Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488001 2015 TD_{346}	17.1	X	35.08517	309.61290	56.90239	7.02787	0.0348182	0.22299563	2.6932199	20	12 23.0	20.7
488002 2015 TK_{346}	17.8	X	318.34011	131.85875	74.67401	5.79314	0.0770221	0.29326653	2.2436807	20	1 18.5	20.4
488003 2015 TM_{346}	17.5	X	12.06452	265.85741	111.32058	4.37279	0.1004684	0.21444887	2.7643108	20	12 13.5	21.0
488004 2015 TO_{346}	16.6	X	35.31068	201.34615	155.39460	5.07523	0.1282937	0.21889817	2.7267247	20	12 23.7	20.3
488005 2015 TZ_{347}	16.9	X	344.32246	327.57023	95.80495	3.65468	0.1314041	0.22111679	2.7084546	20	—	—
488006 2015 TT_{348}	17.8	X	323.24051	26.68828	89.33725	5.14328	0.1111113	0.23662164	2.5888074	20	—	—
488007 2015 TA_{349}	17.2	X	350.34603	288.47169	111.58935	4.45901	0.0976139	0.21383018	2.7696404	20	12 10.5	20.5
488008 2015 TH_{349}	16.6	X	324.86370	226.73526	158.80108	9.24165	0.1350093	0.18789171	3.0190083	20	10 5.6	20.1
488009 2015 TO_{349}	17.6	X	224.28824	78.07681	130.77521	3.77851	0.0765681	0.24063706	2.5599277	20	—	—
488010 2015 TT_{349}	17.6	X	206.85128	85.74785	145.49787	4.58128	0.0820156	0.24492332	2.5299734	20	—	—
488011 2015 UF_{1}	17.1	X	7.88089	324.76601	44.41980	7.25437	0.0584738	0.21078301	2.7962692	20	11 20.1	20.6
488012 2015 UQ_{1}	16.6	X	342.90103	295.05433	137.39464	2.54074	0.0737446	0.22923101	2.6441564	20	—	—
488013 2015 UU_{2}	17.5	X	13.24511	338.87436	19.78161	4.22436	0.1131659	0.21044941	2.7992235	20	11 20.8	20.9
488014 2015 UD_{6}	15.5	X	258.03394	352.29905	79.11342	13.50701	0.2074063	0.17664401	3.1458410	20	8 15.9	20.3
488015 2015 US_{6}	16.8	X	279.09904	297.17586	116.36134	4.76291	0.1957033	0.17750266	3.1356877	20	8 17.9	21.0
488016 2015 UL_{9}	16.6	X	268.51060	239.32734	193.18610	15.44206	0.1596195	0.18341192	3.0679693	20	8 30.2	20.9
488017 2015 UF_{13}	17.1	X	301.49813	254.44276	196.95700	14.72910	0.1744269	0.21035275	2.8000809	20	11 24.5	20.2
488018 2015 UL_{14}	17.5	X	198.11770	144.51862	53.94013	5.43300	0.0633754	0.22289190	2.6940554	20	12 3.9	21.3
488019 2015 UL_{15}	17.0	X	303.00558	0.34793	30.02621	11.26801	0.2178609	0.18273692	3.0755197	20	8 26.7	20.7
488020 2015 UJ_{17}	17.1	X	58.09890	174.66314	160.27220	6.90011	0.0593337	0.22294064	2.6936628	20	12 16.1	21.0
488021 2015 UK_{19}	17.2	X	337.29288	219.63799	169.82901	2.17766	0.0726428	0.20364809	2.8612062	20	11 2.7	20.7
488022 2015 UT_{21}	17.7	X	287.47460	21.86522	175.48187	6.84852	0.0597552	0.27234164	2.3571833	20	—	—
488023 2015 UL_{24}	17.7	X	222.08523	108.73338	119.93535	4.97370	0.0882771	0.25549972	2.4596639	20	—	—
488024 2015 UH_{26}	16.4	X	310.83077	205.33571	172.67401	9.33101	0.0613589	0.18035423	3.1025479	20	9 3.9	20.5
488025 2015 UU_{26}	16.8	X	314.02109	199.12386	183.57222	10.18438	0.1611215	0.18499726	3.0504168	20	9 5.6	20.4
488026 2015 UM_{28}	16.8	X	216.61185	83.31210	88.88057	5.09438	0.0379752	0.21356480	2.7719343	20	11 25.4	20.7
488027 2015 UP_{28}	17.7	X	324.18164	3.27489	74.26007	5.19508	0.0678564	0.21927357	2.7236117	20	12 18.9	20.9
488028 2015 UY_{28}	17.6	X	205.55442	145.68524	88.02202	2.23784	0.0657883	0.24780206	2.5103413	20	—	—
488029 2015 UD_{30}	16.6	X	320.63524	338.80528	69.56991	3.09329	0.0837749	0.20200786	2.8766733	20	11 1.5	20.0
488030 2015 UT_{31}	17.0	X	27.11816	168.76295	188.81866	8.18960	0.1236936	0.21649447	2.7468705	20	12 13.3	20.7
488031 2015 UQ_{34}	17.5	X	11.89550	323.78479	55.55241	6.55534	0.0330998	0.21603532	2.7507611	20	12 6.9	21.2
488032 2015 UV_{35}	16.9	X	32.80084	213.44721	189.87862	10.94980	0.0538808	0.24093532	2.5578146	20	—	—
488033 2015 UL_{36}	17.6	X	18.64768	344.84951	144.21150	5.53549	0.0988405	0.27917435	2.3185638	20	1 1.8	20.1
488034 2015 UZ_{36}	17.4	X	307.11354	337.97513	150.50831	5.98669	0.0906096	0.23632559	2.5909690	20	—	—
488035 2015 UC_{38}	18.1	X	355.05177	61.30002	67.55251	2.35269	0.1320586	0.26570164	2.3962928	20	—	—
488036 2015 UR_{39}	17.9	X	267.95904	87.36205	165.43995	5.02245	0.1258314	0.30041202	2.2079599	20	1 9.4	21.1
488037 2015 UD_{43}	17.1	X	155.11779	115.72699	86.06166	12.38629	0.0169907	0.18911166	3.0060106	20	10 22.1	21.6
488038 2015 UK_{43}	17.0	X	280.55950	308.46755	127.07004	8.89276	0.1229396	0.18447002	3.0562264	20	10 2.3	21.1
488039 2015 UN_{43}	16.5	X	181.94426	74.77740	91.45650	12.27534	0.0397071	0.18160498	3.0882862	20	10 8.5	21.2
488040 2015 UB_{44}	16.4	X	284.85503	297.92410	141.97924	10.97845	0.0900129	0.18996813	2.9969688	20	10 19.9	20.4
488041 2015 UL_{45}	16.3	X	8.07834	271.87847	75.85427	13.03778	0.0378993	0.18924300	3.0046197	20	10 23.8	20.5
488042 2015 UN_{45}	17.2	X	66.72015	293.31220	102.49375	8.66075	0.0480134	0.25138602	2.4864247	20	—	—
488043 2015 UR_{46}	16.8	X	58.99475	147.47886	169.20321	12.24268	0.0439163	0.19990805	2.8967823	20	11 19.5	21.0
488044 2015 UT_{46}	16.9	X	343.46469	210.70605	152.17685	10.07278	0.0988224	0.18391999	3.0623166	20	10 7.1	20.7
488045 2015 UA_{47}	16.3	X	320.60764	242.84154	128.75325	11.95240	0.0970658	0.17540920	3.1605874	20	9 10.6	20.3
488046 2015 UU_{48}	16.3	X	34.35412	220.01734	89.85885	14.70588	0.0579863	0.18107020	3.0943640	20	10 14.4	20.8
488047 2015 UA_{49}	17.1	X	319.76715	337.12337	164.11294	9.39082	0.1233338	0.23752811	2.5822168	20	—	—
488048 2015 US_{49}	16.3	X	249.82793	320.66343	152.36855	13.85751	0.1607096	0.17864578	3.1222970	20	10 2.5	20.9
488049 2015 UF_{50}	16.4	X	282.59793	291.76782	118.60800	10.96055	0.0404107	0.17213183	3.2005793	20	9 12.4	20.9
488050 2015 UA_{51}	16.6	X	323.81698	260.49190	112.26744	10.57346	0.0807066	0.17973617	3.1096563	20	9 20.4	20.7
488051 2015 UE_{53}	17.0	X	358.79065	301.33919	118.27244	4.06222	0.0577132	0.23145948	2.6271572	20	—	—
488052 2015 UF_{53}	16.7	X	342.48469	234.58042	158.37240	6.64668	0.0697419	0.20881163	2.8138413	20	11 17.4	20.2
488053 2015 UN_{53}	16.5	X	258.33602	317.79921	121.88940	3.91759	0.1649857	0.17702288	3.1413508	20	8 29.1	20.9
488054 2015 UW_{53}	16.8	X	231.31335	293.14545	150.28978	1.95944	0.1266092	0.16747015	3.2597010	20	8 6.2	21.8
488055 2015 UZ_{54}	16.3	X	113.30847	7.78230	201.06198	16.31945	0.0514301	0.17784686	3.1316406	20	9 2.7	21.1
488056 2015 UH_{55}	16.2	X	201.33093	2.33779	43.95893	3.90993	0.2329290	0.12681349	3.9236695	20	5 19.6	22.8
488057 2015 UL_{55}	17.5	X	24.31177	278.72320	110.63614	3.45387	0.0681754	0.23079261	2.6322155	20	—	—
488058 2015 UQ_{55}	17.2	X	57.35969	163.71837	177.37041	5.57026	0.0792037	0.22488806	2.6780897	20	12 25.4	21.0
488059 2015 UR_{56}	16.4	X	291.82602	356.74990	46.37023	11.26120	0.0853093	0.18280280	3.0747808	20	9 13.7	20.6
488060 2015 UF_{58}	17.0	X	359.30734	245.52805	186.56505	12.02819	0.0761336	0.22983008	2.6395596	20	—	—
488061 2015 UR_{59}	16.6	X	322.20910	251.50991	114.12202	9.27734	0.2126106	0.17558417	3.1584873	20	8 25.6	20.0
488062 2015 UP_{60}	17.3	X	219.78661	77.12319	130.40296	7.74984	0.0934776	0.22578411	2.6709995	20	—	—
488063 2015 UX_{60}	16.2	X	248.46063	281.07541	213.73485	24.14990	0.2722141	0.17486226	3.1671745	20	10 7.5	21.2
488064 2015 UV_{65}	16.2	X	334.83522	225.51683	137.49726	11.94470	0.2200801	0.18128321	3.0919395	20	9 20.9	19.3
488065 2015 UH_{71}	17.0	X	350.93943	272.74028	105.19942	5.39207	0.1140592	0.20941860	2.8084016	20	11 13.9	20.3
488066 2015 UD_{74}	17.3	X	150.03858	345.97515	0.97386	8.40279	0.1742051	0.28059646	2.3107232	20	1 19.2	20.7
488067 2015 US_{75}	16.1	X	259.50102	192.02455	258.24400	16.43442	0.1730095	0.17930752	3.1146103	20	9 2.2	20.9
488068 2015 UJ_{78}	16.5	X	297.67916	333.78060	96.31098	12.94646	0.1141057	0.19322608	2.9631858	20	10 26.5	20.4
488069 2015 UN_{78}	16.7	X	42.89181	233.21913	165.95711	11.76493	0.1713910	0.24008041	2.5638832	20	—	—
488070 2015 UQ_{79}	16.6	X	278.09496	336.21259	97.26436	18.56430	0.1085109	0.18273322	3.0755612	20	10 4.3	21.1
488071 2015 UO_{82}	17.3	X	315.73604	294.37141	156.13308	2.22507	0.0358105	0.22721579	2.6597678	20	12 25.4	20.7
488072 2015 UF_{84}	16.8	X	356.19318	175.07298	272.83824	7.02859	0.1718201	0.23574346	2.5952326	20	—	—
488073 2015 UH_{84}	16.6	X	73.21161	348.49232	8.37937	10.54849	0.1823574	0.23848782	2.5752847	20	—	—
488074 2015 VC_{3}	17.4	X	65.24789	347.85473	16.20356	2.73487	0.2253924	0.25357483	2.4720957	20	—	—
488075 2015 VQ_{5}	17.3	X	64.00354	294.57662	103.83369	12.15454	0.1224222	0.25500347	2.4628539	20	—	—
488076 2015 VL_{6}	16.3	X	328.09763	148.31010	234.93535	7.82446	0.1613527	0.18487854	3.0517225	20	10 1.5	19.7
488077 2015 VZ_{24}	15.8	X	273.14314	78.66594	348.22866	11.95406	0.0578377	0.18071036	3.0984704	20	9 15.3	20.1
488078 2015 VJ_{25}	16.5	X	40.23486	310.26460	109.74367	15.94208	0.1241929	0.24079434	2.5588129	20	—	—
488079 2015 VK_{25}	16.8	X	2.71578	271.15385	102.94569	7.57261	0.2183324	0.20916818	2.8106427	20	12 10.5	19.8
488080 2015 VT_{25}	16.6	X	107.64677	226.96699	56.74569	13.10806	0.1801790	0.21998887	2.7177046	20	12 13.9	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488081 2015 VN_{29}	16.5	X	284.61013	193.79987	256.90945	11.28408	0.0963363	0.19745916	2.9206837	20	10 27.4	20.5
488082 2015 VE_{30}	16.6	X	309.71331	197.46353	242.08563	9.23164	0.0854916	0.20663720	2.8335467	20	11 25.8	20.1
488083 2015 VL_{30}	16.4	X	277.16546	31.92062	24.60256	16.32637	0.1072787	0.17416427	3.1756308	20	9 7.9	20.9
488084 2015 VS_{30}	16.8	X	96.67730	356.97191	305.23107	4.29092	0.1513518	0.22503131	2.6769530	20	12 26.7	21.1
488085 2015 VV_{30}	16.8	X	19.66086	44.55989	353.25833	5.77677	0.0471192	0.22577195	2.6710954	20	—	—
488086 2015 VX_{33}	16.3	X	281.46852	148.55440	276.81440	4.36722	0.1197292	0.17912178	3.1167631	20	9 13.9	20.5
488087 2015 VE_{36}	17.4	X	357.72777	2.90085	43.87725	1.79105	0.0653243	0.21674105	2.7447867	20	12 27.1	20.7
488088 2015 VT_{36}	17.1	X	41.01126	324.82512	43.83505	6.60206	0.0584577	0.22138301	2.7062829	20	—	—
488089 2015 VU_{36}	16.3	X	252.93760	46.59995	53.62273	4.94864	0.0685594	0.18190714	3.0848654	20	10 2.6	20.6
488090 2015 VV_{40}	16.0	X	309.22986	230.81719	156.08998	11.49144	0.1226148	0.17660974	3.1462479	20	9 8.1	19.7
488091 2015 VG_{41}	16.3	X	248.56077	15.98319	91.56271	10.44036	0.0701541	0.18127498	3.0920331	20	10 9.5	20.8
488092 2015 VC_{42}	16.8	X	12.87196	270.69625	103.07551	8.58348	0.2433568	0.21063105	2.7976140	20	12 30.1	20.1
488093 2015 VC_{52}	16.7	X	187.69800	305.71891	222.27191	8.53991	0.0345832	0.18554416	3.0444197	20	10 10.1	21.1
488094 2015 VE_{62}	17.9	X	257.45182	35.23639	226.55077	4.99041	0.0986645	0.29078221	2.2564419	20	1 12.8	21.0
488095 2015 VS_{62}	16.8	X	134.00374	125.23364	166.87213	13.14378	0.1949708	0.23609175	2.5926795	20	—	—
488096 2015 VU_{62}	17.3	X	85.31886	212.99836	99.63055	15.15310	0.1982657	0.22142425	2.7059469	20	12 31.0	21.6
488097 2015 VW_{62}	16.4	X	223.08124	353.37209	132.78508	10.41400	0.0439390	0.17528471	3.1620837	20	10 2.9	21.0
488098 2015 VY_{62}	16.3	X	308.92939	285.38050	139.81561	9.84943	0.0749098	0.19184979	2.9773405	20	11 6.6	20.3
488099 2015 VQ_{63}	16.6	X	318.09885	270.71517	126.82524	12.19657	0.0772862	0.18375799	3.0641161	20	10 15.6	20.7
488100 2015 VR_{63}	16.3	X	291.13242	313.70413	132.64829	11.21266	0.1155748	0.18991990	2.9974761	20	11 3.7	20.2
488101 2015 VU_{63}	15.3	X	202.37047	230.95074	258.70408	15.10480	0.0225221	0.17615031	3.1517162	20	9 3.1	20.2
488102 2015 VQ_{66}	16.5	X	278.97067	34.27310	13.89557	6.06480	0.1569983	0.17915874	3.1163343	20	8 18.3	20.8
488103 2015 VR_{66}	16.5	X	269.27151	203.78256	235.88712	9.50479	0.1931101	0.17509307	3.1643905	20	9 1.9	21.1
488104 2015 VP_{67}	17.2	X	86.25833	3.18439	54.98167	7.81019	0.1115474	0.28382557	2.2931636	20	1 19.4	19.7
488105 2015 VW_{71}	17.0	X	275.06867	224.34710	191.98813	11.20945	0.1121116	0.16862287	3.2448284	20	8 23.9	21.6
488106 2015 VU_{76}	17.3	X	259.72338	144.77068	45.08017	6.38653	0.0941288	0.23914353	2.5705751	20	—	—
488107 2015 VZ_{77}	16.7	X	289.87726	343.89632	85.23920	10.65592	0.1272095	0.18429810	3.0581267	20	10 9.2	20.7
488108 2015 VH_{78}	16.5	X	301.93052	296.87033	87.80138	10.21049	0.1573103	0.17066546	3.2188862	20	8 22.2	20.6
488109 2015 VQ_{78}	16.6	X	311.69159	291.70269	157.74118	8.15446	0.2062614	0.20994268	2.8037259	20	12 10.1	19.4
488110 2015 VC_{79}	17.2	X	20.10127	290.73585	100.37366	5.75873	0.1264220	0.22625657	2.6672799	20	—	—
488111 2015 VY_{81}	16.9	X	34.22245	205.68807	158.46548	5.31594	0.1254360	0.21974239	2.7197365	20	12 31.1	20.6
488112 2015 VU_{82}	16.7	X	51.70226	203.77997	128.30013	4.41374	0.0923869	0.21132676	2.7914705	20	12 6.8	20.7
488113 2015 VZ_{83}	16.3	X	326.50320	286.38835	83.02669	12.12327	0.1012059	0.18164182	3.0878686	20	9 21.9	20.3
488114 2015 VD_{84}	16.2	X	295.26625	225.00162	174.16842	10.51442	0.2113020	0.17668609	3.1453415	20	8 17.9	20.3
488115 2015 VW_{89}	17.4	X	143.63303	323.58639	356.60652	5.30103	0.2133702	0.26707985	2.3880420	20	—	—
488116 2015 VL_{100}	17.7	X	266.63089	169.78044	83.94169	8.48188	0.0783765	0.28642040	2.2792926	20	1 16.9	20.7
488117 2015 VP_{101}	17.1	X	33.61748	274.85904	106.47619	4.01270	0.1144276	0.22191518	2.7019546	20	—	—
488118 2015 VE_{102}	15.9	X	56.30486	229.72675	83.85303	8.88545	0.1628340	0.20504453	2.8482007	20	11 27.9	19.9
488119 2015 VG_{102}	15.9	X	306.20967	5.52798	54.32362	10.41936	0.0952412	0.18723626	3.0260498	20	10 23.1	19.7
488120 2015 VR_{102}	16.9	X	61.02896	278.13500	58.68295	5.11702	0.0719018	0.21319552	2.7751343	20	12 20.6	20.7
488121 2015 VX_{103}	16.0	X	221.75691	323.96082	154.32361	2.31612	0.0086392	0.17820235	3.1274744	20	9 22.9	20.4
488122 2015 VZ_{106}	16.1	X	155.26761	180.51746	106.81998	16.15278	0.1152590	0.24387719	2.5372032	20	—	—
488123 2015 VU_{107}	16.2	X	357.74206	143.93340	230.48085	11.98052	0.1121858	0.20426889	2.8554062	20	11 16.9	19.7
488124 2015 VF_{111}	16.5	X	74.51766	66.91319	253.71818	8.16351	0.1200169	0.21948698	2.7218459	20	12 22.9	20.5
488125 2015 VC_{112}	16.2	X	318.26250	239.65209	129.61629	13.62905	0.1702234	0.17617815	3.1513842	20	8 27.0	19.9
488126 2015 VK_{113}	16.2	X	1.69715	157.59729	209.24659	19.05421	0.1683750	0.19482912	2.9469095	20	11 18.0	19.7
488127 2015 VP_{116}	16.4	X	339.77806	334.85593	94.40190	14.06596	0.0399638	0.22096571	2.7096890	20	12 29.7	19.7
488128 2015 VH_{117}	16.7	X	297.15629	260.86001	176.92738	6.04775	0.1397235	0.19316827	2.9637770	20	10 27.9	20.3
488129 2015 VH_{120}	16.1	X	301.02611	24.89737	37.94525	11.92114	0.0882335	0.18575954	3.0420660	20	10 18.6	19.9
488130 2015 VS_{120}	16.7	X	46.67000	238.84693	128.68043	14.15265	0.1843356	0.22503615	2.6769147	20	—	—
488131 2015 VJ_{121}	16.0	X	267.51494	346.05644	116.00743	11.36106	0.1045390	0.18229432	3.0804958	20	10 21.9	20.4
488132 2015 VK_{121}	16.3	X	331.52413	261.57735	84.91020	25.99663	0.3140754	0.17519571	3.1631546	20	8 11.8	19.5
488133 2015 VO_{121}	16.5	X	84.53023	235.67659	127.79085	11.77115	0.1563090	0.24185614	2.5513183	20	—	—
488134 2015 VA_{124}	15.5	X	356.60091	90.48671	267.73677	21.23852	0.0658534	0.17944540	3.1130146	20	10 6.7	20.1
488135 2015 VL_{124}	15.8	X	330.98585	299.26904	103.16777	18.16258	0.3218974	0.18333541	3.0688228	20	11 13.3	18.5
488136 2015 VR_{124}	16.0	X	27.18646	287.54305	44.09539	9.75393	0.0337472	0.18755156	3.0226575	20	10 23.8	20.1
488137 2015 VB_{129}	16.1	X	298.90592	183.00797	228.44221	9.87955	0.0630311	0.18070153	3.0985713	20	9 27.6	20.4
488138 2015 VH_{129}	17.9	X	143.90777	194.64668	165.45054	2.58001	0.1133114	0.28047741	2.3113770	20	1 19.2	21.0
488139 2015 VB_{130}	16.9	X	11.07029	311.86608	94.21126	4.05133	0.1060828	0.22166667	2.7039736	20	—	—
488140 2015 VK_{131}	16.4	X	10.63563	111.71931	228.79537	9.36495	0.1164963	0.19998237	2.8960646	20	10 21.7	19.9
488141 2015 VD_{133}	16.4	X	65.03527	287.42008	52.24419	10.26302	0.1113299	0.22253969	2.6968972	20	—	—
488142 2015 VG_{134}	16.2	X	294.35023	187.19568	228.85763	9.55503	0.0760579	0.18009026	3.1055788	20	9 25.4	20.5
488143 2015 VQ_{135}	15.9	X	257.42779	12.87531	90.22551	11.98988	0.0174481	0.18219391	3.0816276	20	10 22.8	20.4
488144 2015 VL_{138}	15.9	X	139.75359	349.75370	254.71661	14.19027	0.1000006	0.20246473	2.8723441	20	11 22.4	20.4
488145 2015 VZ_{138}	17.4	X	58.34038	185.09167	190.12557	4.13053	0.0872241	0.22953645	2.6418102	20	—	—
488146 2015 VK_{139}	16.5	X	251.87412	237.28220	216.94058	9.96104	0.1326823	0.17255821	3.1953048	20	9 8.1	21.2
488147 2015 VK_{141}	15.3	X	169.61352	123.85364	59.97210	25.09235	0.0497834	0.17579225	3.1559945	20	10 19.8	20.3
488148 2015 VE_{143}	17.2	X	64.04607	322.48919	65.58057	10.63466	0.2264031	0.25377980	2.4707644	20	—	—
488149 2015 VU_{145}	17.6	X	141.20305	251.99639	71.22634	5.66105	0.2737030	0.26915837	2.3757321	20	—	—
488150 2015 VB_{147}	16.6	X	259.38946	357.67626	104.27317	18.97697	0.1710284	0.17922432	3.1155741	20	10 5.2	21.3
488151 2015 VS_{148}	16.5	X	92.25918	153.27022	106.12542	10.86411	0.0544188	0.18284162	3.0743455	20	10 20.6	21.1
488152 2015 WT_{4}	16.0	X	310.09668	320.48143	81.71856	12.12885	0.0924534	0.17989888	3.1077810	20	10 9.0	20.2
488153 2015 WP_{9}	16.6	X	286.45020	16.42329	71.54337	7.21063	0.2029626	0.18610227	3.0383299	20	10 15.3	20.3
488154 2015 WW_{9}	15.7	X	38.55251	272.03034	56.20431	11.02923	0.1089628	0.18889091	3.0083522	20	11 12.9	19.7
488155 2015 WQ_{13}	17.0	X	300.99935	287.56808	140.62098	10.60163	0.1113322	0.18716491	3.0268189	20	10 25.9	20.9
488156 2015 WY_{13}	16.3	X	301.33623	80.98025	65.74589	16.15869	0.0195353	0.23076840	2.6323997	20	—	—
488157 2015 WS_{14}	16.7	X	305.51722	119.50976	293.73159	7.47944	0.1896746	0.18157710	3.0886024	20	9 25.0	20.4
488158 2015 WL_{15}	16.0	X	4.25614	242.85521	93.17446	16.08778	0.1043667	0.18016012	3.1047760	20	10 10.8	20.2
488159 2015 XM_{2}	16.7	X	294.24227	44.60549	107.06943	8.48598	0.0766560	0.21732669	2.7398535	20	—	—
488160 2015 XX_{4}	16.1	X	10.80752	217.44481	115.58735	11.07573	0.0201654	0.17550704	3.1594127	20	10 4.6	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488161 2015 XK_5	16.4	X	100.01839	82.40790	168.98292	10.29089	0.0414487	0.17696912	3.1419870	20	10 14.2	21.0
488162 2015 XR_5	16.8	X	40.06677	228.02422	110.79848	12.49587	0.1152703	0.20083659	2.8878468	20	12 3.3	20.9
488163 2015 XA_6	16.5	X	358.73252	249.97912	100.82873	17.99427	0.1432452	0.18602333	3.0391894	20	10 26.3	20.5
488164 2015 XK_6	16.9	X	283.94882	326.61538	119.26777	10.08332	0.0595142	0.18699877	3.0286114	20	10 29.8	21.1
488165 2015 XW_{38}	17.6	X	33.83988	214.29015	182.98098	5.32645	0.0623213	0.22647231	2.6655857	20	—	—
488166 2015 XT_{44}	17.1	X	283.06866	344.00739	129.72615	2.95220	0.0193969	0.20336817	2.8638311	20	12 6.2	21.1
488167 2015 XV_{44}	16.4	X	326.47934	325.41470	75.08724	10.29615	0.0586030	0.18804196	3.0173999	20	10 31.2	20.4
488168 2015 XA_{54}	16.3	X	106.57450	165.89584	88.83717	22.75378	0.0494790	0.18341939	3.0678860	20	11 4.6	21.1
488169 2015 XU_{55}	16.2	X	289.87446	355.40929	70.40963	13.03589	0.1381134	0.17808205	3.1288827	20	10 3.7	20.4
488170 2015 XC_{56}	16.3	X	8.20368	226.94537	99.62185	6.93908	0.1067316	0.17300913	3.1897504	20	9 28.1	20.4
488171 2015 XO_{57}	16.6	X	267.43076	12.65130	100.66680	11.14306	0.0424943	0.19014414	2.9951190	20	11 13.2	20.8
488172 2015 XY_{60}	16.9	X	192.05657	119.64617	167.03144	7.57130	0.1076087	0.25439626	2.4667714	20	—	—
488173 2015 XL_{61}	17.5	X	281.87964	14.43507	176.04311	7.11989	0.1530858	0.23510118	2.5999570	20	—	—
488174 2015 XV_{64}	17.3	X	3.97929	292.07516	124.17794	7.55177	0.0308890	0.21511523	2.7585993	20	—	—
488175 2015 XL_{68}	16.6	X	225.33096	32.97587	107.59332	13.35119	0.1175317	0.17671229	3.1450306	20	10 17.2	21.5
488176 2015 XO_{69}	16.2	X	343.04775	270.24383	87.34839	18.55792	0.2019728	0.17864520	3.1223037	20	10 9.1	19.9
488177 2015 XZ_{71}	15.9	X	332.38636	245.05181	93.97132	16.13534	0.1900724	0.17309788	3.1886600	20	8 11.7	19.6
488178 2015 XA_{77}	16.6	X	134.14195	123.72520	114.88393	11.90925	0.0330554	0.18693313	3.0293203	20	11 10.1	21.2
488179 2015 XN_{84}	17.0	X	265.91456	339.59457	125.20386	16.88814	0.1943562	0.17253034	3.1956489	20	10 9.9	21.7
488180 2015 XL_{86}	15.9	X	230.51133	87.68842	86.75209	23.73531	0.0330362	0.17835935	3.1256388	20	12 8.7	20.3
488181 2015 XO_{98}	17.7	X	250.45405	120.43402	84.83804	15.04696	0.0583301	0.23373205	2.6101004	20	—	—
488182 2015 XD_{112}	16.5	X	127.03401	124.54429	125.51638	11.60456	0.0817090	0.18602925	3.0391249	20	11 17.2	21.3
488183 2015 XM_{114}	16.9	X	89.76507	72.25820	218.67327	8.81556	0.0425590	0.19216591	2.9740743	20	11 20.6	21.1
488184 2015 XK_{116}	17.5	X	227.48559	24.90053	153.39757	6.90230	0.0225385	0.20192540	2.8774564	20	12 15.6	21.6
488185 2015 XS_{130}	17.0	X	315.37915	322.60192	104.51590	4.70357	0.0797460	0.19116571	2.9844391	20	11 15.9	20.8
488186 2015 XD_{138}	16.4	X	93.80765	206.41237	66.85435	11.76400	0.0608006	0.18668475	3.0320066	20	11 6.6	20.9
488187 2015 XM_{147}	17.3	X	233.76823	202.97811	70.01458	6.26501	0.1218746	0.26628342	2.3928012	20	1 6.2	20.9
488188 2015 XG_{161}	16.3	X	318.04479	336.90840	74.19285	10.95738	0.0276068	0.18606951	3.0386866	20	11 2.2	20.5
488189 2015 XN_{167}	13.9	X	250.94148	76.86282	285.00289	29.65050	0.0576271	0.08256266	5.2233237	20	5 28.4	21.2
488190 2015 XX_{177}	17.0	X	348.33947	256.26711	156.11733	6.52016	0.0800351	0.20367874	2.8609191	20	12 18.8	20.6
488191 2015 XD_{184}	16.8	X	203.70990	345.69630	198.71487	9.21806	0.0512938	0.19140302	2.9819718	20	11 19.5	21.1
488192 2015 XT_{184}	16.7	X	115.90575	55.73985	190.18746	9.90592	0.0441677	0.17757193	3.1348722	20	10 25.2	21.3
488193 2015 XY_{187}	16.5	X	147.61417	67.49267	165.14041	8.79716	0.1075550	0.18635493	3.0355831	20	11 15.9	21.4
488194 2015 XT_{198}	16.3	X	197.81122	26.84004	153.08338	19.83026	0.1238692	0.17721281	3.1391059	20	11 3.1	21.5
488195 2015 XQ_{199}	16.9	X	332.21558	125.38642	9.70133	3.45244	0.0895907	0.23863581	2.5742199	20	—	—
488196 2015 XZ_{199}	16.4	X	250.92578	213.40922	266.82053	6.32647	0.1004731	0.18125052	3.0923113	20	10 15.7	20.9
488197 2015 XT_{208}	17.2	X	329.77283	166.96394	262.63940	4.84342	0.0405296	0.20119564	2.8844101	20	12 11.0	20.9
488198 2015 XR_{210}	16.3	X	295.49178	8.41994	64.28265	10.20195	0.0853019	0.18163417	3.0879554	20	10 24.1	20.3
488199 2015 XO_{224}	16.6	X	309.69079	276.45526	124.12873	4.63778	0.0648647	0.17266340	3.1940069	20	10 2.7	20.8
488200 2015 XY_{226}	16.5	X	279.05125	17.92400	82.55230	13.22291	0.1453303	0.18344714	3.0675766	20	10 30.2	20.6
488201 2015 XJ_{244}	16.2	X	180.09426	316.29475	254.69923	8.59497	0.0614304	0.19162019	2.9797183	20	11 22.9	20.6
488202 2015 XB_{253}	16.3	X	49.01103	177.67474	156.86437	15.98288	0.1415125	0.20314260	2.8659507	20	12 12.8	20.7
488203 2015 XG_{255}	16.1	X	268.01556	328.87828	130.96743	17.95654	0.1829682	0.17644641	3.1481893	20	10 8.5	20.7
488204 2015 XE_{257}	15.6	X	328.61122	205.56400	170.36775	18.49332	0.1207815	0.17575139	3.1564835	20	9 26.3	19.4
488205 2015 XU_{262}	16.2	X	47.65624	261.06316	57.35118	9.45208	0.0869515	0.18536634	3.0463664	20	11 8.9	20.3
488206 2015 XC_{264}	17.1	X	352.70116	330.71972	55.53217	5.09341	0.0585077	0.19249597	2.9706737	20	11 16.9	21.0
488207 2015 XU_{278}	16.4	X	358.15675	222.00032	134.77320	2.23179	0.2071183	0.18987976	2.9978986	20	11 1.2	19.5
488208 2015 XW_{278}	16.3	X	265.74799	227.10229	232.65111	9.47339	0.0827651	0.18097980	3.0953943	20	10 12.0	20.6
488209 2015 XA_{279}	16.7	X	244.60074	65.66994	70.31111	12.36773	0.0949024	0.18682905	3.0304453	20	11 3.9	21.0
488210 2015 XN_{292}	16.1	X	330.88447	164.65620	239.93540	5.81625	0.1260337	0.18885817	3.0086999	20	11 8.2	19.4
488211 2015 XR_{295}	16.4	X	125.94953	169.55250	74.86116	11.55788	0.0576197	0.18157961	3.0885739	20	11 6.7	21.1
488212 2015 XB_{309}	16.1	X	288.70549	143.76259	271.45223	14.51683	0.2266369	0.17307416	3.1889514	20	8 20.4	20.4
488213 2015 XP_{311}	16.9	X	323.43390	326.85145	94.08003	13.31434	0.0852339	0.19040774	2.9923541	20	11 21.7	20.7
488214 2015 XC_{313}	16.7	X	349.34785	283.55395	97.35816	10.64905	0.1159909	0.18603316	3.0390823	20	11 11.1	20.5
488215 2015 XA_{315}	16.2	X	4.25020	164.97741	260.94698	11.72375	0.1357986	0.21729474	2.7401220	20	—	—
488216 2015 XK_{315}	16.0	X	160.55715	321.39867	269.27056	10.73741	0.0378580	0.18873293	3.0100308	20	11 25.5	20.5
488217 2015 XS_{331}	17.7	X	271.05194	353.64158	263.18126	4.49410	0.1705884	0.27285031	2.3542527	20	1 17.6	21.2
488218 2015 XU_{364}	16.1	X	245.66808	202.58449	289.60204	9.65716	0.1580032	0.17326479	3.1866119	20	10 12.7	20.9
488219 2015 XN_{367}	16.0	X	299.49293	177.06950	272.18252	8.79050	0.0874348	0.18675594	3.0312361	20	11 16.2	20.0
488220 2015 XR_{368}	16.0	X	70.10509	39.82844	269.53503	10.85462	0.1305135	0.18934556	3.0035346	20	11 29.5	20.4
488221 2015 YW_{14}	15.8	X	24.51046	317.75327	63.93974	17.42984	0.2067607	0.19811831	2.9142020	20	—	—
488222 2015 YS_{18}	16.4	X	144.36443	225.92934	85.32838	14.83440	0.1378944	0.24300880	2.5432441	20	—	—
488223 2016 AT_5	12.9	X	268.90182	221.59992	113.00233	28.32009	0.0845369	0.08133235	5.2758669	20	5 22.7	20.2
488224 2016 AV_6	15.9	X	23.63127	31.75555	332.67353	8.48135	0.0674447	0.18011254	3.1053228	20	11 28.0	20.2
488225 2016 AQ_{13}	16.0	X	120.98941	14.66357	276.63276	7.97312	0.0161565	0.19078474	2.9884107	20	12 24.1	20.3
488226 2016 AK_{19}	16.3	X	317.21893	289.33600	131.64182	2.40639	0.0568533	0.17256663	3.1952009	20	11 6.9	20.6
488227 2016 AH_{30}	16.9	X	181.14383	34.80682	267.52024	6.67229	0.1203813	0.23638436	2.5905395	20	—	—
488228 2016 AE_{44}	15.4	X	99.81778	176.47610	117.61601	18.56322	0.1868332	0.17833398	3.1259353	20	12 15.9	20.7
488229 2016 AM_{44}	16.5	X	111.18450	48.28328	287.19284	5.04836	0.0491974	0.21297488	2.7770506	20	—	—
488230 2016 AR_{44}	14.3	X	334.27819	151.16923	121.35465	9.21813	0.0133898	0.08471760	5.1343673	20	5 28.7	21.1
488231 2016 AH_{50}	16.9	X	83.70363	256.85042	116.88652	6.65122	0.0748725	0.22133200	2.7066986	20	—	—
488232 2016 AL_{57}	16.2	X	106.08739	170.93470	126.75801	8.50629	0.1484640	0.18472352	3.0534297	20	12 22.3	21.1
488233 2016 AL_{75}	15.9	X	92.03607	163.43756	163.13755	11.97791	0.1037271	0.17688708	3.1429585	20	—	—
488234 2016 AG_{76}	16.1	X	4.71263	251.07654	138.07452	10.31922	0.1008263	0.18177318	3.0863808	20	12 10.2	20.2
488235 2016 AH_{77}	13.6	X	301.77749	175.62812	134.72115	23.84489	0.0665770	0.08267950	5.2184015	20	5 31.9	20.6
488236 2016 AA_{95}	17.9	X	64.37803	102.46616	310.80988	2.22192	0.1315816	0.23013418	2.6372338	20	—	—
488237 2016 AX_{106}	16.8	X	194.11397	179.22867	101.12796	5.32552	0.0500731	0.21232700	2.7826968	20	—	—
488238 2016 AB_{107}	15.9	X	78.29672	213.01028	118.44908	11.20853	0.0931575	0.17483066	3.1675561	20	12 27.5	20.6
488239 2016 AM_{180}	15.8	X	129.34904	91.37595	224.56766	10.66687	0.1595783	0.18120228	3.0928601	20	—	—
488240 2016 AO_{184}	15.5	X	352.14625	312.43988	97.74643	16.29388	0.0248657	0.18544996	3.0454506	20	12 12.9	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488241 2016 AS_{186}	16.5	X	69.91746	310.97309	92.36693	15.96931	0.1022551	0.24433456	2.5340360	20	—	—
488242 2016 AX_{186}	15.4	X	318.96602	322.00785	91.21157	12.20987	0.0660331	0.16913225	3.2383101	20	11 2.6	19.8
488243 2016 BZ	13.5	X	298.67350	333.98000	327.37045	12.24622	0.1170698	0.08224522	5.2367551	20	4 30.7	20.4
488244 2016 BY_{15}	15.9	X	58.13650	316.12099	22.38129	18.43642	0.0845899	0.17818238	3.1277081	20	12 9.6	20.7
488245 2016 BL_{26}	16.7	X	217.03547	216.21660	62.80372	3.01381	0.0352388	0.23350871	2.6117644	20	1 2.3	20.2
488246 2016 BN_{32}	15.9	X	316.20595	81.99712	355.01040	12.58225	0.0432076	0.17058664	3.2198776	20	11 20.5	20.5
488247 2016 BT_{33}	16.9	X	151.46534	215.65691	104.79513	7.47367	0.0904968	0.22256737	2.6966736	20	—	—
488248 2016 BD_{38}	15.9	X	23.75392	59.04147	346.45555	8.88921	0.0547202	0.19228671	2.9728286	20	—	—
488249 2016 BG_{62}	17.3	X	117.20248	179.98134	162.14164	6.10087	0.0498979	0.21776798	2.7361508	20	—	—
488250 2016 BB_{81}	15.7	X	114.69587	34.28940	258.82567	8.37139	0.0222878	0.18222822	3.0812407	20	12 17.2	19.9
488251 2016 CR	17.0	X	58.12991	245.74664	145.84444	9.19717	0.1781431	0.21351106	2.7723995	20	—	—
488252 2016 CK_{17}	16.6	X	59.21641	193.93879	161.11170	9.39721	0.0842089	0.17750942	3.1356082	20	—	—
488253 2016 CF_{18}	16.8	X	179.65528	174.41303	125.76462	3.00451	0.0159018	0.21301974	2.7766607	20	—	—
488254 2016 CG_{24}	15.7	X	109.27880	198.94220	90.75809	8.51896	0.1277724	0.17364366	3.1819749	20	12 12.8	20.7
488255 2016 CK_{33}	16.5	X	117.40657	353.61891	308.89715	9.74038	0.0879416	0.19104139	2.9857337	20	—	—
488256 2016 CR_{48}	15.9	X	121.89733	292.99666	356.74833	10.13265	0.0392714	0.17051199	3.2208174	20	12 19.5	20.8
488257 2016 CV_{208}	16.3	X	284.62073	61.33192	81.23923	3.43127	0.0841749	0.17727091	3.1384200	20	12 30.1	20.3
488258 2016 CA_{258}	16.2	X	38.47939	26.71877	4.44272	12.67887	0.0673432	0.18814254	3.0163244	20	—	—
488259 2016 EN_{119}	16.0	X	214.48085	267.76017	64.22844	10.36473	0.2844338	0.24501898	2.5293149	20	3 4.4	20.7
488260 2016 HS_{23}	18.1	X	67.28713	158.45843	42.28257	4.77645	0.1778704	0.27788178	2.3257481	20	7 28.8	21.0
488261 2016 NO_{54}	16.0	X	200.43363	115.54531	280.13824	8.94912	0.0737662	0.19971799	2.8986199	20	5 8.2	20.5
488262 2016 QG_{1}	17.9	X	149.44094	77.37049	289.97277	17.94895	0.0853375	0.36459394	1.9405720	20	1 17.2	19.8
488263 2016 QX_{26}	17.1	X	291.18194	191.32835	185.15429	8.10815	0.2053093	0.22878154	2.6476185	20	7 17.2	20.4
488264 2016 RD	18.0	X	7.29562	94.37456	287.86719	0.97714	0.2274852	0.27578039	2.3375476	20	—	—
488265 2016 RO_{7}	17.3	X	303.83482	167.40513	226.29737	6.13516	0.0881019	0.25519005	2.4616533	20	9 22.9	20.1
488266 2016 SQ_{5}	16.3	X	308.08554	81.90819	271.16916	12.52703	0.1245906	0.22315892	2.6919059	20	7 23.3	19.5
488267 2016 SM_{6}	17.4	X	299.49879	84.11343	326.43014	27.26874	0.3822162	0.23842409	2.5757436	20	8 21.2	19.4
488268 2016 SO_{6}	16.3	X	234.40319	73.20264	291.21435	11.91103	0.3152849	0.17525960	3.1623857	20	4 16.1	22.1
488269 2016 TF_{3}	16.8	X	308.51066	223.29250	177.94251	13.57979	0.1616900	0.23647264	2.5898948	20	10 5.8	19.3
488270 2016 TK_{8}	16.9	X	338.65172	348.72287	69.78985	7.26221	0.1212752	0.27178781	2.3603844	20	—	—
488271 2016 TT_{9}	17.0	X	323.84121	311.37296	64.81027	7.12339	0.2745282	0.23235361	2.6204131	20	9 26.3	18.8
488272 2016 TC_{12}	16.7	X	308.06677	66.32245	326.81480	11.81780	0.1809858	0.23766106	2.5812538	20	9 14.8	19.3
488273 2016 TW_{12}	17.7	X	310.65279	112.65101	305.88626	4.64433	0.2390589	0.25177535	2.4838607	20	11 2.1	19.5
488274 2016 TD_{13}	17.7	X	3.10705	15.82627	336.39137	0.89508	0.2009032	0.25768633	2.4457297	20	11 22.8	20.1
488275 2016 TH_{20}	17.2	X	319.21959	152.83758	210.71426	2.05309	0.1751917	0.22856526	2.6492884	20	8 26.2	19.8
488276 2016 TB_{25}	16.6	X	195.80190	289.66564	226.44329	14.15150	0.0696326	0.22808847	2.6529791	20	10 6.8	20.6
488277 2016 TX_{46}	17.8	X	333.37191	190.39848	251.90958	4.69813	0.1320954	0.28124844	2.3071507	20	—	—
488278 2016 TN_{55}	17.4	X	344.75891	316.56963	75.17188	25.31293	0.3230542	0.25676684	2.4515651	20	—	—
488279 2016 TB_{82}	17.8	X	341.81259	168.74351	234.94293	5.05254	0.1422736	0.26906662	2.3762721	20	12 24.2	20.1
488280 2016 TD_{87}	16.8	X	288.50651	336.67153	60.08492	6.95836	0.0320501	0.21614628	2.7498196	20	9 9.9	20.5
488281 2016 TU_{88}	17.3	X	280.82062	23.37001	54.51797	4.12780	0.1905804	0.23502850	2.6004931	20	10 3.2	20.1
488282 2016 TV_{89}	17.6	X	290.11072	35.20623	57.00778	5.54355	0.1154455	0.25385808	2.4702565	20	11 22.4	20.1
488283 2016 TY_{91}	16.4	X	271.34332	343.72047	28.36424	2.51934	0.1797200	0.18838998	3.0136826	20	6 17.1	20.7
488284 2016 UC_{1}	18.6	X	15.74455	228.48572	190.51475	1.22524	0.0892263	0.30343937	2.1932498	20	—	—
488285 2016 UH_{1}	18.2	X	56.35155	70.63642	279.08392	3.84469	0.1708756	0.29504566	2.2346520	20	—	—
488286 2016 UN_{9}	16.0	X	313.95354	68.04600	275.95272	14.88454	0.1873667	0.22005054	2.7171968	20	7 12.9	18.8
488287 2016 UJ_{14}	16.9	X	290.46561	357.35796	20.86612	4.55638	0.0802506	0.20988804	2.8042125	20	8 9.3	20.5
488288 2016 UZ_{14}	17.5	X	287.65215	351.66724	55.05073	0.50583	0.1840886	0.22567533	2.6718577	20	8 29.1	20.3
488289 2016 UA_{15}	16.8	X	232.45200	230.41787	168.96770	1.25709	0.1809844	0.17925394	3.1152309	20	6 9.7	21.8
488290 2016 UG_{15}	16.7	X	182.06189	42.31035	57.91064	0.90569	0.2144156	0.17157287	3.2075269	20	7 7.9	22.2
488291 2016 UL_{24}	16.9	X	156.11110	310.27493	251.29426	4.85873	0.0936467	0.24304015	2.5430254	20	10 23.2	20.7
488292 2016 UL_{27}	17.1	X	344.05800	162.71129	186.87581	5.56490	0.2391364	0.23987346	2.5653576	20	10 8.4	18.7
488293 2016 UY_{27}	16.2	X	272.97094	144.04504	216.81893	9.36365	0.1573102	0.18632483	3.0359101	20	6 8.2	20.6
488294 2016 UB_{28}	17.2	X	226.13514	349.76653	208.49707	4.05133	0.0607592	0.28755699	2.2732826	20	—	—
488295 2016 UV_{33}	16.6	X	336.46382	128.13903	243.98564	3.63035	0.0891852	0.23232127	2.6206563	20	10 14.1	19.6
488296 2016 UT_{35}	16.4	X	314.08008	34.33321	18.65680	14.85329	0.0898510	0.23987660	2.5653352	20	11 2.1	19.4
488297 2016 UM_{43}	15.8	X	5.47748	243.16984	49.42619	2.75377	0.0657140	0.20418067	2.8562287	20	8 8.1	19.4
488298 2016 UX_{43}	16.4	X	287.55154	139.43089	263.34769	13.54134	0.1029719	0.23286171	2.6165999	20	8 28.7	20.0
488299 2016 UK_{50}	17.4	X	264.65741	91.44842	339.25432	1.32241	0.0598479	0.22411518	2.6842432	20	9 15.3	20.9
488300 2016 UP_{52}	17.6	X	345.95721	104.21700	327.41505	2.33640	0.2088495	0.27594877	2.3365966	20	—	—
488301 2016 UB_{56}	16.2	X	223.15328	11.47939	78.63596	10.24571	0.1410127	0.18835602	3.0140449	20	8 8.9	21.0
488302 2016 UE_{56}	18.2	X	23.79201	299.27255	229.27751	20.13616	0.0605777	0.37382357	1.9084975	20	2 12.8	20.4
488303 2016 UN_{56}	16.9	X	302.08266	244.89053	175.22716	2.91932	0.0589891	0.23011328	2.6373935	20	10 27.6	20.2
488304 2016 UL_{67}	16.5	X	311.19316	312.80407	70.11630	12.58752	0.1815335	0.23026697	2.6362198	20	9 17.2	19.4
488305 2016 UO_{68}	16.3	X	326.58011	309.71888	70.38026	10.13468	0.2262312	0.23573855	2.5952686	20	10 15.2	18.4
488306 2016 UH_{69}	17.0	X	6.65149	281.42989	42.44348	7.52094	0.0863546	0.23368899	2.6104210	20	9 30.6	20.0
488307 2016 UM_{70}	16.2	X	210.50286	213.74900	219.24625	11.07704	0.0798428	0.18504736	3.0498662	20	7 5.4	21.0
488308 2016 UF_{71}	17.3	X	333.43670	42.31361	310.94200	1.35501	0.1049223	0.22708537	2.6607860	20	9 11.7	20.1
488309 2016 UL_{71}	16.7	X	205.29778	281.35291	230.12522	7.93972	0.2439299	0.22293116	2.6937391	20	9 25.7	21.3
488310 2016 UY_{72}	17.8	X	282.53843	256.70034	227.46547	5.84588	0.0665391	0.27797723	2.3252156	20	—	—
488311 2016 UH_{73}	17.0	X	242.18262	310.14481	116.31252	1.58553	0.0538503	0.20819886	2.8193597	20	8 10.2	20.7
488312 2016 UP_{74}	17.1	X	48.91801	34.66832	244.21408	2.04710	0.0260504	0.22498203	2.6773439	20	9 17.2	20.7
488313 2016 UR_{76}	17.6	X	95.34116	250.67521	104.48430	3.54072	0.1227224	0.31484676	2.1399480	20	—	—
488314 2016 UK_{77}	16.7	X	232.40312	280.64100	184.83593	7.82231	0.1291925	0.20550946	2.8439034	20	9 6.2	21.0
488315 2016 UX_{79}	16.0	X	212.54967	229.95730	200.16647	13.73570	0.2685172	0.17254066	3.1955215	20	6 22.9	21.7
488316 2016 UP_{82}	17.5	X	265.36344	289.62572	213.36609	8.68898	0.1441021	0.27061465	2.3672013	20	12 23.6	20.0
488317 2016 UN_{84}	16.0	X	301.75689	252.86438	46.64153	8.95231	0.2244332	0.17629226	3.1500241	20	4 19.5	20.3
488318 2016 UA_{90}	17.9	X	347.06995	353.09654	54.69139	3.65360	0.1780168	0.27239736	2.3568618	20	—	—
488319 2016 UP_{90}	16.9	X	324.19836	333.67992	31.22900	6.20523	0.0398143	0.22484869	2.6784023	20	9 17.3	20.3
488320 2016 UY_{97}	17.2	X	357.06973	290.78083	33.27564	6.26555	0.1284846	0.22697107	2.6616792	20	9 16.9	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488321 2016 UP_{105}	16.9	X	319.23991	284.11927	75.42209	12.40428	0.3184245	0.22915919	2.6447089	20	8 4.8	19.0
488322 2016 UZ_{106}	17.6	X	158.29175	288.98328	64.20867	22.58015	0.0987005	0.36859619	1.9264991	20	1 11.3	20.0
488323 2016 UM_{130}	16.0	X	221.02197	338.43580	35.31660	4.97530	0.0717753	0.15203110	3.4768111	20	5 6.4	21.2
488324 2016 UH_{135}	16.7	X	282.70190	152.71493	253.21376	12.69578	0.2448505	0.22239945	2.6980308	20	8 3.5	20.3
488325 2016 UW_{138}	17.3	X	322.04611	233.78282	114.71580	14.35576	0.2255386	0.22052436	2.7133032	20	8 3.9	19.7
488326 2016 UC_{141}	16.6	X	339.64866	289.28365	92.99712	14.01987	0.0729316	0.24687566	2.5166174	20	11 11.8	19.7
488327 2016 UK_{145}	16.0	X	212.27801	343.55806	115.40717	16.86202	0.2043694	0.19169989	2.9788923	20	8 2.3	20.9
488328 2016 UO_{146}	15.9	X	251.41579	58.07476	325.07262	9.23207	0.1222086	0.17983805	3.1084817	20	6 15.4	20.6
488329 2016 UX_{146}	15.7	X	264.39798	115.09053	251.22055	14.82562	0.1257656	0.18186841	3.0853033	20	6 8.8	20.2
488330 2016 UJ_{147}	16.6	X	311.69985	54.13686	352.70781	14.35682	0.1341743	0.24222248	2.5487452	20	10 16.5	19.5
488331 2016 UK_{147}	16.2	X	240.74025	106.96671	273.88905	14.14245	0.2367309	0.17580204	3.1558774	20	5 19.8	21.6
488332 2016 VE	18.2	X	91.93502	237.48771	248.03079	23.69761	0.0827892	0.40556388	1.8075759	20	4 13.6	20.1
488333 2016 VO_{6}	16.4	X	332.90157	218.73829	148.38029	13.83120	0.1747310	0.23693075	2.5865553	20	10 9.2	19.0
488334 2016 VQ_{6}	15.7	X	282.74974	313.62974	81.94718	14.44756	0.2346844	0.19031386	2.9933380	20	7 26.3	19.8
488335 2016 VY_{6}	16.9	X	238.43592	90.77526	320.27925	11.39133	0.3352206	0.18408086	3.0605323	20	6 16.7	22.4
488336 2016 VW_{7}	17.5	X	32.46040	295.09850	131.56107	5.33700	0.1584733	0.28561102	2.2835967	20	—	—
488337 2016 VZ_{8}	17.0	X	319.23739	300.37226	68.90601	5.43605	0.1042764	0.22403895	2.6848521	20	9 12.9	20.0
488338 2016 VN_{15}	16.5	X	269.96826	137.59732	322.66411	15.35597	0.0900208	0.24174388	2.5521080	20	10 23.4	20.0
488339 2016 VF_{16}	17.2	X	0.76384	100.89672	298.39790	4.37813	0.1607483	0.27456589	2.3444357	20	—	—
488340 2016 VH_{16}	16.5	X	250.08208	165.55964	238.34751	13.39100	0.1866706	0.18772777	3.0207657	20	6 30.7	21.2
488341 2016 VW_{16}	17.3	X	336.67125	312.14916	48.44102	5.64658	0.3476675	0.23610655	2.5925712	20	10 14.3	18.1
488342 2016 VT_{17}	16.8	X	351.50562	201.28210	145.17166	6.72205	0.0744989	0.21920010	2.7242203	20	10 3.3	20.1
488343 2016 VT_{18}	16.4	X	335.49867	353.60229	12.55620	14.43987	0.1760830	0.23955236	2.5676495	20	10 8.7	18.4
488344 2016 WE_{2}	16.3	X	284.46507	264.31670	154.94562	14.42222	0.0776469	0.22641272	2.6660534	20	9 29.4	19.7
488345 2016 WH_{2}	16.0	X	257.15187	285.69700	116.15888	10.82221	0.0809337	0.18865362	3.0108743	20	7 22.4	20.1
488346 2016 WX_{3}	15.9	X	202.53304	192.70404	243.93374	17.96024	0.1703345	0.18087359	3.0966059	20	6 26.2	21.1
488347 2016 WY_{3}	17.8	X	320.44832	230.41767	236.31865	6.72889	0.1486861	0.28305189	2.2973404	20	—	—
488348 2016 WM_{4}	15.7	X	132.25713	85.63758	74.73515	9.07753	0.0965716	0.17526355	3.1623382	20	8 4.0	20.6
488349 2016 WT_{4}	17.9	X	354.81375	162.04354	226.87980	3.74368	0.1889858	0.26088212	2.4257153	20	12 29.8	20.3
488350 2016 WK_{10}	15.7	X	290.22056	277.33512	57.56175	13.46093	0.2132775	0.18610499	3.0383003	20	5 19.1	19.9
488351 2016 WL_{10}	16.1	X	158.18131	278.85793	218.64397	9.78550	0.0704619	0.18626106	3.0366029	20	7 28.4	20.9
488352 2016 WO_{11}	15.1	X	215.34755	127.55105	233.82036	16.99740	0.1078999	0.14638358	3.5656700	20	4 11.8	20.7
488353 2016 WH_{12}	18.5	X	50.36803	348.62452	26.92817	2.94990	0.1796958	0.30517165	2.1849421	20	—	—
488354 2016 WH_{17}	17.5	X	263.13594	274.57440	171.60194	7.88915	0.2723104	0.21877346	2.7277608	20	8 30.7	21.1
488355 2016 WL_{23}	16.9	X	337.99574	337.33763	42.66446	9.89998	0.2160651	0.25730880	2.4481215	20	11 14.4	18.8
488356 2016 WN_{23}	17.5	X	25.61393	84.71513	322.89559	7.30434	0.0860209	0.28874146	2.2670614	20	—	—
488357 2016 WK_{24}	17.5	X	336.86088	205.33015	256.39661	4.68825	0.0552936	0.30269700	2.1968343	20	—	—
488358 2016 WT_{24}	17.2	X	303.93878	63.87508	3.89263	2.24419	0.1061304	0.23804149	2.5785028	20	11 7.4	19.8
488359 2016 WE_{26}	16.8	X	357.98543	85.96410	275.79687	2.72434	0.1607034	0.24076202	2.5590419	20	11 15.6	19.5
488360 2016 WG_{28}	16.0	X	182.43499	24.18122	83.10269	16.31105	0.1065339	0.17098116	3.2149227	20	7 19.3	21.2
488361 2016 WK_{29}	15.6	X	135.58052	308.34633	210.90227	18.29007	0.1060652	0.16925223	3.2367796	20	7 29.8	21.0
488362 2016 WM_{29}	17.2	X	21.34822	233.28717	134.16989	6.84576	0.1631049	0.26504979	2.4002201	20	—	—
488363 2016 WV_{29}	16.3	X	60.75753	185.55395	103.05936	9.15686	0.1082160	0.22990086	2.6390178	20	11 2.5	20.0
488364 2016 WN_{30}	16.1	X	182.35721	285.07781	198.12169	10.25667	0.1449406	0.17697363	3.1419337	20	8 3.5	21.3
488365 2016 WU_{30}	16.0	X	281.95007	280.97029	109.87921	11.50132	0.1163028	0.19760004	2.9192953	20	8 6.7	19.9
488366 2016 WY_{30}	17.3	X	260.71347	258.38526	218.25910	15.26639	0.2528337	0.22631594	2.6668134	20	10 9.6	20.8
488367 2016 WA_{31}	16.7	X	302.40900	296.26271	96.89480	14.19229	0.1305812	0.21565500	2.7539942	20	9 17.9	20.2
488368 2016 WL_{31}	15.7	X	269.40508	280.94867	90.53254	17.92457	0.1985562	0.17833424	3.1259323	20	6 12.2	20.2
488369 2016 WY_{34}	16.1	X	178.50997	60.45594	53.98724	6.48301	0.1396940	0.16750692	3.2592240	20	7 24.2	21.4
488370 2016 WB_{35}	16.8	X	237.59602	153.56614	3.35560	2.83459	0.1378568	0.24357444	2.5393052	20	11 23.2	20.1
488371 2016 WJ_{35}	15.3	X	239.24997	304.59313	90.45341	22.09675	0.0660362	0.16828468	3.2491742	20	6 22.8	19.9
488372 2016 WP_{35}	16.8	X	342.20301	256.37463	119.73066	11.51843	0.1527637	0.23569730	2.5955714	20	11 10.0	19.7
488373 2016 WK_{36}	15.5	X	295.10316	311.23986	47.93862	10.85667	0.1230799	0.18764844	3.0216170	20	7 12.7	19.6
488374 2016 WQ_{36}	15.4	X	342.93996	47.97394	254.09257	19.49130	0.1215488	0.18061443	3.0995675	20	7 8.1	19.3
488375 2016 WH_{37}	15.9	X	170.52080	251.75563	248.96029	16.33373	0.1375319	0.18152298	3.0892162	20	8 9.9	21.2
488376 2016 WT_{39}	17.0	X	356.10649	339.42889	27.34771	4.48741	0.0987311	0.24024013	2.5627467	20	11 11.3	19.9
488377 2016 WT_{41}	16.2	X	215.97354	312.98364	242.80802	27.87922	0.2169929	0.25639506	2.4539344	20	12 8.3	19.7
488378 2016 WA_{42}	16.3	X	223.30207	21.83079	59.07902	5.56928	0.1910527	0.18342638	3.0678081	20	7 22.3	21.2
488379 2016 WD_{45}	18.4	X	322.54464	151.44937	67.52502	22.73618	0.0309085	0.36800356	1.9285669	20	2 15.4	21.0
488380 2016 WJ_{45}	16.0	X	285.11074	108.01693	244.53969	2.99991	0.0911816	0.16934545	3.2355916	20	6 22.5	20.3
488381 2016 WR_{46}	16.0	X	196.86527	31.09450	64.24021	15.44249	0.2360022	0.17108585	3.2136111	20	7 13.9	21.7
488382 2016 WT_{46}	18.0	X	328.98535	319.09757	234.43797	18.91803	0.0582272	0.35723939	1.9671153	20	—	—
488383 2016 WX_{46}	17.5	X	302.20018	2.12342	90.07884	4.31978	0.1512379	0.25318945	2.4746037	20	12 12.9	19.7
488384 2016 WA_{47}	16.2	X	177.07641	252.72284	238.34218	12.21014	0.2072710	0.17460084	3.1703350	20	8 5.3	21.8
488385 2016 WE_{47}	17.8	X	319.99989	301.15593	167.88648	2.68299	0.1827613	0.27409600	2.3471144	20	—	—
488386 2016 WF_{47}	16.3	X	162.67365	68.22128	75.17591	13.25275	0.0650731	0.18289185	3.0737826	20	8 17.2	21.1
488387 2016 WM_{47}	16.2	X	254.81220	128.05525	244.39917	13.23667	0.3148288	0.17590398	3.1546579	20	5 15.6	21.4
488388 2016 WN_{47}	15.5	X	276.37431	319.68712	71.29876	10.13977	0.1049144	0.19244748	2.9711727	20	8 1.6	19.6
488389 2016 WT_{47}	17.1	X	253.27378	318.30572	84.81527	5.87286	0.2089238	0.18412870	3.0600021	20	7 2.2	21.6
488390 2016 WH_{48}	18.1	X	123.68227	331.76754	67.52507	23.12041	0.1093286	0.36147200	1.9517294	20	2 11.5	20.8
488391 2016 WN_{51}	15.3	X	192.39178	74.79497	55.83587	25.52908	0.1763367	0.16989756	3.2285780	20	9 5.9	21.1
488392 2016 WQ_{51}	17.1	X	287.54521	43.54558	80.36836	9.62356	0.1572534	0.26954835	2.3734401	20	—	—
488393 2016 WX_{51}	16.6	X	268.25294	19.79234	77.66545	15.86797	0.0519251	0.23867211	2.5739588	20	11 4.9	20.0
488394 2016 WE_{52}	16.8	X	253.02753	184.33978	245.06747	9.56415	0.2571530	0.20425101	2.8555728	20	7 27.1	21.3
488395 2016 WQ_{52}	16.0	X	263.71411	5.97963	42.41516	10.74034	0.0793980	0.19195428	2.9762599	20	8 13.7	20.3
488396 2016 WU_{52}	16.7	X	291.49772	164.16011	270.67987	11.98926	0.1087283	0.23433304	2.6056357	20	10 21.9	20.0
488397 2016 WV_{52}	17.8	X	153.78785	295.42956	57.44857	23.85638	0.0562584	0.34847194	1.9999732	20	—	—
488398 2016 WY_{52}	16.1	X	185.38759	207.90167	275.77293	8.16153	0.0661311	0.18459406	3.0548571	20	8 10.3	20.7
488399 2016 WE_{53}	17.5	X	288.95868	29.02580	38.64159	2.75643	0.1969743	0.22584590	2.6705123	20	9 29.0	20.2
488400 2016 WF_{53}	17.5	X	351.29474	25.59132	40.00229	3.39047	0.1010444	0.27231036	2.3573638	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488401 2016 WN_{53}	16.7	X	6.36771	105.15905	252.71235	11.42893	0.1202197	0.24068343	2.5595990	20	11 18.5	19.6
488402 2016 WB_{54}	16.1	X	204.63102	189.30485	265.33492	2.29871	0.1394142	0.17485366	3.1672784	20	7 23.2	21.1
488403 2016 WH_{54}	17.1	X	310.81485	203.71957	216.62591	0.92628	0.1304796	0.24035357	2.5619403	20	11 9.3	19.5
488404 2016 WJ_{54}	17.1	X	312.01928	354.70506	66.31852	4.68769	0.1395389	0.24153254	2.5535965	20	11 13.2	19.6
488405 2016 WL_{54}	17.7	X	345.40465	190.41613	257.92195	2.46359	0.1238091	0.28415286	2.2914024	20	—	—
488406 2016 WM_{54}	16.1	X	291.90150	251.26593	105.50458	1.50401	0.2275948	0.19253859	2.9702353	20	6 17.1	20.0
488407 2016 WR_{54}	18.0	X	335.85265	321.13318	108.55967	3.21822	0.2005521	0.26550183	2.3974950	20	—	—
488408 2016 WA_{55}	17.6	X	306.99889	293.87188	176.70151	1.81731	0.1295841	0.26546786	2.3976995	20	—	—
488409 2016 WB_{55}	16.6	X	350.25460	249.19435	88.56707	11.82613	0.2166066	0.22245851	2.6975533	20	10 5.1	19.3
488410 2016 WD_{55}	17.5	X	355.46307	350.75474	71.26213	9.05233	0.2765998	0.26730977	2.3866725	20	—	—
488411 2016 WS_{55}	16.5	X	300.71036	57.52962	304.98694	8.03298	0.0855543	0.18859445	3.0115040	20	7 29.5	20.5
488412 2016 XL	18.6	X	256.34733	16.07826	280.65373	16.46839	0.0474349	0.37713282	1.8973167	20	2 13.4	20.9
488413 2016 XZ_{2}	17.7	X	327.52072	22.69132	43.80538	6.90334	0.1121047	0.25494852	2.4632078	20	12 23.2	20.3
488414 2016 XA_{3}	16.4	X	208.40567	54.83246	52.37155	12.12970	0.1024647	0.18773581	3.0206794	20	8 21.0	21.2
488415 2016 XF_{3}	16.6	X	201.66356	254.56847	235.58047	14.87996	0.2927666	0.18361969	3.0656545	20	8 18.9	22.4
488416 2016 XR_{3}	17.5	X	342.38310	60.73328	9.87292	4.93672	0.1435114	0.26959119	2.3731886	20	—	—
488417 2016 XF_{4}	18.5	X	39.53612	135.75955	248.93716	3.88587	0.2473435	0.29255618	2.2473111	20	—	—
488418 2016 XJ_{4}	16.2	X	238.85850	264.96301	242.79236	14.05190	0.0635506	0.24110944	2.5565831	20	11 24.2	19.5
488419 2016 XQ_{5}	15.9	X	240.97938	119.58334	270.93691	6.16602	0.1768231	0.17281181	3.1921780	20	6 7.2	20.9
488420 2016 XP_{6}	18.1	X	3.96808	134.09337	291.70117	4.46345	0.1816525	0.28542702	2.2845780	20	—	—
488421 2016 XT_{6}	17.1	X	325.47852	34.47696	357.65661	3.79441	0.2676086	0.24050131	2.5608909	20	10 26.8	18.7
488422 2016 XL_{7}	17.4	X	18.65952	40.68903	336.24693	5.07195	0.2630202	0.27701448	2.3305999	20	—	—
488423 2016 XM_{8}	17.0	X	295.83793	140.75514	282.49012	5.67540	0.0696420	0.23073658	2.6326417	20	10 17.9	20.4
488424 2016 XY_{9}	16.6	X	18.49324	88.26014	235.30488	3.93960	0.2821021	0.24313848	2.5423398	20	11 17.9	19.3
488425 2016 XG_{12}	19.0	X	341.10731	155.30164	312.39785	2.78622	0.2114833	0.28702205	2.2761063	20	—	—
488426 2016 XL_{13}	16.2	X	241.45786	263.13910	151.63130	9.90548	0.0667304	0.17419788	3.1752223	20	7 19.7	21.0
488427 2016 XW_{14}	15.4	X	176.89551	212.60213	193.56396	11.55113	0.2834866	0.12475575	3.9666968	20	5 3.9	22.2
488428 2016 XU_{19}	18.4	X	359.69182	70.25009	13.99437	3.46275	0.1958240	0.27944097	2.3170887	20	—	—
488429 2016 XJ_{21}	15.7	X	196.97150	189.27445	250.30704	17.28140	0.0568813	0.18068363	3.0987759	20	6 29.5	20.5
488430 2016 XT_{21}	16.2	X	233.05503	343.79071	91.74549	16.53524	0.1768197	0.16839447	3.2477618	20	7 25.6	21.4
488431 2016 XW_{21}	15.4	X	267.05949	307.74034	91.82303	20.36826	0.1668248	0.17033761	3.2230151	20	7 18.5	20.1
488432 2016 XB_{22}	16.8	X	21.40642	246.84017	104.00790	22.32553	0.2839976	0.26176854	2.4202362	20	—	—
488433 2016 XD_{22}	17.0	X	319.12267	239.76502	141.87925	14.83679	0.2712663	0.22702031	2.6612944	20	9 18.9	19.1
488434 2016 XE_{22}	16.0	X	237.90041	265.61197	133.86203	25.76180	0.2793863	0.17286040	3.1915798	20	6 11.5	21.7
488435 2016 XM_{22}	16.8	X	329.59368	211.17878	180.78308	11.09303	0.2660065	0.24199976	2.5503088	20	11 13.5	18.6
488436 2016 XR_{22}	16.8	X	273.79163	176.83709	266.09305	5.23306	0.1156770	0.23006799	2.6377396	20	10 4.9	20.2
488437 2016 XZ_{22}	17.1	X	286.86708	266.15707	128.61797	11.36772	0.2465256	0.20940028	2.8085654	20	7 29.0	20.7
488438 2016 XG_{23}	17.2	X	254.64348	85.25407	21.36545	14.51636	0.2268606	0.21051455	2.7986460	20	9 25.9	21.2
488439 2016 XF_{24}	16.4	X	325.54892	264.12372	158.55836	14.07226	0.2013363	0.24633962	2.5202669	20	12 18.3	18.9
488440 2016 XG_{24}	16.6	X	291.71006	280.32041	190.06603	16.96521	0.1754861	0.24381256	2.5376516	20	12 13.3	19.4
488441 2016 XH_{24}	15.9	X	290.87873	304.91892	110.22976	26.53054	0.2367303	0.21847463	2.7302477	20	9 15.2	19.5
488442 2016 YH_{2}	15.7	X	273.26628	169.15529	210.59498	19.92485	0.1049841	0.17391072	3.1787167	20	7 6.2	20.6
488443 2016 YT_{2}	16.3	X	330.02228	296.09568	118.35562	14.96425	0.0568639	0.21539460	2.7562134	20	11 30.0	20.0
488444 2016 YK_{5}	18.5	X	80.49373	48.56587	88.89608	21.48295	0.0893604	0.39258541	1.8471973	20	5 5.5	20.5
488445 2016 YG_{7}	16.9	X	235.33798	268.05552	240.68458	7.04364	0.1340521	0.23661948	2.5888232	20	11 8.9	20.3
488446 2016 YR_{9}	16.0	X	232.69688	320.97949	86.66113	17.82938	0.2003167	0.17596887	3.1538824	20	6 18.1	21.1
488447 2016 YU_{9}	17.6	X	319.81102	275.14763	202.28428	5.19531	0.1910683	0.27448425	2.3449006	20	—	—
488448 2016 YC_{10}	17.8	X	4.34359	243.64427	240.82092	5.69640	0.0971040	0.29999661	2.2099977	20	—	—
488449 2016 YL_{10}	15.5	X	175.74512	245.45759	288.98835	10.23659	0.1153036	0.17363337	3.1821007	20	9 25.7	20.8
488450 1994 JX	17.2	X	243.55000	193.43884	52.48326	32.15374	0.5724579	0.21445425	2.7642646	20	—	—
488451 1994 ST_{11}	17.0	X	182.03904	331.18036	76.86161	2.48606	0.1825214	0.17575251	3.1564702	20	5 7.3	22.3
488452 1994 VH_{4}	17.4	X	114.35071	78.13783	263.21366	2.64716	0.2218648	0.23950846	2.5679633	20	—	—
488453 1994 XD	19.1	X	43.96674	249.37181	96.15548	4.31064	0.7338025	0.27416089	2.3467440	20	—	—
488454 1995 DC_{9}	17.1	X	228.35083	181.03183	349.09747	17.64127	0.2050746	0.18154307	3.0889883	20	11 1.4	22.2
488455 1995 SA_{10}	17.0	X	225.87798	31.64559	355.69872	14.45357	0.2657538	0.22672038	2.6636409	20	5 8.5	21.9
488456 1995 SM_{62}	18.4	X	53.94351	333.46458	20.68539	5.09315	0.1064624	0.24458264	2.5323222	20	—	—
488457 1995 TJ_{10}	18.0	X	268.72139	177.24916	199.98047	6.31558	0.2090141	0.22955630	2.6416579	20	6 17.5	21.8
488458 1995 UD_{53}	16.8	X	263.68145	10.59799	5.04595	9.30206	0.0963780	0.18933859	3.0036083	20	6 24.6	21.2
488459 1995 UN_{55}	17.8	X	198.36383	294.66089	13.02106	14.58788	0.1748318	0.25670743	2.4519433	20	1 21.3	22.1
488460 1996 BO_{11}	16.8	X	135.30191	179.79608	283.23509	10.49981	0.1344735	0.17379011	3.1801871	20	5 28.1	21.9
488461 1996 FS_{1}	20.2	X	354.55826	224.56991	170.05562	38.81131	0.7618402	0.56484061	1.4493906	20	—	—
488462 1996 TD_{1}	16.8	X	228.50176	116.54213	191.52061	24.47911	0.4331482	0.23207200	2.6225326	20	2 3.6	22.4
488463 1996 VE_{35}	16.1	X	21.42455	203.62546	236.73528	15.71439	0.1988784	0.17421077	3.1750657	20	—	—
488464 1997 SD_{7}	16.5	X	76.18293	335.38281	355.26153	9.45023	0.0858419	0.18075927	3.0979114	20	12 25.0	21.2
488465 1998 HK_{1}	19.7	X	340.74731	24.95351	213.61110	7.93275	0.4282664	0.31109937	2.1570984	20	1 29.7	22.1
488466 1998 QO_{56}	16.6	X	102.19827	314.15536	349.26589	10.64481	0.1044744	0.18905632	3.0065972	20	12 23.5	21.4
488467 1998 QE_{58}	17.5	X	203.64080	219.12720	174.57942	2.10642	0.2502409	0.21052261	2.7985746	20	5 5.9	22.4
488468 1998 QG_{59}	17.9	X	257.55157	8.80175	354.08969	3.37615	0.2265147	0.21495717	2.7599514	20	5 14.1	22.1
488469 1998 SQ_{122}	16.8	X	97.93481	145.15800	214.16467	3.65077	0.2761773	0.23856852	2.5747039	20	—	—
488470 1998 UV_{50}	16.7	X	6.47255	6.84265	49.95906	10.85500	0.1250941	0.18534350	3.0466166	20	—	—
488471 1998 WG_{35}	18.4	X	47.97096	38.07427	47.53677	5.82160	0.1954363	0.28413995	2.2914718	20	—	—
488472 1998 YE_{15}	18.2	X	312.76984	313.24368	102.54916	5.81014	0.2174188	0.26565686	2.3965621	20	11 15.3	19.8
488473 1999 FW_{80}	17.5	X	256.30577	12.52620	169.49443	13.60846	0.2188385	0.21871199	2.7282719	20	—	—
488474 1999 HD_{1}	20.3	X	87.51138	147.94462	209.87583	18.21637	0.4176819	0.81906137	1.1313364	20	—	—
488475 1999 RW_{199}	16.4	X	152.04872	154.45018	234.55879	11.36113	0.3065498	0.21313216	2.7756842	20	3 21.6	21.6
488476 1999 RN_{239}	17.3	X	266.50600	356.89606	314.16342	10.51915	0.3937529	0.27014516	2.3699431	20	2 29.0	21.7
488477 1999 TY_{20}	16.7	X	270.04945	159.07957	216.35931	7.48406	0.3058060	0.22626024	2.6672510	20	6 3.8	20.7
488478 1999 TP_{34}	16.7	X	296.28445	338.76610	21.30994	13.45516	0.2974223	0.22915507	2.6447405	20	6 15.8	20.2
488479 1999 TB_{45}	16.2	X	142.02014	277.61296	16.55489	17.64931	0.1469290	0.19985237	2.8973203	20	—	—
488480 1999 TC_{46}	18.1	X	143.94447	257.10364	209.67695	20.24982	0.0928750	0.36222343	1.9490293	20	6 9.6	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488481 1999 TZ_{59}	17.0	X	297.86885	352.02354	357.04090	13.61886	0.1152180	0.22892145	2.6465396	20	7 8.2	20.5
488482 1999 TZ_{188}	17.3	X	313.59531	128.76501	248.65241	11.85275	0.2658687	0.23177738	2.6247545	20	8 17.9	20.0
488483 1999 UY_{30}	18.7	X	16.37825	219.01759	189.31357	5.04895	0.1971003	0.29145153	2.2529860	20	—	—
488484 1999 UP_{31}	16.7	X	271.40903	62.42969	34.01250	12.95501	0.1017791	0.23486152	2.6017255	20	10 25.9	19.9
488485 1999 UU_{55}	17.9	X	212.50083	193.34586	117.08207	1.25887	0.1971006	0.26080176	2.4262136	20	2 1.0	21.7
488486 1999 VQ_{6}	18.5	X	312.89592	254.37249	203.46484	27.60986	0.5107366	0.23596906	2.5935781	20	—	—
488487 1999 VA_{13}	17.6	X	285.02241	24.23833	18.60653	21.27924	0.0595495	0.37277264	1.9120828	20	10 7.1	19.0
488488 1999 VA_{139}	18.2	X	221.61175	288.03583	100.76796	3.06833	0.1055259	0.26650212	2.3914920	20	5 22.6	21.5
488489 1999 WM_{5}	17.9	X	39.76150	155.03923	62.06823	22.39010	0.0420536	0.36232040	1.9486815	20	6 14.5	19.7
488490 2000 AF_{205}	21.8	X	234.08108	127.28158	220.02559	2.40856	0.2767496	0.93748990	1.0339312	20	1 29.9	19.9
488491 2000 CG_{130}	17.2	X	188.02925	219.53276	344.66508	0.91995	0.1481547	0.17734977	3.1374897	20	11 14.9	22.3
488492 2000 EX_{202}	16.7	X	309.39179	225.43142	202.01476	13.06983	0.0716620	0.17604075	3.1530238	20	11 4.2	20.8
488493 2000 FN_{53}	16.8	X	78.33164	315.81920	17.66306	15.26932	0.0940828	0.22404282	2.6848211	20	—	—
488494 2000 JA_{3}	18.7	X	318.68956	151.25045	119.61025	10.19321	0.4575268	0.29153952	2.2525327	20	2 18.2	21.8
488495 2000 LO_{31}	16.0	X	96.05698	238.51184	88.07158	15.36604	0.1472450	0.17031289	3.2233270	20	—	—
488496 2000 OM_{1}	17.5	X	11.36535	51.13869	251.58358	6.88177	0.1492535	0.19968183	2.8989697	20	9 2.7	21.0
488497 2000 QM_{20}	17.2	X	233.11334	65.26690	338.80281	5.19736	0.3547862	0.23576687	2.5950607	20	6 2.3	21.9
488498 2000 QJ_{117}	16.9	X	185.16000	193.81246	147.73511	19.53798	0.3986559	0.22474375	2.6792359	20	2 23.5	22.1
488499 2000 QR_{216}	17.8	X	5.29477	321.69825	2.21470	5.31617	0.2266804	0.29820849	2.2188233	20	10 30.5	19.6
488500 2000 SE_{44}	18.2	X	250.82614	340.95717	13.10752	20.80097	0.0899776	0.38324111	1.8771025	20	4 29.3	20.5
488501 2000 SH_{84}	16.8	X	114.02495	313.38980	16.90306	11.65026	0.3270096	0.21291616	2.7775612	20	—	—
488502 2000 SD_{164}	17.8	X	117.46073	338.23682	19.66536	15.80070	0.3022705	0.26508445	2.4000109	20	1 18.3	21.4
488503 2000 SO_{173}	15.7	X	193.52237	111.56608	243.79055	15.07044	0.2564274	0.17645795	3.1480519	20	3 9.7	21.6
488504 2000 SF_{186}	18.2	X	269.55024	16.02415	5.73266	2.62588	0.1433681	0.28907848	2.2652990	20	7 8.2	20.9
488505 2000 SA_{241}	16.9	X	173.11615	139.42064	222.86329	23.03078	0.1678913	0.27341061	2.3510352	20	2 20.0	21.2
488506 2000 SU_{250}	17.5	X	164.63327	304.84544	47.47850	5.55502	0.1729858	0.27194816	2.3594565	20	2 10.5	21.2
488507 2000 TF_{50}	15.8	X	179.92459	335.32519	53.88882	16.49552	0.2808086	0.17632569	3.1496260	20	4 18.7	21.5
488508 2000 UQ_{3}	17.7	X	237.88970	8.14232	30.60470	4.71225	0.2993650	0.23456116	2.6039461	20	6 3.5	22.1
488509 2000 UW_{13}	20.6	X	185.81400	39.83228	33.59437	26.46182	0.1452637	0.68469400	1.2748870	20	6 6.3	21.7
488510 2000 UE_{16}	17.5	X	215.32691	86.98013	240.17176	9.02592	0.3431356	0.27609617	2.3357649	20	2 16.7	22.1
488511 2000 UF_{76}	16.7	X	142.20212	162.76729	232.20793	23.34431	0.2294166	0.27084584	2.3658540	20	3 8.0	20.9
488512 2000 US_{95}	16.3	X	141.57187	108.09874	239.24753	11.36663	0.2994071	0.21665095	2.7455476	20	1 25.5	21.1
488513 2000 WL_{29}	18.1	X	198.64647	210.42173	231.29533	18.99719	0.0733582	0.38437998	1.8733929	20	7 9.7	20.6
488514 2000 XY_{10}	17.5	X	192.43095	47.55495	50.66903	5.91625	0.2073082	0.23285230	2.6166704	20	7 17.3	21.9
488515 2001 FE_{90}	20.6	X	31.14972	145.12696	98.53374	8.79278	0.4946198	0.36620492	1.9348766	20	10 14.8	23.3
488516 2001 FP_{108}	16.9	X	186.90175	191.34382	0.99309	12.59522	0.1029925	0.23342460	2.6123917	20	11 7.9	20.9
488517 2001 ML_{8}	16.2	X	111.37062	140.10453	176.88647	32.35402	0.2343045	0.22837658	2.6507474	20	—	—
488518 2001 PL_{30}	17.9	X	239.58073	282.61206	42.84055	6.07456	0.1682479	0.29790894	2.2203104	20	3 14.9	21.2
488519 2001 QX_{95}	16.2	X	186.71618	354.61729	313.40048	5.18418	0.0469793	0.18237742	3.0795600	20	1 12.3	20.6
488520 2001 QQ_{146}	18.0	X	44.54231	229.08688	122.61379	2.29186	0.1884985	0.27153740	2.3618353	20	—	—
488521 2001 QY_{189}	16.1	X	160.31609	75.99395	192.32087	24.38873	0.3697395	0.17523660	3.1626624	20	12 26.9	22.5
488522 2001 QV_{211}	18.0	X	42.08599	38.74635	322.54856	2.30521	0.2667161	0.27019772	2.3696357	20	—	—
488523 2001 QE_{217}	18.4	X	222.68802	213.12736	139.69219	4.66915	0.2452600	0.29628228	2.2284296	20	3 30.1	22.2
488524 2001 QV_{327}	16.7	X	226.16881	251.83762	66.86837	12.11333	0.3577011	0.24021834	2.5629016	20	2 24.5	21.8
488525 2001 RA_{2}	16.7	X	217.22304	147.61995	160.84730	33.31084	0.2672006	0.23950993	2.5679528	20	2 3.1	21.6
488526 2001 RR_{8}	18.1	X	33.59932	192.32780	174.11151	3.14153	0.2420309	0.26957634	2.3732758	20	—	—
488527 2001 RZ_{13}	18.4	X	175.68106	190.30789	162.74870	1.66429	0.2302141	0.28935928	2.2638333	20	2 20.6	22.2
488528 2001 RJ_{16}	15.5	X	129.78356	327.97016	5.52877	3.32616	0.3119071	0.12340083	3.9956797	20	1 15.5	21.9
488529 2001 RV_{85}	18.2	X	197.67821	348.00453	353.94667	3.09788	0.1934373	0.29091129	2.2557744	20	2 24.7	21.7
488530 2001 RQ_{88}	16.3	X	212.52523	349.79048	9.76679	16.18723	0.2534136	0.18952985	3.0015873	20	4 1.8	21.4
488531 2001 RL_{98}	17.2	X	191.52518	310.01356	6.31233	12.81547	0.2755777	0.23422574	2.6064314	20	1 30.8	22.1
488532 2001 RQ_{108}	18.1	X	213.88704	33.42891	351.40142	18.37091	0.0987081	0.35190946	1.9869278	20	4 26.2	21.0
488533 2001 RF_{127}	15.4	X	129.04396	140.78302	163.32352	23.06353	0.1811293	0.17134765	3.2103369	20	—	—
488534 2001 SZ_{91}	16.6	X	153.70496	229.13178	190.55705	6.07572	0.3170144	0.18593713	3.0401287	20	5 3.4	22.1
488535 2001 SD_{145}	16.7	X	192.25768	50.12211	319.34694	3.82191	0.2448432	0.18773786	3.0206574	20	3 28.9	22.1
488536 2001 SY_{150}	18.3	X	12.52462	51.76491	315.81290	1.98746	0.2499631	0.26540099	2.3981022	20	—	—
488537 2001 SC_{189}	18.3	X	341.17818	156.20898	205.21525	0.65508	0.1886706	0.26187757	2.4195644	20	10 22.8	20.1
488538 2001 SV_{195}	18.6	X	196.25926	176.96404	162.17279	2.38541	0.2311698	0.29087265	2.2559742	20	2 20.0	22.4
488539 2001 SJ_{198}	18.2	X	154.11117	6.89730	39.49449	1.96061	0.1032750	0.29229893	2.2486295	20	3 31.1	21.3
488540 2001 ST_{219}	19.0	X	325.10283	357.58146	16.19103	3.89723	0.2501597	0.25929603	2.4355972	20	10 2.5	20.2
488541 2001 SD_{242}	17.7	X	250.18537	310.76070	13.65657	22.11328	0.1216422	0.34748158	2.0037715	20	3 25.4	20.1
488542 2001 SZ_{293}	16.4	X	80.89055	320.10953	6.95446	17.27733	0.1356585	0.21869406	2.7284210	20	—	—
488543 2001 SN_{349}	18.2	X	336.36351	60.41725	308.76011	4.93281	0.2717952	0.26069983	2.4268460	20	10 28.5	19.6
488544 2001 SV_{355}	18.6	X	228.14042	288.71087	56.54752	5.90300	0.2167379	0.29448423	2.2374913	20	3 27.3	22.2
488545 2001 TM_{13}	17.2	X	133.57915	357.13245	21.89852	24.55232	0.2302390	0.28356290	2.2945795	20	2 29.5	21.0
488546 2001 TW_{28}	15.8	X	100.20753	178.41937	243.22077	9.85987	0.2201898	0.17611715	3.1521119	20	3 8.7	20.6
488547 2001 TW_{69}	18.1	X	292.34308	78.55058	304.96511	1.28488	0.2187546	0.25447464	2.4662648	20	7 31.4	20.4
488548 2001 TR_{70}	16.8	X	240.59112	325.80713	28.81298	18.36432	0.3281868	0.19237389	2.9719303	20	4 14.1	22.0
488549 2001 TH_{91}	16.4	X	20.02644	229.91874	206.67402	24.98656	0.1662577	0.22061758	2.7125389	20	—	—
488550 2001 TR_{100}	16.3	X	167.58916	13.07723	7.54663	16.76585	0.2466364	0.18365259	3.0652884	20	3 26.1	21.6
488551 2001 TB_{230}	18.3	X	2.97702	327.71046	21.41675	3.79443	0.2263010	0.26222540	2.4174243	20	11 23.2	20.6
488552 2001 TW_{237}	17.8	X	203.16658	283.89281	95.04382	4.71452	0.2707196	0.24129846	2.5552478	20	4 18.2	22.4
488553 2001 TC_{253}	15.9	X	324.31444	357.13313	31.01946	20.06917	0.0368734	0.15548790	3.4250873	20	10 8.6	20.6
488554 2001 UF_{1}	17.0	X	187.30294	112.90795	214.52059	28.45963	0.3578595	0.23546187	2.5973012	20	1 30.5	22.6
488555 2001 UJ_{84}	16.9	X	175.87706	47.86105	18.12288	9.40256	0.3634300	0.18694369	3.0292062	20	5 22.2	22.7
488556 2001 UP_{127}	16.7	X	163.41197	253.87293	170.52973	4.13461	0.2301364	0.18519395	3.0482565	20	5 12.9	21.9
488557 2001 UB_{191}	18.1	X	77.51294	165.01041	226.14371	3.92985	0.2272070	0.27724467	2.3293097	20	—	—
488558 2001 UK_{191}	16.1	X	160.55744	78.60523	199.59009	24.63293	0.2922726	0.17258851	3.1949309	20	—	—
488559 2001 UO_{195}	18.3	X	328.03532	168.59917	203.41360	0.76662	0.1859635	0.25835237	2.4415245	20	10 7.1	20.2
488560 2001 UC_{221}	17.1	X	0.85256	22.39782	28.44331	8.50939	0.2348327	0.21270379	2.7794096	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488561 2001 UR_{231}	18.7	X	209.22403	283.71487	70.47525	3.38847	0.1859958	0.29299898	2.2450463	20	3 22.2	22.2
488562 2001 VX_{9}	17.0	X	120.79782	289.16822	59.54920	10.27131	0.3099014	0.22565675	2.6720044	20	1 13.9	21.1
488563 2001 VK_{13}	17.4	X	159.23895	205.79038	236.91548	20.42403	0.0688608	0.34644147	2.0077800	20	5 23.1	19.5
488564 2001 VN_{111}	16.5	X	201.56251	4.90403	359.46729	1.10541	0.3166608	0.18531990	3.0468753	20	3 30.4	22.2
488565 2001 WU_{10}	16.3	X	131.71442	170.66027	226.70836	16.99538	0.2056447	0.17746015	3.1361885	20	3 8.5	21.6
488566 2001 WD_{20}	17.9	X	36.48302	339.31131	24.85248	3.44025	0.2482172	0.26753837	2.3853128	20	—	—
488567 2001 WK_{63}	16.0	X	192.44444	108.99416	244.50010	9.95515	0.0707911	0.17928534	3.1148671	20	3 7.7	20.9
488568 2001 XJ_{13}	16.4	X	120.88422	174.71071	293.18975	9.07445	0.2784643	0.17987429	3.1080642	20	6 1.4	21.7
488569 2001 XC_{37}	17.2	X	152.80059	7.43898	45.33493	12.35667	0.2553301	0.23411815	2.6072299	20	4 21.5	21.6
488570 2001 XH_{138}	17.4	X	107.64638	316.96195	111.06528	5.24085	0.2659503	0.22869461	2.6482893	20	4 2.4	21.4
488571 2001 XS_{219}	16.2	X	142.93133	140.39885	249.92935	9.05634	0.2295836	0.17844152	3.1246792	20	3 13.1	21.5
488572 2001 XH_{260}	17.7	X	338.32428	113.39686	239.77189	12.86443	0.1761202	0.25625336	2.4548389	20	9 23.6	20.1
488573 2002 AA_{96}	17.7	X	350.22292	148.83478	322.11568	5.24537	0.1446010	0.26636574	2.3923083	20	—	—
488574 2002 AE_{181}	16.8	X	266.99253	53.91897	65.26265	16.38301	0.2268091	0.20215972	2.8752325	20	10 28.6	20.6
488575 2002 CZ_{36}	17.7	X	131.72307	187.31728	331.04869	3.72215	0.2174506	0.23658377	2.5890837	20	8 10.2	21.8
488576 2002 CF_{214}	17.5	X	176.69223	116.37259	352.10676	3.35538	0.2297165	0.23741237	2.5830560	20	7 16.4	22.0
488577 2002 CO_{282}	18.1	X	336.68005	196.95021	296.20750	0.99934	0.1774274	0.26562813	2.3967350	20	—	—
488578 2002 EE_{76}	18.3	X	106.16758	351.91690	182.22447	4.94267	0.0899247	0.28641897	2.2793002	20	7 26.6	21.3
488579 2002 FQ_{4}	20.3	X	202.76541	68.50581	182.38954	34.93826	0.1942338	0.52521128	1.5214115	20	—	—
488580 2002 GK_{8}	19.7	X	39.01344	266.76059	47.81495	38.99717	0.4015363	0.39449621	1.8412277	20	—	—
488581 2002 GX_{172}	17.9	X	291.92625	150.36694	73.22191	7.10506	0.2198910	0.26331234	2.4107670	20	—	—
488582 2002 LD_{35}	17.1	X	186.85924	199.49377	98.22317	15.40960	0.4944909	0.19300764	2.9654211	20	1 10.9	23.2
488583 2002 NM_{15}	16.4	X	152.13353	172.30458	102.62537	24.44664	0.3572248	0.18653628	3.0336153	20	—	—
488584 2002 OX_{32}	15.8	X	74.03700	56.74855	315.23291	8.18482	0.2581143	0.12664609	3.9271263	20	—	—
488585 2002 PM_{5}	16.5	X	161.80560	139.00296	185.78239	9.20815	0.3152317	0.19089077	2.9873040	20	1 19.7	22.0
488586 2002 PH_{103}	16.9	X	188.73731	176.97234	202.68934	6.78926	0.3483265	0.20028055	2.8931894	20	4 8.2	22.4
488587 2002 PH_{130}	18.3	X	40.98438	21.98594	326.39710	7.16543	0.2717973	0.28563642	2.2834614	20	—	—
488588 2002 PM_{191}	17.4	X	119.62703	315.13699	332.01021	8.13124	0.1131112	0.23637398	2.5906153	20	12 31.7	21.5
488589 2002 PK_{202}	16.5	X	93.98046	152.79088	209.20175	17.73327	0.2324101	0.23864542	2.5741508	20	—	—
488590 2002 QE	18.2	X	66.20629	100.08725	235.49856	2.76209	0.3131119	0.23205811	2.6226372	20	—	—
488591 2002 QO_{38}	17.4	X	281.38192	67.48112	354.47402	7.26142	0.3156879	0.21577185	2.7529999	20	8 18.3	20.9
488592 2002 QS_{38}	18.2	X	327.35357	166.94892	148.51755	1.51645	0.1975286	0.26898962	2.3767256	20	6 30.7	19.8
488593 2002 QQ_{69}	18.0	X	335.32107	139.09683	177.74043	3.28634	0.1963818	0.21686076	2.7437765	20	7 16.9	20.6
488594 2002 QY_{89}	18.6	X	209.25364	48.33606	306.23687	1.51450	0.1924302	0.31181384	2.1538021	20	3 18.9	22.0
488595 2002 QT_{92}	18.9	X	45.10098	289.88892	68.63527	2.54838	0.2801155	0.28634150	2.2797113	20	—	—
488596 2002 QB_{98}	18.3	X	261.76892	30.99788	337.94837	1.59541	0.1871498	0.26686104	2.3893472	20	5 31.9	21.4
488597 2002 QQ_{111}	18.0	X	246.79841	17.72203	303.38504	4.21321	0.1831872	0.31449651	2.1415366	20	3 9.3	21.3
488598 2002 QL_{124}	17.7	X	317.77699	44.10623	268.18143	3.43321	0.2547749	0.21490470	2.7604005	20	5 24.1	20.5
488599 2002 QY_{156}	17.0	X	123.25593	102.17856	245.72473	7.51987	0.2166020	0.24146478	2.5540743	20	—	—
488600 2002 RM_{44}	15.4	X	83.18578	308.44997	65.41246	3.80276	0.3257072	0.12555087	3.9499315	20	1 19.7	20.8
488601 2002 RA_{49}	15.7	X	90.81171	328.27806	1.49069	16.50174	0.1845031	0.17793219	3.1306393	20	—	—
488602 2002 RV_{49}	17.8	X	229.35649	326.95081	3.22372	7.06727	0.2666673	0.31166099	2.1545062	20	3 5.2	21.3
488603 2002 RH_{76}	17.1	X	111.88882	182.07730	161.43378	8.32766	0.2025262	0.23931844	2.5693224	20	—	—
488604 2002 RW_{112}	16.2	X	79.51151	357.99199	306.27306	19.14763	0.2097579	0.17386347	3.1792925	20	12 8.9	21.5
488605 2002 RT_{115}	18.5	X	63.81256	126.35312	215.89272	4.03449	0.2158097	0.28769869	2.2725361	20	—	—
488606 2002 RE_{121}	16.1	X	121.67495	103.01126	217.32128	12.54078	0.2892862	0.18128279	3.0919443	20	—	—
488607 2002 RS_{189}	15.1	X	76.12604	184.23023	189.00033	8.09454	0.3006295	0.12438670	3.9745390	20	1 5.7	20.4
488608 2002 RY_{208}	17.6	X	282.80609	15.61130	345.46955	4.64284	0.1719530	0.21172702	2.7879514	20	6 19.4	21.4
488609 2002 RE_{209}	16.3	X	73.98506	123.45625	179.94977	26.14480	0.2413095	0.17242920	3.1968985	20	12 7.0	21.8
488610 2002 RQ_{210}	17.0	X	36.52378	216.52596	181.37568	13.41560	0.2577475	0.23180474	2.6245479	20	—	—
488611 2002 RU_{254}	17.7	X	250.05634	34.66590	308.68081	1.92008	0.2036667	0.20555849	2.8434511	20	4 15.3	22.2
488612 2002 RG_{255}	16.6	X	98.98016	314.70939	3.33884	18.10372	0.1888633	0.17950254	3.1123540	20	—	—
488613 2002 RC_{263}	15.9	X	96.84069	93.47288	261.86515	3.69650	0.3082885	0.12584109	3.9438562	20	1 10.2	21.7
488614 2002 RT_{267}	17.4	X	65.36729	267.15767	116.75322	10.19065	0.1203649	0.23622519	2.5917031	20	—	—
488615 2002 SR	21.7	X	228.51253	285.18636	160.87647	6.68957	0.1960072	0.76927452	1.1796373	20	—	—
488616 2002 TZ_{26}	16.6	X	239.52116	161.81085	206.21280	7.02828	0.3127714	0.20418660	2.8561734	20	4 28.9	21.7
488617 2002 TP_{93}	17.2	X	53.08345	357.26011	22.14319	7.03829	0.2594004	0.23273289	2.6175654	20	—	—
488618 2002 TK_{125}	16.7	X	227.04271	140.59830	226.36881	11.29703	0.1966015	0.20305173	2.8668056	20	4 23.9	21.4
488619 2002 TW_{208}	16.9	X	78.85194	219.38606	163.35453	16.22825	0.2027332	0.23646768	2.5899309	20	—	—
488620 2002 TM_{239}	16.5	X	165.50689	23.63524	13.03791	14.32389	0.2249199	0.19523521	2.9428217	20	4 9.3	21.6
488621 2002 TR_{259}	17.7	X	303.33535	250.44038	196.58769	12.70693	0.4188088	0.21923477	2.7239330	20	10 19.5	19.0
488622 2002 TN_{292}	17.5	X	240.03378	150.79659	221.43408	20.05110	0.1003109	0.36969131	1.9226927	20	5 20.7	19.7
488623 2002 TF_{298}	17.3	X	82.67913	21.86887	347.98230	7.37787	0.1951302	0.23623859	2.5916051	20	—	—
488624 2002 TA_{306}	17.1	X	151.60586	116.84574	177.26946	16.21223	0.2939953	0.18241331	3.0791561	20	—	—
488625 2002 TJ_{306}	17.9	X	255.53529	231.52838	131.47886	4.71054	0.1615495	0.26151457	2.4218029	20	5 21.4	21.3
488626 2002 TX_{306}	16.6	X	163.27240	217.65471	50.10096	12.21819	0.1223906	0.17767412	3.1336701	20	—	—
488627 2002 TX_{310}	17.0	X	162.80732	230.55871	60.26146	10.41609	0.1938467	0.23797174	2.5790066	20	—	—
488628 2002 TG_{325}	18.3	X	24.57383	13.65873	13.02281	2.79512	0.0692057	0.28565872	2.2833425	20	—	—
488629 2002 TS_{327}	16.6	X	142.48692	173.20455	130.77605	2.56222	0.1698444	0.18197561	3.0840915	20	—	—
488630 2002 TJ_{356}	19.2	X	39.31192	139.10251	239.70875	1.11118	0.2376487	0.28656261	2.2785385	20	—	—
488631 2002 UM_{70}	17.9	X	310.15129	40.15410	354.20265	5.34208	0.2010866	0.27284364	2.3542911	20	10 2.6	19.5
488632 2002 UZ_{70}	17.1	X	96.52190	154.22362	195.94170	11.41240	0.1972041	0.23438088	2.6052812	20	—	—
488633 2002 UO_{72}	17.7	X	68.07373	197.37245	235.47913	3.57400	0.3170298	0.18187761	3.0851993	20	2 26.9	21.4
488634 2002 VY_{88}	15.8	X	163.12301	52.98643	262.28000	7.24435	0.4330567	0.18516167	3.0486109	20	1 16.3	21.7
488635 2002 VH_{90}	17.8	X	341.60246	168.30084	215.06761	7.11065	0.2340321	0.27532428	2.3401285	20	12 9.8	19.6
488636 2002 WY_{12}	19.4	X	111.63536	5.99210	62.07821	20.60396	0.4340664	0.35652016	1.9697600	20	4 24.0	22.6
488637 2002 XD_{69}	16.4	X	67.46275	57.46461	7.38793	26.06354	0.3862678	0.17819874	3.1275166	20	3 9.4	20.4
488638 2003 AJ_{79}	17.0	X	31.58183	42.71043	94.37394	25.10601	0.1644096	0.28940307	2.2636049	20	2 7.4	19.2
488639 2003 BJ_{90}	17.9	X	115.44012	12.69331	124.84099	26.55028	0.0768628	0.35990595	1.9573870	20	6 22.0	20.5
488640 2003 FR_{6}	19.0	X	11.89214	72.60861	186.03543	40.54735	0.3977040	0.35172679	1.9876157	20	9 16.1	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488641 2003 FD_{25}	16.6	X	249.39983	165.15373	358.35679	9.97014	0.1235208	0.21056753	2.7981766	20	12 10.7	20.5
488642 2003 FP_{132}	17.9	X	272.38484	8.68747	176.53832	1.41729	0.2481310	0.21571969	2.7534437	20	—	—
488643 2003 GR_{21}	18.5	X	306.85523	285.99812	32.28955	21.48476	0.0852163	0.35433665	1.9778438	20	6 5.8	20.7
488644 2003 HY_{56}	7.9	X	301.81358	245.86779	35.65660	2.57838	0.0406712	0.00352850	42.7309403	20	4 29.2	24.1
488645 2003 OV	18.4	X	355.39120	148.03841	261.62376	10.30048	0.8557983	0.29326866	2.2436698	20	—	—
488646 2003 QK_{47}	18.9	X	4.41596	332.02999	331.96767	24.61801	0.1806905	0.40912303	1.7970773	20	9 29.8	20.6
488647 2003 QL_{81}	18.4	X	234.60203	340.24949	345.31004	3.13367	0.2550601	0.27237330	2.3570006	20	3 5.2	22.3
488648 2003 SM_{78}	17.6	X	308.95039	50.86374	286.89498	4.06555	0.1745533	0.22542094	2.6738675	20	6 28.3	20.6
488649 2003 SV_{92}	16.8	X	315.77073	228.53889	191.42170	16.48091	0.2165703	0.17620618	3.1510500	20	10 26.1	20.1
488650 2003 SY_{131}	17.3	X	136.85823	359.80469	343.10204	7.03651	0.1452896	0.25739631	2.4475665	20	—	—
488651 2003 SV_{136}	17.1	X	238.14849	120.09069	253.46831	3.79449	0.1262850	0.21923869	2.7239005	20	5 18.7	21.2
488652 2003 SL_{138}	17.0	X	266.43645	19.44824	348.29859	10.73882	0.3033220	0.22154142	2.7049927	20	5 17.8	21.5
488653 2003 SS_{182}	17.0	X	99.27205	89.80847	304.39263	6.21927	0.1151696	0.25609205	2.4558697	20	1 11.3	20.0
488654 2003 SF_{218}	17.9	X	157.53998	170.82120	193.00395	6.13095	0.1713899	0.26058788	2.4275410	20	2 14.9	21.6
488655 2003 SG_{238}	17.9	X	200.46698	42.23345	12.52036	3.91877	0.1797530	0.27347845	2.3506464	20	5 29.6	21.7
488656 2003 SW_{239}	17.9	X	194.80910	15.34623	319.96288	1.63568	0.1905909	0.26505812	2.4001699	20	2 15.7	21.8
488657 2003 SM_{240}	16.4	X	298.27903	240.07369	200.00530	9.70540	0.2008391	0.17682794	3.1436592	20	10 20.2	19.9
488658 2003 SZ_{290}	18.1	X	303.83431	157.49332	199.17484	10.76063	0.2928989	0.28430032	2.2906100	20	6 27.9	20.4
488659 2003 SO_{293}	16.5	X	347.67450	35.92378	351.49955	10.30437	0.1768294	0.17763260	3.1341584	20	11 10.8	20.1
488660 2003 SL_{309}	17.1	X	258.51778	48.96996	305.87624	2.62854	0.1949744	0.21904454	2.7255099	20	5 8.5	21.3
488661 2003 SA_{328}	18.7	X	219.93089	281.79338	39.08989	1.86350	0.1999939	0.26766646	2.3845517	20	2 19.8	22.7
488662 2003 SM_{337}	17.0	X	290.16506	357.17240	356.03552	14.24552	0.2037596	0.22482105	2.6786218	20	6 12.9	20.7
488663 2003 SZ_{337}	18.1	X	296.42252	151.31843	194.03064	7.34270	0.2755057	0.22335881	2.6902997	20	6 1.5	21.4
488664 2003 SZ_{351}	16.6	X	348.25067	205.41082	192.86917	23.50829	0.1811422	0.17926922	3.1150539	20	12 1.9	20.5
488665 2003 SR_{364}	17.6	X	184.62976	188.36765	226.78751	3.69319	0.0691232	0.21668985	2.7452191	20	5 17.5	21.6
488666 2003 SL_{410}	18.4	X	271.72503	146.63096	228.79991	2.12082	0.1931096	0.28279277	2.2987435	20	6 22.7	21.0
488667 2003 TZ_{26}	16.6	X	134.32204	341.24387	322.21926	6.10944	0.2235434	0.19106577	2.9854797	20	—	—
488668 2003 TE_{40}	17.8	X	212.64880	96.06249	213.43979	13.00676	0.1031622	0.26230103	2.4169596	20	1 26.9	21.7
488669 2003 UD_{97}	15.2	X	48.50814	349.63550	28.29833	9.50118	0.3079349	0.12537995	3.9535205	20	—	—
488670 2003 UP_{130}	17.1	X	341.88863	120.68710	276.99168	12.56956	0.2655911	0.23610275	2.5925990	20	12 20.1	19.1
488671 2003 UK_{168}	16.9	X	227.68413	138.75711	241.18035	4.61616	0.2907374	0.21445739	2.7642376	20	5 4.6	21.7
488672 2003 UE_{171}	17.2	X	271.93732	163.20775	227.87075	7.82874	0.2934681	0.22197243	2.7014900	20	6 26.8	21.2
488673 2003 UK_{175}	16.2	X	88.77043	321.18580	20.76476	12.27827	0.2097050	0.18713286	3.0271644	20	—	—
488674 2003 UJ_{196}	17.1	X	218.37650	25.85936	354.28040	3.11487	0.1963319	0.21279949	2.7785763	20	5 1.9	21.6
488675 2003 UU_{198}	18.0	X	283.52288	211.98177	151.44654	2.79772	0.2190370	0.28137592	2.3064538	20	6 17.9	20.7
488676 2003 UT_{235}	16.8	X	228.40699	131.42807	248.88940	8.41673	0.1712763	0.21596467	2.7513610	20	5 13.2	21.1
488677 2003 UM_{257}	16.8	X	225.42420	139.64765	233.35168	8.25627	0.1773480	0.21264600	2.7799132	20	4 30.9	21.4
488678 2003 US_{276}	17.2	X	352.77891	145.00850	242.38250	8.02400	0.2573305	0.23554315	2.5967037	20	12 25.5	19.8
488679 2003 UR_{295}	17.0	X	273.65010	138.74643	204.73253	12.30563	0.1837124	0.21859812	2.7292193	20	5 14.5	20.9
488680 2003 UO_{299}	16.2	X	320.76260	208.11883	204.62364	11.85025	0.1201881	0.17524157	3.1626026	20	10 30.6	19.9
488681 2003 UM_{325}	18.4	X	328.82098	131.77728	228.51225	10.35956	0.2835157	0.23263022	2.6183355	20	9 1.6	20.4
488682 2003 UG_{334}	16.7	X	279.21841	92.76168	357.70106	12.02887	0.1514221	0.17666182	3.1456296	20	10 7.6	21.0
488683 2003 UX_{339}	16.9	X	179.94464	182.74026	222.04969	7.55265	0.0809553	0.21028089	2.8007188	20	4 29.0	21.2
488684 2003 UC_{354}	17.5	X	154.79853	33.39760	74.16389	5.55365	0.0765964	0.21612081	2.7500356	20	6 20.8	21.4
488685 2003 UK_{391}	16.5	X	254.74595	64.17683	56.43279	19.15669	0.1659426	0.17363881	3.1820342	20	10 20.0	21.2
488686 2003 UD_{415}	15.9	X	308.52042	190.52911	235.03193	16.09138	0.1750600	0.17737999	3.1371332	20	10 19.5	19.6
488687 2003 US_{416}	16.5	X	30.95899	174.52346	180.64895	12.36697	0.1085437	0.17921128	3.1157253	20	12 4.7	20.9
488688 2003 WB_{3}	15.5	X	40.12819	337.28604	64.68831	29.02695	0.1117677	0.18456572	3.0551698	20	—	—
488689 2003 WY_{14}	17.4	X	133.08883	154.02822	197.90367	0.34429	0.1961374	0.25370156	2.4712724	20	1 11.5	20.9
488690 2003 WE_{22}	16.7	X	255.72118	150.96735	244.88919	15.31434	0.2099780	0.21936093	2.7228885	20	6 25.1	20.8
488691 2003 WN_{24}	18.7	X	165.47535	63.74019	45.00434	25.83448	0.0812185	0.39327970	1.8450226	20	7 16.5	21.5
488692 2003 WW_{56}	19.1	X	203.79168	343.21150	67.53766	23.80436	0.1165667	0.38906603	1.8583200	20	5 30.6	21.3
488693 2003 WW_{87}	17.0	X	339.29676	349.26703	46.09554	46.82330	0.5693297	0.23493417	2.6011891	20	—	—
488694 2003 WK_{160}	17.6	X	9.91384	124.27442	266.87133	15.48825	0.1921486	0.23734379	2.5835535	20	—	—
488695 2003 WL_{187}	16.9	X	131.76389	102.04668	217.59838	11.39701	0.1193794	0.18951755	3.0017171	20	—	—
488696 2003 WZ_{192}	16.3	X	97.09135	222.88986	239.50940	13.43872	0.1590558	0.19933675	2.9023145	20	4 16.5	20.5
488697 2003 XE_{7}	17.1	X	293.66689	74.14455	69.02711	29.07345	0.3718217	0.23355202	2.6114415	20	—	—
488698 2003 XV_{10}	19.3	X	240.54100	321.50141	1.84626	11.57471	0.6796782	0.57319460	1.4352735	20	2 16.1	22.4
488699 2003 XG_{30}	16.5	X	260.62039	260.99407	246.12553	17.41800	0.1287767	0.17409128	3.1765183	20	11 26.7	20.9
488700 2003 YF_{22}	17.5	X	62.33871	98.19243	293.42054	2.76040	0.1836251	0.24412760	2.5354680	20	—	—
488701 2003 YE_{113}	17.4	X	312.32334	79.24617	46.01801	5.46773	0.3001668	0.23368420	2.6104566	20	—	—
488702 2003 YU_{117}	17.9	X	24.82083	21.30715	111.80135	26.22767	0.3534632	0.30496608	2.1859238	20	—	—
488703 2004 AC_{19}	15.6	X	233.17432	53.30551	130.68529	11.08869	0.0252453	0.17000977	3.2271573	20	12 21.3	20.3
488704 2004 BY_{50}	17.5	X	7.43511	294.33868	129.39954	13.11460	0.2751485	0.23600969	2.5932805	20	—	—
488705 2004 BJ_{54}	17.5	X	323.75306	335.96881	119.43388	11.19123	0.3572716	0.23281281	2.6169663	20	—	—
488706 2004 BE_{130}	18.3	X	318.97409	292.33201	203.67198	1.48818	0.1473172	0.23582447	2.5946382	20	—	—
488707 2004 CM_{2}	16.9	X	302.75391	230.81136	286.50249	11.93628	0.2189166	0.23353469	2.6115707	20	—	—
488708 2004 CQ_{4}	17.2	X	307.98230	150.77012	320.19255	10.49732	0.2276090	0.23003831	2.6379665	20	—	—
488709 2004 CJ_{67}	17.2	X	252.45655	49.44288	136.84919	6.92920	0.1827247	0.22950585	2.6420450	20	—	—
488710 2004 CS_{84}	16.6	X	266.73821	77.33877	150.82608	13.60408	0.1227883	0.23825539	2.5769593	20	—	—
488711 2004 CR_{110}	16.9	X	333.79222	319.25420	157.98948	32.72302	0.2901593	0.23432847	2.6056696	20	—	—
488712 2004 EY_{27}	17.6	X	259.75609	230.26727	358.67519	2.70625	0.0745896	0.23462292	2.6034891	20	—	—
488713 2004 FF_{23}	17.8	X	303.18175	312.87379	177.20789	4.81599	0.2021397	0.22821796	2.6519754	20	—	—
488714 2004 FH_{56}	17.4	X	251.06537	201.66594	18.51436	7.06210	0.2785995	0.22847860	2.6499582	20	—	—
488715 2004 FT_{86}	16.7	X	258.01276	173.66391	16.28429	14.45075	0.1831902	0.22828570	2.6514508	20	—	—
488716 2004 FK_{102}	17.2	X	279.58002	323.52218	193.79987	7.37914	0.1776992	0.22753013	2.6573175	20	—	—
488717 2004 FE_{119}	18.2	X	350.34571	158.46391	4.80782	7.62021	0.0436547	0.30060617	2.2070091	20	1 8.6	20.8
488718 2004 FZ_{147}	16.9	X	244.95329	283.00115	306.78629	12.21472	0.2620944	0.22828429	2.6514617	20	—	—
488719 2004 GU_{13}	17.3	X	290.27058	291.69888	237.65263	5.09466	0.3664249	0.23005550	2.6378351	20	—	—
488720 2004 GC_{49}	17.8	X	275.87251	285.02867	220.12492	6.38389	0.2152157	0.22347344	2.6893796	20	12 18.5	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488721 2004 GY_{76}	17.3	X	201.49876	19.23852	52.31560	33.01179	0.0708795	0.37970857	1.8887267	20	6 26.5	20.1
488722 2004 HS_{24}	16.9	X	332.28282	96.31511	11.78055	14.57153	0.0717327	0.22725200	2.6594852	20	—	—
488723 2004 JD_{43}	17.0	X	266.43416	234.63839	68.09290	25.48301	0.1976220	0.29862875	2.2167411	20	3 23.5	20.9
488724 2004 OR_{11}	18.3	X	250.60629	202.01397	108.50509	6.37130	0.1958803	0.29294634	2.2453153	20	3 4.5	21.7
488725 2004 PP_{104}	16.6	X	146.46282	304.69926	25.97523	20.97847	0.2454047	0.21366173	2.7710959	20	1 13.1	21.5
488726 2004 PZ_{104}	17.8	X	323.08086	189.15552	184.67727	7.61340	0.3438754	0.30830025	2.1701352	20	10 28.9	17.5
488727 2004 PL_{107}	17.2	X	198.38363	75.62334	337.74835	9.05004	0.2962921	0.22977312	2.6399958	20	5 21.5	22.1
488728 2004 QR_{27}	17.7	X	152.43817	217.66062	139.87548	8.99925	0.2649382	0.27711637	2.3300286	20	2 10.4	21.5
488729 2004 RU_{16}	18.4	X	249.79675	276.76174	38.07628	2.83685	0.2783382	0.29115839	2.2544979	20	3 2.7	22.1
488730 2004 RR_{20}	17.6	X	261.44192	302.20826	338.49383	9.41644	0.1442281	0.28736980	2.2742697	20	2 9.9	20.9
488731 2004 RL_{25}	17.6	X	151.70425	130.21557	206.04535	0.82103	0.2892212	0.21387411	2.7692611	20	1 23.3	22.2
488732 2004 RO_{25}	18.5	X	134.19150	124.95638	239.16714	1.78226	0.2221157	0.27681734	2.3317064	20	1 27.5	21.7
488733 2004 RX_{41}	17.9	X	174.54651	348.51717	1.94420	9.41809	0.2297101	0.27905884	2.3192035	20	2 20.4	21.8
488734 2004 RR_{57}	17.1	X	237.62888	127.49874	232.21191	4.76581	0.2146711	0.23107126	2.6300990	20	4 22.3	21.3
488735 2004 RP_{108}	18.1	X	186.74531	135.71030	215.78924	5.96390	0.1676437	0.28381668	2.2932115	20	2 23.9	21.7
488736 2004 RG_{112}	17.4	X	217.29804	140.82462	216.96223	23.09620	0.2888417	0.28847992	2.2684314	20	3 26.1	21.7
488737 2004 RE_{124}	16.7	X	142.14705	271.77190	57.74007	8.77854	0.2908903	0.20987393	2.8043382	20	1 9.7	21.4
488738 2004 RM_{162}	18.2	X	282.52699	30.21867	273.73303	6.30276	0.2919650	0.29538575	2.2329364	20	3 10.9	21.8
488739 2004 RQ_{183}	17.8	X	217.78374	37.81500	345.78212	16.83428	0.1152867	0.35508745	1.9750549	20	4 28.8	20.8
488740 2004 RC_{186}	17.6	X	204.20644	348.53709	341.81469	6.02498	0.1715029	0.28304702	2.2973667	20	2 16.7	21.2
488741 2004 RP_{213}	16.2	X	302.13140	59.02740	277.17472	12.73466	0.2991023	0.17505802	3.1648129	20	5 22.9	20.4
488742 2004 RF_{249}	16.3	X	276.32187	93.43250	332.95829	24.28592	0.3358050	0.17711816	3.1402242	20	8 13.1	20.8
488743 2004 RO_{251}	18.4	X	284.68020	321.36557	23.27446	24.80785	0.1901458	0.36305716	1.9460442	20	5 16.4	20.8
488744 2004 RT_{254}	17.2	X	229.31847	271.04482	51.96616	8.17120	0.1512905	0.28685993	2.2769638	20	3 5.1	20.7
488745 2004 RJ_{291}	16.3	X	79.78568	21.60739	319.88420	11.91046	0.1688344	0.20163010	2.8802651	20	—	—
488746 2004 RX_{335}	18.2	X	254.95994	152.27934	232.89116	3.85525	0.1941368	0.23394606	2.6085083	20	6 13.9	21.9
488747 2004 RM_{346}	18.5	X	234.95026	104.63455	228.25371	5.89781	0.2653681	0.28916313	2.2648569	20	3 10.5	22.5
488748 2004 SM_{1}	18.0	X	243.06080	343.14447	326.93301	2.01091	0.2347797	0.28871512	2.2671993	20	2 21.7	21.5
488749 2004 SH_{9}	18.5	X	279.44949	120.70702	199.44426	22.09673	0.4020189	0.29595811	2.2300566	20	3 18.7	22.4
488750 2004 SR_{25}	17.3	X	163.77759	165.83065	204.27657	6.22320	0.1294943	0.27890548	2.3200536	20	2 23.6	20.7
488751 2004 SX_{31}	17.0	X	162.41521	324.17260	1.89461	9.11477	0.2697006	0.21251655	2.7810420	20	1 21.2	21.9
488752 2004 SH_{36}	17.8	X	187.70672	103.15335	201.49006	7.80910	0.2670023	0.21612544	2.7499964	20	1 10.8	22.9
488753 2004 SU_{40}	17.3	X	130.12107	352.20013	18.09679	26.08208	0.1973748	0.27345729	2.3507677	20	2 12.1	21.2
488754 2004 SS_{47}	17.8	X	280.27866	77.00522	297.47135	4.96338	0.3398498	0.23696527	2.5863041	20	6 8.6	21.5
488755 2004 SU_{47}	17.6	X	56.26884	25.23816	354.92596	6.94132	0.2986049	0.26125871	2.4233838	20	—	—
488756 2004 TM	17.7	X	194.59693	186.78401	238.37160	0.98180	0.2161716	0.22806203	2.6531841	20	6 6.3	22.2
488757 2004 TY_{3}	18.2	X	47.15225	48.36812	20.93785	6.47230	0.0998822	0.26767029	2.3845290	20	—	—
488758 2004 TA_{31}	17.6	X	251.88879	156.68984	236.14921	4.52928	0.2893560	0.23434034	2.6055816	20	6 9.9	21.9
488759 2004 TO_{35}	18.2	X	22.62199	50.56256	16.89763	10.02223	0.1487324	0.26207695	2.4183371	20	—	—
488760 2004 TP_{38}	17.4	X	230.24767	287.20327	40.68916	3.36190	0.1218614	0.22203573	2.7009765	20	3 15.9	21.5
488761 2004 TD_{58}	18.4	X	130.38209	161.22277	193.99419	0.77009	0.2065074	0.27257689	2.3558268	20	1 10.9	21.6
488762 2004 TW_{62}	17.0	X	149.16612	15.44787	16.34284	11.94317	0.1786417	0.21638191	2.7478230	20	3 20.6	21.4
488763 2004 TM_{82}	17.9	X	341.61797	123.58336	199.60910	16.38516	0.4289076	0.18195847	3.0842853	20	7 15.6	20.0
488764 2004 TJ_{83}	19.3	X	47.55837	48.80577	342.50470	1.60547	0.2021627	0.26216505	2.4177953	20	—	—
488765 2004 TY_{87}	16.0	X	285.12707	65.91665	332.51686	26.18980	0.1802813	0.17824670	3.1269556	20	8 13.3	20.2
488766 2004 TW_{135}	17.3	X	275.25132	3.51328	3.47021	12.29598	0.2618402	0.23546706	2.5972631	20	6 1.3	21.2
488767 2004 TM_{139}	16.9	X	199.92287	124.28972	294.17971	5.48213	0.2506081	0.22843522	2.6502937	20	5 31.9	21.5
488768 2004 TT_{145}	17.6	X	137.41982	341.62559	9.56283	6.96758	0.1316275	0.27278857	2.3546079	20	1 4.9	20.8
488769 2004 TJ_{170}	17.4	X	118.02992	359.07182	56.96750	6.80129	0.2125110	0.27648369	2.3335819	20	3 19.9	20.7
488770 2004 TC_{199}	16.4	X	234.78558	84.95152	30.22507	15.66012	0.1937718	0.17929687	3.1147337	20	9 18.2	21.3
488771 2004 TL_{212}	18.2	X	77.08313	240.54274	155.80235	1.50534	0.1828222	0.26687091	2.3892883	20	—	—
488772 2004 TJ_{214}	18.7	X	98.38938	340.61309	32.87099	1.63033	0.1950320	0.26820664	2.3813489	20	—	—
488773 2004 TQ_{215}	16.7	X	114.07958	243.00258	176.69386	6.28257	0.0305833	0.21741794	2.7390868	20	2 25.1	20.4
488774 2004 TU_{220}	17.5	X	211.18014	146.36445	220.06291	3.38859	0.2887562	0.22499284	2.6772581	20	4 6.5	22.4
488775 2004 TD_{246}	17.4	X	121.76255	164.67589	173.17881	2.16904	0.0976437	0.20475251	2.8509082	20	—	—
488776 2004 TA_{277}	17.9	X	115.98632	356.30585	52.33943	3.29904	0.1839977	0.27415195	2.3467950	20	3 2.3	20.9
488777 2004 TX_{287}	16.0	X	323.68530	157.69415	232.46043	10.97349	0.3091106	0.18062449	3.0994523	20	9 17.3	19.0
488778 2004 TD_{291}	17.9	X	209.02168	115.35220	206.13728	5.30847	0.1415940	0.28072644	2.3100099	20	2 7.4	21.5
488779 2004 TX_{298}	17.6	X	170.11392	312.18806	45.10620	5.17183	0.1417696	0.27840745	2.3228196	20	2 19.3	21.1
488780 2004 TV_{334}	18.7	X	111.97891	200.22780	165.88116	2.63692	0.1969926	0.27228657	2.3575011	20	—	—
488781 2004 TW_{337}	16.6	X	242.43601	285.59320	26.54907	6.05461	0.0702632	0.22210620	2.7004052	20	3 13.9	20.4
488782 2004 VM_{30}	17.5	X	230.44501	218.56667	125.43877	2.41658	0.2485272	0.22357149	2.6885932	20	3 28.3	22.1
488783 2004 VP_{55}	16.9	X	170.38228	337.74378	41.37722	9.59513	0.3060208	0.21736468	2.7395342	20	3 29.3	22.0
488784 2004 VB_{76}	16.5	X	201.45211	201.31890	226.13191	10.97382	0.1268551	0.22976478	2.6400597	20	6 18.3	20.7
488785 2004 WR_{1}	17.5	X	280.15810	118.80914	241.55542	11.50610	0.1935093	0.23246998	2.6195385	20	6 11.6	20.9
488786 2004 XV_{3}	17.6	X	226.57078	82.51105	309.11680	10.15760	0.3108116	0.22870415	2.6482157	20	5 14.2	22.5
488787 2004 XZ_{24}	17.1	X	185.17977	187.58123	253.71739	7.40739	0.2400866	0.22321705	2.6914386	20	6 18.1	21.9
488788 2004 XF_{42}	18.0	X	296.75525	307.27225	72.11421	7.68214	0.2808266	0.30293041	2.1957057	20	7 29.6	19.8
488789 2004 XK_{50}	19.3	X	266.80866	103.96010	94.14000	38.21623	0.6886736	0.56373934	1.4512776	20	—	—
488790 2004 XP_{75}	16.7	X	197.37455	126.61876	309.17984	2.06853	0.2907655	0.22405369	2.6847343	20	6 19.5	21.6
488791 2004 XG_{130}	16.9	X	221.30625	17.20668	23.44325	9.37980	0.3577880	0.22597709	2.6694786	20	5 19.9	22.0
488792 2004 XX_{159}	16.8	X	123.36347	130.90454	312.84616	7.82329	0.2637112	0.21199659	2.7855875	20	5 1.2	21.5
488793 2005 AZ_{31}	17.2	X	285.10047	152.29848	294.04306	13.43172	0.2163996	0.24015193	2.5633741	20	10 9.9	20.2
488794 2005 AQ_{34}	15.8	X	235.91546	50.11325	121.04234	27.98079	0.2467182	0.17596209	3.1539633	20	11 21.8	21.1
488795 2005 AR_{48}	16.4	X	262.79467	14.27966	121.18627	17.94888	0.1898331	0.17745609	3.1362363	20	11 14.1	21.0
488796 2005 AN_{55}	16.1	X	300.11598	316.59813	107.38048	17.85089	0.2083093	0.17708335	3.1406357	20	10 10.3	20.1
488797 2005 CF_{20}	17.5	X	291.81525	118.94055	324.14140	10.79519	0.2775326	0.23975542	2.5661996	20	10 10.3	20.0
488798 2005 EN_{18}	17.1	X	117.28780	257.00159	358.01257	9.19375	0.1582502	0.22683297	2.6627594	20	11 17.0	21.5
488799 2005 EE_{38}	17.8	X	135.00594	349.80542	166.90974	33.16128	0.2458897	0.41148561	1.7901920	20	8 22.1	20.6
488800 2005 EJ_{89}	17.8	X	299.48852	284.86986	222.97227	2.92592	0.1117327	0.24445890	2.5331767	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488801 2005 ES_{156}	18.3	X	328.53598	108.12936	38.51580	5.90472	0.3398720	0.25203898	2.4821284	20	—	—
488802 2005 ED_{174}	16.8	X	264.45760	310.93039	186.23962	17.74029	0.2003791	0.17237640	3.1975513	20	11 11.3	21.3
488803 2005 GB_{120}	20.5	X	301.89091	243.74954	160.92233	9.14676	0.3947480	1.40059855	0.7911526	20	—	—
488804 2005 GK_{163}	17.4	X	267.72549	59.41220	27.90898	17.36581	0.1628352	0.22528941	2.6749081	20	10 1.6	20.8
488805 2005 GW_{177}	17.7	X	243.77942	223.31770	26.98184	4.49069	0.0846903	0.24611046	2.5218312	20	—	—
488806 2005 GW_{201}	17.7	X	207.20112	237.83555	34.51514	7.60630	0.1058772	0.24230221	2.5481860	20	—	—
488807 2005 JN_{8}	15.9	X	31.51280	184.30185	208.14265	18.81597	0.1146370	0.17004424	3.2267211	20	—	—
488808 2005 JZ_{8}	17.1	X	309.17510	118.96114	38.27673	4.84488	0.1679283	0.17948512	3.1125554	20	—	—
488809 2005 JM_{69}	17.2	X	247.93512	105.26296	134.72462	12.96700	0.2263272	0.24165389	2.5527416	20	—	—
488810 2005 JP_{83}	17.8	X	246.43027	169.38224	91.44320	3.10011	0.2001429	0.24494344	2.5298349	20	1 2.6	21.8
488811 2005 JX_{97}	16.8	X	72.75847	283.63260	66.98884	14.04980	0.2140041	0.22702250	2.6612772	20	—	—
488812 2005 JG_{106}	16.8	X	111.62024	269.54783	62.61856	8.26110	0.2036405	0.23117619	2.6293031	20	—	—
488813 2005 JJ_{162}	17.5	X	203.97672	158.63072	107.03311	6.67934	0.1442227	0.23724854	2.5842450	20	—	—
488814 2005 KX_{4}	17.0	X	259.11651	100.56947	60.77763	13.99560	0.2070401	0.23410729	2.6073105	20	12 15.8	20.1
488815 2005 LF_{47}	16.4	X	213.28817	323.48143	299.02755	32.22762	0.2153989	0.23217136	2.6217843	20	—	—
488816 2005 LD_{52}	17.7	X	152.16724	40.21106	277.55454	3.63342	0.2239254	0.22827755	2.6515140	20	—	—
488817 2005 MY_{17}	16.9	X	141.37480	19.14959	293.75932	12.84400	0.1467533	0.22592923	2.6698556	20	—	—
488818 2005 MM_{27}	17.3	X	203.41909	189.18656	126.67907	5.56433	0.2483572	0.23798521	2.5789093	20	2 2.7	21.7
488819 2005 MB_{50}	16.6	X	201.39271	293.85310	310.29724	13.02783	0.0445894	0.22554157	2.6729140	20	—	—
488820 2005 NF_{6}	16.3	X	179.24942	121.35995	270.36878	12.58875	0.3007648	0.17567720	3.1573723	20	4 12.2	22.2
488821 2005 NR_{14}	17.1	X	179.43819	337.91599	298.67066	13.08157	0.2362993	0.22933084	2.6433889	20	—	—
488822 2005 NC_{16}	16.5	X	143.69836	258.69007	106.80741	10.74399	0.1512298	0.23443482	2.6048815	20	2 7.5	20.4
488823 2005 NT_{16}	18.5	X	37.85555	149.83214	189.15778	2.13261	0.2221755	0.27645125	2.3337644	20	12 31.2	21.7
488824 2005 NF_{26}	17.6	X	134.60060	19.04147	280.85341	11.83244	0.1081925	0.22363050	2.6881203	20	—	—
488825 2005 NL_{30}	18.1	X	279.02747	236.37963	99.09922	2.58469	0.1942617	0.25460732	2.4654079	20	5 7.6	21.4
488826 2005 NM_{58}	17.3	X	144.12250	183.02826	150.23395	14.61042	0.2020322	0.22608725	2.6686114	20	1 4.6	21.6
488827 2005 NY_{79}	17.0	X	227.12812	212.95265	84.03268	13.11985	0.2475725	0.24049340	2.5609471	20	1 30.7	21.6
488828 2005 OU_{26}	18.5	X	216.35157	91.91658	307.60690	16.46581	0.0721836	0.38658911	1.8662492	20	6 1.2	20.8
488829 2005 PN_{10}	17.5	X	224.47206	263.94813	40.15727	3.84187	0.2378731	0.23889114	2.5723853	20	2 5.7	22.0
488830 2005 QJ_{11}	16.5	X	106.34603	267.20706	163.05201	46.44746	0.1706332	0.29993465	2.2103020	20	3 12.9	19.2
488831 2005 QG_{34}	18.6	X	3.78105	154.60657	197.38443	2.30924	0.1960615	0.26949240	2.3737686	20	11 27.1	20.8
488832 2005 QX_{35}	16.6	X	165.90810	333.37455	354.96134	12.76864	0.2948511	0.22916697	2.6446490	20	1 27.5	21.4
488833 2005 QT_{55}	18.1	X	27.51436	181.78889	163.29750	2.63783	0.2336855	0.27210676	2.3585396	20	12 27.9	21.1
488834 2005 QV_{60}	17.6	X	134.31392	144.14559	174.96749	12.08408	0.1912648	0.22271404	2.6954896	20	—	—
488835 2005 QA_{71}	17.2	X	203.04553	325.31843	350.87009	4.56864	0.3007559	0.23436800	2.6053766	20	2 4.3	21.9
488836 2005 QW_{72}	16.9	X	166.84107	336.80644	339.67439	7.54293	0.3051969	0.22774240	2.6556660	20	1 12.9	21.6
488837 2005 QD_{81}	18.9	X	118.35274	4.70780	315.34131	5.14976	0.2014060	0.28690243	2.2767389	20	—	—
488838 2005 QH_{87}	16.8	X	110.78912	40.28659	309.59137	11.77599	0.2431214	0.22162832	2.7042855	20	—	—
488839 2005 QU_{102}	17.0	X	242.12351	270.64091	331.35171	11.98526	0.2313431	0.23102162	2.6304757	20	—	—
488840 2005 QW_{109}	19.1	X	28.46587	45.75003	292.95582	0.40735	0.2076482	0.27184812	2.3600353	20	12 17.0	21.8
488841 2005 QD_{121}	17.3	X	92.15927	182.71773	169.44751	9.21780	0.1369101	0.21893184	2.7264451	20	—	—
488842 2005 QY_{175}	18.6	X	320.79523	304.89331	2.76599	17.95560	0.1261656	0.38756105	1.8631277	20	6 14.6	20.3
488843 2005 QM_{177}	17.2	X	141.92893	300.41932	2.31095	11.40741	0.0955569	0.21873268	2.7280998	20	—	—
488844 2005 QD_{188}	16.8	X	206.68813	25.73161	13.78001	7.03525	0.1597642	0.17835065	3.1257405	20	5 16.6	22.0
488845 2005 QE_{188}	17.0	X	338.13752	314.78316	8.55107	11.43584	0.1332665	0.19227724	2.9729262	20	8 7.8	20.6
488846 2005 RE_{25}	17.3	X	249.26878	67.36230	320.47840	13.45881	0.3927307	0.18210871	3.0825886	20	5 20.3	23.0
488847 2005 RD_{27}	16.1	X	53.39338	115.31538	248.05122	11.90629	0.2191745	0.21108053	2.7936410	20	—	—
488848 2005 RR_{28}	16.8	X	247.14647	79.27501	302.51969	4.20092	0.1676303	0.18404743	3.0609029	20	6 3.4	21.5
488849 2005 SL_{1}	17.0	X	167.67212	319.43526	23.09367	6.92881	0.3595194	0.23133705	2.6280840	20	2 15.5	21.9
488850 2005 SC_{3}	18.1	X	169.85474	344.93500	7.02643	3.07992	0.2068707	0.29826248	2.2185555	20	2 13.3	21.4
488851 2005 SL_{16}	17.6	X	43.52773	188.50442	202.65327	5.23244	0.0645910	0.21324020	2.7747466	20	—	—
488852 2005 SX_{17}	18.4	X	205.53331	336.02189	4.98580	7.54967	0.0357155	0.30243110	2.1981218	20	3 1.1	21.2
488853 2005 SH_{28}	16.3	X	217.39079	43.79906	348.67111	8.85657	0.1366903	0.17718134	3.1394776	20	5 18.3	21.4
488854 2005 SJ_{44}	17.3	X	347.05383	28.95090	294.26022	1.98569	0.2613967	0.19269611	2.9686164	20	8 20.5	19.6
488855 2005 SP_{46}	18.4	X	175.54469	91.72139	305.83566	1.48833	0.2316803	0.23706915	2.5855485	20	4 17.3	22.9
488856 2005 SM_{53}	17.2	X	187.44750	96.06517	208.54864	12.29416	0.2819790	0.22811648	2.6527619	20	1 9.1	22.2
488857 2005 SW_{54}	18.9	X	33.30687	327.74012	40.65818	1.29423	0.2202438	0.27404571	2.3474015	20	—	—
488858 2005 SF_{60}	17.8	X	88.77261	356.90748	50.29621	1.41828	0.2388335	0.28912430	2.2650597	20	1 26.4	19.7
488859 2005 SK_{61}	17.3	X	344.38499	61.14598	24.00551	3.87972	0.0675463	0.20995727	2.8035960	20	—	—
488860 2005 ST_{67}	18.0	X	303.58810	163.21341	217.48392	1.68727	0.2247714	0.25951490	2.4342276	20	8 17.8	20.2
488861 2005 SB_{80}	17.6	X	187.09270	288.54970	14.88580	6.07134	0.1272819	0.22683758	2.6627233	20	1 4.5	21.8
488862 2005 SK_{84}	17.3	X	20.79516	29.66143	11.47226	5.25227	0.0829844	0.21007006	2.8025924	20	—	—
488863 2005 SP_{85}	16.8	X	219.91941	208.16744	188.84567	17.29879	0.2215420	0.17791033	3.1308958	20	5 25.4	22.3
488864 2005 SB_{91}	18.2	X	311.39132	177.00184	202.23948	3.09309	0.2103418	0.25962224	2.4335566	20	9 4.9	20.1
488865 2005 SM_{95}	18.0	X	303.75369	308.32159	14.32819	11.75704	0.2753777	0.25335493	2.4735260	20	5 6.5	21.0
488866 2005 SV_{100}	16.1	X	185.97912	49.51562	6.93444	15.12947	0.0960306	0.17448299	3.1717624	20	5 15.9	21.2
488867 2005 SG_{110}	18.0	X	288.91643	191.54874	198.95612	1.31968	0.1967195	0.25828358	2.4419580	20	8 8.9	20.7
488868 2005 ST_{111}	18.3	X	156.37725	264.32235	201.96360	20.94362	0.0440420	0.38032328	1.8866910	20	6 22.2	20.9
488869 2005 SR_{121}	16.9	X	271.22773	15.86235	312.25528	3.90689	0.2663690	0.18090843	3.0962084	20	4 10.6	21.9
488870 2005 SH_{127}	17.3	X	14.66346	38.48515	15.12997	6.94131	0.0236922	0.21166049	2.7885355	20	—	—
488871 2005 SM_{127}	18.1	X	12.51896	203.28881	148.00615	0.54544	0.2129625	0.26879056	2.3778988	20	12 12.4	20.7
488872 2005 SH_{134}	18.2	X	281.55107	2.52399	16.16122	18.84782	0.0962399	0.38985293	1.8558186	20	8 26.1	19.9
488873 2005 SR_{137}	17.6	X	33.64159	273.28678	201.50052	22.44547	0.2835035	0.28628911	2.2799894	20	—	—
488874 2005 SG_{138}	16.8	X	197.83506	90.66666	239.51247	13.27539	0.2318514	0.23469323	2.6029690	20	2 9.8	21.7
488875 2005 SR_{138}	19.1	X	73.46040	4.39459	45.09360	1.98122	0.2069061	0.28751832	2.2734864	20	—	—
488876 2005 SO_{153}	17.1	X	275.27708	163.57424	202.15356	7.50396	0.2181234	0.18524998	3.0476419	20	6 8.7	21.6
488877 2005 SX_{161}	18.7	X	94.19169	123.20236	203.47140	4.44801	0.2336205	0.28100551	2.3084802	20	—	—
488878 2005 SM_{164}	17.6	X	186.39041	270.34608	69.90071	5.90838	0.3563082	0.23280876	2.6169967	20	2 23.6	22.6
488879 2005 SK_{171}	17.6	X	32.63073	340.08662	350.98133	6.82620	0.1430564	0.26939996	2.3743115	20	11 30.4	20.6
488880 2005 SW_{175}	18.2	X	48.64376	140.47037	222.84437	5.09335	0.1867164	0.27666867	2.3325416	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488881 2005 SJ_{177}	17.2	X	200.80625	265.67135	353.42996	7.96122	0.1436580	0.22026630	2.7154221	20	—	—
488882 2005 SD_{184}	18.6	X	330.37392	143.48486	254.93071	1.66511	0.1944615	0.26619315	2.3933422	20	11 28.2	20.2
488883 2005 SK_{222}	17.5	X	127.59443	215.38618	158.18128	7.76020	0.2824075	0.29192014	2.2505742	20	2 6.8	20.6
488884 2005 SU_{231}	17.6	X	285.85011	130.10948	209.98215	9.91840	0.1178379	0.17989132	3.1078681	20	6 4.1	21.9
488885 2005 ST_{233}	18.7	X	341.91936	331.12659	27.44755	1.76659	0.1984751	0.26171920	2.4205403	20	10 20.8	20.4
488886 2005 SF_{240}	18.0	X	315.06686	338.72943	289.35708	4.28232	0.1516393	0.31052481	2.1597585	20	3 23.6	20.2
488887 2005 SG_{243}	18.1	X	210.30335	247.37368	195.12402	21.14697	0.1158837	0.38553457	1.8696508	20	7 23.3	20.9
488888 2005 SP_{243}	17.2	X	1.79254	24.03867	28.12388	9.66435	0.1305245	0.20600748	2.8393181	20	—	—
488889 2005 SM_{247}	18.9	X	60.36033	202.10912	225.28507	1.40360	0.1837116	0.28669058	2.2778604	20	—	—
488890 2005 SZ_{252}	18.7	X	244.22895	302.93941	39.25384	2.62624	0.2250076	0.31085777	2.1582160	20	4 3.1	21.8
488891 2005 SE_{254}	18.0	X	30.97188	52.82543	317.34045	1.72895	0.2131385	0.27669087	2.3324168	20	—	—
488892 2005 SC_{281}	18.2	X	321.00557	24.09033	16.66445	4.84781	0.2113412	0.26372104	2.4082757	20	11 7.4	19.7
488893 2005 TG_{40}	18.4	X	335.84691	224.95031	146.09692	2.79371	0.1719957	0.26316422	2.4116715	20	10 26.5	20.4
488894 2005 TY_{41}	18.8	X	173.30898	161.19690	204.38098	4.40085	0.2461428	0.30054379	2.2073145	20	3 3.9	22.4
488895 2005 TC_{50}	17.8	X	63.76800	346.05439	1.50560	5.23874	0.2067649	0.27647512	2.3336301	20	—	—
488896 2005 TF_{60}	17.7	X	262.18294	167.87434	201.43293	17.54281	0.2304333	0.18319720	3.0703661	20	5 28.6	22.6
488897 2005 TB_{61}	17.0	X	182.31652	33.32417	254.03037	3.27676	0.0676602	0.22177170	2.7031198	20	—	—
488898 2005 TS_{62}	18.1	X	210.30559	353.24333	29.27194	10.17458	0.3208753	0.24129202	2.5552932	20	4 23.8	22.7
488899 2005 TD_{63}	18.2	X	323.78733	339.55373	32.41093	7.03447	0.1511119	0.26056003	2.4277140	20	9 30.6	20.2
488900 2005 TD_{64}	18.7	X	223.64018	182.99931	183.50582	2.30705	0.1973542	0.30903398	2.1666989	20	4 17.6	22.0
488901 2005 TQ_{78}	18.0	X	278.59757	89.36673	209.32727	5.00608	0.2575002	0.30965212	2.1638144	20	3 4.7	21.1
488902 2005 TS_{80}	17.4	X	118.14723	349.66407	313.71355	5.30206	0.0392827	0.21129546	2.7917462	20	—	—
488903 2005 TN_{81}	17.2	X	115.50055	169.66746	273.85656	2.73220	0.1142344	0.23392086	2.6086957	20	4 7.3	20.9
488904 2005 TG_{82}	18.3	X	124.74979	181.27429	216.24309	5.84183	0.1080028	0.29585651	2.2305671	20	2 9.2	21.2
488905 2005 TC_{89}	17.2	X	245.08081	299.32094	85.97626	2.60287	0.2270842	0.18185671	3.0854356	20	5 31.2	22.0
488906 2005 TP_{92}	18.6	X	359.75545	42.10093	337.31613	5.71738	0.1229001	0.26915207	2.3757691	20	12 17.1	21.2
488907 2005 TX_{100}	18.8	X	105.79991	3.02834	28.61121	4.45980	0.1598906	0.29065359	2.2571076	20	1 18.4	21.2
488908 2005 TE_{102}	18.7	X	297.59708	148.60740	271.25559	1.79982	0.2541926	0.26160721	2.4212311	20	10 3.0	20.4
488909 2005 TV_{102}	18.2	X	320.52255	190.36487	225.41021	2.62829	0.1295452	0.26626460	2.3929140	20	11 30.1	20.2
488910 2005 TF_{111}	18.1	X	114.78859	86.81368	353.34809	5.73915	0.1471438	0.23298088	2.6157076	20	4 6.4	21.8
488911 2005 TT_{119}	18.4	X	348.00085	198.39413	199.90367	6.27176	0.1163884	0.26996149	2.3710179	20	12 23.9	21.0
488912 2005 TR_{136}	17.1	X	128.72210	226.61707	101.79291	3.35005	0.0855329	0.21868973	2.7284571	20	—	—
488913 2005 TK_{142}	16.7	X	87.25877	303.60316	29.84628	20.92678	0.2586840	0.21264287	2.7799405	20	—	—
488914 2005 TE_{170}	16.6	X	230.37196	156.54781	228.05408	6.44586	0.3095221	0.17709118	3.1405431	20	5 12.2	22.0
488915 2005 TW_{170}	17.1	X	144.08632	249.25460	59.78223	5.02644	0.1092699	0.21750445	2.7383605	20	—	—
488916 2005 TT_{190}	17.2	X	46.28874	321.98024	37.57330	13.66743	0.1133170	0.20628650	2.8367573	20	—	—
488917 2005 UM_{1}	18.1	X	280.79056	254.32915	85.40219	3.73886	0.2819124	0.25181583	2.4835946	20	5 3.3	21.5
488918 2005 UG_{2}	16.5	X	255.07822	345.98403	33.34001	4.14758	0.2172703	0.18055486	3.1002491	20	6 2.8	21.2
488919 2005 UB_{5}	16.5	X	181.76034	74.84044	239.13885	11.00382	0.1035786	0.22335409	2.6903376	20	1 8.6	20.7
488920 2005 UQ_{9}	16.6	X	302.69344	331.82089	28.90002	16.83155	0.2475052	0.18805981	3.0172090	20	7 7.6	20.6
488921 2005 UN_{22}	16.5	X	223.21869	30.32496	224.93889	13.24192	0.1534651	0.22013126	2.7165325	20	—	—
488922 2005 UT_{22}	18.2	X	178.49057	327.41452	12.42731	3.48758	0.1033627	0.29485657	2.2356072	20	1 30.7	21.3
488923 2005 UE_{33}	17.2	X	307.31866	40.81516	44.81181	10.89784	0.0812332	0.20023834	2.8935960	20	11 27.1	20.7
488924 2005 UZ_{38}	18.3	X	313.99406	305.39605	73.85515	2.51034	0.2023717	0.25775089	2.4453213	20	9 15.0	20.2
488925 2005 UA_{47}	17.5	X	135.21962	220.74478	190.86201	3.47980	0.1045628	0.22905689	2.6454962	20	3 20.4	21.4
488926 2005 UL_{49}	16.5	X	122.26305	73.15755	271.02083	5.35670	0.2212235	0.21921220	2.7241200	20	—	—
488927 2005 UP_{63}	16.6	X	269.66090	275.48196	72.58928	2.00522	0.1883143	0.17704454	3.1410946	20	5 14.9	21.2
488928 2005 UR_{65}	17.6	X	126.30790	176.27455	247.84466	4.28986	0.2300266	0.23035720	2.6355314	20	4 7.6	21.8
488929 2005 UG_{74}	16.0	X	253.97710	140.69547	236.85334	23.45045	0.2080508	0.17935506	3.1140599	20	5 31.7	20.8
488930 2005 UM_{76}	17.1	X	325.89534	348.91406	8.22597	17.63994	0.3293951	0.19151875	2.9807704	20	8 17.5	19.8
488931 2005 UG_{87}	16.9	X	193.96273	265.37520	42.93449	12.80966	0.2764451	0.22823314	2.6518579	20	1 22.5	21.9
488932 2005 UJ_{91}	18.0	X	354.66384	116.36377	359.11150	5.66746	0.1102391	0.28082179	2.3094870	20	—	—
488933 2005 UH_{96}	17.4	X	25.06966	211.50846	205.41057	9.01203	0.1954610	0.20925651	2.8098517	20	—	—
488934 2005 UZ_{101}	17.5	X	299.09207	169.30853	89.09293	5.00440	0.0932342	0.30063962	2.2068454	20	3 2.1	20.1
488935 2005 UC_{103}	17.7	X	345.74723	124.68121	61.94909	7.35535	0.0526099	0.29280187	2.2460538	20	2 5.6	20.2
488936 2005 UV_{113}	18.1	X	16.96145	121.84668	261.22458	1.27216	0.2293173	0.27036797	2.3686409	20	—	—
488937 2005 UM_{120}	17.5	X	165.44673	44.01031	269.14877	1.28251	0.1986748	0.22199745	2.7012870	20	—	—
488938 2005 UG_{137}	18.3	X	119.65601	235.25607	204.53543	1.77532	0.1063866	0.23248709	2.6194100	20	4 7.8	22.0
488939 2005 UV_{138}	16.9	X	299.55101	258.12798	223.36762	14.13427	0.1074309	0.20305888	2.8667384	20	12 30.1	20.5
488940 2005 UL_{141}	18.0	X	307.16639	318.70443	44.53321	26.07262	0.0691929	0.38926444	1.8576885	20	10 2.6	20.0
488941 2005 UT_{145}	17.5	X	356.51872	91.00760	251.79234	3.87826	0.1219897	0.26072453	2.4266927	20	10 15.9	20.1
488942 2005 UX_{146}	18.0	X	101.57252	25.30213	25.04501	5.87995	0.1762224	0.29057351	2.2575222	20	2 11.8	20.5
488943 2005 UL_{147}	17.7	X	231.35088	302.10752	31.83252	7.91152	0.2737850	0.30600593	2.1809690	20	3 13.2	21.4
488944 2005 UO_{163}	18.2	X	140.44010	38.90183	16.22353	5.78178	0.2231820	0.23137959	2.6277620	20	4 10.0	22.5
488945 2005 UF_{164}	19.1	X	0.19865	3.68279	16.18590	2.79315	0.2025966	0.26812825	2.3818130	20	12 31.4	21.6
488946 2005 UB_{165}	18.3	X	140.19333	20.86141	36.71857	1.46989	0.2041473	0.23162185	2.6259293	20	4 11.8	22.3
488947 2005 UN_{167}	17.4	X	318.34738	331.55262	13.96039	2.61512	0.2507091	0.18862765	3.0111506	20	7 14.0	20.4
488948 2005 UF_{169}	17.2	X	115.79735	83.58626	248.10107	3.71358	0.0770187	0.21215587	2.7841931	20	—	—
488949 2005 UQ_{169}	17.4	X	350.51873	359.82807	31.09843	7.24216	0.1567023	0.26683810	2.3894842	20	12 22.4	19.9
488950 2005 UQ_{170}	18.4	X	273.52600	62.88516	4.40287	0.94731	0.1704503	0.25706637	2.4496603	20	9 11.5	21.0
488951 2005 UK_{175}	16.3	X	227.51044	152.98044	240.20241	12.82147	0.1235855	0.17463402	3.1699334	20	6 1.9	21.1
488952 2005 UR_{182}	18.3	X	317.66829	143.43751	224.53721	2.73089	0.2234321	0.25700096	2.4500760	20	8 30.1	19.9
488953 2005 UK_{185}	18.8	X	210.80900	276.42481	58.25079	4.53128	0.1898442	0.29945018	2.2126854	20	2 27.9	22.3
488954 2005 UU_{192}	17.3	X	178.33602	212.83822	51.37352	1.62887	0.0731100	0.21392418	2.7688290	20	—	—
488955 2005 UZ_{193}	17.2	X	181.52741	64.47946	203.39989	3.85261	0.0206631	0.21290748	2.7776367	20	—	—
488956 2005 UD_{198}	18.9	X	115.85665	344.58538	39.76879	3.68446	0.1654603	0.29140101	2.2532464	20	1 23.4	21.4
488957 2005 UG_{211}	17.6	X	357.61795	21.66878	70.02362	5.24830	0.0726728	0.20944134	2.8081983	20	—	—
488958 2005 UK_{222}	18.3	X	3.15800	140.16530	234.29181	5.93124	0.1304003	0.26745529	2.3858067	20	12 16.2	21.0
488959 2005 UQ_{226}	18.6	X	323.19011	352.21817	54.70107	2.04035	0.1810361	0.26397072	2.4067568	20	11 23.2	20.4
488960 2005 UF_{229}	17.3	X	154.72538	135.15457	151.59684	1.70880	0.0604610	0.21061641	2.7977436	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
488961 2005 UC_{248}	17.0	X	238.17278	300.04224	67.92968	2.36395	0.1781731	0.17475890	3.1684232	20	5 8.4	22.1
488962 2005 UP_{252}	17.8	X	169.18859	43.42302	354.80761	4.13481	0.2139752	0.23393317	2.6086041	20	4 12.3	22.1
488963 2005 UM_{254}	18.2	X	336.82448	283.35988	111.73650	2.20071	0.1894787	0.26458225	2.4030469	20	12 6.6	20.2
488964 2005 UP_{262}	16.5	X	266.01330	303.05404	48.75557	11.43965	0.1363434	0.17837985	3.1253994	20	5 21.1	20.9
488965 2005 UR_{269}	17.3	X	82.75481	325.25495	35.34364	12.31606	0.0350159	0.21301653	2.7766886	20	—	—
488966 2005 UF_{270}	17.8	X	139.19426	9.29052	44.72194	8.60497	0.1542450	0.23183016	2.6243561	20	4 4.6	21.8
488967 2005 UO_{285}	17.6	X	156.67805	249.57555	76.78372	5.14876	0.2306817	0.22309776	2.6923979	20	1 11.2	22.1
488968 2005 UY_{286}	18.4	X	102.11089	260.92583	146.00262	2.83387	0.0887282	0.29119914	2.2542876	20	1 21.1	20.9
488969 2005 UC_{287}	18.1	X	124.49801	330.36463	55.02021	7.64079	0.1065092	0.29209086	2.2496972	20	1 28.5	20.9
488970 2005 UK_{291}	17.1	X	117.48738	53.84408	28.89411	12.11712	0.1513780	0.23007461	2.6376890	20	4 15.4	20.8
488971 2005 UY_{296}	17.0	X	195.03527	276.00222	48.97741	13.34494	0.2945060	0.22939373	2.6429058	20	2 13.9	22.1
488972 2005 UD_{313}	16.9	X	244.56939	13.24584	10.51493	6.86856	0.3082203	0.17843858	3.1247135	20	5 20.1	22.4
488973 2005 UC_{324}	17.4	X	60.91775	341.40221	58.08407	5.26416	0.0758118	0.21293034	2.7774378	20	—	—
488974 2005 UQ_{324}	17.0	X	199.77485	227.44891	58.62297	10.06777	0.1362583	0.22023730	2.7156605	20	—	—
488975 2005 UL_{333}	17.2	X	327.05681	257.39895	202.14620	5.28868	0.0385071	0.20514382	2.8472816	20	—	—
488976 2005 UZ_{334}	17.5	X	105.76785	336.00152	75.21972	7.23190	0.0634630	0.28934473	2.2639092	20	1 31.2	20.2
488977 2005 UO_{342}	16.3	X	181.70819	37.82462	264.58119	7.18105	0.1714665	0.22136200	2.7064542	20	—	—
488978 2005 UA_{351}	17.7	X	327.83617	5.75525	358.60650	7.14616	0.2302106	0.26078754	2.4263018	20	9 23.9	19.1
488979 2005 UB_{352}	17.0	X	175.79505	349.78420	344.74719	6.60790	0.3228765	0.22915321	2.6447548	20	2 8.9	21.9
488980 2005 UG_{353}	16.2	X	193.91225	13.69734	31.88126	27.93176	0.1907621	0.17171807	3.2057185	20	5 7.8	21.8
488981 2005 UQ_{358}	17.2	X	250.57319	338.29146	35.54623	1.60867	0.0881267	0.17950281	3.1123508	20	6 6.8	21.7
488982 2005 US_{358}	17.5	X	126.35816	142.78372	203.44678	12.71755	0.0549780	0.21923695	2.7239150	20	—	—
488983 2005 UW_{358}	18.5	X	42.44144	295.73599	56.74543	3.66393	0.1714832	0.27331707	2.3515716	20	—	—
488984 2005 UP_{359}	17.0	X	250.68566	147.89165	218.37370	19.52772	0.2016011	0.17711715	3.1402361	20	5 16.3	22.0
488985 2005 UW_{360}	18.1	X	322.37793	240.25128	139.69623	0.52700	0.1595928	0.26103544	2.4247654	20	10 8.1	19.8
488986 2005 UG_{365}	17.1	X	310.73169	275.62536	71.89136	6.44506	0.2562773	0.18632636	3.0358934	20	6 30.1	20.4
488987 2005 UA_{367}	18.4	X	286.52287	189.56964	81.86538	5.91225	0.0843805	0.30077796	2.2061687	20	3 5.4	21.1
488988 2005 UV_{373}	18.9	X	50.45076	39.98004	18.38601	3.36145	0.1065158	0.28090759	2.3090166	20	—	—
488989 2005 UH_{382}	16.5	X	132.12164	258.70420	82.18744	13.54893	0.2858960	0.22208110	2.7006086	20	1 12.2	20.8
488990 2005 UC_{384}	18.0	X	16.28407	290.51617	87.86734	3.36897	0.2402355	0.27006244	2.3704270	20	—	—
488991 2005 UE_{387}	17.4	X	286.71658	229.29542	238.67528	13.98002	0.2014930	0.19634659	2.9317064	20	11 10.1	20.7
488992 2005 UC_{395}	18.3	X	262.85451	220.56031	80.20118	2.27536	0.1793721	0.30759865	2.1734339	20	3 2.6	21.2
488993 2005 UJ_{405}	18.4	X	71.16176	279.09477	145.67334	2.06857	0.1750560	0.28497391	2.2869990	20	1 8.3	20.2
488994 2005 UF_{434}	17.3	X	248.48258	6.25720	197.04002	5.77267	0.0925697	0.21189806	2.7864509	20	—	—
488995 2005 UZ_{434}	17.4	X	110.80546	112.10528	205.63678	5.71155	0.0530890	0.20891504	2.8129126	20	—	—
488996 2005 UB_{450}	18.0	X	197.84810	4.77780	135.35151	2.25209	0.1365718	0.25669747	2.4520067	20	9 20.0	21.5
488997 2005 UL_{460}	17.0	X	119.89290	204.76989	239.89878	21.05349	0.1224571	0.22941709	2.6427264	20	4 12.9	21.0
488998 2005 UR_{468}	16.4	X	238.45239	340.51458	32.53647	10.66839	0.1851511	0.17517684	3.1633817	20	5 12.2	21.4
488999 2005 UT_{524}	17.5	X	85.17307	167.82599	206.77651	4.06647	0.0823553	0.21324152	2.7747351	20	—	—
489000 2005 UX_{526}	16.3	X	207.40136	209.66440	44.67528	13.71293	0.1441490	0.21354594	2.7720975	20	—	—
489001 2005 UU_{530}	16.5	X	217.12906	46.16703	359.98193	16.59209	0.2327778	0.17695006	3.1422126	20	5 27.4	22.1
489002 2005 VB	18.1	X	62.87439	304.24060	34.13184	4.26343	0.3675927	0.27613033	2.3355723	20	—	—
489003 2005 VW_{1}	18.0	X	152.08779	227.72262	230.46325	20.74643	0.0806435	0.37508854	1.9042042	20	6 6.3	20.2
489004 2005 VD_{11}	17.5	X	91.95088	355.21983	353.64920	5.30829	0.0472881	0.21008484	2.8024610	20	—	—
489005 2005 VN_{24}	17.5	X	150.86033	261.06800	51.37877	1.37984	0.0579418	0.21449960	2.7638749	20	—	—
489006 2005 VP_{27}	16.8	X	158.99226	48.14081	232.45854	9.10876	0.1037859	0.21194421	2.7860464	20	—	—
489007 2005 VG_{31}	18.1	X	343.10049	293.88360	71.29447	2.81006	0.2138963	0.26100419	2.4249590	20	11 5.6	20.0
489008 2005 VJ_{61}	18.4	X	252.22158	311.92786	55.51755	23.07198	0.0896101	0.37943670	1.8896288	20	5 28.6	20.3
489009 2005 VO_{81}	18.5	X	20.55511	47.01889	66.22281	2.86330	0.1556529	0.28192961	2.3034330	20	—	—
489010 2005 VH_{92}	17.2	X	16.51390	223.44692	172.18500	1.96504	0.0854925	0.20428321	2.8552728	20	—	—
489011 2005 VR_{94}	16.2	X	248.66276	105.72323	75.60654	15.96850	0.0965817	0.20262050	2.8708718	20	—	—
489012 2005 VN_{101}	17.1	X	102.56669	349.45589	0.73921	6.17607	0.0587511	0.21394502	2.7686492	20	—	—
489013 2005 VD_{114}	17.9	X	118.77947	318.52055	58.25727	9.81126	0.1550969	0.28726884	2.2748025	20	1 16.6	20.7
489014 2005 VS_{127}	18.1	X	229.71753	323.12417	116.21735	2.10583	0.1548545	0.25380834	2.4705793	20	8 2.6	21.5
489015 2005 WY_{8}	17.8	X	216.28030	148.54366	223.10321	0.64390	0.2471633	0.23903376	2.5713620	20	4 17.7	22.3
489016 2005 WZ_{16}	17.1	X	250.23205	302.76685	72.32111	2.31818	0.2501839	0.17633280	3.1495413	20	5 21.3	22.0
489017 2005 WA_{18}	18.0	X	133.58380	125.86959	246.35018	4.18050	0.0664129	0.28707598	2.2758212	20	1 14.2	20.7
489018 2005 WV_{18}	18.0	X	1.18853	312.23326	73.70231	5.43477	0.1732368	0.26552179	2.3973748	20	—	—
489019 2005 WR_{23}	18.3	X	15.42334	4.57093	8.12206	1.79021	0.2605043	0.26880914	2.3777893	20	—	—
489020 2005 WX_{26}	17.6	X	122.53034	314.28406	63.05488	7.13956	0.1308386	0.28704724	2.2759731	20	1 18.4	20.4
489021 2005 WZ_{27}	16.8	X	353.67876	351.75786	57.81483	9.65148	0.2018797	0.20064329	2.8897013	20	—	—
489022 2005 WY_{44}	17.1	X	58.79930	304.47533	51.96029	2.81434	0.0777472	0.20348466	2.8627380	20	—	—
489023 2005 WO_{45}	18.3	X	158.13874	57.82939	48.55323	1.23409	0.2581181	0.23777133	2.5804556	20	6 28.8	22.9
489024 2005 WP_{66}	18.8	X	95.18934	278.63879	243.10725	19.18521	0.1014004	0.37368355	1.9089742	20	6 27.4	21.0
489025 2005 WP_{67}	17.2	X	80.48523	259.80984	86.74100	3.19562	0.0798899	0.20540476	2.8448697	20	—	—
489026 2005 WP_{68}	16.7	X	56.13706	124.03532	242.43493	9.92601	0.1328329	0.20569185	2.8422219	20	—	—
489027 2005 WF_{80}	18.1	X	200.23284	353.83911	71.18855	24.27452	0.0960838	0.37640836	1.8997504	20	6 16.5	20.3
489028 2005 WP_{85}	18.2	X	102.16971	210.35327	214.33606	6.10362	0.0918569	0.29375866	2.2411741	20	2 13.1	20.8
489029 2005 WE_{109}	19.0	X	217.73300	206.40718	154.00382	0.77695	0.1938800	0.30372561	2.1918716	20	4 4.4	22.3
489030 2005 WV_{134}	18.0	X	47.36241	341.04935	93.04587	4.69292	0.2377574	0.27921309	2.3183493	20	—	—
489031 2005 WF_{135}	17.5	X	237.56485	127.56487	273.46914	4.82496	0.2779749	0.24222124	2.5487539	20	6 8.4	21.8
489032 2005 WA_{145}	17.8	X	202.99114	215.02248	66.12013	8.62723	0.0466101	0.28221511	2.3018793	20	—	—
489033 2005 WK_{157}	17.9	X	356.96899	283.59831	84.34101	2.92045	0.2080545	0.25961767	2.4335852	20	12 6.7	20.3
489034 2005 WK_{165}	17.9	X	186.06389	309.53337	85.35307	2.61054	0.1644894	0.23510620	2.5999201	20	4 23.7	22.0
489035 2005 WG_{166}	18.2	X	8.43676	70.03516	82.80402	5.90734	0.1864289	0.28215435	2.3022097	20	1 7.9	20.0
489036 2005 WM_{181}	17.5	X	200.39002	206.03740	224.96690	10.98975	0.2535475	0.24171034	2.5523441	20	6 16.9	22.1
489037 2005 XY_{32}	17.8	X	163.78018	165.65296	245.19681	5.89477	0.0744802	0.29907981	2.2145117	20	4 12.5	20.7
489038 2005 XU_{59}	17.8	X	222.85352	11.81610	349.95714	0.20925	0.2024916	0.23546272	2.5972950	20	4 13.1	22.0
489039 2005 XU_{66}	17.5	X	322.25546	124.69720	71.78781	7.04514	0.0632005	0.28423186	2.2909778	20	1 13.9	20.2
489040 2005 XN_{86}	16.6	X	305.64692	26.11886	88.26689	6.43556	0.0677237	0.19893124	2.9062573	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489041 2005 XT_{86}	18.2	X	52.01315	160.06992	285.62605	6.92385	0.1573113	0.28159114	2.3052784	20	—	—
489042 2005 XV_{87}	18.2	X	45.52228	14.31793	89.49955	3.76514	0.1085809	0.28340397	2.2954373	20	1 12.5	20.1
489043 2005 YM_{11}	18.4	X	355.74151	320.88114	48.89956	2.08055	0.1991497	0.26065366	2.4271325	20	12 5.7	20.8
489044 2005 YW_{17}	18.0	X	197.17748	159.28862	275.91548	7.85476	0.2218434	0.24168739	2.5525057	20	6 21.1	22.1
489045 2005 YH_{40}	18.2	X	20.30746	14.68307	104.78118	3.25645	0.1606889	0.27881366	2.3205629	20	—	—
489046 2005 YF_{58}	16.4	X	307.07530	320.86148	122.76441	10.70308	0.0647139	0.19052726	2.9911025	20	11 26.6	20.4
489047 2005 YJ_{64}	17.4	X	299.45060	17.91395	77.80200	2.74818	0.1070349	0.19199453	2.9758439	20	11 25.6	21.1
489048 2005 YP_{66}	17.3	X	17.44708	303.37261	327.08102	4.58051	0.0466079	0.23808536	2.5781861	20	7 28.0	20.5
489049 2005 YN_{67}	18.1	X	72.98370	325.69642	94.94989	7.26028	0.1103057	0.28038863	2.3118649	20	—	—
489050 2005 YE_{68}	18.2	X	338.09846	9.04522	11.39822	1.87746	0.2255400	0.25771283	2.4455621	20	11 17.1	19.8
489051 2005 YH_{69}	17.9	X	258.07239	244.86782	100.86139	23.32556	0.0827771	0.36975930	1.9224571	20	5 17.6	20.5
489052 2005 YL_{81}	17.0	X	61.86807	181.29992	283.83535	4.10700	0.1207240	0.21692047	2.7432730	20	2 24.3	20.2
489053 2005 YK_{93}	18.1	X	298.78546	175.53185	291.66562	11.64380	0.4036540	0.26185632	2.4196953	20	12 16.6	18.4
489054 2005 YA_{96}	16.8	X	285.58459	150.14879	312.78534	8.54016	0.1007088	0.18958756	3.0009781	20	11 10.8	20.8
489055 2005 YT_{117}	17.5	X	262.01785	24.35616	2.40118	1.73617	0.1264299	0.24049993	2.5609007	20	7 4.8	20.9
489056 2005 YV_{122}	17.6	X	74.76370	157.62927	289.05597	16.54266	0.1094787	0.35476380	1.9762559	20	1 21.5	19.0
489057 2005 YS_{128}	17.8	X	308.97224	19.26845	278.05928	18.02732	0.0810769	0.36905412	1.9249052	20	5 6.4	19.9
489058 2005 YU_{165}	18.0	X	64.73612	106.47935	312.80923	6.04886	0.1570474	0.27959079	2.3162609	20	—	—
489059 2005 YP_{170}	18.0	X	106.15094	207.70258	293.57965	17.63387	0.0934955	0.36677946	1.9328555	20	6 13.5	20.2
489060 2005 YP_{187}	18.0	X	30.20707	133.94616	300.86730	11.24248	0.1418846	0.27418021	2.3466338	20	—	—
489061 2005 YB_{190}	16.8	X	213.37372	148.29252	98.75870	8.91596	0.0323865	0.20213229	2.8754926	20	—	—
489062 2005 YC_{199}	17.9	X	352.80816	8.99785	111.19301	3.34158	0.1594951	0.27429867	2.3459581	20	—	—
489063 2005 YQ_{207}	18.1	X	353.34603	247.77753	280.16323	6.28844	0.0424730	0.28293958	2.2979483	20	1 21.0	20.8
489064 2005 YB_{217}	17.1	X	305.06633	99.43088	322.18243	8.25900	0.2158831	0.18976267	2.9991316	20	10 4.4	20.5
489065 2005 YO_{234}	17.7	X	225.08236	83.99289	56.17298	1.97156	0.1463751	0.18540378	3.0459562	20	10 8.6	22.1
489066 2005 YB_{251}	17.8	X	312.75254	125.80408	270.59703	4.32045	0.1582155	0.25366178	2.4715308	20	10 8.1	20.0
489067 2005 YH_{264}	17.7	X	307.70120	61.49481	58.14186	2.77320	0.0822701	0.19621201	2.9330468	20	—	—
489068 2005 YC_{289}	19.0	X	353.91081	35.02345	43.00021	2.24695	0.1703838	0.26753019	2.3853614	20	—	—
489069 2006 AF	18.2	X	20.96695	274.02488	216.87462	2.87954	0.1890829	0.28086255	2.3092635	20	—	—
489070 2006 AJ_{2}	18.2	X	169.46968	297.08983	115.99404	23.78370	0.1060048	0.36552354	1.9372804	20	5 5.9	21.3
489071 2006 AX_{5}	17.5	X	358.33909	22.25130	124.73321	25.44203	0.2508881	0.27687168	2.3314012	20	—	—
489072 2006 AK_{17}	16.2	X	113.82749	146.33630	286.33370	9.59052	0.0921939	0.15209708	3.4758054	20	3 21.9	21.5
489073 2006 AS_{18}	18.5	X	68.38195	138.64002	284.03549	5.40280	0.1338719	0.27891159	2.3200197	20	—	—
489074 2006 AP_{19}	17.7	X	38.27887	160.11642	306.05904	4.58422	0.1790399	0.28146896	2.3059455	20	1 1.8	19.4
489075 2006 AV_{28}	18.5	X	9.24449	64.00783	49.72994	3.41163	0.1853618	0.27604593	2.3360483	20	—	—
489076 2006 AR_{38}	18.2	X	342.09323	281.71106	104.95011	3.49800	0.1857640	0.25718141	2.4489298	20	12 1.6	20.3
489077 2006 AW_{38}	16.8	X	158.10531	274.13236	313.41481	1.31561	0.1281314	0.18492541	3.0512069	20	11 16.8	21.8
489078 2006 AN_{50}	18.7	X	42.52973	132.39442	306.20026	1.08804	0.1542008	0.27767993	2.3268750	20	—	—
489079 2006 AA_{53}	16.5	X	287.49863	353.21847	128.71498	10.61450	0.0299626	0.19248745	2.9707614	20	12 18.7	20.6
489080 2006 AF_{53}	17.0	X	337.93478	314.05833	130.47447	10.21226	0.0527868	0.19556837	2.9394787	20	—	—
489081 2006 AK_{66}	18.1	X	224.85266	152.00735	291.34833	5.88473	0.1902019	0.24418276	2.5350861	20	7 28.5	22.1
489082 2006 AY_{76}	16.0	X	112.36665	142.09129	131.93405	15.42194	0.1774951	0.18523668	3.0477878	20	12 5.1	21.2
489083 2006 AZ_{93}	13.4	X	95.41592	156.90699	350.22538	30.85252	0.0214312	0.08206711	5.2443294	20	5 12.9	20.7
489084 2006 AF_{101}	18.3	X	49.60184	309.12564	140.87270	6.02108	0.1988786	0.27804638	2.3248301	20	1 3.8	19.8
489085 2006 AU_{104}	17.5	X	140.46192	161.98793	312.67950	2.60075	0.1284984	0.23010212	2.6374787	20	6 17.8	21.6
489086 2006 BU_{12}	17.9	X	17.20931	190.40992	310.43309	5.46149	0.1660440	0.27856527	2.3219422	20	1 11.7	19.9
489087 2006 BQ_{21}	17.0	X	243.75461	337.11672	314.06687	5.52090	0.1686863	0.28178059	2.3042451	20	2 3.1	20.4
489088 2006 BL_{51}	18.1	X	305.52511	75.47624	123.70713	3.72875	0.0915361	0.27498420	2.3420575	20	—	—
489089 2006 BN_{51}	17.6	X	230.84069	33.28350	121.76860	3.55200	0.1705629	0.18452934	3.0555713	20	10 30.4	22.1
489090 2006 BU_{57}	18.6	X	317.30210	189.33300	4.41765	5.13172	0.1743465	0.27487563	2.3426742	20	—	—
489091 2006 BL_{61}	17.5	X	195.41954	56.65670	52.79147	7.07714	0.2335632	0.24087589	2.5582353	20	8 3.5	21.9
489092 2006 BE_{67}	17.9	X	314.09576	356.25822	43.09888	1.39244	0.1821510	0.25261561	2.4783497	20	10 16.9	20.0
489093 2006 BP_{69}	18.5	X	316.38716	158.95078	58.47785	4.18454	0.1760411	0.27874219	2.3209596	20	1 17.8	21.4
489094 2006 BC_{78}	16.3	X	207.07459	246.69806	313.93964	13.34220	0.1522061	0.18741381	3.0241384	20	11 28.4	21.2
489095 2006 BX_{85}	17.9	X	311.05935	212.53875	327.59941	6.56868	0.1438353	0.27231096	2.3573603	20	—	—
489096 2006 BX_{86}	16.7	X	322.57445	265.98655	126.43795	17.64908	0.2316458	0.18425935	3.0585555	20	10 9.8	20.1
489097 2006 BN_{94}	18.5	X	327.15660	239.71984	284.43504	1.25399	0.1392730	0.27128992	2.3632715	20	—	—
489098 2006 BV_{109}	17.0	X	342.76596	328.94556	85.10875	3.48039	0.0954101	0.18959712	3.0008772	20	12 9.3	20.6
489099 2006 BL_{182}	18.8	X	300.75033	103.67876	108.56848	2.44598	0.1341896	0.27414786	2.3468183	20	—	—
489100 2006 BF_{186}	15.7	X	11.80401	11.32265	42.23222	1.46872	0.2094329	0.12563280	3.9482140	20	—	—
489101 2006 BJ_{188}	13.7	X	181.00058	264.42443	152.34670	35.59787	0.0248134	0.08341268	5.1877773	20	5 24.9	21.1
489102 2006 BB_{202}	17.1	X	278.76989	126.01071	334.48920	9.57316	0.0578177	0.18428027	3.0583240	20	11 1.1	21.4
489103 2006 BO_{210}	17.1	X	245.08029	315.53221	180.88615	4.26174	0.0931594	0.18333894	3.0687834	20	11 2.4	21.4
489104 2006 BQ_{213}	17.8	X	218.90678	317.96298	102.89346	24.64831	0.0926613	0.37343386	1.9098251	20	7 7.8	19.8
489105 2006 BS_{217}	16.0	X	196.07700	290.13115	242.92079	14.19475	0.2379794	0.17853584	3.1235786	20	10 8.3	21.5
489106 2006 BG_{219}	17.6	X	11.89974	185.86513	312.26050	6.23908	0.1079024	0.27662128	2.3328080	20	1 3.9	19.8
489107 2006 BS_{222}	18.7	X	350.22920	145.25339	309.05503	4.56661	0.1913552	0.26733775	2.3865060	20	—	—
489108 2006 BD_{232}	17.5	X	166.08897	22.50038	344.32674	6.64994	0.2070060	0.28651624	2.2787843	20	2 28.9	21.1
489109 2006 BL_{234}	18.7	X	332.49508	151.83455	44.46364	1.92812	0.0540770	0.28102487	2.3083742	20	1 30.2	21.4
489110 2006 BY_{238}	18.2	X	310.05869	43.01255	156.17933	5.22334	0.1149036	0.27818475	2.3240591	20	—	—
489111 2006 BX_{242}	17.0	X	283.02537	111.37256	338.02930	9.65243	0.1423334	0.18463451	3.0544110	20	10 13.1	21.0
489112 2006 BM_{244}	18.7	X	31.66160	84.15136	5.17361	1.79320	0.1474239	0.27385138	2.3485119	20	—	—
489113 2006 BE_{249}	18.2	X	289.93981	248.91194	348.14598	5.10757	0.1260100	0.27644743	2.3337859	20	1 18.9	21.4
489114 2006 BF_{250}	17.9	X	50.70140	121.00414	325.49098	8.46355	0.1751505	0.27681903	2.3316969	20	1 1.6	19.8
489115 2006 BZ_{268}	16.8	X	231.19860	19.72766	121.12434	12.47538	0.2882461	0.18264919	3.0765045	20	10 4.8	22.0
489116 2006 BA_{281}	18.4	X	64.89504	298.27253	151.43615	5.88799	0.1238780	0.27914533	2.3187245	20	1 28.7	20.6
489117 2006 CC_{2}	17.8	X	209.56165	41.60675	7.69226	3.61102	0.3007062	0.23583204	2.5945826	20	5 25.9	22.5
489118 2006 CU_{9}	17.6	X	176.27308	343.44741	106.44391	26.45940	0.1120549	0.36913117	1.9246373	20	6 27.5	20.1
489119 2006 CT_{25}	16.3	X	104.56144	149.60514	118.40987	6.63653	0.1154773	0.18129455	3.0918107	20	11 15.5	21.1
489120 2006 CG_{37}	15.9	X	209.36819	207.88981	331.24403	11.27665	0.1939682	0.18243493	3.0789128	20	10 28.9	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489121 2006 CM_{42}	16.8	X	294.26497	292.20168	166.28063	27.12820	0.1827258	0.18612183	3.0381171	20	11 15.9	20.9
489122 2006 CS_{46}	17.1	X	252.27205	38.30715	1.22460	3.47117	0.1992770	0.24025099	2.5626694	20	6 29.8	20.9
489123 2006 CX_{46}	18.4	X	52.04028	335.34954	111.09607	3.85402	0.1468198	0.27788803	2.3257132	20	1 1.5	20.4
489124 2006 CS_{67}	18.0	X	3.46507	172.67789	321.22130	9.08866	0.1068068	0.27471444	2.3435905	20	—	—
489125 2006 DZ_{19}	18.3	X	291.11377	128.03449	131.62937	4.12594	0.2219829	0.27912095	2.3188595	20	2 5.1	21.5
489126 2006 DY_{24}	16.8	X	144.45075	204.03694	42.22583	1.59177	0.1506808	0.17863307	3.1224451	20	11 25.5	22.0
489127 2006 DN_{27}	18.2	X	312.36392	206.91320	353.67855	5.70724	0.1747456	0.27174302	2.3606437	20	—	—
489128 2006 DT_{33}	17.6	X	146.81285	344.89913	157.30501	2.67585	0.1422030	0.23068579	2.6330280	20	7 30.2	21.6
489129 2006 DX_{38}	18.6	X	36.89286	81.08950	18.77684	2.38669	0.1760453	0.27480008	2.3431035	20	—	—
489130 2006 DF_{85}	18.8	X	89.83423	281.23951	312.64453	2.48383	0.1307077	0.30425759	2.1893159	20	10 5.1	21.8
489131 2006 DQ_{94}	15.9	X	212.08876	311.53787	181.59550	25.49038	0.0703546	0.17049125	3.2210786	20	9 21.1	20.6
489132 2006 DH_{96}	16.4	X	193.36757	218.42967	5.34100	23.85793	0.0992225	0.18141699	3.0904193	20	12 14.6	21.6
489133 2006 DV_{101}	18.3	X	316.46531	59.83974	126.94921	2.91148	0.1402287	0.27128801	2.3632826	20	—	—
489134 2006 DG_{103}	16.7	X	291.70755	118.65641	350.64610	10.21669	0.0586653	0.18423964	3.0587735	20	12 1.2	20.9
489135 2006 DA_{107}	17.0	X	227.35611	340.85623	202.54782	3.16327	0.1129470	0.18351951	3.0667701	20	12 5.1	21.5
489136 2006 DM_{108}	16.7	X	114.56368	305.19403	348.42282	13.10782	0.0406556	0.18193992	3.0844949	20	12 18.7	21.4
489137 2006 DC_{115}	18.1	X	285.64672	214.92044	21.68864	1.42721	0.1414915	0.27197234	2.3593166	20	1 11.4	21.5
489138 2006 DO_{123}	18.5	X	310.45108	241.82210	332.55816	3.63328	0.1720514	0.27422620	2.3463714	20	1 7.3	21.5
489139 2006 DH_{135}	18.2	X	287.72500	214.02452	21.30605	1.54028	0.1448826	0.27439235	2.3454241	20	1 11.3	21.6
489140 2006 DV_{139}	17.9	X	326.57042	172.25111	21.51373	6.46097	0.0581469	0.27481406	2.3430240	20	1 19.9	20.8
489141 2006 DL_{142}	16.6	X	265.52831	324.98903	151.18858	8.87294	0.0298292	0.18019443	3.1043819	20	11 12.9	21.0
489142 2006 DB_{146}	18.3	X	273.21772	219.96428	5.36850	2.57354	0.1508526	0.26855625	2.3792817	20	—	—
489143 2006 DL_{152}	18.5	X	345.17868	319.97017	182.79198	5.27269	0.1357923	0.26876107	2.3780728	20	—	—
489144 2006 DG_{155}	17.7	X	187.02374	231.86004	215.71670	3.76264	0.2763944	0.23206821	2.6225611	20	6 26.7	22.4
489145 2006 DM_{157}	18.4	X	33.74495	340.02618	121.54151	2.92214	0.1724223	0.27380734	2.3487637	20	—	—
489146 2006 DJ_{165}	18.3	X	324.95025	48.54283	148.90275	6.39069	0.1604510	0.27388777	2.3483039	20	1 4.5	21.1
489147 2006 DJ_{172}	17.1	X	211.47461	175.23343	17.10771	5.31589	0.0821013	0.18215573	3.0820581	20	11 30.3	21.6
489148 2006 DN_{172}	16.9	X	220.34154	338.29032	157.24066	11.01349	0.1769545	0.17622561	3.1508184	20	9 25.1	21.9
489149 2006 DZ_{173}	17.3	X	234.73002	40.27999	156.91812	6.46951	0.1275821	0.18712207	3.0272808	20	12 28.3	21.6
489150 2006 DU_{177}	16.3	X	44.10689	16.42561	355.07312	10.29702	0.0187551	0.18590019	3.0405314	20	12 29.6	20.7
489151 2006 DR_{193}	16.8	X	157.09430	207.35170	352.88133	10.60878	0.0744773	0.17304211	3.1893451	20	10 11.1	21.7
489152 2006 DC_{217}	18.0	X	21.94063	85.06948	4.28071	20.92089	0.3533527	0.27154360	2.3617994	20	—	—
489153 2006 EF_{10}	17.1	X	175.29852	192.58439	49.79951	2.70037	0.1778819	0.18154435	3.0889738	20	12 16.7	22.3
489154 2006 EN_{11}	16.5	X	186.73661	34.39147	172.32032	16.34273	0.0559676	0.17988949	3.1078891	20	11 26.1	21.4
489155 2006 EL_{16}	16.5	X	151.09962	66.23342	172.52517	13.01205	0.1293907	0.17632150	3.1496759	20	11 24.7	21.7
489156 2006 ES_{23}	18.7	X	316.22275	110.24158	343.68195	1.19407	0.1412811	0.25826922	2.4420485	20	—	—
489157 2006 EW_{24}	18.0	X	306.26835	36.75374	160.72826	4.94725	0.1277907	0.27191014	2.3596764	20	—	—
489158 2006 EC_{27}	16.6	X	155.97319	208.38277	87.30641	1.81812	0.1521045	0.18986753	2.9980273	20	—	—
489159 2006 EE_{38}	17.3	X	240.47179	41.23360	120.80779	3.46584	0.0166566	0.18372682	3.0644627	20	12 7.9	21.5
489160 2006 EK_{38}	17.3	X	244.89486	71.16097	69.11946	2.16719	0.1440361	0.18196892	3.0841671	20	10 30.1	21.6
489161 2006 EY_{46}	18.1	X	13.63683	137.06275	0.22344	7.50801	0.1282234	0.27588550	2.3369538	20	1 4.5	20.4
489162 2006 ET_{53}	16.5	X	181.03003	28.18941	190.11419	11.59393	0.1102238	0.17984358	3.1084180	20	11 28.9	21.5
489163 2006 ET_{67}	16.6	X	61.56413	205.36964	138.82705	6.36604	0.0752045	0.18937971	3.0031735	20	12 25.2	21.0
489164 2006 FW_{2}	17.7	X	118.74792	246.89665	190.61939	22.10095	0.0866858	0.34979246	1.9949365	20	3 20.7	19.9
489165 2006 FA_{9}	17.9	X	283.31500	137.52619	57.97077	2.84760	0.1560090	0.26267915	2.4146396	20	—	—
489166 2006 FS_{20}	15.7	X	72.00256	305.51228	4.43345	27.14022	0.2152458	0.17324001	3.1869158	20	12 1.6	21.1
489167 2006 FL_{22}	17.0	X	228.61758	25.73065	6.69207	11.53729	0.0863820	0.22349506	2.6892062	20	6 3.4	21.1
489168 2006 FU_{28}	16.3	X	53.73810	315.67262	31.13327	17.17453	0.1065658	0.17398466	3.1778160	20	12 17.7	21.1
489169 2006 FF_{30}	16.1	X	152.15301	253.45876	33.38701	15.93637	0.2074195	0.17829769	3.1263595	20	—	—
489170 2006 FQ_{37}	16.0	X	236.49364	137.46634	42.76953	21.53957	0.2467225	0.18462091	3.0545609	20	11 21.2	20.7
489171 2006 FT_{40}	18.1	X	270.06301	49.02740	179.13131	5.30584	0.1812511	0.26513084	2.3997309	20	—	—
489172 2006 FX_{40}	16.9	X	175.90104	162.30839	81.94740	2.33483	0.1413436	0.17950091	3.1123728	20	12 20.9	21.8
489173 2006 GA_{6}	17.9	X	347.91146	23.69648	104.97121	4.54317	0.1463463	0.26632870	2.3925301	20	—	—
489174 2006 GP_{18}	16.4	X	292.26929	132.17900	10.05042	9.72427	0.0449369	0.18747615	3.0234679	20	—	—
489175 2006 GC_{27}	17.4	X	7.83824	61.56669	47.39250	6.60054	0.1047337	0.26283769	2.4136685	20	—	—
489176 2006 GG_{27}	16.5	X	218.76777	125.20417	56.13257	4.74771	0.1982085	0.17778928	3.1323167	20	11 13.0	21.4
489177 2006 GB_{33}	16.3	X	209.26803	2.29124	197.78561	27.88547	0.1082872	0.17894614	3.1188021	20	12 4.2	21.4
489178 2006 GB_{41}	16.1	X	211.31531	154.70720	45.22178	16.59039	0.2799000	0.18062954	3.0993946	20	11 19.3	21.3
489179 2006 GY_{46}	16.9	X	234.95645	163.42494	24.51044	13.93369	0.1715706	0.18267470	3.0762181	20	12 8.6	21.6
489180 2006 GG_{54}	17.9	X	270.96052	231.25604	52.24439	6.28583	0.2240106	0.27216773	2.3581873	20	2 18.5	21.6
489181 2006 HB_{4}	17.2	X	221.46901	274.96422	278.01306	1.12871	0.2129043	0.18245351	3.0787038	20	11 28.0	21.8
489182 2006 HG_{10}	16.7	X	165.33318	85.10727	157.20624	9.02250	0.1874236	0.17586166	3.1551640	20	12 8.6	22.1
489183 2006 HA_{14}	18.4	X	347.91402	292.61042	207.38146	3.33359	0.2349564	0.26797708	2.3827087	20	—	—
489184 2006 HT_{16}	16.4	X	355.89707	284.85322	154.16706	9.07433	0.0711960	0.18465272	3.0542101	20	—	—
489185 2006 HO_{21}	16.7	X	156.62487	84.39888	187.89565	9.64129	0.1986939	0.17761972	3.1343099	20	—	—
489186 2006 HZ_{21}	17.6	X	314.46153	112.11508	99.98373	4.04540	0.1840545	0.27038193	2.3685594	20	1 7.7	20.6
489187 2006 HU_{23}	16.8	X	192.34602	87.64230	102.14437	2.45255	0.1284655	0.17238495	3.1974455	20	11 3.9	21.8
489188 2006 HZ_{27}	16.1	X	138.74465	68.07948	212.99403	25.11340	0.1739503	0.17345776	3.1842481	20	12 26.0	21.8
489189 2006 HM_{46}	18.2	X	250.54384	215.05930	40.97101	2.44172	0.2075544	0.26323131	2.4112617	20	—	—
489190 2006 HM_{63}	17.7	X	259.99179	202.11272	52.46943	9.24360	0.1877145	0.26487170	2.4012959	20	1 5.4	21.6
489191 2006 HR_{72}	16.7	X	183.65863	132.36632	114.04787	6.36894	0.1324404	0.17790025	3.1310140	20	12 30.6	21.6
489192 2006 HF_{74}	18.6	X	326.02390	46.96365	131.61509	3.24795	0.1579112	0.26667861	2.3904368	20	—	—
489193 2006 HX_{74}	16.7	X	117.31406	72.32911	202.80118	10.20116	0.0532746	0.17102787	3.2143374	20	11 29.4	21.5
489194 2006 HK_{75}	16.7	X	218.24534	32.12275	145.65467	11.15624	0.1769108	0.17492788	3.1663824	20	11 13.3	21.8
489195 2006 HL_{75}	16.3	X	157.48770	145.20503	130.55417	11.09226	0.1944087	0.17612658	3.1519994	20	—	—
489196 2006 HZ_{75}	15.8	X	129.48754	199.03915	112.67837	10.32448	0.0524770	0.17999234	3.1067052	20	—	—
489197 2006 HC_{79}	16.4	X	154.53094	241.88246	35.89417	1.00493	0.1179615	0.17797579	3.1301280	20	—	—
489198 2006 HF_{79}	18.3	X	252.14386	218.04522	34.97193	1.82412	0.1578672	0.26312804	2.4118926	20	—	—
489199 2006 HS_{96}	15.8	X	43.02353	331.11716	50.12153	28.33915	0.1270856	0.17675386	3.1445374	20	—	—
489200 2006 HS_{109}	18.0	X	355.63957	287.65695	216.65070	12.40507	0.1337974	0.26541912	2.3979930	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489201 2006 HS_{116}	16.4	X	212.90231	148.21988	53.41314	16.63686	0.0349057	0.17624829	3.1505481	20	12 16.3	21.1
489202 2006 HJ_{154}	16.3	X	175.74867	165.29687	62.95967	8.43212	0.1130014	0.17545745	3.1600079	20	12 2.9	21.3
489203 2006 JT	18.9	X	290.50867	162.01853	21.02037	36.36655	0.4817381	0.26516721	2.3995115	20	—	—
489204 2006 JP_{11}	16.4	X	149.68300	82.21189	186.74150	8.87870	0.1020818	0.17485733	3.1672340	20	12 25.3	21.5
489205 2006 JR_{15}	16.3	X	133.69523	240.77099	38.72288	11.45532	0.0733222	0.17576013	3.1563789	20	12 21.7	21.2
489206 2006 JU_{19}	16.5	X	117.69618	135.90683	199.17242	16.33454	0.2192388	0.17814314	3.1281673	20	—	—
489207 2006 JG_{27}	16.3	X	134.34142	101.56189	217.44071	24.58899	0.2386727	0.17902286	3.1179111	20	—	—
489208 2006 JX_{42}	18.2	X	235.40918	140.20904	153.71727	3.04128	0.1992153	0.26477428	2.4018849	20	1 30.2	22.2
489209 2006 JJ_{45}	18.0	X	240.49534	81.43808	192.81139	6.55644	0.2250013	0.26344432	2.4099618	20	1 9.5	22.2
489210 2006 JC_{50}	18.4	X	261.65123	220.53692	48.45506	6.66050	0.2209007	0.26778835	2.3838281	20	1 22.9	22.3
489211 2006 JH_{74}	18.3	X	126.00271	80.81520	207.35586	2.49839	0.1753962	0.24565587	2.5249413	20	—	—
489212 2006 JN_{74}	17.1	X	216.35548	6.34110	197.20867	0.70454	0.1365276	0.18062016	3.0995018	20	12 13.3	21.8
489213 2006 KX_{15}	16.8	X	203.48947	213.77054	103.96295	13.58759	0.2308289	0.26169054	2.4207171	20	2 4.2	21.0
489214 2006 KA_{17}	16.2	X	176.24826	107.81154	138.79194	14.07838	0.2541168	0.17577506	3.1562003	20	12 19.2	21.8
489215 2006 KX_{17}	15.8	X	191.91618	133.80966	104.42766	16.40317	0.0530935	0.18061823	3.0995239	20	—	—
489216 2006 KR_{20}	19.4	X	213.34710	45.79405	227.64877	3.67139	0.3341542	0.32566848	2.0922756	20	—	—
489217 2006 KG_{46}	17.1	X	225.47121	300.24749	225.98118	12.79983	0.2372146	0.17530531	3.1618360	20	10 27.6	22.3
489218 2006 KJ_{47}	16.4	X	136.87639	61.12836	220.94148	8.47106	0.0649544	0.17424373	3.1746653	20	12 27.4	21.2
489219 2006 KD_{50}	18.1	X	234.19835	112.25424	211.86175	4.79184	0.2481528	0.26803835	2.3823456	20	3 2.1	22.1
489220 2006 KV_{51}	18.6	X	299.17052	77.75540	150.80790	2.95635	0.1445807	0.26778203	2.3838656	20	1 16.2	21.7
489221 2006 KT_{58}	16.8	X	99.45462	167.34845	132.49965	11.89889	0.0491192	0.17170471	3.2058848	20	12 9.8	21.6
489222 2006 KZ_{60}	18.6	X	351.99567	133.30342	185.15563	5.40357	0.1918959	0.29014387	2.2597503	20	9 14.4	20.1
489223 2006 KF_{62}	16.3	X	199.10881	128.42095	86.88538	13.13757	0.1273695	0.17536097	3.1611669	20	12 10.0	21.1
489224 2006 KO_{62}	16.2	X	184.53132	26.38456	208.63292	10.03703	0.1002977	0.17519098	3.1632114	20	12 19.8	21.2
489225 2006 KG_{74}	16.5	X	198.76881	144.19299	95.72746	14.83934	0.2370697	0.17854745	3.1234432	20	12 28.9	21.5
489226 2006 KE_{75}	16.5	X	244.26719	75.47906	87.61569	18.38187	0.2506633	0.18076701	3.0978230	20	11 16.3	21.3
489227 2006 KN_{106}	17.8	X	237.66290	279.29929	19.23687	5.31193	0.1373044	0.26983326	2.3717690	20	2 11.4	21.4
489228 2006 KS_{109}	18.0	X	287.61222	169.80731	44.70912	11.54256	0.1531992	0.26489156	2.4011759	20	—	—
489229 2006 KB_{120}	16.1	X	217.99374	347.23951	230.63293	26.53636	0.0909803	0.17823264	3.1271200	20	12 31.1	21.1
489230 2006 MT_{7}	17.8	X	252.73309	139.98969	122.18252	5.53939	0.1700932	0.25818636	2.4425710	20	1 9.4	21.7
489231 2006 OC_{4}	18.9	X	153.75948	1.19338	326.81578	4.82564	0.2421996	0.31462987	2.1409314	20	—	—
489232 2006 PX_{13}	17.1	X	113.11310	297.97054	27.92168	9.80270	0.2145558	0.23716145	2.5848776	20	—	—
489233 2006 QP_{27}	18.8	X	34.82953	47.54810	324.57613	6.18128	0.2794145	0.29668386	2.2264183	20	—	—
489234 2006 QY_{29}	16.5	X	183.08893	351.51305	348.86523	2.78607	0.3562215	0.18154568	3.0889587	20	2 22.6	22.2
489235 2006 QA_{58}	20.4	X	222.90613	283.69777	152.46513	26.60501	0.1728803	0.70545197	1.2497537	20	12 15.2	21.3
489236 2006 QQ_{89}	16.7	X	209.11609	92.30452	256.86707	5.30373	0.3038154	0.18386352	3.0629436	20	3 15.9	22.4
489237 2006 QN_{133}	18.3	X	221.31906	138.70530	171.14331	10.33163	0.2477383	0.25644442	2.4536195	20	2 5.4	22.7
489238 2006 QA_{137}	16.9	X	50.32835	54.61075	317.92193	16.86060	0.2337162	0.22964089	2.6410092	20	—	—
489239 2006 QX_{164}	17.2	X	37.27349	32.86769	311.25973	12.59659	0.1983717	0.22184720	2.7025065	20	12 21.9	21.0
489240 2006 QR_{182}	17.4	X	216.30923	29.43372	350.65297	12.06428	0.1755083	0.19134984	2.9825242	20	4 27.9	22.5
489241 2006 QO_{184}	17.4	X	264.71103	323.94176	9.30405	6.01817	0.0947623	0.19296554	2.9658525	20	4 30.7	21.8
489242 2006 QA_{186}	17.1	X	98.44796	293.40678	35.10044	3.37932	0.1397901	0.23163948	2.6257961	20	—	—
489243 2006 QQ_{187}	16.4	X	206.40068	71.81900	290.29986	5.35494	0.1785830	0.18636065	3.0355209	20	3 31.0	21.6
489244 2006 RW_{1}	18.3	X	253.69351	42.19355	338.41077	0.59323	0.1976741	0.27093641	2.3653267	20	6 6.2	21.6
489245 2006 RR_{14}	17.0	X	322.45225	172.68223	295.18656	12.87563	0.2020999	0.22990802	2.6389630	20	—	—
489246 2006 RY_{14}	16.8	X	27.91559	263.81883	194.34960	16.30046	0.0977417	0.24287217	2.5441979	20	—	—
489247 2006 RF_{18}	16.9	X	42.35645	214.00940	180.69102	12.53533	0.2986606	0.22715621	2.6602328	20	—	—
489248 2006 RP_{22}	17.0	X	84.62329	359.51109	356.22477	13.19204	0.2456994	0.23109596	2.6299115	20	—	—
489249 2006 RZ_{43}	17.3	X	81.12303	342.79314	14.37950	13.68817	0.0883828	0.22984788	2.6394233	20	—	—
489250 2006 RV_{53}	16.8	X	203.62795	316.80957	36.35474	5.15272	0.1619077	0.18164036	3.0878852	20	3 23.1	21.8
489251 2006 RD_{62}	19.0	X	343.81630	123.53195	200.12624	4.00924	0.3104319	0.28122554	2.3072760	20	9 9.9	19.4
489252 2006 RJ_{68}	16.9	X	47.14081	219.22046	172.50388	15.62375	0.1650264	0.22998212	2.6383961	20	—	—
489253 2006 RZ_{74}	17.3	X	85.15707	4.20025	8.28518	9.86397	0.0963262	0.23421454	2.6065145	20	—	—
489254 2006 RQ_{75}	18.2	X	199.06166	260.48093	28.28441	1.87074	0.1490484	0.24364330	2.5388268	20	—	—
489255 2006 RA_{77}	18.6	X	50.01705	347.93172	18.19425	3.43935	0.1885755	0.29834541	2.2181444	20	—	—
489256 2006 RB_{90}	17.2	X	320.01473	252.37127	200.02995	7.27482	0.2072147	0.21964017	2.7205803	20	—	—
489257 2006 RQ_{91}	16.4	X	168.10706	180.73612	189.36075	4.38265	0.1221702	0.17732345	3.1378001	20	3 8.8	21.4
489258 2006 RB_{93}	17.3	X	15.68646	66.07451	3.72342	6.34690	0.2496339	0.22690296	2.6622118	20	—	—
489259 2006 RV_{94}	16.0	X	198.73484	345.93809	8.10994	10.11044	0.1054675	0.17991097	3.1076418	20	3 20.0	20.9
489260 2006 RS_{101}	18.0	X	285.63979	258.02445	103.71094	4.01312	0.2573951	0.27402306	2.3475309	20	6 11.8	20.6
489261 2006 RU_{107}	18.3	X	245.53384	358.61006	240.10676	1.30632	0.1750881	0.24194366	2.5507029	20	—	—
489262 2006 RN_{112}	17.6	X	313.84807	73.90377	15.40792	4.96115	0.1354727	0.21967620	2.7202828	20	12 18.3	20.5
489263 2006 RK_{120}	17.2	X	98.51115	178.19355	201.37303	15.25141	0.1794351	0.23787170	2.5797296	20	1 2.0	20.7
489264 2006 RD_{121}	17.6	X	92.86782	354.57844	34.10581	12.41377	0.1855235	0.23679480	2.5875451	20	1 10.9	20.9
489265 2006 ST_{10}	16.0	X	152.22484	142.85714	252.15247	9.61507	0.0600070	0.18413174	3.0599684	20	3 13.8	20.7
489266 2006 SL_{16}	16.8	X	216.95101	113.39225	237.05950	3.75115	0.2455924	0.18570689	3.0426410	20	3 25.2	22.1
489267 2006 SG_{17}	15.7	X	154.62393	30.56347	356.87864	11.00788	0.1268843	0.17693800	3.1423555	20	3 17.3	20.6
489268 2006 SB_{22}	17.7	X	167.67483	334.29610	341.48003	6.39798	0.1732275	0.24195056	2.5506544	20	1 1.9	21.8
489269 2006 SO_{31}	17.5	X	170.92460	86.22230	231.40992	2.27558	0.2365993	0.24436946	2.5337947	20	1 9.9	21.8
489270 2006 SS_{52}	17.5	X	359.75619	166.67157	210.72686	9.23151	0.2052528	0.21786523	2.7353365	20	12 10.4	20.5
489271 2006 SQ_{58}	17.0	X	337.21609	169.83637	200.14467	14.43698	0.1952165	0.21474031	2.7618091	20	10 12.2	19.5
489272 2006 SK_{64}	16.3	X	94.73236	103.78631	244.09596	11.17736	0.2261878	0.23127064	2.6285871	20	—	—
489273 2006 SQ_{75}	17.2	X	162.16207	300.27426	109.61812	2.72303	0.1970315	0.18050184	3.1008562	20	4 23.9	22.3
489274 2006 SN_{93}	16.8	X	16.74706	311.45076	21.54782	12.70197	0.1137583	0.21134065	2.7913482	20	10 23.2	20.2
489275 2006 SZ_{99}	16.5	X	213.38875	323.89943	21.49859	5.34120	0.1622332	0.18192060	3.0847132	20	3 21.9	21.6
489276 2006 SL_{100}	17.5	X	248.73728	221.66460	185.00384	1.60168	0.0717637	0.20080732	2.8881274	20	7 19.7	21.7
489277 2006 SS_{106}	17.1	X	167.73287	21.75539	18.36232	0.35496	0.1799863	0.18141795	3.0904084	20	4 15.3	22.2
489278 2006 SF_{129}	18.3	X	81.65561	41.30172	333.23352	4.15687	0.1348511	0.30591554	2.1813986	20	—	—
489279 2006 SF_{138}	16.8	X	24.62878	2.93613	46.51921	13.93524	0.1815810	0.22694066	2.6619170	20	—	—
489280 2006 SA_{151}	18.7	X	53.11747	171.20194	203.69027	3.58243	0.1180504	0.29887031	2.2155465	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489281 2006 SG_{167}	17.5	X	144.19643	335.69650	354.62492	13.32394	0.1996832	0.24016550	2.5632775	20	—	—
489282 2006 SO_{171}	17.0	X	263.76441	230.31867	0.29328	12.92569	0.1211152	0.24410089	2.5356529	20	—	—
489283 2006 SM_{177}	19.0	X	316.88171	253.76612	158.55767	0.65457	0.1854601	0.28549713	2.2842040	20	11 26.6	20.6
489284 2006 SW_{185}	17.3	X	50.55713	285.51307	26.68607	13.01994	0.1748069	0.21484673	2.7608970	20	11 19.4	21.3
489285 2006 SL_{186}	18.0	X	216.76033	196.95373	205.38319	5.18806	0.2527515	0.26230414	2.4169405	20	5 26.1	22.1
489286 2006 SM_{188}	16.2	X	151.29764	12.08453	17.74069	11.28458	0.1615088	0.17777214	3.1325181	20	3 21.4	21.3
489287 2006 SD_{199}	19.5	X	338.19003	130.26547	189.10620	4.05000	0.2462702	0.27794732	2.3253824	20	8 4.6	20.6
489288 2006 SN_{199}	17.1	X	215.60586	354.27906	9.29749	9.90293	0.0540899	0.18628322	3.0363621	20	4 16.5	21.6
489289 2006 SJ_{204}	16.3	X	145.18502	217.14389	136.89449	2.06151	0.1804669	0.17127072	3.2112982	20	2 3.5	21.3
489290 2006 SH_{207}	17.3	X	264.35168	331.03809	6.98461	12.73333	0.1703912	0.19086818	2.9875398	20	4 24.6	21.9
489291 2006 SC_{209}	17.8	X	338.59827	48.28881	18.99251	6.17693	0.2488647	0.21954297	2.7213831	20	—	—
489292 2006 SJ_{218}	17.8	X	6.57728	0.60758	351.98159	3.23416	0.2050111	0.21625530	2.7488954	20	11 16.7	20.9
489293 2006 SY_{225}	17.5	X	265.68241	355.78049	235.83263	5.69901	0.0764956	0.24382547	2.5375620	20	—	—
489294 2006 ST_{226}	16.8	X	232.93677	259.69856	322.20792	6.61506	0.1591590	0.23604940	2.5929896	20	—	—
489295 2006 SQ_{233}	17.8	X	342.65886	196.01688	272.58075	3.41560	0.0535242	0.23206520	2.6225838	20	—	—
489296 2006 SU_{246}	17.4	X	16.14094	194.82070	131.41288	0.99978	0.0758798	0.21322939	2.7748404	20	10 10.7	20.7
489297 2006 SW_{248}	17.1	X	332.24891	249.85959	195.60572	21.59159	0.0564702	0.22421940	2.6834114	20	—	—
489298 2006 SF_{255}	18.5	X	27.88364	317.19666	59.30754	4.58648	0.2765974	0.29483092	2.2357369	20	—	—
489299 2006 SO_{257}	16.9	X	129.03968	180.64415	211.43693	4.63624	0.1566458	0.17194784	3.2028620	20	2 28.4	21.9
489300 2006 SX_{259}	17.0	X	158.74921	59.18544	345.26864	2.73618	0.1830041	0.17991414	3.1076052	20	4 12.2	22.0
489301 2006 ST_{261}	17.7	X	140.58813	169.25497	195.49468	6.41552	0.2560991	0.24260571	2.5460604	20	2 9.5	21.9
489302 2006 SR_{271}	16.4	X	185.21269	101.21340	242.01744	8.03614	0.0861911	0.17452696	3.1712297	20	2 19.1	21.5
489303 2006 SG_{287}	17.4	X	334.93630	191.73011	204.92651	25.72173	0.2227679	0.28695610	2.2764550	20	12 16.4	19.8
489304 2006 SE_{296}	17.0	X	2.02854	108.35408	359.92461	14.93063	0.0457446	0.23607125	2.5928297	20	—	—
489305 2006 SP_{310}	17.1	X	248.06123	79.20136	245.96518	2.78906	0.2387389	0.18811170	3.0166541	20	3 20.5	22.2
489306 2006 SG_{319}	17.1	X	53.29486	205.48278	177.03969	11.14846	0.1136994	0.22780640	2.6551686	20	—	—
489307 2006 SN_{319}	17.4	X	23.61574	34.52122	41.02326	8.91496	0.1510679	0.23003459	2.6379949	20	—	—
489308 2006 ST_{320}	17.5	X	159.44974	142.28646	155.72184	4.16957	0.1411376	0.23554943	2.5966575	20	—	—
489309 2006 SN_{322}	17.5	X	14.18218	305.96987	115.24714	3.10076	0.0801981	0.22713906	2.6603667	20	—	—
489310 2006 SU_{322}	16.4	X	316.47754	124.76078	27.92414	14.70966	0.0220522	0.23478959	2.6022568	20	—	—
489311 2006 SL_{327}	16.9	X	150.53807	309.14535	117.13683	2.42190	0.1577662	0.18056587	3.1001231	20	5 1.3	21.8
489312 2006 SB_{344}	17.6	X	254.98382	140.73063	221.13564	6.15157	0.1328911	0.26472324	2.4021936	20	5 21.9	20.7
489313 2006 SS_{344}	16.5	X	193.04285	44.53460	315.62168	3.46595	0.1639511	0.18025208	3.1037200	20	3 19.5	21.7
489314 2006 SA_{356}	17.8	X	302.99617	228.88321	117.59780	3.39727	0.2498253	0.27298113	2.3535005	20	6 19.1	20.1
489315 2006 SP_{400}	18.2	X	76.19041	331.57768	17.19607	8.74129	0.1974496	0.30081741	2.2059758	20	—	—
489316 2006 SP_{401}	18.4	X	178.51715	353.81674	63.43944	2.61188	0.1169204	0.25665823	2.4522567	20	5 13.1	21.9
489317 2006 SB_{405}	17.0	X	18.84742	254.49110	194.78535	12.53920	0.2292560	0.23242384	2.6198852	20	—	—
489318 2006 SB_{408}	18.5	X	317.97482	114.98884	204.72785	0.59287	0.1907987	0.27013234	2.3700181	20	6 17.3	20.6
489319 2006 SS_{408}	16.5	X	82.69302	112.80642	250.85988	13.59481	0.2133706	0.23203384	2.6228201	20	—	—
489320 2006 TO_{9}	16.2	X	182.73443	338.81580	41.48808	11.88930	0.0907335	0.17886785	3.1197121	20	4 6.8	21.0
489321 2006 TO_{10}	17.3	X	161.37310	326.35810	351.92559	9.03227	0.0413675	0.23883664	2.5727766	20	—	—
489322 2006 TE_{12}	17.8	X	289.12325	61.22095	294.38870	1.20350	0.2117706	0.27124463	2.3635345	20	6 15.8	20.4
489323 2006 TJ_{15}	18.2	X	259.04919	123.27428	244.12275	1.24638	0.2200548	0.26706274	2.3881440	20	5 22.6	21.4
489324 2006 TY_{41}	17.2	X	7.86377	44.97534	39.30929	22.54649	0.0375668	0.22681084	2.6629326	20	—	—
489325 2006 TM_{45}	16.6	X	155.54293	326.85180	77.98038	2.47805	0.1879791	0.17612605	3.1520056	20	4 12.1	21.7
489326 2006 TO_{54}	17.7	X	20.60137	10.16754	4.24160	7.92689	0.1539915	0.29095369	2.2555552	20	—	—
489327 2006 TZ_{60}	17.1	X	222.82627	156.97589	228.35966	9.09440	0.3248024	0.18894243	3.0078053	20	5 6.7	22.5
489328 2006 TQ_{65}	16.5	X	161.61720	86.01114	291.75016	8.46554	0.2404473	0.17769668	3.1334048	20	3 13.9	22.0
489329 2006 TC_{67}	16.3	X	132.99965	70.42830	312.42126	6.79321	0.1636706	0.17196829	3.2026081	20	2 22.5	21.2
489330 2006 TX_{74}	17.8	X	183.94135	209.33392	195.05720	1.32882	0.1869982	0.25613939	2.4555671	20	5 2.5	21.6
489331 2006 TT_{81}	16.9	X	278.65787	342.61973	229.84969	11.04613	0.0541093	0.23600473	2.5933168	20	—	—
489332 2006 TK_{91}	17.0	X	206.44757	348.08739	28.22311	5.92189	0.1456360	0.18214843	3.0821405	20	4 20.5	22.1
489333 2006 TZ_{96}	18.2	X	302.36224	205.60004	200.74171	4.53324	0.2025734	0.27820796	2.3239298	20	10 5.8	19.9
489334 2006 TA_{101}	16.2	X	182.39378	124.92610	228.93625	8.28874	0.0908618	0.17438960	3.1728947	20	2 28.9	21.3
489335 2006 TD_{128}	17.9	X	324.09430	27.55804	48.35742	8.62476	0.2075479	0.21540887	2.7560917	20	12 19.1	20.4
489336 2006 TR_{129}	17.9	X	246.22387	358.37786	7.12413	5.19684	0.1266147	0.26103998	2.4247373	20	5 15.3	21.3
489337 2006 UM	18.5	X	4.39071	55.28516	57.01388	15.89978	0.5405565	0.29548215	2.2324507	20	—	—
489338 2006 UF_{7}	16.6	X	121.99790	329.64276	40.72495	32.79890	0.1284332	0.23770823	2.5809122	20	1 22.2	20.9
489339 2006 UH_{14}	16.4	X	163.09232	349.62705	54.68636	10.62651	0.0976475	0.17767558	3.1336528	20	4 16.0	21.3
489340 2006 UW_{23}	18.6	X	100.98743	114.05158	222.75548	4.84672	0.2055675	0.30280963	2.1962895	20	—	—
489341 2006 UN_{24}	15.8	X	131.58896	39.70201	19.50003	10.42405	0.0998175	0.17587470	3.1550081	20	3 30.7	20.6
489342 2006 UQ_{29}	18.3	X	158.76707	44.36314	26.23360	1.79142	0.1719666	0.25501021	2.4628105	20	5 12.1	22.0
489343 2006 UP_{37}	17.0	X	152.56277	16.49261	37.20292	15.59489	0.2490284	0.17707511	3.1407332	20	4 22.8	22.3
489344 2006 UZ_{39}	16.8	X	181.29427	221.71931	219.22436	7.35146	0.1079764	0.18784217	3.0195391	20	6 15.2	21.6
489345 2006 UE_{41}	17.1	X	14.73285	294.07160	37.06245	4.96644	0.2021175	0.21004421	2.8028224	20	10 31.3	20.2
489346 2006 US_{41}	17.3	X	178.79728	157.39023	226.35930	1.93193	0.1198775	0.17761205	3.1344001	20	4 3.9	22.2
489347 2006 UP_{50}	17.9	X	218.40931	114.64637	262.69392	3.89206	0.1974248	0.18737496	3.0245563	20	4 29.1	23.0
489348 2006 UU_{50}	19.0	X	97.37523	105.30258	213.04609	20.81364	0.0939682	0.36959525	1.9230259	20	—	—
489349 2006 UB_{57}	17.5	X	342.05160	206.43775	214.47282	7.96118	0.2650470	0.22069819	2.7118783	20	—	—
489350 2006 UC_{59}	17.2	X	245.25990	339.15766	347.92786	2.83987	0.1985700	0.18450916	3.0557941	20	3 24.4	22.1
489351 2006 UX_{71}	17.5	X	51.58358	81.15557	254.34556	8.29548	0.1886609	0.22285830	2.6943262	20	12 25.1	21.5
489352 2006 UP_{72}	17.7	X	346.42611	191.05745	264.13221	5.89711	0.1090178	0.22568527	2.6717792	20	—	—
489353 2006 UJ_{74}	17.1	X	312.75709	147.43095	5.21334	9.71519	0.0801572	0.23074291	2.6325935	20	—	—
489354 2006 UO_{81}	16.5	X	136.77503	172.20637	243.92924	9.27233	0.0936076	0.17549809	3.1595200	20	3 27.3	21.4
489355 2006 UD_{88}	17.3	X	353.75140	51.44791	26.47792	9.72517	0.2690681	0.22046799	2.7137657	20	—	—
489356 2006 UF_{95}	17.4	X	270.67128	279.53974	110.70403	3.07308	0.1042369	0.19807047	2.9146712	20	7 21.9	21.2
489357 2006 UZ_{99}	16.5	X	123.11795	352.66307	71.18475	7.89293	0.1769252	0.17307222	3.1889752	20	4 7.0	21.5
489358 2006 UH_{117}	16.4	X	168.71165	152.17129	205.74789	7.63104	0.0141073	0.17251304	3.1958626	20	2 16.9	21.1
489359 2006 UU_{134}	17.2	X	311.92742	82.28149	47.95288	13.25152	0.1598208	0.22229841	2.6988483	20	—	—
489360 2006 UW_{135}	17.5	X	183.24334	235.30165	193.89374	4.57501	0.1500705	0.18612921	3.0380368	20	6 2.8	22.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489361 2006 UL_{136}	17.8	X	105.21722	47.60061	298.04340	3.80025	0.1006253	0.22882746	2.6472642	20	—	—
489362 2006 UT_{153}	17.1	X	174.88474	10.96020	292.53187	4.14451	0.0765936	0.24098026	2.5574966	20	—	—
489363 2006 UY_{167}	16.8	X	315.93135	261.04607	94.90793	3.28550	0.0811991	0.20246955	2.8722985	20	8 16.1	20.4
489364 2006 UW_{170}	17.8	X	40.90692	286.03510	83.62113	3.80559	0.1065115	0.22161243	2.7044148	20	—	—
489365 2006 UZ_{170}	17.3	X	72.27249	318.74498	59.17087	6.71191	0.1279386	0.22934831	2.6432548	20	—	—
489366 2006 UW_{172}	16.6	X	280.61326	258.54782	34.55964	11.05396	0.0271448	0.18277313	3.0751135	20	4 12.7	20.8
489367 2006 UT_{184}	16.4	X	50.58020	295.87820	68.60645	8.87415	0.2306961	0.22311441	2.6922639	20	—	—
489368 2006 UT_{191}	16.0	X	206.37280	5.23552	344.60390	7.54523	0.2532695	0.18144163	3.0901396	20	3 17.3	21.5
489369 2006 UM_{193}	15.8	X	172.96806	358.26788	11.54092	14.49821	0.1614524	0.17995046	3.1071871	20	3 17.5	20.9
489370 2006 UT_{193}	18.7	X	88.74606	221.98221	215.19171	2.13059	0.1232671	0.31467016	2.1407486	20	2 13.5	20.6
489371 2006 UO_{201}	16.8	X	324.20628	265.03849	229.64335	10.80662	0.1416731	0.22427329	2.6829815	20	—	—
489372 2006 UJ_{205}	17.0	X	201.37106	141.39066	212.28842	1.07641	0.1442361	0.18045102	3.1014384	20	3 20.2	22.1
489373 2006 UQ_{210}	17.6	X	87.57388	55.77287	264.20899	6.51581	0.1434493	0.29365220	2.2417158	20	—	—
489374 2006 UX_{210}	17.3	X	320.96613	56.62033	30.61971	9.24283	0.1350690	0.21599749	2.7510823	20	12 27.4	20.4
489375 2006 UE_{214}	16.1	X	165.46782	292.94211	43.27557	21.67493	0.2569074	0.16898675	3.2401686	20	2 13.7	22.1
489376 2006 UX_{223}	17.0	X	43.30274	154.89011	232.52197	8.57928	0.1360302	0.22510643	2.6763574	20	—	—
489377 2006 UR_{227}	17.0	X	84.99740	314.08196	42.52419	14.26106	0.1944045	0.22997877	2.6384218	20	—	—
489378 2006 UG_{231}	17.5	X	57.31601	202.70457	229.81410	10.21984	0.0718353	0.23495840	2.6010102	20	—	—
489379 2006 UQ_{236}	17.8	X	323.48723	52.91624	34.75373	9.29635	0.0202415	0.22114463	2.7082274	20	12 30.7	21.5
489380 2006 UR_{255}	17.2	X	40.21920	326.29309	36.79412	5.77633	0.1269136	0.22056181	2.7129961	20	—	—
489381 2006 UD_{257}	17.6	X	139.50765	100.29011	221.69987	5.38452	0.0892904	0.23365553	2.6106702	20	—	—
489382 2006 UG_{260}	17.6	X	229.17190	58.75096	213.44611	16.27063	0.1330309	0.24177846	2.5518647	20	1 1.3	22.0
489383 2006 UU_{261}	16.8	X	124.16561	283.14861	222.25192	4.30609	0.0599711	0.18767776	3.0213023	20	7 1.9	21.2
489384 2006 UZ_{261}	17.8	X	313.48815	290.74786	189.11354	1.22505	0.0379716	0.22196077	2.7015846	20	—	—
489385 2006 UG_{262}	17.7	X	260.39233	301.94304	48.07387	13.90270	0.0752344	0.26010530	2.4305427	20	5 18.9	20.9
489386 2006 UC_{273}	16.6	X	291.75762	92.49185	274.54958	4.84921	0.2355521	0.19788800	2.9164626	20	6 29.5	20.4
489387 2006 UC_{277}	19.2	X	64.58898	331.74096	8.42761	4.22465	0.1815023	0.29512891	2.2342317	20	—	—
489388 2006 UG_{279}	16.4	X	149.49583	161.22123	219.68723	12.02439	0.1243021	0.17161610	3.2069882	20	2 29.9	21.6
489389 2006 UX_{284}	17.0	X	47.53540	322.29654	57.28628	10.02065	0.2088406	0.22241504	2.6979047	20	—	—
489390 2006 UD_{285}	16.6	X	238.80167	126.19652	225.25934	8.82859	0.0948869	0.18509643	3.0493272	20	4 25.3	21.1
489391 2006 UE_{334}	17.8	X	138.13373	298.18490	51.47177	5.36906	0.0171334	0.23469672	2.6029433	20	—	—
489392 2006 UF_{334}	18.9	X	1.08131	327.78325	83.08004	3.68421	0.2063073	0.29175254	2.2514360	20	—	—
489393 2006 UG_{334}	18.7	X	295.78360	120.08760	220.00076	5.83999	0.1358462	0.26801300	2.3824958	20	6 16.8	21.4
489394 2006 UN_{334}	17.2	X	48.68903	332.84015	58.52733	14.64051	0.0815444	0.22230181	2.6988208	20	—	—
489395 2006 UX_{345}	15.8	X	151.82474	7.21345	49.34963	28.57515	0.1276295	0.17892023	3.1191032	20	4 24.9	20.8
489396 2006 UQ_{358}	16.9	X	160.23109	200.10287	209.38023	5.51682	0.1792874	0.17791104	3.1308875	20	4 20.1	22.1
489397 2006 UX_{359}	17.9	X	69.63638	318.45194	53.27867	5.83105	0.1150711	0.22787320	2.6546497	20	—	—
489398 2006 VE_{2}	18.2	X	162.02209	268.55214	236.92694	21.22974	0.1294760	0.41332440	1.7848786	20	8 24.6	21.1
489399 2006 VS_{3}	18.8	X	86.83921	359.19462	55.03185	3.80498	0.1697239	0.31033382	2.1606445	20	1 16.4	20.5
489400 2006 VE_{7}	17.1	X	243.92807	276.23902	58.57529	2.57474	0.2439092	0.18383196	3.0632942	20	3 30.4	22.3
489401 2006 VP_{8}	17.1	X	177.47168	305.48619	99.81074	2.38607	0.1925403	0.17929416	3.1147649	20	4 30.7	22.4
489402 2006 VP_{10}	16.4	X	190.15072	335.95331	60.37366	14.99970	0.2082048	0.18199607	3.0838604	20	5 2.2	21.7
489403 2006 VB_{11}	18.4	X	266.02101	45.32277	52.24293	5.49131	0.2239678	0.27822755	2.3238208	20	10 10.5	20.7
489404 2006 VP_{14}	17.1	X	65.91220	355.86432	23.50643	5.04741	0.1015183	0.22632668	2.6667290	20	—	—
489405 2006 VY_{20}	17.9	X	184.67624	271.13300	240.43948	4.13171	0.1633542	0.27146562	2.3622516	20	9 18.4	21.5
489406 2006 VN_{25}	16.8	X	110.88586	28.91238	311.40056	1.21828	0.4049612	0.16413293	3.3037378	20	1 12.3	21.9
489407 2006 VG_{27}	17.5	X	76.29188	161.18275	235.67059	7.42117	0.1364189	0.23041779	2.6350693	20	—	—
489408 2006 VL_{30}	17.1	X	19.56795	353.25046	49.58097	10.58318	0.2859243	0.22069035	2.7119425	20	—	—
489409 2006 VQ_{33}	16.4	X	55.39917	204.48301	223.62388	8.19454	0.1207219	0.15958385	3.3662272	20	1 9.1	20.8
489410 2006 VK_{36}	16.8	X	348.39186	53.25585	57.17193	22.73804	0.0527278	0.22574231	2.6713292	20	—	—
489411 2006 VP_{39}	17.0	X	193.80102	238.00208	49.35498	15.14676	0.0717673	0.23364631	2.6107389	20	—	—
489412 2006 VF_{40}	17.4	X	207.11672	210.36316	166.69647	1.30910	0.1648889	0.18237972	3.0795341	20	4 21.9	22.3
489413 2006 VT_{53}	18.0	X	47.68489	352.27615	33.67633	7.99673	0.1513900	0.29634084	2.2281361	20	—	—
489414 2006 VM_{55}	17.4	X	338.25359	237.48903	233.08931	11.31634	0.1739207	0.22168438	2.7038296	20	—	—
489415 2006 VG_{57}	16.9	X	37.86623	339.15364	70.16120	7.31662	0.1355695	0.22448213	2.6813173	20	—	—
489416 2006 VQ_{70}	17.6	X	110.46616	224.01068	236.94055	11.30739	0.1621162	0.24621330	2.5211288	20	4 30.4	21.3
489417 2006 VM_{76}	18.0	X	354.12123	328.25313	102.66738	3.64676	0.0909554	0.21991153	2.7183417	20	—	—
489418 2006 VW_{83}	17.7	X	246.56361	112.78855	243.39801	7.84323	0.1907007	0.18781114	3.0198716	20	4 29.3	22.6
489419 2006 VA_{96}	17.4	X	154.83870	290.33397	50.36880	14.61982	0.2022861	0.23848891	2.5752768	20	1 25.5	21.7
489420 2006 VF_{105}	18.1	X	283.33752	81.67715	37.34717	5.24364	0.0678137	0.28718461	2.2752473	20	—	—
489421 2006 VC_{121}	16.9	X	173.69521	156.72693	249.16412	7.31122	0.2929870	0.18064283	3.0992425	20	4 27.9	22.6
489422 2006 VJ_{121}	16.9	X	357.21326	154.78925	254.38660	12.12797	0.1681290	0.21684060	2.7439466	20	—	—
489423 2006 VB_{126}	17.1	X	5.56623	209.43815	228.54954	10.91364	0.1557700	0.22551018	2.6731620	20	—	—
489424 2006 VN_{127}	17.3	X	242.96705	329.00189	2.59946	6.20303	0.2291921	0.18296519	3.0729611	20	3 25.8	22.3
489425 2006 VP_{132}	18.2	X	275.23483	327.00127	107.43766	2.17899	0.1519974	0.27643748	2.3338419	20	10 3.2	20.5
489426 2006 VE_{139}	16.3	X	216.22091	155.50318	246.80488	10.17760	0.1799675	0.18585060	3.0410722	20	5 29.2	21.3
489427 2006 VF_{140}	18.4	X	357.28049	192.65806	218.98458	2.81286	0.1526057	0.28898490	2.2657881	20	—	—
489428 2006 VC_{171}	17.1	X	22.95227	296.68259	87.71783	14.40396	0.2409044	0.21910022	2.7250481	20	—	—
489429 2006 WM	18.3	X	142.46735	328.83526	19.83724	5.23407	0.2280464	0.31230089	2.1515622	20	1 13.8	21.1
489430 2006 WH_{28}	17.5	X	65.20506	330.73377	78.11941	7.67549	0.1660391	0.22970472	2.6405199	20	—	—
489431 2006 WE_{32}	17.0	X	70.01943	239.44891	93.36664	7.23143	0.0503567	0.21681335	2.7441765	20	12 24.6	20.9
489432 2006 WB_{33}	17.5	X	298.08631	281.47456	198.08205	3.38421	0.2270726	0.21876657	2.7278181	20	12 24.5	20.0
489433 2006 WB_{53}	16.7	X	61.29309	211.04771	173.73608	15.19799	0.2282307	0.22665032	2.6641898	20	—	—
489434 2006 WC_{71}	18.1	X	306.97611	39.38432	288.53897	1.96215	0.1961216	0.26723269	2.3871314	20	6 7.0	20.5
489435 2006 WF_{73}	17.4	X	189.82019	156.41280	237.25375	2.35144	0.1839545	0.18091924	3.0960851	20	4 25.9	22.6
489436 2006 WW_{86}	16.3	X	311.33141	76.50794	80.44769	25.56026	0.1669333	0.22229269	2.6988946	20	—	—
489437 2006 WR_{95}	18.4	X	247.01570	233.47931	149.26766	1.98412	0.1980550	0.26367959	2.4085281	20	6 2.1	21.8
489438 2006 WN_{99}	17.3	X	345.61597	194.70072	228.59650	3.52238	0.0578341	0.21554561	2.7549259	20	12 29.8	20.7
489439 2006 WS_{175}	17.6	X	317.57783	14.62831	93.45691	9.32886	0.1813470	0.21490348	2.7604110	20	—	—
489440 2006 WK_{193}	18.5	X	83.79780	154.59274	203.73751	1.53000	0.2069430	0.29840023	2.2178727	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489441 2006 WW_{198}	17.9	X	279.64224	14.42548	51.00557	2.07995	0.1687016	0.27112946	2.3642038	20	9 23.2	20.2
489442 2006 XM_{13}	17.4	X	346.41057	165.19243	262.68327	9.24082	0.1448506	0.21524503	2.7574901	20	—	—
489443 2006 XW_{33}	16.8	X	21.38272	325.72418	69.09881	9.75014	0.2117467	0.21688485	2.7435733	20	—	—
489444 2006 XL_{62}	16.7	X	307.14766	44.63359	98.27493	16.91559	0.0879103	0.21590454	2.7518718	20	—	—
489445 2006 XY_{63}	17.2	X	308.53869	243.11893	211.10893	16.21095	0.3265321	0.21181087	2.7872156	20	12 1.1	19.2
489446 2006 YN_{5}	16.3	X	174.36844	335.34573	73.71186	13.86624	0.2513211	0.17808501	3.1288480	20	5 6.1	21.9
489447 2006 YT_{28}	18.7	X	291.84035	82.62671	359.64866	2.92832	0.1678168	0.27684659	2.3315421	20	11 12.5	20.6
489448 2006 YL_{48}	17.5	X	144.36428	251.62194	311.46176	5.40277	0.0407274	0.26726261	2.3869533	20	10 15.0	20.8
489449 2006 YM_{54}	17.4	X	15.43359	325.77322	82.72588	3.97191	0.1850832	0.21347559	2.7727065	20	—	—
489450 2007 AN_{13}	16.6	X	162.94441	135.92584	287.94464	13.31190	0.2787551	0.17484121	3.1674287	20	5 9.6	22.5
489451 2007 BZ_{2}	18.2	X	42.33889	74.01695	81.87645	3.64747	0.0518399	0.30975161	2.1633511	20	3 20.2	20.3
489452 2007 BS_{21}	17.5	X	290.07770	43.72935	100.45167	7.64170	0.2124878	0.21048199	2.7989346	20	—	—
489453 2007 BX_{48}	20.1	X	225.79659	8.10093	303.04746	14.81121	0.3597726	0.60374496	1.3864377	20	1 13.5	21.4
489454 2007 BY_{60}	16.8	X	53.89788	298.02047	112.41167	10.39581	0.0583366	0.22051156	2.7134083	20	—	—
489455 2007 BV_{79}	18.2	X	41.06970	142.01887	338.83720	6.14031	0.0882716	0.30139397	2.2031615	20	1 26.6	20.1
489456 2007 BC_{81}	17.3	X	254.09881	93.24512	121.07779	5.20327	0.0095863	0.21550220	2.7552959	20	—	—
489457 2007 BW_{99}	17.6	X	323.07172	20.18957	93.66089	5.34169	0.1555836	0.21329010	2.7743138	20	—	—
489458 2007 CJ_{1}	16.7	X	235.14640	269.31576	323.30111	6.78012	0.1691142	0.21093390	2.7949356	20	—	—
489459 2007 CS_{27}	17.2	X	313.07817	354.20295	111.10990	14.18606	0.2004003	0.20983342	2.8046991	20	—	—
489460 2007 CE_{37}	17.4	X	251.48940	244.42805	321.70640	6.33484	0.1585333	0.21051252	2.7986640	20	—	—
489461 2007 CY_{64}	17.8	X	39.04253	292.86255	223.39986	1.82321	0.1383418	0.23267749	2.6179809	20	3 28.2	20.5
489462 2007 CV_{73}	18.1	X	164.96549	276.58546	129.99909	0.49582	0.0597824	0.23837562	2.5760927	20	4 12.9	21.6
489463 2007 DX_{8}	18.2	X	352.68619	94.01773	107.79301	4.03312	0.1134338	0.30430459	2.1890905	20	2 28.4	20.2
489464 2007 DP_{16}	17.3	X	315.32675	118.37892	345.75961	14.20829	0.1036616	0.20582046	2.8410378	20	—	—
489465 2007 DY_{27}	16.8	X	291.80359	107.27303	6.34013	7.94365	0.0475940	0.19951818	2.9005548	20	12 12.9	20.7
489466 2007 DD_{31}	18.2	X	67.80923	150.43909	341.12405	5.32700	0.0564686	0.30600705	2.1809636	20	3 22.6	20.3
489467 2007 DO_{38}	18.3	X	344.12861	156.78029	0.50596	6.46901	0.1262725	0.29181238	2.2511283	20	—	—
489468 2007 DN_{62}	18.3	X	208.87785	127.86759	8.87705	5.36343	0.1213617	0.26380858	2.4077429	20	9 29.5	21.5
489469 2007 DF_{67}	18.3	X	248.15721	268.04856	3.37074	4.89949	0.2075803	0.29150871	2.2526914	20	1 11.7	22.0
489470 2007 DK_{71}	18.5	X	295.42571	240.86863	24.83068	2.86986	0.1251560	0.30165979	2.2018671	20	2 29.8	21.2
489471 2007 DS_{75}	18.3	X	208.53688	118.89685	16.26544	2.31377	0.1436627	0.26081489	2.4261322	20	9 24.4	21.8
489472 2007 DH_{83}	16.7	X	189.28952	119.89310	308.53089	14.42200	0.2631237	0.17795704	3.1303479	20	6 4.4	22.4
489473 2007 DW_{95}	16.6	X	283.91623	6.54142	152.06699	15.92556	0.0778662	0.20609513	2.8385130	20	—	—
489474 2007 DL_{115}	18.4	X	40.73741	18.17545	150.01127	0.95743	0.0643079	0.30640630	2.1790687	20	4 4.7	20.3
489475 2007 ER_{4}	16.7	X	182.80149	92.23213	329.98705	12.16727	0.3149168	0.17563864	3.1578343	20	5 21.1	22.7
489476 2007 EU_{9}	15.9	X	170.54603	309.30331	313.79223	14.00337	0.1223705	0.20321613	2.8652593	20	—	—
489477 2007 EU_{47}	18.1	X	300.55667	251.77729	4.30201	6.49092	0.1363820	0.29834182	2.2181622	20	2 22.8	20.7
489478 2007 ET_{89}	16.3	X	143.09995	314.91929	333.66069	14.24175	0.1337864	0.20352200	2.8623878	20	—	—
489479 2007 EL_{136}	17.8	X	283.42641	102.02657	181.52367	6.38225	0.1020748	0.22724760	2.6595195	20	3 19.2	21.5
489480 2007 EF_{151}	18.8	X	9.84187	35.85694	134.16824	3.75633	0.1009638	0.29969232	2.2114934	20	2 11.8	20.5
489481 2007 EZ_{161}	17.2	X	290.32596	338.79651	178.25046	4.86793	0.1556587	0.21007578	2.8025415	20	—	—
489482 2007 ED_{162}	18.4	X	332.71894	211.49812	323.90599	6.37797	0.0843276	0.29594141	2.2301405	20	—	—
489483 2007 EC_{190}	16.6	X	133.60692	304.45468	341.59731	7.46752	0.1691288	0.19613021	2.9338623	20	—	—
489484 2007 EJ_{219}	17.0	X	218.74850	14.20103	201.88918	9.55976	0.1615371	0.19719021	2.9233388	20	12 30.2	21.5
489485 2007 FQ_{31}	17.1	X	305.52592	293.38940	200.35970	13.75727	0.1402767	0.20230689	2.8738379	20	—	—
489486 2007 GS_{3}	19.4	X	303.63330	61.04112	215.40690	15.08912	0.1290787	0.90162269	1.0611729	20	—	—
489487 2007 GV_{38}	16.6	X	124.39115	213.87784	38.87048	9.64006	0.0973745	0.18381093	3.0635278	20	11 13.4	21.4
489488 2007 GE_{46}	18.7	X	279.69437	232.88461	57.10724	3.49935	0.1516456	0.29556636	2.2320267	20	3 11.9	21.7
489489 2007 GN_{59}	17.4	X	174.37642	229.47638	24.21513	6.08996	0.2092568	0.19165306	2.9793775	20	12 29.3	22.4
489490 2007 GA_{62}	16.2	X	189.93015	294.19854	242.44199	7.00148	0.0728414	0.18343385	3.0677248	20	10 19.9	20.8
489491 2007 GJ_{64}	18.9	X	297.45645	232.39142	54.14144	1.87603	0.1868102	0.29790082	2.2203507	20	3 23.3	21.3
489492 2007 GW_{75}	18.4	X	288.99304	189.21071	81.52645	5.59319	0.2499568	0.29173016	2.2515512	20	2 14.3	21.6
489493 2007 HL_{20}	18.6	X	293.46042	335.08559	213.01057	1.67073	0.1224742	0.28205540	2.3027481	20	—	—
489494 2007 HW_{73}	18.3	X	331.28222	141.43424	52.71443	4.35256	0.0668307	0.29017750	2.2595757	20	1 22.3	20.8
489495 2007 JA_{7}	17.1	X	252.76647	169.99062	225.04065	10.11929	0.1673346	0.23774892	2.5806178	20	6 27.1	20.9
489496 2007 JS_{8}	18.4	X	236.98636	262.30368	67.47188	2.52856	0.2325655	0.29119482	2.2543099	20	3 13.4	21.9
489497 2007 JM_{14}	16.7	X	190.32792	188.41333	42.04842	13.79514	0.1461421	0.19151983	2.9807591	20	12 18.9	21.5
489498 2007 JP_{45}	18.2	X	293.70753	201.20135	69.99419	6.34651	0.2378339	0.29260739	2.2470489	20	2 22.3	21.3
489499 2007 LG_{10}	16.2	X	215.60802	79.31366	125.50045	13.23912	0.1403733	0.19078632	2.9883943	20	12 16.9	20.9
489500 2007 LY_{11}	17.6	X	153.41670	286.19252	83.52438	8.82871	0.0951886	0.28429478	2.2906397	20	2 12.8	20.7
489501 2007 LD_{17}	18.6	X	277.64520	146.81226	120.47884	1.19528	0.2056690	0.28925153	2.2643954	20	2 1.7	21.7
489502 2007 LF_{22}	16.7	X	188.57123	26.17972	218.04511	18.52678	0.2766911	0.19055446	2.9908179	20	12 23.4	22.1
489503 2007 LR_{28}	16.7	X	147.85968	139.60731	115.60882	11.32183	0.0660219	0.18419527	3.0592648	20	12 11.4	21.4
489504 2007 MU_{8}	18.5	X	171.56430	265.24703	209.92751	20.87577	0.0573793	0.38968254	1.8563595	20	7 25.0	21.2
489505 2007 MK_{14}	18.1	X	171.74957	259.34517	227.83755	20.07340	0.0525025	0.38973110	1.8562053	20	8 11.4	20.7
489506 2007 ME_{24}	17.9	X	12.07453	168.60916	109.51304	36.48344	0.2200339	0.38515801	1.8708692	20	10 15.4	20.8
489507 2007 NJ_{6}	17.3	X	133.56702	333.17853	32.80465	12.93091	0.2699975	0.26687767	2.3892480	20	2 11.2	21.2
489508 2007 OL_{10}	18.8	X	263.92056	290.23912	6.34969	6.02383	0.3844043	0.28490920	2.2873453	20	2 14.7	22.9
489509 2007 PH_{1}	17.5	X	317.74393	98.67069	264.24012	10.36333	0.2200159	0.22756499	2.6570461	20	8 12.2	20.1
489510 2007 PS_{8}	17.4	X	347.33702	249.53853	141.49210	7.53855	0.4811609	0.23098946	2.6307199	20	—	—
489511 2007 PM_{21}	18.3	X	250.79020	6.78462	327.65810	18.10444	0.0625380	0.36245189	1.9482101	20	3 31.1	21.0
489512 2007 PT_{22}	17.7	X	230.08869	321.39837	0.55129	13.57680	0.3272557	0.27795942	2.3253149	20	2 27.4	22.0
489513 2007 PC_{35}	17.0	X	149.19863	21.01069	322.31778	11.62550	0.2835292	0.26456124	2.4031741	20	1 25.8	20.8
489514 2007 PY_{48}	18.2	X	226.74686	351.84137	323.68197	3.38194	0.2206370	0.27761313	2.3272482	20	2 16.6	22.1
489515 2007 PJ_{49}	17.3	X	170.53732	357.88196	344.91552	6.81783	0.1376242	0.27050606	2.3678347	20	2 1.2	20.7
489516 2007 PP_{49}	16.6	X	183.48214	277.19035	330.68802	7.60885	0.2091738	0.17914547	3.1164883	20	12 28.2	21.8
489517 2007 PF_{50}	16.4	X	115.08222	157.92839	173.67925	13.91497	0.1868654	0.17960357	3.1111866	20	—	—
489518 2007 QS_{6}	18.1	X	201.32559	194.16134	120.03636	2.33881	0.1993112	0.27213293	2.3583884	20	1 26.2	21.9
489519 2007 QZ_{8}	18.1	X	260.17477	329.71736	347.09523	1.24500	0.2370425	0.28509790	2.2863359	20	3 15.9	21.6
489520 2007 RG_{9}	17.4	X	179.87271	358.82479	349.62650	6.33985	0.2692751	0.27040404	2.3684302	20	2 22.6	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489521 2007 RN_{27}	17.1	X	304.25315	22.27534	279.09386	2.60297	0.0813135	0.21276121	2.7789096	20	5 13.6	20.6
489522 2007 RR_{31}	17.3	X	232.63947	73.52509	252.60926	6.14099	0.3254299	0.20360138	2.8616437	20	3 2.9	22.6
489523 2007 RD_{42}	17.9	X	259.98334	72.49193	223.20711	6.22070	0.1164428	0.27789908	2.3256515	20	2 27.0	21.3
489524 2007 RF_{42}	15.9	X	78.83755	125.47048	214.79785	9.32930	0.0692661	0.16885181	3.2418946	20	—	—
489525 2007 RG_{50}	18.1	X	314.93388	100.59702	229.62446	5.40423	0.3527856	0.22039318	2.7143798	20	5 27.3	20.8
489526 2007 RR_{51}	17.7	X	248.59525	177.19823	221.45612	6.14592	0.1851743	0.29167996	2.2518096	20	6 27.0	20.8
489527 2007 RR_{56}	18.1	X	67.60628	144.21014	210.32481	7.02994	0.1260632	0.24579418	2.5239940	20	—	—
489528 2007 RV_{64}	18.4	X	4.11103	50.28704	342.88038	4.11079	0.1616476	0.24113661	2.5563910	20	—	—
489529 2007 RX_{71}	18.3	X	222.50173	148.50327	148.99309	7.28015	0.2299947	0.27297754	2.3535212	20	1 22.4	22.2
489530 2007 RU_{73}	17.7	X	238.25809	318.22879	45.62160	0.89182	0.1928173	0.20909671	2.8112831	20	5 1.1	21.9
489531 2007 RG_{81}	17.3	X	341.49422	84.91468	236.84231	9.84396	0.2951932	0.22479348	2.6788408	20	8 3.1	19.2
489532 2007 RX_{127}	18.8	X	30.96374	2.14107	14.85959	3.61167	0.3646730	0.24040596	2.5615680	20	—	—
489533 2007 RH_{132}	17.6	X	172.31379	202.35401	138.69396	6.46476	0.2201038	0.26530379	2.3986879	20	2 4.9	21.4
489534 2007 RG_{147}	16.1	X	124.49371	308.53610	8.20175	13.18371	0.3552735	0.17757628	3.1348209	20	—	—
489535 2007 RS_{153}	14.1	X	331.21518	100.13963	314.26341	4.08713	0.0259150	0.08455142	5.1410929	20	10 29.4	20.8
489536 2007 RK_{157}	17.8	X	105.44116	212.26782	165.89560	9.36581	0.0796545	0.26027609	2.4294793	20	—	—
489537 2007 RK_{164}	17.8	X	226.21795	131.51582	280.23168	2.61206	0.0957929	0.21489236	2.7605062	20	6 27.3	21.9
489538 2007 RT_{166}	17.0	X	158.09530	220.78929	119.46844	2.43127	0.0710411	0.18737010	3.0246087	20	1 20.1	21.5
489539 2007 RJ_{167}	16.6	X	157.86655	127.56109	142.92460	3.88171	0.2335441	0.17687616	3.1430878	20	—	—
489540 2007 RO_{172}	16.6	X	74.53690	288.46736	27.32705	8.12335	0.1688119	0.16314356	3.3170812	20	12 10.2	21.7
489541 2007 RL_{204}	16.9	X	309.73365	276.55143	190.99927	27.46575	0.3899757	0.23418551	2.6067299	20	—	—
489542 2007 RM_{220}	16.7	X	246.24627	81.41634	2.89511	13.66968	0.1519223	0.22058405	2.7128138	20	8 30.3	20.6
489543 2007 RD_{221}	16.5	X	146.71664	289.57663	5.13972	10.82540	0.2462402	0.17554522	3.1589545	20	—	—
489544 2007 RM_{234}	17.8	X	319.67770	73.22581	346.05921	12.27504	0.2612273	0.23316250	2.6143491	20	11 16.8	20.0
489545 2007 RW_{258}	17.3	X	169.14038	318.98286	46.90292	8.22574	0.2402724	0.27098173	2.3650630	20	3 8.1	21.3
489546 2007 RB_{259}	16.9	X	124.44495	205.06646	216.57098	3.87632	0.2264897	0.18931693	3.0038373	20	4 5.5	21.7
489547 2007 RD_{264}	16.8	X	176.14598	51.41140	343.51253	11.95756	0.1393156	0.20051780	2.8909068	20	4 10.1	21.7
489548 2007 RC_{271}	17.5	X	207.17903	319.01821	354.41790	12.72235	0.1531083	0.26872723	2.3782724	20	2 3.1	21.4
489549 2007 RT_{286}	17.3	X	159.39932	10.40135	325.83350	6.12119	0.1263418	0.26675466	2.3899824	20	1 11.1	20.8
489550 2007 RT_{288}	16.9	X	126.57027	195.54239	246.43997	0.96274	0.2572258	0.18738358	3.0244635	20	5 4.8	21.9
489551 2007 RZ_{289}	16.9	X	101.82777	232.59925	200.20693	6.04919	0.1753085	0.18234232	3.0799552	20	3 21.2	21.4
489552 2007 RH_{292}	18.0	X	225.28813	251.89557	35.64294	3.07152	0.1484933	0.26779936	2.3837627	20	1 15.6	21.7
489553 2007 RF_{297}	16.9	X	230.20164	340.51421	23.78873	9.90145	0.1200813	0.20504674	2.8481803	20	4 28.3	21.3
489554 2007 RZ_{298}	18.2	X	240.22930	295.28427	6.42744	6.53702	0.2619604	0.27766080	2.3269819	20	2 11.3	22.2
489555 2007 RM_{311}	18.0	X	210.72430	178.84247	220.46493	14.72729	0.1984169	0.36231360	1.9487059	20	5 18.6	20.8
489556 2007 RN_{323}	18.0	X	180.59530	325.10837	24.61488	6.58686	0.1425783	0.26625541	2.3929691	20	2 21.7	21.7
489557 2007 SP_{11}	16.8	X	359.02435	66.43344	24.35652	30.52332	0.2634510	0.23325134	2.6136852	20	—	—
489558 2007 SW_{21}	17.4	X	199.68769	325.24399	353.73066	11.77128	0.2325500	0.26874789	2.3781505	20	2 4.1	21.5
489559 2007 TV_{2}	17.1	X	343.11734	129.00846	9.94981	4.16043	0.0260272	0.17983065	3.1085670	20	—	—
489560 2007 TG_{11}	17.1	X	276.45326	44.82447	18.16106	15.84207	0.2691595	0.22051268	2.7133991	20	8 26.9	20.8
489561 2007 TA_{18}	16.9	X	146.04691	61.49377	344.14903	0.65880	0.1754820	0.18930994	3.0039113	20	4 2.2	21.6
489562 2007 TU_{21}	17.8	X	146.88562	283.23961	85.95751	3.60131	0.2066078	0.26475643	2.4019928	20	2 17.2	21.4
489563 2007 TB_{27}	18.2	X	223.67625	282.01463	27.64026	1.82200	0.1822527	0.27096781	2.3651440	20	2 9.3	22.1
489564 2007 TY_{28}	17.9	X	190.63949	133.00072	210.98345	4.25486	0.1732396	0.26820503	2.3813584	20	2 20.4	21.8
489565 2007 TZ_{29}	17.7	X	52.82707	2.39541	28.75971	13.81647	0.0486339	0.24586029	2.5235415	20	—	—
489566 2007 TK_{30}	16.6	X	158.06979	330.53008	33.70636	3.28251	0.3039697	0.18796683	3.0182038	20	3 3.7	21.9
489567 2007 TE_{34}	17.6	X	32.18264	321.55675	34.82776	5.03633	0.2419240	0.23623321	2.5916444	20	—	—
489568 2007 TR_{37}	17.9	X	300.36345	237.13298	180.40669	4.02589	0.2284847	0.22706764	2.6609245	20	10 1.4	20.2
489569 2007 TU_{38}	17.9	X	337.29062	238.97327	203.27357	5.37974	0.2923483	0.23529117	2.5985573	20	—	—
489570 2007 TR_{58}	17.6	X	31.20217	21.61685	0.64137	15.04135	0.1209168	0.24462811	2.5320084	20	—	—
489571 2007 TC_{60}	16.6	X	183.40004	354.49085	22.11796	9.72567	0.0781467	0.19246949	2.9709462	20	3 31.1	21.2
489572 2007 TK_{61}	18.0	X	175.10854	242.20177	123.56839	0.66506	0.2182329	0.26901984	2.3765476	20	3 8.1	21.9
489573 2007 TM_{61}	18.0	X	233.57516	292.62128	30.46398	9.90980	0.2539194	0.27571917	2.3378936	20	3 5.6	22.1
489574 2007 TP_{65}	17.6	X	121.05626	60.87870	309.27667	5.50392	0.1267611	0.25783774	2.4447722	20	1 10.7	20.8
489575 2007 TT_{66}	17.6	X	299.06878	143.26779	233.92583	4.81799	0.2790012	0.22005318	2.7171751	20	7 18.4	20.7
489576 2007 TW_{75}	17.4	X	205.61278	295.61164	21.72167	11.22967	0.2607962	0.26884414	2.3775829	20	2 7.8	21.8
489577 2007 TE_{83}	18.0	X	265.38624	68.38574	14.80305	15.17244	0.2087821	0.22393148	2.6857110	20	9 14.9	21.6
489578 2007 TF_{84}	16.2	X	107.77952	201.96452	220.08444	12.56662	0.2016358	0.18406847	3.0606695	20	3 15.3	20.9
489579 2007 TH_{88}	17.8	X	203.89735	284.88271	52.72831	9.14872	0.1500867	0.26892497	2.3771065	20	3 1.5	21.7
489580 2007 TZ_{94}	17.6	X	175.12800	25.94687	33.95069	21.57590	0.0868691	0.35635132	1.9703822	20	5 6.1	20.0
489581 2007 TB_{100}	17.0	X	96.62357	255.01314	131.72254	2.86705	0.2047488	0.17837668	3.1254364	20	1 25.0	21.2
489582 2007 TM_{103}	18.3	X	40.13820	157.77107	207.33991	13.60919	0.2655922	0.23871530	2.5736484	20	—	—
489583 2007 TK_{105}	17.9	X	204.20142	129.63554	200.27024	4.95122	0.1643083	0.27078654	2.3661994	20	2 14.8	21.7
489584 2007 TS_{110}	16.4	X	94.47073	187.03136	229.51533	12.93328	0.2952545	0.18235281	3.0798371	20	3 5.1	21.1
489585 2007 TG_{122}	17.8	X	73.59962	218.90452	156.51742	2.16628	0.0724054	0.24739374	2.5131027	20	—	—
489586 2007 TP_{122}	16.7	X	85.76343	265.44054	122.54540	2.21065	0.1845357	0.17455533	3.1708861	20	1 10.4	20.9
489587 2007 TC_{126}	17.1	X	132.65296	208.11421	200.07973	3.63521	0.1527430	0.18725228	3.0258772	20	3 21.4	21.9
489588 2007 TD_{126}	18.4	X	195.76139	160.50963	193.19562	0.89944	0.2086710	0.27135462	2.3628958	20	3 9.5	22.4
489589 2007 TW_{129}	17.5	X	243.39421	37.78911	38.19675	9.18246	0.2150212	0.21382224	2.7697089	20	8 6.8	21.8
489590 2007 TW_{136}	16.4	X	329.10953	110.72481	244.87725	11.56818	0.2891010	0.22481717	2.6786526	20	8 20.7	18.6
489591 2007 TM_{137}	16.9	X	253.14993	180.56608	237.86578	8.72419	0.2769828	0.21319846	2.7751088	20	7 12.7	21.3
489592 2007 TP_{140}	17.8	X	246.92344	241.08589	76.02548	3.02731	0.1938940	0.27666751	2.3325481	20	3 9.9	21.5
489593 2007 TJ_{148}	17.9	X	260.85073	271.62543	31.57861	9.28165	0.2331364	0.27998749	2.3140725	20	3 4.5	21.6
489594 2007 TA_{150}	17.2	X	116.43219	156.34789	229.43160	5.95748	0.1494413	0.26213521	2.4179787	20	1 25.5	20.3
489595 2007 TT_{152}	17.7	X	329.63010	93.43158	258.15686	2.62429	0.2995613	0.22437410	2.6821778	20	8 20.2	19.2
489596 2007 TN_{160}	16.1	X	138.75943	10.34465	30.32574	19.52896	0.2765973	0.18591528	3.0403669	20	4 2.5	21.3
489597 2007 TV_{161}	17.8	X	257.23277	15.88924	26.87800	8.44458	0.1573633	0.29322196	2.2439080	20	7 21.7	20.7
489598 2007 TK_{163}	17.5	X	106.40719	4.76949	42.98803	5.25068	0.1943688	0.26052391	2.4279383	20	2 22.2	20.6
489599 2007 TN_{165}	15.9	X	100.00269	216.43320	224.91451	15.39749	0.2940695	0.18181292	3.0859311	20	4 12.5	20.7
489600 2007 TR_{168}	17.7	X	111.71178	30.21958	339.55184	2.07735	0.2116198	0.25622384	2.4550275	20	1 11.1	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489601 2007 TQ_{170}	16.8	X	16.72818	171.41990	248.99701	12.93065	0.2408312	0.23908768	2.5709754	20	—	—
489602 2007 TT_{175}	15.8	X	6.63547	289.88719	219.09536	15.32555	0.1969326	0.17672993	3.1448213	20	1 21.5	19.6
489603 Kurtschreckling	17.5	X	214.66197	176.95696	199.70245	1.13206	0.2081124	0.20319183	2.8654878	20	4 25.3	22.3
489604 2007 TR_{190}	17.7	X	341.98260	305.90368	334.12697	2.80898	0.1663983	0.21773150	2.7364564	20	6 7.2	20.5
489605 2007 TR_{194}	18.3	X	309.71811	7.81672	31.90576	5.35392	0.1209559	0.22497640	2.6773886	20	10 6.4	21.3
489606 2007 TP_{195}	18.0	X	229.30353	272.06545	25.44192	3.60915	0.1279806	0.26651587	2.3914098	20	2 1.9	21.5
489607 2007 TY_{197}	16.5	X	95.61098	39.00008	3.43685	6.66137	0.1560236	0.17952709	3.1120702	20	2 6.8	20.8
489608 2007 TL_{202}	18.8	X	35.11769	194.30847	166.27843	2.49658	0.2212734	0.23675404	2.5878422	20	—	—
489609 2007 TJ_{215}	18.4	X	19.82828	352.31273	17.65049	7.48349	0.3070347	0.23540699	2.5977049	20	—	—
489610 2007 TP_{219}	16.7	X	126.36276	334.15766	44.83736	2.38282	0.2014749	0.18585999	3.0409698	20	2 16.4	21.4
489611 2007 TO_{224}	18.0	X	268.35231	235.58647	58.94673	4.73865	0.2548516	0.27863299	2.3215659	20	2 25.9	21.6
489612 2007 TV_{225}	18.3	X	256.26748	286.64782	30.77598	3.65380	0.2572794	0.27998409	2.3140913	20	3 13.4	21.9
489613 2007 TN_{234}	16.3	X	135.06505	268.29683	52.63193	20.45955	0.2328162	0.17226458	3.1989348	20	—	—
489614 2007 TO_{242}	17.1	X	282.19675	15.48471	357.54957	10.86506	0.3254016	0.21622862	2.7491215	20	6 9.7	21.3
489615 2007 TZ_{246}	17.9	X	222.98368	256.53672	44.13228	9.72474	0.3260679	0.27033112	2.3688561	20	1 29.2	22.5
489616 2007 TJ_{256}	17.4	X	201.49022	268.95056	37.54984	13.51633	0.2069861	0.26465488	2.4026072	20	1 21.3	21.7
489617 2007 TY_{268}	16.3	X	56.01865	81.04397	32.04670	11.23878	0.3111099	0.17949052	3.1124929	20	4 3.2	19.8
489618 2007 TB_{277}	18.3	X	224.72509	184.26372	236.32809	4.01586	0.1475885	0.28920964	2.2646141	20	7 4.3	21.4
489619 2007 TC_{278}	18.6	X	213.73377	194.91769	226.49323	2.43123	0.1861572	0.28623029	2.2803018	20	6 20.8	21.9
489620 2007 TO_{281}	16.9	X	159.07762	52.29647	357.02514	10.92959	0.1297685	0.19640239	2.9311511	20	4 12.7	21.5
489621 2007 TW_{300}	16.6	X	148.67012	161.91223	231.59059	6.62594	0.1098919	0.18802477	3.0175838	20	3 13.9	21.3
489622 2007 TS_{308}	16.7	X	80.36717	84.14767	320.12438	3.62191	0.1364126	0.18128938	3.0918694	20	1 15.3	20.6
489623 2007 TR_{310}	17.4	X	246.98229	212.99733	169.87994	4.38368	0.1142261	0.20892270	2.8128439	20	6 11.8	21.5
489624 2007 TE_{318}	18.4	X	141.11589	187.09116	192.10282	1.99371	0.1926065	0.26172508	2.4205041	20	2 20.9	22.1
489625 2007 TU_{323}	16.3	X	322.62087	68.82723	357.17175	9.29058	0.0715553	0.15475998	3.4358189	20	11 12.0	20.9
489626 2007 TE_{324}	18.1	X	70.18172	56.91761	289.07976	4.64989	0.1662425	0.24221377	2.5488063	20	—	—
489627 2007 TJ_{334}	17.1	X	138.30955	25.10855	33.14516	10.80547	0.0923119	0.18854096	3.0120736	20	4 5.2	21.6
489628 2007 TV_{335}	17.6	X	105.05236	185.52854	211.50196	5.89580	0.1245148	0.26275053	2.4142023	20	1 21.4	20.7
489629 2007 TZ_{345}	16.7	X	77.62115	357.01958	45.13096	6.48550	0.1700960	0.17676557	3.1443986	20	1 15.1	20.7
489630 2007 TE_{355}	16.7	X	298.62891	300.34783	62.33024	14.12588	0.2773024	0.21835752	2.7312238	20	6 27.4	20.0
489631 2007 TN_{361}	17.8	X	23.36607	1.42819	52.93582	8.49300	0.1003603	0.24030843	2.5622611	20	—	—
489632 2007 TE_{367}	17.0	X	318.51084	63.54681	17.47106	30.35433	0.2806094	0.23439151	2.6052024	20	12 24.7	19.8
489633 2007 TE_{369}	17.9	X	328.19564	49.78074	26.29910	15.29626	0.1492516	0.23343527	2.6123121	20	—	—
489634 2007 TR_{386}	17.2	X	152.04285	15.45287	29.33442	0.96980	0.1793095	0.18917293	3.0053616	20	4 7.1	22.1
489635 2007 TO_{391}	16.9	X	253.96281	193.24116	203.14601	7.82372	0.2213387	0.21248713	2.7812987	20	6 23.3	21.2
489636 2007 TN_{395}	16.1	X	222.60720	112.98350	242.76485	11.00822	0.0748119	0.19770503	2.9182617	20	4 11.8	20.5
489637 2007 TA_{413}	16.9	X	246.35254	352.50062	47.87353	13.82650	0.3020896	0.21231694	2.7827847	20	6 11.2	21.6
489638 2007 TY_{417}	16.6	X	100.88583	240.44270	146.04662	22.79248	0.2353070	0.25494533	2.4632283	20	1 21.7	19.8
489639 2007 TC_{424}	17.7	X	359.11165	309.17902	116.69386	4.95883	0.2623463	0.23871467	2.5736529	20	—	—
489640 2007 TT_{425}	16.8	X	94.72287	61.88093	53.43277	8.76572	0.1318857	0.18922773	3.0047813	20	4 30.2	21.1
489641 2007 TO_{427}	17.4	X	348.64379	232.01593	57.30891	5.76872	0.1360111	0.21184228	2.7869400	20	7 6.9	20.4
489642 2007 TQ_{427}	15.9	X	161.40526	69.17998	213.57347	25.24513	0.2777642	0.17259341	3.1948704	20	—	—
489643 2007 TH_{436}	17.6	X	182.05543	213.15583	109.85166	2.47216	0.2001008	0.26623015	2.3931205	20	1 21.4	21.5
489644 2007 TP_{437}	17.7	X	295.89146	101.12004	317.59889	1.78715	0.2805625	0.22620709	2.6676688	20	9 13.5	20.2
489645 2007 TL_{443}	18.0	X	219.77864	212.06038	120.94996	3.70545	0.2578667	0.27438133	2.3454869	20	3 3.9	22.0
489646 2007 TD_{444}	17.7	X	220.51283	284.42983	27.74723	5.52463	0.2184407	0.27210103	2.3585727	20	2 10.4	21.8
489647 2007 UA_{10}	17.5	X	225.41016	182.25990	147.21756	7.34108	0.2553364	0.27643643	2.3338478	20	3 3.5	21.4
489648 2007 US_{13}	17.9	X	245.14327	243.32244	34.62458	7.23978	0.1100102	0.27129662	2.3632325	20	1 25.6	21.4
489649 2007 UG_{17}	17.3	X	184.76431	358.18052	22.30404	2.04886	0.0976490	0.19607122	2.9344507	20	4 5.1	21.8
489650 2007 UX_{19}	18.1	X	235.63285	85.46697	200.22549	2.76518	0.1943300	0.26949891	2.3737303	20	1 19.9	22.1
489651 2007 UB_{23}	17.9	X	211.25384	260.67327	80.09284	3.02229	0.2012515	0.27198956	2.3592170	20	3 8.2	21.8
489652 2007 UP_{25}	17.0	X	251.83340	21.70803	45.32421	14.61678	0.1891056	0.21382045	2.7697244	20	8 10.4	21.3
489653 2007 UD_{36}	18.1	X	307.58069	214.99988	146.70115	3.70276	0.1905675	0.29860832	2.2168422	20	8 7.7	19.7
489654 2007 UA_{38}	16.0	X	36.18342	247.05303	228.03209	25.05556	0.2098406	0.17530277	3.1618665	20	1 31.6	20.1
489655 2007 UY_{52}	18.1	X	357.33687	130.71049	242.91266	0.66980	0.1758433	0.23049835	2.6344553	20	11 30.6	20.8
489656 2007 UP_{53}	17.6	X	196.01452	255.37050	37.72108	4.77821	0.2610225	0.25981600	2.4323466	20	—	—
489657 2007 UH_{69}	17.1	X	235.26429	328.51624	52.60020	2.99917	0.0829319	0.20465223	2.8518394	20	5 29.9	21.3
489658 2007 UK_{87}	17.5	X	319.23819	313.17852	42.26919	8.50737	0.3141671	0.21951549	2.7216103	20	7 27.1	19.8
489659 2007 UB_{90}	16.3	X	7.84065	275.24060	224.19242	14.78445	0.2130135	0.17405260	3.1769889	20	1 11.9	20.0
489660 2007 UQ_{97}	16.8	X	180.85806	281.33914	45.57272	2.24729	0.2101609	0.18415667	3.0596922	20	2 3.3	21.9
489661 2007 UF_{98}	17.4	X	111.40989	320.17227	58.86374	0.19730	0.2011544	0.17632640	3.1496175	20	2 1.6	21.8
489662 2007 UG_{104}	18.5	X	10.99864	176.15476	202.23323	3.92417	0.2709578	0.23252241	2.6191448	20	—	—
489663 2007 UH_{105}	18.6	X	164.25012	284.20870	160.04770	2.40430	0.1918042	0.27479039	2.3431586	20	6 5.1	22.3
489664 2007 UW_{115}	18.1	X	327.54625	143.66035	249.19146	2.37579	0.1886143	0.22560091	2.6724453	20	10 27.6	20.6
489665 2007 UW_{121}	17.6	X	267.78547	250.58710	57.69328	5.16944	0.2350311	0.27868892	2.3212553	20	3 15.7	21.1
489666 2007 UL_{122}	18.3	X	28.60292	150.14707	220.53949	9.06735	0.2140731	0.23619542	2.5919208	20	—	—
489667 2007 UQ_{122}	17.4	X	122.05392	162.96706	238.38324	2.81396	0.2509066	0.18128844	3.0918800	20	3 12.6	22.3
489668 2007 UU_{128}	16.2	X	117.60495	270.71378	36.25135	25.98108	0.2120048	0.16944853	3.2342793	20	—	—
489669 2007 UG_{129}	16.9	X	153.76330	331.64916	90.04206	2.79725	0.2139918	0.18665060	3.0323765	20	5 1.3	21.9
489670 2007 UJ_{135}	17.5	X	272.40458	318.61358	56.88249	5.45191	0.1263973	0.21385854	2.7693955	20	7 2.1	21.2
489671 2007 UO_{141}	18.4	X	249.65116	179.12070	240.84762	7.97307	0.2595889	0.21209884	2.7846921	20	7 13.3	22.8
489672 2007 VH_{10}	17.8	X	352.45276	254.58946	55.95814	25.93396	0.1418746	0.37256986	1.9127765	20	10 8.9	19.9
489673 2007 VE_{15}	19.0	X	312.43198	133.80973	340.63336	2.35675	0.0773268	0.31477312	2.1402818	20	—	—
489674 2007 VB_{28}	17.4	X	353.64481	169.52612	196.98524	5.65873	0.0441284	0.22557551	2.6726459	20	10 31.0	20.6
489675 2007 VH_{34}	17.2	X	163.06343	94.13697	49.82536	9.95967	0.1310159	0.21027740	2.8007498	20	8 20.8	21.8
489676 2007 VT_{46}	16.9	X	118.62925	74.79454	334.86578	3.97961	0.1341795	0.18311976	3.0712316	20	3 7.0	21.4
489677 2007 VH_{47}	18.1	X	357.69461	85.05296	358.74861	4.13771	0.1224492	0.24092822	2.5578649	20	—	—
489678 2007 VZ_{47}	17.7	X	6.96062	179.84563	259.80202	7.22276	0.0575378	0.24273881	2.5451296	20	—	—
489679 2007 VK_{48}	17.1	X	134.64647	109.48337	328.49625	4.23705	0.2724777	0.18949601	3.0019446	20	5 6.3	22.3
489680 2007 VQ_{56}	17.8	X	328.14332	330.69166	109.27227	4.44065	0.1827741	0.23276319	2.6173382	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489681 2007 VS_{56}	17.8	X	257.71006	216.75648	206.97592	8.35718	0.1430903	0.21446944	2.7641340	20	8 10.7	21.7
489682 2007 VV_{64}	18.1	X	332.01783	29.47873	53.76188	7.49656	0.2829103	0.23198394	2.6231962	20	—	—
489683 2007 VG_{74}	17.5	X	222.37715	73.10651	61.87183	2.24576	0.0334333	0.22425109	2.6831586	20	10 19.1	21.0
489684 2007 VH_{77}	16.9	X	175.63539	276.67624	55.21183	8.35454	0.1908207	0.18267688	3.0761936	20	2 6.4	22.1
489685 2007 VY_{85}	17.9	X	311.55636	115.25545	227.12278	19.98229	0.0986269	0.37127924	1.9172067	20	7 26.4	20.0
489686 2007 VH_{88}	17.9	X	287.96123	153.72384	250.41309	17.98873	0.0849892	0.37436242	1.9066657	20	10 1.3	19.8
489687 2007 VU_{89}	17.6	X	291.59793	255.85230	147.11435	2.36045	0.2722296	0.21951145	2.7216437	20	8 13.9	20.6
489688 2007 VY_{94}	17.2	X	252.07667	63.36102	4.40004	8.39407	0.2107518	0.21396376	2.7684875	20	8 5.6	21.3
489689 2007 VS_{96}	18.4	X	286.64567	45.67163	347.02758	4.06836	0.1728970	0.29515989	2.2340754	20	8 19.1	20.2
489690 2007 VP_{98}	18.0	X	259.67996	147.18985	247.20373	5.38169	0.1852732	0.28992503	2.2608873	20	7 4.8	20.8
489691 2007 VW_{99}	17.3	X	31.89283	159.32818	246.30251	12.01250	0.2606678	0.24088644	2.5581606	20	—	—
489692 2007 VK_{106}	18.0	X	275.87315	41.12939	26.69212	1.91217	0.0672543	0.22009259	2.7168507	20	9 26.1	21.5
489693 2007 VH_{107}	18.3	X	318.06872	81.03281	52.61799	3.16806	0.1686964	0.23968293	2.5667170	20	—	—
489694 2007 VN_{108}	17.6	X	232.24481	62.53408	232.90112	5.04721	0.1307078	0.26300135	2.4126671	20	1 30.5	21.4
489695 2007 VA_{113}	18.1	X	220.90322	282.38808	62.31616	6.62315	0.2651556	0.27385228	2.3485067	20	3 20.9	22.3
489696 2007 VC_{119}	18.0	X	321.64364	64.98889	51.92909	14.61848	0.1427951	0.23571434	2.5954463	20	—	—
489697 2007 VK_{120}	18.0	X	217.91259	135.52963	167.21877	2.82709	0.1938639	0.26863699	2.3788050	20	1 25.9	21.9
489698 2007 VY_{123}	18.1	X	248.45497	226.60843	197.85841	2.61599	0.2765495	0.21230157	2.7829191	20	7 16.9	22.5
489699 2007 VG_{124}	17.6	X	340.24168	202.70612	233.71277	1.62618	0.1647507	0.23391751	2.6087206	20	—	—
489700 2007 VK_{125}	17.8	X	252.99880	282.87896	66.99438	23.77357	0.0367326	0.35677618	1.9688176	20	5 17.1	19.8
489701 2007 VV_{135}	16.2	X	225.94111	330.29576	282.05416	26.83170	0.0973292	0.23893540	2.5720676	20	—	—
489702 2007 VL_{155}	18.2	X	334.95648	213.03163	257.25797	5.58772	0.2397273	0.23841660	2.5757975	20	—	—
489703 2007 VR_{157}	16.4	X	71.72096	188.83030	215.39599	11.99822	0.1183494	0.17076539	3.2176303	20	—	—
489704 2007 VY_{158}	18.5	X	209.94017	296.77622	126.54184	3.52619	0.0973516	0.28252689	2.3001855	20	6 25.8	21.6
489705 2007 VK_{160}	17.0	X	168.54018	340.02651	98.29959	6.75221	0.0241662	0.19842652	2.9111835	20	5 28.9	21.2
489706 2007 VG_{171}	18.3	X	62.01297	346.82063	13.74139	5.55488	0.2504756	0.24205228	2.5499398	20	—	—
489707 2007 VQ_{177}	17.8	X	356.29566	246.74339	175.64337	3.63794	0.3149484	0.23598531	2.5934591	20	—	—
489708 2007 VL_{183}	18.3	X	334.53993	109.88240	336.82271	4.59722	0.3070307	0.23415563	2.6069517	20	—	—
489709 2007 VH_{202}	16.2	X	140.12244	339.09972	27.97527	9.37877	0.3090505	0.18203736	3.0833941	20	2 26.7	21.6
489710 2007 VK_{213}	18.5	X	172.17243	304.89192	132.83165	2.89351	0.1828686	0.27678433	2.3318917	20	6 3.7	22.2
489711 2007 VU_{215}	16.2	X	84.12474	191.90728	260.80757	8.63266	0.0559349	0.18150725	3.0893947	20	3 3.6	20.6
489712 2007 VY_{230}	16.9	X	201.46521	349.83335	49.14189	2.62326	0.1072989	0.19784087	2.9169257	20	5 14.3	21.3
489713 2007 VD_{237}	16.9	X	88.52212	65.41814	52.12584	12.32234	0.1523427	0.18723248	3.0260905	20	4 29.0	21.2
489714 2007 VR_{237}	18.1	X	231.04860	256.57260	53.98845	4.44985	0.2565619	0.27006557	2.3704087	20	2 15.6	22.2
489715 2007 VP_{239}	16.7	X	181.45737	275.25933	109.66111	1.76782	0.2418686	0.19183635	2.9774795	20	4 10.1	22.0
489716 2007 VX_{242}	17.7	X	14.13241	274.25883	98.48247	3.13771	0.1091828	0.23342058	2.6124217	20	12 17.0	20.7
489717 2007 VA_{243}	18.5	X	140.03019	324.18024	149.58823	2.69015	0.1238565	0.27843488	2.3226671	20	6 16.8	21.8
489718 2007 VK_{245}	18.1	X	291.78799	293.79106	60.59713	22.51678	0.1117961	0.36652669	1.9337440	20	7 14.5	20.1
489719 2007 VH_{253}	16.9	X	200.13348	256.75724	80.22057	15.75193	0.1843053	0.26671408	2.3902248	20	2 28.9	21.1
489720 2007 VE_{278}	17.9	X	176.57096	267.80128	90.25726	1.49140	0.2268122	0.26660133	2.3908987	20	2 29.9	21.9
489721 2007 VD_{290}	18.2	X	47.88563	107.04029	242.95170	3.33716	0.2260451	0.23469985	2.6029201	20	—	—
489722 2007 VP_{290}	17.9	X	7.07708	207.51332	226.25557	0.92057	0.1142578	0.23843968	2.5756313	20	—	—
489723 2007 VS_{314}	17.9	X	323.40369	201.50015	270.30913	6.17777	0.2456992	0.23089500	2.6314373	20	—	—
489724 2007 VU_{314}	17.8	X	49.58935	284.23906	73.16322	3.23995	0.2422305	0.23655252	2.5893116	20	—	—
489725 2007 VH_{315}	17.0	X	86.32154	167.59562	280.71019	1.19514	0.0998648	0.17953618	3.1119651	20	3 11.3	21.3
489726 2007 VT_{320}	16.5	X	140.10290	11.92833	32.39721	18.59213	0.2164529	0.18687484	3.0299502	20	4 3.4	21.5
489727 2007 VB_{325}	17.8	X	16.07057	69.22287	348.42765	2.35670	0.1652448	0.23908477	2.5709963	20	—	—
489728 2007 WT_{14}	18.0	X	334.87777	56.88351	76.52609	6.75067	0.2686035	0.23978940	2.5659571	20	—	—
489729 2007 WS_{32}	17.6	X	330.93272	113.01306	268.93450	6.98037	0.2980838	0.22457828	2.6805519	20	10 17.0	19.5
489730 2007 WM_{58}	17.4	X	240.41616	189.60418	259.17761	3.06431	0.0341507	0.21431400	2.7654705	20	9 7.9	21.3
489731 2007 WP_{61}	17.4	X	36.86397	24.76782	24.91937	4.21484	0.1108550	0.24108271	2.5567720	20	—	—
489732 2007 WX_{61}	17.5	X	205.46236	61.07008	20.22415	6.16234	0.1302159	0.28321526	2.2964568	20	7 14.6	20.9
489733 2007 WJ_{62}	17.1	X	93.77946	93.46537	269.58031	9.47456	0.1339889	0.24504143	2.5291604	20	—	—
489734 2007 WB_{63}	17.5	X	49.32051	78.11642	321.36071	3.72665	0.2211588	0.24219121	2.5489646	20	—	—
489735 2007 XH_{7}	17.6	X	46.48221	329.59441	66.75307	5.16058	0.1592472	0.24121007	2.5558719	20	—	—
489736 2007 XB_{17}	16.5	X	330.35841	210.62932	262.11744	16.41558	0.1839735	0.23550611	2.5969760	20	—	—
489737 2007 XG_{17}	17.9	X	335.98676	357.41703	72.72392	6.21287	0.3298114	0.23030010	2.6359670	20	—	—
489738 2007 XJ_{18}	17.0	X	347.05067	159.81489	279.35415	11.73039	0.2239068	0.23294002	2.6160135	20	—	—
489739 2007 XE_{40}	16.8	X	326.87135	42.99237	98.43472	33.53513	0.2642983	0.23441836	2.6050034	20	—	—
489740 2007 XB_{42}	17.3	X	47.95615	334.85722	67.96330	6.03683	0.2822772	0.24112175	2.5564960	20	—	—
489741 2007 XO_{49}	16.2	X	80.51121	307.51901	72.04818	12.70616	0.1953916	0.24117592	2.5561132	20	—	—
489742 2007 XJ_{51}	17.6	X	47.79615	298.76925	83.39893	10.29634	0.1478094	0.23780616	2.5802036	20	—	—
489743 2007 XP_{58}	17.2	X	2.22812	152.09001	289.62326	9.96952	0.0996706	0.23174356	2.6250099	20	—	—
489744 2007 XA_{59}	18.0	X	323.60226	182.98172	310.40776	4.95356	0.2048441	0.23229805	2.6208309	20	—	—
489745 2007 YC_{1}	17.5	X	166.38060	197.37905	246.71304	4.10376	0.1974855	0.27344132	2.3508592	20	6 6.6	21.3
489746 2007 YU_{5}	16.4	X	69.45478	208.70331	267.50649	10.13437	0.0658542	0.18363608	3.0654722	20	3 13.8	20.7
489747 2007 YT_{22}	16.8	X	268.73917	238.71680	347.15191	7.44829	0.1674004	0.23977055	2.5660916	20	—	—
489748 2007 YR_{33}	17.3	X	122.22725	304.81976	133.79376	1.59756	0.1592110	0.18487108	3.0518046	20	4 18.6	22.0
489749 2007 YX_{42}	17.0	X	297.27333	225.84974	301.15556	12.58844	0.1883433	0.23443334	2.6048924	20	—	—
489750 2007 YG_{49}	17.7	X	13.52966	204.23349	214.73791	0.79017	0.1041782	0.23296273	2.6158435	20	—	—
489751 2007 YK_{49}	16.9	X	149.20926	317.13641	114.42077	5.10007	0.2706829	0.18716790	3.0267866	20	5 12.7	22.2
489752 2007 YK_{62}	17.1	X	100.19513	145.02286	296.22583	2.48454	0.1380306	0.17498673	3.1656724	20	3 24.8	21.6
489753 2007 YQ_{66}	18.5	X	141.78229	343.76254	115.20581	3.51936	0.1466219	0.26695268	2.3888004	20	5 31.6	22.0
489754 2007 YP_{67}	17.6	X	324.99393	96.57366	293.56015	11.50231	0.1068218	0.21674473	2.7447557	20	10 10.6	21.0
489755 2007 YA_{71}	15.4	X	113.10543	94.33508	276.46038	20.17436	0.0924155	0.17072872	3.2180911	20	1 9.8	20.1
489756 2008 AX_{3}	17.3	X	353.29757	147.36843	277.70239	10.52878	0.1648374	0.23100994	2.6305644	20	—	—
489757 2008 AK_{16}	16.3	X	157.98653	101.41053	281.04031	9.94847	0.1168423	0.17523612	3.1626682	20	3 9.1	21.4
489758 2008 AW_{26}	17.6	X	274.62205	86.32353	134.47477	4.32638	0.2147888	0.23374673	2.6099911	20	—	—
489759 2008 AW_{35}	17.7	X	35.64698	283.42282	125.42104	3.06809	0.0866417	0.23258597	2.6186676	20	—	—
489760 2008 AW_{38}	16.4	X	115.18862	180.83714	297.15709	8.18570	0.2082926	0.18211854	3.0824777	20	6 2.5	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489761 2008 AV_{43}	17.7	X	16.67415	278.94338	134.17644	7.13819	0.1177704	0.22737346	2.6585380	20	—	—
489762 2008 AQ_{46}	16.1	X	94.25938	177.71572	266.21838	10.16949	0.0709867	0.17923094	3.1154974	20	3 7.1	20.7
489763 2008 AG_{54}	17.0	X	93.30833	346.57414	113.37645	2.78938	0.0882383	0.17607114	3.1526609	20	4 4.1	21.3
489764 2008 AY_{54}	18.5	X	177.84202	343.89903	98.45573	2.47690	0.1562789	0.27207436	2.3587268	20	6 14.6	22.1
489765 2008 AU_{59}	16.8	X	22.50311	10.36156	148.47756	2.01075	0.1244244	0.17011914	3.2257739	20	3 10.8	20.7
489766 2008 AL_{66}	16.3	X	266.76703	248.40139	312.25912	12.21307	0.1409522	0.23095024	2.6310177	20	—	—
489767 2008 AZ_{71}	17.1	X	34.67726	282.48235	141.74119	12.05742	0.2389233	0.23821094	2.5772799	20	—	—
489768 2008 AQ_{90}	17.0	X	35.93144	276.80380	130.85431	4.90079	0.1274381	0.23458091	2.6037999	20	—	—
489769 2008 AS_{91}	17.4	X	16.64667	318.93705	104.39209	7.73012	0.1616228	0.23209815	2.6223356	20	—	—
489770 2008 AY_{97}	18.1	X	335.59540	52.18749	49.30547	2.60469	0.1643228	0.23007801	2.6376630	20	—	—
489771 2008 AV_{107}	17.5	X	295.17202	326.06732	203.38015	1.29959	0.1742101	0.23285804	2.6166275	20	—	—
489772 2008 AK_{108}	17.0	X	286.55392	71.05116	127.50473	28.87892	0.1277448	0.23710409	2.5852945	20	—	—
489773 2008 AB_{109}	16.7	X	101.72964	142.89755	299.43257	8.34583	0.0682795	0.17348378	3.1839297	20	3 15.7	21.3
489774 2008 AG_{138}	17.4	X	358.89156	287.81389	151.82228	6.76569	0.0993008	0.22849949	2.6497967	20	—	—
489775 2008 BU_{1}	17.1	X	264.51428	225.15532	345.63212	13.63555	0.2276420	0.22906457	2.6454371	20	—	—
489776 2008 BV_{7}	17.6	X	316.42462	152.82449	332.98087	11.83572	0.1339367	0.22812404	2.6527034	20	—	—
489777 2008 BW_{51}	18.1	X	319.86511	341.77108	143.51806	3.72805	0.1926868	0.22995378	2.6386129	20	—	—
489778 2008 CD_{7}	17.8	X	331.44202	349.15842	122.57944	5.47938	0.2315385	0.22806676	2.6531475	20	—	—
489779 2008 CL_{7}	17.4	X	326.99821	122.89902	334.50318	4.46605	0.1816397	0.22647508	2.6655639	20	—	—
489780 2008 CC_{30}	16.7	X	248.94264	257.99062	329.86357	10.91567	0.1314828	0.23197576	2.6232579	20	—	—
489781 2008 CH_{34}	16.9	X	73.38338	242.79908	326.84075	11.18999	0.0803352	0.18850014	3.0125084	20	7 27.4	21.1
489782 2008 CD_{40}	17.7	X	353.46422	310.37975	149.95175	5.09060	0.2131032	0.23269413	2.6178561	20	—	—
489783 2008 CH_{40}	17.7	X	245.44932	289.61069	314.98961	6.07840	0.2526211	0.23080205	2.6321438	20	—	—
489784 2008 CJ_{43}	18.1	X	157.62782	356.48714	80.21624	3.65194	0.1514091	0.26107419	2.4245255	20	5 18.6	21.9
489785 2008 CP_{43}	17.9	X	261.59929	112.11954	104.55338	5.31770	0.0984978	0.22918772	2.6444893	20	—	—
489786 2008 CR_{62}	16.9	X	321.49540	132.06566	328.54166	11.36955	0.1427829	0.22537107	2.6742619	20	—	—
489787 2008 CT_{81}	17.2	X	289.58801	32.95277	130.53157	8.41450	0.2239944	0.22704393	2.6611098	20	—	—
489788 2008 CX_{84}	17.6	X	291.38890	1.76679	152.52732	2.70207	0.1423752	0.22516853	2.6758654	20	—	—
489789 2008 CF_{94}	17.1	X	271.21907	14.32593	130.63838	9.14243	0.1457124	0.21873764	2.7280586	20	12 19.3	20.3
489790 2008 CX_{99}	17.0	X	137.83695	140.41450	331.30463	6.31925	0.1003431	0.18382557	3.0633652	20	6 7.9	21.8
489791 2008 CT_{112}	17.5	X	355.97982	93.37697	348.15800	7.75157	0.0524568	0.22673929	2.6634928	20	—	—
489792 2008 CV_{141}	17.7	X	255.92829	56.36123	167.77060	12.13473	0.1568055	0.22806074	2.6531942	20	—	—
489793 2008 CK_{143}	17.0	X	270.97482	328.10239	158.14833	10.33675	0.1353792	0.21461420	2.7628910	20	11 26.4	20.6
489794 2008 CY_{144}	17.6	X	22.38261	108.15079	309.71505	5.37024	0.0875081	0.22691844	2.6620908	20	—	—
489795 2008 CP_{146}	17.9	X	16.56155	252.32988	180.80227	6.19809	0.2095638	0.23193992	2.6235281	20	—	—
489796 2008 CF_{148}	17.7	X	336.43354	94.26745	317.37641	6.53074	0.2898762	0.21997530	2.7178163	20	12 23.6	19.8
489797 2008 CZ_{154}	17.0	X	355.77725	347.78509	144.72914	15.69904	0.0661821	0.23384850	2.6092338	20	—	—
489798 2008 CZ_{155}	17.1	X	264.92511	7.44260	175.51738	7.57509	0.0843594	0.22671753	2.6636632	20	—	—
489799 2008 CK_{156}	17.5	X	11.28066	59.12092	350.78918	12.29303	0.2957276	0.22634820	2.6665600	20	—	—
489800 2008 CQ_{159}	17.4	X	297.59954	42.67617	82.07332	5.79332	0.1252074	0.22388984	2.6860440	20	—	—
489801 2008 CW_{169}	17.1	X	225.89762	246.05385	303.30612	6.64378	0.0741065	0.21813306	2.7330971	20	12 23.8	20.9
489802 2008 CS_{181}	19.0	X	58.68861	143.84662	148.87782	23.78084	0.0698283	0.44464644	1.7000414	20	12 19.5	21.2
489803 2008 CB_{182}	16.8	X	229.47613	159.24570	17.35023	8.81378	0.2425281	0.21465673	2.7625260	20	11 16.8	21.1
489804 2008 CB_{186}	16.9	X	325.42208	323.47514	147.63200	26.40190	0.1549338	0.22875120	2.6478526	20	—	—
489805 2008 CS_{191}	16.2	X	224.61159	331.21360	319.29975	9.23891	0.0504901	0.15973616	3.3640870	20	2 4.0	21.1
489806 2008 CG_{193}	17.1	X	260.15022	95.08598	126.43670	11.91467	0.2096806	0.22767979	2.6561528	20	—	—
489807 2008 CN_{197}	17.2	X	4.83375	86.41938	334.97413	10.69260	0.1735062	0.22632860	2.6667139	20	—	—
489808 2008 CE_{209}	17.1	X	328.32243	320.83178	178.59777	4.30683	0.1784368	0.23414734	2.6070132	20	—	—
489809 2008 CK_{209}	17.4	X	306.41094	19.66805	96.93135	11.14679	0.2239097	0.22464976	2.6799832	20	—	—
489810 2008 DF_{12}	17.7	X	319.74541	337.66789	137.80141	12.63212	0.1698121	0.22741950	2.6581791	20	—	—
489811 2008 DM_{12}	18.1	X	251.15065	94.66074	139.42333	7.40260	0.2907925	0.22946567	2.6423534	20	—	—
489812 2008 DY_{27}	17.8	X	348.74328	336.27457	141.81147	5.17108	0.1778639	0.23441605	2.6050206	20	—	—
489813 2008 DE_{29}	18.2	X	162.97601	342.44255	95.48689	2.46608	0.1555226	0.26607663	2.3940409	20	5 25.5	21.8
489814 2008 DS_{82}	17.3	X	345.03218	98.33225	14.30197	13.54467	0.0749999	0.22483879	2.6784809	20	—	—
489815 2008 DK_{85}	17.5	X	271.85993	146.65813	358.27092	3.70110	0.0943886	0.21549720	2.7553385	20	12 25.4	21.0
489816 2008 DQ_{85}	17.9	X	178.84326	232.80710	27.41366	6.73295	0.0914951	0.29737973	2.2229437	20	—	—
489817 2008 DM_{86}	17.0	X	41.63930	243.67383	1.63600	8.94182	0.0758394	0.18690404	3.0296347	20	7 31.0	21.1
489818 2008 EB_{2}	17.4	X	244.54407	358.93140	194.99069	8.25217	0.0914295	0.21886778	2.7269772	20	—	—
489819 2008 EC_{5}	17.6	X	242.76771	33.29399	166.94185	3.64155	0.1355153	0.21933966	2.7230646	20	—	—
489820 2008 EX_{17}	17.3	X	279.36476	336.75022	209.49680	13.08570	0.1920738	0.22379897	2.6867711	20	—	—
489821 2008 EN_{33}	17.4	X	225.70992	76.85265	165.65521	7.62900	0.2052810	0.22088340	2.7103622	20	—	—
489822 2008 EO_{33}	16.9	X	263.84761	340.99038	171.57578	11.56174	0.1557177	0.21566931	2.7538724	20	12 15.7	20.5
489823 2008 EJ_{38}	17.0	X	194.55625	246.52218	9.95265	15.73612	0.0204950	0.22325165	2.6911605	20	—	—
489824 2008 EV_{40}	18.2	X	288.34812	271.08495	207.97061	4.90266	0.2100182	0.29719493	2.2238652	20	—	—
489825 2008 ER_{50}	17.3	X	213.05938	237.55277	7.88441	4.98132	0.1259241	0.22399021	2.6852416	20	—	—
489826 2008 EP_{52}	17.3	X	237.22961	205.09404	13.01303	7.08835	0.2356050	0.21854565	2.7296562	20	—	—
489827 2008 ES_{68}	14.2	X	314.28152	155.69885	141.52880	28.25892	0.0694296	0.08357957	5.1808694	20	6 1.9	21.2
489828 2008 EV_{73}	17.7	X	292.05915	40.40917	135.56318	4.88929	0.1144312	0.22602171	2.6691273	20	—	—
489829 2008 EH_{79}	17.3	X	263.44073	212.11893	301.23983	5.53782	0.1751412	0.21817673	2.7327324	20	12 13.1	20.6
489830 2008 EK_{82}	16.7	X	279.92786	212.54919	323.17653	12.76471	0.1880828	0.22500829	2.6771356	20	—	—
489831 2008 EM_{84}	17.5	X	200.47468	97.58382	186.29788	7.23116	0.3119262	0.22471214	2.6794873	20	—	—
489832 2008 ET_{88}	16.6	X	302.49670	18.97114	152.51519	14.85151	0.1723858	0.22828481	2.6514577	20	—	—
489833 2008 ED_{92}	16.7	X	296.76651	169.58038	351.85538	11.85176	0.1794054	0.22780132	2.6552080	20	—	—
489834 2008 ER_{94}	16.4	X	3.14657	181.60883	287.26924	4.89186	0.0448726	0.15054302	3.4996851	20	—	—
489835 2008 EJ_{107}	17.1	X	155.94101	176.85765	108.89465	6.25774	0.0384426	0.21859629	2.7292345	20	—	—
489836 2008 EA_{119}	17.0	X	11.34341	273.09467	157.87368	17.45849	0.1748706	0.23024627	2.6363778	20	—	—
489837 2008 EY_{126}	16.9	X	192.94755	289.86533	8.23145	12.69844	0.2633380	0.22190235	2.7020587	20	1 9.9	21.9
489838 2008 EJ_{143}	17.4	X	271.97025	74.73208	129.23730	14.46642	0.2172779	0.22550820	2.6731777	20	—	—
489839 2008 ES_{156}	17.5	X	310.47778	159.14026	0.01433	5.25317	0.0817199	0.22578473	2.6709946	20	—	—
489840 2008 ES_{160}	17.4	X	27.50942	246.77725	177.16363	10.55711	0.0719347	0.22273359	2.6953318	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489841 2008 EX_{167}	17.8	X	216.76121	79.36418	191.17116	12.40945	0.2433161	0.22267819	2.6957788	20	—	—
489842 2008 FB_{10}	17.0	X	42.13113	217.31348	168.97595	11.55582	0.0785724	0.22207265	2.7006772	20	—	—
489843 2008 FD_{14}	17.5	X	326.75319	283.63711	186.49955	12.40207	0.2303167	0.22437087	2.6822035	20	—	—
489844 2008 FQ_{27}	17.7	X	325.68413	4.92376	90.76900	5.65881	0.0339947	0.21298163	2.7769919	20	—	—
489845 2008 FC_{37}	17.6	X	314.75604	316.62683	167.90012	4.61767	0.2213895	0.22438170	2.6821173	20	—	—
489846 2008 FW_{40}	17.5	X	263.30974	46.22938	148.21703	4.71389	0.1409946	0.22049105	2.7135765	20	—	—
489847 2008 FL_{48}	17.2	X	136.71536	121.17002	184.53517	11.70037	0.0480240	0.21714479	2.7413834	20	—	—
489848 2008 FX_{53}	17.3	X	249.89421	194.58204	46.94159	3.45236	0.1363901	0.22522239	2.6754387	20	—	—
489849 2008 FZ_{70}	17.5	X	300.49938	303.52452	177.45231	9.25629	0.1110407	0.21569925	2.7536176	20	—	—
489850 2008 FK_{73}	17.8	X	222.62903	79.85169	161.54888	7.59903	0.2318375	0.21803367	2.7339276	20	—	—
489851 2008 FV_{78}	16.9	X	331.24444	264.57528	193.37233	11.57113	0.1463438	0.21944046	2.7222306	20	—	—
489852 2008 FS_{80}	15.8	X	252.31566	10.90083	12.01345	16.40697	0.0926192	0.18066101	3.0990346	20	6 19.0	20.6
489853 2008 FJ_{98}	17.4	X	133.30452	211.88927	110.98033	5.89822	0.1098109	0.21706726	2.7420361	20	—	—
489854 2008 FO_{103}	17.0	X	166.22982	221.75160	78.77462	7.15696	0.0197294	0.21865867	2.7287154	20	—	—
489855 2008 FP_{112}	17.5	X	20.40692	6.20794	51.21341	7.55495	0.0714630	0.21713658	2.7414524	20	—	—
489856 2008 FX_{115}	17.4	X	111.75665	260.49770	50.55334	5.09074	0.0579205	0.21223004	2.7835444	20	—	—
489857 2008 FA_{122}	16.8	X	82.46145	259.27216	112.72382	7.16103	0.0450354	0.21975303	2.7196487	20	—	—
489858 2008 FA_{128}	17.3	X	306.96859	54.17051	44.62854	9.91074	0.1027478	0.21068496	2.7971367	20	12 16.3	20.7
489859 2008 FU_{133}	17.6	X	314.96461	306.92306	161.75561	3.83637	0.0551983	0.21487858	2.7606243	20	—	—
489860 2008 GG_{1}	16.9	X	203.01849	231.73108	17.61934	12.56934	0.1595907	0.21566377	2.7539196	20	—	—
489861 2008 GK_{6}	17.0	X	231.59358	163.37156	68.42246	5.86536	0.0955135	0.22040642	2.7142711	20	—	—
489862 2008 GJ_{8}	16.5	X	81.62301	125.51870	25.55747	16.42618	0.1574771	0.17337482	3.1852636	20	5 28.3	21.2
489863 2008 GU_{28}	17.7	X	248.90249	106.05218	114.87790	3.16800	0.2141074	0.22121633	2.7076421	20	—	—
489864 2008 GN_{32}	17.3	X	257.43941	48.04338	132.71058	6.01808	0.1246149	0.21586569	2.7522020	20	—	—
489865 2008 GS_{33}	17.8	X	309.51448	354.49389	165.99063	1.45363	0.0610155	0.22524954	2.6752237	20	—	—
489866 2008 GJ_{51}	17.5	X	278.09206	117.40056	39.96411	4.83482	0.0114730	0.21596665	2.7513442	20	—	—
489867 2008 GB_{54}	17.6	X	241.08165	31.18244	176.58572	7.72271	0.1496742	0.21803185	2.7339428	20	—	—
489868 2008 GP_{67}	17.4	X	178.65782	191.36478	85.66022	2.74664	0.2071474	0.21232881	2.7826810	20	—	—
489869 2008 GM_{68}	17.8	X	258.34047	124.77403	60.40284	9.76897	0.2814577	0.21713469	2.7414684	20	12 29.8	21.1
489870 2008 GU_{74}	17.1	X	173.52814	151.00048	135.01268	5.78781	0.1325084	0.21574869	2.7531969	20	—	—
489871 2008 GJ_{76}	17.2	X	333.02732	333.67042	167.62560	13.59668	0.1016336	0.22555058	2.6728428	20	—	—
489872 2008 GC_{78}	17.1	X	149.29984	205.24641	126.41525	5.39182	0.1067763	0.21979433	2.7193079	20	—	—
489873 2008 GK_{78}	17.2	X	220.54064	233.62419	97.30007	6.64356	0.1874753	0.23351998	2.6116804	20	3 8.6	21.6
489874 2008 GT_{105}	16.6	X	256.35382	147.98493	42.34877	26.00646	0.0931340	0.21612718	2.7499816	20	—	—
489875 2008 GM_{106}	16.9	X	265.68221	159.01557	32.01235	5.75544	0.0895666	0.21902105	2.7257048	20	—	—
489876 2008 GY_{106}	16.7	X	180.78562	214.76263	44.13622	10.29207	0.2729951	0.21215420	2.7842077	20	—	—
489877 2008 GJ_{131}	17.3	X	172.46228	232.32761	62.82484	10.36376	0.1870220	0.21399541	2.7682145	20	—	—
489878 2008 GV_{138}	17.5	X	298.08228	116.02160	32.04162	5.28200	0.1039675	0.21815005	2.7329552	20	—	—
489879 2008 GA_{139}	13.9	X	55.62932	121.30845	47.10044	25.02579	0.0125170	0.08330882	5.1920881	20	5 4.2	20.7
489880 2008 GF_{144}	17.0	X	208.90419	54.07521	170.08150	9.17716	0.0895497	0.21095578	2.7947422	20	—	—
489881 2008 HQ_{1}	16.9	X	241.64193	19.18864	161.67517	7.48191	0.1838854	0.21087379	2.7954667	20	12 15.5	20.9
489882 2008 HM_{6}	17.2	X	316.34195	282.98885	210.49166	8.28808	0.0959098	0.22049901	2.7135112	20	—	—
489883 2008 HP_{8}	17.0	X	202.43947	166.80733	100.88749	9.81137	0.1695015	0.21677960	2.7444612	20	—	—
489884 2008 HR_{19}	16.7	X	200.69648	157.31803	107.92234	13.03255	0.0746619	0.21567408	2.7538318	20	—	—
489885 2008 HY_{37}	18.5	X	308.87998	1.63663	26.08163	35.13740	0.3544188	0.43676009	1.7204448	20	—	—
489886 2008 HN_{41}	18.4	X	116.89620	86.83608	216.28482	4.78031	0.1946051	0.28499541	2.2868840	20	—	—
489887 2008 HT_{46}	16.9	X	227.46536	62.85906	175.74369	14.51057	0.1574313	0.21581013	2.7526744	20	—	—
489888 2008 HZ_{55}	17.3	X	215.45292	124.14529	117.49945	9.17032	0.2820655	0.21304475	2.7764434	20	—	—
489889 2008 HT_{56}	17.2	X	169.84177	95.51079	204.33510	14.41997	0.2463814	0.21587377	2.7521333	20	—	—
489890 2008 HU_{62}	16.8	X	234.66255	97.45581	108.22028	26.06904	0.2605316	0.21534792	2.7566117	20	12 28.6	20.7
489891 2008 HV_{68}	17.6	X	178.21731	119.34620	199.64286	4.47009	0.3953714	0.21303276	2.7765476	20	1 25.0	23.0
489892 2008 HL_{69}	17.3	X	225.87840	23.96397	222.48478	2.71594	0.1439519	0.21799575	2.7342446	20	—	—
489893 2008 JM_{12}	17.1	X	189.79024	123.79616	136.49727	10.16528	0.0925940	0.21090151	2.7952217	20	—	—
489894 2008 JG_{18}	16.6	X	200.52454	172.84427	82.22464	12.30103	0.1053190	0.21236356	2.7823775	20	—	—
489895 2008 JS_{21}	16.6	X	198.23179	300.54611	3.59810	12.84490	0.2651244	0.22546544	2.6735156	20	1 21.4	21.6
489896 2008 JN_{23}	17.2	X	182.15064	235.37034	67.06330	10.03609	0.1710903	0.21651431	2.7467026	20	1 1.6	21.8
489897 2008 JW_{25}	17.0	X	272.50643	67.28641	100.62668	13.36079	0.1427797	0.21418681	2.7665651	20	—	—
489898 2008 JJ_{28}	17.0	X	228.72247	119.61117	112.99903	5.99479	0.1146807	0.21490691	2.7603816	20	—	—
489899 2008 JT_{40}	16.9	X	163.13551	118.81899	153.66927	15.23797	0.1374845	0.20585070	2.8407596	20	—	—
489900 2008 KP	18.9	X	33.19460	345.00829	62.45186	59.84553	0.7896004	0.85360564	1.1006043	20	—	—
489901 2008 KA_{17}	17.6	X	204.89635	137.34247	139.25414	8.70304	0.1759473	0.21551833	2.7551584	20	—	—
489902 2008 KA_{27}	16.8	X	229.32719	182.06912	84.23596	13.71080	0.1216160	0.22294597	2.6936198	20	—	—
489903 2008 KL_{30}	16.7	X	296.90551	12.48579	150.60245	15.08827	0.1329348	0.21638977	2.7477565	20	—	—
489904 2008 KM_{31}	16.6	X	213.64605	145.89077	94.38149	11.40287	0.1180938	0.21296411	2.7771442	20	—	—
489905 2008 KX_{38}	16.9	X	41.82591	135.23125	234.82045	23.97769	0.2294378	0.28024018	2.3126813	20	—	—
489906 2008 LU_{5}	16.7	X	310.85697	80.14364	83.88672	22.43074	0.0376955	0.21960295	2.7208876	20	—	—
489907 2008 OW_{7}	16.9	X	101.80651	109.46996	215.64968	3.05447	0.2199788	0.19247383	2.9709016	20	—	—
489908 2008 OP_{14}	16.0	X	28.99343	34.19324	329.88809	14.87051	0.2196598	0.17709955	3.1404441	20	12 28.8	20.4
489909 2008 OF_{20}	17.6	X	294.25251	56.50424	337.84460	10.46053	0.1078394	0.24649677	2.5191956	20	9 5.4	20.4
489910 2008 OP_{20}	18.3	X	269.14345	124.72267	160.04081	4.35454	0.1381310	0.30556235	2.1830792	20	2 20.0	21.3
489911 2008 OQ_{21}	18.9	X	93.39611	68.21174	335.54490	5.18228	0.2396683	0.28301908	2.2975179	20	1 31.2	21.2
489912 2008 OY_{23}	16.6	X	189.16250	164.30775	157.81020	9.93562	0.2839634	0.21128215	2.7918634	20	2 1.5	21.6
489913 2008 PG_{5}	18.3	X	55.09941	118.80797	227.46505	4.75674	0.2285517	0.26670136	2.3903009	20	—	—
489914 2008 PU_{8}	17.5	X	62.69667	15.25047	335.89980	5.62612	0.2524088	0.26795732	2.3828258	20	—	—
489915 2008 PF_{15}	18.2	X	13.49834	13.65466	315.19462	1.42874	0.2255756	0.25479047	2.4642263	20	11 10.2	20.7
489916 2008 QF_{8}	18.3	X	212.59718	356.16480	339.31942	6.44247	0.2098551	0.30112834	2.2044570	20	2 28.0	21.9
489917 2008 QH_{11}	15.6	X	31.45612	0.45331	0.95248	8.55010	0.2188584	0.17584090	3.1554123	20	12 26.8	20.0
489918 2008 QO_{12}	18.0	X	172.66375	183.06503	164.59665	2.83735	0.2315333	0.29189658	2.2506953	20	2 11.1	21.4
489919 2008 QC_{21}	16.0	X	37.89810	142.96661	168.40789	28.54941	0.2212505	0.17290230	3.1910641	20	11 8.3	20.8
489920 2008 QG_{22}	15.8	X	58.76569	62.89781	256.05919	7.21332	0.2665357	0.17724769	3.1386942	20	12 12.9	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
489921 2008 QD_{23}	16.9	X	202.60141	142.12412	222.57060	7.92269	0.2827614	0.21765037	2.7371364	20	3 28.8	22.0
489922 2008 QB_{35}	18.9	X	280.37209	153.35291	161.50931	2.43780	0.1999523	0.31219260	2.1520597	20	4 6.9	21.6
489923 2008 QM_{38}	15.9	X	20.61060	193.10946	179.93082	12.05403	0.1389002	0.17751742	3.1355139	20	12 15.6	20.2
489924 2008 QX_{40}	16.3	X	46.64274	43.29442	228.51385	14.88679	0.1139262	0.24577503	2.5241251	20	9 16.8	19.8
489925 2008 QL_{46}	17.8	X	57.49797	13.29257	313.93571	4.51253	0.2584680	0.26178515	2.4201338	20	—	—
489926 2008 RF_{4}	18.5	X	233.39299	116.34059	187.88823	4.40792	0.1887507	0.29852586	2.2172504	20	2 6.2	22.0
489927 2008 RV_{4}	16.7	X	339.72990	49.21118	352.08248	10.88780	0.0491188	0.17304798	3.1892729	20	11 8.8	21.1
489928 2008 RM_{17}	17.8	X	253.11137	164.04765	226.25578	3.85025	0.1469871	0.23261319	2.6184633	20	6 24.6	21.5
489929 2008 RQ_{17}	18.4	X	123.46455	174.45594	192.70027	7.50257	0.1406068	0.28338612	2.2955336	20	1 5.7	21.3
489930 2008 RP_{24}	17.7	X	72.58181	224.91712	164.34555	6.71241	0.4250076	0.27156478	2.3616766	20	1 4.7	18.8
489931 2008 RJ_{30}	18.3	X	244.61767	317.33341	354.71175	4.67017	0.1819499	0.30248400	2.1978655	20	2 28.2	21.6
489932 2008 RG_{44}	18.0	X	297.36353	18.47238	16.75612	2.00983	0.1903176	0.24334014	2.5409349	20	9 1.2	20.4
489933 2008 RY_{45}	18.4	X	52.85071	13.24208	24.91896	1.58426	0.1904385	0.27091312	2.3654623	20	—	—
489934 2008 RG_{46}	14.3	X	338.72936	4.20852	18.00537	8.48172	0.0259914	0.08223817	5.2370544	20	10 4.3	21.1
489935 2008 RQ_{65}	16.3	X	38.60101	205.82101	161.46559	10.56447	0.1877345	0.17934241	3.1142063	20	—	—
489936 2008 RU_{85}	17.9	X	260.56488	146.33557	264.78344	3.88717	0.1961972	0.23624623	2.5915492	20	7 24.5	21.4
489937 2008 RY_{87}	17.2	X	219.20890	120.55153	302.55666	4.76063	0.2670318	0.22688816	2.6623276	20	6 21.6	21.7
489938 2008 RH_{89}	16.7	X	76.20325	128.36955	217.23554	8.59037	0.0837069	0.18177736	3.0863335	20	—	—
489939 2008 RV_{90}	18.6	X	59.21053	157.51855	169.16788	1.34241	0.1962451	0.26386078	2.4074253	20	—	—
489940 2008 RB_{91}	18.4	X	350.02141	209.89733	156.38340	2.01718	0.2106564	0.25349821	2.4725939	20	11 19.5	20.4
489941 2008 RO_{91}	14.1	X	9.12452	354.40805	0.73250	18.50312	0.0525776	0.08410746	5.1591685	20	10 7.4	20.8
489942 2008 RY_{102}	16.8	X	137.92385	3.72123	261.28636	3.33987	0.1567151	0.18090254	3.0962756	20	12 11.8	21.8
489943 2008 RP_{103}	13.8	X	11.38248	14.15781	338.50660	11.91646	0.0980385	0.08351401	5.1835801	20	10 9.0	20.3
489944 2008 RT_{103}	17.6	X	35.08411	171.58419	315.18423	5.14758	0.0978214	0.28714435	2.2754600	20	1 26.7	19.6
489945 2008 RY_{109}	16.5	X	63.33436	140.69545	189.91277	10.55529	0.0830233	0.17800558	3.1297787	20	12 9.9	21.1
489946 2008 RC_{112}	18.3	X	237.17496	281.45365	343.23782	6.20128	0.0873917	0.28661855	2.2782420	20	—	—
489947 2008 RL_{112}	17.7	X	250.63897	82.69317	296.77405	1.51465	0.1780850	0.22883065	2.6472396	20	6 3.4	21.5
489948 2008 RO_{112}	16.8	X	230.94142	78.18234	306.16761	6.09337	0.2387298	0.22574677	2.6712940	20	5 14.3	21.3
489949 2008 RS_{112}	14.4	X	300.99932	175.86052	259.11164	6.14167	0.0950969	0.08340733	5.1879993	20	10 9.2	21.0
489950 2008 RD_{114}	16.9	X	344.78293	31.08315	355.36439	7.65774	0.1115255	0.17138847	3.2098271	20	10 31.5	20.9
489951 2008 RJ_{121}	14.4	X	2.91950	160.12927	197.49884	4.70771	0.0986805	0.08477767	5.1319417	20	10 7.6	20.8
489952 2008 RA_{123}	14.1	X	33.94918	4.70331	319.95084	6.59544	0.0314631	0.08153486	5.2671275	20	10 1.9	21.0
489953 2008 RH_{127}	16.6	X	87.80606	305.47058	348.89308	9.65372	0.0297902	0.17513743	3.1638562	20	11 13.9	21.3
489954 2008 RR_{127}	17.3	X	169.56683	96.08157	345.32217	4.64087	0.1059113	0.22663517	2.6643085	20	6 3.3	21.4
489955 2008 RJ_{135}	17.6	X	308.58035	349.13100	4.16039	12.88543	0.1944723	0.23849652	2.5752220	20	7 23.7	20.5
489956 2008 RC_{137}	16.7	X	287.20381	124.07061	242.01409	10.24850	0.2297286	0.23713253	2.5850878	20	6 23.3	19.9
489957 2008 RK_{137}	18.7	X	22.64171	90.40147	184.98755	23.13531	0.0521205	0.40880481	1.7980098	20	9 2.3	20.2
489958 2008 RX_{139}	18.4	X	272.50451	219.78286	185.21291	4.89828	0.2405921	0.23540574	2.5977141	20	7 24.4	21.8
489959 2008 SN_{6}	17.0	X	215.29304	17.03365	24.03947	12.08804	0.1826815	0.22502178	2.6770286	20	5 23.8	21.5
489960 2008 SG_{8}	16.1	X	26.16778	190.49029	175.87248	18.91139	0.1903085	0.17824357	3.1269922	20	12 22.2	20.6
489961 2008 SN_{27}	17.8	X	314.34998	338.43923	7.23971	1.70937	0.1811453	0.23904533	2.5712790	20	7 21.3	20.1
489962 2008 SE_{37}	16.5	X	280.86637	267.20534	186.84786	9.34613	0.0398901	0.16834137	3.2484447	20	10 31.5	21.0
489963 2008 SS_{40}	18.4	X	293.16877	244.41115	157.76749	4.10890	0.2821688	0.24080226	2.5587568	20	8 16.5	21.0
489964 2008 SC_{41}	16.3	X	78.27447	319.31369	2.51944	14.83908	0.2725648	0.18200459	3.0837641	20	—	—
489965 2008 SA_{43}	18.1	X	311.10101	144.68752	198.75865	8.84567	0.1509742	0.23576507	2.5950740	20	7 12.9	21.1
489966 2008 SA_{45}	18.2	X	199.51176	328.39587	11.34388	5.16690	0.2012486	0.29467500	2.2365255	20	2 24.5	21.7
489967 2008 SA_{46}	15.8	X	181.10213	215.15782	24.33801	28.74603	0.1790946	0.18112517	3.0937379	20	12 12.4	21.3
489968 2008 SC_{54}	18.1	X	244.06681	290.39526	7.37088	6.27152	0.1656859	0.29731812	2.2232509	20	2 12.4	21.4
489969 2008 SE_{54}	17.6	X	212.24732	225.89743	190.36657	1.80783	0.0810194	0.22711913	2.6605223	20	6 18.8	21.5
489970 2008 SR_{56}	16.6	X	185.40050	336.25182	20.90034	4.86764	0.1230065	0.20897360	2.8123871	20	3 9.4	21.1
489971 2008 SN_{62}	17.0	X	359.77321	254.04354	197.68897	14.05138	0.2678941	0.18172247	3.0869549	20	—	—
489972 2008 SU_{62}	17.5	X	279.32829	160.34601	206.59432	4.13264	0.2228132	0.23446947	2.6046249	20	6 15.2	20.9
489973 2008 SJ_{77}	16.3	X	359.26009	200.00100	191.89937	10.48186	0.0924764	0.17426594	3.1743956	20	12 2.5	20.5
489974 2008 SG_{88}	17.6	X	248.95281	7.48313	20.99133	4.72649	0.1106128	0.22835758	2.6508944	20	6 21.9	21.3
489975 2008 SF_{93}	18.4	X	256.61271	207.74337	196.19369	19.72472	0.0755619	0.40401431	1.8121948	20	8 9.1	20.4
489976 2008 SX_{93}	17.4	X	289.37731	140.64164	221.93334	3.49534	0.3281359	0.23531780	2.5983613	20	6 5.9	20.8
489977 2008 SC_{104}	18.0	X	331.27038	320.15791	21.67166	9.62284	0.2195800	0.24015436	2.5633568	20	8 25.5	20.1
489978 2008 SL_{105}	17.7	X	172.34134	243.51320	201.92907	6.28081	0.2810683	0.21666565	2.7454235	20	6 13.7	22.7
489979 2008 SC_{112}	16.7	X	102.24041	240.23998	93.72109	3.82305	0.0896431	0.18416725	3.0595751	20	—	—
489980 2008 SA_{117}	16.7	X	121.30109	269.69606	17.15778	15.46410	0.2209144	0.18058973	3.0998501	20	12 24.3	22.3
489981 2008 SE_{118}	18.3	X	320.38542	78.10181	10.34864	2.27274	0.1664407	0.25596259	2.4566977	20	—	—
489982 2008 SA_{119}	16.7	X	95.27150	312.23708	32.90044	1.82240	0.1634520	0.18479229	3.0526720	20	—	—
489983 2008 SN_{120}	17.4	X	216.81391	199.38324	196.69207	5.09041	0.2016593	0.22173769	2.7033962	20	5 21.5	21.8
489984 2008 SL_{125}	16.7	X	63.33380	300.48304	20.18194	11.48770	0.0695838	0.16998548	3.2274647	20	11 21.4	21.4
489985 2008 ST_{127}	17.6	X	173.98461	46.89671	6.76140	8.39597	0.2066078	0.21416171	2.7667813	20	5 4.0	22.3
489986 2008 SN_{142}	18.3	X	294.08347	358.55759	36.14109	6.09608	0.2650746	0.23864248	2.5741719	20	8 13.4	21.0
489987 2008 SN_{145}	18.9	X	259.43514	135.30420	192.42578	4.93914	0.2284966	0.30845638	2.1694029	20	3 28.5	22.1
489988 2008 SP_{151}	17.9	X	233.43186	316.30025	335.39763	7.10452	0.1696841	0.29509925	2.2343814	20	1 25.2	21.3
489989 2008 SX_{152}	16.0	X	58.61582	165.32639	177.33464	18.42569	0.2688837	0.18012389	3.1051923	20	—	—
489990 2008 SA_{156}	16.2	X	29.39282	39.55757	27.99271	27.18694	0.4186367	0.18087787	3.0965571	20	—	—
489991 2008 SJ_{161}	16.0	X	120.67273	273.48824	12.53271	17.06434	0.1356016	0.18176483	3.0864753	20	12 19.5	21.2
489992 2008 SQ_{164}	17.9	X	180.56795	190.32734	174.07440	5.86644	0.1878253	0.29449924	2.2374153	20	3 7.5	21.4
489993 2008 SD_{168}	15.9	X	60.69221	351.01728	338.64386	26.87609	0.1999673	0.17954676	3.1118429	20	12 22.9	21.1
489994 2008 SV_{176}	16.7	X	264.36388	356.04222	13.72570	11.20712	0.2722141	0.22815021	2.6525005	20	5 22.4	20.9
489995 2008 SN_{184}	18.0	X	13.81368	78.68665	43.35211	4.65693	0.1446233	0.27027184	2.3692025	20	—	—
489996 2008 ST_{186}	16.8	X	351.17484	197.96390	220.53105	8.21321	0.0841267	0.17512217	3.1640400	20	12 21.8	20.9
489997 2008 SR_{191}	18.0	X	197.88056	280.46228	40.27094	7.72764	0.0787082	0.28750471	2.2735582	20	1 28.3	21.2
489998 2008 SH_{194}	16.2	X	299.19330	56.81216	54.48153	12.25862	0.0435665	0.17372482	3.1809839	20	12 13.1	20.6
489999 2008 ST_{199}	16.4	X	263.93755	283.13507	215.44368	10.84957	0.0794247	0.17119202	3.2122823	20	11 27.4	20.8
490000 2008 SG_{201}	18.7	X	167.45876	39.74483	309.51249	1.54343	0.2283314	0.28798649	2.2710218	20	2 9.1	22.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490001 2008 SZ_{201}	17.5	X	152.76276	233.71848	238.75333	2.98754	0.1530710	0.22007316	2.7170106	20	6 28.1	21.9
490002 2008 SJ_{205}	18.6	X	266.35604	143.96263	158.60827	5.28864	0.1892006	0.30084223	2.2058544	20	3 7.4	21.7
490003 2008 SB_{206}	18.6	X	227.67195	210.83960	133.07446	4.04809	0.1592590	0.29943088	2.2127805	20	3 26.5	21.8
490004 2008 ST_{208}	18.3	X	93.58846	301.38172	66.87022	3.88203	0.2448341	0.27076763	2.3663095	20	—	—
490005 2008 SL_{218}	16.9	X	331.93904	30.64553	319.53564	6.87572	0.3207937	0.24161990	2.5529810	20	8 29.9	17.8
490006 2008 ST_{218}	17.5	X	293.84082	172.53156	197.68084	13.75866	0.1937186	0.23843241	2.5756837	20	7 13.9	20.8
490007 2008 SF_{224}	18.8	X	186.33550	222.63278	199.84734	18.58839	0.1177731	0.38975050	1.8561437	20	5 28.7	21.3
490008 2008 SU_{231}	16.7	X	71.35487	124.49565	206.64762	9.87252	0.1228538	0.17928307	3.1148935	20	12 23.4	21.5
490009 2008 SR_{233}	16.7	X	34.00248	329.05356	24.78595	12.85478	0.0713454	0.17397770	3.1779007	20	11 26.5	21.3
490010 2008 SZ_{236}	16.1	X	54.59484	337.95967	13.67770	17.68281	0.0860041	0.17621744	3.1509158	20	12 23.9	20.9
490011 2008 SS_{237}	17.8	X	145.32342	33.76936	356.80460	3.96292	0.1680894	0.29294426	2.2453259	20	3 6.4	20.9
490012 2008 SC_{238}	16.8	X	164.94016	266.73395	86.75650	3.14581	0.0808782	0.20177309	2.8789043	20	2 11.9	21.0
490013 2008 SV_{243}	18.2	X	329.84338	320.95692	55.52948	22.35775	0.0923064	0.41121520	1.7909767	20	11 29.8	19.1
490014 2008 SE_{245}	13.9	X	343.04919	72.02343	298.82245	8.48996	0.0278184	0.07995499	5.3362849	20	9 21.8	20.9
490015 2008 SM_{250}	18.0	X	261.19769	281.94670	46.82655	5.71632	0.2256355	0.30675334	2.1774249	20	4 3.2	21.1
490016 2008 SE_{257}	16.5	X	329.55337	53.72013	23.70958	16.28637	0.1710859	0.17306289	3.1890898	20	12 11.9	20.3
490017 2008 SB_{260}	17.8	X	13.52063	342.87523	156.78821	7.49122	0.1724640	0.28155801	2.3054593	20	—	—
490018 2008 SF_{265}	18.0	X	346.73207	117.41928	64.02860	7.42310	0.0393413	0.28517422	2.2859279	20	2 2.5	20.7
490019 2008 SN_{267}	17.9	X	301.09098	93.38439	293.35068	3.44160	0.2457802	0.24021769	2.5629063	20	8 14.9	20.3
490020 2008 SE_{270}	17.9	X	122.99363	14.36129	40.05583	7.24771	0.0814882	0.28834049	2.2691627	20	3 4.4	20.7
490021 2008 SJ_{270}	16.7	X	320.65353	40.87806	36.69259	12.86383	0.1265410	0.16968054	3.2313303	20	11 26.3	20.8
490022 2008 SK_{270}	16.5	X	92.30845	265.26186	59.38117	4.35773	0.1843291	0.17812357	3.1283964	20	—	—
490023 2008 SS_{277}	18.0	X	274.52869	163.73404	231.48459	4.50454	0.1224801	0.23583752	2.5945425	20	8 1.5	21.3
490024 2008 SN_{281}	16.7	X	107.09898	355.08570	50.72308	2.61600	0.0982885	0.19476863	2.9475197	20	2 13.7	20.7
490025 2008 SA_{283}	16.2	X	49.18456	341.39617	30.62964	11.74362	0.0921320	0.17956283	3.1116573	20	—	—
490026 2008 SH_{288}	17.4	X	186.61239	4.67349	97.48242	4.60476	0.0643785	0.22753953	2.6572442	20	7 21.1	21.1
490027 2008 SG_{290}	16.2	X	52.33152	286.89389	67.69944	11.84123	0.1810407	0.17704545	3.1410838	20	—	—
490028 2008 SS_{299}	17.7	X	271.76822	352.62980	50.40739	3.78713	0.2065917	0.23629043	2.5912260	20	7 28.7	21.1
490029 2008 SH_{302}	16.4	X	74.38792	333.42629	16.18607	15.51709	0.1735480	0.18041516	3.1018493	20	—	—
490030 2008 ST_{304}	16.5	X	122.93469	79.24721	217.01330	14.01900	0.1764721	0.18473893	3.0532599	20	—	—
490031 2008 TT_{3}	18.7	X	193.96233	93.30986	346.99238	20.94496	0.1239682	0.39648900	1.8350530	20	7 10.3	21.4
490032 2008 TQ_{4}	16.6	X	90.54076	316.70728	346.50198	2.57970	0.1831944	0.17836431	3.1255809	20	12 15.7	21.7
490033 2008 TB_{7}	17.9	X	240.06623	114.43473	195.80010	7.34412	0.1554322	0.29951748	2.2123539	20	2 20.4	21.4
490034 2008 TO_{16}	17.3	X	350.11700	213.70891	216.20805	8.48197	0.0685792	0.17954944	3.1118120	20	—	—
490035 2008 TP_{16}	18.1	X	38.81326	226.56850	228.57569	4.93469	0.1193206	0.27955573	2.3164546	20	—	—
490036 2008 TV_{16}	14.8	X	279.33597	215.87903	249.26834	7.86352	0.0375850	0.08420158	5.1553229	20	10 24.5	21.7
490037 2008 TE_{18}	17.6	X	205.41265	188.22786	218.76616	4.26456	0.1151816	0.21947955	2.7219074	20	5 28.4	21.8
490038 2008 TY_{19}	18.2	X	120.96387	340.50600	24.87107	2.03191	0.1947435	0.27807605	2.3246647	20	1 10.7	21.1
490039 2008 TO_{20}	17.7	X	155.67886	200.99215	223.95701	1.86884	0.1516142	0.21107171	2.7937188	20	5 2.3	22.0
490040 2008 TB_{22}	18.6	X	147.22808	134.27434	212.09603	2.20697	0.1971847	0.28140578	2.3062907	20	1 15.1	21.8
490041 2008 TH_{30}	18.7	X	34.16388	61.65845	31.09039	1.97060	0.1578844	0.27467904	2.3437918	20	—	—
490042 2008 TM_{36}	17.1	X	194.62007	10.87348	340.98916	3.24594	0.1105137	0.21152666	2.7897116	20	3 9.8	21.5
490043 2008 TK_{41}	17.5	X	332.74901	358.70193	349.71646	12.28939	0.1896068	0.24233801	2.5479351	20	9 6.5	19.6
490044 2008 TR_{51}	16.3	X	18.18626	357.07591	27.14699	11.41727	0.0718390	0.17466948	3.1695044	20	12 14.6	20.7
490045 2008 TS_{51}	18.2	X	241.07024	291.54463	24.99524	5.76347	0.2300617	0.30105820	2.2047994	20	2 29.7	21.8
490046 2008 TQ_{61}	17.5	X	159.64340	356.36533	16.82046	6.29970	0.1125037	0.20513618	2.8473523	20	3 4.0	21.8
490047 2008 TX_{61}	18.5	X	351.61069	151.21584	296.69153	0.69235	0.1454403	0.26389004	2.4072474	20	—	—
490048 2008 TH_{65}	17.7	X	256.33812	332.93263	325.61073	5.38965	0.1832483	0.30130189	2.2036104	20	2 20.9	21.1
490049 2008 TN_{71}	18.5	X	45.14463	336.08858	112.20071	3.74547	0.1632566	0.27490431	2.3425112	20	—	—
490050 2008 TQ_{73}	16.2	X	129.18863	73.67138	225.50747	8.10545	0.1143822	0.17982871	3.1085894	20	—	—
490051 2008 TW_{74}	16.1	X	258.19134	301.76485	216.71050	9.73723	0.0382952	0.17329927	3.1861892	20	12 19.1	20.6
490052 2008 TY_{74}	17.6	X	284.10568	146.97330	217.32245	1.75651	0.1699369	0.23124261	2.6287996	20	6 26.6	20.9
490053 2008 TL_{75}	16.2	X	135.80292	256.04985	37.36692	18.69601	0.0651165	0.17861176	3.1226934	20	—	—
490054 2008 TH_{80}	16.9	X	161.03649	50.89456	189.30058	12.24967	0.1006104	0.17678275	3.1441949	20	12 4.8	22.0
490055 2008 TQ_{84}	18.3	X	76.89419	41.87210	14.85351	6.01260	0.1493904	0.27882492	2.3205004	20	1 6.9	20.5
490056 2008 TB_{86}	18.7	X	303.26451	168.40559	194.33279	2.53516	0.1919255	0.23862492	2.5742982	20	7 22.5	21.3
490057 2008 TF_{86}	18.4	X	330.71051	354.40756	17.65832	2.02847	0.1576197	0.24668643	2.5179042	20	10 9.6	20.4
490058 2008 TG_{86}	16.2	X	163.99568	209.85890	14.79802	10.43222	0.0137050	0.17317693	3.1876896	20	11 17.8	20.8
490059 2008 TQ_{88}	18.1	X	309.63616	15.78841	339.48001	7.13064	0.1662130	0.23835432	2.5762462	20	7 30.1	20.7
490060 2008 TC_{90}	17.3	X	174.70384	173.18588	185.59129	0.81490	0.1568457	0.20520759	2.8466917	20	3 1.3	22.0
490061 2008 TT_{96}	16.7	X	90.40893	72.74398	232.19951	9.09591	0.0826847	0.17680146	3.1439731	20	12 8.6	21.3
490062 2008 TL_{97}	16.6	X	122.47416	291.32627	346.61312	11.68927	0.0389256	0.17655294	3.1469228	20	12 6.1	21.5
490063 2008 TX_{99}	19.0	X	282.01810	89.06597	186.67460	7.52434	0.2966367	0.30451947	2.1880606	20	2 4.1	22.5
490064 2008 TZ_{100}	18.1	X	308.13481	12.41486	11.69750	2.69300	0.1294516	0.24233610	2.5479485	20	9 13.1	20.7
490065 2008 TO_{102}	18.5	X	274.63065	288.97337	27.36011	4.29588	0.1537415	0.30721016	2.1752658	20	4 8.4	21.2
490066 2008 TN_{103}	16.7	X	223.85299	149.15269	271.45796	8.31662	0.3499546	0.22717788	2.6600636	20	6 17.0	21.6
490067 2008 TF_{104}	16.3	X	352.69541	32.48312	15.87428	11.98185	0.1366263	0.17227726	3.1987778	20	12 13.9	20.4
490068 2008 TE_{113}	18.6	X	251.13985	263.47654	72.22964	2.45629	0.1559566	0.30427179	2.1892478	20	4 8.2	21.6
490069 2008 TA_{114}	17.2	X	26.24970	249.97447	187.93957	7.96163	0.1972908	0.18341808	3.0679007	20	—	—
490070 2008 TM_{116}	18.0	X	279.54772	327.10588	354.78504	5.80412	0.2523618	0.31029871	2.1608075	20	4 6.5	20.9
490071 2008 TQ_{117}	18.5	X	49.39333	170.59814	268.92858	1.49945	0.1777274	0.27387026	2.3484039	20	—	—
490072 2008 TU_{119}	18.3	X	190.63221	52.81594	275.07687	3.09937	0.0616058	0.28789900	2.2714819	20	1 25.3	21.2
490073 2008 TX_{121}	17.2	X	295.09764	16.43112	345.29314	11.88516	0.1927477	0.23576874	2.5950470	20	7 9.4	20.5
490074 2008 TC_{124}	19.2	X	71.76726	62.86473	343.44647	4.96246	0.2382141	0.27529194	2.3403118	20	—	—
490075 2008 TD_{131}	17.6	X	44.21631	36.64314	12.47432	12.88069	0.1860063	0.26830423	2.3807715	20	—	—
490076 2008 TM_{135}	17.3	X	152.41770	199.91874	251.05292	3.90616	0.0195413	0.21875477	2.7279162	20	5 23.8	20.9
490077 2008 TR_{145}	18.3	X	162.70225	169.51841	173.93584	3.42944	0.0660905	0.28596223	2.2817266	20	1 13.1	21.1
490078 2008 TG_{146}	17.9	X	325.59722	185.20418	162.37533	2.22784	0.1654975	0.24132774	2.5550411	20	8 18.9	20.3
490079 2008 TO_{147}	18.6	X	53.90197	48.94471	33.26440	5.11934	0.1362410	0.27912133	2.3188574	20	—	—
490080 2008 TL_{150}	17.1	X	126.49284	234.87494	69.68121	2.38367	0.2381674	0.18835223	3.0140853	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490081 2008 TX_{150}	18.6	X	168.71959	284.46274	47.08073	3.96040	0.0401806	0.28458954	2.2890578	20	1 2.9	21.4
490082 2008 TC_{161}	18.2	X	10.46104	265.33470	183.71279	4.54037	0.1956053	0.26992222	2.3712479	20	—	—
490083 2008 TV_{163}	18.7	X	127.42831	346.78093	13.29701	2.50043	0.1636460	0.27915235	2.3186855	20	1 7.1	21.6
490084 2008 TP_{166}	16.9	X	148.94376	313.15453	55.82626	2.82555	0.0909998	0.20031658	2.8928425	20	2 14.9	21.1
490085 2008 TC_{168}	18.3	X	250.86691	279.84148	17.41062	4.39254	0.1588992	0.29587116	2.2304935	20	2 18.4	21.6
490086 2008 TF_{173}	16.8	X	264.11485	148.91854	9.41535	5.06023	0.0144005	0.17886175	3.1197830	20	12 31.3	21.2
490087 2008 TP_{177}	15.7	X	42.88426	334.66598	48.76137	25.21011	0.1828206	0.18040515	3.1019641	20	—	—
490088 2008 TD_{184}	16.8	X	188.06444	77.03103	322.98789	8.38060	0.2817496	0.21405840	2.7676714	20	4 27.7	22.0
490089 2008 TE_{184}	16.6	X	125.03696	72.24131	225.16429	9.77658	0.0765226	0.18311203	3.0713181	20	—	—
490090 2008 UN	17.2	X	247.95637	178.40009	245.15550	5.61211	0.1551840	0.23233369	2.6205629	20	7 30.1	20.9
490091 2008 US_{8}	19.0	X	175.72851	258.05561	199.11372	21.86131	0.0727223	0.39782730	1.8309353	20	7 4.8	21.7
490092 2008 UJ_{11}	16.6	X	67.47994	136.75725	199.36304	9.16624	0.0607146	0.17754989	3.1351317	20	12 17.6	21.2
490093 2008 UG_{22}	18.6	X	45.55785	32.87396	29.72466	2.64315	0.1771109	0.27122850	2.3636283	20	—	—
490094 2008 UX_{22}	18.1	X	291.15415	235.37547	161.90748	1.44929	0.1719053	0.23937488	2.5689186	20	8 25.1	20.9
490095 2008 UN_{23}	17.1	X	163.55184	169.75516	196.59770	1.51803	0.0856733	0.20600491	2.8393417	20	2 24.4	21.3
490096 2008 UT_{24}	18.3	X	28.72755	41.94750	54.26486	3.35224	0.1832324	0.27197731	2.3592878	20	—	—
490097 2008 UW_{26}	16.3	X	154.04370	208.57458	44.07034	17.52906	0.0988060	0.17266886	3.1939396	20	12 8.1	21.4
490098 2008 UL_{27}	17.4	X	179.01488	11.65855	50.50148	5.71793	0.1538206	0.21598943	2.7511507	20	5 20.3	21.9
490099 2008 UT_{27}	17.9	X	295.21721	340.93683	43.96489	9.73591	0.1681721	0.23688105	2.5869171	20	8 19.8	20.9
490100 2008 UR_{28}	17.0	X	27.01316	1.70494	88.41263	2.34047	0.1668230	0.18453776	3.0554784	20	—	—
490101 2008 UV_{29}	18.4	X	124.09951	79.93723	41.63891	22.41340	0.0416576	0.38722894	1.8641929	20	5 24.6	20.3
490102 2008 UW_{30}	18.3	X	275.12992	239.50096	53.69681	7.61826	0.2297278	0.30102132	2.2049795	20	3 3.7	21.6
490103 2008 UD_{32}	15.6	X	120.80568	245.49036	55.23526	11.99271	0.0927217	0.17698482	3.1418012	20	—	—
490104 2008 UQ_{35}	17.1	X	196.77983	291.59804	35.37602	2.37143	0.0624690	0.20344449	2.8631148	20	2 12.7	21.2
490105 2008 UH_{36}	17.4	X	267.80647	57.38916	310.80770	2.33401	0.1966370	0.22738818	2.6584233	20	6 5.7	21.2
490106 2008 UM_{36}	17.6	X	291.78533	86.79080	299.98607	2.01181	0.1451691	0.23547629	2.5971952	20	8 14.3	20.5
490107 2008 UQ_{38}	17.5	X	226.56927	195.17386	237.14628	5.87020	0.1546760	0.22737126	2.6585551	20	7 17.7	21.6
490108 2008 UR_{41}	18.2	X	60.21679	3.51998	35.57906	5.90742	0.2023034	0.26837616	2.3803460	20	—	—
490109 2008 UW_{41}	16.3	X	336.42701	135.50047	232.82282	9.12211	0.1063544	0.15673885	3.4068390	20	9 21.1	20.7
490110 2008 UA_{42}	17.0	X	273.52818	134.31460	232.07026	4.22064	0.2672856	0.22914545	2.6448145	20	5 31.7	20.6
490111 2008 UY_{43}	18.4	X	314.79391	138.75012	208.64657	11.20061	0.2175834	0.23806745	2.5783153	20	7 15.6	21.2
490112 2008 UD_{49}	18.1	X	294.43056	35.62112	36.19035	7.21526	0.3485031	0.24241447	2.5473993	20	9 25.3	20.2
490113 2008 UM_{49}	17.7	X	251.54023	45.30951	16.64083	2.86549	0.1382831	0.23463530	2.6033975	20	8 7.1	21.3
490114 2008 UL_{50}	18.4	X	76.97595	179.64182	202.01458	0.59038	0.1907531	0.27134199	2.3629691	20	—	—
490115 2008 UH_{52}	16.7	X	123.11481	165.20413	229.68761	11.37134	0.2197999	0.19606008	2.9345618	20	2 27.4	21.5
490116 2008 UE_{67}	17.6	X	309.57030	343.22287	9.50727	4.74005	0.2684049	0.23560757	2.5962303	20	7 7.5	20.2
490117 2008 UB_{72}	17.2	X	201.52914	81.53547	318.66160	5.39390	0.1284465	0.21539017	2.7562512	20	5 13.2	21.6
490118 2008 UJ_{75}	17.7	X	265.85425	40.46449	350.75186	2.69496	0.1154266	0.22782430	2.6550295	20	7 17.5	21.3
490119 2008 UN_{75}	18.1	X	184.45517	309.94436	35.99597	7.50911	0.1580061	0.28629231	2.2799724	20	2 20.1	21.7
490120 2008 UK_{77}	17.2	X	200.69168	2.99533	35.72725	3.58372	0.0966304	0.21411891	2.7671500	20	5 12.9	21.3
490121 2008 UZ_{79}	17.1	X	272.56730	73.14827	268.46010	5.22954	0.0457162	0.22120046	2.7077717	20	5 29.6	20.8
490122 2008 UY_{80}	18.3	X	50.01291	342.58171	62.92907	2.43636	0.1823517	0.26984981	2.3716721	20	—	—
490123 2008 UB_{87}	18.3	X	40.36962	258.83714	207.06997	9.24882	0.1915716	0.27661448	2.3328462	20	1 5.8	20.2
490124 2008 UE_{87}	18.5	X	33.76606	40.98016	59.82298	2.26926	0.1389412	0.27512680	2.3412482	20	—	—
490125 2008 UM_{87}	18.2	X	65.51042	93.88726	343.81993	5.20047	0.1187719	0.27704091	2.3304517	20	1 13.9	20.4
490126 2008 UZ_{93}	16.7	X	270.57460	163.23557	201.91843	15.35675	0.2722976	0.22848266	2.6499268	20	5 26.9	20.8
490127 2008 UN_{101}	17.9	X	238.00033	257.32067	3.77011	4.41645	0.1345938	0.28338609	2.2955338	20	—	—
490128 2008 UB_{102}	18.6	X	141.13785	154.12195	242.20968	2.42304	0.0825427	0.28949387	2.2631316	20	2 26.9	21.5
490129 2008 UZ_{104}	17.5	X	159.77968	12.31362	354.13512	1.60371	0.0829534	0.20284047	2.8687959	20	2 21.4	21.6
490130 2008 UO_{108}	17.3	X	319.44171	63.38381	316.22065	4.78353	0.2762415	0.24134102	2.5549473	20	9 13.8	18.9
490131 2008 UM_{119}	18.4	X	323.87193	0.86886	10.81781	6.25904	0.2354427	0.24167532	2.5525907	20	9 20.4	20.0
490132 2008 UT_{120}	17.5	X	30.23070	86.75245	315.45309	5.77469	0.1109021	0.26132803	2.4229552	20	—	—
490133 2008 UA_{123}	17.6	X	280.01634	3.94282	351.31699	6.02867	0.1516428	0.22647851	2.6655370	20	6 10.5	21.1
490134 2008 UW_{124}	17.7	X	122.68503	6.00685	2.10820	7.32022	0.1323186	0.27626653	2.3348046	20	1 8.5	20.7
490135 2008 UY_{124}	17.0	X	212.80635	40.77964	28.59568	15.03653	0.1007085	0.22291133	2.6938989	20	7 6.4	21.3
490136 2008 UE_{128}	17.1	X	339.50233	77.51370	56.39215	20.26924	0.3808582	0.25931582	2.4354733	20	—	—
490137 2008 UZ_{132}	17.4	X	231.26998	354.82316	34.51293	5.32785	0.1185649	0.22199686	2.7012918	20	5 31.8	21.4
490138 2008 UM_{139}	18.2	X	81.81759	339.06711	40.13584	2.10293	0.2003891	0.27066969	2.3668803	20	—	—
490139 2008 UQ_{143}	17.7	X	275.87425	336.20084	52.03374	5.43176	0.1750613	0.23221136	2.6214832	20	7 18.6	21.1
490140 2008 UA_{145}	17.7	X	283.40662	300.66290	78.13827	2.77436	0.1074766	0.23145702	2.6271758	20	7 27.1	21.0
490141 2008 UX_{146}	17.5	X	31.88111	61.33983	38.47731	5.73602	0.1383573	0.27204297	2.3589082	20	—	—
490142 2008 UY_{150}	16.8	X	351.41447	48.75608	66.61149	4.43253	0.1472636	0.18324695	3.0698104	20	—	—
490143 2008 UZ_{150}	17.2	X	209.68168	152.27870	236.27250	2.41458	0.2014497	0.21653958	2.7464889	20	5 5.2	21.8
490144 2008 UX_{154}	16.8	X	17.60765	194.42763	208.94247	10.89648	0.0674910	0.17614394	3.1517923	20	—	—
490145 2008 UY_{156}	18.5	X	16.82065	205.58548	200.91216	1.21524	0.1817223	0.25878376	2.4388104	20	—	—
490146 2008 UW_{157}	17.4	X	139.31191	161.78951	223.34740	14.51887	0.2737079	0.19991781	2.8966880	20	3 5.4	22.5
490147 2008 UZ_{158}	18.4	X	295.35278	29.37096	2.10813	5.88329	0.3139251	0.23699692	2.5860738	20	7 31.4	21.0
490148 2008 UA_{159}	17.4	X	283.00057	50.02273	315.46472	5.35562	0.2182728	0.22905339	2.6455232	20	6 18.8	20.9
490149 2008 UM_{165}	17.3	X	166.67018	246.77421	206.02482	2.11208	0.2345433	0.21693307	2.7431667	20	6 17.8	22.1
490150 2008 UD_{175}	18.5	X	13.81537	67.10699	42.73449	4.34447	0.1483791	0.26946207	2.3739467	20	—	—
490151 2008 UW_{178}	16.9	X	325.96043	121.41866	243.49220	13.96385	0.1223486	0.24210650	2.5495591	20	9 10.4	19.9
490152 2008 UM_{184}	18.6	X	42.06658	347.58688	43.01924	1.85026	0.1871355	0.26176836	2.4202373	20	—	—
490153 2008 UJ_{196}	17.4	X	184.95466	63.27741	46.47675	3.77888	0.0622296	0.22813027	2.6526550	20	7 30.3	21.2
490154 2008 UO_{196}	18.7	X	110.69733	185.02843	193.39804	5.07123	0.1685744	0.27787329	2.3257954	20	1 9.1	21.5
490155 2008 UP_{198}	15.8	X	75.09200	297.42583	35.26383	27.19113	0.1513927	0.17691306	3.1426507	20	12 31.1	21.1
490156 2008 UV_{199}	18.0	X	294.03464	6.75099	31.22827	3.31380	0.2497643	0.23894238	2.5720175	20	8 19.7	20.5
490157 2008 UY_{201}	17.6	X	241.08010	192.16986	194.46751	4.84844	0.0688840	0.22428143	2.6829166	20	6 15.4	21.4
490158 2008 UB_{203}	17.0	X	265.37379	114.83130	258.34707	5.84205	0.3311744	0.23045947	2.6347516	20	5 23.6	21.1
490159 2008 UE_{222}	17.5	X	128.70317	353.02412	20.30425	7.04681	0.1646994	0.27961325	2.3161368	20	1 28.4	20.6
490160 2008 UN_{229}	17.2	X	267.92584	147.50081	254.96413	12.71596	0.2574612	0.23098429	2.6307591	20	7 11.1	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490161 2008 UZ_{230}	17.0	X	344.13444	217.55531	202.92968	15.91406	0.1971538	0.17363203	3.1821171	20	12 20.7	20.8
490162 2008 UN_{236}	17.2	X	30.90486	50.02252	274.01252	5.08574	0.1476297	0.24793467	2.5094461	20	11 14.8	20.4
490163 2008 UW_{240}	16.3	X	114.88701	35.92338	274.05874	8.60981	0.0757178	0.17529838	3.1619193	20	—	—
490164 2008 UN_{243}	17.4	X	8.51157	73.61076	265.02058	11.97587	0.1776457	0.24449873	2.5329015	20	11 2.5	20.3
490165 2008 UP_{245}	17.7	X	316.51492	31.32126	342.76487	3.22305	0.1678192	0.23774404	2.5806531	20	9 9.1	19.9
490166 2008 UZ_{247}	18.6	X	10.08944	195.64819	212.45834	2.62477	0.1857508	0.25644520	2.4536145	20	—	—
490167 2008 UP_{248}	17.5	X	311.90318	233.36421	139.37160	1.04094	0.2248292	0.23669136	2.5882990	20	8 20.8	19.5
490168 2008 UG_{250}	16.7	X	115.77830	239.80058	47.29183	16.93942	0.2053605	0.17680901	3.1438836	20	12 17.7	22.1
490169 2008 UP_{250}	18.3	X	268.38575	243.94579	26.87502	4.38193	0.0398022	0.28825996	2.2695853	20	2 16.2	21.1
490170 2008 UD_{252}	17.2	X	112.98885	252.96112	220.43678	7.90725	0.1267460	0.21062673	2.7976522	20	5 17.5	21.3
490171 2008 UD_{253}	14.3	X	38.08324	355.82025	35.58875	13.62648	0.4826265	0.09475054	4.7652050	20	—	—
490172 2008 UJ_{253}	17.5	X	250.81055	162.08905	207.70689	1.87479	0.1328991	0.22317555	2.6917722	20	5 27.8	21.4
490173 2008 UO_{255}	17.6	X	194.13743	222.70581	139.90643	6.53919	0.2010402	0.29705181	2.2245794	20	3 19.6	21.2
490174 2008 UR_{256}	16.5	X	44.87427	144.42183	220.28647	9.80839	0.0467958	0.17134058	3.2104253	20	12 21.2	21.1
490175 2008 UB_{259}	16.8	X	141.90278	192.55051	243.21761	2.64765	0.0740264	0.20869852	2.8148579	20	4 25.6	20.9
490176 2008 UT_{260}	18.8	X	166.89863	246.97407	100.81222	2.97364	0.2146520	0.28613675	2.2807987	20	2 6.8	22.3
490177 2008 UV_{269}	18.7	X	110.77638	226.38544	149.11928	1.67396	0.1938779	0.27724892	2.3292860	20	1 10.1	21.4
490178 2008 UO_{272}	16.4	X	141.42236	3.25949	273.13442	9.89548	0.0378810	0.17726151	3.1385310	20	12 26.6	21.1
490179 2008 UW_{272}	18.3	X	56.05517	65.59491	33.07075	6.29853	0.0674308	0.27908711	2.3190469	20	1 24.4	20.8
490180 2008 UJ_{275}	16.6	X	100.30948	92.29851	231.46798	8.11847	0.1352143	0.17681704	3.1437884	20	—	—
490181 2008 UN_{277}	18.2	X	324.75739	227.96801	215.77752	2.10644	0.1864504	0.25451607	2.4659972	20	—	—
490182 2008 UF_{283}	18.1	X	265.57550	214.58434	59.36696	5.51598	0.0927705	0.29060034	2.2573833	20	2 10.9	21.2
490183 2008 UL_{283}	17.0	X	58.11254	344.77943	84.72348	2.72817	0.1711139	0.18897333	3.0074774	20	1 15.7	20.3
490184 2008 UD_{285}	16.8	X	254.65636	242.43698	50.98354	8.31468	0.2033205	0.21076520	2.7964267	20	2 24.2	21.4
490185 2008 US_{289}	18.0	X	10.57784	18.49144	104.60029	3.28757	0.1515884	0.26924951	2.3751959	20	—	—
490186 2008 UZ_{299}	18.7	X	36.28669	150.46568	313.06352	2.21519	0.1461742	0.27416483	2.3467215	20	—	—
490187 2008 UW_{302}	18.5	X	315.37480	93.67911	262.27831	3.58500	0.3389591	0.23753592	2.5821602	20	7 11.0	20.3
490188 2008 UT_{303}	17.2	X	73.62574	218.33292	248.84113	8.31799	0.2056460	0.19541143	2.9410522	20	3 29.2	21.1
490189 2008 UJ_{305}	17.2	X	193.26005	50.78974	4.54486	5.67420	0.1461209	0.22167682	2.7038911	20	5 24.1	21.6
490190 2008 UD_{309}	18.5	X	305.36193	19.33867	14.74923	8.25963	0.3177590	0.24102971	2.5571468	20	8 28.3	20.6
490191 2008 UR_{314}	19.0	X	13.00638	278.73218	38.74763	20.00039	0.0631917	0.40928846	1.7965931	20	11 3.4	20.2
490192 2008 UC_{315}	17.1	X	19.90636	13.17058	78.87628	0.81937	0.2009848	0.18009279	3.1055498	20	—	—
490193 2008 UP_{317}	18.0	X	308.30818	103.31242	256.84299	11.49872	0.3040321	0.23906165	2.5711620	20	7 7.1	20.5
490194 2008 UJ_{321}	17.8	X	205.86199	318.38638	9.41017	6.49485	0.1781076	0.29274276	2.2463561	20	2 15.6	21.3
490195 2008 UT_{324}	18.4	X	279.51732	342.12952	329.18926	3.71522	0.2155572	0.30783964	2.1722994	20	3 27.9	21.3
490196 2008 UH_{327}	18.3	X	256.10709	355.58178	350.49604	20.37233	0.0955597	0.39133514	1.8511296	20	4 19.4	20.8
490197 2008 UT_{328}	17.8	X	98.01472	7.45023	23.06373	6.17559	0.1225803	0.27357540	2.3500911	20	1 1.8	20.5
490198 2008 UC_{331}	16.8	X	225.87212	192.73226	228.09789	8.42580	0.3153013	0.22640165	2.6661402	20	6 20.5	21.5
490199 2008 UH_{337}	18.1	X	276.72915	60.57046	304.59383	4.13498	0.1923310	0.22780978	2.6551423	20	6 13.7	21.6
490200 2008 US_{339}	17.9	X	248.98399	210.21524	211.04396	2.90500	0.1568855	0.23080882	2.6320923	20	7 28.9	21.7
490201 2008 UQ_{352}	17.3	X	241.07901	141.16297	239.54349	13.37984	0.2435249	0.22113169	2.7083330	20	5 20.0	21.8
490202 2008 UC_{353}	17.4	X	140.87245	244.31655	235.56802	13.21123	0.1252255	0.21689623	2.7434774	20	6 23.3	21.7
490203 2008 UX_{353}	17.6	X	296.30636	107.91338	248.60486	11.41623	0.2819748	0.23243939	2.6197684	20	6 14.9	20.7
490204 2008 UV_{354}	15.9	X	148.38054	195.50527	76.00168	15.08698	0.0505901	0.17020887	3.2246401	20	12 26.3	20.8
490205 2008 UO_{355}	18.2	X	359.91774	332.18781	142.41107	2.36176	0.2709115	0.26294025	2.4130408	20	—	—
490206 2008 UW_{356}	16.3	X	68.64476	305.47914	31.63289	4.50924	0.1497893	0.17006830	3.2264167	20	12 29.2	21.1
490207 2008 UN_{359}	18.8	X	60.47419	153.52774	258.96394	0.79345	0.1745702	0.27048608	2.3679513	20	—	—
490208 2008 UW_{359}	17.8	X	165.61031	263.77169	185.57701	2.50024	0.1534175	0.21425446	2.7659827	20	6 11.4	22.2
490209 2008 UE_{361}	16.9	X	193.04017	80.78885	324.50542	7.69816	0.1919802	0.21614430	2.7498364	20	5 9.3	21.7
490210 2008 UD_{366}	17.7	X	225.70409	284.84816	346.79668	7.47074	0.1120641	0.28473828	2.2882606	20	—	—
490211 2008 UQ_{368}	17.7	X	101.84965	328.08377	63.40631	12.41992	0.2204582	0.27613678	2.3355359	20	1 27.1	20.5
490212 2008 VP	17.9	X	329.15533	337.41981	11.88522	7.54000	0.3104863	0.24089413	2.5581062	20	8 23.9	19.2
490213 2008 VZ_{1}	18.4	X	91.34077	92.79479	287.40313	4.38606	0.2568954	0.27324924	2.3519608	20	—	—
490214 2008 VF_{4}	17.6	X	239.05358	139.75214	274.68946	3.44567	0.1657088	0.22735656	2.6586697	20	7 7.9	21.6
490215 2008 VJ_{5}	18.0	X	258.72883	200.39350	217.27871	5.22020	0.2369897	0.23339156	2.6126383	20	7 24.2	21.8
490216 2008 VV_{10}	18.0	X	318.91277	134.89594	214.19342	12.53305	0.2992805	0.23766896	2.5811965	20	7 13.6	20.4
490217 2008 VJ_{12}	16.4	X	110.59225	242.45563	99.41891	6.79507	0.1525434	0.18352202	3.0667422	20	—	—
490218 2008 VS_{13}	17.7	X	56.26394	28.60661	64.43504	24.46464	0.2065591	0.27461706	2.3441444	20	2 4.7	20.3
490219 2008 VN_{19}	17.9	X	142.15683	179.28474	163.20159	5.08196	0.1724671	0.27825092	2.3236907	20	1 2.3	21.0
490220 2008 VK_{32}	17.9	X	309.62512	97.85010	76.53675	7.59760	0.1075967	0.27051601	2.3677766	20	—	—
490221 2008 VU_{33}	16.4	X	86.05773	110.89605	206.92591	10.29816	0.0880791	0.17087836	3.2162120	20	12 18.1	21.3
490222 2008 VC_{44}	15.9	X	9.30068	333.02450	34.09185	18.78321	0.1114568	0.16326028	3.3154999	20	11 11.5	20.2
490223 2008 VM_{53}	18.5	X	69.97013	182.29174	200.96012	9.50126	0.2512335	0.26923045	2.3753080	20	—	—
490224 2008 VV_{53}	14.9	X	333.25152	59.22259	2.09370	5.14133	0.0595596	0.08396114	5.1651607	20	11 7.4	21.4
490225 2008 VC_{54}	17.6	X	240.27415	164.65948	321.65374	4.71866	0.1868579	0.23931172	2.5693705	20	10 8.1	21.1
490226 2008 VH_{54}	17.0	X	175.07975	94.34098	249.96326	8.94106	0.1045528	0.19850778	2.9103889	20	2 8.6	21.7
490227 2008 VR_{62}	16.4	X	119.62356	94.96740	219.54568	6.32687	0.1113547	0.17978598	3.1090820	20	—	—
490228 2008 VS_{69}	17.1	X	191.38361	17.22849	29.76738	3.61862	0.1515606	0.21320592	2.7750440	20	5 12.7	21.5
490229 2008 VN_{79}	16.1	X	108.15379	254.38377	82.23746	14.49988	0.1835121	0.17981692	3.1087252	20	—	—
490230 2008 WK_{2}	16.4	X	86.98330	313.36526	47.62629	14.01894	0.2136481	0.18575245	3.0421434	20	—	—
490231 2008 WD_{5}	16.9	X	37.83233	7.16942	64.85527	2.75641	0.2470238	0.18367608	3.0650270	20	—	—
490232 2008 WS_{15}	18.8	X	88.49270	200.81946	182.77269	2.01592	0.2088636	0.27416914	2.3466969	20	—	—
490233 2008 WG_{17}	16.0	X	58.85062	137.05522	216.73055	24.99824	0.1263315	0.17623923	3.1506560	20	—	—
490234 2008 WK_{25}	17.5	X	326.32271	174.57508	186.57517	2.38780	0.1612723	0.23738769	2.5832350	20	9 10.2	19.7
490235 2008 WX_{34}	17.6	X	223.51139	218.91013	175.13530	2.13852	0.0631949	0.22141891	2.7059903	20	6 4.4	21.4
490236 2008 WJ_{36}	16.4	X	85.58020	103.41584	237.84798	8.14725	0.0740905	0.17444997	3.1721627	20	—	—
490237 2008 WO_{38}	18.3	X	335.62833	297.42749	211.61119	2.35523	0.0708800	0.27007041	2.3703804	20	—	—
490238 2008 WN_{39}	17.9	X	30.72751	8.07808	78.85363	3.42718	0.1399378	0.26868467	2.3785236	20	—	—
490239 2008 WV_{44}	18.5	X	12.81829	28.86812	55.09294	2.06146	0.1533613	0.26305294	2.4123516	20	—	—
490240 2008 WH_{46}	17.9	X	56.95729	198.07376	254.29441	6.13400	0.0451504	0.27546637	2.3393237	20	1 13.0	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490241 2008 WA_{47}	17.9	X	286.96434	320.14833	63.44358	6.95597	0.1702268	0.23155081	2.6264664	20	7 30.6	21.1
490242 2008 WN_{53}	19.0	X	11.94657	26.27846	91.24711	3.05168	0.1888709	0.27115300	2.3640669	20	—	—
490243 2008 WR_{59}	18.2	X	50.55707	299.26687	98.11002	3.57679	0.1818511	0.26472359	2.4021915	20	—	—
490244 2008 WH_{66}	17.7	X	286.14032	125.65851	243.81930	10.92255	0.2971811	0.23221119	2.6214844	20	6 15.6	21.1
490245 2008 WB_{73}	18.2	X	294.89398	102.20666	285.62366	2.77441	0.1797033	0.23384453	2.6092633	20	8 14.9	21.1
490246 2008 WF_{81}	17.5	X	231.54793	219.94627	96.35947	6.58275	0.1184941	0.28814007	2.2702148	20	2 27.5	20.8
490247 2008 WK_{85}	17.8	X	57.37993	355.64473	89.27239	5.90907	0.1820124	0.27094572	2.3652725	20	1 15.9	19.6
490248 2008 WV_{86}	18.4	X	118.78316	123.77400	226.78666	3.67002	0.1170375	0.27337596	2.3512339	20	—	—
490249 2008 WB_{92}	18.1	X	158.40576	302.52989	65.39560	7.00795	0.1423666	0.28466507	2.2886529	20	2 21.1	21.5
490250 2008 WS_{95}	17.7	X	323.42760	287.90927	104.95231	5.42073	0.2873801	0.24396491	2.5365950	20	10 28.1	19.1
490251 2008 WY_{103}	15.5	X	19.27586	178.86248	247.69226	27.18064	0.1208006	0.17802666	3.1295317	20	—	—
490252 2008 WH_{107}	18.3	X	280.15314	327.93569	65.52842	4.02958	0.2357968	0.23430884	2.6058151	20	7 21.9	21.4
490253 2008 WW_{110}	16.0	X	134.63627	56.34027	250.50205	6.92652	0.2197881	0.17970207	3.1100498	20	—	—
490254 2008 WC_{114}	17.4	X	60.88302	327.91863	90.70308	2.22740	0.2172499	0.18387944	3.0627668	20	1 13.3	20.6
490255 2008 WC_{120}	17.6	X	100.40288	287.03189	83.80189	2.41323	0.1964089	0.26809807	2.3819918	20	—	—
490256 2008 WY_{137}	17.6	X	317.97418	53.54648	248.39083	19.78230	0.0312565	0.38775420	1.8625090	20	6 13.0	18.9
490257 2008 WQ_{138}	17.0	X	297.18573	223.99635	263.26379	13.54534	0.0606755	0.25375978	2.4708945	20	—	—
490258 2008 WE_{141}	16.5	X	164.28501	107.16167	264.77081	7.70443	0.1205108	0.20136505	2.8827921	20	3 2.1	21.1
490259 2008 XB_{12}	17.9	X	303.79346	257.62580	132.76450	4.90615	0.2405883	0.23797976	2.5789487	20	8 29.1	20.0
490260 2008 XA_{14}	18.0	X	27.87740	102.87191	353.90618	5.07519	0.1887710	0.26933721	2.3746803	20	—	—
490261 2008 XR_{18}	18.4	X	12.50510	311.73810	139.86205	1.80276	0.1448308	0.26188258	2.4195335	20	—	—
490262 2008 XA_{38}	17.9	X	124.67674	340.94668	40.81128	4.80592	0.1399870	0.27722793	2.3294035	20	1 30.6	20.9
490263 2008 XF_{39}	18.0	X	207.05479	38.89265	32.79078	2.07126	0.1168614	0.21965907	2.7204241	20	6 30.6	22.0
490264 2008 YS_{10}	18.0	X	16.98164	14.70376	85.28787	3.07402	0.1269970	0.26631494	2.3926125	20	—	—
490265 2008 YP_{11}	17.8	X	58.71963	0.79517	75.51244	5.74755	0.1238599	0.27178485	2.3604015	20	—	—
490266 2008 YT_{12}	18.5	X	287.04835	317.77814	71.65236	3.53907	0.2352192	0.23299058	2.6156350	20	7 26.9	21.6
490267 2008 YX_{15}	18.2	X	13.93909	7.10491	115.02358	3.28990	0.1487676	0.26504409	2.4002546	20	—	—
490268 2008 YM_{17}	17.8	X	286.93215	102.50408	105.39425	2.33223	0.1234535	0.26021037	2.4298883	20	—	—
490269 2008 YP_{17}	16.9	X	64.01760	198.08673	298.04258	9.14150	0.0828597	0.19182384	2.9776090	20	4 2.6	21.0
490270 2008 YH_{36}	17.1	X	270.10939	214.35592	285.03027	14.17864	0.0472763	0.24535594	2.5269986	20	12 30.2	20.1
490271 2008 YR_{42}	17.6	X	215.89488	16.45705	54.24643	2.13580	0.1530793	0.22204327	2.7009154	20	7 6.0	21.8
490272 2008 YY_{42}	17.3	X	237.51125	12.93510	271.90283	6.70640	0.0948319	0.27959513	2.3162369	20	1 22.5	20.5
490273 2008 YC_{48}	17.9	X	78.13444	326.28785	104.51728	5.88741	0.0908626	0.26895453	2.3769323	20	1 23.3	20.3
490274 2008 YJ_{48}	17.6	X	26.94496	350.48426	101.95838	5.69675	0.1744880	0.26186452	2.4196448	20	—	—
490275 2008 YT_{48}	17.4	X	66.35317	46.81505	96.64772	4.48546	0.2218891	0.19246167	2.9710266	20	5 12.9	21.1
490276 2008 YU_{48}	18.0	X	316.62360	224.57824	308.66712	5.59235	0.1415572	0.25918644	2.4362838	20	—	—
490277 2008 YG_{51}	18.1	X	290.15503	172.72401	42.32856	1.88143	0.1489564	0.26193473	2.4192123	20	—	—
490278 2008 YB_{56}	17.7	X	311.65326	128.92114	243.80359	11.62848	0.1939629	0.23556361	2.5965534	20	8 17.5	20.6
490279 2008 YW_{74}	17.3	X	169.31135	44.25559	359.54341	1.92654	0.1866496	0.20249817	2.8720279	20	4 20.0	22.2
490280 2008 YL_{83}	18.0	X	9.60048	20.00653	86.89035	3.39899	0.1799752	0.26162526	2.4211197	20	—	—
490281 2008 YU_{100}	18.0	X	74.47714	44.54498	331.47309	0.50184	0.2018181	0.25895217	2.4377529	20	—	—
490282 2008 YK_{102}	18.1	X	2.80712	16.84790	128.58588	3.82961	0.1377427	0.26590685	2.3950598	20	—	—
490283 2008 YJ_{104}	18.1	X	90.61977	286.51749	107.42670	4.89777	0.0914944	0.26339535	2.4102605	20	—	—
490284 2008 YS_{105}	17.7	X	343.98181	126.59020	293.20051	5.39408	0.1282264	0.24434013	2.5339975	20	—	—
490285 2008 YD_{113}	17.5	X	132.41914	24.89982	68.26078	2.90918	0.1481118	0.19943324	2.9013783	20	5 14.9	21.9
490286 2008 YL_{117}	17.4	X	302.79666	149.81886	267.46256	4.50650	0.2586983	0.23795501	2.5791275	20	10 1.9	19.5
490287 2008 YX_{117}	18.2	X	291.73487	134.02385	308.80180	4.23459	0.2721470	0.23898801	2.5716901	20	10 14.4	20.6
490288 2008 YC_{124}	17.6	X	187.06377	263.96936	164.16681	2.15261	0.1873013	0.21047085	2.7990334	20	6 4.4	22.2
490289 2008 YS_{125}	17.6	X	143.11582	257.23542	107.06723	7.74929	0.1460123	0.27142010	2.3625157	20	1 30.4	20.9
490290 2008 YM_{126}	18.0	X	108.81025	288.29320	91.23615	2.18856	0.1753715	0.26763402	2.3847444	20	1 12.1	20.6
490291 2008 YY_{126}	17.7	X	323.87802	204.22180	315.96650	3.78156	0.1016528	0.25973828	2.4328318	20	—	—
490292 2008 YD_{132}	18.0	X	262.05143	313.59324	69.07221	3.29726	0.0950195	0.21728654	2.7401910	20	7 2.9	21.6
490293 2008 YR_{135}	17.4	X	207.91848	355.51752	295.08860	6.57675	0.1019843	0.26908613	2.3761572	20	1 1.8	21.0
490294 2008 YZ_{135}	17.4	X	30.01227	153.02278	289.98614	11.47939	0.1131984	0.26289010	2.4133477	20	—	—
490295 2008 YC_{140}	18.1	X	322.95591	287.58109	235.18999	1.58872	0.1502908	0.25986301	2.4320532	20	—	—
490296 2008 YY_{143}	18.2	X	70.26783	280.20548	129.42644	3.81613	0.1842807	0.26427232	2.4049253	20	—	—
490297 2008 YR_{160}	15.8	X	92.19370	87.41353	343.81094	10.48610	0.0703895	0.17434190	3.1734735	20	2 24.9	20.1
490298 2008 YM_{170}	18.1	X	318.77247	262.84584	288.58993	1.23642	0.1112434	0.26510570	2.3998826	20	—	—
490299 2009 AK_{9}	17.4	X	33.01737	158.34750	305.40780	6.30650	0.0656980	0.26655765	2.3911599	20	—	—
490300 2009 AX_{11}	18.0	X	84.87632	295.97007	93.06934	2.26460	0.1668221	0.26364485	2.4087396	20	—	—
490301 2009 AJ_{15}	17.5	X	250.01910	142.51729	300.59044	6.71594	0.3586264	0.22967283	2.6407643	20	8 2.9	21.7
490302 2009 AG_{23}	17.5	X	115.97666	284.38196	96.59289	6.98369	0.1204325	0.26813011	2.3818020	20	1 15.4	20.3
490303 2009 AY_{24}	16.9	X	55.73344	330.34070	177.54577	1.53423	0.1665369	0.19034336	2.9930288	20	4 23.0	20.4
490304 2009 AY_{25}	18.2	X	295.00409	0.17890	181.55660	1.11454	0.1249461	0.25674836	2.4516827	20	—	—
490305 2009 BK_{22}	17.4	X	226.23820	160.70331	328.21241	12.90866	0.1871264	0.22765069	2.6563792	20	9 21.3	21.5
490306 2009 BL_{30}	17.9	X	267.56232	328.11297	111.27182	5.97970	0.2128762	0.23068177	2.6330587	20	9 10.8	21.2
490307 2009 BH_{33}	16.9	X	137.66380	99.94888	318.77794	8.63815	0.0679069	0.19124175	2.9836479	20	3 27.3	21.4
490308 2009 BE_{38}	17.1	X	71.25624	63.52399	31.87269	1.66929	0.2528679	0.18514330	3.0488125	20	3 23.0	20.7
490309 2009 BH_{38}	18.1	X	324.90055	169.46478	17.24310	1.27180	0.1269776	0.26207277	2.4183628	20	—	—
490310 2009 BQ_{38}	17.1	X	104.49602	50.84282	23.86259	1.66433	0.0736927	0.18558540	3.0439686	20	3 13.9	21.2
490311 2009 BG_{40}	18.4	X	351.28545	93.52684	61.20478	2.30647	0.1143402	0.26198117	2.4189265	20	—	—
490312 2009 BS_{40}	18.2	X	293.89403	108.41104	84.88758	2.33805	0.1248327	0.25541134	2.4602313	20	—	—
490313 2009 BQ_{43}	18.7	X	41.20964	73.87802	123.49284	23.74678	0.0832343	0.37311602	1.9109095	20	6 1.6	20.9
490314 2009 BE_{51}	17.2	X	197.55123	179.47041	313.81488	11.41380	0.1780247	0.22200109	2.7012574	20	8 31.4	21.6
490315 2009 BL_{57}	17.8	X	14.33593	300.92353	144.27728	2.73212	0.1788418	0.25745184	2.4472146	20	—	—
490316 2009 BP_{64}	18.2	X	336.29265	160.14031	331.47849	5.56625	0.2001265	0.25459155	2.4655098	20	—	—
490317 2009 BF_{66}	18.2	X	279.28764	120.86125	323.09661	5.01119	0.2636998	0.23296989	2.6157898	20	9 22.3	21.1
490318 2009 BE_{67}	16.5	X	70.14257	151.40849	309.80806	5.31425	0.1790707	0.18334094	3.0687611	20	3 14.9	20.4
490319 2009 BC_{72}	18.2	X	275.27679	164.47877	268.30475	9.54806	0.2429383	0.23305569	2.6151478	20	8 31.2	21.6
490320 2009 BM_{75}	17.6	X	348.85348	183.20522	337.45400	4.83118	0.0863498	0.26544355	2.3978459	20	1 3.6	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490321 2009 BB_{80}	17.5	X	226.03247	126.83215	347.28522	7.21262	0.2257732	0.22643964	2.6658420	20	9 3.4	21.6
490322 2009 BN_{95}	18.0	X	307.86692	79.36700	90.44107	3.37502	0.1342937	0.25692400	2.4505652	20	—	—
490323 2009 BM_{119}	17.2	X	174.15383	104.28771	299.70225	1.18359	0.3057044	0.20411296	2.8568602	20	4 26.4	22.5
490324 2009 BF_{142}	17.3	X	290.06060	89.85178	331.11917	8.48948	0.2721144	0.23241473	2.6199537	20	9 7.2	20.1
490325 2009 BA_{149}	17.3	X	181.36879	75.16200	349.75270	1.42912	0.0533458	0.20249298	2.8720770	20	5 26.0	21.5
490326 2009 BW_{152}	18.1	X	300.32236	84.14712	118.97077	5.89618	0.1725125	0.25951366	2.4342354	20	—	—
490327 2009 BE_{159}	18.1	X	311.72084	212.17722	327.29772	1.00995	0.1243533	0.25438372	2.4668525	20	—	—
490328 2009 BS_{166}	17.8	X	347.39579	28.73950	108.68399	4.02262	0.1289728	0.25520312	2.4615693	20	—	—
490329 2009 BZ_{173}	17.6	X	327.71536	280.39875	122.77077	3.47422	0.2038759	0.23632295	2.5909883	20	11 19.0	19.7
490330 2009 BZ_{179}	18.5	X	347.41210	144.40659	329.89442	1.87746	0.1652944	0.25264647	2.4781479	20	—	—
490331 2009 BJ_{182}	18.2	X	0.06216	81.18958	41.63207	1.77751	0.1487960	0.25729546	2.4482061	20	—	—
490332 2009 BE_{185}	18.1	X	198.22780	266.70016	129.19469	24.93044	0.1372448	0.37699272	1.8977867	20	5 12.8	21.3
490333 2009 BY_{186}	16.5	X	12.10278	188.23327	335.59069	9.83803	0.0138968	0.17868400	3.1218517	20	2 28.4	20.9
490334 2009 CK	18.1	X	192.17471	289.79402	137.12001	22.71242	0.0866196	0.38122260	1.8837226	20	6 16.3	20.8
490335 2009 CN_{25}	17.2	X	82.16698	97.09675	345.75148	8.22314	0.1611673	0.18223243	3.0811933	20	3 8.1	21.3
490336 2009 CC_{35}	18.1	X	279.25274	16.79100	62.14797	3.94870	0.1565128	0.23211618	2.6221998	20	10 6.9	21.2
490337 2009 DE_{8}	16.3	X	62.77980	108.16763	337.27314	12.89336	0.2117268	0.17581556	3.1557156	20	2 21.5	19.9
490338 2009 DV_{26}	17.9	X	227.57925	341.11715	328.81120	4.99248	0.1621294	0.26733140	2.3865437	20	2 13.4	21.5
490339 2009 DN_{30}	16.6	X	284.57655	108.06728	154.98189	3.09353	0.0187280	0.18000162	3.1065983	20	3 11.8	21.0
490340 2009 DO_{49}	17.2	X	167.53821	153.12285	1.58512	10.95144	0.1359854	0.21179281	2.7873739	20	9 5.3	21.7
490341 2009 DW_{59}	18.1	X	282.03385	207.23566	26.55996	5.28955	0.1612130	0.25609430	2.4558553	20	1 4.6	21.7
490342 2009 DL_{68}	18.2	X	302.59018	274.24705	150.01069	5.86413	0.2916896	0.23820908	2.5772933	20	10 13.3	20.0
490343 2009 DD_{71}	17.3	X	98.77603	181.17153	285.44913	1.95544	0.2073316	0.19178494	2.9780115	20	5 2.3	21.6
490344 2009 DE_{81}	17.5	X	316.02805	321.04587	136.29684	4.36142	0.1797647	0.23775439	2.5805782	20	—	—
490345 2009 DB_{104}	18.0	X	260.55877	209.18162	359.73300	2.89026	0.1417190	0.24488844	2.5302136	20	—	—
490346 2009 DJ_{110}	16.7	X	127.72846	233.28447	343.29035	8.09586	0.1013564	0.22006189	2.7171033	20	10 8.1	20.8
490347 2009 DE_{132}	16.5	X	98.10243	91.35548	332.63596	9.27484	0.1248958	0.17881569	3.1203188	20	2 28.8	20.9
490348 2009 DS_{139}	16.3	X	73.59650	124.70289	341.88766	12.25635	0.1002849	0.18253282	3.0778118	20	3 15.5	20.4
490349 2009 EM	18.3	X	219.89904	31.14323	358.00523	19.88927	0.0844056	0.37160542	1.9160846	20	5 10.9	21.1
490350 2009 ES_{5}	16.5	X	261.05848	284.46660	356.69082	10.70337	0.0662911	0.17549342	3.1595761	20	3 1.7	21.2
490351 2009 EX_{8}	17.3	X	109.81731	67.90078	30.13655	6.29189	0.1450757	0.18938173	3.0031521	20	4 26.4	21.7
490352 2009 EY_{15}	16.4	X	113.69586	255.64490	355.53430	13.48524	0.2020561	0.21894183	2.7263622	20	11 8.0	21.1
490353 2009 EH_{19}	18.0	X	8.19841	107.91935	341.37013	5.92975	0.1485307	0.25308325	2.4752959	20	—	—
490354 2009 FF_{19}	21.3	X	26.83535	244.84926	84.84269	0.55843	0.4093040	0.73772631	1.2130328	20	—	—
490355 2009 FQ_{28}	15.8	X	181.38813	344.73925	15.66200	27.24674	0.0526520	0.17635384	3.1492908	20	3 17.9	20.7
490356 2009 FM_{43}	17.8	X	272.40035	135.45687	32.19368	25.14136	0.3205104	0.24076756	2.5590026	20	—	—
490357 2009 FM_{46}	17.8	X	166.31101	326.06869	156.38376	23.48374	0.0726061	0.37996461	1.8878781	20	8 2.9	20.1
490358 2009 FP_{57}	18.0	X	304.70313	323.91852	24.53579	21.43143	0.0758232	0.37496242	1.9046312	20	8 22.8	20.1
490359 2009 FM_{65}	18.6	X	292.61880	24.23554	181.94518	3.10581	0.1583973	0.25195505	2.4826796	20	—	—
490360 2009 FD_{72}	17.2	X	252.43529	208.04260	30.77937	14.38909	0.1264499	0.24401376	2.5362565	20	—	—
490361 2009 HR_{11}	17.6	X	205.68015	168.36924	118.26228	4.87250	0.2209883	0.23839653	2.5759421	20	1 1.1	22.1
490362 2009 HG_{20}	17.7	X	237.46641	16.50519	210.11844	7.60396	0.1278812	0.23942942	2.5685284	20	—	—
490363 2009 HA_{24}	17.3	X	199.53102	181.29835	124.54488	7.20776	0.1239064	0.24514863	2.5284230	20	1 15.8	21.1
490364 2009 HO_{34}	17.6	X	193.84038	247.99154	31.56329	8.68154	0.1434568	0.23897243	2.5718019	20	—	—
490365 2009 HU_{34}	17.2	X	210.18075	235.93739	20.59298	17.09855	0.0946962	0.23890256	2.5723033	20	—	—
490366 2009 HZ_{34}	17.3	X	116.85295	76.62729	272.02582	3.85369	0.1159175	0.23819445	2.5773988	20	—	—
490367 2009 HC_{37}	16.4	X	118.86000	310.35945	22.27489	32.69174	0.3112161	0.23257999	2.6187125	20	—	—
490368 2009 HV_{50}	17.1	X	236.69694	44.03972	192.62207	13.03581	0.1011961	0.24059214	2.5602464	20	—	—
490369 2009 HV_{73}	17.9	X	116.46211	53.80133	66.51185	22.71062	0.0988816	0.36489660	1.9394987	20	5 26.0	19.8
490370 2009 HV_{74}	18.0	X	0.75543	79.67622	209.29486	20.54375	0.0772244	0.37265949	1.9124698	20	8 6.6	20.2
490371 2009 HT_{84}	17.0	X	168.48718	160.09557	156.34727	13.36813	0.1762704	0.23545430	2.5973569	20	1 3.5	21.3
490372 2009 JZ_{3}	17.6	X	201.27216	214.77676	230.46448	20.49615	0.0853565	0.37100818	1.9181404	20	7 15.4	20.4
490373 2009 JY_{6}	17.0	X	113.55348	240.92324	83.10995	13.66078	0.1842145	0.22463123	2.6801306	20	—	—
490374 2009 JT_{9}	18.0	X	200.35591	210.55685	196.56015	20.87620	0.0964341	0.36308065	1.9459603	20	5 23.9	20.7
490375 2009 JU_{9}	17.3	X	261.36372	77.87689	160.98706	11.05895	0.1358021	0.24642761	2.5196670	20	—	—
490376 2009 JO_{17}	17.3	X	185.93603	190.79744	126.92076	13.40100	0.1283920	0.24220495	2.5488682	20	1 17.6	21.2
490377 2009 KY_{3}	18.0	X	29.55420	37.05917	225.44578	4.40654	0.2097522	0.27971886	2.3155539	20	9 1.6	20.3
490378 2009 KJ_{23}	17.9	X	291.35996	319.17593	211.52597	12.81863	0.2066050	0.24010564	2.5637036	20	—	—
490379 2009 KF_{24}	17.4	X	228.56514	99.15503	177.53778	12.97384	0.1345989	0.24352464	2.5396514	20	1 7.1	21.6
490380 2009 LH	17.6	X	278.96464	64.69354	156.45009	10.38606	0.2083357	0.24334726	2.5408854	20	—	—
490381 2009 OE_{10}	17.1	X	167.26391	190.79873	163.13597	14.52332	0.2576387	0.22897842	2.6461006	20	2 20.5	21.8
490382 2009 OX_{19}	15.8	X	336.42662	357.05989	307.12417	13.28770	0.3483674	0.17285387	3.1916602	20	6 8.6	18.8
490383 2009 OK_{22}	16.4	X	147.78085	180.16117	149.17314	18.24015	0.2953969	0.21612652	2.7499872	20	1 12.5	21.2
490384 2009 ON_{23}	16.8	X	193.87275	303.50459	320.25215	12.33364	0.1747622	0.22063516	2.7123948	20	—	—
490385 2009 PO_{2}	18.1	X	88.87923	59.90678	271.74708	4.20462	0.2802501	0.29727284	2.2234766	20	—	—
490386 2009 PX_{2}	17.3	X	147.73150	209.96801	104.04376	3.71869	0.2394183	0.21801178	2.7341106	20	—	—
490387 2009 PS_{5}	17.3	X	175.55428	304.44927	18.56349	1.91806	0.2449635	0.22679134	2.6630853	20	1 22.9	21.8
490388 2009 PP_{18}	18.1	X	293.55484	69.48223	334.43339	6.35174	0.1907943	0.26868014	2.3785503	20	9 10.1	20.1
490389 2009 QK_{1}	17.7	X	3.61898	113.20137	144.09221	27.11444	0.1300978	0.35151312	1.9884211	20	6 29.0	19.8
490390 2009 QA_{5}	17.9	X	78.55290	35.33454	330.14702	6.41252	0.2101380	0.30001715	2.2098968	20	—	—
490391 2009 QT_{7}	17.4	X	198.77804	129.99795	181.73021	15.58389	0.2448474	0.22921274	2.6442969	20	1 23.8	22.3
490392 2009 QH_{13}	17.6	X	346.14799	49.40751	334.74053	6.99765	0.1371076	0.27917910	2.3185374	20	12 5.3	20.0
490393 2009 QJ_{13}	17.4	X	193.56532	116.59842	172.88478	7.84312	0.2070396	0.22265733	2.6959472	20	—	—
490394 2009 QN_{21}	17.1	X	217.60498	157.48751	126.40520	5.37795	0.2440679	0.23026629	2.6362250	20	1 7.6	21.8
490395 2009 QE_{23}	16.5	X	197.55507	316.20420	322.35122	10.91885	0.1784851	0.22383914	2.6864496	20	—	—
490396 2009 QU_{24}	17.1	X	147.42960	133.10243	174.84191	9.51917	0.2438544	0.21608990	2.7502979	20	—	—
490397 2009 QH_{40}	15.5	X	118.26039	195.11591	167.61936	2.82808	0.2360528	0.12436706	3.9749573	20	1 30.1	21.6
490398 2009 QS_{56}	16.7	X	135.88581	39.97902	264.85589	3.34477	0.1836681	0.21167773	2.7883841	20	—	—
490399 2009 QP_{61}	16.4	X	171.08244	343.71179	292.41093	10.59233	0.2281187	0.21273225	2.7791617	20	—	—
490400 2009 RA	16.8	X	174.36379	244.19511	107.47615	14.20160	0.2830128	0.22589317	2.6701397	20	2 29.0	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490401 2009 RY_{1}	17.2	X	130.26318	167.94400	194.51318	3.14653	0.2077606	0.21751235	2.7382942	20	1 26.9	21.3
490402 2009 RV_{11}	17.1	X	125.66632	143.00920	172.36913	2.03094	0.0783153	0.20447773	2.8534617	20	—	—
490403 2009 RR_{29}	16.1	X	348.12853	54.36632	355.87321	12.78922	0.1180376	0.18966107	3.0002026	20	12 13.1	20.0
490404 2009 RQ_{33}	14.6	X	359.47035	326.79172	17.56121	3.47596	0.0385235	0.08175389	5.2577156	20	9 16.8	21.4
490405 2009 RP_{34}	16.7	X	298.18492	279.69348	203.28069	11.07382	0.0751224	0.19182693	2.9775770	20	12 29.1	20.7
490406 2009 RS_{39}	16.7	X	298.95649	205.87403	206.28225	16.91328	0.2388476	0.17593119	3.1543326	20	9 3.3	20.7
490407 2009 RM_{49}	16.7	X	250.52347	93.82817	17.31870	24.28129	0.0485282	0.17859531	3.1228851	20	10 12.6	21.0
490408 2009 RV_{56}	16.6	X	325.07241	357.39689	40.70426	10.70591	0.1312626	0.17848883	3.1241271	20	10 20.1	20.2
490409 2009 RW_{70}	18.8	X	347.65647	208.11772	166.01509	1.53135	0.2106465	0.27498876	2.3420316	20	12 4.2	20.7
490410 2009 RL_{72}	16.2	X	301.10915	63.80691	357.23931	16.89502	0.2663538	0.18089498	3.0963618	20	9 20.4	19.4
490411 2009 RP_{73}	16.3	X	269.89913	265.88047	193.61990	24.23815	0.3326775	0.17476866	3.1683052	20	9 8.8	21.0
490412 2009 SX_{14}	17.3	X	205.62601	117.53126	192.75686	11.94793	0.2633954	0.22945012	2.6424728	20	1 26.9	22.2
490413 2009 SC_{32}	17.3	X	146.31127	106.88391	230.31257	2.47743	0.2001009	0.21844183	2.7305209	20	1 11.9	21.7
490414 2009 SC_{34}	16.6	X	58.67341	332.40471	0.42681	9.71753	0.1023304	0.18958541	3.0010007	20	12 10.6	21.0
490415 2009 SU_{35}	14.1	X	314.89435	38.79584	8.12711	9.20631	0.1121746	0.08466963	5.1363066	20	9 26.9	20.5
490416 2009 SD_{40}	16.6	X	257.54315	114.21045	16.52694	10.87068	0.0174505	0.18555410	3.0443110	20	11 18.0	20.9
490417 2009 SX_{42}	16.1	X	248.57194	184.23694	3.45404	11.18069	0.0382721	0.19736993	2.9215639	20	—	—
490418 2009 SY_{42}	14.4	X	307.69022	43.41469	13.58742	16.45483	0.0621493	0.08478236	5.1317528	20	10 3.9	21.0
490419 2009 SO_{43}	17.7	X	218.32990	152.97574	217.97083	8.39612	0.1753667	0.23898844	2.5716871	20	4 21.4	21.7
490420 2009 SG_{50}	16.2	X	338.43584	32.86835	0.06971	28.35355	0.1891623	0.18465517	3.0541831	20	10 23.5	19.9
490421 2009 SX_{53}	18.5	X	24.52159	354.78943	34.70875	5.41460	0.1338241	0.28646988	2.2790302	20	—	—
490422 2009 SM_{56}	16.8	X	359.93621	40.87069	325.55652	6.69937	0.1347399	0.18218556	3.0817217	20	11 3.5	20.6
490423 2009 SP_{56}	18.7	X	327.85717	176.29978	233.83775	5.69357	0.2201005	0.27443404	2.3451865	20	12 17.9	20.2
490424 2009 SN_{61}	17.6	X	216.20791	162.02456	212.02701	11.93592	0.1856488	0.23976745	2.5661138	20	4 23.2	21.6
490425 2009 SP_{68}	17.4	X	48.32669	38.81770	319.41834	4.70772	0.0481187	0.19593823	2.9357784	20	12 24.6	21.5
490426 2009 SY_{69}	18.8	X	11.94315	198.22152	206.32468	2.66982	0.1089566	0.28865879	2.2674942	20	—	—
490427 2009 SU_{73}	17.2	X	45.94607	351.64400	41.29739	10.97718	0.1263273	0.19895082	2.9060666	20	—	—
490428 2009 SL_{75}	17.4	X	74.68156	27.68629	49.40364	9.58073	0.2171962	0.21337180	2.7736056	20	2 28.9	20.8
490429 2009 SB_{77}	16.6	X	23.32181	207.99769	176.70663	12.30726	0.0878792	0.19063469	2.9899787	20	12 29.0	20.8
490430 2009 SB_{81}	17.8	X	208.98746	34.93440	336.55623	2.79250	0.1317844	0.24162526	2.5529432	20	4 14.1	21.7
490431 2009 SE_{88}	17.6	X	153.12553	330.84000	68.86838	4.97277	0.2074869	0.22754687	2.6571871	20	4 3.9	21.9
490432 2009 SF_{96}	16.7	X	298.75672	31.19463	39.75785	9.56229	0.1477191	0.17462876	3.1699971	20	10 16.7	20.6
490433 2009 SJ_{107}	16.4	X	266.06680	271.28229	209.69959	15.25192	0.0723821	0.18384185	3.0631843	20	11 12.8	20.6
490434 2009 SR_{107}	17.7	X	299.38865	40.15733	4.42342	3.37093	0.1247282	0.26632867	2.3925302	20	10 2.4	19.9
490435 2009 SA_{114}	17.0	X	162.97875	43.05796	274.97916	3.59932	0.1539912	0.21676419	2.7445914	20	1 1.5	21.4
490436 2009 SQ_{117}	17.4	X	108.10763	137.74517	228.36927	3.98774	0.0638369	0.21112461	2.7932522	20	—	—
490437 2009 SC_{120}	16.7	X	37.78490	72.52742	289.73522	1.98273	0.0658190	0.19250058	2.9706263	20	12 17.9	20.6
490438 2009 SY_{124}	16.8	X	113.32618	317.64867	350.71710	8.73764	0.1676700	0.20032936	2.8927195	20	—	—
490439 2009 SU_{130}	19.0	X	18.06021	233.57726	158.42225	2.62848	0.2040636	0.28431045	2.2905556	20	—	—
490440 2009 SA_{136}	16.3	X	301.93811	240.33471	205.39998	15.27510	0.1623316	0.18228133	3.0806422	20	11 9.8	19.9
490441 2009 SG_{136}	18.1	X	258.52440	215.76241	236.84298	1.63164	0.1720274	0.26477712	2.4018677	20	9 24.7	21.0
490442 2009 SF_{145}	18.4	X	272.08656	297.66248	47.50424	2.23798	0.2243283	0.25191899	2.4829165	20	5 7.2	21.9
490443 2009 SR_{146}	18.3	X	57.01866	293.79164	44.49629	3.07794	0.1991764	0.28432643	2.2904697	20	—	—
490444 2009 ST_{151}	16.7	X	304.92468	87.85665	2.62297	9.12083	0.0597827	0.18990124	2.9976725	20	11 27.3	20.7
490445 2009 SL_{158}	16.6	X	260.29215	281.04068	221.01888	14.51283	0.1910998	0.18391543	3.0623672	20	11 13.8	20.7
490446 2009 SO_{164}	14.2	X	322.35207	218.75508	174.29119	3.35154	0.0318635	0.08179741	5.2558508	20	9 26.5	21.0
490447 2009 SX_{166}	16.9	X	303.80126	9.89320	33.98007	11.00853	0.1975008	0.17483273	3.1675311	20	9 16.4	20.7
490448 2009 SJ_{184}	14.3	X	267.85980	208.23041	242.32570	8.62138	0.0553413	0.08468109	5.1358433	20	9 21.5	21.2
490449 2009 SN_{192}	17.0	X	150.23716	324.81728	349.87629	7.41029	0.2130938	0.21311554	2.7758286	20	—	—
490450 2009 SX_{204}	16.5	X	299.45252	40.75708	20.72922	9.23486	0.1028630	0.17706498	3.1408529	20	10 9.9	20.3
490451 2009 SY_{204}	16.4	X	1.15730	34.67425	24.49884	17.47415	0.0292275	0.19309409	2.9645360	20	—	—
490452 2009 SR_{209}	16.1	X	271.67988	276.59787	197.33816	25.53952	0.2190531	0.18126737	3.0921197	20	10 20.7	20.1
490453 2009 SU_{213}	18.7	X	63.55363	152.65140	187.26174	5.41387	0.2114786	0.28751810	2.2734876	20	—	—
490454 2009 SM_{214}	18.7	X	19.17336	195.29925	162.46285	1.10206	0.2050912	0.27900593	2.3194967	20	12 31.9	21.4
490455 2009 SO_{214}	18.2	X	344.89918	210.20251	168.20758	1.80231	0.1941858	0.27310854	2.3527685	20	12 1.9	20.1
490456 2009 SA_{240}	15.7	X	318.23955	330.89360	46.41086	18.23231	0.2142204	0.17572492	3.1568005	20	9 12.0	19.5
490457 2009 SE_{250}	17.7	X	327.70205	44.54007	12.46255	8.09898	0.1235397	0.27695990	2.3309062	20	12 18.5	20.0
490458 2009 SL_{262}	17.6	X	201.24369	137.99316	241.66353	4.96267	0.1459030	0.23798055	2.5789430	20	4 16.5	21.7
490459 2009 SD_{266}	17.7	X	351.85686	18.86790	18.05947	10.41076	0.1038044	0.27720423	2.3295363	20	12 29.8	20.4
490460 2009 ST_{270}	15.0	X	61.12375	163.37004	131.90250	10.43580	0.0709391	0.17488030	3.1669566	20	10 27.4	19.6
490461 2009 SV_{271}	16.8	X	311.58611	53.11068	7.09763	11.23255	0.1713584	0.17989410	3.1078360	20	10 18.9	20.3
490462 2009 SX_{271}	16.6	X	259.82919	113.65443	6.54383	11.41290	0.1739066	0.17896666	3.1185637	20	10 16.2	21.0
490463 2009 SD_{275}	18.6	X	326.03725	29.82581	25.30792	6.52972	0.1212957	0.27731734	2.3289028	20	12 12.2	20.8
490464 2009 SB_{283}	16.4	X	317.46816	15.28990	41.27662	10.96845	0.0842515	0.18310509	3.0713957	20	11 2.2	20.2
490465 2009 SM_{287}	17.4	X	305.72142	176.36377	278.74717	4.23438	0.1422146	0.18585647	3.0410082	20	11 29.8	20.9
490466 2009 SW_{287}	16.6	X	121.21174	310.26405	355.80549	11.67093	0.0279330	0.19770230	2.9182886	20	—	—
490467 2009 SY_{289}	18.3	X	19.77310	357.64913	37.71382	8.40360	0.1874269	0.28500035	2.2868576	20	—	—
490468 2009 SB_{291}	16.5	X	272.49358	55.50187	41.65067	14.31704	0.2707108	0.17492019	3.1664752	20	9 27.3	21.0
490469 2009 SU_{293}	18.0	X	344.37607	0.46459	56.74349	6.30548	0.1451068	0.28088356	2.3091483	20	—	—
490470 2009 ST_{299}	16.8	X	283.21271	218.04708	207.55167	13.66875	0.2574590	0.17318029	3.1876483	20	8 23.8	21.2
490471 2009 SS_{321}	16.7	X	306.32330	357.60156	50.31841	9.56825	0.0895947	0.17664984	3.1457718	20	10 7.3	20.8
490472 2009 SU_{323}	16.9	X	327.74274	46.29875	33.24821	6.08965	0.2018847	0.18689594	3.0297221	20	12 19.7	20.0
490473 2009 SO_{324}	18.3	X	73.35136	113.49908	250.24864	3.30913	0.1790157	0.29307171	2.2446749	20	—	—
490474 2009 SZ_{334}	16.4	X	144.94707	319.93481	353.76385	21.53682	0.3091903	0.21311246	2.7758553	20	—	—
490475 2009 SW_{344}	17.7	X	121.67552	282.09131	146.34713	3.10410	0.0553058	0.22724952	2.6595045	20	3 21.1	21.4
490476 2009 SK_{345}	17.7	X	196.58966	343.94198	38.19331	0.88789	0.1612277	0.23553541	2.5967606	20	4 16.5	21.9
490477 2009 SQ_{345}	16.9	X	321.45751	211.21104	196.22715	10.84070	0.1228856	0.18185478	3.0854575	20	10 26.7	20.6
490478 2009 SG_{349}	16.0	X	322.25864	32.55658	28.40347	18.00714	0.2068269	0.17965469	3.1105965	20	11 6.5	19.4
490479 2009 SM_{350}	16.8	X	186.61440	253.30511	24.10412	14.46687	0.2116039	0.21429380	2.7656442	20	—	—
490480 2009 SV_{350}	16.5	X	168.60207	251.31238	39.49787	20.78778	0.1331177	0.20909716	2.8112790	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490481 2009 SO_{352}	16.5	X	21.94758	356.45248	7.13553	11.73054	0.1236393	0.18746929	3.0235417	20	12 3.4	20.7
490482 2009 SZ_{352}	16.8	X	213.13903	142.48947	6.56218	12.57977	0.0429211	0.17949367	3.1124565	20	10 13.9	21.4
490483 2009 SH_{353}	17.5	X	90.49147	232.34717	215.12011	4.37792	0.0960731	0.22278745	2.6948974	20	3 9.6	21.1
490484 2009 SJ_{353}	15.8	X	237.99745	77.93052	20.63319	32.72684	0.1624516	0.17045372	3.2215513	20	9 15.2	21.1
490485 2009 SK_{360}	16.0	X	303.23000	42.58939	21.09246	17.80746	0.2202347	0.17642677	3.1484229	20	10 6.4	19.6
490486 2009 SW_{362}	16.7	X	318.88149	37.89516	7.68720	16.00061	0.0924905	0.18310071	3.0714447	20	10 17.2	20.7
490487 2009 TM_{1}	17.1	X	201.77028	41.40057	339.05324	5.03727	0.3259204	0.23627787	2.5913179	20	4 14.5	22.0
490488 2009 TR_{6}	16.8	X	173.09954	274.90999	23.11084	16.72421	0.3546962	0.21723729	2.7406051	20	—	—
490489 2009 TM_{7}	16.2	X	4.83516	102.21875	269.10145	8.32390	0.2758408	0.18293787	3.0732670	20	12 9.8	19.4
490490 2009 TA_{34}	16.0	X	319.86273	64.56282	354.96612	15.77298	0.2637828	0.18047171	3.1012013	20	10 23.5	19.1
490491 2009 TH_{39}	18.1	X	19.11962	331.89758	59.46961	25.45907	0.2573358	0.28323033	2.2963754	20	—	—
490492 2009 UA_{5}	17.0	X	314.40327	153.89912	236.03688	11.30699	0.2498807	0.26781424	2.3836744	20	9 25.7	18.8
490493 2009 UN_{5}	18.2	X	20.77579	54.22528	310.26308	4.93311	0.2180837	0.28082958	2.3094442	20	—	—
490494 2009 UF_{13}	18.4	X	44.19944	357.07121	16.63006	3.00064	0.1810171	0.28992108	2.2609078	20	—	—
490495 2009 UN_{15}	17.0	X	284.41857	79.70021	28.40129	12.92416	0.1140289	0.18567029	3.0430408	20	11 13.5	21.0
490496 2009 UN_{17}	18.2	X	313.65410	175.98327	218.47868	4.97667	0.2210023	0.26697081	2.3886922	20	10 8.5	19.6
490497 2009 UM_{19}	18.3	X	121.39154	354.56845	18.85768	3.26182	0.1838578	0.30593009	2.1813294	20	1 15.9	20.7
490498 2009 UR_{28}	18.9	X	269.21248	290.84682	145.21822	0.54817	0.2472416	0.26122696	2.4235801	20	9 4.6	21.7
490499 2009 UQ_{34}	16.4	X	291.67475	264.04594	183.37743	15.50592	0.1870222	0.17889106	3.1194423	20	10 22.6	20.2
490500 2009 UF_{35}	18.8	X	49.76233	319.16016	44.98666	7.16623	0.2092835	0.28405433	2.2919322	20	—	—
490501 2009 UF_{36}	17.3	X	302.92763	262.12862	179.68023	2.98576	0.1834303	0.17984179	3.1084387	20	11 3.0	20.8
490502 2009 UA_{38}	16.5	X	282.70791	232.05349	216.92969	9.07454	0.1878236	0.17407129	3.1767616	20	10 5.9	20.7
490503 2009 UR_{38}	18.9	X	37.19117	147.50452	199.89240	2.35271	0.2380455	0.27914498	2.3187264	20	—	—
490504 2009 UD_{39}	16.4	X	0.51855	340.17955	54.33037	11.03643	0.1748313	0.18418481	3.0593806	20	12 17.7	20.0
490505 2009 UF_{53}	17.2	X	205.89995	356.93936	20.33522	4.88190	0.3015634	0.23605971	2.5929141	20	4 15.4	21.9
490506 2009 UK_{68}	17.1	X	16.06082	334.37877	55.36114	11.26276	0.1108646	0.19046034	2.9918032	20	12 28.9	21.1
490507 2009 UB_{69}	16.7	X	329.42070	221.42681	177.65838	9.47251	0.1460982	0.18520363	3.0481504	20	10 30.9	20.2
490508 2009 UD_{71}	16.0	X	325.10734	34.21884	25.14885	15.21168	0.2015956	0.18058623	3.0998900	20	11 10.7	19.3
490509 2009 UF_{78}	16.7	X	46.25357	327.34661	27.22118	15.73766	0.0349971	0.18882606	3.0090410	20	12 11.3	21.1
490510 2009 UF_{83}	18.1	X	258.37083	250.52418	163.61581	1.70329	0.1758133	0.25368412	2.4713857	20	7 30.7	21.1
490511 2009 UC_{85}	17.3	X	182.49035	173.93035	202.83942	5.45459	0.0792826	0.22560690	2.6723979	20	3 26.0	21.2
490512 2009 UY_{86}	18.4	X	322.88359	172.08188	251.67027	1.33653	0.1568814	0.27454364	2.3445624	20	12 21.7	20.3
490513 2009 UT_{97}	16.6	X	315.03797	7.22847	51.29677	11.85904	0.0838557	0.17823284	3.1271178	20	11 1.3	20.5
490514 2009 UF_{101}	17.1	X	19.78752	201.33780	214.07077	9.64537	0.0993747	0.19327295	2.9627067	20	—	—
490515 2009 UY_{104}	16.4	X	306.48526	35.70904	51.75179	11.75403	0.1750997	0.18271624	3.0757517	20	11 17.5	19.6
490516 2009 UU_{109}	16.0	X	163.77356	155.21846	55.46357	27.58482	0.0474195	0.17604295	3.1529974	20	11 7.3	20.7
490517 2009 UF_{117}	16.4	X	260.95706	234.64261	249.69291	9.27412	0.2094623	0.17744365	3.1363829	20	10 16.8	21.0
490518 2009 UW_{120}	17.2	X	37.69443	304.19930	35.48917	6.50555	0.1274452	0.18650625	3.0339409	20	11 26.6	21.4
490519 2009 UL_{121}	16.5	X	291.61455	54.11539	27.23472	16.13908	0.2071086	0.17681335	3.1438321	20	10 11.3	20.2
490520 2009 UA_{123}	16.3	X	319.92691	285.83280	140.41600	5.58089	0.1749612	0.18158326	3.0885325	20	11 16.5	19.8
490521 2009 UQ_{128}	16.5	X	292.97620	227.75417	207.77186	11.06716	0.0620238	0.18016063	3.1047701	20	10 23.0	20.6
490522 2009 UO_{137}	15.9	X	307.53690	343.88870	63.66222	12.22827	0.1229370	0.17659767	3.1463913	20	10 7.9	20.0
490523 2009 UR_{137}	16.3	X	293.02800	30.44688	47.54174	12.76040	0.2238669	0.17730591	3.1380070	20	10 9.6	20.1
490524 2009 US_{139}	17.7	X	337.10008	94.92086	310.38808	6.29220	0.2053527	0.27354933	2.3502404	20	12 29.2	19.6
490525 2009 UF_{141}	15.9	X	299.64202	57.21732	36.71329	27.11716	0.2640963	0.17734933	3.1374948	20	10 31.4	19.1
490526 2009 UH_{142}	16.8	X	14.48229	338.38137	43.61011	6.67988	0.1629102	0.18581256	3.0414872	20	12 22.9	20.7
490527 2009 UK_{146}	16.1	X	186.32450	225.75086	56.23738	9.35796	0.2617634	0.20991403	2.8039811	20	—	—
490528 2009 UQ_{154}	16.5	X	73.42715	276.81994	67.98105	6.99408	0.1461945	0.19742466	2.9210239	20	—	—
490529 2009 VC	16.3	X	212.68715	257.61814	48.38551	27.87528	0.2982849	0.22605755	2.6688452	20	2 8.4	21.7
490530 2009 VJ_{7}	17.9	X	343.98382	97.75415	276.48083	3.42233	0.2034208	0.26975016	2.3722561	20	11 22.6	19.8
490531 2009 VO_{17}	17.4	X	200.69238	154.63568	217.96984	14.77873	0.1911255	0.23352664	2.6116307	20	4 6.2	21.9
490532 2009 VZ_{17}	17.8	X	315.89963	72.74267	301.89867	3.87984	0.2518796	0.26292794	2.4131162	20	9 3.9	19.3
490533 2009 VP_{24}	15.8	X	324.55813	157.41708	243.89669	13.99042	0.1828826	0.17773556	3.1329479	20	10 15.8	19.5
490534 2009 VW_{27}	15.9	X	287.31360	244.22051	231.01164	25.27590	0.2459229	0.17934274	3.1142025	20	11 9.7	19.4
490535 2009 VQ_{29}	18.1	X	18.41031	352.65282	41.17262	9.98426	0.1833888	0.28383836	2.2930947	20	—	—
490536 2009 VJ_{30}	16.3	X	308.23240	26.93261	26.22250	9.91318	0.0674974	0.17352476	3.1834284	20	10 14.8	20.5
490537 2009 VQ_{37}	15.9	X	331.59983	171.17373	234.81918	13.28311	0.1702451	0.17844115	3.1246835	20	11 8.5	19.2
490538 2009 VK_{38}	18.2	X	5.91928	352.33657	7.27038	2.22823	0.2351920	0.27294315	2.3537188	20	12 18.8	20.6
490539 2009 VL_{41}	17.7	X	344.90719	10.12310	358.69289	4.29932	0.2172415	0.27009253	2.3702510	20	11 17.3	19.5
490540 2009 VD_{46}	16.5	X	287.31574	244.11852	237.19436	21.41103	0.2207182	0.18011694	3.1052722	20	11 21.8	20.0
490541 2009 VN_{48}	17.4	X	99.58001	344.16043	85.04518	4.77027	0.0775956	0.21460430	2.7629759	20	2 29.2	21.2
490542 2009 VY_{48}	18.0	X	83.22045	306.92378	43.22429	4.89135	0.1720521	0.29040999	2.2583696	20	—	—
490543 2009 VD_{55}	16.1	X	70.08274	263.52686	40.10145	23.20611	0.0813078	0.18449046	3.0560007	20	11 13.1	20.6
490544 2009 VW_{68}	18.1	X	85.67097	168.76762	261.75861	4.83086	0.1253449	0.30424456	2.1893784	20	1 30.9	20.3
490545 2009 VR_{70}	17.0	X	190.39050	95.29546	266.61643	5.40545	0.0683781	0.22247083	2.6974537	20	3 13.9	21.0
490546 2009 VB_{72}	17.4	X	341.76131	321.27007	78.28371	7.58511	0.0889003	0.27267025	2.3552890	20	12 13.0	19.8
490547 2009 VG_{73}	18.6	X	71.37307	331.08343	120.76360	0.56884	0.1258353	0.31093102	2.1578770	20	2 7.1	20.3
490548 2009 VS_{81}	18.9	X	326.49160	30.30514	351.81777	1.76886	0.1871827	0.26659378	2.3909438	20	10 22.3	20.6
490549 2009 VP_{84}	16.2	X	322.33524	151.96885	264.09907	8.20162	0.0611290	0.17399317	3.1777123	20	11 5.6	20.5
490550 2009 VU_{88}	18.2	X	265.95607	214.27618	236.04343	1.21112	0.1607420	0.26615144	2.3935922	20	10 5.5	20.9
490551 2009 VC_{89}	17.1	X	96.23140	39.08959	32.22677	8.25200	0.2144404	0.21497046	2.7598376	20	3 19.3	20.9
490552 2009 VR_{90}	16.1	X	331.00455	124.10968	268.75637	10.62264	0.0974767	0.17361988	3.1822656	20	10 16.7	20.3
490553 2009 VB_{99}	16.4	X	60.13201	161.93151	168.43853	3.38422	0.1531526	0.18377163	3.0639645	20	12 15.8	21.0
490554 2009 VV_{103}	15.8	X	52.87414	85.38635	244.30508	14.14151	0.0869615	0.17680633	3.1439153	20	11 26.3	20.3
490555 2009 VH_{116}	16.2	X	38.88119	325.94864	40.69596	14.61344	0.2399775	0.18818590	3.0158610	20	—	—
490556 2009 WL_{5}	16.5	X	12.39693	264.57733	126.67082	15.93903	0.1861413	0.18642550	3.0348170	20	—	—
490557 2009 WC_{19}	17.8	X	216.13639	187.71588	170.18481	2.86174	0.1137457	0.23144511	2.6272660	20	4 7.1	21.8
490558 2009 WT_{19}	17.3	X	121.40416	262.74098	148.65562	4.03789	0.0807750	0.21777423	2.7360985	20	3 3.0	20.9
490559 2009 WR_{20}	17.3	X	212.35212	321.35153	51.44907	7.40332	0.3699933	0.23592291	2.5939164	20	4 14.8	22.2
490560 2009 WQ_{24}	18.6	X	54.90454	317.78714	60.93694	9.49320	0.2375829	0.28768783	2.2725933	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490561 2009 WY_{25}	13.7	X	341.27589	336.39179	45.83374	12.92477	0.1647708	0.08207829	5.2438529	20	10 7.7	19.9
490562 2009 WU_{26}	17.1	X	8.54061	359.36578	49.69905	10.13322	0.0898450	0.18772332	3.0208134	20	—	—
490563 2009 WD_{32}	16.3	X	359.28507	0.24937	73.22230	17.63158	0.1115147	0.18825027	3.0151735	20	—	—
490564 2009 WQ_{32}	18.9	X	43.95227	57.50454	72.49990	1.80001	0.1830679	0.30419190	2.1896311	20	2 19.1	20.2
490565 2009 WK_{39}	18.0	X	312.41933	23.48941	39.44068	2.67457	0.1998485	0.26826784	2.3809867	20	11 25.1	19.7
490566 2009 WM_{39}	16.0	X	337.41462	138.80034	255.99499	8.91343	0.0733984	0.17432501	3.1736784	20	10 31.4	20.1
490567 2009 WJ_{44}	16.2	X	23.96088	318.25036	37.11519	18.23032	0.1461762	0.18249871	3.0781953	20	11 26.6	20.4
490568 2009 WD_{51}	18.2	X	28.64226	161.09641	222.77567	2.31657	0.2340002	0.28092470	2.3089229	20	—	—
490569 2009 WS_{57}	16.8	X	91.66030	264.67292	61.47599	12.20797	0.1213973	0.19131998	2.9828346	20	—	—
490570 2009 WD_{59}	16.7	X	340.54451	213.67791	222.46033	8.64884	0.1298614	0.18662655	3.0326370	20	—	—
490571 2009 WU_{59}	16.3	X	3.68898	303.14775	65.68169	10.49980	0.0812453	0.17835561	3.1256826	20	11 10.7	20.3
490572 2009 WR_{62}	16.4	X	3.82836	315.83927	82.18130	11.82726	0.0310409	0.18281593	3.0746335	20	12 11.7	20.5
490573 2009 WB_{65}	18.1	X	13.34411	4.06467	35.22068	6.08565	0.1627366	0.28646074	2.2790787	20	—	—
490574 2009 WR_{76}	16.1	X	220.76761	256.99005	260.47963	20.62217	0.2552631	0.16728861	3.2620590	20	10 3.9	21.9
490575 2009 WG_{82}	16.8	X	255.31954	202.30709	293.22621	8.03330	0.0316604	0.17916881	3.1162176	20	11 19.0	21.2
490576 2009 WF_{83}	17.2	X	147.30629	162.70002	330.31144	4.54977	0.1612333	0.24005018	2.5640984	20	7 21.2	21.2
490577 2009 WO_{87}	16.4	X	28.25831	346.46535	50.24312	12.12115	0.1068936	0.18879356	3.0093862	20	—	—
490578 2009 WV_{98}	17.3	X	85.29374	181.42329	248.42694	9.09979	0.2508294	0.21212852	2.7844324	20	3 1.5	21.1
490579 2009 WA_{101}	17.1	X	304.96140	104.16730	130.78051	2.89633	0.0280563	0.21853101	2.7297780	20	2 25.9	20.7
490580 2009 WL_{104}	15.5	X	96.49363	256.20522	101.09707	17.66469	0.1140868	0.19842973	2.9111521	20	—	—
490581 2009 WZ_{104}	20.0	X	237.95764	10.55317	263.26770	9.83449	0.1927615	1.24587752	0.8553670	20	—	—
490582 2009 WD_{113}	16.6	X	289.89797	21.46809	72.08467	18.09535	0.1959870	0.17441396	3.1725993	20	10 30.4	20.6
490583 2009 WP_{114}	16.9	X	319.73405	56.52922	38.18225	10.02743	0.0473996	0.19038608	2.9925811	20	12 25.6	21.0
490584 2009 WV_{118}	18.1	X	26.40266	127.31913	246.16043	4.04002	0.1770341	0.27950813	2.3167175	20	—	—
490585 2009 WE_{119}	16.9	X	88.03403	75.84268	240.30712	7.54762	0.0600283	0.18516732	3.0485488	20	12 18.5	21.3
490586 2009 WW_{120}	18.3	X	356.95074	147.74768	251.44869	3.42423	0.1641531	0.27615065	2.3354577	20	—	—
490587 2009 WT_{127}	17.5	X	185.60531	36.76825	76.71490	7.94767	0.2128114	0.24251455	2.5466984	20	7 31.6	21.8
490588 2009 WF_{133}	16.7	X	277.67518	228.90199	233.02740	5.39483	0.1812604	0.17602447	3.1532182	20	10 16.7	20.9
490589 2009 WZ_{135}	16.7	X	70.55026	232.05131	231.74935	11.19228	0.0426643	0.21828220	2.7318520	20	2 22.1	20.5
490590 2009 WT_{145}	17.7	X	270.85834	166.90652	233.21642	10.78071	0.2103310	0.25664768	2.4523239	20	7 19.7	21.1
490591 2009 WG_{155}	16.6	X	101.89893	340.72301	5.63767	8.41128	0.2004898	0.20037479	2.8922821	20	—	—
490592 2009 WO_{167}	16.3	X	247.67015	87.05428	66.21356	14.06289	0.2486554	0.17513695	3.1638620	20	11 5.5	21.1
490593 2009 WL_{169}	18.1	X	303.61440	337.90680	88.37798	7.17267	0.0950097	0.26652070	2.3913809	20	11 16.0	20.6
490594 2009 WL_{170}	16.7	X	42.68019	337.12249	50.86215	9.89356	0.1216467	0.19057576	2.9905950	20	—	—
490595 2009 WL_{172}	17.2	X	101.28436	288.93160	16.57814	6.68141	0.1430235	0.18888736	3.0083899	20	12 27.3	22.0
490596 2009 WH_{173}	16.2	X	280.12690	258.33514	237.83058	8.27565	0.0568980	0.18076116	3.0978898	20	12 19.8	20.3
490597 2009 WK_{173}	15.9	X	215.06497	322.05566	233.09029	13.42049	0.2303758	0.17484341	3.1674021	20	11 22.1	21.0
490598 2009 WR_{175}	18.6	X	35.86592	297.91590	82.11836	4.59398	0.2070974	0.28350054	2.2949160	20	—	—
490599 2009 WX_{175}	16.6	X	246.53875	145.63956	357.00450	5.28515	0.1483540	0.17545958	3.1599824	20	10 31.0	21.1
490600 2009 WK_{176}	16.1	X	309.17976	155.99362	262.40560	12.63233	0.0910909	0.17404924	3.1770298	20	10 15.9	20.5
490601 2009 WO_{177}	16.6	X	329.76830	0.69358	40.65927	10.59948	0.1085645	0.17503602	3.1650781	20	10 30.5	20.3
490602 2009 WU_{178}	16.2	X	8.06980	328.70625	37.58931	10.63239	0.0268919	0.17456473	3.1707722	20	11 5.7	20.6
490603 2009 WO_{179}	16.3	X	242.91450	124.80410	52.85673	16.30456	0.1386551	0.18158062	3.0885625	20	12 10.0	20.7
490604 2009 WT_{180}	15.5	X	328.62348	41.10116	85.51524	12.68414	0.0403748	0.19320922	2.9633583	20	—	—
490605 2009 WK_{182}	16.3	X	350.08792	333.22051	57.34220	10.34526	0.0846619	0.17566410	3.1575292	20	11 16.5	20.4
490606 2009 WN_{184}	17.4	X	13.60178	121.06616	235.53695	8.47004	0.2072972	0.27309754	2.3528317	20	12 21.1	20.1
490607 2009 WO_{185}	16.7	X	120.56089	103.46067	234.09020	13.86087	0.1667167	0.20402265	2.8577032	20	—	—
490608 2009 WJ_{186}	13.9	X	15.47898	98.54812	248.46297	13.67881	0.1137620	0.08325497	5.1943267	20	10 9.8	20.4
490609 2009 WT_{195}	17.4	X	145.67563	140.79097	261.48838	4.12228	0.1293321	0.22229935	2.6988407	20	3 21.2	21.6
490610 2009 WF_{203}	15.7	X	336.29218	135.97579	246.46099	14.75732	0.1129015	0.17223501	3.1993009	20	10 11.3	19.8
490611 2009 WU_{203}	16.7	X	342.65456	180.35083	239.10512	9.29702	0.1245612	0.18104297	3.0946742	20	12 14.9	20.5
490612 2009 WX_{205}	16.9	X	14.75482	77.05350	289.69270	3.50621	0.1183207	0.17958189	3.1114371	20	11 26.3	21.0
490613 2009 WQ_{207}	18.4	X	327.91193	15.08352	37.65546	2.86383	0.1890486	0.27083405	2.3659226	20	12 16.7	20.3
490614 2009 WC_{212}	16.4	X	101.26472	258.45199	81.54883	12.51527	0.0733464	0.19331085	2.9623195	20	—	—
490615 2009 XT_{15}	16.0	X	10.22408	314.61523	111.40238	17.55614	0.0730584	0.18192284	3.0846879	20	—	—
490616 2009 XU_{24}	16.3	X	304.73219	352.24482	88.58494	19.11167	0.2138570	0.17465652	3.1696612	20	11 7.4	20.1
490617 2009 YM_{1}	16.4	X	308.95832	359.60744	83.59290	6.90729	0.1252890	0.17181880	3.2044654	20	11 18.6	20.2
490618 2009 YA_{3}	16.3	X	294.83404	9.73055	111.95590	12.06862	0.0484442	0.17598532	3.1536858	20	12 21.9	20.6
490619 2009 YC_{19}	17.5	X	176.32520	50.24914	80.07647	4.71257	0.1604409	0.24058638	2.5602872	20	8 15.1	21.6
490620 2009 YQ_{24}	17.9	X	189.28461	151.93812	311.42813	3.96023	0.2182710	0.23799812	2.5788160	20	7 20.2	22.1
490621 2010 AC_{19}	18.3	X	30.88825	187.18560	248.91612	0.37664	0.1933291	0.28594039	2.2818427	20	—	—
490622 2010 AV_{28}	16.3	X	296.34756	356.44632	92.37518	7.88090	0.1610984	0.17048207	3.2211942	20	11 3.3	20.3
490623 2010 AZ_{32}	18.2	X	17.60876	77.91875	90.50516	5.37321	0.1352289	0.29937294	2.2130659	20	2 24.9	19.9
490624 2010 AN_{53}	18.3	X	30.11632	277.34646	235.62593	2.72252	0.1095137	0.29786655	2.2205210	20	2 22.3	20.1
490625 2010 AZ_{80}	16.7	X	230.44445	169.10394	231.09878	4.31128	0.3219924	0.23751677	2.5822990	20	5 29.8	21.3
490626 2010 AY_{91}	17.4	X	117.12540	107.27049	31.18648	8.09201	0.1664189	0.21446610	2.7641628	20	6 27.2	21.8
490627 2010 BS_{3}	17.4	X	158.14181	100.10076	342.03420	11.12396	0.2262801	0.22484864	2.6784027	20	5 26.1	22.2
490628 2010 BW_{4}	17.8	X	183.67185	127.70303	345.94564	3.51522	0.1472813	0.23578855	2.5949017	20	7 30.9	21.8
490629 2010 BO_{81}	16.3	X	0.99998	218.32619	173.75819	16.73520	0.1290822	0.18491551	3.0513158	20	12 12.3	20.4
490630 2010 BF_{122}	16.4	X	38.08159	267.32408	234.91465	8.20744	0.1210118	0.18839138	3.0136678	20	3 8.1	20.2
490631 2010 CF_{5}	18.2	X	119.31152	304.61863	100.03864	3.97044	0.1413811	0.29346682	2.2426597	20	2 21.3	20.8
490632 2010 CN_{29}	18.7	X	9.09382	356.61269	142.23224	2.61654	0.1685357	0.28587795	2.2821750	20	—	—
490633 2010 CV_{85}	15.7	X	67.09444	207.94386	133.57625	13.62896	0.0729495	0.17077658	3.2174898	20	12 24.3	20.5
490634 2010 CA_{128}	16.9	X	248.39811	221.06091	343.19831	10.24959	0.1931629	0.26778284	2.3838608	20	—	—
490635 2010 CB_{139}	18.3	X	1.07711	351.81640	92.84146	4.76733	0.2378834	0.27690548	2.3312115	20	—	—
490636 2010 DP	18.6	X	179.19338	286.82357	174.56084	36.43834	0.3956698	0.41987405	1.7662684	20	7 11.1	22.7
490637 2010 DD_{60}	16.0	X	291.75905	27.07480	81.35254	28.25410	0.0978754	0.17774445	3.1328434	20	11 30.6	20.1
490638 2010 DU_{74}	17.6	X	308.17895	41.81334	168.98086	5.53462	0.1044171	0.28553172	2.2840195	20	1 6.3	20.5
490639 2010 ED_{1}	15.9	X	323.93355	333.64665	83.43580	27.41454	0.1223756	0.17476055	3.1684032	20	11 18.2	20.0
490640 2010 ED_{32}	18.2	X	7.75001	345.47549	158.09410	6.39688	0.1518724	0.28589364	2.2820915	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490641 2010 EJ_{68}	18.1	X	298.64301	82.04090	158.52301	7.97364	0.1413549	0.28494504	2.2871535	20	1 28.3	21.1
490642 2010 EU_{76}	18.8	X	35.88892	292.52576	176.12157	4.60913	0.1160977	0.28623273	2.2802888	20	—	—
490643 2010 EW_{78}	18.5	X	29.05706	18.86112	119.66151	2.88316	0.1155484	0.28931981	2.2640392	20	2 1.3	20.2
490644 2010 EG_{94}	18.1	X	329.22032	164.82705	29.48150	3.72667	0.1028621	0.28607105	2.2811479	20	1 14.2	20.6
490645 2010 ER_{123}	15.9	X	332.20935	108.61957	33.36694	11.57963	0.1120340	0.17679191	3.1440863	20	—	—
490646 2010 EO_{128}	17.9	X	337.37167	170.63303	358.95800	5.69902	0.0887411	0.27938807	2.3173812	20	—	—
490647 2010 ES_{132}	18.6	X	254.92984	279.46287	332.87133	1.42195	0.1901596	0.27389291	2.3482745	20	—	—
490648 2010 EC_{133}	18.1	X	285.24597	23.58431	213.61506	5.51063	0.1782948	0.27864386	2.3215056	20	1 5.6	21.5
490649 2010 EU_{135}	18.1	X	4.46445	327.18181	193.94033	4.72809	0.1188104	0.28307164	2.2972335	20	1 19.7	20.4
490650 2010 FX_{31}	17.0	X	166.05299	187.78426	136.20043	16.50523	0.0802519	0.25771927	2.4455213	20	—	—
490651 2010 FM_{47}	17.8	X	273.22706	55.29015	165.71348	5.18187	0.1044718	0.27389167	2.3482815	20	—	—
490652 2010 FY_{86}	18.4	X	324.77686	135.61790	59.86572	2.61118	0.1424521	0.28221737	2.3018670	20	1 3.3	20.9
490653 2010 FT_{99}	18.3	X	257.40671	128.80631	140.16754	2.03051	0.2186721	0.27632495	2.3344754	20	1 16.6	22.0
490654 2010 FD_{101}	18.0	X	42.99745	235.32849	228.22982	4.61948	0.2207874	0.28264512	2.2995440	20	1 7.6	19.3
490655 2010 GZ_{26}	17.8	X	301.64300	147.81963	72.66232	7.52669	0.1385983	0.27804131	2.3248584	20	1 8.5	20.9
490656 2010 GA_{31}	17.0	X	86.70174	140.32808	24.33991	8.29058	0.1514044	0.21102793	2.7941053	20	6 25.0	21.0
490657 2010 GQ_{66}	17.9	X	267.00273	218.02592	38.65150	5.20015	0.2038232	0.27724495	2.3293082	20	1 11.9	21.7
490658 2010 GS_{108}	17.6	X	270.19458	20.52259	213.87622	6.07898	0.0633810	0.27102267	2.3648248	20	—	—
490659 2010 GS_{111}	18.5	X	264.60856	271.13766	14.96366	2.03412	0.2012864	0.28102719	2.3083615	20	2 14.7	21.9
490660 2010 GW_{117}	18.3	X	236.97437	163.73890	112.57913	6.87988	0.2366317	0.26909863	2.3760837	20	1 9.2	22.4
490661 2010 GN_{132}	17.4	X	233.15577	268.87898	77.16009	9.93812	0.1743029	0.28700607	2.2761908	20	4 7.1	21.0
490662 2010 HG_{43}	17.9	X	229.17273	319.06327	347.45119	4.84698	0.2791431	0.26272917	2.4143331	20	2 8.6	22.2
490663 2010 HH_{61}	17.8	X	218.20662	2.09817	305.43012	3.85733	0.2388132	0.25975804	2.4327084	20	2 1.6	21.8
490664 2010 HZ_{77}	18.4	X	265.18160	308.93376	326.33283	1.56611	0.2262364	0.27765558	2.3270110	20	1 30.6	22.2
490665 2010 HH_{103}	18.3	X	296.13693	207.21930	44.23900	7.69705	0.1480892	0.28183840	2.3039300	20	2 12.9	21.4
490666 2010 HU_{103}	18.8	X	318.05638	17.32457	173.50333	1.11113	0.1196914	0.27614340	2.3354986	20	—	—
490667 2010 HF_{105}	18.3	X	299.81173	8.50920	216.77217	2.69943	0.0531881	0.27761299	2.3272491	20	1 23.6	21.1
490668 2010 JK_{29}	18.5	X	270.66770	246.21460	40.95662	2.83042	0.2107905	0.28020785	2.3128592	20	2 21.7	21.8
490669 2010 JN_{31}	17.6	X	309.38964	160.09784	56.39531	24.20520	0.0980453	0.27881128	2.3205762	20	1 22.1	21.1
490670 2010 JX_{33}	18.1	X	333.62101	328.53129	208.01526	4.43726	0.1982730	0.27713279	2.3299366	20	—	—
490671 2010 JE_{41}	15.6	X	50.00928	81.23182	187.31079	13.44090	0.2346690	0.12509313	3.9595614	20	9 21.7	20.9
490672 2010 JU_{43}	18.8	X	299.37915	108.15035	140.93687	4.52456	0.1936650	0.28039584	2.3118253	20	2 3.8	21.7
490673 2010 JW_{96}	17.3	X	107.06486	50.17036	294.11492	10.24018	0.2084051	0.23449484	2.6044370	20	—	—
490674 2010 JB_{113}	17.7	X	312.03147	175.31220	69.03296	12.06922	0.1812333	0.28462091	2.2888896	20	2 20.8	20.7
490675 2010 JW_{148}	17.9	X	227.10674	247.90278	43.78198	11.86448	0.2788122	0.26849228	2.3796596	20	1 22.0	22.3
490676 2010 JA_{156}	18.3	X	341.04406	1.57471	176.43677	2.99186	0.1681361	0.27819747	2.3239883	20	—	—
490677 2010 JK_{163}	18.3	X	285.71586	172.68209	45.19927	5.91336	0.1683264	0.27488747	2.3426069	20	—	—
490678 2010 JJ_{176}	17.9	X	265.51561	238.79560	34.97815	10.92283	0.2829109	0.27443260	2.3451948	20	1 28.8	22.0
490679 2010 KO_{53}	16.8	X	253.13070	144.23800	219.21683	9.50302	0.2309538	0.17683370	3.1435910	20	5 12.1	21.7
490680 2010 KR_{84}	18.0	X	235.37704	164.10412	146.24913	5.30473	0.2237148	0.26239087	2.4164079	20	2 18.7	22.1
490681 2010 LJ_{8}	16.8	X	273.26766	26.36840	325.10885	6.11831	0.1635652	0.17938672	3.1136934	20	5 25.1	21.3
490682 2010 LT_{28}	16.3	X	303.07783	350.60821	347.57210	16.37924	0.1124558	0.18510838	3.0491959	20	6 28.7	20.6
490683 2010 LH_{34}	18.6	X	262.83842	108.04163	156.27874	8.66996	0.2914062	0.27081780	2.3660173	20	1 11.2	22.9
490684 2010 LL_{34}	19.4	X	269.39664	270.98079	120.27192	22.71972	0.5544802	0.68045770	1.2801729	20	6 2.6	20.9
490685 2010 LB_{37}	16.1	X	272.63713	92.56050	251.64132	10.72052	0.1558809	0.17765313	3.1339169	20	5 17.1	20.7
490686 2010 LY_{44}	17.0	X	53.90895	50.64632	320.22842	12.11764	0.2138115	0.22151535	2.7052049	20	—	—
490687 2010 LV_{113}	17.1	X	274.01922	186.14595	106.62754	16.91067	0.2840321	0.27454064	2.3445795	20	2 28.9	21.1
490688 2010 MH_{17}	16.8	X	281.40024	156.41915	201.46002	12.88881	0.2110020	0.18082991	3.0971045	20	6 7.3	21.3
490689 2010 MG_{35}	17.3	X	286.79918	54.01863	311.37149	14.08197	0.2766839	0.18231471	3.0802661	20	6 13.9	21.7
490690 2010 MW_{65}	16.7	X	71.50448	101.51362	261.99242	10.01218	0.2091326	0.22300388	2.6931535	20	—	—
490691 2010 MN_{114}	16.2	X	285.58079	130.62359	219.31932	26.61025	0.2613369	0.17865472	3.1221928	20	5 25.1	20.8
490692 2010 NG_{5}	17.6	X	195.01896	160.62425	146.93403	3.67787	0.1964886	0.25498271	2.4629876	20	1 14.5	21.6
490693 2010 NV_{6}	16.7	X	92.04180	337.23581	311.78961	8.75034	0.2101424	0.22132511	2.7067548	20	12 9.6	21.2
490694 2010 NU_{30}	16.5	X	262.44652	358.43574	10.04883	13.21787	0.2352992	0.17505532	3.1648455	20	5 22.8	21.5
490695 2010 OC_{24}	17.9	X	328.22255	114.86355	233.43843	8.01659	0.4006244	0.19010703	2.9955087	20	7 14.9	20.1
490696 2010 OE_{70}	17.0	X	101.11873	175.88191	159.05984	5.74471	0.0888339	0.22019198	2.7160330	20	—	—
490697 2010 OA_{71}	17.1	X	279.31625	91.36281	273.97653	8.20127	0.2510275	0.17704444	3.1410959	20	6 7.8	21.7
490698 2010 OV_{76}	16.8	X	300.15843	94.56155	261.14392	10.54831	0.2243600	0.18093056	3.0959559	20	6 27.7	20.7
490699 2010 OW_{103}	17.2	X	202.17997	199.02036	98.04757	18.27021	0.2485755	0.26420238	2.4053497	20	1 8.3	21.4
490700 2010 OM_{125}	17.1	X	131.82307	294.17111	45.94898	12.33200	0.1940205	0.23140895	2.6275397	20	—	—
490701 2010 PH_{24}	17.8	X	217.01217	148.82796	163.16739	1.23189	0.1930229	0.26090398	2.4255798	20	2 6.3	21.8
490702 2010 PQ_{35}	16.5	X	295.61079	347.11552	13.33571	10.20833	0.2885222	0.18009656	3.1055064	20	6 16.3	20.7
490703 2010 PF_{41}	16.5	X	277.13791	31.80975	339.38172	9.34445	0.4028330	0.17737878	3.1371475	20	5 21.9	21.6
490704 2010 PP_{57}	17.0	X	47.10575	331.03570	340.01344	3.59076	0.2100315	0.21092289	2.7950328	20	11 19.9	20.9
490705 2010 PT_{63}	17.1	X	247.09824	343.55741	313.01169	5.82060	0.1185592	0.26586614	2.3953043	20	2 17.2	20.6
490706 2010 PY_{79}	17.4	X	123.23596	6.45116	331.96602	11.71292	0.1205848	0.23568674	2.5956489	20	—	—
490707 2010 QZ_{1}	16.4	X	122.00728	308.46604	48.85216	29.10313	0.2515068	0.23127636	2.6285438	20	1 20.7	20.8
490708 2010 QZ_{2}	16.3	X	299.09924	170.90461	165.67497	7.10267	0.1911560	0.18394801	3.0620056	20	6 7.3	20.4
490709 2010 RB_{10}	17.8	X	180.78937	232.65759	192.23343	10.29580	0.1417886	0.26788466	2.3832567	20	5 26.7	21.6
490710 2010 RU_{18}	18.2	X	233.47820	34.77880	337.15958	18.62739	0.0994997	0.37561279	1.9024320	20	4 29.9	21.0
490711 2010 RY_{18}	16.8	X	63.92070	161.00349	211.48193	13.67721	0.2604383	0.22451002	2.6810952	20	—	—
490712 2010 RS_{25}	17.4	X	151.14090	188.44791	158.12458	13.55946	0.0448366	0.24419586	2.5349955	20	1 7.6	21.1
490713 2010 RY_{26}	18.2	X	300.35623	147.43431	204.56769	0.96861	0.2785901	0.18643728	3.0346892	20	6 14.8	21.9
490714 2010 RK_{40}	16.9	X	132.88752	140.89086	175.04282	31.34238	0.1690975	0.23371963	2.6101928	20	—	—
490715 2010 RE_{42}	17.6	X	268.58063	188.15410	187.84045	4.93026	0.1841388	0.28273481	2.2990577	20	6 20.6	20.4
490716 2010 RN_{68}	16.1	X	296.71135	308.75603	33.25754	4.97836	0.2773857	0.18167586	3.0874829	20	5 26.5	20.2
490717 2010 RF_{81}	16.7	X	142.29627	305.96231	4.65402	31.55013	0.2302412	0.23447428	2.6045892	20	—	—
490718 2010 RL_{82}	19.4	X	350.40672	284.01003	145.40543	19.88783	0.0993318	0.52538829	1.5210697	20	—	—
490719 2010 RH_{87}	17.6	X	7.93735	357.64966	323.90885	4.96066	0.2261542	0.19751480	2.9201351	20	10 3.7	20.7
490720 2010 RR_{104}	17.1	X	38.39473	22.15200	2.80277	8.79469	0.1676081	0.21664835	2.7455696	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490721 2010 RC_{109}	18.2	X	285.61764	162.37643	171.93700	23.81351	0.0775734	0.38074591	1.8852946	20	6 5.9	20.7
490722 2010 RT_{112}	16.5	X	338.00350	344.44379	336.46720	10.78531	0.1242538	0.18549648	3.0449413	20	8 1.4	20.1
490723 2010 RX_{120}	17.4	X	348.42883	251.34263	192.46349	2.45406	0.0491243	0.22316694	2.6918414	20	—	—
490724 2010 RD_{123}	17.3	X	150.33734	147.47451	180.43180	12.75636	0.1842333	0.23761284	2.5816030	20	—	—
490725 2010 RE_{123}	18.3	X	267.18521	218.50547	158.95176	2.78702	0.1694194	0.28060556	2.3106733	20	6 23.1	21.1
490726 2010 RX_{125}	17.3	X	89.73890	337.04858	18.07375	15.08210	0.1211883	0.22582171	2.6707030	20	—	—
490727 2010 RH_{140}	18.6	X	337.88070	315.06430	22.30014	2.22135	0.2029930	0.29412023	2.2393370	20	9 14.8	19.7
490728 2010 RD_{142}	17.1	X	280.88231	128.22765	223.23592	6.15323	0.1589679	0.17764162	3.1340522	20	6 5.8	21.5
490729 2010 RB_{149}	16.5	X	276.33177	0.59621	344.33939	8.67184	0.0906144	0.17563658	3.1578590	20	5 30.7	21.2
490730 2010 RC_{154}	17.6	X	18.11721	151.49758	282.59341	3.84123	0.1750655	0.22214889	2.7000592	20	—	—
490731 2010 RE_{158}	17.8	X	226.89249	230.40188	169.41453	1.40667	0.1853538	0.27229479	2.3574536	20	6 5.1	21.3
490732 2010 RS_{162}	17.4	X	359.67138	21.27819	4.78448	15.54997	0.1931092	0.20640922	2.8356328	20	12 14.2	21.0
490733 2010 RQ_{167}	16.4	X	279.83003	340.47557	355.07353	10.92258	0.0997687	0.17712682	3.1401219	20	5 20.3	21.1
490734 2010 RO_{174}	16.4	X	255.80967	13.07702	6.19749	16.33727	0.1398180	0.17422889	3.1748455	20	6 11.1	21.4
490735 2010 RX_{174}	17.0	X	61.53296	24.08412	9.34470	14.74892	0.1145165	0.22638271	2.6662889	20	—	—
490736 2010 RC_{175}	17.3	X	17.27704	1.62355	22.83516	6.09499	0.0436936	0.21103979	2.7940005	20	12 20.8	21.1
490737 2010 RX_{177}	17.1	X	254.85102	66.84356	174.93050	14.52728	0.0675707	0.23979515	2.5659161	20	—	—
490738 2010 SS_{4}	16.6	X	288.37664	353.02901	343.75803	15.89795	0.1043864	0.17674950	3.1445892	20	6 1.8	21.2
490739 2010 SU_{5}	17.0	X	87.15008	183.44293	210.16804	11.31813	0.1480704	0.23059849	2.6336926	20	1 1.0	20.4
490740 2010 SV_{11}	17.9	X	296.53899	239.91074	113.99463	0.43118	0.2705720	0.18413780	3.0599013	20	6 12.8	21.7
490741 2010 SX_{14}	17.6	X	4.06623	47.63184	15.48683	8.78563	0.0643321	0.21929166	2.7234619	20	—	—
490742 2010 SW_{18}	17.0	X	20.51742	202.42781	191.21313	8.95493	0.1658127	0.21287356	2.7779317	20	—	—
490743 2010 SV_{26}	17.2	X	239.80121	248.28127	7.12540	6.89652	0.1279295	0.24021359	2.5629355	20	—	—
490744 2010 SG_{37}	16.8	X	106.07094	12.22018	2.39985	7.75958	0.2022040	0.23347386	2.6120242	20	1 14.2	20.3
490745 2010 SG_{39}	17.5	X	137.29522	180.75093	157.30392	5.70023	0.2509057	0.23679403	2.5875508	20	1 7.1	21.5
490746 2010 TR_{4}	18.2	X	177.46627	268.43821	161.18129	2.15272	0.1735114	0.26666448	2.3905212	20	5 28.9	22.1
490747 2010 TG_{15}	17.1	X	221.83002	326.35923	280.13763	5.21132	0.1551351	0.23436433	2.6054038	20	—	—
490748 2010 TQ_{43}	17.7	X	41.89366	33.37894	8.57222	6.37703	0.0570990	0.22233522	2.6985504	20	—	—
490749 2010 TR_{87}	18.4	X	169.47357	48.23136	17.81513	1.68192	0.2298665	0.26199606	2.4188348	20	5 17.4	22.5
490750 2010 TA_{93}	18.3	X	331.99466	128.05216	194.73921	5.99316	0.1352301	0.28741077	2.2740536	20	7 30.4	20.2
490751 2010 TG_{100}	17.7	X	12.77868	282.15308	146.25525	3.04105	0.1714181	0.21935427	2.7229436	20	—	—
490752 2010 TE_{102}	17.4	X	138.86127	250.34645	75.01730	5.07588	0.2279667	0.23490842	2.6013791	20	—	—
490753 2010 TL_{104}	16.5	X	247.84731	40.99271	183.91294	14.13547	0.0601137	0.23309074	2.6148857	20	—	—
490754 2010 TQ_{119}	16.6	X	276.75731	154.65660	269.66881	12.76098	0.3470246	0.18032586	3.1028733	20	8 1.2	21.1
490755 2010 TW_{150}	16.8	X	24.75087	131.28313	241.73275	12.75637	0.2368702	0.21146964	2.7902130	20	—	—
490756 2010 TW_{154}	16.9	X	322.43723	339.60883	348.15304	12.47948	0.1219403	0.18366684	3.0651298	20	7 15.5	20.8
490757 2010 TN_{166}	18.0	X	237.54401	351.81690	15.90719	21.76768	0.1321405	0.37439446	1.9065569	20	4 28.5	20.6
490758 2010 TB_{167}	17.4	X	189.81367	147.82956	266.93535	4.86249	0.1687863	0.26381339	2.4077136	20	5 20.2	21.3
490759 2010 TE_{167}	17.6	X	171.31736	60.89071	32.44380	23.72259	0.1329314	0.36681034	1.9327470	20	6 21.9	20.7
490760 2010 TD_{174}	17.1	X	313.66398	10.64412	336.78546	10.34181	0.2379480	0.18616311	3.0376680	20	7 10.7	20.5
490761 2010 TX_{181}	18.2	X	170.69614	40.13584	37.39011	5.84898	0.0793093	0.26664059	2.3906640	20	5 29.9	21.7
490762 2010 TZ_{187}	16.7	X	294.71368	303.71142	196.44815	27.47771	0.2363771	0.21260267	2.7802910	20	—	—
490763 2010 TL_{192}	14.6	X	269.49594	244.05771	175.55330	5.47914	0.0590268	0.08310145	5.2007220	20	8 21.3	21.4
490764 2010 TM_{192}	14.0	X	222.46915	95.87578	24.73114	13.47516	0.0359929	0.08391034	5.1672451	20	9 15.8	21.0
490765 2010 TP_{192}	14.8	X	309.37807	53.67147	341.97120	0.56203	0.0403712	0.08241126	5.2297189	20	9 13.0	21.5
490766 2010 UC_{2}	16.8	X	248.56161	229.09895	25.03169	9.83502	0.1683539	0.23791292	2.5794317	20	—	—
490767 2010 UV_{5}	17.4	X	169.69533	28.14770	276.71309	6.47281	0.1123104	0.23267325	2.6180127	20	—	—
490768 2010 US_{6}	17.1	X	124.02116	303.67127	31.33500	15.20194	0.1306243	0.22584314	2.6705340	20	—	—
490769 2010 UQ_{8}	18.2	X	75.43191	54.84412	33.54637	20.60886	0.0738856	0.34352972	2.0191093	20	2 6.9	20.7
490770 2010 UH_{20}	17.2	X	197.09525	262.77545	31.05516	7.60746	0.0508760	0.23476763	2.6024191	20	—	—
490771 2010 UR_{25}	17.0	X	87.46776	108.30102	255.38422	5.35182	0.0294990	0.21811542	2.7332444	20	—	—
490772 2010 UO_{30}	17.5	X	328.44921	147.64566	312.50641	3.22301	0.0662475	0.21214088	2.7843242	20	—	—
490773 2010 UL_{33}	16.8	X	13.03858	39.77728	16.51657	10.24057	0.1200628	0.21350125	2.7724843	20	—	—
490774 2010 UL_{40}	17.5	X	254.07281	23.11255	227.59231	7.79628	0.1215610	0.23929651	2.5694794	20	1 1.7	21.6
490775 2010 UR_{45}	14.2	X	262.20557	172.21638	262.57457	8.49252	0.1224028	0.08263830	5.2201359	20	8 19.5	21.2
490776 2010 UD_{50}	18.0	X	123.59089	224.24443	136.85251	3.36582	0.0581277	0.23140216	2.6275911	20	—	—
490777 2010 UC_{53}	17.0	X	274.63289	96.81002	21.63130	10.01637	0.1292061	0.19901829	2.9054097	20	11 13.8	20.8
490778 2010 UL_{56}	14.0	X	289.66543	168.94905	251.81064	9.21849	0.1482734	0.08356374	5.1815236	20	8 31.4	20.7
490779 2010 UL_{57}	16.7	X	42.95022	115.34973	249.94145	12.15853	0.0897461	0.20538494	2.8450527	20	—	—
490780 2010 UQ_{59}	18.2	X	244.81522	74.21488	306.40409	1.50538	0.2081931	0.26847614	2.3797551	20	5 26.2	21.7
490781 2010 UX_{67}	17.6	X	172.36258	306.32416	0.51254	8.52541	0.2143236	0.23824354	2.5770448	20	—	—
490782 2010 UA_{70}	16.9	X	117.75913	311.68269	62.08964	10.69693	0.1262701	0.23269040	2.6178840	20	1 16.5	20.5
490783 2010 UF_{70}	16.6	X	42.42674	30.74244	29.74749	9.55309	0.1375455	0.22040479	2.7142844	20	—	—
490784 2010 UQ_{77}	17.4	X	286.64419	115.41213	10.66834	12.83868	0.1685794	0.20386799	2.8591483	20	12 9.1	20.9
490785 2010 UO_{81}	14.4	X	265.37054	104.65996	327.77649	2.04832	0.1123038	0.08226800	5.2357885	20	8 25.0	21.3
490786 2010 UK_{86}	17.8	X	52.87628	205.89040	178.99396	5.36859	0.0795872	0.21841756	2.7307232	20	—	—
490787 2010 UA_{89}	17.4	X	115.50619	319.22668	26.03401	9.31529	0.1026864	0.23017935	2.6368888	20	—	—
490788 2010 UY_{97}	16.8	X	328.01101	259.42271	218.87473	23.47374	0.1624289	0.21098567	2.7944783	20	—	—
490789 2010 UQ_{101}	18.9	X	328.64361	108.02252	217.14511	18.32359	0.0919650	0.38550153	1.8697576	20	8 5.6	20.8
490790 2010 UR_{105}	18.0	X	299.71300	283.49537	57.17870	7.09813	0.1512648	0.27742334	2.3283095	20	6 21.9	20.3
490791 2010 VE_{1}	19.8	X	71.01653	98.45636	55.02022	7.14979	0.3613664	0.34939486	1.9964497	20	6 25.1	22.0
490792 2010 VF_{2}	17.4	X	191.38973	301.10971	6.84885	7.88284	0.1502433	0.23986516	2.5654168	20	1 14.1	21.6
490793 2010 VJ_{12}	17.9	X	284.96428	306.34640	60.64202	3.18028	0.2076101	0.27947881	2.3168795	20	6 27.5	20.5
490794 2010 VY_{23}	17.4	X	171.03285	287.95651	48.85818	3.00537	0.1481931	0.23664263	2.5886543	20	1 29.4	21.5
490795 2010 VQ_{28}	17.6	X	143.37413	352.50106	75.30564	23.45294	0.0760939	0.35455785	1.9770211	20	4 23.3	20.4
490796 2010 VY_{29}	17.0	X	118.40281	199.81808	179.30328	5.07918	0.2363265	0.23478232	2.6023106	20	2 4.9	20.7
490797 2010 VX_{38}	16.2	X	7.63786	58.89731	63.19891	22.95414	0.0694857	0.22697359	2.6616595	20	—	—
490798 2010 VN_{44}	17.5	X	335.43804	141.63006	308.35679	3.26019	0.0236920	0.21410085	2.7673056	20	—	—
490799 2010 VX_{56}	17.6	X	57.14622	285.79422	83.60469	4.43102	0.0873905	0.21297037	2.7770898	20	—	—
490800 2010 VO_{64}	16.5	X	345.21966	18.30178	76.55242	10.06609	0.1687423	0.21132124	2.7915192	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490801 2010 VH_{72}	16.8	X	155.93690	271.20915	45.21208	13.71697	0.0190435	0.22799669	2.6536910	20	—	—
490802 2010 VL_{74}	17.7	X	104.84211	278.38732	220.95881	20.17924	0.0938806	0.36354529	1.9443019	20	6 6.5	20.0
490803 2010 VD_{87}	17.3	X	310.55325	63.94581	42.84876	12.74968	0.1188799	0.20391395	2.8587187	20	12 30.9	20.8
490804 2010 VN_{89}	14.7	X	291.55647	19.58438	39.22779	4.42225	0.1312292	0.08247115	5.2271865	20	9 8.7	21.3
490805 2010 VF_{90}	16.7	X	281.79395	229.27088	248.04065	11.61244	0.0538265	0.19815678	2.9138248	20	12 3.9	20.5
490806 2010 VA_{91}	18.3	X	282.28495	5.54370	353.91072	1.20070	0.1997780	0.27492545	2.3423911	20	6 13.1	20.9
490807 2010 VB_{105}	17.3	X	33.15398	328.75088	75.80319	6.48593	0.0520730	0.21351515	2.7723640	20	—	—
490808 2010 VK_{112}	16.6	X	224.57876	80.39408	61.16076	25.57845	0.2919249	0.18272927	3.0756056	20	10 8.8	22.1
490809 2010 VE_{115}	14.6	X	256.16002	277.21837	183.32092	7.39096	0.0815161	0.08468678	5.1356132	20	9 19.4	21.4
490810 2010 VA_{117}	17.1	X	147.57829	314.81341	37.89311	11.38871	0.2352715	0.23723530	2.5843412	20	2 6.3	21.4
490811 2010 VM_{124}	17.2	X	359.79959	160.81333	270.98992	3.22579	0.0465788	0.21204436	2.7851691	20	—	—
490812 2010 VH_{127}	17.9	X	228.01902	283.16256	236.41061	6.12323	0.0897780	0.29566386	2.2315359	20	12 5.1	20.5
490813 2010 VX_{127}	17.5	X	130.40962	261.73582	106.92121	3.89465	0.2391728	0.23431807	2.6057467	20	2 6.6	21.4
490814 2010 VQ_{131}	17.4	X	350.14387	247.22227	203.24024	3.55835	0.0641187	0.21500121	2.7595744	20	—	—
490815 2010 VE_{133}	17.1	X	85.80259	294.89661	55.74700	8.99615	0.1630301	0.21669543	2.7451720	20	—	—
490816 2010 VH_{138}	16.3	X	145.48895	306.30270	32.50219	29.70329	0.0946167	0.23122548	2.6289294	20	—	—
490817 2010 VF_{142}	14.2	X	313.89557	301.06452	85.02239	8.93138	0.0646470	0.08436932	5.1484879	20	9 9.9	20.9
490818 2010 VS_{145}	16.8	X	259.89514	1.16212	211.46972	12.78527	0.0511384	0.22347484	2.6893684	20	—	—
490819 2010 VD_{147}	17.1	X	32.15959	213.88394	220.82185	13.21333	0.1504925	0.21952497	2.7215319	20	—	—
490820 2010 VA_{148}	14.6	X	292.55417	221.89860	202.90109	6.99677	0.0865427	0.08508679	5.1195049	20	9 19.6	21.2
490821 2010 VT_{157}	17.1	X	91.55140	118.71497	247.50564	5.31937	0.0288361	0.22050442	2.7134669	20	—	—
490822 2010 VG_{160}	16.7	X	267.61756	285.59905	264.33137	7.40911	0.0649244	0.22128318	2.7070968	20	—	—
490823 2010 VK_{164}	16.8	X	175.94458	296.86606	55.91394	15.74517	0.1641136	0.24220692	2.5488543	20	2 29.9	21.2
490824 2010 VW_{164}	18.7	X	338.79975	287.72162	40.71977	22.81272	0.1664824	0.38835339	1.8605927	20	10 9.9	19.8
490825 2010 VC_{176}	17.3	X	159.82823	22.08202	319.24085	5.62365	0.2663966	0.23980778	2.5658260	20	1 31.9	21.7
490826 2010 VR_{197}	17.0	X	46.59505	311.78408	80.28911	6.33253	0.0595743	0.21538630	2.7562842	20	—	—
490827 2010 VS_{197}	16.6	X	206.27909	218.26137	62.36358	15.25927	0.0534437	0.23001572	2.6381392	20	—	—
490828 2010 VT_{197}	17.7	X	95.74524	319.63673	232.85675	19.54140	0.0450580	0.37601570	1.9010727	20	8 2.6	20.3
490829 2010 VF_{199}	16.6	X	78.66126	328.55108	66.06155	14.84399	0.1816772	0.22711417	2.6605611	20	—	—
490830 2010 VR_{207}	17.2	X	62.34421	76.17757	291.24356	6.03021	0.0414505	0.21603814	2.7507372	20	—	—
490831 2010 VT_{215}	18.0	X	257.77296	287.19966	90.97267	2.35989	0.1915248	0.27318175	2.3523481	20	6 8.7	21.3
490832 2010 VK_{217}	16.3	X	92.49435	297.76644	35.88965	28.55786	0.1111318	0.21476937	2.7615600	20	—	—
490833 2010 VT_{217}	17.9	X	182.04870	45.06248	14.59446	1.43058	0.1725976	0.26059125	2.4275201	20	5 19.6	21.9
490834 2010 VY_{224}	14.6	X	122.13615	172.91266	52.59570	2.38080	0.0584187	0.08317277	5.1977488	20	9 25.9	21.7
490835 2010 VA_{225}	14.1	X	15.77399	140.67554	184.58155	9.47367	0.0035289	0.08214434	5.2410418	20	9 11.4	21.0
490836 2010 WZ_{21}	17.4	X	52.53364	110.86669	246.70361	1.14451	0.0745146	0.20474599	2.8509687	20	—	—
490837 2010 WY_{22}	18.8	X	228.92592	61.93109	330.59601	0.35395	0.1829346	0.26649842	2.3915141	20	5 28.4	22.5
490838 2010 WD_{30}	17.2	X	108.49041	249.05819	87.99203	1.71106	0.0754488	0.21493704	2.7601236	20	—	—
490839 2010 WD_{33}	14.4	X	320.80550	161.22884	238.04836	6.59638	0.0762274	0.08487784	5.1279036	20	9 26.3	21.0
490840 2010 WW_{34}	17.0	X	88.48722	94.30588	240.80957	7.76464	0.1845412	0.21247542	2.7814009	20	—	—
490841 2010 WS_{51}	18.1	X	91.03220	123.29128	56.11513	22.36867	0.0473154	0.36881789	1.9257271	20	7 16.1	20.6
490842 2010 WG_{62}	17.5	X	84.41764	278.52090	251.90014	20.04881	0.1246639	0.35925694	1.9597437	20	6 28.7	19.7
490843 2010 WD_{70}	17.4	X	202.54026	334.18510	79.01994	23.53710	0.0675356	0.36538419	1.9377729	20	6 5.9	19.5
490844 2010 WD_{74}	16.8	X	157.84804	238.01296	69.15220	15.01340	0.0837723	0.22088340	2.7103622	20	—	—
490845 2010 XS	16.0	X	262.45901	343.72649	154.95503	27.67521	0.0768889	0.17838300	3.1253626	20	12 2.5	20.9
490846 2010 XY_{11}	16.4	X	29.90796	290.32774	112.39312	10.12599	0.1361894	0.20478307	2.8506246	20	—	—
490847 2010 XT_{29}	14.4	X	308.71409	15.11785	26.14893	4.22215	0.0939953	0.08142251	5.2719716	20	9 14.5	21.0
490848 2010 XO_{37}	17.4	X	242.53352	96.03088	273.79242	20.48425	0.1381025	0.36258543	1.9477318	20	5 12.8	20.1
490849 2010 XG_{48}	18.2	X	298.97780	275.67430	60.25129	23.09860	0.0790460	0.37720096	1.8970882	20	6 27.9	20.0
490850 2010 XL_{55}	14.5	X	280.26426	38.47835	28.67362	4.44273	0.1435869	0.08220231	5.2385773	20	9 2.6	21.3
490851 2010 XY_{57}	16.9	X	148.91645	280.68223	74.03863	12.73198	0.1486503	0.23223762	2.6212855	20	1 31.9	21.0
490852 2010 XO_{58}	17.1	X	10.72958	21.02722	66.76064	6.04688	0.1339958	0.21338095	2.7735263	20	—	—
490853 2010 XB_{64}	16.2	X	11.04600	339.55809	102.50421	14.32915	0.1756955	0.21171449	2.7880614	20	—	—
490854 2010 XB_{67}	17.4	X	160.45389	178.26942	174.35384	4.73010	0.2770353	0.23873103	2.5735353	20	2 14.1	21.8
490855 2010 XO_{71}	17.1	X	88.07926	129.53317	231.90813	5.43516	0.0608108	0.21721373	2.7408033	20	—	—
490856 2011 AQ	16.2	X	217.04570	241.44524	294.61658	13.51363	0.1027251	0.18387199	3.0628496	20	11 12.9	21.0
490857 2011 AR_{14}	16.8	X	262.98483	343.67264	103.41672	19.06633	0.1786784	0.17619882	3.1511377	20	9 18.2	21.6
490858 2011 AA_{19}	16.7	X	158.93380	166.78262	41.65113	4.86081	0.0838690	0.17386126	3.1793195	20	10 25.9	21.6
490859 2011 AL_{43}	17.8	X	28.39561	126.26714	119.54906	24.74045	0.0508475	0.35802265	1.9642453	20	7 18.4	19.4
490860 2011 AP_{48}	17.5	X	51.45890	194.97158	309.26542	3.62476	0.0662999	0.23318725	2.6141641	20	3 23.6	20.6
490861 2011 AP_{53}	16.0	X	201.00214	65.45856	115.10048	26.34298	0.1952310	0.17461216	3.1701980	20	11 7.1	21.6
490862 2011 AT_{56}	15.8	X	193.63839	242.57620	307.31790	18.40458	0.2005037	0.17408043	3.1766503	20	10 22.8	21.4
490863 2011 AV_{58}	16.4	X	13.65977	71.76983	296.73451	8.61891	0.0808594	0.18464730	3.0542698	20	11 22.7	20.5
490864 2011 AF_{63}	16.2	X	216.41352	42.93159	125.71591	12.00363	0.2259980	0.17507299	3.1646325	20	10 28.9	21.5
490865 2011 AE_{65}	17.6	X	255.31475	153.62650	345.18445	0.85748	0.1195134	0.18545800	3.0453626	20	11 13.4	21.8
490866 2011 AK_{65}	16.5	X	6.23174	268.28715	114.87979	10.75191	0.1046539	0.18551901	3.0446949	20	12 6.6	20.5
490867 2011 AB_{66}	16.4	X	124.61674	178.49878	122.98176	11.59092	0.0958973	0.19178803	2.9779795	20	—	—
490868 2011 AU_{67}	18.1	X	98.35912	200.59789	248.21068	1.17834	0.1646083	0.23356874	2.6113168	20	4 1.1	21.4
490869 2011 AV_{67}	17.0	X	242.51056	30.06543	126.46258	7.29303	0.1091081	0.18585120	3.0410657	20	11 22.9	21.4
490870 2011 AQ_{69}	16.8	X	208.02930	60.86025	92.95739	12.42876	0.0931519	0.17545855	3.1599948	20	10 16.7	21.8
490871 2011 BS	16.7	X	313.59787	308.07716	116.33386	10.75247	0.0953648	0.18459749	3.0548193	20	11 10.2	20.7
490872 2011 BE_{5}	16.5	X	196.26841	74.28793	127.55777	9.05912	0.1600961	0.18157199	3.0886603	20	11 22.2	21.5
490873 2011 BH_{6}	16.6	X	99.91297	273.06180	114.39750	14.75233	0.0701134	0.21532016	2.7568486	20	1 4.6	20.2
490874 2011 BS_{6}	16.3	X	137.40046	132.71720	109.55332	10.68761	0.0851819	0.17914465	3.1164978	20	11 16.9	21.2
490875 2011 BL_{10}	17.7	X	199.19333	278.28530	144.93676	25.21167	0.1364940	0.35577085	1.9725248	20	6 16.8	21.0
490876 2011 BA_{11}	16.5	X	285.61789	105.33094	321.22477	9.20095	0.0972881	0.17924740	3.1153066	20	9 22.9	20.7
490877 2011 BM_{13}	17.6	X	245.67294	352.97855	22.15853	5.40243	0.2143642	0.25823716	2.4422506	20	5 18.5	21.4
490878 2011 BM_{19}	16.5	X	173.44961	102.86991	121.40505	12.14061	0.1039291	0.17814995	3.1280877	20	11 29.9	21.5
490879 2011 BA_{21}	16.3	X	6.82568	242.31716	121.63375	17.47699	0.0492263	0.18072473	3.0983061	20	11 11.9	20.8
490880 2011 BU_{22}	18.2	X	236.25655	175.49226	271.17145	6.18715	0.2665164	0.27324436	2.3519888	20	8 5.9	21.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490881 2011 BK_{28}	16.7	X	224.63508	47.01898	126.67711	18.27168	0.2029986	0.17969424	3.1101400	20	11 15.6	21.8
490882 2011 BN_{33}	17.0	X	258.99585	153.58978	315.24982	13.50685	0.1301476	0.17599618	3.1535561	20	10 1.9	21.7
490883 2011 BU_{39}	15.8	X	224.62814	149.96972	354.12510	14.62113	0.2256478	0.17445485	3.1721035	20	9 30.2	20.9
490884 2011 BQ_{43}	18.2	X	68.49952	201.25408	184.70683	4.33842	0.0779267	0.30718442	2.1753873	20	—	—
490885 2011 BU_{43}	15.8	X	96.15483	185.12199	158.78563	10.45136	0.1003854	0.19602621	2.9348998	20	—	—
490886 2011 BC_{45}	18.1	X	138.18208	34.94979	30.66266	3.09694	0.0434245	0.23490107	2.6014334	20	4 4.4	21.5
490887 2011 BT_{52}	16.4	X	256.50171	97.21622	79.61386	7.50126	0.1762158	0.19038143	2.9926298	20	12 24.8	20.4
490888 2011 BD_{53}	16.0	X	282.46133	281.01243	126.54609	26.40183	0.2825992	0.17288571	3.1912683	20	7 30.9	20.1
490889 2011 BC_{57}	16.7	X	310.37436	305.86298	105.89442	15.96194	0.3086159	0.18281782	3.0746124	20	9 29.9	20.0
490890 2011 BC_{60}	16.5	X	278.58498	29.86175	116.88569	17.88021	0.1824115	0.19002082	2.9964148	20	12 20.2	20.2
490891 2011 BB_{65}	16.9	X	189.68586	37.16258	152.61605	16.74693	0.0988556	0.17057173	3.2200653	20	11 6.8	22.1
490892 2011 BT_{65}	17.9	X	171.66813	303.65932	132.10045	24.57848	0.0811364	0.35470887	1.9764600	20	6 5.7	21.0
490893 2011 BS_{67}	16.2	X	260.14290	217.93223	285.98638	8.95635	0.1111868	0.18492931	3.0511640	20	11 26.3	20.5
490894 2011 BX_{70}	17.3	X	278.56064	302.64947	153.08230	12.21922	0.1892045	0.17857133	3.1231647	20	10 14.2	21.4
490895 2011 BB_{84}	16.1	X	353.37017	312.18273	107.78008	12.54324	0.0462071	0.19000148	2.9966180	20	12 28.3	20.0
490896 2011 BP_{85}	16.9	X	230.11880	37.18552	121.04154	15.57349	0.2239600	0.17649728	3.1475843	20	10 31.2	22.1
490897 2011 BH_{86}	16.9	X	321.52036	318.59011	125.23939	10.11933	0.0446310	0.18838419	3.0137444	20	12 15.2	21.0
490898 2011 BU_{90}	15.6	X	92.55795	131.67211	141.00336	21.59928	0.1246288	0.17151116	3.2082963	20	11 12.9	20.9
490899 2011 BZ_{98}	15.6	X	87.40897	319.74934	329.12119	13.82891	0.0703616	0.16994448	3.2279838	20	11 8.6	20.6
490900 2011 BK_{100}	17.8	X	24.97059	293.12745	193.65968	7.14610	0.2559689	0.21560035	2.7544596	20	1 20.4	20.2
490901 2011 BB_{105}	15.9	X	70.11798	33.05298	291.15176	9.94022	0.1034889	0.18328278	3.0694102	20	12 13.1	20.5
490902 2011 BN_{108}	16.9	X	106.97177	40.28014	279.75300	3.14847	0.0447950	0.18841952	3.0133676	20	—	—
490903 2011 BC_{109}	17.3	X	216.43527	149.40078	202.05027	3.43100	0.0834693	0.23101432	2.6305311	20	3 30.7	21.3
490904 2011 BM_{109}	16.8	X	148.40347	4.55254	255.71470	6.14393	0.1272843	0.17849667	3.1240356	20	12 15.0	21.9
490905 2011 BJ_{111}	16.6	X	226.07699	35.79469	166.30245	10.48397	0.0535025	0.18596864	3.0397853	20	—	—
490906 2011 BG_{116}	16.7	X	123.44289	242.91820	104.29164	1.82323	0.0823903	0.20894054	2.8126838	20	—	—
490907 2011 BL_{116}	16.7	X	296.15741	126.07411	302.17238	8.00939	0.1918369	0.18143456	3.0902198	20	9 28.2	20.5
490908 2011 BS_{124}	16.7	X	298.20279	103.21907	347.85503	11.35176	0.0829510	0.18207177	3.0830056	20	11 12.9	20.9
490909 2011 BC_{125}	17.6	X	256.92388	303.58504	190.44493	0.45987	0.1357230	0.18471350	3.0535401	20	11 7.4	21.5
490910 2011 BB_{129}	17.6	X	187.94242	154.88400	228.98496	3.33878	0.0315017	0.23588057	2.5942268	20	4 8.8	21.2
490911 2011 BL_{134}	17.1	X	180.41929	266.61006	19.50166	2.12231	0.0331404	0.20681969	2.8318796	20	—	—
490912 2011 BZ_{145}	16.3	X	74.88591	195.43801	124.05079	14.16838	0.1124704	0.18427525	3.0583795	20	12 15.4	21.0
490913 2011 CO_{3}	18.1	X	250.69020	151.67849	289.28953	4.20916	0.1863787	0.27368924	2.3494393	20	8 26.1	21.2
490914 2011 CX_{5}	17.8	X	74.46547	120.89599	348.98374	4.20694	0.2179082	0.22866713	2.6485015	20	4 4.6	20.9
490915 2011 CY_{8}	16.4	X	257.16548	198.23693	304.33721	8.39763	0.0594469	0.18257607	3.0773258	20	11 27.1	20.7
490916 2011 CZ_{13}	18.6	X	239.48168	169.70163	286.66538	0.68210	0.1432573	0.27304595	2.3531280	20	9 9.9	21.4
490917 2011 CG_{18}	16.2	X	327.28539	319.16350	124.49649	11.96467	0.1217530	0.18942077	3.0027394	20	12 24.1	19.9
490918 2011 CO_{21}	16.3	X	112.30367	165.95552	132.97991	11.35434	0.0311920	0.18477212	3.0528942	20	12 23.2	20.8
490919 2011 CS_{30}	17.2	X	268.14012	45.52089	86.85487	3.22207	0.1511620	0.18478107	3.0527956	20	11 18.5	21.0
490920 2011 CA_{40}	16.2	X	312.77345	1.69997	113.30718	12.20156	0.0653918	0.19203695	2.9754056	20	—	—
490921 2011 CY_{43}	16.8	X	337.39289	264.97860	147.56933	11.24496	0.0850793	0.18377665	3.0639088	20	11 29.6	20.8
490922 2011 CW_{47}	15.7	X	205.11447	244.28078	307.41037	25.18458	0.2615032	0.17374469	3.1807413	20	10 28.3	21.5
490923 2011 CR_{51}	16.1	X	185.43243	248.25428	325.76772	10.46388	0.0366343	0.18038767	3.1021644	20	11 30.7	20.8
490924 2011 CK_{52}	18.7	X	90.84554	296.06660	86.38960	1.22689	0.1434809	0.31359601	2.1456343	20	—	—
490925 2011 CH_{53}	16.8	X	211.46280	169.75077	23.25654	1.57415	0.1073000	0.18026179	3.1036085	20	11 28.7	21.3
490926 2011 CP_{57}	16.8	X	336.16401	252.01851	143.62194	2.79935	0.0559696	0.17497490	3.1658150	20	11 2.6	20.9
490927 2011 CK_{59}	18.4	X	249.59846	329.87275	160.96048	1.31087	0.1356734	0.28300101	2.2976157	20	11 15.9	21.0
490928 2011 CT_{60}	16.6	X	339.38601	252.93645	146.41281	15.89517	0.2115692	0.18242264	3.0790511	20	11 22.9	20.1
490929 2011 CN_{61}	17.0	X	169.80915	149.84075	147.63908	11.31118	0.0646505	0.20014582	2.8944876	20	—	—
490930 2011 CA_{62}	18.5	X	145.23715	88.23000	166.39200	2.58599	0.1292883	0.28316862	2.2967089	20	12 25.1	22.0
490931 2011 CT_{62}	16.4	X	5.69098	274.35963	119.34540	10.88192	0.0971024	0.18761428	3.0219838	20	12 17.9	20.3
490932 2011 CS_{64}	16.5	X	348.53993	297.25248	108.35373	11.54345	0.1318129	0.18413779	3.0599014	20	12 9.8	20.2
490933 2011 CN_{66}	16.3	X	275.28589	312.37731	127.84082	28.58878	0.1986057	0.17932838	3.1143688	20	9 21.7	20.9
490934 2011 CD_{74}	15.7	X	223.20230	58.61178	139.34632	27.94378	0.2046671	0.18016317	3.1047409	20	12 11.7	21.0
490935 2011 CJ_{78}	16.9	X	286.81825	2.93889	279.07529	5.72322	0.1708533	0.22622823	2.6675026	20	3 8.9	20.8
490936 2011 CG_{81}	16.9	X	243.19490	253.43825	276.43848	6.12708	0.1050825	0.18127415	3.0920426	20	12 7.3	21.1
490937 2011 CS_{82}	17.0	X	134.64953	73.88246	190.53689	0.77676	0.1465049	0.17359425	3.1825787	20	12 7.1	22.0
490938 2011 CL_{85}	16.1	X	209.14601	60.48436	152.07640	19.55379	0.1334482	0.18108397	3.0942071	20	12 18.7	21.1
490939 2011 CM_{85}	17.4	X	222.74255	175.07100	158.96112	5.02647	0.0988588	0.22457952	2.6805420	20	3 16.3	21.4
490940 2011 CV_{87}	17.2	X	266.61365	276.69024	156.09312	23.17537	0.4316361	0.17490324	3.1666798	20	7 24.4	22.5
490941 2011 CC_{90}	16.5	X	98.53943	358.29759	317.03344	8.97247	0.0846930	0.18415422	3.0597194	20	12 31.7	21.2
490942 2011 CJ_{90}	16.8	X	302.42161	115.88352	315.03227	8.22042	0.0650238	0.17481457	3.1677505	20	10 24.9	21.2
490943 2011 CX_{90}	16.8	X	21.46300	264.52731	170.90853	12.25591	0.0093032	0.19721371	2.9231065	20	—	—
490944 2011 CF_{91}	16.9	X	295.37835	296.16368	159.34890	11.01660	0.1050719	0.17928576	3.1148623	20	11 18.6	21.0
490945 2011 CQ_{95}	17.3	X	329.33555	268.60728	158.26602	10.23675	0.1050229	0.18265488	3.0764405	20	12 4.7	21.3
490946 2011 CP_{96}	18.2	X	138.92901	343.74523	278.49039	3.49285	0.0987940	0.28342050	2.2953480	20	12 29.7	21.3
490947 2011 CV_{97}	16.6	X	135.64331	326.30282	295.96321	9.12867	0.0573118	0.17733391	3.1376767	20	12 3.7	21.4
490948 2011 CO_{98}	16.1	X	79.64022	56.30763	275.36685	9.22305	0.0805077	0.18305581	3.0719469	20	12 29.4	20.5
490949 2011 CU_{102}	16.6	X	105.87071	336.57907	310.66180	5.73390	0.1319915	0.17403843	3.1771614	20	12 6.4	21.7
490950 2011 CX_{105}	17.0	X	93.16696	347.55462	324.84697	10.09947	0.0785590	0.17958259	3.1114290	20	12 20.7	21.8
490951 2011 CV_{106}	16.8	X	178.51932	106.07431	160.08021	3.82593	0.1751252	0.18589389	3.0406001	20	—	—
490952 2011 CR_{112}	17.0	X	22.49531	236.43258	170.80820	8.77147	0.1262290	0.19301627	2.9653328	20	—	—
490953 2011 CY_{114}	17.1	X	76.55938	181.94846	179.98103	2.91928	0.0919674	0.19291249	2.9663961	20	—	—
490954 2011 DO_{12}	15.7	X	81.37422	9.94666	357.53248	9.77411	0.1154007	0.19734532	2.9218068	20	—	—
490955 2011 DF_{14}	16.7	X	38.29521	243.02439	149.19850	10.11440	0.0791569	0.19288684	2.9666591	20	—	—
490956 2011 DG_{14}	17.0	X	161.43870	88.17985	156.01749	6.50649	0.1307190	0.17835726	3.1256632	20	12 8.9	22.0
490957 2011 DA_{15}	16.0	X	221.57076	236.85151	321.08412	13.10063	0.0136690	0.18611142	3.0382303	20	12 30.6	20.4
490958 2011 DC_{20}	16.8	X	251.53077	114.36228	4.94410	6.02751	0.2632810	0.17536118	3.1611644	20	9 25.2	21.6
490959 2011 DO_{27}	17.4	X	269.77021	343.42653	140.58344	1.88425	0.1426794	0.18101186	3.0950288	20	11 10.8	21.4
490960 2011 DQ_{30}	15.9	X	259.20315	53.17483	100.26512	17.96686	0.1699277	0.18245509	3.0786860	20	12 1.9	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
490961 2011 DE_{31}	16.6	X	190.61273	28.41648	160.15745	13.54986	0.0849108	0.17063799	3.2192317	20	11 6.2	21.7
490962 2011 DN_{31}	16.1	X	186.07974	90.30912	149.86528	16.75183	0.2075889	0.17886014	3.1198018	20	12 22.2	21.5
490963 2011 DS_{36}	16.7	X	175.83434	91.74485	161.74773	16.19421	0.2216216	0.17824266	3.1270028	20	12 27.4	22.2
490964 2011 DX_{36}	16.9	X	189.56417	40.26601	198.95208	1.88869	0.0960150	0.18206758	3.0830528	20	12 31.6	21.5
490965 2011 DC_{38}	17.7	X	239.40719	154.05551	291.31768	1.71527	0.1980604	0.26775919	2.3840012	20	8 17.1	21.1
490966 2011 DT_{46}	16.9	X	204.55605	145.05433	62.61875	2.16697	0.1379496	0.17720293	3.1392227	20	12 5.3	21.8
490967 2011 DG_{51}	16.1	X	277.47377	37.36927	69.83029	19.32024	0.2257833	0.17828097	3.1265549	20	10 26.2	20.3
490968 2011 EL_{5}	16.3	X	106.87965	149.46445	151.14659	11.98993	0.2456801	0.17761105	3.1344119	20	12 29.7	21.8
490969 2011 EV_{6}	17.9	X	33.98709	47.98259	311.50834	5.58719	0.1954099	0.28842847	2.2687012	20	—	—
490970 2011 EA_{9}	16.0	X	265.75214	338.78283	139.53731	18.03333	0.1013109	0.17870619	3.1215932	20	11 9.3	20.6
490971 2011 EH_{9}	16.6	X	224.26596	33.34826	172.05448	17.66058	0.1336357	0.18074425	3.0980830	20	12 24.3	21.5
490972 2011 ES_{27}	16.1	X	179.45264	240.61931	9.34848	9.94035	0.0923697	0.17912941	3.1166746	20	—	—
490973 2011 EH_{31}	15.6	X	130.36100	160.27417	103.07668	21.58679	0.0842329	0.17223060	3.1993556	20	12 4.1	20.7
490974 2011 EZ_{35}	16.3	X	207.25600	200.54847	4.11227	11.64877	0.0941192	0.17494797	3.1661399	20	12 6.6	21.3
490975 2011 EL_{58}	16.5	X	104.91819	186.24482	113.13189	12.31138	0.0545407	0.17559464	3.1583619	20	12 15.7	21.3
490976 2011 EW_{61}	16.0	X	149.95568	216.50594	84.30506	10.47245	0.1300864	0.18654201	3.0335532	20	—	—
490977 2011 EK_{72}	16.6	X	224.55989	156.75742	30.75340	6.27179	0.1143888	0.17524281	3.1625877	20	12 3.8	21.3
490978 2011 EE_{73}	16.0	X	171.95891	118.25158	147.87154	26.79728	0.2142812	0.18398590	3.0615853	20	—	—
490979 2011 EZ_{81}	16.5	X	213.81530	207.15440	357.77959	9.88130	0.1677331	0.17758925	3.1346683	20	12 6.9	21.6
490980 2011 EW_{83}	16.6	X	250.41193	133.23214	358.68088	3.09741	0.1630694	0.17257747	3.1950670	20	10 20.9	21.1
490981 2011 EN_{85}	15.9	X	235.85976	7.80082	195.42624	12.74090	0.0535998	0.18940290	3.0029284	20	—	—
490982 2011 FA_{2}	16.4	X	284.16093	81.33100	57.57169	13.15691	0.1228633	0.18201613	3.0836338	20	12 21.3	20.3
490983 2011 FV_{21}	15.9	X	169.38200	123.45154	138.92709	16.58076	0.0894272	0.18084107	3.0969772	20	—	—
490984 2011 FE_{22}	16.5	X	342.95659	303.15133	149.41462	14.00465	0.1496821	0.18754997	3.0226745	20	—	—
490985 2011 FG_{27}	16.1	X	72.88405	261.27115	102.45813	11.59893	0.0863725	0.17794857	3.1304472	20	—	—
490986 2011 FN_{27}	15.9	X	306.02603	50.49759	55.79847	18.08625	0.0154374	0.17237244	3.1976002	20	12 16.2	20.5
490987 2011 FO_{52}	16.9	X	74.93624	355.90378	103.02346	0.40736	0.0323556	0.21324020	2.7747466	20	2 26.3	20.5
490988 2011 FV_{75}	16.9	X	215.21409	54.27752	154.63425	1.70453	0.1132942	0.17851042	3.1238751	20	12 20.5	21.5
490989 2011 FM_{103}	16.2	X	164.00902	92.75968	164.26136	25.58261	0.1585163	0.17546688	3.1598948	20	12 24.9	21.8
490990 2011 FU_{103}	16.2	X	227.18800	180.28191	11.20233	17.52611	0.1328526	0.17905736	3.1175105	20	12 7.4	21.1
490991 2011 FU_{108}	18.2	X	209.16153	212.89000	289.46292	2.00830	0.1188772	0.26782805	2.3835925	20	10 6.9	21.6
490992 2011 FK_{126}	16.3	X	130.44336	95.67753	217.57488	9.19508	0.0634536	0.19020442	2.9944861	20	—	—
490993 2011 FS_{133}	16.7	X	234.11585	188.06573	344.37306	6.43046	0.0754831	0.17718528	3.1394311	20	12 1.8	21.3
490994 2011 FJ_{143}	18.1	X	231.09807	303.80109	188.34120	3.78250	0.1172538	0.26975024	2.3722556	20	10 22.6	21.0
490995 2011 FK_{147}	16.7	X	271.19178	58.37752	53.77108	12.27915	0.3027854	0.17686962	3.1431653	20	10 8.7	21.0
490996 2011 FR_{152}	17.5	X	56.52443	149.91582	319.82346	3.45887	0.0622955	0.21060671	2.7978295	20	2 18.2	21.1
490997 2011 FD_{154}	16.8	X	82.55537	314.21302	10.39992	14.23565	0.2499979	0.27475909	2.3433366	20	—	—
490998 2011 FC_{156}	16.8	X	125.23785	159.88558	126.40894	9.63177	0.0278831	0.17843748	3.1247264	20	12 21.0	21.4
490999 2011 GZ_{4}	15.6	X	295.54230	31.89625	65.82998	16.84535	0.0577594	0.16860264	3.2450879	20	11 21.6	19.9
491000 2011 GL_{7}	16.4	X	184.67481	59.67663	173.96347	19.50425	0.1070320	0.17326592	3.1865980	20	12 18.6	21.7
491001 2011 GP_{7}	17.7	X	139.24771	11.47934	220.60459	8.31366	0.0785851	0.26730402	2.3867067	20	11 19.1	21.0
491002 2011 GO_{9}	15.8	X	184.66882	194.32834	63.12565	18.21825	0.1616487	0.17582105	3.1556498	20	—	—
491003 2011 GL_{26}	16.0	X	195.21324	357.38215	230.12448	8.19549	0.0554240	0.17348443	3.1839217	20	12 25.3	20.8
491004 2011 GH_{33}	16.4	X	136.61177	86.86402	200.78077	26.67361	0.0644553	0.17336033	3.1854410	20	12 30.6	21.7
491005 2011 GC_{41}	15.3	X	234.99468	105.59589	102.51738	10.96856	0.0370947	0.18281723	3.0746190	20	—	—
491006 2011 GG_{58}	16.5	X	261.47844	228.27759	60.11869	6.56881	0.1643178	0.20443925	2.8538196	20	2 27.9	21.0
491007 2011 GL_{62}	19.5	X	235.99167	244.38578	189.86072	15.69012	0.7070160	0.80952411	1.1402048	20	6 25.3	21.2
491008 2011 GM_{64}	16.0	X	195.63708	159.53674	88.06641	12.00613	0.0805954	0.17924449	3.1153404	20	—	—
491009 2011 GP_{75}	15.6	X	288.50872	68.83706	49.48406	16.70434	0.1406760	0.17344576	3.1843950	20	11 26.6	19.7
491010 2011 HH_{70}	18.3	X	269.78471	251.49086	21.25567	3.25144	0.1736802	0.31087039	2.1581575	20	2 2.4	21.3
491011 2011 JO_{25}	16.3	X	98.61890	260.67538	64.38016	9.23157	0.0931576	0.17059055	3.2198285	20	—	—
491012 2011 KH_{12}	16.3	X	70.58348	11.58120	248.29767	13.92706	0.0638661	0.24271971	2.5452631	20	9 23.8	20.1
491013 2011 KZ_{21}	16.8	X	28.11096	80.09371	247.29977	3.63754	0.2420291	0.24339435	2.5405576	20	11 30.0	19.9
491014 2011 KC_{46}	16.3	X	196.96813	28.76469	271.95221	3.80726	0.1227827	0.18242726	3.0789990	20	1 15.1	21.1
491015 2011 LS_{14}	19.0	X	316.67098	309.54066	350.26048	6.21390	0.3747959	0.31971048	2.1181894	20	4 2.4	20.9
491016 2011 NK	17.3	X	39.33197	28.65817	350.28604	5.02506	0.3287726	0.23795973	2.5790934	20	—	—
491017 2011 OS_{1}	17.7	X	283.39667	344.53674	279.15213	8.82148	0.0637883	0.29451680	2.2373263	20	2 16.1	20.6
491018 2011 OU_{1}	17.9	X	88.02021	227.64624	167.19290	12.77436	0.1953641	0.26687047	2.3892909	20	1 3.5	20.6
491019 2011 OB_{6}	16.2	X	344.88631	164.39212	248.97157	7.74992	0.2522185	0.12515925	3.9581667	20	11 28.5	20.2
491020 2011 OX_{7}	18.8	X	311.65178	180.19770	84.83997	1.63597	0.1498991	0.30993069	2.1625176	20	3 17.8	21.0
491021 2011 OF_{12}	17.6	X	121.34460	282.25497	143.39132	8.26937	0.0870421	0.29469613	2.2364186	20	3 16.3	20.3
491022 2011 OO_{16}	17.9	X	82.39618	295.08253	79.10051	5.12543	0.2663954	0.26123861	2.4235081	20	—	—
491023 2011 OK_{20}	18.2	X	133.99666	231.92263	104.46384	2.98832	0.2205335	0.26909253	2.3761196	20	—	—
491024 2011 OD_{24}	18.7	X	255.58763	230.82583	69.49476	7.01904	0.2150878	0.30102380	2.2049673	20	2 23.9	22.2
491025 2011 PS_{4}	16.2	X	201.13363	52.06397	287.06247	3.94489	0.1128457	0.17951210	3.1122434	20	3 2.1	21.1
491026 2011 PC_{7}	18.0	X	223.53106	214.86534	104.51067	6.14021	0.1784855	0.29383701	2.2407757	20	2 20.2	21.6
491027 2011 PZ_{7}	18.4	X	214.85627	73.18323	260.43510	5.59882	0.1485481	0.29237499	2.2482395	20	2 26.1	21.9
491028 2011 PG_{8}	17.9	X	112.07838	3.23257	325.50226	6.50876	0.1722754	0.25706896	2.4496439	20	—	—
491029 2011 PY_{8}	17.0	X	227.54638	45.59885	324.16883	6.81459	0.2395110	0.18874405	3.0099125	20	4 23.4	22.2
491030 2011 PA_{15}	15.8	X	349.79981	87.97140	333.23754	6.76460	0.2612826	0.12440334	3.9741845	20	12 19.0	20.0
491031 2011 QS_{1}	18.5	X	91.90887	57.65746	288.00418	1.57021	0.2098456	0.25436866	2.4669498	20	—	—
491032 2011 QH_{2}	18.1	X	260.98048	164.42966	165.82364	5.60421	0.2207565	0.30467156	2.1873323	20	4 4.9	21.2
491033 2011 QY_{3}	14.2	X	266.89413	155.26680	175.71458	21.10398	0.0409228	0.08270394	5.2173732	20	5 15.2	21.3
491034 2011 QU_{7}	17.9	X	214.33520	353.16288	274.13515	5.44088	0.1297756	0.27792847	2.3254876	20	—	—
491035 2011 QV_{7}	16.3	X	227.05453	91.56174	240.91468	6.50967	0.1018945	0.18667852	3.0320741	20	3 18.1	21.1
491036 2011 QK_{10}	18.3	X	72.42744	124.01204	241.09588	3.36339	0.2485737	0.25213742	2.4814823	20	—	—
491037 2011 QW_{11}	18.6	X	118.61729	76.53351	275.50655	1.08521	0.3781709	0.26260480	2.4150953	20	1 17.8	22.1
491038 2011 QK_{14}	17.5	X	188.70191	12.03309	329.64296	6.80374	0.1662476	0.28665577	2.2780448	20	2 15.7	20.9
491039 2011 QT_{14}	18.0	X	239.66668	149.92174	155.14354	7.64122	0.1961204	0.29273838	2.2463785	20	2 13.8	21.5
491040 2011 QS_{17}	16.9	X	291.23659	40.59758	350.52569	3.31099	0.1851614	0.21287802	2.7778929	20	8 11.6	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491041 2011 QL_{21}	16.1	X	284.26819	9.51778	275.46072	10.96614	0.1516862	0.18917945	3.0052924	20	3 12.7	20.6
491042 2011 QO_{22}	18.2	X	128.14628	105.90440	254.79396	5.26885	0.1390577	0.27041300	2.3683779	20	1 5.9	21.2
491043 2011 QW_{23}	17.2	X	252.84486	243.66867	177.79573	5.15007	0.1627391	0.20957606	2.8069948	20	7 31.2	21.2
491044 2011 QB_{27}	18.0	X	227.50756	169.53020	146.51413	5.93610	0.1880235	0.29312330	2.2444115	20	2 17.6	21.6
491045 2011 QL_{34}	15.8	X	312.37572	204.09659	248.81362	7.42936	0.2505326	0.12575274	3.9457033	20	11 9.6	20.2
491046 2011 QM_{35}	17.4	X	143.06224	127.31711	277.14494	7.62842	0.1076691	0.28515007	2.2860570	20	3 11.6	20.7
491047 2011 QE_{36}	16.6	X	224.28199	171.66647	157.83618	1.94048	0.1831953	0.17930158	3.1146791	20	3 11.2	21.8
491048 2011 QF_{42}	18.1	X	249.71492	217.31094	106.29734	5.09423	0.2235588	0.30139479	2.2031576	20	3 17.7	21.5
491049 2011 QC_{45}	17.3	X	186.47174	353.74962	276.03427	6.00450	0.0884041	0.26557399	2.3970607	20	—	—
491050 2011 QD_{45}	18.1	X	182.32006	12.95525	278.83434	6.60900	0.1085044	0.27080063	2.3661173	20	—	—
491051 2011 QM_{49}	18.5	X	147.81358	158.39120	188.62079	3.25568	0.2602023	0.27359901	2.3499558	20	1 23.6	22.1
491052 2011 QJ_{50}	17.5	X	266.61135	228.72840	178.90969	7.64870	0.1853626	0.20933702	2.8091312	20	7 26.4	21.5
491053 2011 QP_{58}	16.9	X	185.71769	68.90073	292.43081	1.61623	0.2466823	0.17346044	3.1842152	20	3 16.5	22.5
491054 2011 QE_{60}	17.6	X	312.35369	108.78169	284.04663	4.71620	0.2557557	0.21847442	2.7302494	20	9 11.3	20.0
491055 2011 QE_{62}	14.9	X	334.95131	191.68486	235.70629	7.17543	0.1186618	0.12571052	3.9465866	20	11 26.4	19.9
491056 2011 QP_{62}	18.1	X	302.69243	266.20909	334.76545	7.10431	0.0775016	0.28987464	2.2611493	20	2 13.8	20.6
491057 2011 QA_{65}	15.8	X	210.13717	1.85708	342.30985	11.47822	0.1137345	0.17823600	3.1270807	20	3 16.4	20.7
491058 2011 QL_{65}	16.3	X	210.63100	348.57625	351.95011	10.49529	0.2289549	0.17814108	3.1281914	20	3 11.5	21.8
491059 2011 QF_{66}	17.9	X	128.88192	227.94429	114.22975	5.67175	0.2059017	0.26601966	2.3943826	20	—	—
491060 2011 QN_{70}	17.3	X	105.74314	338.81592	5.00991	15.00669	0.1568387	0.25687603	2.4508703	20	—	—
491061 2011 QO_{72}	17.3	X	314.55130	137.92043	203.09208	7.72043	0.2249251	0.21086544	2.7955404	20	7 3.6	20.4
491062 2011 QX_{72}	17.8	X	160.05838	3.49273	323.16087	4.41922	0.2470855	0.27100082	2.3649519	20	1 10.1	21.6
491063 2011 QY_{72}	17.5	X	112.88644	86.72405	252.59514	4.64575	0.2111339	0.25730564	2.4481415	20	—	—
491064 2011 QU_{75}	18.7	X	135.39302	83.59195	273.13555	0.99301	0.2327195	0.27279915	2.3545471	20	1 21.6	22.1
491065 2011 QW_{83}	16.7	X	287.12482	33.97822	356.95846	9.01962	0.2305329	0.21157451	2.7892910	20	7 30.2	20.2
491066 2011 QZ_{84}	16.6	X	235.61575	325.43892	337.48540	8.88978	0.0579427	0.17414717	3.1758387	20	2 27.7	21.3
491067 2011 QB_{85}	14.3	X	304.56613	325.83629	337.55171	17.05276	0.0975546	0.08298515	5.2055798	20	5 11.7	21.2
491068 2011 QV_{88}	18.3	X	270.83627	275.32454	1.23351	5.91951	0.2015634	0.29455826	2.2371164	20	2 8.4	21.7
491069 2011 QY_{90}	16.6	X	221.57377	26.86707	284.71228	8.02848	0.0575254	0.17482053	3.1676785	20	2 19.9	21.5
491070 2011 QQ_{91}	18.4	X	218.70764	128.73158	210.94420	5.39484	0.1991329	0.29261099	2.2470305	20	3 8.4	22.1
491071 2011 QL_{95}	18.0	X	196.62086	308.27689	26.46150	4.34358	0.2594382	0.28629269	2.2799704	20	2 17.8	22.0
491072 2011 QJ_{97}	16.7	X	202.03239	147.50482	237.24951	16.04710	0.2056218	0.18092241	3.0960488	20	4 23.7	22.0
491073 2011 RG_{7}	18.5	X	311.99962	266.31681	330.96589	4.38001	0.1362761	0.29338184	2.2430927	20	2 11.3	20.8
491074 2011 RT_{8}	16.5	X	330.52943	282.90054	332.05311	7.13185	0.0881891	0.19041732	2.9922537	20	4 17.8	20.5
491075 2011 RZ_{8}	17.2	X	311.96554	25.39966	269.11734	0.99170	0.1107198	0.19668448	2.9283478	20	5 12.4	20.7
491076 2011 RQ_{10}	18.2	X	153.55018	61.97222	292.95807	2.60507	0.2258199	0.27536411	2.3399028	20	2 4.6	21.7
491077 2011 RD_{12}	18.2	X	108.35102	4.35363	353.33979	4.76334	0.2032746	0.25980611	2.4324083	20	—	—
491078 2011 RP_{14}	17.7	X	250.69778	110.54326	333.62672	8.59538	0.1771685	0.21473895	2.7618208	20	8 26.9	21.7
491079 2011 RP_{15}	17.0	X	199.67235	143.09478	235.55234	6.66948	0.1903167	0.18375253	3.0641769	20	4 15.1	22.2
491080 2011 RR_{17}	17.1	X	280.50657	105.67065	310.73077	3.88626	0.1539783	0.21521752	2.7577250	20	9 2.0	20.5
491081 2011 RE_{19}	16.5	X	308.06898	18.24267	254.98777	6.84238	0.0104780	0.18942889	3.0026536	20	4 21.1	20.6
491082 2011 SA	17.6	X	130.76862	140.48624	189.91990	3.99219	0.2309589	0.26282933	2.4137197	20	—	—
491083 2011 SK_{3}	17.2	X	109.34881	4.90698	3.40780	8.16613	0.2344914	0.26273002	2.4143279	20	1 9.6	20.3
491084 2011 SF_{6}	18.6	X	269.69382	353.24814	299.60801	6.51582	0.2380508	0.30087660	2.2056864	20	2 20.2	22.1
491085 2011 SP_{7}	17.4	X	140.72536	52.72669	275.12527	4.80635	0.1746926	0.26604379	2.3942379	20	—	—
491086 2011 SA_{10}	17.4	X	348.24120	210.16403	175.53203	3.84879	0.3184311	0.22703477	2.6611814	20	12 21.2	19.6
491087 2011 SQ_{10}	17.2	X	315.39927	212.20339	183.93421	13.12110	0.1820074	0.22085126	2.7106251	20	10 6.0	19.8
491088 2011 SR_{10}	17.6	X	288.51809	196.39209	218.93653	2.22198	0.0578810	0.22043140	2.7140660	20	9 27.7	21.1
491089 2011 SP_{11}	18.0	X	122.45986	43.32516	311.22046	4.55144	0.2453405	0.26368493	2.4084955	20	1 8.2	21.2
491090 2011 SL_{12}	19.4	X	306.53337	193.90332	190.15446	28.05978	0.0556054	0.44377648	1.7022625	20	11 7.8	20.8
491091 2011 SR_{13}	17.6	X	40.99024	177.99027	259.68070	5.96434	0.1013502	0.26380505	2.4077644	20	—	—
491092 2011 SD_{20}	17.3	X	346.95671	149.61679	248.18013	14.63283	0.2840871	0.22856754	2.6492707	20	12 29.0	19.8
491093 2011 SJ_{21}	16.7	X	190.55454	118.82666	268.31349	12.35143	0.2996638	0.17701557	3.1414374	20	4 14.6	22.6
491094 2011 SN_{23}	16.8	X	285.80599	170.77613	226.51224	9.16158	0.2233454	0.20922483	2.8101353	20	7 31.4	20.5
491095 2011 SX_{23}	16.2	X	203.23366	44.04223	6.25532	11.83828	0.2711276	0.18412600	3.0600320	20	5 21.3	21.8
491096 2011 ST_{24}	17.5	X	215.56442	272.77701	45.87751	2.69157	0.2340074	0.28156621	2.3054145	20	2 12.3	21.3
491097 2011 ST_{25}	16.0	X	201.16617	74.16173	292.00637	8.29502	0.1068825	0.17892475	3.1190507	20	3 31.5	21.1
491098 2011 SH_{27}	18.0	X	115.12262	265.90554	82.45442	2.36706	0.2282255	0.26196174	2.4190461	20	—	—
491099 2011 SR_{27}	16.2	X	298.65985	168.57134	241.78601	11.75652	0.1293601	0.21879489	2.7275828	20	9 23.3	19.6
491100 2011 SN_{33}	17.4	X	167.02726	353.04120	347.88619	7.35699	0.1366047	0.27528677	2.3403411	20	1 25.9	20.8
491101 2011 SN_{37}	17.5	X	233.77945	139.15763	165.11680	2.71069	0.1863989	0.28280090	2.2986995	20	2 9.0	21.2
491102 2011 SX_{41}	18.3	X	18.85546	90.27809	279.91584	2.22773	0.2727493	0.23502080	2.6005498	20	—	—
491103 2011 SQ_{42}	17.3	X	207.67849	165.96660	211.84621	1.20871	0.1256420	0.18352314	3.0667297	20	4 24.3	22.1
491104 2011 SS_{43}	18.0	X	209.15574	306.20013	337.77216	4.42881	0.2165530	0.27677838	2.3319252	20	—	—
491105 2011 SB_{46}	18.5	X	177.45823	82.49739	217.01873	2.34989	0.1796921	0.26930683	2.3748588	20	—	—
491106 2011 SL_{49}	18.8	X	255.41009	100.12375	215.44681	1.60447	0.1755161	0.29775511	2.2210751	20	3 13.8	21.9
491107 2011 SC_{55}	17.9	X	12.73424	338.74817	42.75486	6.08533	0.2706188	0.23256876	2.6187968	20	—	—
491108 2011 SN_{61}	17.8	X	212.72550	65.32329	216.09514	7.41460	0.0345681	0.27456159	2.3444602	20	—	—
491109 2011 SR_{65}	17.7	X	174.11502	72.23248	278.14265	4.99833	0.1465891	0.27836936	2.3230315	20	2 10.8	21.3
491110 2011 SV_{66}	17.6	X	356.29395	135.92236	255.40076	12.26343	0.2624791	0.23014779	2.6371299	20	—	—
491111 2011 SM_{75}	18.9	X	241.99524	126.09930	207.24019	5.19863	0.1835445	0.29922073	2.2138164	20	3 22.4	22.1
491112 2011 SW_{76}	18.2	X	211.61718	46.35486	327.76496	1.93042	0.2258949	0.18261070	3.0769367	20	4 18.9	23.5
491113 2011 SD_{84}	17.6	X	41.86923	350.75817	5.52101	13.61711	0.1974127	0.23844633	2.5755834	20	—	—
491114 2011 SR_{84}	17.6	X	121.94706	221.58144	180.27082	5.00410	0.1344168	0.26999174	2.3708408	20	2 20.2	20.8
491115 2011 SU_{86}	15.8	X	273.13309	79.39222	213.92013	9.47486	0.0562105	0.17612932	3.1519667	20	3 27.9	20.4
491116 2011 SF_{98}	16.7	X	278.05200	226.00478	193.51375	4.56782	0.1071190	0.21419753	2.7664728	20	9 9.8	20.1
491117 2011 SZ_{98}	17.3	X	197.39914	10.46658	14.06766	0.24437	0.1954885	0.17926292	3.1151269	20	4 21.5	22.4
491118 2011 SK_{100}	16.7	X	215.37981	147.42328	224.38618	8.68494	0.0642627	0.18904736	3.0066922	20	4 27.3	21.2
491119 2011 SW_{102}	17.1	X	293.01519	17.84424	11.27327	10.11914	0.2869635	0.21040048	2.7996575	20	7 27.9	20.6
491120 2011 SR_{104}	16.8	X	241.41504	49.67826	346.01824	9.00893	0.0661103	0.19193123	2.9764982	20	6 27.9	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491121 2011 SD_{107}	18.0	X	52.95215	145.14445	223.07980	4.14430	0.3061941	0.23976203	2.5661524	20	—	—
491122 2011 SR_{107}	17.4	X	98.66730	156.53038	224.23149	5.95773	0.2180722	0.26103787	2.4247504	20	1 6.1	20.1
491123 2011 SA_{110}	17.1	X	112.60724	359.13018	30.29314	6.90469	0.2260599	0.26940531	2.3742801	20	2 9.7	20.2
491124 2011 SE_{110}	17.7	X	345.81849	28.57955	0.42822	13.17996	0.1865294	0.22897124	2.6461559	20	11 27.7	20.6
491125 2011 SP_{113}	18.1	X	98.53014	317.79219	59.19124	2.55651	0.1990980	0.26142494	2.4223564	20	—	—
491126 2011 SB_{118}	17.1	X	223.19176	51.65465	259.90756	7.02674	0.1133917	0.28054615	2.3109994	20	2 8.2	20.7
491127 2011 SP_{124}	18.3	X	14.38892	345.59948	24.52524	6.01789	0.1721745	0.23085400	2.6317489	20	12 22.6	21.5
491128 2011 SN_{125}	17.0	X	190.48051	63.77203	22.18275	16.85508	0.2073161	0.18862051	3.0112266	20	6 28.3	22.4
491129 2011 SF_{129}	17.4	X	315.40227	321.10755	57.68978	3.98467	0.0856598	0.21278802	2.7786761	20	9 18.0	20.7
491130 2011 SE_{132}	18.1	X	269.00471	268.14573	40.80190	7.86609	0.1691177	0.29337527	2.2431262	20	3 24.4	21.2
491131 2011 SN_{135}	17.0	X	241.86214	345.93087	21.46083	7.00895	0.2337681	0.19001371	2.9964894	20	5 4.5	21.9
491132 2011 SX_{135}	17.5	X	82.93727	315.85575	23.94116	11.32902	0.1443420	0.24162878	2.5529184	20	—	—
491133 2011 SL_{140}	17.6	X	339.00864	186.92335	182.54946	4.77653	0.1246472	0.21889856	2.7267215	20	10 14.8	20.5
491134 2011 SU_{140}	17.2	X	225.60656	345.66581	29.74360	1.70050	0.2478532	0.18458230	3.0549868	20	4 30.9	22.5
491135 2011 SD_{151}	15.9	X	25.86638	358.20623	29.32235	3.18711	0.2352221	0.12575869	3.9455786	20	—	—
491136 2011 SS_{151}	17.3	X	274.21057	302.63746	117.16393	0.83450	0.0612420	0.21516666	2.7581596	20	9 13.0	20.8
491137 2011 SE_{155}	17.5	X	261.69459	189.14194	148.81681	2.28813	0.1671252	0.18967567	3.0000487	20	4 26.6	22.0
491138 2011 SN_{156}	17.7	X	304.82792	220.24422	172.96988	2.21874	0.0857589	0.21700157	2.7425895	20	9 19.5	20.8
491139 2011 SA_{165}	17.3	X	247.06766	256.93239	84.95493	1.96156	0.1837813	0.18294507	3.0731864	20	4 15.2	22.1
491140 2011 SC_{166}	16.5	X	220.04238	344.93384	9.55926	10.29725	0.1219432	0.17783989	3.1317224	20	4 7.6	21.5
491141 2011 SO_{167}	18.0	X	17.57018	28.31052	347.32301	11.95646	0.1402199	0.23588108	2.5942230	20	—	—
491142 2011 SM_{168}	18.1	X	167.83094	125.54393	211.73325	4.10706	0.1688897	0.27147262	2.3622110	20	1 22.2	21.6
491143 2011 SA_{177}	18.0	X	39.72110	207.56102	161.56401	5.71295	0.2384164	0.23887517	2.5725000	20	—	—
491144 2011 SD_{179}	18.1	X	238.52211	308.71776	3.97340	5.94562	0.1480022	0.28636481	2.2795876	20	2 27.4	21.5
491145 2011 SV_{179}	18.1	X	110.34481	84.57558	252.01520	1.86437	0.2078489	0.25354197	2.4723093	20	—	—
491146 2011 SM_{181}	18.4	X	256.33576	31.47378	264.40638	3.15278	0.2282754	0.28897140	2.2658586	20	2 14.6	22.0
491147 2011 SV_{183}	16.9	X	273.95529	260.43247	65.37051	4.77565	0.2261335	0.18724342	3.0259727	20	4 18.3	21.5
491148 2011 SV_{184}	17.7	X	144.46803	282.76924	81.30589	3.43749	0.1821218	0.26870429	2.3784078	20	2 5.2	21.1
491149 2011 SY_{186}	17.4	X	84.02930	17.21896	7.77477	24.34303	0.1882855	0.25664257	2.4523564	20	—	—
491150 2011 SF_{192}	17.9	X	6.31192	242.66140	137.31558	6.35850	0.2808324	0.22994997	2.6386421	20	—	—
491151 2011 SO_{194}	17.7	X	103.00468	353.03083	8.51200	7.61559	0.1215374	0.25841199	2.4411489	20	—	—
491152 2011 SQ_{195}	18.6	X	80.53958	78.96481	287.00635	0.61828	0.1897867	0.25445217	2.4664100	20	—	—
491153 2011 SS_{204}	16.8	X	244.71133	334.78361	26.35169	11.18852	0.2346693	0.18828446	3.0148085	20	4 29.3	21.8
491154 2011 SR_{206}	17.5	X	78.37974	245.94810	174.42884	8.71581	0.2021989	0.26849367	2.3796514	20	1 22.9	19.8
491155 2011 SL_{210}	18.4	X	170.32064	103.21458	196.23250	1.83665	0.1688260	0.26928071	2.3750124	20	—	—
491156 2011 SP_{214}	16.6	X	161.88898	173.94834	199.61158	21.03603	0.1876861	0.27649871	2.3334974	20	2 28.6	20.6
491157 2011 SE_{216}	13.8	X	272.43839	355.41321	343.91991	28.68316	0.0647440	0.08278319	5.2140432	20	5 14.2	21.1
491158 2011 SX_{217}	17.0	X	230.92016	165.87791	171.30939	3.85150	0.2175661	0.18134740	3.0912099	20	3 23.8	22.1
491159 2011 SH_{219}	17.5	X	223.67943	311.69781	340.77111	3.96500	0.1091347	0.27354854	2.3502449	20	1 20.2	21.0
491160 2011 SM_{219}	19.0	X	79.61870	163.38509	188.78595	2.36455	0.2409481	0.25212777	2.4815456	20	—	—
491161 2011 ST_{221}	18.1	X	259.73556	236.97349	54.68355	6.08565	0.1672731	0.29054985	2.2576448	20	2 21.2	21.4
491162 2011 SJ_{230}	17.7	X	171.12310	321.20014	29.04945	9.45930	0.1932050	0.27729416	2.3290326	20	2 16.7	21.5
491163 2011 SR_{234}	16.7	X	238.79577	304.49017	136.36899	4.56912	0.0750011	0.21018142	2.8016024	20	8 22.3	20.5
491164 2011 SN_{253}	18.3	X	119.04247	273.96108	103.26881	3.57674	0.2150005	0.26646527	2.3917125	20	1 28.8	21.4
491165 2011 SZ_{256}	16.3	X	325.62737	12.36749	267.15471	9.53923	0.2180470	0.19108364	2.9852936	20	4 26.3	19.9
491166 2011 SF_{261}	17.3	X	198.26654	38.03653	19.22246	5.41856	0.2154858	0.18417332	3.0595079	20	5 29.6	22.6
491167 2011 TF_{5}	15.9	X	226.68186	115.12858	246.62938	15.28816	0.2232012	0.18002124	3.1063726	20	4 14.0	21.3
491168 2011 TJ_{13}	17.3	X	19.47461	183.71427	213.36920	13.57935	0.2535169	0.23529620	2.5985202	20	—	—
491169 2011 TF_{14}	18.0	X	177.61216	157.37820	215.55579	5.98114	0.1489781	0.28499927	2.2868634	20	3 13.0	21.4
491170 2011 UW	15.8	X	173.61331	201.92074	218.70015	27.72335	0.1901858	0.17602681	3.1531903	20	5 14.9	21.1
491171 2011 UG_{1}	17.3	X	148.91286	357.28624	10.63616	7.30777	0.1288115	0.27028989	2.3690970	20	2 10.6	20.7
491172 2011 UN_{8}	17.8	X	9.71514	20.28528	49.18340	5.74359	0.1011567	0.23840024	2.5759154	20	—	—
491173 2011 UE_{14}	16.5	X	208.68380	57.06728	5.32515	12.07647	0.0607970	0.18846921	3.0128379	20	6 23.3	21.2
491174 2011 UT_{21}	17.9	X	320.43423	54.31010	347.66372	7.50119	0.2232621	0.21927508	2.7235992	20	10 19.2	20.2
491175 2011 UQ_{24}	17.5	X	356.06810	118.92199	27.08421	14.70384	0.0899471	0.25999821	2.4312100	20	—	—
491176 2011 UG_{25}	17.0	X	307.96732	274.53818	218.30519	27.55197	0.2327222	0.23442760	2.6049350	20	—	—
491177 2011 UH_{28}	17.5	X	4.43760	61.16065	21.65060	12.88002	0.1311562	0.24030249	2.5623033	20	—	—
491178 2011 UT_{46}	17.1	X	4.86110	0.07634	350.72891	6.18146	0.0542515	0.21811750	2.7332271	20	10 22.7	20.6
491179 2011 UE_{47}	15.9	X	174.14628	175.82978	236.83440	9.25563	0.1200288	0.17346364	3.1841761	20	5 4.2	20.9
491180 2011 UL_{50}	17.9	X	35.71024	312.31701	54.85128	4.46286	0.2418532	0.23393127	2.6086183	20	—	—
491181 2011 UA_{51}	17.8	X	156.41998	280.10745	65.17166	3.43778	0.2032740	0.26660916	2.3908519	20	1 26.7	21.4
491182 2011 UC_{53}	17.9	X	165.95536	225.21501	117.54295	3.24837	0.1924623	0.26829108	2.3808492	20	1 30.7	21.7
491183 2011 UV_{54}	18.0	X	43.81907	337.66722	45.89502	6.92797	0.1505498	0.23776441	2.5805057	20	—	—
491184 2011 UY_{56}	15.7	X	195.67244	21.95329	32.13265	30.66700	0.2218229	0.18155806	3.0888183	20	5 15.8	21.3
491185 2011 UY_{58}	17.0	X	184.99575	309.32649	86.19690	2.55424	0.1890457	0.17700458	3.1415674	20	4 25.4	22.2
491186 2011 UD_{59}	17.8	X	197.29974	280.70835	43.21547	7.00704	0.1141386	0.27741568	2.3283524	20	2 3.4	21.3
491187 2011 UX_{59}	16.4	X	219.39323	180.30504	214.59861	10.80858	0.2756437	0.18301079	3.0724507	20	5 18.6	21.8
491188 2011 UM_{61}	16.8	X	305.25239	265.17847	229.65986	13.57037	0.0692684	0.23403921	2.6078161	20	—	—
491189 2011 UV_{76}	17.7	X	105.78938	345.48481	343.62132	4.26652	0.1728522	0.24596741	2.5228088	20	—	—
491190 2011 UF_{84}	16.8	X	240.87070	127.16773	237.79540	17.39185	0.3195299	0.18396695	3.0617954	20	4 24.3	22.2
491191 2011 UY_{84}	17.3	X	65.59912	306.83835	23.78164	5.43843	0.1967174	0.23041541	2.6350874	20	—	—
491192 2011 US_{86}	17.4	X	1.61844	33.93942	56.45063	6.78868	0.1329489	0.23780792	2.5801909	20	—	—
491193 2011 UL_{88}	17.4	X	65.96106	326.66344	50.98096	13.88128	0.1846914	0.24249583	2.5468295	20	—	—
491194 2011 UG_{89}	17.4	X	309.80504	214.54557	261.91131	3.21605	0.0711439	0.23091505	2.6312850	20	—	—
491195 2011 UE_{94}	17.1	X	299.35124	97.94968	41.23668	15.69360	0.2847163	0.22937384	2.6430586	20	—	—
491196 2011 UZ_{97}	17.1	X	25.76692	27.70899	12.31217	5.00018	0.2558026	0.23600012	2.5933506	20	—	—
491197 2011 UQ_{101}	17.2	X	11.39612	203.37655	193.76476	6.17778	0.2254767	0.23119904	2.6291298	20	—	—
491198 2011 UJ_{102}	17.9	X	210.02549	44.66800	289.72426	2.09626	0.2183393	0.28130928	2.3068181	20	2 25.2	21.7
491199 2011 UX_{107}	17.4	X	201.58961	138.99196	217.16086	23.99359	0.2334710	0.28748845	2.2736439	20	3 11.1	21.7
491200 2011 UL_{111}	16.0	X	207.97872	108.61578	268.97665	10.32366	0.2080304	0.17875362	3.1210411	20	4 18.2	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491201 2011 UH_{117}	17.8	X	191.31900	295.86295	37.44042	4.63093	0.1814268	0.27748547	2.3279620	20	2 10.8	21.6
491202 2011 UQ_{117}	17.4	X	123.14721	333.81203	70.32763	8.35603	0.1975389	0.27226857	2.3576050	20	3 9.7	20.8
491203 2011 UQ_{118}	16.9	X	249.74145	94.26333	212.37012	14.86920	0.2437396	0.17744744	3.1363382	20	2 26.8	22.4
491204 2011 UN_{120}	17.4	X	138.40051	330.25015	17.70769	6.82108	0.1943642	0.26379245	2.4078410	20	1 11.9	20.9
491205 2011 UP_{122}	17.2	X	254.77432	194.30251	208.07795	11.49790	0.0264279	0.19897554	2.9058259	20	7 25.4	21.5
491206 2011 UR_{123}	17.3	X	172.20446	46.87947	17.19259	0.76447	0.1640878	0.17730910	3.1379694	20	5 17.2	22.5
491207 2011 UC_{128}	17.7	X	121.57368	257.36562	90.78686	8.14155	0.1415792	0.25878786	2.4387846	20	—	—
491208 2011 UU_{129}	17.9	X	11.81562	64.49397	29.00010	3.70722	0.1672675	0.24221600	2.5487907	20	—	—
491209 2011 UF_{131}	17.1	X	353.26990	186.41282	230.50248	13.60751	0.2286222	0.23058378	2.6338045	20	—	—
491210 2011 UB_{139}	17.9	X	18.01989	43.37476	26.83141	5.48691	0.1590563	0.24080879	2.5587105	20	—	—
491211 2011 UB_{141}	16.2	X	205.59473	319.66978	57.45130	11.30141	0.2371879	0.17649232	3.1476432	20	4 21.4	21.7
491212 2011 UZ_{142}	17.4	X	359.77717	72.11757	21.36054	5.29292	0.2117455	0.23769783	2.5809875	20	—	—
491213 2011 US_{144}	17.7	X	154.99207	342.72610	359.68064	4.95513	0.1211533	0.26077856	2.4263575	20	1 14.7	21.1
491214 2011 UH_{150}	17.3	X	295.81870	104.13848	208.94387	8.22210	0.1088627	0.19168155	2.9790823	20	5 15.1	21.2
491215 2011 UA_{152}	17.7	X	242.30221	351.39728	321.71387	5.77117	0.2023139	0.28445968	2.2897544	20	2 26.1	21.3
491216 2011 UP_{156}	17.8	X	340.64321	331.69489	117.36903	4.73460	0.1690707	0.23175986	2.6248868	20	—	—
491217 2011 UY_{167}	16.1	X	218.43940	187.78959	203.85793	17.49527	0.1938042	0.17959851	3.1112451	20	5 18.7	21.4
491218 2011 UQ_{173}	17.4	X	331.29143	294.47673	187.04167	11.65532	0.2033881	0.24032690	2.5621298	20	—	—
491219 2011 UP_{179}	17.7	X	358.97819	66.21854	302.12461	5.21641	0.1900158	0.21918633	2.7243344	20	11 23.4	20.7
491220 2011 UO_{180}	17.2	X	271.28049	15.80260	266.55286	6.25866	0.2147031	0.28486728	2.2875697	20	2 11.6	20.7
491221 2011 UY_{181}	17.3	X	100.97491	357.31808	39.61859	7.34582	0.1505234	0.25985664	2.4320930	20	1 24.1	20.3
491222 2011 UE_{182}	16.9	X	234.43868	354.28716	36.22021	12.65893	0.1108261	0.18501552	3.0502161	20	6 5.1	21.6
491223 2011 UA_{183}	15.8	X	15.47078	356.44299	244.44311	15.52587	0.0879973	0.17739470	3.1369598	20	6 12.5	19.7
491224 2011 UO_{183}	15.8	X	288.92278	312.39999	48.46123	10.85246	0.1198394	0.19050184	2.9913686	20	7 5.8	19.9
491225 2011 UT_{184}	16.5	X	16.57682	251.69457	87.53340	7.92109	0.1383361	0.21963980	2.7205832	20	11 9.4	19.8
491226 2011 UZ_{184}	17.1	X	220.55125	230.63785	94.54508	6.85994	0.0617393	0.27822765	2.3238202	20	3 1.6	20.3
491227 2011 UZ_{185}	17.2	X	108.88933	288.71279	101.09406	7.11476	0.1174715	0.26148600	2.4219793	20	1 18.3	20.1
491228 2011 UQ_{186}	16.8	X	212.92182	214.24510	200.51314	18.02155	0.0848212	0.18567820	3.0429544	20	6 15.9	21.7
491229 2011 UB_{187}	17.8	X	16.73699	230.91227	188.21898	9.70382	0.1377990	0.23975006	2.5662378	20	—	—
491230 2011 UE_{187}	17.3	X	119.83888	313.20930	101.72037	6.69855	0.1091422	0.27173486	2.3606910	20	3 6.4	20.4
491231 2011 UX_{187}	16.2	X	302.94684	304.57702	64.25369	13.11060	0.0849619	0.20378930	2.8598843	20	8 18.0	20.1
491232 2011 UV_{189}	17.7	X	125.06007	260.12213	112.96046	5.49195	0.1895292	0.26163409	2.4210653	20	1 27.6	20.9
491233 2011 UZ_{191}	18.3	X	2.74274	355.38996	4.14704	7.67199	0.2248767	0.22146322	2.7056294	20	11 22.9	21.3
491234 2011 UW_{192}	18.0	X	241.16017	165.93292	151.07064	4.60918	0.3165383	0.28548375	2.2842753	20	2 25.4	22.0
491235 2011 UP_{198}	16.9	X	102.59600	194.52663	220.84705	8.49429	0.0950503	0.26321399	2.4113675	20	2 5.3	20.0
491236 2011 UV_{199}	17.1	X	55.12367	353.22681	36.44840	7.86034	0.1208927	0.24022732	2.5628378	20	—	—
491237 2011 UP_{200}	15.8	X	229.61067	141.87690	254.03586	13.45016	0.1778684	0.18258003	3.0772813	20	6 2.9	20.6
491238 2011 UH_{201}	17.9	X	252.81950	169.19612	154.63364	6.28133	0.2475739	0.29505275	2.2346162	20	3 18.0	21.4
491239 2011 UO_{201}	17.2	X	183.84897	334.89357	37.56350	24.57992	0.1873068	0.28549748	2.2842021	20	4 1.1	21.2
491240 2011 UU_{204}	17.8	X	221.76998	177.71990	171.51875	9.43444	0.3043615	0.29208803	2.2497117	20	3 22.3	21.7
491241 2011 UB_{206}	17.2	X	345.71758	237.73964	227.93753	29.72250	0.3241341	0.23493584	2.6011767	20	—	—
491242 2011 UG_{206}	17.6	X	318.73885	46.65095	42.72096	13.81673	0.2427355	0.22960278	2.6413014	20	—	—
491243 2011 UB_{209}	16.8	X	265.13418	25.08254	331.86434	4.30353	0.2437112	0.19222132	2.9735028	20	5 12.3	21.4
491244 2011 UG_{211}	18.5	X	268.10409	292.50148	356.75057	5.05475	0.1272705	0.28693363	2.2765739	20	2 29.3	21.6
491245 2011 UC_{213}	16.3	X	113.88338	194.48465	296.91391	4.71809	0.0891096	0.17992704	3.1074568	20	6 5.3	20.9
491246 2011 US_{220}	18.1	X	2.94562	33.17247	34.51653	4.65564	0.2366125	0.23811740	2.5779548	20	—	—
491247 2011 UV_{228}	17.7	X	46.25858	35.67532	53.78138	3.16834	0.1671508	0.25864125	2.4397062	20	1 1.1	19.8
491248 2011 UJ_{234}	17.3	X	3.16053	31.93315	306.86277	3.43652	0.0797994	0.21266635	2.7797359	20	10 5.9	20.8
491249 2011 UC_{237}	17.9	X	174.25145	323.25481	10.73976	1.67887	0.1996726	0.26966255	2.3727699	20	1 27.9	21.6
491250 2011 UJ_{241}	16.7	X	344.71432	224.34000	231.71684	27.78582	0.1222902	0.23641529	2.5903136	20	—	—
491251 2011 UJ_{243}	17.6	X	332.28307	253.22012	235.85748	11.22445	0.2001274	0.23829859	2.5766478	20	—	—
491252 2011 US_{245}	16.7	X	251.36207	280.33347	59.70645	9.06993	0.2282440	0.18116345	3.0933020	20	4 15.1	21.7
491253 2011 UT_{245}	17.5	X	222.14663	203.17160	176.10500	2.05064	0.3246099	0.18162911	3.0880127	20	4 29.9	23.2
491254 2011 UZ_{247}	18.7	X	191.04646	299.31844	59.73564	2.20848	0.2030508	0.27941276	2.3172446	20	3 12.8	22.4
491255 2011 UU_{248}	18.1	X	211.29853	275.45574	54.30723	3.28914	0.1916471	0.27732910	2.3288370	20	2 23.4	21.8
491256 2011 UF_{249}	18.1	X	337.67729	296.94471	67.70320	3.66953	0.2112370	0.21189956	2.7864378	20	10 6.9	20.6
491257 2011 US_{250}	17.7	X	311.88567	52.17668	91.05951	5.28303	0.2018997	0.23476298	2.6024534	20	—	—
491258 2011 UW_{251}	15.7	X	73.15804	208.84288	162.39484	3.58658	0.1505969	0.12542387	3.9525975	20	—	—
491259 2011 US_{265}	18.0	X	346.61798	57.48737	60.00574	2.15993	0.2042706	0.23916313	2.5704346	20	—	—
491260 2011 UN_{269}	17.7	X	73.61943	239.34620	215.53092	6.27078	0.1386881	0.26704617	2.3882428	20	2 22.9	20.3
491261 2011 UK_{277}	17.2	X	153.34071	62.91633	260.97795	10.98166	0.0981729	0.25311866	2.4750650	20	—	—
491262 2011 UW_{279}	17.4	X	24.68625	88.14592	250.42684	12.60282	0.2061110	0.22085667	2.7105809	20	11 28.7	20.6
491263 2011 US_{282}	18.2	X	358.71269	24.06294	60.49968	8.66334	0.1689412	0.23803911	2.5785200	20	—	—
491264 2011 UW_{283}	16.3	X	192.94422	43.57692	22.26618	14.72212	0.2653258	0.17883877	3.1200504	20	6 1.6	22.0
491265 2011 UD_{299}	17.3	X	231.88555	245.69495	58.16422	7.11141	0.1241171	0.27409142	2.3471405	20	2 13.5	20.9
491266 2011 UM_{307}	17.2	X	39.88616	329.94475	68.73503	13.02121	0.1855374	0.24010141	2.5637337	20	—	—
491267 2011 UR_{308}	17.5	X	332.88806	211.75193	245.16848	11.51488	0.2443391	0.22858581	2.6491296	20	—	—
491268 2011 UF_{310}	18.0	X	83.46809	17.88377	45.63034	3.34521	0.1615791	0.26267258	2.4146798	20	2 3.2	20.5
491269 2011 UP_{315}	17.9	X	237.14456	224.95955	91.75359	5.05345	0.2535541	0.28592692	2.2819144	20	2 26.7	21.8
491270 2011 UD_{317}	16.6	X	261.51348	127.14856	240.86872	8.08851	0.0440627	0.18433391	3.0577307	20	6 18.9	21.0
491271 2011 UL_{320}	17.7	X	230.24021	258.31501	75.94280	10.55930	0.2449557	0.28541027	2.2846674	20	3 17.8	21.7
491272 2011 UK_{331}	15.8	X	155.99980	177.68180	266.59232	7.96841	0.1222809	0.17320420	3.1873549	20	5 25.1	20.8
491273 2011 UQ_{331}	17.4	X	127.66632	47.15928	342.14185	4.71107	0.1211165	0.26537015	2.3982880	20	2 11.4	20.4
491274 2011 UU_{335}	17.5	X	206.90376	153.28559	169.23436	5.52026	0.1882401	0.28024364	2.3126622	20	2 8.0	21.3
491275 2011 UV_{335}	16.9	X	335.64408	23.30741	24.90443	15.69420	0.2095000	0.22839038	2.6506406	20	12 7.1	19.6
491276 2011 UZ_{362}	18.2	X	64.10791	184.18087	263.71006	1.06543	0.0912957	0.26272221	2.4143757	20	1 25.3	20.7
491277 2011 UW_{374}	17.1	X	243.66809	110.73553	281.48791	7.43358	0.0794452	0.19031866	2.9932878	20	6 23.7	21.4
491278 2011 UZ_{383}	16.0	X	231.01214	56.10174	8.96944	10.55179	0.0128883	0.19297464	2.9657592	20	8 2.1	20.3
491279 2011 UU_{385}	17.0	X	36.80650	319.51444	15.02336	10.10786	0.1696956	0.22232320	2.6986477	20	12 2.5	20.8
491280 2011 UD_{398}	17.7	X	3.92748	187.83681	237.73063	3.13553	0.1540874	0.23389100	2.6089177	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491281 2011 UG_{400}	18.0	X	190.85799	218.57081	97.43950	7.60370	0.1330593	0.27354027	2.3502923	20	1 17.0	21.5
491282 2011 UO_{402}	13.9	X	230.13398	345.95180	114.11881	18.88355	0.0364250	0.08421000	5.1549795	20	8 31.1	21.0
491283 2011 UZ_{406}	16.8	X	354.14867	93.38554	288.34466	13.12027	0.1713784	0.22501135	2.6771114	20	12 3.2	19.8
491284 2011 VD_{5}	16.7	X	203.57602	231.87484	195.24253	9.30721	0.0651579	0.18829340	3.0147131	20	6 22.7	21.3
491285 2011 VY_{5}	17.5	X	279.43689	180.24948	131.95803	9.99671	0.1605522	0.30123878	2.2039181	20	4 12.5	20.4
491286 2011 VS_{6}	17.8	X	188.61478	265.28865	102.77165	6.31862	0.2072644	0.28203632	2.3028520	20	3 24.0	21.6
491287 2011 VH_{9}	17.4	X	292.79226	193.72051	211.03394	9.67259	0.2135446	0.21512139	2.7585465	20	8 24.4	20.8
491288 2011 VS_{14}	17.1	X	340.03481	28.46081	33.55779	14.02334	0.2454401	0.23066878	2.6331575	20	—	—
491289 2011 VF_{18}	17.4	X	116.45991	162.49317	242.57817	5.72877	0.0993500	0.27448062	2.3449212	20	2 10.1	20.5
491290 2011 VG_{18}	17.2	X	188.12435	205.75997	114.48167	7.30268	0.1277309	0.26795038	2.3828669	20	1 19.8	20.8
491291 2011 VT_{18}	16.0	X	168.60798	167.13411	269.95229	11.75191	0.0882205	0.17472644	3.1688156	20	5 27.8	20.9
491292 2011 VU_{18}	15.9	X	284.14930	338.37253	30.44811	11.30913	0.0307467	0.19157853	2.9801503	20	7 25.9	20.2
491293 2011 VX_{18}	17.2	X	236.40153	358.05434	48.01817	11.05736	0.2354880	0.19024697	2.9940397	20	6 15.9	22.2
491294 2011 VQ_{21}	17.0	X	224.80011	108.36821	289.00883	5.99282	0.1649496	0.18179874	3.0860915	20	5 31.6	21.9
491295 2011 WA_{2}	16.9	X	303.27482	345.26367	71.91651	11.31034	0.1128731	0.21025167	2.8009783	20	10 20.9	20.3
491296 2011 WM_{3}	16.3	X	327.76075	66.68157	60.59732	30.13105	0.3074662	0.23137670	2.6277838	20	—	—
491297 2011 WF_{10}	17.8	X	23.89927	319.91490	109.69961	1.12815	0.1230913	0.24168591	2.5525161	20	—	—
491298 2011 WV_{13}	17.9	X	168.76310	322.07044	9.08051	1.22900	0.1990723	0.26403178	2.4063858	20	1 20.1	21.7
491299 2011 WP_{14}	15.6	X	236.12417	176.12973	214.06832	11.13991	0.1433662	0.18353619	3.0665843	20	6 5.7	20.4
491300 2011 WW_{19}	17.3	X	9.74792	119.47560	262.53388	8.19856	0.2534512	0.23089054	2.6314712	20	—	—
491301 2011 WT_{20}	16.7	X	126.50605	44.81381	245.00438	11.54268	0.1176576	0.23129354	2.6284136	20	—	—
491302 2011 WZ_{20}	18.0	X	34.80590	312.25110	100.70554	0.39289	0.0198207	0.23851621	2.5750803	20	—	—
491303 2011 WV_{22}	18.3	X	3.22940	343.91518	105.26891	0.83943	0.1121508	0.23845712	2.5755057	20	—	—
491304 2011 WO_{24}	17.2	X	314.17499	56.22849	289.97041	1.24737	0.0858059	0.19264616	2.9691295	20	7 28.3	21.0
491305 2011 WR_{25}	18.6	X	268.98068	124.09681	182.77784	1.40849	0.2259970	0.29169679	2.2517229	20	3 12.2	21.6
491306 2011 WK_{38}	16.5	X	204.41529	138.05820	247.34222	13.60777	0.1039005	0.17059240	3.2198052	20	4 29.8	21.7
491307 2011 WR_{38}	17.2	X	292.54878	322.32572	244.39115	5.53166	0.0722416	0.25363124	2.4717292	20	—	—
491308 2011 WH_{49}	17.6	X	341.64462	39.03614	78.01303	5.32191	0.1519197	0.23810948	2.5780119	20	—	—
491309 2011 WS_{50}	16.4	X	36.31814	327.33218	257.77540	9.20576	0.0341442	0.17926731	3.1150760	20	6 18.2	20.7
491310 2011 WJ_{51}	16.4	X	320.94581	211.30826	68.95141	10.37717	0.0323217	0.17288383	3.1912914	20	5 17.9	20.8
491311 2011 WM_{51}	17.0	X	221.71758	133.17756	248.67762	10.36365	0.1285445	0.17596438	3.1539360	20	5 12.2	21.9
491312 2011 WW_{56}	17.5	X	339.15159	234.05426	231.63660	10.85969	0.1534262	0.23509393	2.6000105	20	—	—
491313 2011 WQ_{57}	16.5	X	284.83045	276.42664	69.91916	11.32562	0.0547423	0.18339722	3.0681333	20	6 19.4	20.8
491314 2011 WO_{60}	18.1	X	350.37933	236.96932	199.36813	2.64269	0.1463176	0.23077042	2.6323843	20	—	—
491315 2011 WA_{68}	16.2	X	274.79437	83.96452	275.29231	7.65225	0.1252991	0.18596968	3.0397739	20	6 12.9	20.4
491316 2011 WT_{68}	17.3	X	346.24428	245.99115	196.17876	3.90115	0.1773020	0.22910143	2.6451533	20	—	—
491317 2011 WD_{70}	16.5	X	30.94354	173.12179	239.01406	16.13216	0.2302160	0.23783682	2.5799819	20	—	—
491318 2011 WL_{71}	15.8	X	234.38047	322.48269	63.66019	10.70818	0.0527868	0.18023023	3.1039707	20	6 7.1	20.3
491319 2011 WA_{79}	17.7	X	8.39605	206.85444	245.11608	12.11997	0.1480405	0.24239842	2.5475118	20	—	—
491320 2011 WL_{79}	16.3	X	21.04251	328.95040	244.46051	4.16345	0.0850010	0.17042453	3.2219192	20	5 15.8	20.4
491321 2011 WX_{86}	17.3	X	224.77122	324.42397	77.82702	6.06003	0.1517170	0.18324975	3.0697791	20	6 8.1	22.2
491322 2011 WS_{87}	17.0	X	110.87071	62.76785	241.36034	13.38928	0.1054464	0.23184495	2.6242444	20	—	—
491323 2011 WV_{87}	18.0	X	217.19977	255.49105	78.98274	6.88704	0.2490693	0.28098331	2.3086018	20	3 5.8	22.0
491324 2011 WB_{97}	17.2	X	20.38950	169.87175	239.29484	4.05524	0.2230209	0.23577155	2.5950264	20	—	—
491325 2011 WJ_{106}	16.3	X	180.46327	150.64270	279.46294	10.32216	0.0717284	0.17808391	3.1288609	20	5 31.5	21.0
491326 2011 WL_{107}	16.8	X	21.46270	265.97608	79.10372	13.91492	0.1826151	0.21836709	2.7311440	20	11 29.5	20.1
491327 2011 WY_{109}	18.1	X	358.38669	284.35653	128.99163	1.62601	0.0738913	0.22839570	2.6505995	20	—	—
491328 2011 WW_{113}	18.0	X	328.53382	9.68677	87.37264	4.42786	0.1591054	0.22541025	2.6739520	20	—	—
491329 2011 WX_{116}	17.9	X	311.34641	228.65969	241.64245	5.10268	0.1806883	0.22695827	2.6617793	20	—	—
491330 2011 WR_{124}	17.9	X	355.20661	317.24631	112.55187	4.34111	0.2362427	0.23304296	2.6152431	20	—	—
491331 2011 WK_{134}	17.1	X	39.12079	297.31031	117.61898	8.42655	0.1551280	0.24137382	2.5547159	20	—	—
491332 2011 WU_{134}	12.7	X	292.72089	203.93670	206.41503	36.63200	0.0789379	0.08389240	5.1679819	20	8 31.6	19.8
491333 2011 WP_{143}	16.0	X	230.95050	118.88317	264.27418	9.26273	0.0316068	0.17640864	3.1486386	20	6 1.9	20.4
491334 2011 WY_{151}	16.2	X	24.74455	61.44004	280.16296	15.34911	0.0614378	0.21960858	2.7208411	20	11 7.4	20.0
491335 2011 WY_{152}	17.6	X	233.23371	201.09325	137.36324	7.67168	0.1341646	0.28449951	2.2895407	20	3 28.6	21.0
491336 2011 XH	17.6	X	358.20793	267.87243	184.62421	8.45848	0.1334243	0.23772672	2.5807784	20	—	—
491337 2011 XO_{2}	17.7	X	294.23673	331.52665	194.72902	8.56300	0.1038516	0.23782049	2.5801000	20	—	—
491338 2011 YM_{7}	16.3	X	292.27094	242.94865	281.20887	13.21905	0.0332468	0.23175511	2.6249226	20	—	—
491339 2011 YR_{19}	17.0	X	342.86635	129.31550	291.67058	12.43390	0.1886433	0.21699784	2.7426209	20	—	—
491340 2011 YB_{21}	16.9	X	221.83376	79.23772	118.81196	16.61537	0.0907315	0.21338883	2.7734580	20	12 26.6	21.0
491341 2011 YD_{24}	17.1	X	23.90558	120.45115	293.55358	12.12403	0.1567164	0.22857920	2.6491806	20	—	—
491342 2011 YT_{24}	18.0	X	306.50779	7.34826	84.63753	3.95790	0.2533390	0.21374716	2.7703575	20	11 29.4	20.1
491343 2011 YU_{24}	18.0	X	353.93878	17.59784	78.08749	3.24127	0.2231054	0.22921125	2.6443083	20	—	—
491344 2011 YY_{29}	17.5	X	134.03571	245.47387	128.26032	7.80057	0.1436461	0.25432359	2.4672412	20	2 2.6	20.7
491345 2011 YY_{30}	16.2	X	315.21580	326.45936	122.71525	34.87449	0.1673378	0.21257326	2.7805474	20	12 24.5	19.6
491346 2011 YL_{31}	16.9	X	123.33703	268.62700	60.01479	8.02750	0.1595399	0.24355701	2.5394264	20	—	—
491347 2011 YW_{37}	17.0	X	330.80743	290.99283	132.23058	7.67773	0.2545754	0.21419217	2.7665190	20	12 19.8	19.3
491348 2011 YZ_{50}	17.3	X	246.66738	136.90941	65.38567	14.01392	0.1016697	0.22677835	2.6631870	20	—	—
491349 2011 YG_{51}	17.3	X	228.59978	183.30597	3.17423	8.00573	0.1527221	0.21407677	2.7675131	20	12 10.3	21.3
491350 2011 YN_{52}	16.7	X	278.23626	266.26784	285.66978	7.93765	0.1389035	0.22582020	2.6707149	20	—	—
491351 2011 YR_{56}	17.5	X	78.73116	73.61072	309.29470	3.09876	0.1918283	0.23865947	2.5740498	20	—	—
491352 2011 YU_{68}	17.5	X	44.52508	331.46833	78.18434	7.03204	0.2136893	0.23750722	2.5823682	20	—	—
491353 2011 YJ_{70}	17.7	X	250.87929	109.53631	52.94533	8.65248	0.4832691	0.20464744	2.8518839	20	10 25.4	22.3
491354 2012 AW_{3}	17.3	X	262.66170	47.64829	107.52128	13.05814	0.2925411	0.21125600	2.7920939	20	11 27.1	20.9
491355 2012 AG_{6}	16.1	X	222.27654	320.00314	293.06217	13.22002	0.0777900	0.23314591	2.6144731	20	—	—
491356 2012 AK_{7}	17.3	X	34.71530	69.64324	353.91033	10.57956	0.1899433	0.23833634	2.5763758	20	—	—
491357 2012 AW_{14}	16.6	X	342.19587	20.61978	70.51518	16.04502	0.1625301	0.22345775	2.6895055	20	—	—
491358 2012 BU	14.9	X	269.00236	41.21939	62.88938	3.47936	0.1927433	0.08334764	5.1904758	20	9 25.0	21.8
491359 2012 BM_{2}	17.6	X	40.49348	119.08017	278.22163	4.71337	0.0432509	0.22454392	2.6808253	20	—	—
491360 2012 BH_{12}	17.8	X	9.28068	334.99061	92.47589	6.13523	0.1615644	0.22642727	2.6659391	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491361 2012 BY_{12}	17.1	X	286.69659	194.71540	294.44254	8.25126	0.1036588	0.21188068	2.7866033	20	12 25.4	20.5
491362 2012 BD_{17}	16.9	X	323.76479	28.56442	115.38865	7.26635	0.0667811	0.22746661	2.6578121	20	—	—
491363 2012 BT_{26}	17.1	X	289.04104	59.67407	112.24530	12.48979	0.1297374	0.22756937	2.6570120	20	—	—
491364 2012 BD_{33}	17.1	X	270.93483	216.11464	317.31344	12.75597	0.0668594	0.22175413	2.7032626	20	—	—
491365 2012 BN_{41}	17.8	X	300.16978	47.54987	103.81850	3.35953	0.1415342	0.22329038	2.6908493	20	—	—
491366 2012 BF_{44}	18.3	X	99.80948	204.37972	314.50666	4.35756	0.1349927	0.27793525	2.3254498	20	7 3.9	21.3
491367 2012 BD_{56}	16.9	X	244.78061	81.79345	119.87055	8.66784	0.1600472	0.21117220	2.7928324	20	—	—
491368 2012 BY_{58}	17.2	X	4.19864	107.50286	315.77003	9.95170	0.1723356	0.22361992	2.6882050	20	—	—
491369 2012 BG_{69}	17.2	X	94.00733	32.32574	325.34048	5.73895	0.1923695	0.22945279	2.6424523	20	—	—
491370 2012 BT_{71}	17.1	X	302.36091	166.10624	295.19953	7.88497	0.2213306	0.21184506	2.7869156	20	12 4.5	19.8
491371 2012 BZ_{71}	16.8	X	203.98734	93.22249	138.76630	25.30377	0.1229001	0.21119606	2.7926221	20	—	—
491372 2012 BS_{74}	16.9	X	64.99297	285.72068	94.03015	13.25590	0.2045447	0.23476985	2.6024027	20	—	—
491373 2012 BE_{75}	17.3	X	24.38153	91.83160	307.85345	4.59877	0.1017329	0.22232505	2.6986328	20	—	—
491374 2012 BL_{75}	18.2	X	246.54226	211.75453	139.97377	23.80176	0.0577396	0.39227714	1.8481649	20	5 12.4	20.8
491375 2012 BV_{77}	17.6	X	242.42326	90.58217	144.04974	4.13930	0.0789153	0.23240788	2.6200052	20	—	—
491376 2012 BQ_{78}	16.0	X	278.29981	228.15771	322.54506	11.37221	0.1327497	0.22293806	2.6936835	20	—	—
491377 2012 BB_{85}	17.7	X	271.47221	47.87799	105.99376	5.15597	0.0418424	0.21436966	2.7649917	20	—	—
491378 2012 BH_{87}	17.5	X	285.89271	118.53409	357.95477	6.38908	0.2900916	0.21080658	2.7960608	20	11 8.9	20.3
491379 2012 BN_{89}	17.5	X	311.08593	134.68118	324.80335	14.91817	0.1933106	0.21330905	2.7741495	20	12 25.9	20.5
491380 2012 BG_{92}	17.2	X	23.37899	299.53080	134.56361	13.21276	0.1445749	0.22807358	2.6530946	20	—	—
491381 2012 BW_{121}	16.9	X	332.26386	17.18542	107.49423	22.90528	0.0534556	0.22855688	2.6493531	20	—	—
491382 2012 BB_{135}	17.3	X	12.53838	309.08564	110.12577	10.98127	0.1342161	0.22643550	2.6658745	20	—	—
491383 2012 BS_{138}	17.5	X	298.72912	347.36456	161.50482	2.94965	0.1157666	0.21808878	2.7334670	20	—	—
491384 2012 BZ_{145}	16.9	X	270.19715	275.65794	288.72968	9.10141	0.0196278	0.23238603	2.6201694	20	—	—
491385 2012 BL_{149}	17.7	X	262.89762	332.69809	65.32879	8.47585	0.1756000	0.29885096	2.2156421	20	7 18.8	20.4
491386 2012 CZ_{5}	16.9	X	351.32531	23.68429	87.41080	12.75213	0.1322893	0.22717798	2.6600628	20	—	—
491387 2012 CQ_{6}	17.1	X	297.96772	189.08159	279.55329	3.61712	0.0718671	0.20847952	2.8168288	20	12 16.9	20.7
491388 2012 CQ_{12}	16.9	X	210.17446	161.09278	126.60545	9.10796	0.1139636	0.23151746	2.6267186	20	1 5.8	21.0
491389 2012 CB_{18}	17.1	X	249.39544	75.57885	63.02552	16.27793	0.2107461	0.20285270	2.8686806	20	10 31.8	21.2
491390 2012 CJ_{18}	17.1	X	285.19594	57.85607	134.42629	11.50785	0.1894683	0.22456136	2.6806865	20	—	—
491391 2012 CJ_{19}	16.7	X	269.70276	294.01754	241.58157	8.53983	0.2330430	0.21537843	2.7563514	20	—	—
491392 2012 CG_{20}	17.3	X	160.54384	174.54714	53.63908	2.68411	0.0021268	0.20294942	2.8677691	20	11 27.2	21.0
491393 2012 CR_{22}	16.8	X	324.73393	172.26300	300.37437	11.52216	0.0808913	0.21800327	2.7341818	20	—	—
491394 2012 CS_{29}	17.7	X	306.70246	311.97658	142.23053	9.45177	0.2634956	0.21082335	2.7959125	20	12 3.0	20.2
491395 2012 CL_{34}	17.0	X	281.03989	221.13706	326.20339	5.91647	0.0976888	0.22402516	2.6849623	20	—	—
491396 2012 CG_{35}	17.2	X	68.70549	237.62088	146.09905	6.36125	0.0326268	0.22282904	2.6945621	20	—	—
491397 2012 CY_{45}	17.0	X	248.75430	249.21034	329.35916	7.37605	0.1602735	0.21751513	2.7382708	20	—	—
491398 2012 CH_{46}	17.3	X	261.04003	56.82878	113.86853	5.51854	0.0103488	0.21251277	2.7810750	20	—	—
491399 2012 CL_{55}	16.7	X	341.25385	17.55760	67.03583	19.50353	0.2995574	0.22135333	2.7065248	20	—	—
491400 2012 DA_{4}	16.6	X	269.08338	73.51607	116.34898	15.23718	0.2634762	0.21415088	2.7668746	20	—	—
491401 2012 DB_{5}	17.5	X	295.96438	338.95013	151.30638	9.62617	0.0882430	0.21096363	2.7946729	20	—	—
491402 2012 DD_{9}	16.8	X	186.84994	124.27591	146.50443	11.19512	0.0375070	0.21868787	2.7284726	20	—	—
491403 2012 DC_{11}	14.0	X	307.08165	113.66518	321.62964	8.52930	0.0626550	0.08214004	5.2412248	20	10 18.8	20.8
491404 2012 DT_{11}	17.3	X	282.43002	99.14109	47.86988	8.61940	0.2428404	0.21312961	2.7757063	20	12 25.5	20.2
491405 2012 DN_{18}	17.1	X	232.48954	75.63389	145.41836	11.11779	0.2466931	0.21296638	2.7771245	20	—	—
491406 2012 DR_{20}	17.2	X	323.80910	254.59991	244.66952	1.19605	0.0214753	0.22111081	2.7085035	20	—	—
491407 2012 DX_{22}	17.1	X	254.44540	235.58770	321.36208	7.02482	0.1352765	0.21243141	2.7817850	20	—	—
491408 2012 DP_{34}	16.9	X	199.56236	250.28146	353.71494	14.75250	0.2071704	0.20025626	2.8934233	20	—	—
491409 2012 DO_{36}	17.9	X	64.76300	5.38070	170.81604	6.43174	0.0823305	0.26145169	2.4221912	20	6 1.4	20.8
491410 2012 DJ_{38}	17.1	X	286.31913	95.91773	65.24388	15.26144	0.1966605	0.21142039	2.7906464	20	—	—
491411 2012 DL_{52}	17.8	X	98.61475	318.96122	174.29925	5.13460	0.1807132	0.26592925	2.3949253	20	6 2.9	21.1
491412 2012 DA_{61}	18.8	X	209.68044	235.08957	179.75087	21.98919	0.0961209	0.39379309	1.8434187	20	6 16.5	21.5
491413 2012 DE_{62}	18.3	X	77.78843	199.24803	344.37365	20.34283	0.0586497	0.38812696	1.8613163	20	7 9.3	20.6
491414 2012 DH_{63}	17.3	X	219.14175	88.39923	143.45335	9.85631	0.1103235	0.20998263	2.8033703	20	—	—
491415 2012 DQ_{63}	18.1	X	19.65727	321.31515	313.47458	3.29918	0.1804797	0.28165846	2.3049111	20	8 29.8	20.0
491416 2012 DB_{78}	16.6	X	307.62111	5.90544	122.91098	14.94106	0.1424611	0.21548189	2.7554691	20	—	—
491417 2012 DL_{90}	17.3	X	346.33101	100.23062	343.49261	11.84713	0.1388865	0.21481664	2.7611549	20	—	—
491418 2012 DJ_{94}	16.6	X	191.92218	261.58715	346.80171	6.63023	0.2655702	0.20522669	2.8465151	20	—	—
491419 2012 DE_{95}	16.7	X	208.83117	173.25530	151.99525	15.21719	0.2204337	0.24220042	2.5488999	20	2 16.8	21.1
491420 2012 EG_{4}	16.6	X	307.93372	342.68846	164.92007	11.03716	0.1748715	0.21426131	2.7659238	20	—	—
491421 2012 EQ_{4}	17.1	X	241.06784	27.61523	163.40597	10.91913	0.0837769	0.20411507	2.8568406	20	—	—
491422 2012 EE_{5}	17.2	X	235.77742	52.91742	186.06686	8.27376	0.2258429	0.20983842	2.8046545	20	—	—
491423 2012 EQ_{7}	16.2	X	238.49377	206.30579	357.88682	8.76150	0.0958421	0.21126103	2.7920496	20	—	—
491424 2012 ET_{14}	17.6	X	107.06919	174.44768	166.65482	66.22808	0.5663496	0.45228100	1.6808559	20	—	—
491425 2012 EU_{15}	18.1	X	140.92422	113.65026	5.57593	20.88332	0.0746250	0.38489433	1.8717236	20	6 26.1	20.8
491426 2012 EV_{16}	16.3	X	84.63422	281.25486	136.67717	14.92147	0.0969850	0.22979427	2.6398338	20	1 23.2	19.5
491427 2012 EZ_{16}	16.9	X	239.42326	117.10782	117.61715	13.11985	0.1648940	0.21427457	2.7658097	20	—	—
491428 2012 FO_{1}	16.2	X	336.17000	302.30019	166.44142	32.96339	0.2946354	0.21649703	2.7468488	20	—	—
491429 2012 FZ_{7}	18.4	X	154.80746	251.84858	203.12896	2.66425	0.1838434	0.27358244	2.3500507	20	6 9.9	22.2
491430 2012 FR_{8}	17.3	X	273.55217	354.52440	180.43748	4.52754	0.0496994	0.21387278	2.7692726	20	—	—
491431 2012 FW_{10}	16.9	X	194.49960	214.06081	355.71717	9.48757	0.0264663	0.19518502	2.9433261	20	12 10.8	21.2
491432 2012 FS_{14}	18.6	X	133.97457	106.73130	20.24736	21.74873	0.0797539	0.38860532	1.8597885	20	6 28.7	21.3
491433 2012 FT_{20}	17.6	X	298.51618	35.68554	77.10131	3.16675	0.0497678	0.19983351	2.8975026	20	12 21.8	21.3
491434 2012 FB_{22}	16.1	X	158.38846	239.22990	5.85802	15.02248	0.0804638	0.18960432	3.0008013	20	12 7.2	20.9
491435 2012 FB_{25}	17.3	X	239.34374	51.83388	146.69919	8.53322	0.2424077	0.20096659	2.8866013	20	12 23.5	21.5
491436 2012 FY_{25}	18.5	X	150.66635	252.12581	186.44811	4.64971	0.1745068	0.26290816	2.4132371	20	5 15.9	22.2
491437 2012 FX_{32}	16.3	X	133.07405	215.30764	86.28526	13.31222	0.1290865	0.19461397	2.9490811	20	—	—
491438 2012 FX_{42}	16.5	X	339.51065	64.04005	28.76968	10.01761	0.0528475	0.21312385	2.7757564	20	—	—
491439 2012 FZ_{43}	16.7	X	216.97008	87.63959	153.67799	14.21877	0.1454780	0.21503607	2.7592762	20	—	—
491440 2012 FC_{44}	16.7	X	309.59498	53.88561	18.58308	9.99297	0.0063286	0.18081650	3.0972577	20	11 11.9	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491441 2012 FG_{49}	17.0	X	122.56736	238.31662	74.60578	3.17613	0.0535546	0.20305974	2.8667303	20	—	—
491442 2012 FY_{49}	17.8	X	297.90638	3.00430	141.05103	1.10792	0.0990683	0.20914343	2.8108645	20	—	—
491443 2012 FM_{55}	17.0	X	221.88591	105.71850	157.87383	13.51587	0.2274369	0.22305197	2.6927663	20	—	—
491444 2012 FX_{60}	16.7	X	301.04372	68.64653	51.05733	6.43203	0.0460540	0.19929227	2.9027463	20	—	—
491445 2012 FR_{61}	19.2	X	66.84343	52.30876	197.50934	21.13890	0.0993456	0.39731107	1.8325209	20	10 12.7	20.8
491446 2012 FL_{62}	18.3	X	194.50238	17.94835	27.13002	22.05463	0.0909282	0.37955347	1.8892412	20	5 5.5	20.6
491447 2012 FY_{63}	17.7	X	258.16185	79.21675	130.98365	1.53336	0.0054132	0.21574687	2.7532124	20	—	—
491448 2012 FD_{65}	16.9	X	210.54996	165.30320	15.49719	13.69275	0.0398410	0.19041671	2.9922601	20	11 19.2	21.3
491449 2012 FJ_{65}	17.3	X	297.60843	315.55365	161.61936	9.89626	0.0061012	0.19816385	2.9137554	20	12 27.8	21.4
491450 2012 FU_{66}	17.2	X	147.43851	176.34919	134.61255	4.19526	0.0863975	0.20997955	2.8033977	20	—	—
491451 2012 FE_{68}	17.2	X	321.93849	62.25891	42.96847	8.21200	0.1894568	0.20904751	2.8117241	20	—	—
491452 2012 FO_{68}	17.0	X	176.34808	139.35036	154.87661	13.46996	0.1542392	0.21036302	2.7999898	20	—	—
491453 2012 FC_{74}	17.5	X	237.46135	216.27552	10.34370	3.19910	0.1224797	0.20995398	2.8036253	20	—	—
491454 2012 FF_{74}	15.9	X	165.92228	147.37038	56.85566	17.23245	0.1651382	0.17388347	3.1790487	20	10 29.8	21.2
491455 2012 FC_{79}	17.5	X	332.20653	129.89607	334.30289	7.62857	0.0824173	0.21629269	2.7485786	20	—	—
491456 2012 GQ	18.1	X	167.78299	235.13227	168.77877	23.82246	0.1085661	0.37074384	1.9190520	20	4 11.3	20.7
491457 2012 GS_{1}	18.3	X	331.01586	274.07082	26.81317	21.19864	0.0405580	0.38881670	1.8591144	20	7 11.6	20.5
491458 2012 GC_{16}	15.9	X	90.33425	200.70374	111.69610	12.69971	0.0793548	0.17701843	3.1414035	20	12 17.7	20.6
491459 2012 GO_{21}	16.7	X	146.30679	81.12290	158.67883	16.79696	0.1063093	0.17360903	3.1823981	20	11 22.5	22.0
491460 2012 GJ_{27}	16.2	X	176.46880	357.72853	218.85222	22.22770	0.0973315	0.18063817	3.0992958	20	11 22.4	21.1
491461 2012 GQ_{27}	19.1	X	27.17579	32.58406	196.61101	22.07642	0.0377486	0.38064700	1.8856212	20	6 14.7	21.3
491462 2012 GE_{30}	16.9	X	169.61994	41.63980	200.74342	10.36076	0.1133565	0.18902810	3.0068964	20	12 16.2	21.8
491463 2012 GZ_{35}	16.2	X	151.89292	205.71838	31.47813	11.89778	0.1438750	0.17860024	3.1228277	20	11 19.6	21.3
491464 2012 GZ_{38}	16.0	X	112.81275	221.96607	112.00123	10.89155	0.1096625	0.19202389	2.9755406	20	—	—
491465 2012 HU	17.6	X	114.71050	63.74065	63.88902	26.86358	0.1054812	0.37935942	1.8898854	20	6 2.2	19.5
491466 2012 HZ	16.1	X	294.58964	104.16535	44.76851	15.45189	0.0941271	0.20373025	2.8604369	20	—	—
491467 2012 HJ_{10}	16.4	X	25.05092	267.37001	115.16357	12.26218	0.0733996	0.18508336	3.0494707	20	12 26.0	20.6
491468 2012 HU_{11}	17.0	X	211.47724	54.81923	143.51863	7.00157	0.1746138	0.18622384	3.0370075	20	11 30.7	21.8
491469 2012 HX_{11}	16.6	X	239.91659	77.48270	104.49404	9.91974	0.0862563	0.18981119	2.9986205	20	12 22.9	20.8
491470 2012 HS_{12}	16.6	X	108.29127	203.86419	87.32738	12.90340	0.0631327	0.17814787	3.1281120	20	12 10.4	21.2
491471 2012 HD_{13}	16.2	X	261.18305	36.48631	101.75348	10.57573	0.0942872	0.18296139	3.0730036	20	11 25.7	20.5
491472 2012 HL_{14}	15.9	X	229.26798	132.57283	112.52220	10.07213	0.1043549	0.20997504	2.8034379	20	—	—
491473 2012 HQ_{14}	19.0	X	111.88640	345.94979	196.57369	21.85741	0.0946572	0.39578439	1.8372303	20	8 22.5	21.5
491474 2012 HQ_{15}	18.6	X	157.12568	329.72940	153.00819	14.56694	0.2017777	0.39320186	1.8452661	20	7 23.3	21.3
491475 2012 HL_{17}	16.6	X	116.05544	115.59917	173.03185	10.63289	0.2452151	0.17412104	3.1761564	20	12 22.6	22.2
491476 2012 HV_{18}	16.3	X	111.47918	142.04787	145.05942	13.76123	0.1223014	0.17402024	3.1773829	20	12 13.0	21.5
491477 2012 HE_{25}	18.8	X	144.97071	258.95090	208.35840	19.86260	0.0700493	0.37842344	1.8930004	20	6 10.2	21.3
491478 2012 HC_{26}	16.6	X	288.22224	353.03318	173.31725	15.22830	0.0774020	0.20352298	2.8623787	20	—	—
491479 2012 HU_{26}	16.9	X	275.05297	79.93434	52.18367	12.52156	0.0684022	0.18863875	3.0110325	20	12 7.8	20.9
491480 2012 HS_{41}	16.8	X	124.70666	177.30538	67.74244	2.64853	0.1574054	0.17225305	3.1990776	20	11 7.0	21.8
491481 2012 HQ_{43}	17.2	X	163.28026	177.83823	70.96998	2.58053	0.1582993	0.18502551	3.0501063	20	12 15.3	22.3
491482 2012 HS_{43}	17.0	X	189.97366	137.13364	79.27248	2.94610	0.1270497	0.18529982	3.0470954	20	12 3.9	21.8
491483 2012 HY_{43}	16.6	X	252.71781	106.89820	41.59340	10.45253	0.0341425	0.18548616	3.0450543	20	12 2.7	20.9
491484 2012 HM_{45}	17.5	X	225.22873	38.23525	136.69498	3.35431	0.2511633	0.18901935	3.0069893	20	11 8.9	22.2
491485 2012 HQ_{45}	18.5	X	282.53076	272.78238	45.39486	21.50642	0.0865808	0.36953931	1.9232200	20	4 30.9	20.4
491486 2012 HR_{45}	17.0	X	207.45241	173.73112	82.37249	6.47963	0.1190484	0.20110795	2.8852485	20	—	—
491487 2012 HP_{46}	16.4	X	98.08212	205.12857	106.13519	9.29297	0.1407440	0.17918874	3.1159865	20	12 28.8	21.2
491488 2012 HT_{51}	16.7	X	142.19902	253.29065	33.70477	3.55788	0.2580497	0.18253778	3.0777562	20	—	—
491489 2012 HU_{57}	16.5	X	176.21275	165.63363	57.00297	7.43143	0.1344183	0.18034943	3.1026029	20	11 26.7	21.5
491490 2012 HV_{63}	16.7	X	158.68784	64.98082	202.60760	9.39389	0.0892433	0.18814575	3.0162901	20	—	—
491491 2012 HC_{64}	16.4	X	132.28487	241.38263	46.89382	12.36302	0.1637965	0.18311301	3.0713071	20	—	—
491492 2012 HJ_{66}	16.7	X	177.14238	150.52790	76.11556	12.13630	0.1046448	0.18330916	3.0691158	20	12 4.7	21.5
491493 2012 HQ_{71}	16.5	X	205.67131	0.85064	224.80676	12.89837	0.1027014	0.19230472	2.9726429	20	—	—
491494 2012 HP_{75}	16.7	X	191.89014	94.73314	126.68020	9.90785	0.0703814	0.18683931	3.0303343	20	12 17.4	21.2
491495 2012 HK_{78}	16.0	X	185.64341	146.74324	63.39478	18.24726	0.1488751	0.17827262	3.1266525	20	11 20.8	20.9
491496 2012 HV_{81}	16.0	X	111.82966	232.30419	32.33680	27.24609	0.2219065	0.17310740	3.1885431	20	11 15.2	21.6
491497 2012 JG	19.0	X	316.42419	168.98450	171.19469	21.65925	0.0547426	0.38857654	1.8598803	20	8 15.9	20.6
491498 2012 JO	17.9	X	9.95302	61.30402	170.67327	22.06048	0.0565625	0.36991522	1.9219168	20	5 23.9	20.1
491499 2012 JN_{1}	16.1	X	122.39249	266.02434	40.44241	14.45595	0.3623623	0.18064259	3.0992453	20	—	—
491500 2012 JY_{4}	17.8	X	49.50272	355.99962	205.76375	21.44593	0.0584512	0.37439358	1.9065599	20	6 11.2	19.9
491501 2012 JH_{6}	16.5	X	93.72380	283.15493	28.12778	3.98127	0.1765686	0.17412050	3.1761630	20	12 26.6	21.7
491502 2012 JA_{10}	16.3	X	140.66604	217.64669	54.22814	16.90003	0.1578684	0.17940214	3.1135151	20	12 20.2	21.5
491503 2012 JX_{10}	16.0	X	118.23894	227.77297	86.73719	10.25661	0.0623160	0.19292645	2.9662531	20	—	—
491504 2012 JK_{11}	18.0	X	246.38259	269.30018	89.23656	22.88856	0.1101609	0.36796931	1.9286865	20	5 15.7	20.6
491505 2012 JO_{11}	18.2	X	287.39292	187.85479	182.11841	22.26484	0.0263863	0.38868062	1.8595483	20	8 14.8	20.2
491506 2012 JA_{12}	16.0	X	112.50186	244.44702	62.22064	17.41525	0.2224909	0.17911566	3.1168340	20	—	—
491507 2012 JV_{13}	16.8	X	267.92370	275.85096	212.40566	10.26749	0.0692048	0.18312475	3.0711759	20	11 24.2	21.0
491508 2012 JU_{15}	16.3	X	240.09755	51.94818	114.07494	14.07826	0.1181511	0.18192724	3.0846382	20	11 30.6	20.8
491509 2012 JO_{18}	16.3	X	196.76953	21.87735	193.83414	27.16168	0.1006710	0.18048035	3.1011023	20	12 10.5	21.5
491510 2012 JH_{19}	16.7	X	233.49787	311.50913	220.75962	13.86291	0.1954528	0.18875463	3.0098001	20	11 19.5	21.1
491511 2012 JG_{22}	18.1	X	153.40827	295.51314	213.29001	21.92485	0.1292459	0.39432655	1.8417557	20	8 20.7	21.0
491512 2012 JF_{23}	15.5	X	138.38835	169.48388	124.35277	9.81510	0.0508987	0.18972928	2.9994834	20	—	—
491513 2012 JK_{27}	18.5	X	81.64569	59.54674	110.52409	24.26247	0.0499472	0.37537466	1.9032364	20	6 17.3	20.5
491514 2012 JC_{29}	16.5	X	262.52480	106.32032	46.51307	16.66628	0.0159225	0.18553109	3.0445626	20	12 22.4	20.9
491515 2012 JG_{32}	17.1	X	187.66535	210.45234	39.45779	3.45301	0.1891088	0.19008227	2.9957689	20	—	—
491516 2012 JA_{38}	16.0	X	97.53459	256.25017	68.68847	17.57079	0.2374050	0.17806092	3.1291303	20	—	—
491517 2012 JX_{44}	16.8	X	61.71809	246.30758	238.39941	11.52033	0.1433279	0.23260127	2.6185528	20	3 19.5	20.1
491518 2012 JP_{45}	15.7	X	100.89622	210.99382	81.31749	11.86473	0.0508331	0.17173894	3.2054588	20	12 1.7	20.4
491519 2012 JN_{54}	15.5	X	307.80254	327.49438	65.30359	23.18528	0.1334839	0.16024083	3.3570200	20	9 23.7	20.2
491520 2012 KB	17.8	X	227.98570	301.07870	86.51951	24.32416	0.1166154	0.37216636	1.9141588	20	5 30.6	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491521 2012 KF_1	18.0	X	213.88597	30.04639	36.57537	22.10829	0.0969924	0.38674037	1.8657626	20	7 14.2	20.7
491522 2012 KP_3	17.1	X	132.80415	102.59926	167.66078	8.22133	0.2233555	0.17660839	3.1462640	20	12 14.6	22.6
491523 2012 KA_6	17.7	X	7.48064	138.24864	173.34594	22.75218	0.0589162	0.39174123	1.8498501	20	10 13.6	19.2
491524 2012 KK_{10}	15.9	X	240.73357	60.28667	74.95121	16.05475	0.0373948	0.17016724	3.2251661	20	11 4.9	20.6
491525 2012 KH_{17}	16.8	X	147.24754	44.63529	208.37099	4.61077	0.1283638	0.17500150	3.1654943	20	12 5.5	21.9
491526 2012 KZ_{18}	16.2	X	140.88938	160.00025	118.12592	19.14529	0.1778499	0.17904892	3.1176086	20	12 29.6	21.5
491527 2012 KP_{20}	16.9	X	222.29435	49.79060	116.34391	3.84589	0.0615165	0.17990613	3.1076975	20	11 15.3	21.4
491528 2012 KE_{22}	16.7	X	199.53164	41.27153	157.27221	5.41052	0.2498749	0.18476351	3.0529891	20	11 14.4	21.9
491529 2012 KC_{23}	17.3	X	299.92346	358.97902	104.26937	6.81872	0.1004633	0.18754341	3.0227450	20	12 5.7	21.1
491530 2012 KZ_{24}	17.0	X	180.25836	179.40174	52.34669	5.44346	0.1333213	0.18676222	3.0311682	20	12 11.9	21.8
491531 2012 KD_{42}	16.3	X	262.12074	52.98172	83.34372	11.67812	0.0462664	0.17733986	3.1376065	20	11 28.7	20.6
491532 2012 KE_{44}	16.9	X	147.72659	138.64184	121.49352	4.69851	0.1426788	0.17719849	3.1392751	20	12 14.3	22.0
491533 2012 KX_{44}	16.8	X	152.50801	152.38520	140.64865	10.25912	0.0913624	0.18961748	3.0006624	20	—	—
491534 2012 KR_{45}	16.7	X	175.56478	99.87845	177.72330	10.67445	0.1639406	0.18891561	3.0080900	20	—	—
491535 2012 KB_{48}	16.2	X	134.51800	51.90285	235.54010	14.32449	0.1714376	0.17865465	3.1221936	20	—	—
491536 2012 LD	18.2	X	231.41166	175.48258	210.44781	19.88744	0.0794013	0.36993855	1.9218360	20	6 1.6	20.6
491537 2012 LU_2	16.1	X	80.56865	264.02812	66.88938	11.27508	0.0780016	0.17612435	3.1520259	20	12 27.5	20.8
491538 2012 LW_8	16.8	X	141.33005	109.88655	163.56979	12.39439	0.1736841	0.17701851	3.1414025	20	12 23.9	22.2
491539 2012 LG_{12}	15.7	X	185.32412	298.05452	296.32052	11.23929	0.2390081	0.17450304	3.1715195	20	12 11.6	21.2
491540 2012 LN_{14}	16.8	X	151.38570	114.48587	174.15309	15.74517	0.1217088	0.18531530	3.0469257	20	—	—
491541 2012 LV_{15}	15.9	X	111.12850	228.61054	84.18935	14.58367	0.2523218	0.17475307	3.1684936	20	—	—
491542 2012 LA_{16}	16.6	X	167.51785	28.52104	236.89477	10.87893	0.0762684	0.18541804	3.0458001	20	—	—
491543 2012 LX_{16}	15.6	X	166.01711	345.75607	243.67389	22.34086	0.1139284	0.17584026	3.1554199	20	11 25.5	20.6
491544 2012 LW_{18}	16.2	X	173.37691	148.22696	74.99645	13.78165	0.1210272	0.17636644	3.1491409	20	11 26.0	21.3
491545 2012 LE_{19}	16.9	X	192.21287	82.80153	123.68688	4.61511	0.1086497	0.17733752	3.1376341	20	11 25.5	21.8
491546 2012 LO_{19}	16.6	X	196.32714	105.91431	80.66945	16.98847	0.2020307	0.17593620	3.1542728	20	11 4.4	22.0
491547 2012 LJ_{21}	16.5	X	181.10943	123.83968	67.50283	20.02576	0.1638804	0.17377477	3.1803743	20	10 30.6	21.9
491548 2012 LM_{23}	15.9	X	175.93549	7.51979	241.44919	12.43216	0.0563796	0.18250451	3.0781302	20	12 30.7	20.6
491549 2012 LU_{26}	15.5	X	175.11442	149.02364	79.93444	28.75807	0.1360221	0.18327147	3.0695365	20	12 5.3	20.5
491550 2012 LV_{26}	16.7	X	168.15303	98.45640	159.23572	26.59920	0.1430593	0.18455936	3.0552400	20	12 31.4	22.1
491551 2012 MA_1	16.1	X	217.20224	139.40250	88.39880	13.30455	0.1051329	0.19056799	2.9906763	20	—	—
491552 2012 MV_6	16.0	X	192.74560	62.31687	136.29258	16.51487	0.1237697	0.17398992	3.1777519	20	11 19.1	21.2
491553 2012 PA_5	16.8	X	201.34939	102.85122	299.89265	8.41796	0.1446634	0.21842499	2.7306613	20	5 15.3	21.3
491554 2012 PP_{12}	18.3	X	18.24999	43.22933	300.34994	4.89362	0.2777323	0.26073578	2.4266229	20	12 18.2	21.2
491555 2012 PH_{29}	17.3	X	108.72576	312.89346	266.71530	6.17378	0.0505901	0.25593734	2.4568593	20	9 21.2	20.7
491556 2012 PB_{31}	16.6	X	257.13755	62.86973	306.25184	11.90789	0.2273373	0.22603790	2.6689998	20	5 19.9	21.0
491557 2012 PL_{37}	17.6	X	46.67793	326.06449	346.10743	5.14254	0.2442173	0.26448955	2.4036084	20	12 6.2	21.2
491558 2012 QF	16.4	X	210.02105	103.71038	290.71471	7.24207	0.0860919	0.19735425	2.9217187	20	5 17.1	20.9
491559 2012 QA_4	17.7	X	254.54008	53.41382	330.86158	8.41340	0.1619992	0.23145734	2.6271734	20	6 16.3	21.6
491560 2012 QT_6	18.0	X	327.64065	280.43943	107.24731	2.49865	0.1803220	0.25689780	2.4507319	20	11 1.4	19.9
491561 2012 QY_7	16.2	X	161.37067	113.28177	163.97118	26.24530	0.2430767	0.17034727	3.2228933	20	—	—
491562 2012 QU_{14}	17.8	X	32.73872	80.91614	265.90088	7.70859	0.3008502	0.26750689	2.3854999	20	—	—
491563 2012 QD_{26}	16.6	X	146.20196	89.43587	258.29032	1.70628	0.0964826	0.17723132	3.1388873	20	1 19.9	21.4
491564 2012 QU_{40}	17.8	X	24.00397	81.71010	252.08279	4.17718	0.2651915	0.26324459	2.4111807	20	12 11.4	20.7
491565 2012 QF_{49}	17.4	X	75.75843	30.68130	30.67338	28.24090	0.4923848	0.29023103	2.2592978	20	3 27.0	20.2
491566 2012 RG_1	17.3	X	63.76657	321.17027	336.53485	5.86076	0.1872304	0.26632967	2.3925243	20	11 28.9	20.8
491567 2012 RG_3	18.0	X	211.18202	35.16146	113.05497	15.91786	0.5284997	0.49897459	1.5742865	20	10 8.7	20.2
491568 2012 RS_7	16.9	X	285.36545	20.83846	352.67002	13.02772	0.2640904	0.23414913	2.6069999	20	6 27.1	20.5
491569 2012 RO_8	16.5	X	65.92128	337.96669	308.10207	5.58827	0.1214448	0.26114126	2.4241104	20	11 6.9	20.0
491570 2012 RP_{11}	15.8	X	96.06824	68.09400	346.54751	13.94537	0.2464408	0.17306226	3.1890975	20	3 4.5	20.3
491571 2012 RW_{11}	17.7	X	295.87960	156.46738	200.62714	12.46754	0.3044550	0.22913058	2.6449289	20	6 11.5	21.1
491572 2012 RF_{12}	16.1	X	220.73576	158.34457	219.85175	20.73926	0.1423609	0.20999629	2.8032487	20	5 6.0	20.5
491573 2012 RJ_{12}	16.3	X	222.79873	174.65835	210.31580	12.67663	0.1944267	0.21162299	2.7888650	20	5 13.7	20.9
491574 2012 RO_{14}	16.6	X	296.83202	352.30436	354.46356	13.35804	0.1654068	0.22780362	2.6551902	20	6 22.6	20.1
491575 2012 RF_{19}	16.9	X	236.82766	132.84100	245.04661	1.55104	0.1926042	0.21453583	2.7635638	20	5 16.9	21.3
491576 2012 RP_{21}	18.0	X	309.64420	12.93903	330.99817	3.15024	0.2471869	0.23476057	2.6024713	20	6 27.1	20.6
491577 2012 RD_{22}	17.7	X	26.21936	314.00979	35.19089	5.69698	0.1716907	0.26329510	2.4108722	20	12 20.2	20.7
491578 2012 RP_{26}	18.3	X	46.87163	342.49499	6.04495	3.19441	0.2333855	0.27152880	2.3618852	20	—	—
491579 2012 RE_{35}	17.2	X	241.22067	28.00766	335.24463	3.09058	0.1141515	0.21204081	2.7852002	20	5 9.4	21.4
491580 2012 RQ_{37}	17.7	X	200.10139	101.40621	320.92206	2.85928	0.2244224	0.21523047	2.7576144	20	6 6.7	22.5
491581 2012 RO_{38}	17.6	X	130.34329	307.25157	309.10217	5.24711	0.1493909	0.27626380	2.3348199	20	12 10.9	21.2
491582 2012 RY_{39}	18.0	X	352.11290	336.50039	332.75684	2.00448	0.1517646	0.23646181	2.5899739	20	8 16.3	20.5
491583 2012 SU_3	18.1	X	15.38491	212.29812	160.75394	4.72006	0.2114667	0.26244850	2.4160541	20	—	—
491584 2012 SZ_3	17.2	X	275.31295	318.15250	47.22391	4.73130	0.2005570	0.22443763	2.6816716	20	6 10.6	20.7
491585 2012 SL_6	17.0	X	273.75723	73.58229	327.39224	5.07538	0.4290083	0.22711934	2.6605207	20	6 24.8	21.1
491586 2012 SC_{15}	18.7	X	68.27073	24.57111	42.29746	2.11620	0.1749950	0.29666034	2.2265360	20	1 2.1	20.1
491587 2012 SD_{19}	16.4	X	128.32619	194.21492	219.59226	7.45442	0.1678822	0.18183364	3.0856967	20	3 24.3	21.2
491588 2012 SG_{21}	16.7	X	276.80358	333.28153	18.13035	16.05245	0.2485410	0.21946437	2.7220329	20	5 13.5	20.8
491589 2012 SS_{21}	18.1	X	53.61918	12.33689	276.92411	0.83996	0.1726027	0.25698271	2.4501920	20	11 4.5	21.4
491590 2012 SR_{26}	17.2	X	203.80532	11.26633	10.08744	2.12119	0.1727523	0.20372779	2.8604600	20	4 22.5	21.8
491591 2012 SV_{33}	17.6	X	297.31827	41.23068	310.15707	4.44843	0.2560088	0.23333019	2.6130963	20	6 13.9	20.6
491592 2012 SZ_{33}	17.8	X	49.24953	118.64887	188.79194	2.23825	0.2011196	0.26100379	2.4249615	20	11 28.1	21.0
491593 2012 SB_{46}	17.2	X	198.91257	88.30634	344.21799	2.05979	0.1629001	0.21761140	2.7374632	20	6 20.9	21.5
491594 2012 SM_{55}	17.9	X	25.31167	173.37945	179.10651	1.43577	0.1988790	0.26076786	2.4264239	20	12 26.9	21.1
491595 2012 SV_{58}	17.4	X	310.28409	154.13594	200.52992	15.95150	0.2500100	0.23661503	2.5888556	20	7 11.1	20.3
491596 2012 SC_{60}	16.7	X	177.60845	193.41703	151.16099	1.87307	0.1731683	0.18660153	3.0329080	20	2 18.6	21.7
491597 2012 SU_{61}	17.1	X	197.97226	129.70982	192.27426	0.85488	0.2053501	0.19076023	2.9886667	20	2 9.1	22.3
491598 2012 SG_{62}	18.1	X	268.19610	139.93724	264.57362	4.69223	0.3152298	0.22881680	2.6473465	20	7 7.8	22.0
491599 2012 SK_{63}	17.9	X	145.67338	279.27045	196.48475	22.33218	0.0319680	0.34595822	2.0096493	20	6 20.1	20.8
491600 2012 SG_{64}	16.2	X	192.32903	152.81974	237.91396	14.21577	0.1409933	0.20455178	2.8527730	20	4 22.7	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491601 2012 TH_6	17.5	X	233.66630	7.31638	48.92465	6.14483	0.1673041	0.21920638	2.7241683	20	7 4.5	21.7
491602 2012 TW_{11}	18.0	X	23.08535	330.15918	29.50474	2.58783	0.2033053	0.25952686	2.4341528	20	—	—
491603 2012 TB_{16}	17.8	X	284.68641	295.67920	50.11031	0.46110	0.1638678	0.22252801	2.6969916	20	6 2.6	21.2
491604 2012 TY_{17}	16.1	X	154.14864	100.73115	235.59555	8.30548	0.0301646	0.18060040	3.0997280	20	1 7.0	20.6
491605 2012 TV_{21}	18.6	X	73.88704	106.48342	204.49455	0.84778	0.1946781	0.26635112	2.3923958	20	12 27.0	22.1
491606 2012 TP_{25}	18.2	X	343.35090	306.13495	29.98878	2.50616	0.1772275	0.24121639	2.5558273	20	9 11.5	20.3
491607 2012 TC_{30}	17.8	X	305.24187	313.96387	17.72473	3.44696	0.0702332	0.22387623	2.6861528	20	6 28.7	21.2
491608 2012 TS_{33}	18.6	X	82.49194	152.65761	175.74781	2.40371	0.2044986	0.27433113	2.3457730	20	—	—
491609 2012 TO_{45}	16.4	X	127.36053	76.86798	327.89974	7.94070	0.1746985	0.18241154	3.0791760	20	3 13.1	21.1
491610 2012 TS_{49}	18.8	X	82.68766	21.16560	288.47931	0.38718	0.1893059	0.27011159	2.3701395	20	—	—
491611 2012 TX_{51}	13.3	X	206.29785	74.54806	321.11301	16.33734	0.0312266	0.08157214	5.2655224	20	5 16.2	20.6
491612 2012 TH_{54}	18.0	X	38.21566	111.57550	329.99215	5.30169	0.1345236	0.28477427	2.2880678	20	—	—
491613 2012 TT_{54}	17.8	X	125.25985	44.25844	341.73777	5.44238	0.1537827	0.30083038	2.2059123	20	2 3.9	20.3
491614 2012 TF_{55}	16.0	X	128.34767	157.61665	244.60299	11.51106	0.0432460	0.17566129	3.1575629	20	2 22.8	20.8
491615 2012 TB_{57}	16.8	X	254.50261	166.70136	224.91420	7.38168	0.1719402	0.21744498	2.7388597	20	6 23.9	20.8
491616 2012 TJ_{64}	16.2	X	213.06234	21.81972	343.01132	7.30672	0.0895464	0.20074930	2.8886839	20	4 11.9	20.6
491617 2012 TW_{69}	16.6	X	137.83976	39.61015	11.50397	10.75840	0.1224335	0.18854012	3.0120825	20	3 28.2	21.2
491618 2012 TJ_{76}	17.5	X	73.82773	64.32690	234.99500	5.72396	0.1540970	0.26213754	2.4179644	20	12 8.5	20.9
491619 2012 TL_{91}	16.4	X	60.30255	348.49861	100.96499	2.61584	0.1470696	0.17169677	3.2059837	20	2 14.6	20.3
491620 2012 TP_{97}	18.2	X	57.34043	335.78991	359.95010	1.24066	0.2019760	0.26678637	2.3897930	20	—	—
491621 2012 TE_{98}	17.7	X	332.66675	289.33530	21.54711	6.33884	0.0165125	0.22109477	2.7086345	20	7 16.9	21.3
491622 2012 TE_{101}	16.7	X	98.91477	81.38124	333.31169	6.13379	0.2359488	0.16984969	3.2291846	20	3 5.4	21.4
491623 2012 TR_{101}	18.0	X	356.62052	306.96194	14.71017	14.73364	0.1584972	0.24110874	2.5565880	20	9 19.7	20.5
491624 2012 TR_{128}	17.5	X	83.07562	251.15335	40.97554	6.63454	0.1117988	0.26313071	2.4118763	20	12 4.5	21.0
491625 2012 TW_{128}	16.2	X	79.07808	77.45135	356.41320	9.26489	0.1396012	0.17282234	3.1920483	20	2 22.4	20.4
491626 2012 TL_{130}	16.1	X	158.65517	105.70479	196.09750	25.10136	0.2922616	0.17403643	3.1771857	20	—	—
491627 2012 TD_{139}	17.6	X	280.38042	91.03811	285.72487	3.95682	0.0738999	0.22798898	2.6537509	20	7 23.7	20.9
491628 2012 TU_{149}	16.5	X	173.67806	157.43474	217.55149	10.44457	0.1911267	0.18704960	3.0280627	20	3 19.3	21.7
491629 2012 TX_{152}	17.4	X	92.35379	32.31588	193.96020	6.27305	0.0954217	0.23954665	2.5676903	20	9 15.3	21.1
491630 2012 TM_{153}	18.1	X	62.08494	265.35587	33.15181	3.73906	0.2045480	0.26102507	2.4248296	20	11 29.9	21.6
491631 2012 TG_{154}	17.9	X	40.78022	270.44477	40.90833	2.16382	0.1934336	0.25657179	2.4528074	20	11 20.7	21.0
491632 2012 TZ_{154}	17.7	X	263.23858	248.58689	147.58614	2.69234	0.1005133	0.22896114	2.6462337	20	7 22.2	21.1
491633 2012 TZ_{169}	15.8	X	172.11083	14.30539	359.52250	13.62353	0.1496379	0.18694725	3.0291677	20	3 18.2	20.7
491634 2012 TL_{171}	16.4	X	91.42706	156.43758	217.65371	9.26993	0.0868925	0.16004507	3.3597569	20	—	—
491635 2012 TW_{183}	17.1	X	137.04333	116.60480	289.21867	2.90412	0.0747389	0.18684525	3.0302701	20	3 14.5	21.5
491636 2012 TR_{186}	17.6	X	334.76562	329.67345	37.31929	7.98620	0.2175667	0.24037443	2.5617920	20	10 12.8	19.5
491637 2012 TZ_{186}	17.9	X	320.62801	133.59512	221.30106	5.23634	0.3336152	0.23480763	2.6021236	20	7 23.4	19.7
491638 2012 TN_{190}	18.8	X	10.01246	141.79413	291.80754	1.74997	0.1732884	0.27361128	2.3498856	20	—	—
491639 2012 TH_{192}	16.5	X	110.25605	51.29071	350.54591	11.43412	0.1845195	0.17395708	3.1781518	20	2 26.9	21.2
491640 2012 TR_{194}	17.2	X	116.12052	12.70319	57.68298	4.86754	0.2535144	0.17819475	3.1275633	20	4 13.5	22.1
491641 2012 TM_{195}	18.8	X	104.80691	65.94129	251.48914	3.64779	0.2436522	0.28106054	2.3081789	20	—	—
491642 2012 TV_{197}	18.2	X	267.92766	78.93401	322.91337	6.78272	0.3167933	0.22604246	2.6689639	20	7 4.9	22.1
491643 2012 TD_{203}	17.8	X	316.74794	319.82973	28.40020	10.16859	0.2177886	0.23683401	2.5872596	20	7 28.7	20.4
491644 2012 TN_{211}	17.9	X	341.17605	120.01972	356.92066	7.00923	0.1378466	0.27969588	2.3156807	20	—	—
491645 2012 TO_{213}	18.9	X	58.73592	249.60013	199.02246	3.19079	0.1157351	0.29831586	2.2182908	20	1 9.9	20.9
491646 2012 TA_{214}	18.0	X	13.01504	64.32941	258.19219	2.01555	0.1147789	0.24397910	2.5364967	20	10 10.7	20.8
491647 2012 TV_{215}	17.3	X	66.78929	174.65204	157.95583	3.00697	0.2640754	0.26935335	2.3745854	20	—	—
491648 2012 TS_{222}	17.1	X	237.90394	185.42145	221.17502	4.25563	0.1614920	0.21481835	2.7611403	20	6 26.4	21.3
491649 2012 TX_{224}	17.5	X	280.62303	342.26447	42.99876	3.19196	0.2201177	0.23042710	2.6349984	20	7 13.2	20.7
491650 2012 TC_{233}	17.5	X	289.98439	191.78090	186.93844	1.32274	0.1128571	0.23262665	2.6183623	20	8 4.4	20.6
491651 2012 TR_{239}	16.7	X	129.22542	251.87292	171.05834	4.31539	0.1174764	0.18818305	3.0158915	20	4 2.3	21.1
491652 2012 TK_{242}	17.9	X	336.07611	247.34059	80.48146	2.31176	0.1755041	0.23500417	2.6006725	20	8 10.7	20.1
491653 2012 TT_{254}	17.9	X	3.70665	241.52010	225.78487	21.86343	0.3110189	0.27665741	2.3326049	20	—	—
491654 2012 TE_{255}	17.6	X	313.43267	35.35570	352.59342	4.83147	0.2472772	0.24040931	2.5615442	20	9 16.3	19.6
491655 2012 TN_{256}	17.8	X	315.18408	350.14353	0.68939	14.90647	0.2104259	0.23842152	2.5757621	20	8 2.4	20.5
491656 2012 TY_{257}	18.1	X	17.49077	237.53844	115.51616	2.82799	0.2032172	0.25708682	2.4495304	20	12 17.1	20.8
491657 2012 TJ_{258}	18.5	X	52.72881	30.34826	77.96537	3.24831	0.0815050	0.29909880	2.2144180	20	1 28.2	20.5
491658 2012 TG_{287}	17.2	X	186.44032	17.77161	48.22405	5.84150	0.1323384	0.20529259	2.8459059	20	6 1.0	21.6
491659 2012 TB_{292}	16.2	X	341.37051	234.41977	320.57015	5.94166	0.0873976	0.17612743	3.1519892	20	2 21.3	20.1
491660 2012 TK_{292}	16.0	X	132.89706	134.00112	258.77961	8.15837	0.1072804	0.17477655	3.1682098	20	2 25.5	20.9
491661 2012 TG_{296}	17.0	X	244.28839	174.60350	220.98301	10.01860	0.2127348	0.21696846	2.7428685	20	6 13.6	21.3
491662 2012 TK_{296}	17.2	X	262.89028	173.02378	220.74665	14.05316	0.1082867	0.22281540	2.6946720	20	7 13.6	21.2
491663 2012 TE_{298}	16.5	X	113.80423	41.52431	19.91875	17.67876	0.1418063	0.18325089	3.0697664	20	3 21.9	21.1
491664 2012 TD_{302}	17.7	X	7.52847	349.31213	15.07187	2.45983	0.2070463	0.26076123	2.4264651	20	12 19.3	20.3
491665 2012 TO_{304}	17.1	X	270.49424	256.20987	144.68300	4.04823	0.0992003	0.22920652	2.6443448	20	8 8.2	20.6
491666 2012 TY_{304}	18.1	X	285.10716	299.09030	99.82959	3.91130	0.2689248	0.23288628	2.6164159	20	7 31.2	21.0
491667 2012 TM_{306}	16.9	X	220.51260	54.13323	321.88501	3.08222	0.1144049	0.20947194	2.8079249	20	5 3.4	21.2
491668 2012 TK_{308}	16.0	X	162.43269	66.17128	307.84112	11.28192	0.1370592	0.18066372	3.0990036	20	3 5.0	21.0
491669 2012 TA_{310}	16.6	X	184.83129	14.50540	2.91865	8.95500	0.1226112	0.19250652	2.9705652	20	3 31.9	21.4
491670 2012 TG_{313}	18.1	X	308.28221	16.22851	0.92627	5.39299	0.2125389	0.23784598	2.5799157	20	8 23.4	20.4
491671 2012 UU_1	18.8	X	86.69463	328.68965	81.99463	3.71790	0.1098009	0.29802008	2.2197583	20	1 3.9	20.7
491672 2012 UV_5	17.2	X	215.93237	292.98574	113.31337	1.69715	0.0711041	0.21317159	2.7753419	20	6 10.6	21.1
491673 2012 UX_{12}	17.1	X	180.85226	29.81443	67.36758	5.26168	0.0717607	0.21746083	2.7387267	20	7 7.1	21.2
491674 2012 UB_{23}	16.4	X	145.11819	111.63320	293.68934	8.33869	0.0757681	0.18713110	3.0271834	20	3 19.9	21.1
491675 2012 UA_{31}	17.4	X	262.31427	182.74466	216.88807	11.30140	0.1785165	0.22383396	2.6864911	20	7 11.3	21.3
491676 2012 UD_{31}	16.8	X	129.62791	338.43910	56.75026	1.87806	0.1956721	0.17504279	3.1649964	20	3 9.6	21.8
491677 2012 UF_{31}	18.0	X	35.05504	273.90350	206.17925	4.70956	0.0886734	0.29732088	2.2232371	20	1 12.7	20.0
491678 2012 UL_{31}	16.7	X	136.76707	31.44366	48.49748	9.97748	0.1087602	0.18859591	3.0114884	20	4 30.3	21.3
491679 2012 UL_{32}	16.5	X	83.51717	257.76329	211.76561	9.16140	0.2199290	0.17879242	3.1205896	20	4 21.1	20.6
491680 2012 UD_{35}	17.9	X	280.02010	170.06991	226.40498	2.54826	0.1429126	0.22925778	2.6439505	20	8 8.2	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491681 2012 UY_{35}	17.0	X	221.15918	147.27711	208.84373	1.38273	0.1276565	0.19673365	2.9278598	20	4 10.3	21.7
491682 2012 UM_{40}	17.7	X	76.22701	242.29193	64.02367	3.41625	0.1724813	0.26310171	2.4120535	20	12 21.1	21.3
491683 2012 UY_{40}	17.9	X	66.36846	255.83784	45.92039	5.80117	0.2745878	0.26269710	2.4145296	20	12 14.7	21.9
491684 2012 UC_{43}	17.5	X	252.60399	157.80796	202.52809	1.30544	0.1218882	0.21115548	2.7929799	20	5 18.9	21.6
491685 2012 UW_{43}	18.4	X	114.58652	308.43867	72.73248	5.39505	0.1743777	0.29413500	2.2392620	20	1 17.9	20.9
491686 2012 UD_{45}	17.5	X	247.38484	239.05238	163.41052	2.15411	0.0738789	0.22127807	2.7071384	20	7 13.4	21.2
491687 2012 UX_{45}	18.1	X	111.56095	346.59971	58.72892	5.15363	0.1222569	0.30306867	2.1950379	20	2 7.8	20.6
491688 2012 UN_{47}	16.9	X	182.73484	339.38877	47.66833	10.75780	0.1122154	0.19356578	2.9597179	20	4 13.9	21.5
491689 2012 UT_{49}	17.7	X	288.66391	228.26288	162.00211	3.88130	0.2485385	0.23189419	2.6238730	20	7 26.6	20.8
491690 2012 UB_{65}	16.8	X	134.11287	219.21723	222.55250	8.29610	0.1043905	0.18808104	3.0169819	20	4 28.4	21.4
491691 2012 US_{69}	16.7	X	158.08827	335.00878	53.44616	6.30008	0.1323027	0.18062313	3.0994679	20	3 24.6	21.6
491692 2012 UE_{71}	16.8	X	15.12168	254.73115	70.83572	8.22441	0.0592425	0.24421268	2.5348791	20	10 15.7	20.0
491693 2012 UV_{76}	16.5	X	72.94209	71.49758	40.71917	17.36768	0.1514281	0.17732893	3.1377354	20	4 6.3	20.8
491694 2012 UX_{78}	18.2	X	74.39359	102.18653	316.34387	4.07495	0.0684035	0.29253456	2.2474218	20	—	—
491695 2012 UN_{79}	16.8	X	137.61057	62.48796	12.35733	8.28895	0.1918301	0.18768508	3.0212236	20	4 29.1	21.8
491696 2012 UA_{86}	16.9	X	188.23873	345.69430	30.30227	2.86779	0.0925643	0.18899582	3.0072388	20	4 3.8	21.4
491697 2012 US_{87}	16.9	X	143.77258	22.67643	52.72386	4.19944	0.1016166	0.18908294	3.0063150	20	5 1.1	21.3
491698 2012 UP_{90}	16.9	X	153.31528	332.82242	55.42265	1.76309	0.1985465	0.17937120	3.1138731	20	3 22.1	21.9
491699 2012 UX_{93}	17.6	X	315.63554	100.59469	271.38932	6.43758	0.1276798	0.23745319	2.5827599	20	9 3.8	20.5
491700 2012 UV_{98}	16.9	X	82.27629	260.66877	223.55188	2.32648	0.1560687	0.18386804	3.0628934	20	4 28.5	21.1
491701 2012 UK_{103}	18.6	X	32.17231	329.25780	86.24840	1.85180	0.2027097	0.27493907	2.3423138	20	—	—
491702 2012 UH_{105}	16.6	X	127.56714	65.79132	337.09296	11.72953	0.1846037	0.17738891	3.1370281	20	3 12.5	21.4
491703 2012 US_{112}	17.2	X	158.41136	172.27527	278.37784	0.94236	0.0475675	0.20698358	2.8303846	20	6 1.5	21.1
491704 2012 UF_{113}	17.0	X	144.05548	28.59553	2.75545	2.82707	0.1891440	0.18218406	3.0817386	20	3 16.4	21.9
491705 2012 UR_{114}	17.0	X	110.42823	213.80085	241.72797	4.05437	0.1610174	0.18780323	3.0199565	20	4 25.6	21.5
491706 2012 UJ_{115}	17.7	X	332.48083	320.08766	2.05971	4.05182	0.2062779	0.23250881	2.6192469	20	7 21.8	19.9
491707 2012 UH_{116}	17.3	X	189.71194	203.53681	245.87506	1.89644	0.0592230	0.21689786	2.7434636	20	7 6.9	21.3
491708 2012 UB_{121}	16.4	X	245.06681	49.99585	267.27961	8.12778	0.0615653	0.18780399	3.0199483	20	3 20.6	21.1
491709 2012 UD_{129}	16.2	X	111.62139	62.76401	338.83279	10.86312	0.1283489	0.17148202	3.2086597	20	2 20.6	20.9
491710 2012 UK_{130}	15.7	X	165.77569	297.93953	35.46837	16.92641	0.2414270	0.17596715	3.1539029	20	2 6.9	21.4
491711 2012 UA_{131}	17.7	X	278.29497	194.97562	164.03716	4.30774	0.2720168	0.22206682	2.7007244	20	5 27.6	21.6
491712 2012 UJ_{137}	17.2	X	291.43336	181.67631	219.31987	3.86583	0.2378903	0.23555075	2.5966478	20	8 17.4	20.1
491713 2012 UD_{141}	18.5	X	284.36451	216.17323	175.01220	2.60531	0.2210559	0.23119295	2.6291760	20	7 25.9	21.7
491714 2012 UQ_{143}	18.5	X	6.94089	339.72971	115.62284	3.72696	0.2081342	0.27672103	2.3322473	20	—	—
491715 2012 UW_{143}	17.4	X	131.10107	5.79421	137.62190	4.36053	0.0338444	0.21350621	2.7724414	20	7 6.5	21.3
491716 2012 UL_{145}	16.9	X	266.20666	345.04536	50.79397	15.49509	0.1112032	0.22553800	2.6729422	20	7 28.6	20.8
491717 2012 UM_{147}	16.6	X	86.34253	221.24775	244.21133	3.97450	0.0929907	0.17961473	3.1110578	20	3 30.6	21.0
491718 2012 UP_{153}	17.4	X	278.60347	163.14481	218.99200	13.15285	0.1665229	0.22276288	2.6950956	20	7 10.6	21.1
491719 2012 UV_{153}	16.7	X	130.50746	269.02201	165.69773	1.92671	0.1604155	0.18270465	3.0758818	20	4 22.3	21.4
491720 2012 UT_{154}	18.1	X	293.72103	119.86899	228.73952	11.86459	0.2843207	0.22441113	2.6818828	20	5 30.9	21.6
491721 2012 UU_{154}	18.6	X	39.22282	85.69070	342.53412	2.21113	0.1665309	0.28042558	2.3116618	20	—	—
491722 2012 UZ_{155}	16.2	X	99.94274	22.17367	58.54764	12.95759	0.2236670	0.17492433	3.1664252	20	4 10.5	21.0
491723 2012 UY_{162}	15.9	X	86.70944	45.79025	49.75605	9.76653	0.0817455	0.17482791	3.1675893	20	3 23.7	20.4
491724 2012 UC_{164}	17.3	X	244.26034	152.19409	248.48862	3.60991	0.1650669	0.21514221	2.7583685	20	6 25.4	21.4
491725 2012 UR_{164}	16.1	X	170.82387	74.01329	293.48499	10.02050	0.0838045	0.18140551	3.0905497	20	3 2.5	20.9
491726 2012 UK_{165}	16.3	X	251.90162	35.69936	299.35323	10.46539	0.1189937	0.20042765	2.8917737	20	4 11.2	20.8
491727 2012 UC_{169}	15.6	X	346.24144	185.26168	226.60195	8.53267	0.1520487	0.12342411	3.9951771	20	11 25.6	20.5
491728 2012 UR_{172}	16.9	X	269.71928	119.65208	250.64147	11.94493	0.1520336	0.21421148	2.7663527	20	6 17.1	20.8
491729 2012 UO_{174}	17.6	X	79.93521	267.30980	89.89527	21.67233	0.2758170	0.28167657	2.3048123	20	—	—
491730 2012 VE	17.1	X	219.25622	336.39463	82.67505	13.63471	0.1171972	0.21595259	2.7514636	20	6 26.7	21.3
491731 2012 VG_{2}	17.5	X	306.26279	114.95970	253.48530	17.87726	0.1209544	0.36044722	1.9554270	20	8 25.4	19.5
491732 2012 VO_{3}	17.4	X	297.67509	170.99717	196.75204	4.72885	0.1049560	0.22846104	2.6500940	20	7 31.7	20.6
491733 2012 VQ_{10}	16.2	X	327.14701	154.20053	277.18644	2.35821	0.2406871	0.12250104	4.0152217	20	11 12.1	20.5
491734 2012 VS_{10}	17.7	X	352.67187	242.11099	233.04108	21.58483	0.3065763	0.27119957	2.3637963	20	—	—
491735 2012 VC_{13}	16.7	X	79.18679	21.46039	87.56543	2.36595	0.1535758	0.17900386	3.1181317	20	4 6.4	20.9
491736 2012 VN_{17}	15.9	X	342.24153	260.12478	150.15445	3.53285	0.2341862	0.12267418	4.0114429	20	11 18.8	20.2
491737 2012 VZ_{24}	16.8	X	238.72497	205.64375	256.99739	12.39697	0.1339952	0.22759426	2.6568182	20	9 6.4	20.9
491738 2012 VF_{28}	16.6	X	307.46124	5.64769	241.54370	7.85435	0.0096886	0.18861761	3.0112575	20	3 17.1	20.9
491739 2012 VQ_{29}	16.9	X	292.33398	51.35010	270.20165	4.66759	0.1237313	0.21359478	2.7716749	20	5 17.2	20.6
491740 2012 VL_{32}	16.1	X	139.29728	355.41995	77.98498	10.53616	0.1371333	0.18576887	3.0419641	20	4 30.0	20.9
491741 2012 VD_{34}	15.0	X	0.98230	190.58954	204.18255	10.37250	0.1724194	0.12528096	3.9556028	20	12 1.5	19.8
491742 2012 VH_{36}	15.9	X	106.20797	34.94010	60.74314	21.58326	0.1373591	0.18072226	3.0983344	20	4 26.1	20.6
491743 2012 VD_{38}	17.2	X	298.82851	312.35081	67.78659	11.20697	0.1516831	0.23061573	2.6335613	20	8 21.2	20.4
491744 2012 VM_{44}	18.3	X	126.04368	129.68310	259.31110	4.08303	0.1000876	0.29641619	2.2277585	20	1 30.1	21.0
491745 2012 VV_{58}	16.7	X	137.72292	210.56559	214.10891	5.63213	0.1480273	0.18409375	3.0603894	20	4 15.1	21.4
491746 2012 VX_{58}	18.1	X	289.78780	327.05249	62.66932	3.80803	0.2487563	0.23068094	2.6330650	20	7 29.5	21.2
491747 2012 VA_{60}	16.4	X	209.80158	98.24170	222.79201	8.45230	0.0663682	0.17624340	3.1506063	20	2 17.9	21.3
491748 2012 VV_{68}	17.8	X	228.53847	330.51238	76.73459	3.78759	0.1797302	0.21239818	2.7820751	20	6 16.0	22.2
491749 2012 VF_{70}	17.3	X	323.92284	234.66279	74.86271	7.02443	0.0409998	0.21251609	2.7810460	20	6 28.6	20.9
491750 2012 VM_{71}	18.7	X	21.63496	288.75937	148.91835	1.62386	0.1534625	0.27542496	2.3395582	20	—	—
491751 2012 VR_{72}	18.5	X	28.76902	314.39449	98.89316	2.33334	0.1723987	0.27079661	2.3661407	20	—	—
491752 2012 VZ_{72}	17.9	X	257.36859	311.39140	90.67369	2.95453	0.1331335	0.22142846	2.7059126	20	7 17.6	21.7
491753 2012 VT_{75}	17.2	X	359.72604	118.24425	223.41110	6.60682	0.2401852	0.23969774	2.5666112	20	11 1.7	19.4
491754 2012 VR_{79}	16.7	X	96.00460	267.54625	211.50992	10.18868	0.0552141	0.18801584	3.0176793	20	4 24.7	20.8
491755 2012 VE_{80}	18.2	X	276.22767	100.44090	323.64832	4.81033	0.3892165	0.23151945	2.6267036	20	8 2.4	21.6
491756 2012 VM_{85}	17.6	X	275.15377	261.90052	109.53669	2.09233	0.1034932	0.21717481	2.7411307	20	7 3.9	21.1
491757 2012 VH_{86}	16.1	X	102.92527	222.07835	240.78893	6.46015	0.1080745	0.18244704	3.0787765	20	4 19.0	20.6
491758 2012 VL_{89}	16.5	X	273.49069	56.77860	232.81143	8.76039	0.0775307	0.18613204	3.0380059	20	3 18.6	21.0
491759 2012 VL_{90}	18.0	X	340.26100	167.14741	195.47568	2.12830	0.2692737	0.24188762	2.5510969	20	10 23.5	19.5
491760 2012 VO_{90}	18.1	X	87.38022	340.26215	76.09828	3.37520	0.1375297	0.29250184	2.2475894	20	1 19.5	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491761 2012 VJ_{93}	17.8	X	282.34375	180.15772	199.22131	3.96679	0.2476038	0.22350706	2.6891099	20	7 1.6	21.2
491762 2012 VB_{98}	16.4	X	229.97848	184.89561	251.50778	8.98108	0.2752996	0.21551978	2.7551460	20	7 14.3	21.1
491763 2012 VH_{106}	17.7	X	350.60221	39.43269	48.89037	12.46503	0.0525258	0.26945903	2.3739645	20	—	—
491764 2012 VV_{107}	16.6	X	109.01678	24.53869	56.62160	17.63719	0.1931461	0.17497935	3.1657614	20	4 17.7	21.5
491765 2012 VU_{110}	18.8	X	87.41320	106.11268	303.83517	4.14892	0.2654257	0.29342113	2.2428925	20	1 31.2	20.7
491766 2012 VA_{111}	17.5	X	231.14822	39.32575	74.79768	6.46661	0.1726178	0.23071011	2.6328430	20	9 18.3	21.4
491767 2012 VU_{113}	7.7	X	22.21959	312.68898	65.46218	30.17370	0.0778446	0.00397296	39.4814651	20	11 12.5	23.4
491768 2012 VV_{113}	7.4	X	356.78911	293.49107	115.88291	15.68283	0.1143896	0.00315638	46.0266549	20	11 13.0	23.5
491769 2012 WO_{4}	17.4	X	344.87257	2.57904	310.19518	4.49873	0.2094030	0.23102726	2.6304329	20	8 5.2	19.5
491770 2012 WP_{9}	17.3	X	300.94051	309.96424	74.75317	6.31234	0.3667843	0.23224394	2.6212380	20	7 19.7	20.1
491771 2012 WU_{9}	18.2	X	20.30780	268.33266	156.79878	2.20902	0.1609876	0.26653105	2.3913190	20	—	—
491772 2012 WU_{11}	18.2	X	44.14178	8.02795	103.79103	2.06463	0.1849325	0.29126315	2.2539573	20	1 22.1	19.3
491773 2012 WY_{11}	17.1	X	320.01262	89.43539	236.23800	13.89593	0.2138974	0.22124013	2.7074479	20	6 23.7	20.0
491774 2012 WU_{12}	17.1	X	308.75194	99.02196	227.07686	5.50653	0.0839990	0.21087571	2.7954497	20	6 23.4	20.6
491775 2012 WB_{13}	16.2	X	227.76531	112.70981	226.16996	10.05865	0.0967631	0.18814983	3.0162465	20	3 26.8	20.9
491776 2012 WA_{14}	16.6	X	91.70859	230.29748	225.94093	8.67767	0.0697585	0.17494302	3.1661997	20	3 21.9	21.2
491777 2012 WD_{14}	18.2	X	252.08695	296.75236	157.46176	2.57304	0.1750516	0.23125291	2.6287215	20	9 13.6	21.7
491778 2012 WH_{14}	18.5	X	280.63577	228.84787	211.61328	4.64408	0.2010846	0.23781857	2.5801138	20	10 2.6	21.3
491779 2012 WY_{15}	17.6	X	307.69343	291.73493	86.67874	6.03184	0.2602494	0.23336028	2.6128717	20	8 16.1	20.0
491780 2012 WB_{16}	17.5	X	250.88552	269.87380	111.60672	4.84677	0.1093081	0.20925360	2.8098777	20	6 15.1	21.5
491781 2012 WG_{16}	15.7	X	9.67632	281.50904	109.39523	4.38509	0.2486928	0.12713481	3.9170555	20	12 19.7	20.2
491782 2012 WG_{19}	18.5	X	29.34598	148.05344	288.33370	1.67164	0.1997110	0.27655394	2.3331866	20	—	—
491783 2012 WS_{32}	18.1	X	37.76432	171.85308	306.35893	3.85670	0.0884452	0.29030220	2.2589285	20	1 17.9	20.2
491784 2012 WK_{35}	17.7	X	251.17826	246.59608	198.98155	5.46468	0.2595085	0.22585261	2.6704594	20	8 17.4	21.8
491785 2012 XW	18.6	X	273.50290	33.21483	49.87028	4.77098	0.2523811	0.23656705	2.5892056	20	9 18.9	21.6
491786 2012 XN_{8}	17.3	X	280.41833	265.52295	90.36801	5.19082	0.1168393	0.21311207	2.7758587	20	6 17.8	21.0
491787 2012 XP_{8}	17.8	X	356.89902	76.20031	79.60978	7.97487	0.0449703	0.29322563	2.2438893	20	1 8.0	20.3
491788 2012 XC_{9}	18.3	X	8.87964	14.00866	41.88322	2.93275	0.2047668	0.26354645	2.4093392	20	—	—
491789 2012 XY_{10}	17.1	X	138.87205	224.67164	211.62767	1.95994	0.1080098	0.18798903	3.0179662	20	4 27.3	21.7
491790 2012 XC_{11}	16.7	X	161.06829	162.29792	227.89055	4.07692	0.1046892	0.18305257	3.0719831	20	3 23.7	21.4
491791 2012 XE_{12}	17.2	X	297.18036	82.56117	274.55930	4.56732	0.1345813	0.22178793	2.7029880	20	7 11.9	20.3
491792 2012 XX_{14}	17.6	X	264.72284	19.16573	359.51116	4.75836	0.1673463	0.21406406	2.7676227	20	6 20.0	21.5
491793 2012 XF_{15}	18.4	X	120.60840	45.14638	8.83949	3.89757	0.1471058	0.30280020	2.1963352	20	3 5.9	20.9
491794 2012 XD_{25}	16.3	X	218.80702	106.35470	243.14387	7.14501	0.1310676	0.19015344	2.9950214	20	3 28.6	21.2
491795 2012 XV_{25}	16.6	X	357.90298	168.70400	236.79226	1.63725	0.2367318	0.12726904	3.9143009	20	12 14.8	21.0
491796 2012 XD_{26}	18.5	X	300.55012	21.89011	48.90299	2.32553	0.2154397	0.24336683	2.5407492	20	10 29.0	20.3
491797 2012 XD_{39}	18.5	X	16.73553	326.38941	143.81993	1.54342	0.1483285	0.27941970	2.3172063	20	—	—
491798 2012 XH_{53}	16.2	X	140.66239	184.84452	283.44145	7.94630	0.1629893	0.18445214	3.0564238	20	6 11.5	21.1
491799 2012 XD_{57}	17.0	X	1.11977	74.49845	238.72007	14.19190	0.1752313	0.23078661	2.6322612	20	9 3.3	20.0
491800 2012 XL_{57}	18.4	X	336.69830	225.73222	223.27231	1.64984	0.1818977	0.26094514	2.4253248	20	—	—
491801 2012 XF_{62}	18.3	X	353.60941	44.51724	140.57022	6.21121	0.0325083	0.30168950	2.2017225	20	2 13.5	20.5
491802 2012 XX_{70}	17.8	X	280.06012	341.22888	97.25718	3.87540	0.1789779	0.23733811	2.5835948	20	10 5.6	20.7
491803 2012 XL_{80}	18.2	X	313.12560	336.50704	182.30678	5.79654	0.0546052	0.27669694	2.3323827	20	—	—
491804 2012 XP_{83}	18.3	X	31.00139	36.62711	68.56935	5.83677	0.1948515	0.27734660	2.3287390	20	—	—
491805 2012 XS_{94}	16.5	X	111.24877	196.54700	235.97888	8.35087	0.0979196	0.17100750	3.2145926	20	3 20.1	21.3
491806 2012 XW_{96}	17.6	X	314.71729	113.44099	56.44570	10.60348	0.1250504	0.27643082	2.3338794	20	—	—
491807 2012 XD_{103}	17.3	X	350.09803	53.71815	292.54309	3.22041	0.2167060	0.23805440	2.5784096	20	10 12.6	19.5
491808 2012 XS_{104}	19.1	X	103.49912	213.89225	216.87666	2.40368	0.0882000	0.30566417	2.1825944	20	2 22.9	21.3
491809 2012 XB_{106}	16.7	X	280.93102	110.32332	300.21086	7.62465	0.0563917	0.21701177	2.7425035	20	9 7.2	20.5
491810 2012 XV_{108}	18.9	X	18.66952	351.67924	73.00956	2.54460	0.1708329	0.26700538	2.3884861	20	—	—
491811 2012 XY_{112}	17.2	X	243.74813	342.30657	47.81018	9.55525	0.2120767	0.20965926	2.8062521	20	6 5.2	21.7
491812 2012 XA_{115}	18.3	X	155.19452	295.84611	72.68845	1.90875	0.1465294	0.30675802	2.1774028	20	2 13.8	21.1
491813 2012 XX_{115}	16.8	X	239.93428	187.08213	249.70190	16.05098	0.2433230	0.21515010	2.7583012	20	7 23.4	21.4
491814 2012 XK_{118}	19.0	X	113.14880	74.67256	338.65104	4.56956	0.2318528	0.29634703	2.2281051	20	3 7.4	21.8
491815 2012 XU_{118}	18.4	X	67.13789	223.69636	224.74949	3.71430	0.0845141	0.29220192	2.2491272	20	1 23.2	20.6
491816 2012 XH_{145}	18.9	X	147.84235	331.18266	39.40664	7.29621	0.2334587	0.29637228	2.2279785	20	2 21.4	22.3
491817 2013 AF_{1}	13.7	X	265.98662	36.58647	36.94225	20.52670	0.0452531	0.08284293	5.2115359	20	9 14.9	20.8
491818 2013 AF_{3}	15.7	X	117.92621	160.52192	274.17871	7.74308	0.0946650	0.17212498	3.2006642	20	3 29.0	20.6
491819 2013 AN_{3}	17.8	X	331.45437	66.04742	96.51205	3.23330	0.1304457	0.26678846	2.3897806	20	—	—
491820 2013 AK_{8}	18.2	X	309.84841	44.39144	135.12384	2.58115	0.1375389	0.26453379	2.4033404	20	—	—
491821 2013 AZ_{8}	18.8	X	36.34847	89.99320	44.15755	2.95165	0.1489157	0.28701488	2.2761442	20	2 11.4	20.5
491822 2013 AC_{16}	17.5	X	22.75096	138.78991	286.59503	5.96645	0.1006600	0.26717733	2.3874611	20	—	—
491823 2013 AT_{17}	18.5	X	36.36370	345.98294	93.05438	3.27046	0.2120270	0.27096222	2.3651765	20	—	—
491824 2013 AX_{17}	16.9	X	121.33297	48.45710	74.14770	2.31293	0.1412537	0.17873612	3.1212448	20	6 8.4	21.7
491825 2013 AV_{18}	17.9	X	66.84029	356.91634	110.43660	7.10767	0.0586415	0.28822582	2.2697645	20	2 20.6	20.4
491826 2013 AD_{22}	18.1	X	87.87121	118.24827	278.74165	5.00447	0.1189265	0.27536349	2.3399064	20	—	—
491827 2013 AU_{22}	18.0	X	16.05992	188.45634	292.07594	1.62475	0.1730189	0.27129259	2.3632559	20	—	—
491828 2013 AD_{25}	16.2	X	162.59497	144.84821	259.99951	9.54473	0.0801429	0.17981266	3.1087744	20	4 8.5	21.1
491829 2013 AN_{28}	18.4	X	15.52309	54.56944	54.12061	5.82709	0.2667295	0.27161436	2.3613891	20	—	—
491830 2013 AS_{28}	16.8	X	184.47361	235.29437	272.85278	12.25382	0.1097396	0.21332673	2.7739962	20	9 5.8	21.4
491831 2013 AN_{32}	16.9	X	238.15602	116.67218	339.29105	14.04858	0.2313575	0.21831254	2.7315989	20	8 23.2	21.0
491832 2013 AP_{36}	17.1	X	141.40914	146.98384	335.38284	4.14520	0.1655761	0.18726169	3.0257759	20	6 30.1	21.9
491833 2013 AC_{37}	16.7	X	196.22037	174.24042	317.00665	8.82182	0.1045458	0.21081198	2.7960130	20	9 1.4	20.9
491834 2013 AQ_{39}	14.2	X	233.11704	187.08393	296.37549	6.24093	0.0527991	0.08470774	5.1347659	20	9 21.2	21.2
491835 2013 AL_{40}	18.3	X	23.87068	173.64462	277.74876	4.23169	0.1869398	0.26818964	2.3814495	20	—	—
491836 2013 AV_{44}	17.7	X	339.93551	86.95536	81.82916	3.31743	0.1245443	0.27047580	2.3680113	20	—	—
491837 2013 AA_{45}	17.6	X	175.09903	237.30764	117.17355	9.02416	0.1820554	0.29158215	2.2523131	20	2 21.3	21.1
491838 2013 AH_{45}	15.7	X	156.44894	135.04007	315.07442	14.66985	0.0326299	0.17597058	3.1538620	20	5 26.5	20.6
491839 2013 AB_{46}	18.0	X	47.46373	10.22139	98.96024	4.70280	0.1037515	0.27815329	2.3242344	20	1 25.6	20.1
491840 2013 AF_{50}	18.0	X	57.62966	326.79716	55.25735	8.30259	0.1883602	0.26273137	2.4143196	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491841 2013 AX_{51}	17.2	X	195.98882	118.89352	2.04586	9.37791	0.1271358	0.21077508	2.7963394	20	8 22.8	21.6
491842 2013 AB_{53}	18.2	X	16.09617	229.44437	163.97030	5.47078	0.4866749	0.26217703	2.4177216	20	—	—
491843 2013 AK_{57}	15.6	X	70.96416	195.42226	319.03135	11.16067	0.1100594	0.16930635	3.2360897	20	5 12.0	20.2
491844 2013 AA_{58}	18.1	X	332.77458	197.46043	327.15759	1.71607	0.1516307	0.26871348	2.3783535	20	—	—
491845 2013 AD_{67}	17.7	X	315.78240	49.56514	328.95002	2.89219	0.2839923	0.23422482	2.6064382	20	8 30.5	19.3
491846 2013 AR_{67}	16.8	X	299.75716	173.57459	282.59026	2.75303	0.0357102	0.24670229	2.5177963	20	12 15.9	19.9
491847 2013 AS_{82}	18.2	X	281.00238	100.24535	333.24693	1.08653	0.2726918	0.22924096	2.6440799	20	9 9.9	21.0
491848 2013 AS_{85}	18.1	X	2.47849	219.82991	311.20308	4.46260	0.0560474	0.28783299	2.2718292	20	2 6.6	20.5
491849 2013 AS_{94}	17.2	X	26.25557	336.46129	106.39604	25.48995	0.2457315	0.27429154	2.3459987	20	—	—
491850 2013 AW_{96}	17.7	X	34.79765	335.14537	114.33147	7.76679	0.0836811	0.27382372	2.3486700	20	—	—
491851 2013 AL_{98}	18.0	X	159.59134	328.41611	66.06294	6.51061	0.1534270	0.30241085	2.1982199	20	3 27.5	21.2
491852 2013 AD_{101}	17.6	X	1.90105	60.11433	4.04449	10.58450	0.2228348	0.25681293	2.4512717	20	—	—
491853 2013 AH_{107}	17.0	X	143.15962	354.91832	141.30775	4.17943	0.0662841	0.19042157	2.9922092	20	7 12.9	21.4
491854 2013 AW_{107}	17.8	X	264.90252	315.05610	288.95322	6.44161	0.1001687	0.27353806	2.3503049	20	1 1.9	21.2
491855 2013 AA_{110}	17.2	X	327.31830	164.41634	261.56055	12.24868	0.1584223	0.24185324	2.5513386	20	12 20.4	19.5
491856 2013 AB_{115}	17.8	X	54.02306	208.48861	262.49824	5.37483	0.0309836	0.28624910	2.2802019	20	1 31.1	20.5
491857 2013 AV_{117}	16.9	X	280.97065	62.47289	347.21038	7.07785	0.0855144	0.21373281	2.7704815	20	9 5.3	20.5
491858 2013 AH_{119}	18.0	X	239.57074	150.06708	298.96932	5.80761	0.2356761	0.21778674	2.7359937	20	8 12.7	22.2
491859 2013 AM_{119}	18.3	X	22.12639	31.33266	108.12895	6.41219	0.1698387	0.28283477	2.2985159	20	1 18.3	20.0
491860 2013 AA_{120}	17.7	X	94.89221	313.28139	109.95893	7.05819	0.0760911	0.28648173	2.2789673	20	2 2.4	20.1
491861 2013 AW_{122}	18.7	X	23.17860	113.25184	329.68478	2.78740	0.2565596	0.26972066	2.3724291	20	—	—
491862 2013 AW_{127}	17.5	X	283.42557	139.85228	306.99008	12.91902	0.2180502	0.23099785	2.6306562	20	10 5.1	20.8
491863 2013 AW_{162}	16.1	X	58.59930	301.88516	244.50492	12.42455	0.1258452	0.17535267	3.1612666	20	6 11.0	20.2
491864 2013 AF_{165}	17.1	X	118.97371	251.19087	228.04352	9.16847	0.1795673	0.17748222	3.1359285	20	6 5.7	22.0
491865 2013 AD_{169}	17.3	X	92.16160	290.15985	209.36824	8.54260	0.1579716	0.17290084	3.1910822	20	5 31.2	21.9
491866 2013 AX_{174}	18.3	X	322.66543	296.13778	204.01126	8.57641	0.2095280	0.25817459	2.4426452	20	—	—
491867 2013 AY_{175}	17.9	X	106.53887	94.26835	191.15453	13.63993	0.1074530	0.23417259	2.6068258	20	12 15.4	22.1
491868 2013 BL_{1}	14.3	X	323.46969	8.34819	8.93647	3.88986	0.0332075	0.08391516	5.1670474	20	9 10.7	20.9
491869 2013 BZ_{1}	17.4	X	33.48480	271.58913	168.37181	22.68369	0.2786493	0.27467494	2.3438151	20	—	—
491870 2013 BC_{5}	17.0	X	300.13803	182.51226	257.21870	6.70123	0.1699060	0.23531026	2.5984167	20	11 11.3	19.5
491871 2013 BF_{9}	18.1	X	305.00319	227.67211	333.31464	3.91718	0.1407932	0.27252718	2.3561133	20	—	—
491872 2013 BK_{10}	18.6	X	33.85466	155.44900	299.74365	2.22272	0.0793250	0.27280474	2.3545149	20	—	—
491873 2013 BG_{11}	17.4	X	170.69012	194.48363	119.96399	9.78155	0.1082066	0.26990054	2.3713749	20	—	—
491874 2013 BD_{13}	18.0	X	44.88132	260.47241	225.41039	3.33891	0.0984597	0.28744008	2.2738990	20	2 10.3	20.3
491875 2013 BC_{19}	13.5	X	41.42386	288.74468	15.58481	9.62556	0.0528283	0.08416632	5.1567626	20	9 24.7	20.2
491876 2013 BA_{21}	17.9	X	62.36041	344.59950	98.51739	10.02839	0.0736049	0.27950128	2.3167554	20	1 10.8	20.4
491877 2013 BJ_{21}	16.2	X	208.97993	298.12501	82.88608	11.78586	0.1489100	0.18155922	3.0888052	20	5 2.4	21.3
491878 2013 BT_{22}	17.8	X	295.53707	319.70209	96.79055	5.42067	0.2423426	0.22920893	2.6443262	20	9 20.9	20.4
491879 2013 BJ_{31}	17.7	X	302.28504	131.72721	100.71974	12.39838	0.1712774	0.28005572	2.3136967	20	1 20.3	20.8
491880 2013 BR_{36}	16.6	X	268.43018	154.63896	254.67560	2.23933	0.0708139	0.20990763	2.8040380	20	8 18.4	20.5
491881 2013 BB_{40}	18.7	X	11.35410	42.96498	80.63205	5.56863	0.1838562	0.27120091	2.3637885	20	—	—
491882 2013 BW_{56}	14.7	X	188.34483	225.59380	301.14738	5.92371	0.1224863	0.08353701	5.1826286	20	9 21.3	22.1
491883 2013 BP_{57}	17.9	X	277.65737	131.73638	116.39000	7.07150	0.0934620	0.28136056	2.3065378	20	1 21.1	21.1
491884 2013 BT_{61}	18.4	X	330.84301	16.63517	114.62364	2.38486	0.1333862	0.25680277	2.4513364	20	—	—
491885 2013 BR_{62}	18.1	X	11.27733	30.23322	117.93432	3.30653	0.1317139	0.27536281	2.3399102	20	1 14.7	20.1
491886 2013 BF_{64}	17.1	X	241.24185	74.71754	137.62259	16.42661	0.1030643	0.24670644	2.5177681	20	—	—
491887 2013 BE_{66}	18.7	X	7.47040	177.24107	333.64653	5.00904	0.1023334	0.27489699	2.3425528	20	1 16.1	21.0
491888 2013 BG_{72}	16.1	X	70.59813	247.26239	270.59635	12.24712	0.1078011	0.17241770	3.1970407	20	5 18.0	20.6
491889 2013 BM_{74}	18.4	X	350.43256	30.30127	105.51283	4.54944	0.1543024	0.26900853	2.3766141	20	—	—
491890 2013 BZ_{80}	16.1	X	126.69295	206.43638	278.56147	8.45473	0.0621457	0.17890386	3.1192935	20	6 9.3	20.8
491891 2013 CE_{2}	18.1	X	14.18502	233.03335	203.88088	4.41286	0.1954591	0.26006757	2.4307777	20	—	—
491892 2013 CN_{2}	17.0	X	215.56147	167.57524	266.18964	7.90903	0.2305863	0.20271582	2.8699717	20	7 2.9	21.8
491893 2013 CX_{2}	17.9	X	354.12187	215.54793	276.59566	2.49153	0.1202154	0.26578588	2.3957865	20	—	—
491894 2013 CA_{4}	17.4	X	256.52500	147.26730	286.36764	6.91833	0.2017797	0.21510896	2.7586529	20	8 14.7	21.4
491895 2013 CA_{14}	17.9	X	244.69607	172.24489	60.52305	2.22957	0.1454454	0.25385086	2.4703034	20	—	—
491896 2013 CN_{14}	16.5	X	138.73669	148.78949	340.40875	9.58682	0.0494468	0.18140042	3.0906075	20	6 28.6	21.2
491897 2013 CT_{14}	17.4	X	319.85731	182.43185	343.33725	6.59593	0.0673912	0.26154480	2.4216163	20	—	—
491898 2013 CC_{15}	18.5	X	1.34628	40.13049	74.61729	2.82314	0.1706052	0.26216005	2.4178260	20	—	—
491899 2013 CE_{15}	18.6	X	13.85641	353.34029	120.11264	3.37883	0.1530544	0.26682200	2.3895803	20	—	—
491900 2013 CJ_{16}	16.3	X	108.01644	178.24822	315.09465	6.81173	0.0948212	0.17541024	3.1605749	20	6 1.0	21.0
491901 2013 CU_{16}	17.3	X	183.17105	25.88235	316.58095	5.99064	0.1376770	0.27603067	2.3361344	20	2 10.8	20.9
491902 2013 CJ_{17}	18.2	X	18.04851	289.07049	177.63811	4.86191	0.1769124	0.26501800	2.4004121	20	—	—
491903 2013 CA_{19}	18.5	X	283.10323	115.58263	47.06024	2.10920	0.1302491	0.24278655	2.5447959	20	—	—
491904 2013 CY_{34}	17.9	X	17.25213	353.54908	132.27533	3.42828	0.0640733	0.27173837	2.3606707	20	—	—
491905 2013 CJ_{42}	16.9	X	172.75789	159.17043	289.76152	9.77816	0.0702911	0.17996559	3.1070129	20	6 16.3	21.6
491906 2013 CH_{46}	17.0	X	121.89249	164.63397	352.45181	9.09820	0.0371021	0.18577407	3.0419074	20	7 14.2	21.5
491907 2013 CR_{46}	18.1	X	275.00728	227.68478	65.13275	5.36556	0.1773806	0.29045231	2.2581502	20	3 8.7	21.3
491908 2013 CX_{46}	17.6	X	215.56248	270.44264	41.60142	4.28117	0.1470620	0.27909791	2.3189871	20	2 5.5	21.1
491909 2013 CL_{48}	17.8	X	287.48871	320.04749	230.32363	5.70082	0.0952718	0.25629765	2.4545561	20	—	—
491910 2013 CB_{49}	17.2	X	267.89293	104.82466	333.14520	4.22884	0.0340437	0.21991381	2.7183229	20	10 1.2	20.8
491911 2013 CN_{49}	17.6	X	352.15044	170.05829	299.03262	11.53758	0.1091813	0.25727637	2.4483271	20	—	—
491912 2013 CL_{53}	16.4	X	213.69994	89.88728	322.83538	6.27080	0.1900219	0.18709993	3.0275196	20	6 7.6	21.5
491913 2013 CB_{54}	17.9	X	7.94895	173.44843	317.72406	5.59236	0.0374785	0.26639880	2.3921103	20	—	—
491914 2013 CZ_{62}	16.3	X	180.69604	168.33926	256.65419	6.51450	0.1339373	0.17919063	3.1159646	20	5 25.7	21.3
491915 2013 CW_{63}	17.4	X	258.62885	353.80269	273.77724	6.02055	0.0841438	0.27553151	2.3389550	20	1 24.9	20.6
491916 2013 CG_{65}	17.7	X	55.00954	272.25215	160.27844	6.62892	0.1039219	0.26784672	2.3834817	20	—	—
491917 2013 CK_{67}	18.0	X	9.52153	308.97541	180.91055	4.10131	0.1403569	0.26934799	2.3746169	20	—	—
491918 2013 CT_{68}	16.5	X	213.16389	225.04146	197.50637	6.41835	0.0973149	0.18911089	3.0060188	20	6 25.4	21.1
491919 2013 CL_{70}	16.8	X	249.47887	115.84164	310.32918	8.68417	0.1373200	0.20866703	2.8151410	20	8 6.7	20.9
491920 2013 CS_{71}	17.2	X	288.88977	126.06238	297.04503	11.38412	0.1502332	0.22235082	2.6984242	20	9 20.8	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
491921 2013 CX_{72}	16.2	X	163.72801	124.84467	297.72832	9.28606	0.2363361	0.17671174	3.1450371	20	5 7.6	21.8
491922 2013 CL_{79}	17.0	X	186.50483	203.66080	301.93918	4.44625	0.0267157	0.21027141	2.8008031	20	9 14.0	21.0
491923 2013 CB_{82}	16.5	X	281.17989	91.99726	282.61660	9.71505	0.0681184	0.19189608	2.9768617	20	7 19.6	20.6
491924 2013 CA_{84}	18.1	X	312.49844	144.42523	35.68831	2.48774	0.1401454	0.25977667	2.4325921	20	—	—
491925 2013 CY_{84}	18.6	X	216.79388	273.54375	87.47101	2.75713	0.1566685	0.31073044	2.1588055	20	4 6.5	21.7
491926 2013 CV_{85}	16.9	X	236.33807	96.18472	351.89625	8.76450	0.1917398	0.21242300	2.7818584	20	8 16.1	21.2
491927 2013 CO_{86}	17.9	X	259.98114	131.51944	107.57747	2.48893	0.1424636	0.25813657	2.4428850	20	—	—
491928 2013 CF_{87}	17.5	X	11.07070	42.34233	130.39752	4.38558	0.0924805	0.27817841	2.3240944	20	2 23.4	19.6
491929 2013 CU_{97}	18.1	X	238.69698	297.62581	328.73771	1.10144	0.1717933	0.26277539	2.4140500	20	1 1.5	22.1
491930 2013 CW_{99}	18.0	X	353.59955	249.93075	247.62453	5.63366	0.0657073	0.26426368	2.4049778	20	—	—
491931 2013 CM_{102}	18.5	X	326.01343	123.61675	63.83797	3.10732	0.1336235	0.26999379	2.3708288	20	—	—
491932 2013 CP_{103}	18.1	X	357.85191	86.48997	45.29667	2.94798	0.1810538	0.26609484	2.3939317	20	—	—
491933 2013 CB_{104}	16.6	X	23.05637	333.39660	348.52577	9.22515	0.1395593	0.20981376	2.8048743	20	10 19.2	20.1
491934 2013 CL_{108}	18.9	X	5.73456	62.62774	86.71392	1.59887	0.1598849	0.27235872	2.3570847	20	1 3.5	20.8
491935 2013 CA_{109}	18.2	X	20.23893	104.62917	349.32562	4.86810	0.1799146	0.26260956	2.4150661	20	—	—
491936 2013 CU_{110}	18.1	X	77.86031	310.24437	105.49285	6.67118	0.1614412	0.27215988	2.3582326	20	1 9.7	20.3
491937 2013 CJ_{112}	13.9	X	307.11258	15.33498	31.74660	7.67086	0.0880793	0.08076634	5.3004873	20	9 20.7	20.6
491938 2013 CK_{112}	17.6	X	49.08469	53.93157	23.14707	6.30723	0.0084524	0.26253548	2.4155204	20	—	—
491939 2013 CO_{112}	19.1	X	46.31759	80.79861	27.96306	3.57095	0.0981573	0.27607405	2.3358897	20	1 23.8	21.3
491940 2013 CV_{115}	17.8	X	324.15756	319.31652	235.53575	5.01678	0.0391537	0.27297498	2.3535359	20	1 18.1	20.7
491941 2013 CD_{116}	17.1	X	207.64348	295.36815	345.09488	16.22440	0.0346462	0.25930188	2.4355606	20	—	—
491942 2013 CS_{118}	18.2	X	352.20108	161.89696	335.33763	0.78299	0.1277122	0.26355665	2.4092770	20	—	—
491943 2013 CL_{126}	18.5	X	8.03362	302.67102	160.30500	1.91003	0.1464004	0.26410744	2.4059261	20	—	—
491944 2013 CA_{127}	17.0	X	190.41649	230.35760	14.39196	7.10263	0.0953749	0.23683800	2.5872305	20	—	—
491945 2013 CZ_{131}	18.2	X	315.63629	310.07140	242.61034	1.68865	0.1344473	0.26513197	2.3997241	20	—	—
491946 2013 CC_{140}	17.0	X	148.42250	98.90937	5.04520	7.70380	0.1664473	0.17946351	3.1128052	20	6 12.8	22.1
491947 2013 CL_{142}	18.1	X	321.65546	138.28245	24.11995	5.42918	0.1397075	0.26129367	2.4231676	20	—	—
491948 2013 CE_{143}	17.6	X	174.75955	31.79170	310.91530	5.99771	0.1373319	0.27343262	2.3509091	20	2 3.2	20.9
491949 2013 CT_{143}	18.0	X	282.01255	35.52400	186.18041	2.29855	0.1225945	0.26209644	2.4182172	20	—	—
491950 2013 CS_{150}	18.0	X	67.19334	290.26050	138.84180	5.37092	0.1738576	0.26977521	2.3721093	20	1 10.9	20.1
491951 2013 CE_{151}	18.1	X	56.06691	2.44306	84.60176	2.30741	0.1509681	0.27059187	2.3673341	20	1 13.5	19.9
491952 2013 CF_{155}	18.3	X	309.73249	62.16738	141.42206	1.86255	0.1254088	0.26599782	2.3945137	20	—	—
491953 2013 CQ_{157}	17.9	X	297.82448	224.97992	343.97101	4.73687	0.1372951	0.26402513	2.4064262	20	—	—
491954 2013 CY_{168}	17.9	X	27.17184	13.11248	90.77995	3.25083	0.1713731	0.26839540	2.3802323	20	—	—
491955 2013 CZ_{170}	17.9	X	52.06107	251.40201	194.55273	2.58804	0.1668645	0.27050964	2.3678138	20	1 3.9	19.7
491956 2013 CT_{175}	17.6	X	262.82521	213.42037	332.39025	16.19636	0.0507143	0.24409442	2.5356977	20	—	—
491957 2013 CD_{188}	18.3	X	33.47832	125.49251	334.37063	2.23798	0.1452740	0.26878135	2.3779532	20	—	—
491958 2013 CX_{205}	16.6	X	63.06439	276.15940	290.61639	8.80480	0.1197834	0.18193879	3.0845076	20	7 13.5	20.7
491959 2013 CQ_{213}	14.5	X	311.48489	96.85648	310.87857	9.43070	0.0785757	0.08436864	5.1485152	20	9 21.9	21.1
491960 2013 CV_{215}	16.3	X	329.71517	18.53030	299.03361	11.71999	0.0646730	0.18697558	3.0288618	20	7 15.5	20.2
491961 2013 DB_{2}	17.5	X	245.79742	302.03407	330.48365	23.06474	0.1478345	0.26914281	2.3758236	20	1 21.8	21.4
491962 2013 DL_{2}	17.6	X	334.17641	257.15809	275.94439	5.69995	0.0558791	0.27093842	2.3653150	20	1 1.7	20.5
491963 2013 DQ_{5}	18.2	X	56.86673	253.53231	192.53975	3.11879	0.1466639	0.27287391	2.3541170	20	1 11.7	20.4
491964 2013 DR_{5}	17.7	X	104.92986	102.55942	303.14860	3.60249	0.1418118	0.27628310	2.3347112	20	2 3.8	20.3
491965 2013 DS_{6}	17.4	X	139.44717	11.09801	346.74008	5.66372	0.0697059	0.26726924	2.3869138	20	1 8.5	20.5
491966 2013 DF_{10}	17.7	X	55.49753	20.49799	43.37522	5.10967	0.1712404	0.26716877	2.3875122	20	—	—
491967 2013 DP_{10}	16.4	X	105.27303	191.20566	298.19529	8.62235	0.0442548	0.17459092	3.1704551	20	5 16.0	21.0
491968 2013 DS_{16}	17.7	X	337.67651	122.04605	24.79231	23.43402	0.2808444	0.25802268	2.4436038	20	—	—
491969 2013 EF_{1}	17.7	X	284.76983	70.08683	160.14801	6.34099	0.1431925	0.26828220	2.3809017	20	1 2.1	21.1
491970 2013 EO_{8}	17.7	X	39.24337	282.62120	184.74291	6.64984	0.0793293	0.26860306	2.3790053	20	1 8.6	20.4
491971 2013 EP_{8}	17.9	X	352.72079	309.93966	224.64812	2.59295	0.0804481	0.27297612	2.3535293	20	1 26.6	20.5
491972 2013 ER_{8}	17.6	X	248.16363	323.56614	321.55308	6.02989	0.1118028	0.27146159	2.3622750	20	2 4.8	20.9
491973 2013 EN_{11}	16.8	X	356.80793	230.37645	180.32953	31.95703	0.4085048	0.24352256	2.5396658	20	—	—
491974 2013 EZ_{12}	17.5	X	331.60574	267.03599	155.86493	13.33233	0.2443373	0.23302507	2.6153769	20	12 29.5	19.9
491975 2013 EU_{14}	17.4	X	249.80942	297.92212	350.03130	7.14819	0.1176029	0.27314760	2.3525442	20	2 10.9	20.9
491976 2013 EF_{16}	17.7	X	59.20950	30.82369	67.23620	2.95842	0.1604976	0.27496191	2.3421841	20	2 6.6	19.7
491977 2013 EK_{17}	18.2	X	299.96523	207.18014	13.62691	1.40693	0.1356908	0.26598363	2.3945989	20	1 9.2	21.4
491978 2013 EE_{19}	18.0	X	222.13517	37.99887	193.46072	3.29998	0.0438194	0.24218368	2.5490174	20	—	—
491979 2013 EG_{21}	18.3	X	333.30809	345.24491	198.54257	6.86546	0.1073342	0.27017580	2.3697639	20	1 6.3	21.2
491980 2013 EY_{29}	18.0	X	358.54808	104.49815	51.51998	6.91012	0.1557850	0.26951386	2.3736425	20	1 1.7	20.5
491981 2013 EG_{31}	17.7	X	317.70395	87.89689	109.72556	5.60623	0.1742780	0.26091490	2.4255122	20	—	—
491982 2013 ER_{32}	16.7	X	326.27442	237.22969	16.04229	24.24308	0.1671963	0.28646535	2.2790542	20	3 27.7	19.0
491983 2013 EU_{34}	17.6	X	262.79552	197.57574	50.19186	3.82651	0.1462795	0.25790407	2.4443530	20	1 3.3	21.2
491984 2013 EG_{44}	15.9	X	251.69470	41.59979	346.04224	9.11144	0.0850344	0.17963133	3.1108662	20	6 27.0	20.5
491985 2013 EX_{44}	17.3	X	287.89539	290.07282	185.92748	5.79964	0.1402985	0.22950987	2.6420142	20	12 12.2	20.2
491986 2013 EG_{49}	18.1	X	338.34249	182.22059	345.05489	6.22316	0.1782960	0.26329041	2.4109009	20	—	—
491987 2013 EH_{58}	17.9	X	228.25594	219.74051	54.55687	2.19275	0.1666244	0.25443926	2.4664935	20	1 3.2	21.7
491988 2013 EL_{58}	18.5	X	240.28927	77.58744	156.46598	5.52109	0.1811358	0.24439028	2.5336508	20	—	—
491989 2013 EK_{61}	17.9	X	326.29390	131.19172	13.98796	2.14194	0.1561955	0.25258260	2.4785657	20	—	—
491990 2013 ED_{66}	17.9	X	338.64097	305.29992	241.34525	6.66986	0.1779081	0.27265423	2.3553813	20	1 6.4	20.5
491991 2013 EM_{67}	17.4	X	189.58482	169.62620	110.49328	4.61419	0.1926083	0.23560895	2.5962202	20	—	—
491992 2013 EJ_{72}	18.0	X	17.34215	82.74852	18.38047	6.25541	0.0663787	0.25669467	2.4520245	20	—	—
491993 2013 EG_{82}	17.7	X	315.71964	128.70991	40.19851	2.89234	0.1383836	0.25450591	2.4660628	20	—	—
491994 2013 EC_{89}	14.3	X	235.72598	357.56264	144.32860	2.63944	0.0364239	0.08006688	5.3313120	20	10 19.2	21.3
491995 2013 EY_{97}	18.3	X	252.47610	268.83627	10.80347	2.42537	0.1841537	0.26324877	2.4111551	20	1 29.8	22.1
491996 2013 EX_{101}	17.3	X	160.35200	125.50214	158.90319	12.88765	0.1778925	0.22810287	2.6528675	20	—	—
491997 2013 ED_{105}	18.0	X	16.01297	351.96234	141.52522	7.34243	0.0452057	0.27294443	2.3537115	20	1 9.2	20.8
491998 2013 EM_{107}	17.2	X	172.29012	248.43867	21.54319	12.01887	0.0220020	0.23449882	2.6044075	20	—	—
491999 2013 EQ_{107}	17.9	X	260.58596	73.75122	90.99844	3.65666	0.1012703	0.23035807	2.6355247	20	—	—
492000 2013 EJ_{109}	17.4	X	207.54013	214.48361	29.67037	8.23353	0.1269859	0.23405450	2.6077026	20	—	—