Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416001 2002 AO_{188}	17.2	X	172.68779	173.45498	268.50625	20.58214	0.0926800	0.37427992	1.9069459	21	5 23.3	19.7
416002 2002 BN	20.3	X	178.66220	147.25218	115.75865	27.75482	0.5463828	1.20410948	0.8750349	21	—	—
416003 2002 BA_{19}	16.6	X	148.34900	53.47167	96.47799	14.30624	0.2142142	0.22531696	2.6746900	21	8 8.5	21.2
416004 2002 CJ_{12}	17.6	X	189.82919	132.46927	326.36342	18.34094	0.0987028	0.37712200	1.8973530	21	7 16.4	20.0
416005 2002 CJ_{14}	17.8	X	258.37878	264.23832	145.61886	24.40732	0.0603647	0.37916187	1.8905418	21	8 5.3	19.4
416006 2002 CT_{24}	16.9	X	205.77369	50.61492	158.15215	21.82659	0.2113989	0.28929897	2.2641479	21	12 14.9	20.7
416007 2002 CJ_{29}	16.0	X	118.47870	198.15270	331.16524	12.25290	0.1081639	0.22395857	2.6854945	21	7 27.5	20.0
416008 2002 CY_{29}	16.7	X	208.99640	342.06794	94.76548	10.79051	0.1882135	0.22699411	2.6614991	21	6 27.8	21.0
416009 2002 CY_{43}	18.1	X	270.62295	186.67170	132.69474	24.60686	0.0424551	0.36920594	1.9243775	21	4 11.6	20.8
416010 2002 CE_{44}	17.8	X	267.62589	227.70224	140.26996	24.20922	0.0396777	0.37510918	1.9041344	21	6 19.5	20.3
416011 2002 CB_{67}	18.4	X	286.52613	185.96815	326.65691	3.58676	0.1828932	0.29648399	2.2274188	21	—	—
416012 2002 CS_{67}	17.3	X	164.46967	311.91390	117.58786	7.98151	0.2532787	0.22134146	2.7066215	21	5 15.9	22.1
416013 2002 CU_{67}	16.6	X	243.51725	313.80966	121.32184	14.60082	0.1046547	0.23091679	2.6312718	21	8 9.3	20.3
416014 2002 CE_{91}	16.6	X	79.06983	216.57447	342.63109	10.20803	0.0861901	0.22029962	2.7151483	21	7 14.5	20.4
416015 2002 CZ_{113}	16.4	X	211.66645	65.90006	343.30468	11.00487	0.1751181	0.22436433	2.6822557	21	5 24.1	21.0
416016 2002 CW_{135}	17.6	X	7.36121	137.19330	299.73534	5.89229	0.1081732	0.29848658	2.2174450	21	—	—
416017 2002 CA_{162}	16.4	X	155.85840	11.10508	122.73282	14.64012	0.1954267	0.22467712	2.6797656	21	7 22.8	20.9
416018 2002 CO_{169}	16.2	X	118.31797	47.42787	137.64983	17.31496	0.2059951	0.22242438	2.6978292	21	8 24.1	20.5
416019 2002 CH_{177}	16.8	X	192.50002	321.81390	111.75133	14.80873	0.2370041	0.22527271	2.6750403	21	6 10.5	21.6
416020 2002 CX_{213}	16.4	X	34.48837	230.74965	334.70937	11.92900	0.2250680	0.21295920	2.7771869	21	5 24.9	19.4
416021 2002 CT_{217}	16.6	X	194.25599	153.13385	346.62368	10.77763	0.1225548	0.22848758	2.6498888	21	9 5.4	20.5
416022 2002 CB_{222}	17.9	X	305.91166	1.10070	137.20854	6.83113	0.0923337	0.29750331	2.2223281	21	—	—
416023 2002 CO_{256}	17.1	X	153.28981	37.20687	119.53927	9.98218	0.2520765	0.22506738	2.6766670	21	8 21.2	21.8
416024 2002 CR_{272}	16.5	X	216.11116	341.26184	130.90989	17.22662	0.2277136	0.22935024	2.6432399	21	8 16.2	20.8
416025 2002 CK_{276}	16.6	X	126.79043	229.19261	280.85322	13.33438	0.1737328	0.22246102	2.6975330	21	7 14.2	20.9
416026 2002 CA_{303}	17.0	X	165.69234	16.25623	129.42654	14.74807	0.1842026	0.22639483	2.6661938	21	8 15.9	21.4
416027 2002 DY	16.8	X	114.10666	213.88909	347.30748	13.58195	0.1236321	0.22301696	2.6930482	21	9 2.4	20.9
416028 2002 DC_{2}	17.9	X	137.28333	123.62775	16.05410	21.30161	0.1713124	0.37446925	1.9063030	21	7 20.6	21.0
416029 2002 DU_{5}	18.2	X	129.63903	116.48541	333.97491	18.13740	0.0986068	0.36635103	1.9343621	21	3 29.7	20.5
416030 2002 EF_{6}	16.3	X	141.79548	48.86058	144.64468	28.62552	0.1064748	0.22938763	2.6429527	21	9 24.0	20.7
416031 2002 EX_{10}	15.8	X	150.61915	77.60480	159.89042	28.75338	0.3524739	0.23196348	2.6233504	21	11 26.4	21.4
416032 2002 EX_{11}	20.8	X	170.40467	315.26081	187.02698	2.50884	0.4090431	0.38004478	1.8876126	21	8 18.0	24.3
416033 2002 EE_{17}	17.5	X	92.89684	198.42343	287.80968	0.82376	0.1699667	0.21411988	2.7671416	21	5 6.2	21.0
416034 2002 EA_{27}	16.8	X	230.64650	25.31673	351.02709	5.13204	0.0127848	0.21585404	2.7523010	21	5 14.6	20.7
416035 2002 EK_{64}	16.0	X	129.88788	291.17248	341.71133	13.07107	0.1717561	0.23386184	2.6091345	21	12 16.3	20.5
416036 2002 EO_{84}	17.9	X	259.48938	143.71918	9.19618	5.35053	0.1590949	0.29017202	2.2596041	21	12 15.2	20.2
416037 2002 ES_{92}	16.4	X	37.03045	196.28333	349.71388	8.20432	0.1569067	0.21294002	2.7773537	21	4 23.4	19.5
416038 2002 ED_{102}	16.4	X	166.74820	8.31208	126.35004	14.86165	0.1986807	0.22409387	2.6844134	21	8 2.5	21.0
416039 2002 EX_{103}	16.9	X	91.02623	99.10819	65.66723	9.45332	0.2583659	0.21613029	2.7499552	21	7 6.8	21.0
416040 2002 ER_{137}	17.2	X	99.38743	357.22079	156.35262	2.81323	0.1234313	0.21618695	2.7494747	21	6 13.3	21.1
416041 2002 EZ_{162}	16.7	X	190.58765	309.40511	182.01103	14.05596	0.1242587	0.22577219	2.6710935	21	8 18.7	21.0
416042 2002 ED_{164}	16.1	X	196.66689	141.09596	155.34254	13.03530	0.0451574	0.19776450	2.9176766	21	—	—
416043 2002 FT_{3}	16.4	X	42.98110	152.86592	41.59419	9.82608	0.2083508	0.21196811	2.7858370	21	5 26.2	19.2
416044 2002 FK_{40}	17.3	X	100.11447	340.82376	152.12604	7.55806	0.0636810	0.21496056	2.7599224	21	5 11.3	21.1
416045 2002 GW_{2}	16.6	X	110.19288	322.95269	207.25712	15.83337	0.2809451	0.21920046	2.7242172	21	7 29.9	21.4
416046 2002 GW_{22}	15.9	X	117.98997	260.91825	238.29403	8.78750	0.2540015	0.21546566	2.7556074	21	6 29.3	20.4
416047 2002 GF_{27}	17.6	X	134.90163	83.39012	81.42433	23.76907	0.1013324	0.37427781	1.9069530	21	8 20.9	20.5
416048 2002 GR_{29}	17.1	X	156.65100	265.70631	158.03933	9.09932	0.1228295	0.21456834	2.7632847	21	4 25.7	21.5
416049 2002 GS_{29}	17.3	X	144.73435	13.59466	70.94731	1.78535	0.0432710	0.21449502	2.7639143	21	4 29.3	21.1
416050 2002 GJ_{39}	17.4	X	147.91501	13.44815	213.88246	6.40229	0.1745287	0.28186581	2.3037806	21	11 13.8	20.9
416051 2002 GX_{56}	16.7	X	79.86777	332.71832	225.10034	11.20818	0.2869347	0.21741724	2.7390927	21	8 5.5	20.9
416052 2002 GP_{74}	17.4	X	170.93623	10.87741	194.89422	11.31293	0.1908152	0.28075904	2.3098311	21	11 7.8	21.1
416053 2002 GV_{97}	16.8	X	130.58761	99.40759	64.73302	10.76232	0.2735346	0.22091099	2.7101366	21	8 16.2	21.7
416054 2002 GB_{104}	16.4	X	70.43768	76.10474	77.58071	17.42273	0.1946824	0.21087922	2.7954186	21	5 19.2	19.9
416055 2002 GU_{106}	17.1	X	146.36107	25.53832	155.22389	10.07295	0.1976293	0.22393441	2.6856876	21	9 11.9	21.6
416056 2002 GU_{116}	17.4	X	115.84466	198.40265	47.70655	7.31435	0.1690031	0.27727671	2.3291303	21	11 7.4	21.0
416057 2002 GG_{158}	17.4	X	183.47299	32.62673	145.32218	6.39947	0.1162836	0.27940059	2.3173119	21	10 20.3	20.8
416058 2002 GK_{180}	16.7	X	134.97908	280.52779	235.91054	5.79938	0.1349397	0.22036956	2.7145738	21	7 26.7	20.9
416059 2002 GX_{185}	18.2	X	255.85305	146.35932	17.10673	3.41104	0.1161471	0.28797224	2.2710968	21	12 31.5	20.7
416060 2002 HW_{12}	15.6	X	70.03996	183.67061	69.14927	28.31034	0.1689524	0.22058857	2.7127767	21	10 11.0	20.0
416061 2002 HW_{17}	16.2	X	175.99094	341.66112	168.63314	28.59661	0.1440531	0.22383284	2.6865000	21	8 29.2	20.6
416062 2002 HQ_{18}	17.2	X	115.87605	166.85174	81.85591	7.52436	0.0771655	0.27686369	2.3314461	21	11 7.5	20.4
416063 2002 JH_{14}	16.4	X	139.43697	101.86173	112.63322	13.01976	0.2172335	0.22653237	2.6651145	21	10 22.7	21.2
416064 2002 JY_{107}	15.8	X	66.63337	116.62817	70.91094	15.21476	0.2208910	0.21347509	2.7727108	21	6 29.6	19.4
416065 2002 JM_{136}	17.5	X	189.40775	153.31255	43.79569	5.93811	0.0998500	0.28122601	2.3072734	21	11 19.3	20.7
416066 2002 JM_{150}	16.6	X	76.51364	109.38911	68.69212	14.17521	0.1476086	0.21026720	2.8008404	21	6 18.7	20.3
416067 2002 KM_{16}	16.9	X	117.60209	340.21476	280.57115	11.99104	0.1515302	0.27238245	2.3569478	21	11 24.7	20.6
416068 2002 LH_{58}	17.9	X	34.21213	61.59160	100.69648	24.69878	0.0710521	0.35505742	1.9751662	21	2 18.5	20.0
416069 2002 MZ_{4}	16.9	X	199.01910	98.97514	107.59304	22.80264	0.1834677	0.27928809	2.3179342	21	12 8.4	20.6
416070 2002 ME_{6}	15.8	X	165.82665	29.66059	283.94620	16.76411	0.1680618	0.18081424	3.0972835	21	—	—
416071 2002 NV	17.9	X	153.60691	271.82516	294.27275	22.26389	0.6162577	0.22620333	2.6676984	21	10 8.1	24.3
416072 2002 NT_{30}	16.0	X	145.30260	89.93196	269.38282	20.14829	0.2697183	0.18078417	3.0976269	21	2 2.5	21.5
416073 2002 NX_{30}	16.1	X	134.92266	46.15704	290.22821	15.55958	0.2139031	0.17827580	3.1266153	21	1 1.6	20.9
416074 2002 NL_{39}	16.4	X	340.50857	40.74132	278.49741	22.37633	0.2042913	0.25950555	2.4342861	21	7 13.4	18.4
416075 2002 NY_{62}	17.7	X	341.60813	52.47090	309.86797	6.02826	0.1595115	0.26326880	2.4110328	21	9 29.2	19.9
416076 2002 NC_{63}	17.7	X	44.99064	238.87436	39.43743	2.06170	0.1671625	0.26421478	2.4052745	21	9 28.5	20.4
416077 2002 NF_{63}	18.1	X	46.05268	233.60913	51.07152	1.99589	0.1740533	0.26504163	2.4002694	21	10 10.3	20.9
416078 2002 NA_{70}	15.8	X	105.17963	101.63267	282.19487	24.31853	0.2685026	0.17786248	3.1314573	21	1 26.3	20.5
416079 2002 NJ_{76}	17.5	X	340.11131	48.36277	246.28540	5.04192	0.1177555	0.25547797	2.4598035	21	6 13.9	20.0
416080 2002 NQ_{76}	15.6	X	300.41761	273.01362	274.47292	11.94262	0.0984649	0.18226006	3.0808819	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416081 2002 NE_{77}	16.0	X	151.00162	188.70031	126.77671	12.41629	0.1244760	0.17780378	3.1321465	21	—	—
416082 2002 NR_{77}	16.6	X	192.91890	220.93664	93.87430	8.73087	0.1075604	0.18523954	3.0477564	21	1 21.2	21.4
416083 2002 NY_{77}	16.3	X	112.49034	51.70225	305.19144	16.05939	0.2097443	0.17727783	3.1383384	21	1 2.9	20.8
416084 2002 ND_{78}	16.2	X	171.22145	34.83904	307.71182	10.29519	0.1312812	0.18519727	3.0482202	21	2 1.9	21.0
416085 2002 NU_{79}	16.1	X	134.17632	341.93124	340.20492	10.27165	0.2157920	0.17671921	3.1449486	21	—	—
416086 2002 ND_{81}	15.8	X	172.65802	240.71223	114.59827	12.10455	0.0973559	0.18782286	3.0197460	21	2 18.4	20.5
416087 2002 OQ_{18}	17.0	X	10.27349	77.92691	275.14409	8.91864	0.2628023	0.26474918	2.4020367	21	12 3.6	19.2
416088 2002 OL_{24}	15.7	X	116.84130	209.78348	133.20847	18.48331	0.2110748	0.17481141	3.1677886	21	—	—
416089 2002 OO_{28}	15.5	X	104.34373	17.66789	341.63065	17.07468	0.2055123	0.17526272	3.1623481	21	—	—
416090 2002 OH_{29}	15.8	X	180.91541	347.66768	292.62114	8.64623	0.0598597	0.17864484	3.1223079	21	—	—
416091 2002 OM_{33}	16.2	X	155.07588	49.75929	259.68925	8.16308	0.0942964	0.17830046	3.1263270	21	—	—
416092 2002 OH_{34}	17.7	X	333.64699	48.61569	305.71441	13.96286	0.1709702	0.26033872	2.4290896	21	8 25.8	19.9
416093 2002 OO_{34}	16.2	X	224.16269	41.39489	277.03847	9.54052	0.0956016	0.18738635	3.0244338	21	2 19.3	21.0
416094 2002 PM_{3}	16.3	X	139.10664	72.75310	283.98096	13.40865	0.2770907	0.18031668	3.1029786	21	1 30.8	21.5
416095 2002 PZ_{8}	16.3	X	146.15804	19.32041	282.56748	8.53184	0.1616325	0.17619949	3.1511297	21	—	—
416096 2002 PS_{9}	16.3	X	179.82196	354.21659	297.68486	11.67313	0.2517217	0.17974508	3.1095535	21	—	—
416097 2002 PM_{12}	16.1	X	164.59341	357.08584	282.32557	12.55870	0.1694743	0.17658981	3.1464847	21	—	—
416098 2002 PZ_{12}	17.3	X	57.30480	16.37099	267.42376	4.34628	0.1817606	0.26540834	2.3980579	21	10 23.2	20.4
416099 2002 PQ_{23}	16.5	X	111.68979	37.75940	306.07787	5.74726	0.2648932	0.17401871	3.1774014	21	—	—
416100 2002 PN_{30}	17.9	X	330.04106	19.48776	310.10957	5.67954	0.2149256	0.25729995	2.4481776	21	7 7.3	19.8
416101 2002 PO_{40}	15.7	X	135.52965	344.30671	338.06346	10.29510	0.2812147	0.17513142	3.1639286	21	—	—
416102 2002 PR_{40}	15.8	X	88.21782	106.77287	143.81046	23.58845	0.3149789	0.21662388	2.7457763	21	10 31.4	20.8
416103 2002 PY_{66}	18.1	X	329.34647	184.73378	134.64417	5.14123	0.2257824	0.25707841	2.4495838	21	6 16.4	20.1
416104 2002 PV_{111}	15.0	X	63.77009	75.18121	324.69745	24.48704	0.2372062	0.17399417	3.1777002	21	—	—
416105 2002 PA_{112}	17.2	X	38.01705	62.96545	286.73845	8.41187	0.0879364	0.26972601	2.3723977	21	12 13.5	20.1
416106 2002 PJ_{114}	16.9	X	191.72190	9.36436	299.36769	1.48908	0.1060979	0.18286615	3.0740705	21	1 12.8	21.7
416107 2002 PA_{162}	18.2	X	320.13597	281.99238	67.24123	2.40190	0.1983120	0.25789155	2.4444321	21	7 19.9	20.3
416108 2002 PY_{162}	16.1	X	148.67227	207.00658	126.24412	10.97897	0.1535907	0.17893630	3.1189165	21	1 4.2	21.0
416109 2002 PG_{168}	15.8	X	92.20822	252.80735	143.17602	11.02273	0.2539322	0.17718096	3.1394821	21	1 28.9	19.9
416110 2002 PJ_{173}	17.7	X	311.53562	194.30181	184.17561	4.36105	0.1573920	0.25953630	2.4340938	21	8 22.5	20.2
416111 2002 PW_{175}	15.9	X	300.87601	295.74820	280.98140	8.19190	0.0304092	0.18613625	3.0379602	21	1 22.9	20.2
416112 2002 PR_{177}	16.3	X	165.11181	121.65391	255.58357	8.68149	0.0804435	0.18815830	3.0161560	21	3 1.0	21.0
416113 2002 PJ_{191}	18.2	X	307.84582	305.46257	46.41070	2.05907	0.2059451	0.25675838	2.4516189	21	6 27.7	20.6
416114 2002 PZ_{191}	16.3	X	141.50799	122.67898	272.79946	9.38037	0.1097478	0.18654265	3.0335463	21	2 28.6	21.0
416115 2002 PF_{195}	18.4	X	319.47995	46.13125	311.37166	1.66844	0.2145041	0.25902733	2.4372813	21	7 28.9	20.3
416116 2002 PG_{199}	17.4	X	10.00726	157.62130	138.47382	9.42251	0.1262560	0.25971832	2.4329564	21	8 16.3	19.5
416117 2002 QZ_{3}	17.7	X	300.82264	33.74003	338.80350	1.83669	0.2343825	0.25663827	2.4523838	21	7 11.8	20.3
416118 2002 QQ_{31}	17.6	X	335.31189	312.87351	42.85028	3.39668	0.2340322	0.25984629	2.4321576	21	9 5.9	19.0
416119 2002 QS_{35}	16.2	X	77.42854	33.48675	355.77468	13.99299	0.2712888	0.17299080	3.1899757	21	1 6.1	20.2
416120 2002 QO_{37}	16.3	X	38.02660	270.37305	163.74123	15.76180	0.2018078	0.17198095	3.2024509	21	—	—
416121 2002 QS_{54}	17.4	X	274.28064	95.68603	333.71906	8.20693	0.2969556	0.25752298	2.4467639	21	8 13.3	20.7
416122 2002 QM_{59}	16.3	X	121.41940	88.24847	286.32114	4.95075	0.1162121	0.17948159	3.1125962	21	1 19.1	20.7
416123 2002 QM_{69}	17.8	X	301.03313	242.07607	124.73109	3.59450	0.2474025	0.25613974	2.4555648	21	6 30.7	20.5
416124 2002 QZ_{71}	17.1	X	301.28113	70.07098	326.83266	7.74162	0.2195681	0.25909273	2.4368712	21	8 21.7	19.5
416125 2002 QC_{75}	17.7	X	274.40069	355.61123	42.49565	3.52252	0.1943364	0.25550429	2.4596345	21	7 16.3	20.8
416126 2002 QF_{89}	17.6	X	309.56743	41.92034	326.80149	6.21281	0.1422815	0.25770416	2.4456169	21	8 7.6	20.0
416127 2002 QC_{95}	16.1	X	134.93245	36.36585	305.03494	9.28385	0.2098143	0.17608562	3.1524880	21	1 7.4	20.9
416128 2002 QE_{95}	16.9	X	95.60365	283.49218	93.30333	3.05268	0.1800075	0.17548104	3.1597247	21	—	—
416129 2002 QA_{99}	16.4	X	135.93789	27.40041	295.61442	3.89246	0.1380017	0.17591710	3.1545011	21	—	—
416130 2002 QF_{101}	18.0	X	349.32464	258.03002	38.15461	3.66777	0.2032848	0.25648609	2.4533537	21	6 29.7	19.8
416131 2002 QT_{103}	15.9	X	129.64911	69.28027	288.64831	8.38568	0.0998324	0.17797660	3.1301185	21	1 7.3	20.3
416132 2002 QS_{105}	17.6	X	277.72194	353.91500	56.62762	3.26755	0.1804699	0.25723829	2.4485688	21	8 10.8	20.6
416133 2002 QD_{106}	16.2	X	154.15427	269.86373	107.00310	10.16706	0.1564563	0.18391518	3.0623700	21	3 3.8	21.1
416134 2002 QK_{108}	16.0	X	90.39630	89.75477	318.48224	10.26838	0.0926595	0.18094436	3.0957984	21	1 19.4	20.1
416135 2002 QW_{114}	16.8	X	140.51075	51.66995	269.75796	3.98801	0.1792387	0.17552524	3.1591943	21	—	—
416136 2002 QN_{115}	16.1	X	145.81742	188.25508	151.76523	11.56294	0.0897017	0.17840734	3.1250783	21	1 2.4	20.9
416137 2002 QF_{117}	17.6	X	354.66907	44.14885	270.82400	3.93065	0.1088850	0.25903861	2.4372105	21	8 12.5	20.1
416138 2002 QK_{122}	16.4	X	119.82691	165.24782	173.26356	14.20215	0.1312700	0.17432247	3.1737092	21	—	—
416139 2002 QX_{122}	16.1	X	65.71275	89.84909	317.58524	11.85012	0.2951161	0.17283676	3.1918708	21	1 11.5	19.5
416140 2002 QK_{123}	16.6	X	91.15768	258.48071	132.03090	1.84727	0.1744495	0.17614215	3.1518136	21	1 9.9	20.6
416141 2002 QG_{126}	16.3	X	81.08896	226.92006	157.48608	11.60775	0.1136215	0.17587150	3.1550463	21	—	—
416142 2002 QR_{126}	16.1	X	75.37211	29.25520	1.00444	11.63421	0.1187177	0.17429309	3.1740659	21	—	—
416143 2002 QY_{130}	18.2	X	291.58051	320.37143	42.35214	2.93566	0.2268980	0.25464508	2.4651642	21	6 13.7	21.4
416144 2002 QO_{135}	15.9	X	59.09044	264.15707	135.98407	16.05978	0.1956166	0.17214318	3.2004387	21	—	—
416145 2002 QH_{142}	17.5	X	325.17207	127.64701	253.44533	5.70214	0.1331034	0.26089407	2.4256413	21	9 23.9	19.8
416146 2002 QP_{146}	16.3	X	190.60085	341.64447	347.23981	9.46644	0.1646990	0.18433697	3.0576969	21	2 7.6	21.3
416147 2002 QW_{147}	17.8	X	61.97294	154.80664	125.63074	8.05541	0.0980872	0.26447507	2.4036961	21	10 17.7	20.9
416148 2002 QU_{150}	16.2	X	78.17346	260.37407	144.25362	6.09305	0.1327532	0.17699556	3.1416741	21	1 2.9	20.2
416149 2002 QV_{154}	16.3	X	143.63046	359.54263	352.15839	10.17734	0.2085760	0.17839602	3.1252105	21	1 28.7	21.3
416150 2002 RR_{23}	15.7	X	162.28570	4.89277	346.78057	15.72047	0.2346662	0.18132050	3.0915157	21	2 15.3	21.0
416151 2002 RQ_{25}	20.7	X	105.59063	225.71268	10.50476	4.57628	0.3063105	0.84085559	1.1117021	21	—	—
416152 2002 RX_{68}	17.3	X	31.97060	319.73424	346.00370	6.71836	0.2218712	0.26224894	2.4172796	21	10 22.8	20.1
416153 2002 RB_{79}	17.3	X	342.95493	21.88515	12.88424	2.20546	0.1858049	0.26396518	2.4067905	21	11 28.2	19.2
416154 2002 RY_{109}	16.7	X	311.89411	68.85047	328.95742	8.59777	0.2243383	0.25861786	2.4398532	21	9 12.0	18.8
416155 2002 RZ_{118}	16.5	X	116.84558	226.47330	118.15035	15.40628	0.2709657	0.17366872	3.1816689	21	—	—
416156 2002 RU_{131}	16.2	X	126.49139	100.38086	240.43967	11.07427	0.1924584	0.17388774	3.1789967	21	—	—
416157 2002 RK_{143}	17.6	X	316.75177	44.48479	315.58197	5.00398	0.1721760	0.25637376	2.4540703	21	8 2.9	20.0
416158 2002 RU_{175}	17.4	X	326.88394	73.94881	282.20669	5.28197	0.1404425	0.25757379	2.4464421	21	8 19.3	19.8
416159 2002 RM_{176}	17.5	X	322.57156	75.73623	308.51312	3.84259	0.2036060	0.25963211	2.4334950	21	9 18.9	19.4
416160 2002 RE_{195}	17.4	X	348.93886	194.36484	156.67252	6.40913	0.1915519	0.26047122	2.4282658	21	10 4.9	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416161 2002 RZ_{217}	17.9	X	43.86398	331.50333	320.51696	1.89092	0.1946448	0.26264565	2.4148449	21	10 18.8	20.8
416162 2002 RL_{226}	16.2	X	108.68092	44.71904	331.16387	9.33460	0.2271001	0.17591811	3.1544889	21	1 23.5	20.7
416163 2002 RE_{228}	17.6	X	269.08661	7.30956	26.71310	9.97504	0.2876873	0.25297060	2.4760307	21	6 19.7	21.4
416164 2002 RQ_{233}	18.3	X	295.18931	42.73756	316.80920	0.69986	0.2012104	0.25414655	2.4683869	21	6 19.0	21.1
416165 2002 RF_{235}	16.2	X	115.08256	347.94667	339.05244	12.64635	0.1156049	0.17188167	3.2036840	21	—	—
416166 2002 RO_{250}	15.9	X	70.02850	282.39625	129.86159	11.46732	0.0902546	0.17652027	3.1473110	21	—	—
416167 2002 RS_{252}	17.8	X	267.00679	199.94589	217.96661	3.31517	0.1751704	0.25535086	2.4606197	21	8 4.2	20.9
416168 2002 RS_{262}	15.5	X	55.30506	128.03179	349.57531	27.22106	0.1219093	0.18111475	3.0938565	21	3 2.9	19.3
416169 2002 RB_{263}	16.5	X	133.94596	36.97100	323.20014	6.52566	0.1720555	0.17721617	3.1390662	21	1 23.8	21.3
416170 2002 RQ_{264}	15.6	X	286.22938	289.58305	320.87800	8.88770	0.0457449	0.18395228	3.0619582	21	2 14.1	20.0
416171 2002 RP_{267}	15.7	X	84.30628	352.56576	90.98140	10.98406	0.0933508	0.18107264	3.0943362	21	2 26.7	20.0
416172 2002 RC_{276}	16.5	X	226.75106	322.71370	342.12388	9.08280	0.0306981	0.18386568	3.0629197	21	2 14.5	21.0
416173 2002 RG_{286}	15.4	X	20.31134	154.66290	311.30419	16.07739	0.1099751	0.17666568	3.1455837	21	—	—
416174 2002 SY_{5}	17.7	X	298.17439	148.96620	213.25989	0.67553	0.1963168	0.25293751	2.4762466	21	6 28.5	20.4
416175 2002 SS_{13}	15.4	X	75.52547	127.05990	261.99910	15.42765	0.2245343	0.17139887	3.2096973	21	—	—
416176 2002 SV_{13}	16.1	X	102.23070	134.86480	263.02244	15.60950	0.2372543	0.17595102	3.1540956	21	2 4.8	20.8
416177 2002 SZ_{13}	17.8	X	323.25277	202.64510	137.80462	1.88922	0.1994013	0.25508470	2.4623311	21	7 11.3	20.0
416178 2002 SM_{14}	17.6	X	300.82383	21.36297	21.11954	6.36132	0.1647933	0.25774737	2.4453436	21	9 10.6	20.1
416179 2002 SC_{15}	15.6	X	147.72475	44.64719	273.22467	15.68416	0.2128604	0.17355061	3.1831122	21	—	—
416180 2002 SB_{54}	15.9	X	151.16825	69.88071	257.60517	13.73318	0.2748806	0.17659129	3.1464672	21	1 8.7	21.2
416181 2002 SA_{66}	16.1	X	255.71976	133.35524	140.06317	11.84446	0.0696418	0.18533224	3.0467400	21	2 4.4	20.7
416182 2002 SD_{67}	16.5	X	143.71530	101.63293	249.42375	3.88799	0.1382838	0.17758713	3.1346933	21	1 17.9	21.2
416183 2002 SB_{70}	17.2	X	104.37138	39.13923	0.66257	9.77939	0.2255533	0.17681084	3.1438619	21	2 16.8	21.7
416184 2002 SR_{72}	17.8	X	292.76601	342.70507	66.05982	3.35287	0.1774483	0.25862809	2.4397889	21	9 2.7	20.5
416185 2002 TW_{14}	15.2	X	184.90918	338.65783	351.48755	16.71149	0.2670995	0.18216213	3.0819859	21	2 10.4	20.8
416186 2002 TD_{60}	19.3	X	56.86341	343.77787	62.63950	7.41134	0.0825250	0.74784825	1.2020625	21	—	—
416187 2002 TP_{65}	16.5	X	229.61275	284.60466	71.82723	28.09428	0.3767710	0.24164509	2.5528036	21	4 14.7	21.9
416188 2002 TR_{85}	15.8	X	120.12224	33.61919	0.36601	11.33711	0.1183698	0.17694169	3.1423117	21	2 14.2	20.4
416189 2002 TT_{99}	16.5	X	106.82416	51.21830	323.18749	8.89128	0.2324952	0.17520887	3.1629961	21	1 20.1	20.9
416190 2002 TF_{105}	16.9	X	295.96708	91.43260	282.19329	3.17365	0.1481309	0.25323179	2.4743278	21	7 19.9	19.7
416191 2002 TK_{122}	16.3	X	139.68007	110.10058	228.23388	12.90027	0.2039447	0.17575957	3.1563856	21	1 4.9	21.4
416192 2002 TX_{131}	17.9	X	222.95416	158.14788	203.45740	21.63860	0.0562273	0.34661383	2.0071144	21	3 29.3	20.3
416193 2002 TE_{135}	15.5	X	202.64719	140.99256	248.73452	8.23685	0.0229003	0.18972896	2.9994869	21	4 28.3	19.8
416194 2002 TX_{156}	17.7	X	308.16471	111.88313	282.72697	4.91738	0.2264845	0.25808215	2.4432284	21	8 28.6	19.9
416195 2002 TR_{190}	19.4	X	193.11711	104.74697	24.22537	26.91677	0.1599609	0.88188811	1.0769455	21	—	—
416196 2002 TV_{199}	15.0	X	83.09823	118.48641	267.06258	16.24515	0.1460679	0.17132245	3.2106517	21	—	—
416197 2002 TY_{269}	15.8	X	143.15311	40.35606	348.03753	9.27106	0.1371602	0.18050656	3.1008022	21	3 2.6	20.5
416198 2002 TR_{293}	15.4	X	75.98641	100.04088	296.01403	14.09158	0.0723810	0.17217812	3.2000056	21	—	—
416199 2002 TH_{308}	15.6	X	126.42514	199.71834	151.65596	9.37675	0.0632467	0.17256027	3.1952795	21	—	—
416200 2002 TZ_{308}	15.8	X	283.30358	231.36848	69.68464	9.89878	0.0164152	0.18804549	3.0173621	21	4 21.5	20.1
416201 2002 TY_{315}	15.4	X	314.95317	27.74056	136.02562	12.62284	0.0090003	0.16959108	3.2324666	21	—	—
416202 2002 TE_{319}	16.2	X	109.82103	48.93273	346.83296	9.99647	0.1673511	0.17808048	3.1289011	21	2 9.6	20.6
416203 2002 TV_{326}	16.4	X	52.13314	61.87848	13.13286	14.00803	0.1868872	0.17309633	3.1886791	21	1 8.8	20.2
416204 2002 TF_{327}	18.1	X	273.59527	40.29673	32.67765	3.19171	0.0992877	0.25800591	2.4437097	21	9 19.2	21.0
416205 2002 TP_{331}	16.7	X	32.66249	21.43725	98.88084	2.25708	0.1435918	0.17635172	3.1493161	21	1 26.8	20.1
416206 2002 TC_{334}	16.3	X	223.14043	213.96800	29.53794	11.36179	0.0591731	0.17234406	3.1979512	21	—	—
416207 2002 TZ_{349}	16.5	X	108.61152	124.28700	251.73515	8.80182	0.1161746	0.17751885	3.1354971	21	1 5.4	21.0
416208 2002 TW_{355}	18.3	X	317.95486	353.30909	337.51792	2.91991	0.1588320	0.25347266	2.4727600	21	6 22.2	20.9
416209 2002 TM_{375}	17.6	X	297.24656	258.07363	118.20517	3.00622	0.2845761	0.25346963	2.4727797	21	7 1.9	20.5
416210 2002 UZ_{23}	16.1	X	128.21036	124.88868	216.81746	15.46032	0.1860579	0.17144509	3.2091205	21	—	—
416211 2002 UB_{31}	16.4	X	235.39797	268.09393	81.50953	27.71318	0.3827299	0.24074234	2.5591814	21	4 10.3	21.8
416212 2002 UQ_{60}	16.2	X	130.47752	280.79925	77.01970	12.71596	0.0461267	0.17267036	3.1939211	21	1 2.1	20.8
416213 2002 UQ_{61}	15.9	X	182.00526	45.94078	242.05036	8.21754	0.0659172	0.17643070	3.1483762	21	—	—
416214 2002 VR_{2}	17.2	X	288.74664	136.79004	281.94559	1.64232	0.1615925	0.25479710	2.4641836	21	9 9.9	19.9
416215 2002 VL_{61}	15.7	X	114.21893	211.78104	231.54938	14.24496	0.1991572	0.17932787	3.1143746	21	4 11.6	20.5
416216 2002 VM_{90}	17.3	X	308.74315	337.48688	52.87462	7.63022	0.1185080	0.25481362	2.4640771	21	9 15.2	20.0
416217 2002 VD_{118}	20.5	X	293.68864	66.45746	35.19359	14.24914	0.1435587	0.57782852	1.4275897	21	—	—
416218 2002 WK_{24}	15.6	X	0.92717	99.97757	65.71255	9.74371	0.1087492	0.17229410	3.1985695	21	2 6.7	19.7
416219 2002 WQ_{26}	16.3	X	74.79414	341.25505	95.13786	5.69023	0.1746213	0.17195228	3.2028069	21	2 14.9	20.4
416220 2002 WW_{30}	17.4	X	218.90759	57.56613	77.71749	5.60740	0.1184161	0.25268399	2.4779026	21	10 1.1	21.0
416221 2002 WG_{31}	17.2	X	231.92959	173.55914	234.02229	11.98282	0.1360836	0.24347262	2.5400132	21	6 15.4	21.0
416222 2002 XR_{3}	16.0	X	113.02717	15.31106	17.87754	11.98173	0.2524729	0.17517153	3.1634455	21	2 23.8	20.9
416223 2002 XJ_{69}	18.7	X	33.74112	191.32510	275.98523	25.17064	0.3174721	0.32450684	2.0972658	21	—	—
416224 2002 XM_{90}	18.0	X	232.00070	80.82127	81.57515	20.17768	0.3783644	0.41136104	1.7905534	21	11 12.4	19.9
416225 2002 XZ_{118}	13.6	X	247.41449	302.69624	69.28398	15.56720	0.0559641	0.08352823	5.1829918	21	6 1.4	20.6
416226 2002 YL_{34}	16.5	X	184.73265	143.25853	321.58364	8.35884	0.0901908	0.23900185	2.5715909	21	7 14.1	20.4
416227 2003 AX_{7}	15.8	X	137.37838	221.01337	312.38189	10.39254	0.2157922	0.23735988	2.5834368	21	8 24.5	20.1
416228 2003 AL_{20}	15.8	X	41.86884	42.68581	109.97082	22.14899	0.3314633	0.16964096	3.2318329	21	4 30.9	19.5
416229 2003 AM_{55}	15.4	X	36.04501	5.36627	115.45588	29.20196	0.2443037	0.16520679	3.2894058	21	2 11.9	18.9
416230 2003 AB_{69}	17.1	X	112.90389	59.92778	100.30751	10.13879	0.2092071	0.23477164	2.6023895	21	7 18.2	21.0
416231 2003 AJ_{73}	18.6	X	182.06038	168.85005	4.87290	9.77742	0.3497270	0.40409296	1.8119597	21	10 7.4	21.5
416232 2003 AK_{79}	16.9	X	140.10506	25.69921	132.32093	14.51811	0.1181911	0.23815452	2.5776869	21	8 4.3	20.5
416233 2003 AG_{90}	15.6	X	356.24608	62.96076	82.28303	15.97964	0.2602218	0.16360535	3.3108364	21	—	—
416234 2003 BW	16.4	X	198.65054	62.34643	55.90833	12.59333	0.2307431	0.24159814	2.5531343	21	8 13.4	21.0
416235 2003 BZ_{5}	16.8	X	98.16423	80.11935	107.07602	14.05796	0.2732119	0.23265384	2.6181583	21	8 16.0	21.0
416236 2003 BS_{16}	16.4	X	135.28666	221.92869	344.61269	12.49595	0.2018517	0.24089880	2.5580731	21	9 30.9	20.8
416237 2003 BS_{23}	15.9	X	259.34589	222.64223	170.99878	16.12569	0.2546070	0.24257926	2.5462455	21	6 15.1	20.2
416238 2003 BP_{24}	16.5	X	155.51253	259.59893	291.54000	16.07422	0.1745910	0.24283383	2.5444657	21	9 23.2	21.0
416239 2003 BK_{55}	16.7	X	91.95203	51.72945	120.39539	14.76712	0.1877985	0.23203182	2.6228353	21	7 7.8	20.3
416240 2003 BQ_{63}	17.8	X	187.01798	101.59035	11.56256	6.42711	0.2738605	0.23965047	2.5669487	21	7 24.6	22.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416241 2003 BP_{66}	17.3	X	166.65098	183.86970	309.96166	4.69093	0.2361494	0.23780390	2.5802199	21	8 1.9	21.8
416242 2003 BZ_{66}	17.0	X	143.84555	190.36145	313.43406	4.05693	0.1894644	0.23761103	2.5816161	21	7 24.9	21.3
416243 2003 BS_{81}	16.5	X	206.17487	43.62170	71.48550	6.73686	0.2348416	0.24163848	2.5528501	21	8 12.9	20.9
416244 2003 BZ_{86}	17.6	X	244.75322	283.20249	144.93279	6.55393	0.1610155	0.24195931	2.5505930	21	7 24.1	21.4
416245 2003 CT_{1}	16.7	X	149.90535	147.83991	315.10029	7.15350	0.1795350	0.23451942	2.6042550	21	6 6.9	20.9
416246 2003 CL_{6}	17.0	X	195.73307	34.19073	105.07871	5.81037	0.1643854	0.24320312	2.5418892	21	9 6.8	21.0
416247 2003 CD_{7}	16.2	X	173.37349	40.14585	126.58595	10.33239	0.1086438	0.24226044	2.5484789	21	9 23.2	20.2
416248 2003 CD_{26}	16.9	X	19.32907	38.54433	173.12517	5.99435	0.2247438	0.22379715	2.6867856	21	5 1.2	19.1
416249 2003 DG_{4}	16.6	X	98.64801	0.26391	176.35196	13.53057	0.2745969	0.22930000	2.6436260	21	7 29.3	20.9
416250 2003 DL_{22}	16.5	X	68.15656	89.71183	130.79391	12.24546	0.1359940	0.23262167	2.6183996	21	8 3.5	19.9
416251 2003 EQ	16.8	X	140.93857	94.19897	69.54303	8.74703	0.1617119	0.23669041	2.5883059	21	8 18.6	21.0
416252 Manuelherrera	16.6	X	74.97006	229.49249	352.48262	12.99652	0.2110805	0.22950789	2.6420293	21	8 28.8	20.2
416253 2003 EF_{23}	16.3	X	101.34542	155.47298	3.09388	14.28670	0.1880680	0.22903919	2.6456325	21	7 2.5	20.4
416254 2003 EE_{35}	17.0	X	164.14111	268.77736	259.13547	2.95567	0.2147223	0.23900645	2.5715579	21	9 9.4	21.4
416255 2003 EW_{35}	16.5	X	85.22599	162.35326	11.19941	13.64411	0.1441012	0.22813669	2.6526052	21	6 24.6	20.3
416256 2003 EB_{42}	16.2	X	166.08088	116.81488	319.02100	21.57973	0.0446153	0.23099530	2.6306755	21	5 2.9	20.5
416257 2003 EG_{46}	16.6	X	100.94642	177.59142	16.51765	7.97460	0.1339032	0.23275660	2.6173877	21	8 12.9	20.5
416258 2003 ED_{48}	15.9	X	31.97736	279.65741	305.96689	15.46275	0.3079609	0.22413619	2.6840755	21	7 9.2	18.1
416259 2003 EK_{62}	16.4	X	74.17203	76.79644	118.17224	13.84222	0.2116054	0.22555240	2.6728284	21	7 19.5	19.9
416260 2003 FQ_{3}	16.6	X	63.63802	105.93227	100.70262	13.24830	0.1323613	0.22818012	2.6522687	21	7 7.6	19.7
416261 2003 FD_{5}	17.4	X	162.22278	85.41837	67.26491	28.01588	0.3807790	0.23828859	2.5767200	21	9 5.9	23.0
416262 2003 FG_{20}	16.5	X	98.59688	166.38488	21.42352	12.66199	0.1542502	0.23246196	2.6195988	21	8 6.5	20.5
416263 2003 FQ_{24}	16.2	X	122.89422	103.56531	1.45283	14.38223	0.0433250	0.22453772	2.6808747	21	4 22.4	20.1
416264 2003 FF_{29}	16.7	X	104.10402	100.48450	33.29474	5.70385	0.0112928	0.22527625	2.6750123	21	5 5.8	20.4
416265 2003 FP_{52}	16.5	X	151.25092	74.11511	127.14093	8.52275	0.1981465	0.24034854	2.5619760	21	10 14.9	20.9
416266 2003 FV_{70}	16.6	X	75.08899	67.67114	170.21132	12.65149	0.0446115	0.23365842	2.6106486	21	8 20.9	20.1
416267 2003 FN_{93}	16.3	X	57.41516	158.40035	43.27961	14.59088	0.1881301	0.22484253	2.6784512	21	6 29.7	19.7
416268 2003 FR_{96}	16.9	X	49.68755	344.10471	203.36706	12.66157	0.1026083	0.22317838	2.6917495	21	5 16.0	20.1
416269 2003 FJ_{108}	17.2	X	162.64690	30.87227	142.31890	5.75631	0.2103407	0.23898883	2.5716842	21	9 17.7	21.5
416270 2003 FY_{119}	17.5	X	181.12445	236.44106	12.57418	5.97428	0.1872488	0.30271839	2.1967309	21	—	—
416271 2003 FS_{131}	16.5	X	235.43337	232.82196	61.88257	8.32022	0.2772121	0.20446644	2.8535667	21	1 30.7	21.7
416272 2003 GN_{3}	17.2	X	168.11668	330.21567	201.99393	5.21161	0.2212464	0.23967121	2.5668006	21	9 18.4	21.6
416273 Glennsnyder	17.0	X	139.07770	135.40230	23.14982	13.65938	0.1893771	0.23474695	2.6025720	21	8 14.2	21.5
416274 2003 GA_{52}	17.1	X	178.66600	58.86384	12.93126	6.16591	0.0163668	0.22385528	2.6863205	21	5 20.6	20.8
416275 2003 HK_{15}	16.2	X	40.71737	201.13236	48.22725	22.44380	0.0165603	0.22836795	2.6508142	21	7 20.3	20.2
416276 2003 HU_{34}	17.7	X	81.29237	265.49879	33.49692	8.80920	0.1406525	0.29541949	2.2327664	21	12 9.5	20.9
416277 2003 HR_{58}	17.9	X	205.86925	291.67702	137.54448	24.03856	0.1018673	0.38692955	1.8651544	21	6 19.8	20.6
416278 2003 KG	16.6	X	55.16015	170.11739	85.75008	15.86462	0.2151411	0.22754672	2.6571883	21	9 24.5	20.5
416279 2003 KW_{2}	16.9	X	147.66865	78.47383	108.23099	5.76452	0.1642198	0.23435949	2.6054396	21	9 21.9	21.2
416280 2003 KA_{3}	16.0	X	255.63938	204.57345	72.82743	16.57829	0.1195962	0.20675315	2.8324872	21	2 6.1	20.6
416281 2003 KZ_{27}	17.4	X	99.13584	130.22689	127.70958	5.73974	0.2251689	0.28924978	2.2644046	21	11 13.6	21.0
416282 2003 KE_{31}	18.3	X	8.59420	150.03906	150.38492	8.28284	0.2881764	0.27844093	2.3226334	21	9 15.8	19.4
416283 2003 MM	21.5	X	340.65541	19.80204	127.61888	8.54494	0.2564104	0.91181806	1.0532479	21	—	
416284 2003 OP_{21}	17.6	X	118.25111	137.84134	127.16982	7.85822	0.1481971	0.28826583	2.2695545	21	12 5.1	21.1
416285 2003 OW_{25}	16.3	X	284.41687	89.20773	258.18514	4.33392	0.0640512	0.21356138	2.7719639	21	6 10.1	20.0
416286 2003 PR_{11}	17.3	X	120.44264	89.88177	295.63269	12.02396	0.5237969	0.18702640	3.0283131	21	3 7.7	22.9
416287 2003 QK_{34}	17.0	X	25.51512	5.79602	330.52264	10.56360	0.1803959	0.28065038	2.3104272	21	11 21.1	19.8
416288 2003 QP_{71}	16.2	X	121.12830	62.13244	308.50940	14.54786	0.2514656	0.18547163	3.0452134	21	1 30.0	20.7
416289 2003 QT_{71}	17.3	X	197.19910	90.94096	303.37491	18.11430	0.1041743	0.36775259	1.9294442	21	4 1.3	20.3
416290 2003 QJ_{77}	17.2	X	40.46158	17.82584	335.10117	10.67586	0.2409346	0.28270502	2.2992191	21	—	—
416291 2003 QZ_{86}	16.1	X	101.68562	12.85995	329.84525	5.63249	0.1184910	0.18182282	3.0858191	21	—	—
416292 2003 QJ_{93}	17.5	X	38.03246	318.56882	15.42050	6.98670	0.1479650	0.28172717	2.3045363	21	12 2.7	20.3
416293 2003 QJ_{95}	16.2	X	136.63889	58.86063	325.41151	11.78572	0.3309366	0.19001635	2.9964617	21	3 4.9	21.4
416294 2003 QK_{99}	17.1	X	58.97906	308.89355	3.24634	23.85574	0.2787214	0.28264291	2.2995560	21	12 13.9	21.2
416295 2003 QD_{109}	16.9	X	338.24186	37.95029	353.36160	7.12446	0.1083052	0.27970606	2.3156245	21	11 9.0	19.2
416296 2003 RM_{1}	17.8	X	7.75412	41.87042	338.61320	6.05269	0.2835314	0.27987804	2.3146758	21	—	—
416297 2003 RW_{2}	17.7	X	42.34671	354.26194	351.27289	3.23743	0.2002400	0.28352498	2.2947841	21	—	—
416298 2003 RZ_{13}	17.1	X	0.54215	98.14090	270.58751	9.99030	0.2352957	0.27821337	2.3238998	21	12 7.7	19.0
416299 2003 RW_{19}	18.1	X	346.32975	230.99237	173.87007	3.78916	0.2325536	0.27994853	2.3142872	21	—	—
416300 2003 RS_{22}	17.9	X	19.04591	171.02506	192.92810	4.80825	0.2525023	0.28082685	2.3094592	21	—	—
416301 2003 RL_{26}	17.1	X	46.43825	83.43158	218.38946	21.54634	0.2951328	0.27925252	2.3181310	21	11 23.1	20.4
416302 2003 SW_{4}	17.6	X	314.06450	25.18612	356.48042	8.76221	0.2530580	0.27173938	2.3606648	21	8 23.6	19.4
416303 2003 SF_{5}	17.7	X	330.28399	2.33222	24.94819	3.56003	0.2265061	0.27397132	2.3478264	21	10 20.1	19.0
416304 2003 SS_{8}	18.2	X	344.26953	62.62884	355.52033	3.54657	0.1118556	0.28159526	2.3052560	21	—	—
416305 2003 SB_{13}	18.0	X	24.12387	19.24608	355.99662	5.90529	0.2422005	0.28267294	2.2993931	21	—	—
416306 2003 SL_{28}	16.2	X	116.96446	41.51204	335.27114	16.19925	0.1805446	0.18586405	3.0409255	21	1 28.0	20.7
416307 2003 SA_{39}	17.3	X	4.83947	88.24501	295.49561	6.68253	0.2287895	0.27953370	2.3165762	21	—	—
416308 2003 SP_{41}	17.3	X	351.70753	335.68996	13.79176	15.12916	0.2049181	0.27349440	2.3505550	21	10 10.3	18.9
416309 2003 SV_{42}	17.6	X	352.90188	175.74366	228.60661	5.35267	0.1889954	0.28187781	2.3037152	21	—	—
416310 2003 SP_{48}	16.3	X	89.71126	81.20606	293.46576	7.37850	0.3136252	0.18048550	3.1010434	21	1 8.7	20.1
416311 2003 SA_{51}	17.5	X	328.06517	210.33988	173.29142	2.18371	0.2286135	0.27441348	2.3453037	21	10 7.5	18.6
416312 2003 SX_{55}	17.5	X	23.03845	24.66116	312.18952	3.82456	0.2380567	0.27876974	2.3208067	21	11 30.1	20.1
416313 2003 SM_{77}	17.7	X	7.18082	167.34189	213.88879	8.38401	0.2194493	0.28030844	2.3123058	21	—	—
416314 2003 SR_{85}	15.6	X	24.87309	164.81606	237.77393	16.17266	0.1836207	0.17499283	3.1655988	21	—	—
416315 2003 SW_{85}	16.7	X	130.19008	25.44383	357.78606	7.85573	0.2799874	0.18772695	3.0207745	21	2 26.4	21.5
416316 2003 SA_{90}	17.9	X	152.38265	90.61681	343.42333	18.68416	0.1201349	0.36496432	1.9392588	21	4 8.7	20.5
416317 2003 SH_{104}	17.7	X	318.60609	183.01009	202.04682	1.85813	0.1873907	0.27256753	2.3558807	21	9 16.3	19.4
416318 2003 SK_{121}	17.1	X	16.96737	52.89383	323.41375	6.71404	0.1154496	0.28231364	2.3013436	21	12 28.0	19.7
416319 2003 SX_{129}	17.9	X	0.74842	154.57472	176.00870	4.69254	0.2592350	0.27466821	2.3438534	21	10 11.3	19.3
416320 2003 SS_{138}	16.4	X	45.20798	18.83648	1.03672	17.01809	0.2471860	0.17280861	3.1922174	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416321 2003 SV_{150}	17.7	X	335.24111	331.59213	57.11175	5.43453	0.2840471	0.27577773	2.3375626	21	11 11.9	18.6
416322 2003 SE_{153}	16.1	X	175.43173	328.49721	20.40738	15.68248	0.2554329	0.19226671	2.9730348	21	2 25.2	21.5
416323 2003 SW_{161}	18.3	X	9.63982	109.17145	222.10087	1.38992	0.2443466	0.27452763	2.3446535	21	10 29.8	20.2
416324 2003 SF_{165}	17.7	X	322.14761	152.29474	169.17036	7.78071	0.2686987	0.26636715	2.3922998	21	5 27.8	20.0
416325 2003 SL_{176}	16.5	X	112.19824	23.31896	9.82106	3.99787	0.2527039	0.18742311	3.0240383	21	2 17.7	20.9
416326 2003 SY_{177}	18.1	X	358.59146	143.75275	200.63432	4.70878	0.2630742	0.27584657	2.3371737	21	10 30.1	19.5
416327 2003 SM_{179}	16.7	X	151.24461	274.17213	74.97027	5.84152	0.2514584	0.18787981	3.0191357	21	2 2.3	21.8
416328 2003 SV_{183}	18.0	X	349.25680	37.58530	318.43901	1.81425	0.1859160	0.27436307	2.3455910	21	10 13.5	19.5
416329 2003 SX_{192}	16.1	X	145.16985	80.80623	247.73007	7.86213	0.2770767	0.18429417	3.0581701	21	1 5.3	21.2
416330 2003 SM_{194}	17.7	X	308.19380	169.67330	259.23336	4.54861	0.2071113	0.27614569	2.3354857	21	11 1.8	19.5
416331 2003 SV_{194}	17.9	X	356.79255	39.45552	310.57078	5.69910	0.2009315	0.27447772	2.3449377	21	10 20.7	19.9
416332 2003 SQ_{202}	17.9	X	331.76473	36.94382	359.31096	1.75957	0.1761250	0.27668143	2.3324699	21	11 7.9	19.6
416333 2003 SV_{202}	18.3	X	355.28094	13.25846	324.33615	1.04519	0.2510910	0.27445668	2.3450576	21	10 5.3	19.4
416334 2003 ST_{205}	17.9	X	8.66174	330.10091	9.86312	1.74418	0.2574510	0.27624955	2.3349002	21	11 12.8	19.6
416335 2003 SG_{207}	16.2	X	153.00075	299.00994	30.36228	3.43628	0.3102563	0.18506712	3.0496491	21	1 16.2	21.4
416336 2003 SG_{219}	17.3	X	210.24503	59.29950	262.61610	18.48180	0.0674943	0.35975525	1.9579336	21	1 10.6	19.7
416337 2003 SM_{222}	16.0	X	148.97476	335.67057	31.92271	9.92993	0.0954878	0.18910022	3.0061318	21	2 10.2	20.6
416338 2003 SF_{244}	16.6	X	137.50709	193.43517	181.68935	2.04355	0.1607750	0.18874767	3.0098740	21	2 9.6	21.1
416339 2003 SS_{258}	16.2	X	188.52544	312.77827	24.74870	11.34739	0.2160784	0.19142540	2.9817393	21	2 18.8	21.4
416340 2003 SH_{280}	17.3	X	338.91260	254.26155	123.11602	5.00008	0.2120299	0.27478400	2.3431949	21	10 29.9	18.8
416341 2003 SV_{281}	18.0	X	7.58545	63.86885	327.65113	5.36779	0.1773573	0.28176122	2.3043506	21	—	—
416342 2003 SR_{289}	15.9	X	145.98340	145.45969	173.25112	13.84494	0.1437801	0.18241341	3.0791550	21	—	—
416343 2003 SZ_{293}	15.9	X	130.32989	172.82508	192.76558	14.82504	0.2513712	0.18431796	3.0579070	21	1 30.0	20.9
416344 2003 SX_{295}	16.3	X	144.48403	112.31914	258.24482	7.74002	0.1677338	0.18881038	3.0092075	21	2 9.3	21.1
416345 2003 SD_{307}	15.7	X	142.04492	353.31767	321.29874	20.94160	0.2894660	0.18243289	3.0789357	21	—	—
416346 2003 SQ_{323}	18.2	X	321.90038	86.43467	317.90190	1.76485	0.1802203	0.27638499	2.3341374	21	10 27.9	19.8
416347 2003 SQ_{327}	17.4	X	321.15341	134.16497	245.34023	12.36192	0.2073333	0.27242525	2.3567010	21	9 2.9	19.7
416348 2003 SW_{328}	17.9	X	252.02868	14.46065	30.09220	4.92227	0.1362817	0.26506110	2.4001519	21	7 5.1	21.2
416349 2003 SA_{329}	17.7	X	231.11566	180.40033	24.07440	8.35207	0.0488522	0.28791032	2.2714223	21	—	—
416350 2003 SH_{331}	16.6	X	113.43460	296.55070	64.77179	11.96141	0.1081296	0.18141201	3.0904758	21	—	—
416351 2003 SJ_{331}	17.1	X	84.75855	214.86017	79.89095	8.21072	0.1522974	0.28001654	2.3139125	21	12 7.5	20.4
416352 2003 SX_{332}	15.5	X	64.46532	68.56147	9.12735	16.38297	0.2243511	0.18068458	3.0987651	21	2 10.5	19.3
416353 2003 SL_{333}	18.0	X	322.85787	155.98611	255.73916	2.17646	0.2697415	0.27634976	2.3343357	21	11 11.5	19.0
416354 2003 SJ_{338}	18.7	X	298.09827	279.56018	166.27571	1.76799	0.1414735	0.27834921	2.3231436	21	11 16.1	20.6
416355 2003 SZ_{338}	15.7	X	137.09387	330.10867	38.53067	10.99019	0.0749323	0.18717130	3.0267499	21	1 26.7	20.3
416356 2003 SD_{339}	16.4	X	77.56523	42.54550	38.20918	12.84838	0.0665328	0.18779977	3.0199935	21	2 10.9	20.6
416357 2003 ST_{339}	16.5	X	173.61209	237.78478	93.16192	11.12302	0.0388055	0.18504764	3.0498631	21	1 16.4	20.9
416358 2003 SM_{344}	17.8	X	345.96068	141.68838	283.04901	2.21306	0.2225669	0.28219089	2.3020110	21	—	—
416359 2003 SZ_{357}	18.4	X	48.48737	327.90342	335.94595	1.35767	0.1910072	0.27785369	2.3259048	21	11 12.4	21.1
416360 2003 SR_{365}	16.3	X	15.95060	268.47385	192.23832	9.52564	0.0904689	0.18400040	3.0614244	21	—	—
416361 2003 SV_{368}	17.5	X	253.12266	210.88266	223.10872	3.14313	0.0120748	0.21663295	2.7456997	21	8 30.3	21.3
416362 2003 SM_{382}	16.7	X	12.11511	102.66201	17.12552	9.80821	0.0529601	0.18493102	3.0511452	21	—	—
416363 2003 SS_{391}	16.5	X	78.71998	8.02104	35.96497	13.05464	0.1066996	0.18259088	3.0771594	21	—	—
416364 2003 SR_{399}	16.2	X	194.59367	201.45487	129.09573	11.03927	0.0915777	0.18901888	3.0069942	21	2 8.9	20.8
416365 2003 SL_{418}	16.3	X	90.25182	336.41423	68.46362	11.54160	0.1029276	0.18352037	3.0667606	21	1 15.9	20.5
416366 2003 SR_{418}	17.9	X	276.61414	328.33652	105.23148	7.15685	0.1964104	0.26989094	2.3714311	21	9 11.9	20.7
416367 2003 SG_{419}	16.1	X	202.18281	179.69979	111.99685	11.22930	0.0523761	0.18374527	3.0642576	21	1 1.7	20.7
416368 2003 SS_{421}	18.0	X	299.97199	92.03689	279.81908	6.27449	0.1349666	0.26943070	2.3741309	21	7 26.0	20.4
416369 2003 SS_{428}	17.6	X	3.83798	141.12529	210.60753	6.67726	0.1381455	0.27494710	2.3422682	21	11 2.4	19.6
416370 2003 SE_{429}	16.1	X	134.90995	36.49434	355.64843	11.21163	0.1420657	0.18921967	3.0048666	21	2 27.5	20.6
416371 2003 SK_{430}	17.8	X	17.85921	27.91909	358.62330	6.92055	0.1126196	0.28100390	2.3084890	21	—	—
416372 2003 TK_{5}	16.0	X	145.99512	309.98209	50.11645	13.42864	0.3051874	0.18807793	3.0170151	21	2 19.0	21.4
416373 2003 TG_{18}	18.2	X	29.52493	359.99986	343.47601	9.76861	0.2222527	0.27938284	2.3174101	21	12 16.3	21.2
416374 2003 TC_{25}	16.5	X	120.43820	45.94118	330.79301	5.96751	0.1559460	0.18594466	3.0400466	21	1 25.8	21.0
416375 2003 TS_{26}	16.3	X	192.30980	57.00621	235.37067	10.53836	0.1029068	0.18489632	3.0515269	21	—	—
416376 2003 TT_{34}	16.6	X	127.12384	64.28913	300.79099	7.31201	0.0954752	0.18408496	3.0604868	21	1 11.4	20.9
416377 2003 TB_{45}	16.3	X	67.61605	78.97448	295.52653	6.66354	0.0828961	0.17635064	3.1493290	21	—	—
416378 2003 TG_{46}	16.2	X	28.39278	264.74990	219.44301	10.98028	0.1445397	0.18452062	3.0556677	21	1 18.6	19.9
416379 2003 TU_{55}	17.9	X	343.10283	297.72188	73.42753	6.36769	0.1526405	0.27429221	2.3459949	21	10 25.6	19.8
416380 2003 UA_{2}	17.9	X	278.02915	95.69764	355.21033	3.80447	0.1083073	0.27426138	2.3461707	21	10 20.3	20.5
416381 2003 UR_{8}	17.3	X	179.53273	154.09394	285.06591	17.26045	0.0842292	0.36887549	1.9255266	21	5 27.4	19.8
416382 2003 UU_{9}	17.8	X	330.75042	343.89239	48.40540	2.97676	0.2020334	0.27327513	2.3518122	21	10 30.4	19.3
416383 2003 UH_{11}	18.2	X	171.46637	165.07051	203.07678	22.68496	0.1064292	0.35835798	1.9630197	21	1 29.3	21.1
416384 2003 UA_{15}	16.2	X	141.63668	343.19270	19.53705	9.76736	0.1549612	0.18598563	3.0396002	21	2 3.0	21.0
416385 2003 UN_{17}	17.7	X	295.31796	170.89088	278.89866	4.39116	0.1839622	0.27671048	2.3323066	21	11 8.9	19.7
416386 2003 UW_{19}	16.8	X	341.20033	261.81978	82.96375	22.53579	0.3371964	0.26937974	2.3744303	21	9 25.6	18.6
416387 2003 UL_{28}	16.2	X	112.02031	129.88647	230.71606	2.19521	0.1594799	0.17996844	3.1069802	21	—	—
416388 2003 UY_{28}	16.5	X	58.86541	170.68449	220.62047	16.52329	0.1997426	0.17580283	3.1558679	21	—	—
416389 2003 UR_{33}	18.2	X	303.02407	286.59942	125.88822	1.66114	0.1775447	0.27269276	2.3551595	21	9 29.3	20.2
416390 2003 UD_{35}	17.5	X	25.59378	87.43596	242.33278	5.25232	0.1254680	0.27641603	2.3339626	21	11 4.6	19.9
416391 2003 UG_{51}	15.5	X	168.10659	345.14482	323.51404	18.41495	0.1488533	0.18355634	3.0663599	21	—	—
416392 2003 UL_{51}	15.9	X	70.31892	86.23340	337.15411	14.73141	0.1959897	0.18208341	3.0828742	21	1 25.3	19.7
416393 2003 UT_{66}	17.5	X	335.83591	344.76966	100.93770	9.88539	0.2033803	0.28030219	2.3123401	21	—	—
416394 2003 UF_{67}	17.0	X	151.28749	143.22475	209.92648	10.55905	0.1297702	0.18772540	3.0207911	21	1 23.3	21.8
416395 2003 UE_{90}	18.2	X	265.51733	316.77021	160.33118	6.91771	0.0588417	0.27696193	2.3308948	21	11 18.5	21.0
416396 2003 UR_{97}	18.0	X	346.49953	336.01521	42.95562	2.02641	0.1969762	0.27520946	2.3407793	21	11 16.2	19.6
416397 2003 UJ_{105}	15.5	X	69.67631	130.35810	254.35850	15.69562	0.1404168	0.17734550	3.1375400	21	—	—
416398 2003 UK_{114}	17.9	X	333.85690	325.89545	93.40013	3.07986	0.1966699	0.27750533	2.3278509	21	12 23.1	19.3
416399 2003 UN_{117}	18.2	X	341.96453	62.86565	328.08309	1.74830	0.1916027	0.27523339	2.3406437	21	11 24.1	19.8
416400 2003 UZ_{117}	5.1	X	346.29265	245.49213	204.56352	27.39993	0.1307586	0.00335866	44.1596586	21	12 4.4	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416401 2003 UP_{119}	16.4	X	73.62341	146.82934	226.11745	7.98127	0.1123883	0.17688289	3.1430081	21	—	—
416402 2003 UF_{123}	18.0	X	351.45389	89.72305	271.97453	0.39351	0.2014171	0.27328325	2.3517656	21	10 30.5	19.7
416403 2003 UO_{131}	18.2	X	315.59186	61.28239	313.88848	4.06270	0.2378526	0.26934820	2.3746157	21	8 15.0	19.7
416404 2003 US_{131}	17.6	X	23.35353	110.22564	255.09678	6.52483	0.3442651	0.27982062	2.3149924	21	—	—
416405 2003 UN_{136}	17.7	X	322.77907	29.28360	30.78510	8.65955	0.2543482	0.27545809	2.3393706	21	11 24.9	18.8
416406 2003 UG_{139}	16.8	X	117.47164	200.61726	152.99563	7.57029	0.3068945	0.18226928	3.0807780	21	1 13.2	21.5
416407 2003 UP_{140}	17.3	X	310.46945	343.29975	81.40717	4.01416	0.2146602	0.27573981	2.3377769	21	11 2.8	18.7
416408 2003 UM_{146}	15.8	X	34.04800	335.69834	58.61758	16.08311	0.2254537	0.17172621	3.2056171	21	—	—
416409 2003 UJ_{154}	16.1	X	64.64919	353.76948	48.49259	9.45329	0.1929200	0.17956410	3.1116426	21	—	—
416410 2003 UU_{170}	17.3	X	262.26793	354.27831	18.11081	8.53202	0.1070390	0.26083373	2.4260154	21	6 5.1	20.6
416411 2003 UN_{175}	18.0	X	343.79722	39.80952	359.25644	1.85014	0.2162988	0.27676051	2.3320255	21	12 15.7	19.6
416412 2003 US_{176}	17.5	X	354.11996	58.01903	323.47284	4.84085	0.1705037	0.27578868	2.3375008	21	12 2.3	19.6
416413 2003 UM_{179}	17.5	X	43.63885	193.97925	146.82193	2.62250	0.2236187	0.28006175	2.3136635	21	12 30.5	20.7
416414 2003 UA_{181}	15.5	X	112.92509	281.26854	43.47186	16.33167	0.2375054	0.17701892	3.1413977	21	—	—
416415 2003 UA_{184}	15.8	X	109.36274	359.66392	44.51573	6.26119	0.2431016	0.18553091	3.0445647	21	2 28.6	20.3
416416 2003 UG_{189}	17.2	X	28.95442	354.75411	11.66327	5.31419	0.1628735	0.27992394	2.3144227	21	—	—
416417 2003 UB_{191}	16.0	X	91.41227	319.99654	49.43472	6.90346	0.1787424	0.17837655	3.1254379	21	—	—
416418 2003 UZ_{194}	17.8	X	350.03507	91.58131	287.72993	1.34519	0.2075233	0.27458755	2.3443124	21	11 26.0	19.5
416419 2003 UL_{205}	16.1	X	183.44653	102.33273	262.03074	10.04025	0.1654239	0.19134085	2.9826176	21	3 6.4	21.3
416420 2003 UW_{210}	17.6	X	20.67043	36.45833	325.41504	1.62042	0.2331900	0.27784392	2.3259593	21	12 31.0	20.3
416421 2003 UL_{221}	15.7	X	141.74678	327.53855	3.26629	9.88828	0.1000564	0.18216129	3.0819954	21	—	—
416422 2003 UC_{222}	16.2	X	181.75858	214.28633	177.38331	11.23672	0.1477749	0.19536476	2.9415207	21	4 12.0	21.0
416423 2003 UY_{230}	17.8	X	13.31525	53.15257	299.71335	2.22646	0.1757481	0.27691551	2.3311553	21	11 26.5	20.1
416424 2003 UK_{231}	18.0	X	232.50714	248.58138	227.35911	3.55033	0.2595731	0.26708135	2.3880331	21	9 1.4	21.8
416425 2003 UB_{233}	17.1	X	295.04404	175.08142	240.32639	6.29559	0.0882914	0.26997905	2.3709151	21	9 26.8	19.8
416426 2003 UT_{236}	16.3	X	93.71158	338.54936	84.28307	5.10911	0.2260017	0.18567077	3.0430355	21	3 1.9	20.4
416427 2003 UT_{241}	17.9	X	317.41123	331.03304	68.99312	3.28019	0.2144222	0.27235689	2.3570953	21	10 8.7	19.4
416428 2003 UK_{249}	17.5	X	341.81081	117.60220	253.55121	3.68907	0.1935722	0.27347690	2.3506553	21	10 20.5	19.2
416429 2003 UM_{260}	16.3	X	136.99018	138.19561	214.81881	9.27889	0.1248089	0.18340003	3.0681019	21	1 9.7	21.0
416430 2003 UH_{264}	17.7	X	308.80701	236.29097	173.49329	5.26840	0.2137743	0.27122025	2.3636762	21	10 2.2	19.5
416431 2003 UA_{267}	17.7	X	334.75273	313.93568	57.06118	3.33256	0.2237195	0.27170705	2.3608521	21	10 4.9	18.9
416432 2003 UY_{278}	17.7	X	353.93305	61.91256	279.18027	3.59927	0.1678064	0.27261986	2.3555792	21	9 26.1	19.6
416433 2003 UF_{295}	16.8	X	121.50350	142.28299	228.14615	3.81416	0.1682769	0.18443996	3.0565585	21	1 19.4	21.2
416434 2003 UO_{315}	18.0	X	72.19622	208.28663	88.22218	4.86243	0.1563022	0.27895226	2.3197942	21	11 27.2	21.2
416435 2003 UC_{317}	16.6	X	147.26126	26.69639	357.53542	12.32264	0.1770760	0.19205525	2.9752166	21	3 5.2	21.3
416436 2003 UR_{317}	17.9	X	83.05331	43.32623	258.30562	5.42890	0.1415048	0.28439662	2.2900929	21	12 14.1	21.0
416437 2003 UA_{338}	16.8	X	91.86440	225.97277	185.56507	9.90118	0.1267650	0.18639813	3.0351140	21	1 25.5	21.0
416438 2003 UW_{345}	16.8	X	129.94932	217.00570	188.35983	9.63764	0.0307512	0.19277926	2.9677627	21	2 19.6	21.1
416439 2003 UQ_{351}	17.8	X	12.47524	237.77821	109.46155	2.86808	0.1332590	0.27633163	2.3344379	21	11 11.4	20.2
416440 2003 UL_{355}	16.2	X	14.96372	73.57725	43.35455	14.40922	0.0569277	0.18324468	3.0698357	21	—	—
416441 2003 UG_{369}	16.1	X	115.70042	95.43416	340.04662	7.89153	0.0966151	0.19060131	2.9903278	21	3 21.1	20.4
416442 2003 US_{371}	16.2	X	271.01233	10.03567	248.40176	11.61790	0.0696182	0.19702947	2.9249285	21	1 28.5	20.6
416443 2003 UO_{376}	16.4	X	354.05390	249.85257	0.58415	14.81985	0.1136489	0.20580742	2.8411579	21	5 2.6	20.0
416444 2003 UL_{380}	17.9	X	264.87168	27.20718	35.56695	7.14731	0.1087998	0.26915781	2.3757353	21	8 24.8	20.9
416445 2003 UY_{400}	18.2	X	17.62001	99.50392	289.15325	5.23890	0.1766558	0.28403806	2.2920198	21	—	—
416446 2003 VY	16.9	X	317.50009	46.73701	18.04389	23.10533	0.2898655	0.27303921	2.3531668	21	11 4.6	18.3
416447 2003 VG_{4}	17.4	X	344.94743	316.27847	26.53501	6.62701	0.2666557	0.27031102	2.3689735	21	9 15.9	18.4
416448 2003 VK_{4}	17.6	X	321.47205	32.72225	346.31804	5.08704	0.1743199	0.26965704	2.3728022	21	9 14.1	19.2
416449 2003 VZ_{6}	16.6	X	79.34281	342.38239	40.43464	3.80974	0.1333718	0.17662534	3.1460627	21	—	—
416450 2003 VZ_{10}	17.8	X	358.62094	312.01480	97.15693	3.94302	0.2083904	0.27882196	2.3205169	21	—	—
416451 2003 VM_{12}	17.8	X	348.24257	287.18779	90.65955	7.83244	0.3124118	0.27413344	2.3469007	21	12 7.8	19.0
416452 2003 WD_{3}	16.5	X	93.29438	158.85450	234.82593	11.29384	0.2105252	0.18133412	3.0913608	21	1 17.8	20.7
416453 2003 WU_{4}	17.6	X	304.69573	38.32546	10.06671	7.84230	0.1342161	0.27020319	2.3696038	21	9 30.9	19.9
416454 2003 WL_{10}	17.8	X	301.72517	44.34249	10.26667	5.25187	0.2139598	0.27020656	2.3695841	21	9 23.4	19.5
416455 2003 WW_{14}	16.2	X	78.29575	189.96720	229.28218	11.33679	0.1261925	0.18144602	3.0900897	21	1 16.4	20.3
416456 2003 WC_{19}	16.1	X	134.04849	100.64227	264.27771	13.10381	0.2252920	0.18343046	3.0677625	21	1 29.3	21.1
416457 2003 WO_{20}	15.8	X	90.53233	173.55811	254.75426	17.48934	0.1788870	0.18334637	3.0687005	21	2 15.1	20.2
416458 2003 WW_{20}	17.4	X	204.51488	184.03993	257.96581	18.39115	0.0816660	0.37032415	1.9205017	21	7 2.4	19.7
416459 2003 WT_{36}	16.1	X	110.63168	130.13195	266.26618	10.07863	0.1152606	0.18349337	3.0670614	21	1 29.0	20.5
416460 2003 WY_{40}	15.4	X	29.10252	352.02039	60.14554	28.72786	0.1389475	0.17136178	3.2101605	21	—	—
416461 2003 WT_{41}	15.3	X	68.31911	153.62753	254.40716	26.96128	0.1555800	0.17729179	3.1381736	21	—	—
416462 2003 WC_{52}	16.9	X	80.75584	288.96229	273.54771	4.85660	0.0870355	0.25666740	2.4521982	21	7 19.2	19.9
416463 2003 WV_{58}	18.4	X	332.34993	221.51617	198.23387	0.96676	0.1681430	0.27560503	2.3385390	21	12 16.9	20.2
416464 2003 WX_{64}	17.4	X	312.05540	325.10004	77.28170	3.55190	0.2368344	0.27043112	2.3682721	21	9 25.8	18.9
416465 2003 WT_{65}	16.1	X	110.02286	282.93202	65.61428	16.96264	0.2343244	0.17691189	3.1426646	21	—	—
416466 2003 WG_{66}	15.4	X	27.40602	216.05952	270.65130	26.36939	0.1579990	0.17892864	3.1190055	21	1 17.5	19.2
416467 2003 WJ_{69}	16.0	X	46.20847	46.74696	70.53230	8.36160	0.2722758	0.17978694	3.1090709	21	3 3.3	19.1
416468 2003 WQ_{78}	17.5	X	325.44647	1.68409	26.79250	6.60801	0.1101770	0.27087448	2.3656872	21	10 12.9	19.8
416469 2003 WA_{81}	16.1	X	99.16543	152.34389	255.91107	17.43731	0.1655861	0.18159244	3.0884285	21	2 1.6	20.7
416470 2003 WD_{82}	16.3	X	123.02143	88.40394	277.78327	9.49918	0.4675497	0.18347859	3.0672261	21	2 13.8	21.8
416471 2003 WZ_{86}	16.9	X	291.67267	173.73145	260.06252	4.92867	0.1987542	0.26956154	2.3733626	21	10 1.8	19.3
416472 2003 WW_{88}	17.8	X	349.37029	205.45397	217.41103	4.20164	0.2076565	0.27861247	2.3216799	21	—	—
416473 2003 WY_{91}	16.3	X	75.34044	351.55131	87.99589	10.14871	0.1913230	0.18250665	3.0781061	21	2 22.1	20.2
416474 2003 WN_{92}	17.5	X	340.15088	159.57241	274.37071	6.03542	0.1428608	0.27906511	2.3191688	21	—	—
416475 2003 WE_{94}	17.6	X	297.32375	167.89663	244.90030	10.92630	0.2080166	0.26997357	2.3709472	21	9 4.7	20.2
416476 2003 WJ_{104}	16.1	X	46.28132	177.66577	235.42753	9.28324	0.2951765	0.17565478	3.1576409	21	—	—
416477 2003 WZ_{106}	15.8	X	110.84881	3.33749	50.18672	11.10852	0.0964690	0.18784559	3.0195025	21	2 24.1	20.2
416478 2003 WC_{109}	17.2	X	23.16172	343.68153	354.75177	4.09444	0.2196739	0.27553332	2.3389448	21	11 28.4	19.8
416479 2003 WR_{109}	16.9	X	99.67265	103.41470	298.12895	1.85214	0.2533345	0.18294996	3.0731317	21	2 12.9	21.2
416480 2003 WX_{109}	15.9	X	162.29574	74.95737	251.87912	12.26422	0.2081370	0.18260166	3.0770383	21	1 10.9	21.1

Planet		H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
		m		°	°	°	°		°				
416481	2003 WH_{110}	18.0	X	255.37939	101.21803	21.54377	5.46737	0.1743591	0.27091554	2.3654482	21	10 20.5	20.9
416482	2003 WG_{115}	15.7	X	19.45671	220.38901	263.26449	10.70138	0.1740147	0.17753966	3.1352521	21	1 5.1	19.3
416483	2003 WM_{116}	15.3	X	63.38352	164.62937	252.94816	26.22221	0.0771660	0.17671280	3.1450246	21	—	—
416484	2003 WP_{127}	15.2	X	17.88029	207.49467	271.77039	27.05680	0.2244636	0.17429692	3.1740193	21	—	—
416485	2003 WZ_{140}	15.2	X	87.39390	341.55929	74.66558	17.04529	0.1508026	0.17887409	3.1196396	21	2 5.7	19.6
416486	2003 WK_{144}	17.9	X	339.31500	133.58116	276.90738	1.32286	0.1838475	0.27590892	2.3368216	21	12 19.3	19.7
416487	2003 WL_{152}	17.1	X	10.22990	299.56972	116.79640	6.94552	0.0909641	0.28049639	2.3112727	21	—	—
416488	2003 WJ_{153}	15.8	X	49.36152	326.05764	118.91807	17.10989	0.2792683	0.17813460	3.1282674	21	1 21.0	18.6
416489	2003 WL_{156}	17.1	X	306.07564	270.06113	138.16768	12.15732	0.2101887	0.26904537	2.3763972	21	9 27.3	19.2
416490	2003 WY_{156}	17.0	X	98.00512	263.76620	149.35805	6.26379	0.1859768	0.18402350	3.0611681	21	2 15.5	21.0
416491	2003 WE_{158}	18.9	X	212.43226	257.64584	80.51244	4.50615	0.2785805	0.36006897	1.9567961	21	2 18.5	22.1
416492	2003 WA_{187}	16.9	X	130.93477	287.07337	60.70501	2.49529	0.1581878	0.18227152	3.0807527	21	1 3.2	21.5
416493	2003 WR_{187}	17.8	X	337.07741	165.08931	201.58858	0.90753	0.2095731	0.27220830	2.3579530	21	10 1.8	19.3
416494	2003 XU_{18}	17.3	X	174.55877	336.89597	94.05172	24.94036	0.0692640	0.36504504	1.9389729	21	5 18.9	20.0
416495	2003 XA_{19}	16.5	X	80.92067	9.44230	87.34517	6.74528	0.2204047	0.18405816	3.0607839	21	3 28.0	20.5
416496	2003 XR_{20}	15.9	X	43.86943	57.91286	63.98666	15.91488	0.2544026	0.17933594	3.1142813	21	3 7.6	19.4
416497	2003 XA_{21}	17.1	X	15.28279	273.82788	67.85761	12.73675	0.2719384	0.27334919	2.3513874	21	11 30.0	19.4
416498	2003 XS_{29}	18.1	X	271.49106	136.15556	284.02864	1.07284	0.1651465	0.26523594	2.3990969	21	8 16.7	20.9
416499	2003 XK_{34}	15.5	X	233.29017	18.19428	249.57299	10.58602	0.1378010	0.17960030	3.1112245	21	1 2.9	20.6
416500	2003 XX_{42}	16.2	X	36.18572	71.34174	29.87367	13.40092	0.2915420	0.17516614	3.1635105	21	1 15.9	19.2
416501	2003 YU_{1}	18.6	X	102.46809	76.28635	287.33338	7.79683	0.2145418	0.45491638	1.6743580	21	—	—
416502	2003 YT_{7}	13.4	X	295.19341	236.53554	103.81034	33.17451	0.0300424	0.08338327	5.1889972	21	6 24.9	20.3
416503	2003 YK_{10}	15.8	X	105.90073	27.84531	29.91079	13.07185	0.2452642	0.18342947	3.0677736	21	3 15.8	20.4
416504	2003 YT_{12}	15.3	X	102.65330	314.33529	90.55422	17.84116	0.2137793	0.17834957	3.1257531	21	2 21.7	20.0
416505	2003 YW_{40}	15.7	X	44.98392	349.19083	107.10008	18.08036	0.1695156	0.17427960	3.1742297	21	1 19.2	19.2
416506	2003 YM_{44}	15.9	X	19.29038	279.52361	298.61895	12.48455	0.0963683	0.18607122	3.0386679	21	5 5.2	20.0
416507	2003 YF_{46}	16.0	X	25.97782	159.59742	322.55435	14.38786	0.2344615	0.17480416	3.1678763	21	1 18.9	19.1
416508	2003 YB_{63}	15.0	X	338.95689	268.11907	292.54349	21.48483	0.2281296	0.17491053	3.1665917	21	1 25.6	19.1
416509	2003 YN_{65}	16.3	X	39.87582	346.84936	108.44712	14.65211	0.2569189	0.17417653	3.1754818	21	1 12.4	19.2
416510	2003 YF_{70}	17.7	X	173.86364	117.90522	288.99576	15.71140	0.1209279	0.35676738	1.9688500	21	3 26.9	20.7
416511	2003 YT_{77}	15.4	X	44.31336	224.40327	282.55928	17.10700	0.1976721	0.18058784	3.0998716	21	3 15.8	19.3
416512	2003 YK_{92}	16.1	X	112.97440	353.45916	63.13138	10.17460	0.1310430	0.18427796	3.0583496	21	3 7.4	20.6
416513	2003 YU_{93}	13.5	X	142.70376	197.02838	282.42663	14.84569	0.0736369	0.08309093	5.2011610	21	6 17.3	20.6
416514	2003 YP_{96}	15.8	X	96.08010	288.73754	98.49905	9.63439	0.3093368	0.17989244	3.1078552	21	2 1.7	20.1
416515	2003 YV_{111}	16.4	X	107.43500	142.20865	292.84074	10.59416	0.2281721	0.18516321	3.0485939	21	3 25.1	21.1
416516	2003 YC_{112}	17.5	X	336.06069	24.11386	39.07134	6.21605	0.1581787	0.27493344	2.3423458	21	12 29.1	19.6
416517	2003 YK_{113}	17.5	X	321.12222	333.28466	116.17901	9.87611	0.1741100	0.27347042	2.3506924	21	—	—
416518	2003 YX_{119}	17.4	X	348.70375	335.10287	58.29587	5.43288	0.1970754	0.27213260	2.3583902	21	12 12.8	19.2
416519	2003 YY_{119}	16.7	X	10.56135	62.96554	93.92550	27.43737	0.2567828	0.17542359	3.1604145	21	1 28.6	20.1
416520	2003 YT_{123}	17.7	X	304.92542	12.39159	92.85648	3.24389	0.1539921	0.27544776	2.3394291	21	12 28.0	19.6
416521	2003 YR_{124}	17.2	X	123.28390	209.66798	309.67991	18.17874	0.0702074	0.36421883	1.9419041	21	7 17.6	19.2
416522	2003 YX_{134}	15.6	X	50.59853	348.46686	84.01351	16.84802	0.2551081	0.17383172	3.1796796	21	1 5.5	18.8
416523	2003 YM_{141}	17.3	X	317.13239	30.84111	33.33772	9.47406	0.1770774	0.27108515	2.3644614	21	11 15.9	19.1
416524	2003 YO_{146}	16.1	X	60.68005	30.79544	99.57910	17.90397	0.1795226	0.17829881	3.1263463	21	4 10.6	20.3
416525	2003 YD_{170}	15.6	X	42.80994	222.97405	300.22651	17.06429	0.2548219	0.18132519	3.0914623	21	4 12.0	19.2
416526	2003 YK_{171}	16.3	X	80.92831	86.30506	335.37591	8.63660	0.2399924	0.17754681	3.1351678	21	2 13.3	20.2
416527	2003 YY_{172}	17.8	X	332.71504	173.65307	244.41935	2.58790	0.1894844	0.27486970	2.3427079	21	12 16.7	19.4
416528	2003 YG_{181}	16.1	X	140.37277	314.55049	118.22122	10.68215	0.1688238	0.18628332	3.0363610	21	4 28.1	21.1
416529	2003 YR_{181}	17.8	X	287.54106	201.16540	287.01637	1.55966	0.1474095	0.27069332	2.3667426	21	12 26.1	19.8
416530	2003 YN_{182}	15.9	X	53.91799	146.39197	288.99300	15.32506	0.2003167	0.17333330	3.1857722	21	1 10.9	19.3
416531	2004 AK_{6}	16.5	X	340.69090	46.09615	104.43767	6.20112	0.1157096	0.17039033	3.2223503	21	—	—
416532	2004 AX_{6}	16.0	X	6.85574	81.92945	113.31695	22.67368	0.1407011	0.17995721	3.1071094	21	3 29.4	20.1
416533	2004 AW_{11}	15.6	X	78.92604	164.83143	257.82766	10.05029	0.0737082	0.17768912	3.1334936	21	1 16.8	19.8
416534	2004 BQ_{6}	17.3	X	193.26100	318.96627	135.47664	23.81387	0.0896146	0.36581792	1.9362409	21	7 10.1	19.9
416535	2004 BD_{13}	16.6	X	245.60418	99.10946	123.29041	25.87519	0.2432602	0.27507386	2.3415486	21	—	—
416536	2004 BV_{16}	16.0	X	53.57772	355.66516	95.88864	16.89659	0.2439329	0.17521903	3.1628739	21	2 8.2	19.5
416537	2004 BW_{38}	17.6	X	267.45531	32.29803	106.51744	7.36427	0.2220430	0.27037381	2.3686068	21	11 24.7	20.0
416538	2004 BM_{47}	15.2	X	177.96847	9.75288	291.29107	12.81069	0.0562880	0.16999804	3.2273057	21	—	—
416539	2004 BE_{50}	15.6	X	106.05530	255.62714	125.74753	22.69925	0.4047673	0.17778295	3.1323910	21	2 17.9	20.6
416540	2004 BB_{55}	17.5	X	265.28000	323.83942	129.75971	11.97075	0.1909512	0.26365799	2.4086596	21	9 25.0	20.6
416541	2004 BV_{57}	17.0	X	209.16942	350.34385	138.47960	15.10756	0.2330120	0.25735092	2.4478543	21	9 1.8	21.1
416542	2004 BK_{62}	15.9	X	38.25590	338.58912	108.43734	12.46040	0.1030518	0.17147605	3.2087342	21	—	—
416543	2004 BX_{63}	15.4	X	291.04971	297.12262	305.23671	21.20877	0.2338786	0.17326469	3.1866132	21	1 20.9	20.3
416544	2004 BA_{64}	15.8	X	113.83661	325.17560	109.68179	10.19826	0.0330116	0.18041757	3.1018216	21	3 16.8	20.3
416545	2004 BX_{68}	15.7	X	63.32897	271.13027	221.14574	23.70464	0.3111817	0.17913886	3.1165649	21	4 27.9	19.3
416546	2004 BE_{69}	15.7	X	26.91152	89.61115	46.05422	13.97683	0.2601854	0.17545820	3.1599990	21	2 13.1	18.9
416547	2004 BX_{75}	15.8	X	99.55274	165.28723	292.29572	13.39139	0.2385838	0.18192946	3.0846131	21	4 14.0	20.6
416548	2004 BJ_{80}	15.1	X	334.77075	258.74268	303.52825	17.59825	0.2029751	0.17316447	3.1878425	21	1 27.7	19.0
416549	2004 BK_{80}	15.8	X	125.36810	296.24792	131.75643	28.29026	0.1984867	0.18257869	3.0772964	21	4 16.0	21.1
416550	2004 BH_{103}	15.8	X	68.51005	48.85169	56.29543	20.54552	0.2973424	0.17682831	3.1436548	21	4 9.1	19.9
416551	2004 BJ_{116}	17.4	X	287.77450	34.77097	96.75604	7.70464	0.1557650	0.27217097	2.3581686	21	12 31.3	19.5
416552	2004 BG_{124}	16.1	X	130.62863	81.42100	12.42309	10.31518	0.1968221	0.18681652	3.0305808	21	5 9.4	21.0
416553	2004 CE_{13}	15.3	X	342.60971	113.07422	142.16737	21.85760	0.2997617	0.17862220	3.1225718	21	4 12.6	18.9
416554	2004 CB_{26}	17.6	X	288.51708	105.84369	323.50618	11.60757	0.1753752	0.26426526	2.4049682	21	9 19.8	20.3
416555	2004 CE_{26}	15.4	X	343.04981	229.15177	330.46198	26.03790	0.1942649	0.17232562	3.1981794	21	2 11.6	19.3
416556	2004 CW_{47}	15.7	X	50.17633	221.03757	330.31765	15.68325	0.2115580	0.18139347	3.0906864	21	6 6.8	19.7
416557	2004 CF_{51}	16.1	X	92.84021	288.56320	180.73354	19.62514	0.2723569	0.18155260	3.0888803	21	5 4.8	20.8
416558	2004 CD_{52}	17.0	X	293.97651	51.98607	42.57594	23.11778	0.2739617	0.26652739	2.3913409	21	10 30.9	18.9
416559	2004 CN_{55}	15.9	X	53.11004	188.29360	334.34117	14.58351	0.0293387	0.17945195	3.1129389	21	4 6.1	20.3
416560	2004 CQ_{55}	16.4	X	80.65292	211.92994	249.03879	2.33886	0.1979020	0.17826330	3.1267615	21	3 25.5	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416561 2004 CD_{58}	15.6	X	11.46406	99.90286	88.46386	14.54529	0.2342424	0.17520857	3.1629997	21	3 24.9	19.0
416562 2004 CK_{116}	17.7	X	284.34399	350.94748	84.73646	2.32517	0.1574575	0.26394234	2.4069293	21	10 1.7	20.3
416563 2004 CH_{118}	16.1	X	24.69842	70.26815	136.95766	17.33627	0.2769501	0.18017018	3.1046604	21	5 23.0	19.3
416564 2004 CM_{128}	16.0	X	92.70029	313.83860	156.76822	16.45398	0.1891401	0.18190847	3.0848504	21	4 26.4	20.6
416565 2004 DG_{3}	17.6	X	272.15870	281.39114	159.37320	3.58626	0.1950427	0.26100069	2.4249806	21	9 11.5	20.5
416566 2004 DB_{60}	15.9	X	108.87163	281.95304	154.47563	16.81062	0.2334188	0.17985344	3.1083044	21	4 8.1	20.7
416567 2004 EB	16.9	X	22.18548	238.36628	21.11219	21.10503	0.6586266	0.17900281	3.1181438	21	10 13.7	20.2
416568 2004 ET_{20}	16.1	X	70.98206	95.06163	45.10843	25.08109	0.2933656	0.17885367	3.1198771	21	5 14.4	20.2
416569 2004 EL_{28}	16.0	X	15.62845	271.12446	168.37785	6.08560	0.2178911	0.16289408	3.3204670	21	—	—
416570 2004 EA_{31}	17.7	X	97.65684	178.48914	0.09610	19.89946	0.0423966	0.35772385	1.9653389	21	7 6.7	20.3
416571 2004 EY_{41}	15.5	X	50.24074	165.61290	13.34824	17.25847	0.1438896	0.17892704	3.1190241	21	5 6.9	19.5
416572 2004 EM_{42}	17.0	X	199.31918	92.41076	109.11293	10.00710	0.1645582	0.26109498	2.4243968	21	11 28.9	20.7
416573 2004 EK_{61}	18.0	X	189.22625	327.22701	178.79988	11.72636	0.2293856	0.25498999	2.4629408	21	9 3.6	22.1
416574 2004 EY_{80}	15.6	X	16.12532	70.37428	65.17199	7.75258	0.1430803	0.16889056	3.2413987	21	1 21.1	19.5
416575 2004 EZ_{82}	17.1	X	168.63458	154.38360	43.32790	9.12603	0.1175989	0.25526831	2.4611502	21	10 25.9	20.7
416576 2004 EC_{86}	15.9	X	60.72402	344.77005	127.30131	6.55481	0.1524005	0.17268195	3.1937782	21	3 7.3	19.8
416577 2004 EP_{98}	16.2	X	299.51262	192.13809	151.92395	4.29152	0.2154565	0.24454043	2.5326136	21	6 2.0	19.4
416578 2004 FX_{86}	15.8	X	36.65133	180.07485	16.04925	16.21375	0.1462572	0.17932652	3.1143903	21	5 8.0	19.6
416579 2004 FF_{97}	17.1	X	206.62724	40.81687	161.25683	14.09401	0.1719716	0.26312622	2.4119037	21	12 6.8	20.9
416580 2004 GR_{2}	15.4	X	21.42508	95.91389	78.05047	31.58226	0.2837126	0.17293787	3.1906266	21	4 13.4	19.1
416581 2004 GP_{81}	16.5	X	235.00333	178.87355	202.18162	10.00629	0.1599879	0.23731270	2.5837792	21	5 14.9	20.6
416582 2004 HA_{26}	16.5	X	10.60209	197.82323	51.59411	9.77955	0.2032442	0.23412620	2.6071702	21	6 4.8	18.8
416583 2004 JH	17.1	X	274.49854	63.13888	234.59670	7.46686	0.2226682	0.22251603	2.6970884	21	3 1.6	21.5
416584 2004 JB_{12}	18.9	X	81.00985	152.25597	151.99510	8.43999	0.5161115	0.30466200	2.1873781	21	—	—
416585 2004 JU_{24}	16.5	X	277.59209	56.25898	238.04048	12.19809	0.2502786	0.22280159	2.6947834	21	2 23.6	21.2
416586 2004 JX_{24}	16.8	X	354.23402	170.73497	61.94988	8.84775	0.1743894	0.22917436	2.6445921	21	4 9.2	19.5
416587 2004 JQ_{25}	16.2	X	282.52379	260.81659	60.21855	16.57812	0.2375900	0.22703641	2.6611685	21	4 15.3	20.4
416588 2004 JS_{31}	17.5	X	115.14691	50.25205	268.70582	4.93893	0.3032278	0.31510873	2.1387618	21	—	—
416589 2004 KV	17.0	X	275.07080	339.06626	278.17948	9.60830	0.2794880	0.21844830	2.7304670	21	1 12.0	21.7
416590 2004 LM_{1}	15.6	X	18.49381	68.98411	134.89461	26.81452	0.2166969	0.17083755	3.2167242	21	5 5.2	19.6
416591 2004 LC_{2}	18.5	X	229.50753	290.65338	84.30341	10.98240	0.7347052	0.38711955	1.8645440	21	4 13.3	23.2
416592 2004 LP_{3}	15.9	X	15.80885	359.68794	285.22420	19.53019	0.2604244	0.23295420	2.6159073	21	8 14.4	18.4
416593 2004 LB_{13}	16.7	X	286.73618	174.84764	113.74238	8.14429	0.2601687	0.22347706	2.6893506	21	3 4.1	20.9
416594 2004 NC_{6}	16.2	X	253.17553	9.45506	286.80588	13.39129	0.2232267	0.21414068	2.7669624	21	2 9.6	21.0
416595 2004 NZ_{8}	16.2	X	204.01875	302.76935	84.61739	8.05386	0.5180226	0.21344588	2.7729638	21	4 23.4	22.1
416596 2004 NA_{15}	16.3	X	72.50226	0.88740	288.51908	14.54913	0.1132698	0.24279916	2.5447078	21	11 2.1	20.1
416597 2004 OS_{4}	18.0	X	83.16926	29.55711	298.62894	5.16982	0.2473953	0.30684733	2.1769802	21	—	—
416598 2004 PR_{13}	17.6	X	93.42825	320.49967	328.35466	7.58856	0.2310822	0.30334441	2.1937075	21	12 16.9	21.2
416599 2004 PJ_{54}	16.8	X	222.38114	167.75422	154.25083	17.59426	0.2455424	0.21028121	2.8007160	21	2 19.1	21.7
416600 2004 PV_{68}	16.5	X	143.53414	96.69140	303.92517	12.75401	0.3327141	0.20502582	2.8483740	21	3 23.5	21.7
416601 2004 PW_{78}	16.4	X	272.74898	79.99224	173.53350	7.63385	0.1780028	0.21119745	2.7926099	21	1 14.4	21.0
416602 2004 PW_{79}	16.1	X	25.06149	353.79297	318.97283	14.56410	0.1298303	0.23454072	2.6040974	21	9 26.5	19.4
416603 2004 PO_{99}	18.4	X	133.01880	203.32669	101.92178	3.72349	0.1986465	0.31205066	2.1527122	21	—	—
416604 2004 PD_{104}	18.1	X	62.67185	68.87874	283.42427	4.62870	0.2206884	0.30379518	2.1915369	21	—	—
416605 2004 PV_{116}	17.5	X	208.40339	224.47713	141.16033	4.39304	0.1699839	0.21363545	2.7713231	21	4 2.9	22.1
416606 2004 QK_{2}	15.9	X	353.83929	24.46133	343.29253	29.26287	0.0700986	0.23910459	2.5708542	21	10 7.5	19.5
416607 2004 QJ_{28}	16.8	X	167.68029	200.30828	215.44575	8.51724	0.1439206	0.21203256	2.7852724	21	4 25.2	21.3
416608 2004 RH_{27}	18.2	X	92.88073	192.26598	132.65005	4.35777	0.1694253	0.30594754	2.1812464	21	—	—
416609 2004 RW_{34}	16.7	X	212.38748	3.98181	15.38219	8.03172	0.2708755	0.21389957	2.7690414	21	4 18.0	21.6
416610 2004 RE_{38}	18.1	X	137.67395	259.00117	53.66987	3.86087	0.1660906	0.31139799	2.1557192	21	—	—
416611 2004 RB_{44}	17.0	X	190.82891	160.06302	203.67759	8.05317	0.2022785	0.20908016	2.8114314	21	3 14.3	21.9
416612 2004 RQ_{44}	17.3	X	193.39173	53.13064	310.83282	3.79677	0.1834478	0.20947673	2.8078820	21	3 16.5	22.1
416613 2004 RD_{47}	16.9	X	278.52996	339.41949	343.99584	8.46773	0.1684079	0.21832533	2.7314922	21	4 13.2	21.0
416614 2004 RD_{70}	18.0	X	54.38064	353.62716	8.63225	4.44366	0.2031235	0.30328049	2.1940157	21	—	—
416615 2004 RS_{93}	16.7	X	234.60342	125.52706	262.60438	6.75719	0.2137387	0.21912547	2.7248387	21	5 18.7	21.1
416616 2004 RX_{97}	16.3	X	31.40747	296.37422	335.20511	16.70044	0.2209330	0.23105120	2.6302512	21	8 30.7	19.0
416617 2004 RL_{136}	16.2	X	212.82497	127.76155	221.79182	14.69056	0.1434763	0.21012208	2.8021298	21	3 13.4	21.0
416618 2004 RD_{138}	16.0	X	248.24363	90.47017	218.32774	12.19375	0.2195630	0.21277595	2.7787812	21	2 20.3	20.9
416619 2004 RV_{142}	16.0	X	208.44631	97.74915	257.31032	10.82089	0.0963170	0.20983865	2.8046525	21	3 15.5	20.6
416620 2004 RK_{162}	17.9	X	12.27006	119.48006	304.16620	5.38963	0.1503469	0.30447842	2.1882572	21	—	—
416621 2004 RE_{178}	16.8	X	175.42077	43.99456	310.70273	7.31985	0.3481441	0.20432161	2.8549150	21	2 25.6	22.1
416622 2004 RU_{182}	16.0	X	188.00994	4.62719	338.65836	14.80725	0.1412945	0.20448604	2.8533843	21	2 18.1	20.5
416623 2004 RK_{185}	18.2	X	71.81689	99.74516	253.40546	3.90112	0.1629293	0.30471491	2.1871249	21	—	—
416624 2004 RG_{215}	15.9	X	248.68737	49.88045	307.85073	12.47621	0.2513681	0.21637672	2.7478669	21	4 15.5	20.9
416625 2004 RU_{227}	15.9	X	176.94906	7.13260	6.19203	15.25555	0.1433575	0.20458128	2.8524987	21	3 16.2	20.5
416626 2004 RB_{233}	17.0	X	201.07629	330.82589	16.86762	8.65912	0.1692231	0.20566062	2.8425097	21	3 8.1	21.7
416627 2004 RV_{237}	17.5	X	210.42294	167.30906	193.14501	4.11836	0.0920622	0.21117003	2.7928516	21	3 29.3	21.6
416628 2004 RV_{244}	17.2	X	258.08002	292.51443	30.11705	2.86943	0.1122189	0.21420141	2.7664394	21	3 31.4	21.2
416629 2004 RZ_{249}	16.7	X	238.10425	348.41964	350.29232	8.00039	0.2105259	0.21271389	2.7793217	21	3 22.9	21.4
416630 2004 RF_{305}	17.0	X	186.98460	159.25639	299.22860	4.48333	0.0354327	0.22356386	2.6886544	21	7 8.0	20.6
416631 2004 RM_{312}	17.5	X	82.39399	328.82628	29.17046	6.74162	0.2232298	0.30693372	2.1765717	21	—	—
416632 2004 RO_{316}	17.4	X	130.80142	37.39444	267.77518	6.66097	0.2196460	0.30941624	2.1649140	21	—	—
416633 2004 RA_{332}	16.6	X	221.39504	298.31403	76.96788	10.04006	0.1882301	0.21413124	2.7670438	21	4 27.1	21.2
416634 2004 RZ_{333}	16.3	X	215.82336	278.04261	135.92595	13.84983	0.2253256	0.21749176	2.7384670	21	6 6.2	21.2
416635 2004 RN_{346}	18.1	X	40.11779	144.93547	223.35023	5.63994	0.1914371	0.30068775	2.2066099	21	—	—
416636 2004 SL_{9}	15.8	X	205.69409	95.71253	297.36469	23.31956	0.1998600	0.21131534	2.7915712	21	4 22.5	21.1
416637 2004 SA_{16}	16.1	X	323.39084	279.69761	28.49811	14.64872	0.1019496	0.22201626	2.7011344	21	6 4.4	19.6
416638 2004 SL_{29}	17.9	X	68.24099	338.00054	347.35334	4.21397	0.1810137	0.30045115	2.2077682	21	—	—
416639 2004 TF_{21}	16.3	X	248.33077	311.74180	40.16652	15.17623	0.3056523	0.21765332	2.7371117	21	4 13.7	21.2
416640 2004 TC_{24}	17.9	X	137.52586	314.09595	353.67575	4.31238	0.2105834	0.30955807	2.1642527	21	—	—

Planet		H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
		m		°	°	°	°		°				
416641	2004 TW_{27}	16.4	X	116.22550	29.70902	14.12664	15.31029	0.1291267	0.19973870	2.8984195	21	2 22.2	20.7
416642	2004 TZ_{45}	16.1	X	39.74323	39.22723	25.33981	10.23191	0.0922222	0.18808998	3.0168863	21	—	—
416643	2004 TK_{73}	17.2	X	141.79050	27.49198	18.28081	1.99307	0.0710548	0.20250793	2.8719356	21	3 12.2	21.3
416644	2004 TP_{76}	18.0	X	110.54742	138.66130	188.19264	3.64866	0.1765226	0.30701606	2.1761825	21	—	—
416645	2004 TV_{76}	18.1	X	316.80924	61.27270	24.92979	2.03424	0.0099071	0.29845813	2.2175859	21	12 27.5	20.6
416646	2004 TQ_{82}	17.7	X	167.67303	56.91544	215.05854	3.59889	0.1640183	0.30800354	2.1715287	21	—	—
416647	2004 TA_{96}	18.5	X	53.33019	121.13478	202.23798	6.28648	0.1720300	0.29598935	2.2298997	21	12 15.5	21.5
416648	2004 TY_{99}	17.2	X	172.74531	34.29295	39.73890	5.62782	0.1439955	0.21145919	2.7903050	21	5 22.1	21.7
416649	2004 TP_{101}	17.9	X	100.06963	303.75873	16.76686	6.18535	0.2179446	0.30298507	2.1954416	21	—	—
416650	2004 TW_{102}	16.4	X	235.81866	75.49446	287.78218	7.13474	0.2965965	0.21255407	2.7807147	21	4 12.6	21.5
416651	2004 TL_{117}	17.9	X	3.36001	186.95776	169.50731	3.80107	0.1684349	0.29346284	2.2426800	21	11 18.6	19.8
416652	2004 TX_{136}	16.5	X	142.31112	170.21824	254.02332	7.59771	0.3008350	0.20337835	2.8637355	21	4 21.9	21.6
416653	2004 TO_{159}	16.2	X	225.84653	337.44387	24.48857	10.34396	0.1371018	0.20969891	2.8058984	21	4 14.1	20.7
416654	2004 TF_{174}	16.4	X	216.26504	7.50759	3.98758	8.45494	0.1592143	0.21238606	2.7821809	21	4 13.9	21.0
416655	2004 TJ_{185}	16.8	X	105.01116	357.75233	8.60570	9.38878	0.0654292	0.19202881	2.9754897	21	—	—
416656	2004 TZ_{189}	17.3	X	213.17393	326.56937	19.34191	2.10877	0.0646921	0.20704821	2.8297956	21	3 15.9	21.6
416657	2004 TU_{208}	18.0	X	55.34154	23.94929	354.58458	3.59779	0.1980027	0.30394282	2.1908272	21	—	—
416658	2004 TC_{212}	18.1	X	341.66352	243.27138	213.65311	1.72820	0.0593809	0.30187461	2.2008224	21	—	—
416659	2004 TA_{226}	18.1	X	349.68203	14.64007	30.49478	5.62961	0.0567628	0.29747442	2.2224720	21	12 21.5	20.6
416660	2004 TQ_{234}	17.0	X	206.25723	359.65513	27.74603	4.73632	0.0836285	0.21038921	2.7997574	21	4 27.5	21.1
416661	2004 TQ_{266}	16.0	X	359.13268	262.70249	212.19255	14.29708	0.2753048	0.18573730	3.0423088	21	—	—
416662	2004 TO_{277}	16.7	X	167.78773	348.24899	43.96655	11.55211	0.1675223	0.20358894	2.8617604	21	4 2.5	21.4
416663	2004 TZ_{280}	18.6	X	1.84577	275.05038	118.04844	1.21621	0.1667975	0.29455926	2.2371113	21	—	—
416664	2004 TB_{328}	16.4	X	208.32209	300.52171	64.63783	11.18824	0.2954762	0.21011389	2.8022026	21	4 4.6	21.7
416665	2004 TO_{335}	16.8	X	140.36341	192.07742	224.27667	6.92346	0.0769874	0.20188665	2.8778245	21	3 21.7	21.0
416666	2004 TX_{350}	16.6	X	209.98707	347.42467	58.79897	4.97413	0.1039939	0.21208541	2.7848097	21	5 24.8	20.9
416667	2004 TH_{355}	16.1	X	155.14296	342.64409	60.49202	10.51012	0.2019099	0.20539980	2.8449155	21	4 6.8	20.9
416668	2004 UU_{4}	17.0	X	332.74612	117.09152	249.50345	23.32280	0.2252127	0.28722389	2.2750399	21	9 4.9	19.4
416669	2004 UB_{8}	16.9	X	132.61001	101.48815	243.61407	11.11687	0.3912188	0.19394824	2.9558257	21	1 20.8	22.1
416670	2004 VG_{3}	17.8	X	36.39635	324.47690	60.93379	3.80336	0.1581405	0.29940187	2.2129234	21	—	—
416671	2004 VA_{38}	17.1	X	30.69520	318.75159	40.57915	1.59875	0.1686794	0.17605777	3.1528206	21	12 7.7	21.2
416672	2004 VT_{40}	16.1	X	254.15038	289.64311	61.60001	7.25400	0.0358671	0.21010178	2.8023103	21	5 11.6	20.0
416673	2004 VG_{53}	17.9	X	162.84074	8.40881	56.46719	22.20570	0.1045505	0.38302269	1.8778160	21	4 23.6	20.2
416674	2004 VP_{107}	17.4	X	114.65449	44.29045	35.64888	2.45734	0.0462803	0.20189985	2.8776991	21	3 19.5	21.3
416675	2004 XJ_{3}	17.5	X	149.78733	153.56705	242.04986	35.94630	0.5574473	0.20302542	2.8670533	21	4 3.2	23.8
416676	2004 XO_{5}	17.0	X	77.26353	101.75706	270.02104	21.93994	0.3103046	0.30210548	2.1997010	21	—	—
416677	2004 XQ_{5}	18.4	X	45.58193	59.13976	328.96302	4.01925	0.1343676	0.29985757	2.2106808	21	—	—
416678	2004 XT_{5}	16.4	X	318.94502	151.88481	241.43769	26.32018	0.2893207	0.28583702	2.2823929	21	9 4.2	18.8
416679	2004 XR_{44}	15.9	X	121.78159	136.88211	263.32287	9.24213	0.0966189	0.19445549	2.9506831	21	2 10.5	20.3
416680	2004 XD_{50}	18.4	X	210.93398	63.79529	106.04170	20.65129	0.3772439	0.39975132	1.8250556	21	11 3.0	21.5
416681	2004 XE_{57}	16.6	X	80.57601	167.65929	278.29166	7.69708	0.0618395	0.19043045	2.9921162	21	2 11.8	20.7
416682	2004 XH_{59}	15.8	X	44.20570	70.91909	78.77145	11.88909	0.0906426	0.19266678	2.9689177	21	3 25.2	19.7
416683	2004 XB_{79}	15.7	X	7.69908	61.23165	75.82531	17.48040	0.1689240	0.18558257	3.0439996	21	—	—
416684	2004 XV_{87}	15.8	X	131.60910	324.39032	94.69706	16.61593	0.1881732	0.19554970	2.9396657	21	4 8.3	20.7
416685	2004 XD_{90}	16.8	X	129.05212	18.77368	33.24598	2.44147	0.0901451	0.19585932	2.9365668	21	3 8.9	20.9
416686	2004 XK_{97}	17.6	X	242.50675	218.41531	304.67364	5.61289	0.1518053	0.28645644	2.2791014	21	12 3.3	20.2
416687	2004 XD_{126}	15.9	X	224.64606	228.84839	98.88584	3.37201	0.0651525	0.19894880	2.9060863	21	3 8.2	20.1
416688	2004 XM_{129}	16.5	X	118.20249	2.82317	58.88405	10.03233	0.1709103	0.19665096	2.9286805	21	3 22.9	20.9
416689	2004 XJ_{148}	17.2	X	214.78150	46.25333	108.92989	9.02713	0.1388834	0.28202170	2.3029315	21	10 24.9	20.5
416690	2004 XP_{160}	17.6	X	313.13080	109.39245	323.25469	5.33174	0.1267048	0.28641938	2.2792980	21	11 27.2	19.6
416691	2004 YS_{7}	18.0	X	357.56466	299.82447	93.50043	4.90033	0.1861891	0.29300961	2.2449921	21	—	—
416692	2004 YO_{12}	15.9	X	16.91869	18.03914	106.24200	11.57017	0.0909090	0.18360821	3.0657824	21	1 5.1	19.8
416693	2004 YU_{20}	13.2	X	228.37565	284.32808	124.14773	19.30293	0.0139764	0.08493860	5.1254575	21	6 27.8	20.1
416694	2004 YR_{32}	17.6	X	23.90665	88.55716	90.34729	20.51535	0.7002031	0.18393452	3.0621553	21	7 6.9	19.3
416695	2005 AM_{10}	17.9	X	358.29403	332.22099	123.44082	8.65575	0.2159971	0.29695967	2.2250396	21	—	—
416696	2005 AV_{10}	15.7	X	337.34690	215.96058	322.80048	13.45263	0.1924392	0.18207841	3.0829306	21	1 4.6	19.8
416697	2005 AG_{20}	16.8	X	150.65032	155.90927	276.81950	5.98830	0.3017865	0.20139480	2.8825082	21	5 8.7	21.9
416698	2005 AV_{21}	17.8	X	303.29257	220.90100	113.55103	24.20114	0.0275657	0.38494714	1.8715524	21	6 23.9	19.6
416699	2005 AK_{34}	15.9	X	355.81904	234.44633	290.69214	7.96466	0.1566343	0.18462451	3.0545212	21	1 17.6	19.4
416700	2005 AR_{34}	16.1	X	193.81978	345.23960	123.11122	17.41586	0.0407848	0.20982476	2.8047763	21	7 29.0	20.0
416701	2005 AA_{45}	18.0	X	278.73769	144.49115	337.79993	4.17407	0.1723899	0.28546684	2.2843656	21	11 30.3	20.2
416702	2005 AY_{47}	18.4	X	337.95260	305.26173	121.19842	2.52554	0.1996155	0.28990291	2.2610023	21	—	—
416703	2005 AY_{59}	16.3	X	17.28228	25.40195	134.32578	11.93529	0.2212099	0.18586475	3.0409179	21	2 15.1	19.1
416704	2005 AK_{64}	18.2	X	267.70368	214.35863	282.49727	2.25903	0.0751051	0.28663690	2.2781448	21	12 17.6	20.6
416705	2005 AR_{64}	13.8	X	130.43611	2.16194	124.04957	12.73983	0.0658247	0.08215617	5.2405388	21	6 12.7	21.0
416706	2005 AS_{65}	17.2	X	3.90061	300.24847	223.11622	0.81444	0.2548933	0.18436412	3.0573966	21	1 18.2	20.1
416707	2005 AL_{69}	18.5	X	335.63482	69.97313	24.95175	1.24671	0.3285946	0.29308654	2.2445992	21	—	—
416708	2005 AL_{74}	13.0	X	339.77084	150.74280	124.59380	25.78997	0.0382806	0.08064692	5.3057183	21	6 7.0	20.1
416709	2005 AB_{77}	16.6	X	76.77243	148.77922	342.84016	7.46660	0.1194310	0.19253780	2.9702434	21	4 12.9	20.6
416710	2005 BR_{5}	18.3	X	245.65299	76.43236	70.89098	3.29824	0.1739571	0.28409657	2.2917051	21	11 13.0	20.8
416711	2005 BX_{15}	16.0	X	296.85010	77.85044	128.93935	17.31617	0.0691766	0.18153496	3.0890804	21	1 3.5	20.6
416712	2005 BD_{28}	17.9	X	179.84198	251.56814	128.93820	23.82344	0.0669373	0.37347444	1.9096867	21	3 2.5	20.2
416713	2005 BR_{33}	13.5	X	203.59780	277.76091	128.05395	19.95217	0.0455484	0.08192608	5.2503461	21	5 30.5	20.8
416714	2005 BC_{38}	16.1	X	265.99284	96.96938	117.13389	10.27546	0.0320846	0.17820485	3.1274451	21	—	—
416715	2005 CX_{18}	17.6	X	246.84757	356.17109	142.50041	3.81077	0.1719346	0.28175355	2.3043925	21	11 3.8	20.3
416716	2005 CY_{28}	16.4	X	24.19705	113.98310	330.48558	15.44482	0.1931296	0.17761441	3.1343723	21	—	—
416717	2005 CR_{29}	17.5	X	291.20746	54.68341	84.02167	5.95885	0.1979878	0.28933745	2.2639471	21	—	—
416718	2005 CX_{34}	17.2	X	92.33704	283.86239	334.11782	6.80702	0.0977047	0.27398844	2.3477286	21	10 19.6	20.5
416719	2005 CG_{43}	15.7	X	1.81543	322.40874	134.21680	17.80667	0.1932568	0.17630676	3.1498514	21	—	—
416720	2005 CC_{50}	16.0	X	31.57699	316.01718	145.68480	20.16055	0.1516349	0.18028148	3.1033825	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416721 2005 CW_{62}	17.9	X	283.28393	80.65506	54.47244	3.61103	0.1607614	0.28642081	2.2792905	21	—	—
416722 2005 CZ_{72}	16.0	X	79.02994	82.07209	337.26296	15.72507	0.1231940	0.18091895	3.0960883	21	1 24.4	20.1
416723 2005 CM_{76}	16.0	X	24.89569	59.19552	127.68838	20.21437	0.0592423	0.19230650	2.9726246	21	4 13.7	20.2
416724 2005 CN_{76}	15.4	X	330.68062	156.21983	327.30309	27.49865	0.1562701	0.17375573	3.1806066	21	—	—
416725 2005 CQ_{78}	17.7	X	304.91485	4.90912	131.87107	5.66364	0.1447111	0.28934789	2.2638927	21	—	—
416726 2005 CY_{78}	16.1	X	3.97005	358.41574	168.90709	18.56528	0.2332967	0.18283279	3.0744445	21	1 24.9	19.7
416727 2005 CV_{79}	16.3	X	316.02103	38.48565	153.20292	13.45905	0.1896429	0.17710940	3.1403277	21	—	—
416728 2005 CW_{80}	17.6	X	218.20089	269.48036	250.05241	5.84548	0.1646428	0.27923619	2.3182214	21	10 25.1	20.8
416729 2005 DC_{1}	17.4	X	189.72848	21.72020	78.39783	22.80946	0.0838985	0.38547260	1.8698512	21	7 13.4	19.7
416730 2005 EF_{2}	17.5	X	319.78739	341.35783	349.96633	15.95411	0.0501213	0.38372187	1.8755343	21	7 19.9	19.3
416731 2005 EO_{8}	16.5	X	342.49616	39.20108	136.83270	12.05889	0.1180180	0.18272250	3.0756815	21	1 16.2	20.4
416732 2005 EJ_{17}	17.0	X	29.46211	6.70697	105.93999	0.29264	0.1502294	0.17821947	3.1272741	21	1 10.5	20.5
416733 2005 EA_{27}	17.4	X	188.68624	180.44121	353.78371	8.62911	0.1160352	0.27394527	2.3479753	21	10 15.2	20.8
416734 2005 EA_{31}	17.4	X	151.93265	205.72965	17.83708	5.28891	0.1562262	0.27380021	2.3488045	21	11 10.4	21.2
416735 2005 EF_{34}	17.3	X	159.16281	59.14342	122.51319	4.35815	0.0834338	0.27052355	2.3677327	21	9 28.4	20.6
416736 2005 EJ_{43}	15.9	X	23.40099	160.61991	0.24784	9.27961	0.0384142	0.18394650	3.0620225	21	3 3.8	20.0
416737 2005 ER_{46}	16.1	X	300.31414	3.01802	171.43008	9.34925	0.1608339	0.17308530	3.1888145	21	—	—
416738 2005 EK_{52}	16.0	X	38.22082	136.41657	320.12858	10.25597	0.1003748	0.18096084	3.0956105	21	1 4.7	19.9
416739 2005 EH_{53}	16.3	X	36.19812	305.24153	164.27357	16.02785	0.1932326	0.18048050	3.1011006	21	1 17.2	19.8
416740 2005 EP_{67}	17.6	X	24.90626	131.82217	164.97598	7.40208	0.1236225	0.26563256	2.3967083	21	9 15.1	19.9
416741 2005 EX_{69}	17.7	X	81.71060	60.31317	98.09111	10.61607	0.4527972	0.19419814	2.9532894	21	7 12.9	22.4
416742 2005 EG_{70}	17.4	X	48.46390	224.13050	334.12629	17.51605	0.0715444	0.37735153	1.8965835	21	4 28.4	19.4
416743 2005 EY_{74}	15.7	X	343.31910	150.83370	3.22188	9.46894	0.0674799	0.17479588	3.1679763	21	—	—
416744 2005 ES_{86}	15.3	X	277.96450	109.84500	93.22228	18.40126	0.0656692	0.17064727	3.2191149	21	—	—
416745 2005 EG_{93}	15.9	X	313.07270	6.52551	179.60001	17.06281	0.1657392	0.17443508	3.1723432	21	—	—
416746 2005 EO_{93}	15.4	X	307.14433	61.16565	102.85237	14.30157	0.1018419	0.17121969	3.2119362	21	—	—
416747 2005 EH_{99}	17.8	X	300.70655	242.52476	218.89700	3.31553	0.1724193	0.28413020	2.2915242	21	12 15.0	19.4
416748 2005 ET_{103}	17.6	X	271.78031	279.15399	126.42121	5.98036	0.1149327	0.27345485	2.3507816	21	8 5.4	20.2
416749 2005 EK_{105}	18.1	X	269.96366	333.84712	143.31313	3.92854	0.1226864	0.28268029	2.2993532	21	11 16.4	20.5
416750 2005 EC_{108}	17.5	X	71.63182	286.45968	345.06442	5.11868	0.2108693	0.26937953	2.3744316	21	10 27.8	20.9
416751 2005 ES_{117}	16.2	X	4.73557	348.07759	173.62474	17.10109	0.1634696	0.18006785	3.1058366	21	1 26.6	20.0
416752 2005 EL_{126}	17.8	X	144.08206	9.17606	178.16314	2.92631	0.1444531	0.26561985	2.3967847	21	9 18.2	21.4
416753 2005 EV_{135}	17.7	X	172.04901	63.48613	146.62972	4.19602	0.1840135	0.27457413	2.3443888	21	11 13.7	21.4
416754 2005 EM_{137}	16.5	X	358.68645	138.87406	24.67015	5.56396	0.1219014	0.17678733	3.1441406	21	1 27.9	20.4
416755 2005 EB_{141}	15.8	X	358.68509	189.23106	298.71286	9.49801	0.1796375	0.17787790	3.1312763	21	—	—
416756 2005 EW_{143}	17.8	X	244.67881	145.41550	21.74284	1.64337	0.1414921	0.28197010	2.3032125	21	12 13.3	20.2
416757 2005 EJ_{148}	17.3	X	215.64828	355.58041	153.08664	5.39403	0.1570884	0.27363095	2.3497730	21	10 11.6	20.7
416758 2005 EP_{155}	16.0	X	3.62505	320.62919	187.67379	23.05098	0.1967512	0.17703198	3.1412433	21	1 4.9	20.2
416759 2005 ET_{169}	16.6	X	216.36993	119.44497	120.16134	24.04192	0.2559807	0.28310725	2.2970409	21	—	—
416760 2005 EQ_{193}	18.0	X	250.37516	194.53766	347.67903	3.95296	0.1485665	0.28495662	2.2870915	21	—	—
416761 2005 EL_{200}	15.3	X	334.12106	245.30746	272.80466	23.22848	0.2321279	0.17507376	3.1646232	21	—	—
416762 2005 EL_{202}	17.5	X	295.71645	233.01687	68.74504	23.43721	0.0742549	0.37190542	1.9150541	21	4 20.1	19.9
416763 2005 EY_{213}	16.2	X	39.24612	248.93655	296.69844	6.38257	0.2457886	0.18866546	3.0107483	21	5 12.5	19.3
416764 2005 EY_{215}	17.0	X	57.90669	280.01728	259.27391	0.37079	0.2145427	0.19169341	2.9789595	21	6 4.7	20.6
416765 2005 ET_{218}	17.4	X	266.06545	65.16249	104.90780	6.18794	0.1134285	0.28632422	2.2798030	21	—	—
416766 2005 EU_{218}	17.6	X	230.71371	98.25052	90.47909	5.73954	0.1731928	0.28265190	2.2995072	21	12 18.8	20.4
416767 2005 EO_{233}	15.5	X	326.33918	69.94265	114.01416	10.31854	0.0457693	0.17726500	3.1384898	21	1 15.5	19.9
416768 2005 EB_{234}	17.5	X	218.17691	26.52878	124.47863	6.40973	0.1652329	0.27526030	2.3404911	21	10 18.0	20.9
416769 2005 EC_{237}	16.5	X	319.94273	148.18796	3.31658	12.19248	0.1497730	0.17146107	3.2089210	21	—	—
416770 2005 ER_{245}	15.4	X	116.97849	49.92628	355.46272	13.09408	0.0690788	0.17981925	3.1086985	21	2 17.3	19.8
416771 2005 EJ_{261}	18.0	X	225.06129	172.07845	353.51853	2.24487	0.1448185	0.27744910	2.3281654	21	11 13.2	20.9
416772 2005 EQ_{272}	14.1	X	97.10466	248.38776	293.94032	4.75088	0.0805578	0.08213637	5.2413807	21	7 11.4	21.1
416773 2005 EW_{274}	17.8	X	210.25518	152.73624	24.44977	2.51547	0.1127505	0.27940167	2.3173060	21	11 15.6	20.8
416774 2005 EG_{286}	15.9	X	338.53120	84.61861	93.01883	16.50134	0.1840404	0.17724037	3.1387805	21	1 5.2	20.0
416775 2005 EZ_{288}	16.7	X	25.48912	184.72530	308.11676	9.99618	0.0855204	0.18336021	3.0685461	21	1 28.8	20.4
416776 2005 EM_{298}	14.0	X	272.11556	311.37803	42.14018	1.49010	0.0405678	0.07895480	5.3812565	21	6 9.9	21.0
416777 2005 EM_{312}	16.8	X	107.09909	312.77537	160.21016	9.74705	0.1970393	0.19275033	2.9680596	21	5 14.4	21.3
416778 2005 FY_{4}	15.7	X	45.08529	239.54766	318.14491	15.17315	0.2909992	0.18909952	3.0061393	21	6 22.3	19.2
416779 2005 GR_{7}	16.2	X	341.54687	93.92670	70.40592	25.32192	0.3139447	0.17518008	3.1633427	21	—	—
416780 2005 GZ_{9}	17.3	X	150.45441	198.84609	273.21242	16.75580	0.0899281	0.37947014	1.8895178	21	6 10.3	19.3
416781 2005 GH_{12}	16.5	X	52.82142	102.75613	40.61835	12.53916	0.2615038	0.18540945	3.0458942	21	4 17.4	19.7
416782 2005 GG_{19}	16.1	X	353.53835	297.70170	198.44380	26.94242	0.2252270	0.17358777	3.1826579	21	—	—
416783 2005 GA_{37}	16.0	X	334.69290	54.38070	132.31409	18.05924	0.2168915	0.17501846	3.1652898	21	1 6.9	20.1
416784 2005 GU_{50}	15.2	X	4.46480	166.74209	21.40925	28.53799	0.1217847	0.18160992	3.0882303	21	3 19.4	19.2
416785 2005 GD_{51}	15.4	X	36.91414	200.77221	319.16186	13.05858	0.1834795	0.18398276	3.0616200	21	3 21.2	18.9
416786 2005 GR_{53}	17.1	X	266.09033	208.86022	3.43833	5.11488	0.1332354	0.28894625	2.2659901	21	—	—
416787 2005 GY_{56}	17.9	X	190.12200	129.53372	65.24893	2.32041	0.1267970	0.27377099	2.3489716	21	11 14.3	21.1
416788 2005 GT_{66}	16.6	X	296.46132	7.65995	196.95405	4.63194	0.1392588	0.17129014	3.2110554	21	—	—
416789 2005 GF_{68}	15.3	X	18.33705	27.60008	111.81062	18.88166	0.1518787	0.17740441	3.1368454	21	1 26.1	18.9
416790 2005 GG_{69}	15.4	X	11.01244	76.95710	96.06401	18.54527	0.1921450	0.18041830	3.1018133	21	3 1.7	19.1
416791 2005 GH_{71}	16.9	X	38.64696	297.05187	166.90148	17.21746	0.2297528	0.18090712	3.0962233	21	1 15.8	20.3
416792 2005 GC_{83}	16.9	X	38.26107	126.19900	30.34628	1.55381	0.1191039	0.18610489	3.0383014	21	3 21.2	20.4
416793 2005 GR_{83}	18.2	X	190.73631	194.78753	336.82904	2.31267	0.1187945	0.27113529	2.3641699	21	10 15.3	21.5
416794 2005 GW_{84}	17.6	X	176.36416	223.14122	300.01925	2.21944	0.0493545	0.26647230	2.3916704	21	9 20.9	20.9
416795 2005 GL_{88}	17.3	X	46.12589	300.45823	18.93935	7.98641	0.1975492	0.26622554	2.3931481	21	11 27.8	20.5
416796 2005 GM_{94}	16.0	X	21.09716	99.72918	29.98650	25.28493	0.1946685	0.17628700	3.1500869	21	1 25.7	20.0
416797 2005 GF_{97}	15.1	X	326.05091	332.16661	270.23325	20.73301	0.2194070	0.18239284	3.0793864	21	2 19.2	19.5
416798 2005 GQ_{98}	16.3	X	43.15088	221.18356	330.40815	7.99580	0.3144028	0.18769313	3.0211373	21	6 11.8	19.5
416799 2005 GV_{110}	17.3	X	179.34702	64.03046	175.47979	6.68674	0.1251666	0.27712194	2.3299974	21	12 29.9	20.8
416800 2005 GD_{113}	15.9	X	339.64524	132.89209	69.54864	20.83273	0.1859350	0.17857670	3.1231022	21	2 13.7	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416801 2005 GC_{120}	19.6	X	86.10821	258.27850	67.95163	16.53326	0.4975857	0.75587910	1.1935332	21	—	—
416802 2005 GS_{124}	15.2	X	7.55920	115.69985	50.28576	27.73623	0.1749753	0.18003381	3.1062280	21	2 23.9	19.4
416803 2005 GZ_{127}	17.7	X	291.00800	293.32186	193.00020	21.83755	0.3111220	0.28467763	2.2885856	21	12 14.9	19.6
416804 2005 GP_{128}	18.6	X	210.17118	116.47806	166.80964	5.29364	0.5756536	0.22164957	2.7041127	21	—	—
416805 2005 GB_{140}	15.6	X	315.04691	207.22953	23.70313	18.41322	0.1937518	0.17663082	3.1459976	21	2 15.3	20.2
416806 2005 GB_{144}	18.0	X	66.88313	65.52180	44.57723	21.81657	0.0975553	0.36033422	1.9558358	21	1 26.2	20.2
416807 2005 GT_{148}	16.3	X	32.11345	94.45782	58.15574	13.43412	0.1304966	0.17892890	3.1190025	21	3 15.2	20.2
416808 2005 GR_{157}	17.7	X	160.61476	122.83063	68.24442	3.18316	0.1464217	0.26793425	2.3829626	21	10 10.7	21.4
416809 2005 GR_{161}	17.6	X	211.67270	38.73712	145.70019	8.48872	0.1397773	0.27679830	2.3318133	21	11 25.7	20.9
416810 2005 GF_{165}	17.9	X	199.23440	141.75917	45.18687	3.75082	0.1777638	0.27506323	2.3416089	21	11 9.2	21.4
416811 2005 GL_{165}	16.1	X	55.58298	285.94710	201.56047	10.91486	0.0784353	0.18021528	3.1041425	21	3 5.1	20.3
416812 2005 GW_{178}	15.7	X	306.18783	304.15308	286.49558	16.88093	0.2404817	0.17430107	3.1739691	21	1 19.2	20.3
416813 2005 GG_{179}	15.7	X	335.98284	78.31136	105.52189	14.62590	0.3086152	0.17485337	3.1672819	21	—	—
416814 2005 GP_{200}	16.7	X	6.25326	352.86301	152.19778	5.11969	0.1088864	0.18036438	3.1024315	21	1 14.2	20.6
416815 2005 GZ_{201}	17.0	X	353.35078	280.07568	3.93999	5.63904	0.1000958	0.25637142	2.4540852	21	6 24.1	19.7
416816 2005 GF_{202}	17.6	X	69.55955	80.04084	193.80668	5.98989	0.1082221	0.26694678	2.3888356	21	10 16.9	20.6
416817 2005 GH_{215}	15.5	X	45.05614	106.32155	59.64432	12.50943	0.1003024	0.18206030	3.0831351	21	4 16.8	19.5
416818 2005 GJ_{215}	17.0	X	248.05700	156.59404	104.71163	10.49081	0.1454996	0.29137478	2.2533816	21	—	—
416819 2005 GW_{225}	16.3	X	22.72407	77.09711	19.77501	25.63466	0.2678072	0.17466290	3.1695840	21	—	—
416820 2005 GP_{227}	15.8	X	15.17375	38.59960	135.95424	11.30163	0.1662507	0.17835144	3.1257313	21	3 8.7	19.3
416821 2005 HT_{4}	15.8	X	318.27918	175.47326	52.29544	19.38066	0.1532512	0.17627476	3.1502326	21	2 22.3	20.4
416822 2005 HQ_{6}	17.4	X	338.77745	191.04079	112.16100	24.72775	0.0224423	0.37483079	1.9050770	21	7 2.8	19.1
416823 2005 HJ_{9}	17.0	X	91.75633	145.61135	91.31432	8.55536	0.1337754	0.26025673	2.4295998	21	10 1.6	20.5
416824 2005 JW_{17}	18.0	X	301.55443	90.52737	217.77187	2.06079	0.2371818	0.24410581	2.5356188	21	4 11.9	21.4
416825 2005 JE_{32}	15.6	X	299.90228	211.91557	44.19361	17.32736	0.1598405	0.17573233	3.1567119	21	3 4.6	20.4
416826 2005 JK_{34}	17.3	X	87.69763	117.56991	80.43599	15.32875	0.0564505	0.25296925	2.4760395	21	7 19.2	20.6
416827 2005 JU_{45}	17.6	X	249.68605	258.38053	107.82194	23.82381	0.1224458	0.37115732	1.9176265	21	5 15.9	20.5
416828 2005 JK_{60}	17.2	X	61.57824	182.09115	85.96028	7.82935	0.1496187	0.25921642	2.4360959	21	10 8.0	20.4
416829 2005 JU_{75}	15.6	X	12.72249	129.21666	52.54544	12.07531	0.1425216	0.17847765	3.1242575	21	3 19.3	19.6
416830 2005 JE_{82}	16.7	X	239.28847	246.09578	65.26385	34.38445	0.3040229	0.23240152	2.6200529	21	3 4.6	22.2
416831 2005 JH_{100}	17.7	X	283.04088	82.79443	71.18253	22.69284	0.2332384	0.28288179	2.2982612	21	—	—
416832 2005 JJ_{100}	15.9	X	295.57695	215.84628	91.15777	12.36547	0.0866489	0.18313539	3.0710569	21	5 5.9	20.3
416833 2005 JT_{101}	17.0	X	127.97430	74.32524	95.75496	15.21649	0.0442037	0.25460240	2.4654397	21	8 2.5	20.4
416834 2005 JY_{108}	16.1	X	323.13861	109.71119	80.53165	24.22377	0.2212891	0.17484644	3.1673656	21	—	—
416835 2005 JA_{109}	15.1	X	108.08846	315.74752	90.57736	28.44239	0.1895347	0.17579909	3.1559126	21	3 2.9	20.2
416836 2005 JK_{111}	15.2	X	339.88983	129.92773	28.02026	19.58855	0.1231833	0.17164087	3.2066797	21	—	—
416837 2005 JU_{134}	17.3	X	251.20929	119.11390	229.35061	28.41277	0.3983984	0.23693377	2.5865333	21	3 28.5	22.5
416838 2005 JQ_{147}	16.7	X	260.83395	102.85698	218.12221	28.20853	0.3308682	0.23407231	2.6075703	21	3 5.2	21.9
416839 2005 JD_{150}	17.8	X	159.86800	132.95584	114.93619	5.06417	0.1053720	0.27315228	2.3525173	21	12 21.3	21.3
416840 2005 JA_{164}	15.8	X	131.04372	321.58737	108.54121	10.75534	0.0882114	0.17721628	3.1390650	21	4 8.7	20.6
416841 2005 LZ_{8}	17.2	X	244.86879	247.75663	104.55007	13.41225	0.1782349	0.23993034	2.5649521	21	4 21.9	21.5
416842 2005 LD_{10}	16.4	X	284.70393	106.38750	231.49736	22.63680	0.3166277	0.24267123	2.5456021	21	4 19.3	20.5
416843 2005 LA_{20}	17.3	X	299.65583	168.23528	136.04968	13.09079	0.3529129	0.23958219	2.5674364	21	3 24.6	21.3
416844 2005 LU_{21}	17.0	X	321.81827	146.77012	127.18205	13.56767	0.1425216	0.23752415	2.5822455	21	4 16.8	20.4
416845 2005 LQ_{23}	15.9	X	259.11779	206.42826	60.61843	13.25273	0.0168614	0.17179574	3.2047522	21	2 13.5	20.7
416846 2005 LM_{27}	17.4	X	66.52987	109.46947	161.78335	6.53810	0.0998371	0.26059591	2.4274911	21	10 8.7	20.5
416847 2005 LX_{39}	16.7	X	292.53614	226.49260	121.36923	7.90602	0.1882546	0.24180730	2.5516618	21	6 2.6	20.1
416848 2005 LJ_{52}	17.8	X	312.75074	82.11610	242.59892	18.76971	0.0878363	0.37037794	1.9203157	21	6 9.7	19.2
416849 2005 MO_{3}	16.8	X	307.87155	133.68448	184.14520	12.54268	0.1820301	0.24429667	2.5342980	21	5 15.6	20.0
416850 2005 MN_{6}	17.3	X	116.35881	152.51581	85.75823	5.10209	0.1479014	0.26319003	2.4115138	21	10 28.0	21.0
416851 2005 MM_{13}	18.9	X	36.95071	254.73680	100.55570	22.99555	0.3181919	0.44672534	1.6947631	21	—	—
416852 2005 MQ_{15}	17.7	X	3.11954	139.23105	95.83303	23.78996	0.0532694	0.36710747	1.9317039	21	5 2.3	20.1
416853 2005 MV_{16}	17.2	X	30.11739	200.23830	130.81746	8.04160	0.1284986	0.25590506	2.4570659	21	11 13.7	20.2
416854 2005 MW_{16}	17.3	X	289.46605	54.94675	279.46666	6.22795	0.2079503	0.23842188	2.5757595	21	5 4.9	21.0
416855 2005 MX_{17}	16.7	X	358.34717	174.81575	121.09856	12.30108	0.1022121	0.24553764	2.5257518	21	7 21.8	19.3
416856 2005 MO_{23}	17.7	X	126.01417	301.87342	232.15550	21.23061	0.0673205	0.37662698	1.8990152	21	8 1.1	20.5
416857 2005 NH_{14}	15.6	X	7.58887	142.35771	184.98042	2.91139	0.2518486	0.12350884	3.9933499	21	9 19.0	19.9
416858 2005 NO_{14}	17.5	X	216.89368	285.28628	292.66870	4.12425	0.1761623	0.27179537	2.3603406	21	—	—
416859 2005 NJ_{18}	17.2	X	334.98512	190.82422	129.29289	5.72912	0.0963461	0.24502826	2.5292510	21	7 15.2	19.8
416860 2005 NK_{25}	16.7	X	6.68466	358.85926	288.23756	14.33139	0.1062678	0.24478652	2.5309159	21	7 22.6	19.4
416861 2005 ND_{37}	15.7	X	358.13528	158.78586	165.04049	6.17092	0.2854325	0.12402708	3.9822181	21	8 25.0	19.5
416862 2005 NC_{68}	15.5	X	342.12694	214.32650	120.14963	10.23302	0.2821939	0.12368713	3.9895114	21	7 31.2	19.5
416863 2005 NK_{68}	17.7	X	245.89440	14.87874	305.48939	3.71709	0.2648543	0.22862589	2.6488200	21	3 3.1	22.4
416864 2005 NV_{68}	17.1	X	302.82314	210.98252	121.52373	2.90170	0.1573431	0.24030937	2.5622544	21	5 31.3	20.2
416865 2005 ND_{88}	17.7	X	39.16414	114.41522	130.01828	23.12855	0.0497191	0.36784534	1.9291199	21	7 13.5	19.5
416866 2005 NX_{92}	17.3	X	292.46982	254.38447	81.25027	2.37234	0.1282001	0.23983514	2.5656309	21	5 25.0	20.7
416867 2005 NG_{95}	15.2	X	25.81122	243.54750	297.49875	24.47746	0.2053648	0.17255561	3.1953370	21	3 21.1	19.3
416868 2005 NE_{101}	17.3	X	196.51836	90.77509	283.47157	17.14471	0.1139893	0.35219828	1.9858414	21	3 6.1	20.4
416869 2005 OB_{1}	16.7	X	244.86849	350.23827	352.99249	14.27044	0.2621442	0.23071456	2.6328091	21	3 27.8	21.2
416870 2005 OO_{7}	17.0	X	258.21434	223.10749	110.42497	12.04889	0.2055007	0.23153582	2.6265798	21	4 9.1	21.4
416871 2005 OJ_{17}	16.8	X	184.53201	97.28830	294.47608	10.35150	0.2172857	0.22548595	2.6733535	21	4 7.0	21.6
416872 2005 OK_{26}	16.6	X	274.14645	64.19455	281.76103	12.18850	0.1852136	0.23631508	2.5910458	21	5 3.6	20.6
416873 2005 OR_{27}	16.1	X	280.75355	291.79845	68.95400	15.32272	0.1230958	0.23929510	2.5694895	21	6 12.4	19.5
416874 2005 PW_{19}	17.0	X	318.38312	357.68446	325.17087	7.56959	0.0672146	0.24099278	2.5574081	21	6 25.2	20.1
416875 2005 PE_{29}	17.3	X	191.82704	262.89563	117.94006	3.23531	0.1082008	0.22620596	2.6676776	21	4 4.9	21.4
416876 2005 QM	16.5	X	273.91068	189.10775	121.58005	16.30641	0.2039061	0.23221045	2.6214900	21	3 27.4	20.8
416877 2005 QR_{21}	16.8	X	272.91462	296.75017	15.39363	12.68558	0.3268478	0.23063986	2.6333776	21	3 14.0	21.3
416878 2005 QA_{30}	16.1	X	263.12044	2.16648	323.34286	14.38448	0.2565108	0.22950464	2.6420543	21	3 18.7	20.6
416879 2005 QZ_{31}	17.1	X	278.12260	153.63684	156.32662	12.25095	0.1932623	0.23189457	2.6238701	21	3 28.1	21.0
416880 2005 QH_{46}	17.2	X	300.34875	263.02269	138.69413	5.23400	0.1154915	0.24615948	2.5214964	21	9 13.4	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416881 2005 QO_{55}	16.9	X	284.09706	357.10202	348.80493	14.62876	0.2764411	0.23571550	2.5954377	21	4 29.9	21.0
416882 2005 QO_{56}	16.4	X	293.01658	151.85786	162.48135	33.23819	0.2053348	0.23488871	2.6015247	21	4 20.1	20.5
416883 2005 QZ_{62}	17.1	X	232.42915	25.99055	356.29173	4.94957	0.1157276	0.23236336	2.6203398	21	5 14.8	21.2
416884 2005 QF_{66}	16.6	X	264.01002	8.93690	324.56347	12.51408	0.1981729	0.23141278	2.6275107	21	4 3.1	21.0
416885 2005 QC_{67}	17.6	X	272.62867	238.44216	136.96725	5.62243	0.2653133	0.23722341	2.5844275	21	6 3.8	21.6
416886 2005 QX_{82}	17.2	X	288.50560	159.63718	177.18869	10.45685	0.1879143	0.23549913	2.5970273	21	5 14.3	20.9
416887 2005 QS_{87}	16.9	X	239.75315	346.83245	17.07177	6.51523	0.3481588	0.22937695	2.6430347	21	4 15.3	21.9
416888 2005 QX_{100}	17.0	X	151.29176	324.98021	270.32901	5.23260	0.1050707	0.25845539	2.4408757	21	11 23.7	20.5
416889 2005 QG_{116}	15.8	X	16.89204	305.09523	23.74883	0.69428	0.1851821	0.12549577	3.9510875	21	10 2.8	20.6
416890 2005 QY_{125}	17.4	X	180.14849	65.01436	347.06061	5.50021	0.1404205	0.22731847	2.6589667	21	4 29.4	21.6
416891 2005 QK_{129}	17.1	X	170.03442	16.01893	20.02720	5.26125	0.0665314	0.22355225	2.6887475	21	3 29.3	20.8
416892 2005 QL_{130}	16.9	X	270.10106	331.15986	6.24800	10.20023	0.1883746	0.23228669	2.6209164	21	4 18.9	20.8
416893 2005 QU_{144}	16.9	X	278.74544	8.72073	15.04567	11.86033	0.1288894	0.23997222	2.5646537	21	7 14.6	20.5
416894 2005 QB_{150}	17.0	X	197.23539	81.31503	8.12676	11.58178	0.2367552	0.23207975	2.6224742	21	7 3.2	21.8
416895 2005 QF_{150}	16.7	X	155.89373	319.09438	69.24118	2.99981	0.2196378	0.21744352	2.7388720	21	3 18.0	21.1
416896 2005 QM_{156}	16.7	X	337.89200	94.33428	274.28093	13.20191	0.1190597	0.24630934	2.5204735	21	9 22.8	19.8
416897 2005 QN_{156}	16.6	X	289.64568	353.46197	288.82030	12.98259	0.2272675	0.22746165	2.6578507	21	2 22.2	20.9
416898 2005 QU_{166}	17.0	X	262.13706	86.63208	296.34505	11.63765	0.2791646	0.23725689	2.5841844	21	5 30.5	21.2
416899 2005 QB_{170}	16.8	X	220.40878	144.02725	269.77556	12.53264	0.2505307	0.23088396	2.6315212	21	6 5.7	21.3
416900 2005 QG_{171}	16.8	X	223.43052	31.43298	330.82410	12.75079	0.2782668	0.22652567	2.6651670	21	3 31.4	21.8
416901 2005 QB_{172}	17.5	X	212.26817	154.73032	203.01073	4.42761	0.3020806	0.22379814	2.6867777	21	3 22.9	22.5
416902 2005 QG_{179}	17.6	X	251.95805	46.17538	340.95275	7.28419	0.2768226	0.23405619	2.6076900	21	5 26.0	22.0
416903 2005 QQ_{189}	16.6	X	43.90082	169.28813	4.17027	8.38514	0.1116892	0.22509777	2.6764261	21	4 13.7	19.7
416904 2005 QL_{190}	16.9	X	152.13153	256.66519	177.66420	2.34164	0.0239033	0.22628508	2.6670558	21	4 22.3	20.5
416905 2005 RK_{7}	16.8	X	218.85338	26.61168	347.68001	17.70695	0.2514153	0.22724405	2.6595472	21	4 10.4	21.7
416906 2005 RH_{9}	16.4	X	202.98086	251.04291	116.15111	13.60417	0.2849752	0.22417256	2.6837852	21	4 3.4	21.5
416907 2005 RY_{9}	17.3	X	260.97621	82.12105	255.28421	5.18927	0.2865553	0.23032906	2.6357460	21	4 1.4	21.8
416908 2005 RP_{28}	17.4	X	178.11849	174.54870	229.27435	2.74708	0.1052171	0.22579787	2.6708910	21	4 17.5	21.3
416909 2005 RN_{29}	16.4	X	236.22569	28.10984	296.28264	19.13204	0.2481274	0.22428252	2.6829079	21	2 22.8	21.4
416910 2005 RV_{43}	16.8	X	289.74323	241.39831	77.62493	4.53072	0.2200364	0.23345050	2.6121985	21	4 17.4	20.4
416911 2005 RL_{44}	17.0	X	237.64175	102.06671	291.93121	12.05402	0.2681908	0.23189784	2.6238455	21	5 23.6	21.7
416912 2005 RA_{48}	17.2	X	286.57710	250.52738	74.02797	4.75713	0.1565463	0.23132826	2.6281507	21	4 29.4	20.7
416913 2005 RB_{48}	16.8	X	280.36631	337.12721	33.57890	14.57549	0.1039477	0.23605557	2.5929445	21	6 29.8	20.5
416914 2005 RH_{48}	16.4	X	304.98811	29.78685	266.46117	11.02873	0.1738781	0.23128236	2.6284984	21	4 6.7	20.0
416915 2005 SH_{1}	16.8	X	247.96830	354.69223	15.73619	18.00041	0.2302887	0.23126678	2.6286164	21	5 2.2	21.3
416916 2005 SH_{15}	17.4	X	160.97994	216.12800	203.25998	4.70373	0.2262225	0.22151304	2.7052237	21	4 27.6	21.8
416917 2005 SV_{31}	16.8	X	125.41327	176.54457	28.51780	13.70610	0.0443486	0.24158528	2.5532249	21	9 19.1	20.4
416918 2005 SA_{39}	17.3	X	248.92529	328.94084	9.48529	4.57087	0.1416537	0.22656231	2.6648797	21	4 5.7	21.5
416919 2005 SS_{45}	16.6	X	122.56746	208.36486	0.52869	3.43595	0.1671525	0.24247274	2.5469912	21	9 24.3	20.4
416920 2005 SN_{49}	17.6	X	286.81911	352.63016	22.32997	5.36792	0.1621697	0.23666847	2.5884659	21	7 6.2	20.9
416921 2005 SF_{51}	17.4	X	215.95999	118.57420	261.34735	1.35446	0.1077424	0.22541307	2.6739297	21	4 26.4	21.3
416922 2005 SY_{51}	16.7	X	318.91420	267.64150	31.14722	7.82651	0.1960442	0.23172028	2.6251856	21	5 1.6	19.7
416923 2005 ST_{53}	17.0	X	196.20006	83.06559	345.80298	6.90515	0.0915017	0.22965658	2.6408888	21	6 7.2	21.0
416924 2005 SD_{54}	17.0	X	274.92921	294.64605	21.74925	5.30211	0.2920301	0.22922727	2.6441852	21	3 21.6	21.3
416925 2005 SN_{60}	16.9	X	219.66683	19.68839	347.95539	6.15879	0.1115684	0.22613263	2.6682543	21	4 12.9	21.1
416926 2005 SV_{62}	17.7	X	262.71923	145.37409	192.67361	4.67505	0.1412571	0.22828361	2.6514670	21	4 20.6	21.5
416927 2005 SY_{72}	16.7	X	265.12376	354.82756	342.98472	8.97295	0.2243403	0.23072362	2.6327402	21	4 9.9	20.9
416928 2005 ST_{75}	17.3	X	195.97839	188.00681	184.16087	6.17978	0.0470916	0.22248071	2.6973738	21	3 27.4	20.9
416929 2005 SZ_{80}	17.3	X	290.04324	309.73061	27.93282	4.03149	0.1814571	0.23454946	2.6040327	21	5 15.4	20.9
416930 2005 SV_{84}	16.5	X	222.06888	8.46292	10.63975	14.69098	0.0484908	0.22730910	2.6590398	21	4 30.9	20.4
416931 2005 SY_{86}	16.8	X	222.59961	348.74644	14.68738	12.98683	0.1705692	0.22546819	2.6734939	21	4 9.4	21.1
416932 2005 SM_{87}	17.2	X	280.51609	171.65410	149.56379	1.91145	0.0845944	0.22876418	2.6477523	21	4 27.5	20.6
416933 2005 SY_{104}	16.5	X	208.31536	172.09227	219.40001	13.64850	0.2554354	0.22468417	2.6797096	21	4 30.3	21.2
416934 2005 SC_{106}	16.4	X	259.22361	299.48942	25.31830	14.51906	0.2801188	0.22678933	2.6631010	21	3 23.1	21.0
416935 2005 SG_{111}	16.7	X	205.55285	269.41737	15.43842	23.96090	0.1990798	0.21120581	2.7925362	21	—	—
416936 2005 SY_{112}	17.2	X	265.63056	15.39503	347.80052	15.02825	0.2141839	0.23303127	2.6153305	21	5 10.9	21.5
416937 2005 SJ_{113}	16.9	X	275.38014	117.94674	173.08638	13.65702	0.1775394	0.22780939	2.6551453	21	2 28.5	20.9
416938 2005 SB_{119}	16.8	X	274.07156	192.24916	125.34588	8.35675	0.3142836	0.23012140	2.6373314	21	3 22.3	21.2
416939 2005 SA_{120}	17.3	X	246.38708	17.51609	3.32816	7.43649	0.2048490	0.23215119	2.6219361	21	5 19.1	21.5
416940 2005 SY_{121}	17.2	X	175.98752	83.72171	338.89805	7.35865	0.2248428	0.22407855	2.6845357	21	5 10.5	21.9
416941 2005 SH_{132}	16.3	X	226.55955	348.98143	40.76837	12.99554	0.2741913	0.22632528	2.6667400	21	5 10.0	21.0
416942 2005 SW_{132}	17.1	X	176.92303	233.90473	207.10703	8.91093	0.3003370	0.22386004	2.6862824	21	6 6.9	22.1
416943 2005 SM_{135}	17.3	X	249.45922	184.73876	161.63194	1.56285	0.1951339	0.22852578	2.6495935	21	4 12.4	21.5
416944 2005 SY_{138}	17.0	X	226.11319	336.09530	29.21601	5.78333	0.0666194	0.22621456	2.6676101	21	4 21.1	20.8
416945 2005 SR_{142}	17.0	X	22.90029	119.19904	66.82574	5.16722	0.0213671	0.22211904	2.7003011	21	3 30.3	20.5
416946 2005 SU_{146}	16.8	X	358.63825	300.79243	22.44837	9.87018	0.0912347	0.24151585	2.5537142	21	9 5.7	19.7
416947 2005 SD_{156}	16.2	X	272.46743	92.19282	259.11425	13.58574	0.1535167	0.23315839	2.6143798	21	5 15.5	20.1
416948 2005 SG_{164}	16.6	X	286.85861	298.38070	43.70833	11.54552	0.3149154	0.23418500	2.6067337	21	4 30.0	20.4
416949 2005 SK_{165}	16.5	X	275.90649	352.13700	5.38560	16.40723	0.1164921	0.23508070	2.6001081	21	5 29.9	20.4
416950 2005 SR_{182}	16.9	X	199.74134	5.54760	1.89269	5.89971	0.0518270	0.22043805	2.7140115	21	3 25.7	20.9
416951 2005 SE_{187}	16.3	X	220.02795	353.12062	26.02962	15.65653	0.1423515	0.22626717	2.6671966	21	4 26.5	20.4
416952 2005 SZ_{187}	15.8	X	309.40545	275.02116	181.83673	2.93748	0.1807366	0.12736510	3.9123324	21	11 11.7	20.7
416953 2005 SE_{196}	17.5	X	174.39693	75.52405	17.91510	4.62409	0.1105742	0.23058927	2.6337628	21	6 16.5	21.5
416954 2005 SD_{197}	17.6	X	234.02201	185.40560	174.43868	5.14131	0.0726578	0.22725524	2.6594599	21	4 24.1	21.5
416955 2005 SK_{198}	16.7	X	305.36957	78.34465	240.55388	13.23523	0.1729826	0.23634516	2.5908260	21	5 12.6	19.9
416956 2005 SB_{200}	17.4	X	171.25761	244.52713	186.39087	6.92251	0.0776627	0.22623185	2.6674741	21	5 15.6	21.4
416957 2005 SG_{202}	17.1	X	242.38529	351.26950	358.21595	1.05397	0.1555325	0.22800514	2.6536255	21	4 11.9	21.2
416958 2005 SD_{212}	17.4	X	216.85994	140.80382	227.69621	1.46853	0.0644103	0.22308617	2.6924911	21	4 14.9	21.4
416959 2005 SD_{214}	16.0	X	220.39581	52.95810	278.80219	11.20110	0.2698417	0.22198687	2.7013728	21	2 22.8	21.1
416960 2005 SJ_{214}	16.4	X	208.47312	56.28923	328.71662	13.83481	0.1344981	0.22589251	2.6701449	21	4 17.9	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
416961 2005 SC_{220}	16.5	X	244.75324	164.95451	288.45166	13.26707	0.2046115	0.23913512	2.5706353	21	8 16.9	20.5
416962 2005 ST_{222}	16.0	X	328.82607	72.31766	274.52456	14.17829	0.1602102	0.24005376	2.5640729	21	8 2.3	18.8
416963 2005 SV_{222}	17.6	X	196.68031	248.64447	156.48377	2.91896	0.1948826	0.22601272	2.6691980	21	5 9.2	22.0
416964 2005 SG_{252}	17.2	X	250.59145	73.09924	288.38640	1.71447	0.1996966	0.23093636	2.6311232	21	4 30.6	21.3
416965 2005 SR_{272}	16.7	X	285.59911	104.98652	265.23266	11.63477	0.2077641	0.23885102	2.5726733	21	6 19.5	20.0
416966 2005 SX_{277}	16.5	X	199.94723	158.85317	290.66621	8.04032	0.1187797	0.21909123	2.7251227	21	7 8.3	20.6
416967 2005 SU_{292}	16.9	X	324.58748	233.17143	54.87027	5.96880	0.1753697	0.23167225	2.6255484	21	4 30.8	19.8
416968 2005 TP_{1}	16.7	X	203.54790	44.89322	28.83758	11.89357	0.1603839	0.23005132	2.6378670	21	6 18.9	21.1
416969 2005 TZ_{1}	16.7	X	147.43723	93.36763	4.38261	22.01015	0.0689416	0.22759931	2.6567790	21	5 11.9	21.0
416970 2005 TN_{7}	16.9	X	267.24754	207.24457	119.16775	4.98587	0.2995155	0.22937290	2.6430658	21	3 27.7	21.3
416971 2005 TW_{8}	17.4	X	255.72627	137.75657	180.36908	4.86175	0.1164690	0.22305749	2.6927219	21	3 21.4	21.4
416972 2005 TN_{19}	16.8	X	144.35315	263.64119	192.16116	12.24389	0.2371765	0.22353095	2.6889183	21	5 29.8	21.4
416973 2005 TR_{21}	17.5	X	212.27549	86.60936	34.92434	5.40139	0.1797966	0.23924561	2.5698439	21	8 30.0	21.6
416974 2005 TR_{28}	17.2	X	240.70647	76.35784	321.17945	12.25174	0.1911211	0.23290851	2.6162494	21	6 6.3	21.5
416975 2005 TF_{37}	17.9	X	238.66062	48.34677	330.97285	2.13509	0.1240098	0.23084063	2.6318505	21	5 17.9	21.7
416976 2005 TV_{46}	17.2	X	256.62433	17.13573	327.51345	5.32000	0.1320173	0.22865112	2.6486251	21	4 20.3	21.2
416977 2005 TF_{48}	16.5	X	278.12308	335.73378	29.04325	15.76324	0.1456727	0.23453733	2.6041225	21	6 8.9	20.3
416978 2005 TF_{58}	16.5	X	126.14185	70.18470	29.00163	12.93501	0.1265619	0.22031429	2.7150277	21	5 3.1	20.5
416979 2005 TT_{65}	17.4	X	177.19161	12.42547	43.55897	2.03797	0.1670255	0.22184062	2.7025600	21	5 4.6	21.9
416980 2005 TD_{77}	17.4	X	218.97817	31.50326	331.18313	3.14036	0.1908359	0.22483016	2.6785495	21	4 4.3	22.0
416981 2005 TG_{83}	16.4	X	192.28859	21.09570	16.50747	13.27265	0.1501864	0.22199819	2.7012810	21	4 22.9	20.8
416982 2005 TU_{83}	17.1	X	281.92641	58.88462	285.40117	2.50858	0.0513675	0.23158358	2.6262186	21	6 3.6	20.6
416983 2005 TH_{88}	17.3	X	276.58842	203.74925	141.54065	4.69115	0.1491973	0.23300155	2.6155529	21	5 15.8	21.1
416984 2005 TK_{94}	17.4	X	316.60929	3.04496	315.87578	3.61968	0.0476871	0.23320267	2.6140489	21	6 18.9	20.6
416985 2005 TD_{103}	17.2	X	225.38965	125.30624	199.56610	4.49660	0.1141883	0.21878927	2.7276294	21	2 26.3	21.4
416986 2005 TO_{107}	16.2	X	126.52077	20.44979	98.13384	11.83921	0.2117205	0.21324210	2.7747301	21	6 9.3	20.6
416987 2005 TM_{119}	17.0	X	174.59656	357.57377	16.48553	3.42941	0.0505278	0.21752090	2.7382224	21	3 6.8	21.0
416988 2005 TB_{126}	16.7	X	291.28739	53.58184	201.57349	12.21390	0.0916670	0.21733628	2.7397729	21	2 10.9	20.8
416989 2005 TV_{140}	17.6	X	213.95552	285.08066	159.33138	3.60416	0.1985319	0.23265021	2.6181855	21	7 10.9	21.9
416990 2005 TS_{141}	17.1	X	77.12253	50.46834	48.27597	6.23396	0.0473597	0.21369937	2.7707705	21	2 23.1	20.8
416991 2005 TG_{144}	17.5	X	135.16971	309.36329	146.19173	3.79526	0.1088372	0.22204603	2.7008930	21	5 9.7	21.4
416992 2005 TJ_{149}	17.2	X	232.83582	125.43135	174.99789	7.44104	0.2589605	0.21899526	2.7259187	21	1 30.7	22.1
416993 2005 TO_{152}	16.8	X	196.45981	327.57345	94.35230	12.13729	0.2608575	0.21999198	2.7176790	21	5 29.9	21.7
416994 2005 TS_{155}	16.7	X	100.74763	300.82540	207.59095	15.18780	0.0995841	0.22682308	2.6628368	21	6 4.5	20.5
416995 2005 TP_{157}	17.4	X	241.98494	30.12086	355.01948	3.12345	0.0885008	0.23065444	2.6332666	21	6 1.9	21.2
416996 2005 TY_{157}	17.4	X	221.95604	128.62005	236.90748	1.62398	0.1300105	0.22465522	2.6799398	21	4 13.5	21.6
416997 2005 TV_{162}	16.9	X	248.24888	338.65777	8.05225	3.37302	0.0967809	0.22555052	2.6728433	21	4 19.3	20.7
416998 2005 TS_{163}	16.9	X	195.70608	83.25069	18.10581	14.23747	0.1723856	0.23186491	2.6240938	21	7 21.5	21.4
416999 2005 TO_{165}	17.5	X	221.33191	145.72530	274.46864	1.37314	0.2009730	0.23014267	2.6371689	21	6 17.1	21.7
417000 2005 TH_{177}	17.6	X	199.04743	73.31020	332.98480	15.19684	0.3443457	0.22542218	2.6738577	21	5 4.3	23.0
417001 2005 TT_{179}	16.7	X	248.53564	103.49009	258.68753	12.11495	0.1946171	0.23134403	2.6280312	21	4 28.1	21.0
417002 2005 TY_{186}	16.8	X	324.46945	268.37420	11.98262	10.90805	0.0832425	0.22860671	2.6489681	21	4 30.0	20.1
417003 2005 TD_{189}	17.7	X	271.77067	65.24435	288.99167	1.79152	0.0714149	0.23048674	2.6345438	21	5 31.4	21.2
417004 2005 TS_{191}	16.7	X	46.56410	187.11228	50.73790	15.66833	0.0977238	0.22903106	2.6456951	21	7 23.4	20.2
417005 2005 UL_{4}	16.4	X	165.00480	191.18149	220.06804	11.50473	0.1226988	0.21940561	2.7225188	21	4 14.2	20.7
417006 2005 UV_{5}	16.0	X	158.08367	306.60674	85.40958	35.19059	0.3176673	0.21475834	2.7616546	21	4 18.6	21.7
417007 2005 UX_{7}	16.9	X	168.56785	168.44952	220.33018	10.18229	0.2840061	0.21754578	2.7380136	21	3 28.3	21.8
417008 2005 UV_{17}	16.6	X	221.08586	321.64805	58.43449	12.92079	0.1199121	0.22412509	2.6841641	21	5 3.8	20.8
417009 2005 UU_{23}	16.9	X	48.03737	151.69172	7.77603	2.35314	0.0288746	0.21772266	2.7365305	21	3 28.3	20.3
417010 2005 UE_{41}	16.8	X	263.11672	319.78352	32.80589	6.62437	0.0476872	0.22622680	2.6675139	21	5 20.6	20.4
417011 2005 UF_{41}	17.0	X	218.82506	345.97304	22.88799	3.38533	0.1423499	0.22223580	2.6993552	21	4 14.6	21.4
417012 2005 UG_{41}	16.9	X	167.81198	343.97308	29.75238	4.88309	0.0830661	0.21325891	2.7745843	21	3 2.8	21.0
417013 2005 UO_{44}	16.7	X	109.20930	10.89313	208.86924	10.42886	0.0731141	0.23810740	2.5780269	21	9 12.6	20.5
417014 2005 UP_{44}	17.2	X	142.27387	320.99921	94.26010	2.80365	0.1273386	0.21523109	2.7576091	21	3 30.1	21.2
417015 2005 UW_{46}	17.0	X	225.62277	308.12852	62.75884	7.38179	0.0602837	0.22257030	2.6966499	21	4 30.1	20.8
417016 2005 UG_{49}	16.4	X	110.61284	31.48363	14.59569	13.32294	0.1527481	0.20926247	2.8097983	21	2 19.1	20.4
417017 2005 UJ_{54}	17.3	X	255.43625	264.28149	79.50355	3.34016	0.2266653	0.22697156	2.6616754	21	4 13.1	21.6
417018 2005 UH_{58}	17.4	X	203.95275	24.96148	35.81283	3.49112	0.0986732	0.22676947	2.6632565	21	6 5.5	21.3
417019 2005 UV_{59}	16.9	X	237.20720	80.32469	260.66083	5.70563	0.2661064	0.22311320	2.6922737	21	3 19.6	21.7
417020 2005 UX_{64}	17.0	X	174.63999	214.10796	239.42214	11.92757	0.2863663	0.22505074	2.6767990	21	6 19.3	21.9
417021 2005 UU_{68}	16.6	X	197.10287	228.28485	232.39107	12.49281	0.2217222	0.23092170	2.6312345	21	7 13.3	21.3
417022 2005 UY_{80}	16.1	X	225.21343	326.33159	58.48395	15.31324	0.1299039	0.22424890	2.6831761	21	5 12.5	20.3
417023 2005 UK_{82}	17.5	X	172.95107	230.08689	220.88110	1.99509	0.0695742	0.22745704	2.6578866	21	6 11.1	21.4
417024 2005 UH_{83}	17.1	X	168.95249	64.32346	34.70691	6.26568	0.0302792	0.22854436	2.6494499	21	6 15.1	20.7
417025 2005 UQ_{84}	17.4	X	161.35177	75.67329	48.99689	2.79282	0.0545969	0.23069925	2.6329257	21	7 12.1	21.2
417026 2005 UV_{85}	17.6	X	249.17135	186.38430	155.55235	2.42931	0.2136130	0.22567051	2.6718957	21	4 5.8	22.0
417027 2005 UM_{88}	16.8	X	215.59324	336.41069	44.18828	6.59176	0.0568504	0.22402102	2.6849953	21	4 29.8	20.6
417028 2005 UZ_{89}	17.3	X	181.19107	106.19115	302.94686	4.12506	0.1705116	0.22138678	2.7062521	21	4 28.1	21.7
417029 2005 UV_{90}	16.0	X	308.76195	216.70235	12.38059	8.99168	0.0951948	0.21225707	2.7833080	21	2 7.2	19.9
417030 2005 UH_{91}	17.4	X	214.51849	54.25502	312.13143	4.46012	0.0910309	0.22077511	2.7112484	21	4 6.9	21.5
417031 2005 UB_{98}	17.3	X	148.33586	287.19255	184.72399	4.68671	0.1248716	0.22400428	2.6851291	21	6 14.5	21.5
417032 2005 UL_{99}	16.8	X	107.63559	339.70886	107.56665	4.85566	0.0679326	0.21366599	2.7710591	21	3 23.2	20.6
417033 2005 UH_{106}	17.1	X	187.09706	280.55726	68.95043	9.05438	0.1349728	0.21291588	2.7775636	21	2 26.0	21.6
417034 2005 UM_{106}	16.6	X	249.48846	272.19803	56.76247	13.31229	0.1983527	0.22220538	2.6996016	21	3 28.5	21.2
417035 2005 UK_{108}	17.3	X	217.71966	302.58079	88.75038	2.92919	0.0875952	0.22443093	2.6817250	21	5 14.9	21.3
417036 2005 UQ_{111}	16.5	X	182.43680	204.52266	237.65533	21.16259	0.0365866	0.22495633	2.6775479	21	6 9.3	20.4
417037 2005 UT_{114}	16.8	X	207.65925	17.07508	43.94530	14.75504	0.1889118	0.22771934	2.6558453	21	6 4.4	21.4
417038 2005 UD_{115}	16.9	X	212.73302	64.85247	310.47406	11.72922	0.2897804	0.22570783	2.6716012	21	4 7.6	22.0
417039 2005 UV_{115}	16.9	X	219.28631	56.64699	329.63966	7.03572	0.1341076	0.22670296	2.6637774	21	5 4.1	21.3
417040 2005 UN_{117}	17.3	X	220.79871	23.75191	20.77834	4.73418	0.1632749	0.22818069	2.6522643	21	5 29.2	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417041 2005 UX_{118}	17.7	X	241.73069	121.72640	224.53410	1.82800	0.0685925	0.22258237	2.6965524	21	4 14.6	21.7
417042 2005 UL_{122}	16.3	X	212.63021	140.40880	230.57195	4.95207	0.0635275	0.22115205	2.7081667	21	4 12.7	20.3
417043 2005 UE_{126}	16.9	X	296.04375	292.14670	41.85772	2.96479	0.1986872	0.23115416	2.6294701	21	5 16.5	20.1
417044 2005 UY_{127}	17.7	X	196.42404	34.72606	27.47494	2.35326	0.1294540	0.22534166	2.6744946	21	5 29.8	21.8
417045 2005 UW_{129}	16.7	X	117.73902	41.55957	41.54204	14.11334	0.0679553	0.21508104	2.7588915	21	4 2.2	20.6
417046 2005 UR_{140}	17.4	X	141.56518	107.43246	43.07710	4.99645	0.1850279	0.22868410	2.6483705	21	8 1.4	21.7
417047 2005 UO_{154}	17.5	X	194.84376	256.06803	48.91996	6.58155	0.0959174	0.26865907	2.3786746	21	—	—
417048 2005 UJ_{156}	16.4	X	195.80460	277.82233	110.34117	13.75102	0.2312692	0.22099035	2.7094877	21	4 23.5	21.4
417049 2005 UG_{158}	16.5	X	194.61575	337.77046	34.97881	11.86113	0.0333762	0.21805925	2.7337138	21	3 30.4	20.4
417050 2005 UG_{161}	16.9	X	262.52325	219.14287	131.84907	6.60437	0.3272095	0.23056217	2.6339691	21	4 20.7	21.4
417051 2005 UB_{166}	17.3	X	216.79072	161.89854	227.02082	3.96149	0.1139294	0.22546227	2.6735407	21	5 8.9	21.3
417052 2005 UL_{181}	16.7	X	156.70351	298.46466	227.06823	10.57595	0.1365782	0.23238377	2.6201864	21	8 26.8	21.0
417053 2005 UO_{182}	17.3	X	211.38967	27.77312	54.18084	3.96052	0.1524383	0.22918590	2.6445033	21	7 8.8	21.4
417054 2005 UB_{183}	16.9	X	236.74593	106.47426	231.56062	5.98647	0.1593107	0.21943413	2.7222830	21	3 21.9	21.3
417055 2005 UP_{184}	17.4	X	113.91343	76.11273	47.77589	9.62400	0.0955658	0.22001320	2.7175042	21	5 18.0	21.1
417056 2005 US_{187}	16.8	X	231.29889	108.34655	226.25966	11.37892	0.1346457	0.21925945	2.7237286	21	3 12.2	21.3
417057 2005 UG_{194}	17.4	X	75.28164	113.83517	53.88912	5.30201	0.0504343	0.22376108	2.6870743	21	5 18.7	20.7
417058 2005 UA_{195}	17.1	X	179.75538	158.28016	205.07608	5.11679	0.0880855	0.21320332	2.7750666	21	2 27.5	21.3
417059 2005 UL_{202}	16.7	X	233.31851	333.53654	55.83462	7.37227	0.1562304	0.22763216	2.6565234	21	5 23.2	20.9
417060 2005 UP_{205}	17.1	X	94.02390	294.24448	213.65482	4.32937	0.1072853	0.21988421	2.7185669	21	5 27.4	20.6
417061 2005 UK_{210}	17.0	X	214.99311	69.41326	280.94158	1.66698	0.0410443	0.21929245	2.7234554	21	3 21.2	20.9
417062 2005 UM_{212}	17.2	X	182.21618	302.31114	65.13041	5.10045	0.1139507	0.21444392	2.7643533	21	3 12.3	21.5
417063 2005 UH_{218}	16.8	X	77.50557	280.88539	260.18724	5.88676	0.1069341	0.22572804	2.6714418	21	6 18.2	20.1
417064 2005 UK_{219}	16.5	X	182.80572	105.82116	272.04003	4.70044	0.0394009	0.21711784	2.7416102	21	3 16.9	20.6
417065 2005 UQ_{219}	17.1	X	202.54617	93.38960	275.75626	3.56286	0.1341818	0.22005123	2.7171911	21	3 29.2	21.4
417066 2005 UP_{222}	17.2	X	140.39448	101.86307	3.80042	4.63099	0.1279927	0.22257565	2.6966068	21	5 28.0	21.3
417067 2005 US_{225}	17.0	X	98.35085	180.30501	256.37414	3.65044	0.0893010	0.21159200	2.7891373	21	2 24.7	20.8
417068 2005 UW_{227}	17.6	X	224.54941	168.25105	185.18957	1.43713	0.0842767	0.21976182	2.7195761	21	4 4.1	21.7
417069 2005 UX_{227}	17.2	X	254.36120	284.85148	56.74913	5.98196	0.0628426	0.22266999	2.6958451	21	4 25.6	21.1
417070 2005 UM_{228}	17.4	X	183.80785	35.32089	67.87474	4.32219	0.1061589	0.22894873	2.6463293	21	7 9.8	21.4
417071 2005 UX_{229}	17.6	X	137.05292	280.21052	163.69239	2.21697	0.2345528	0.21706140	2.7420854	21	5 8.3	22.0
417072 2005 UN_{232}	17.5	X	181.71980	201.89598	212.49800	2.39245	0.0449239	0.22168311	2.7038400	21	5 4.1	21.4
417073 2005 UZ_{239}	16.3	X	176.31609	38.90096	60.45109	22.70795	0.0394300	0.22762157	2.6566058	21	6 23.0	20.3
417074 2005 UT_{240}	16.8	X	234.77366	254.65678	96.37096	6.10729	0.1340217	0.22188433	2.7022050	21	4 11.6	21.0
417075 2005 UT_{242}	16.7	X	161.06281	76.93547	37.63617	12.45402	0.1266304	0.22481513	2.6786688	21	7 1.1	21.1
417076 2005 UD_{244}	17.1	X	213.89848	347.83762	356.15914	5.57472	0.0350547	0.21349704	2.7725208	21	3 13.9	21.1
417077 2005 UO_{247}	16.7	X	154.47342	195.08477	219.73759	5.15279	0.0275935	0.21676838	2.7445560	21	3 30.4	20.5
417078 2005 UQ_{251}	16.3	X	161.17826	44.32541	40.12387	26.45713	0.1301545	0.22259970	2.6964125	21	5 18.1	20.6
417079 2005 UU_{257}	16.8	X	221.55948	321.90930	54.93943	7.11247	0.0517980	0.22367581	2.6877572	21	5 2.8	20.6
417080 2005 UF_{258}	17.7	X	149.25285	293.83806	174.65733	2.32363	0.1656098	0.22371854	2.6874150	21	6 13.6	22.0
417081 2005 UM_{260}	17.3	X	271.08933	101.61491	205.80965	4.98199	0.1607193	0.22175643	2.7032440	21	3 18.8	21.3
417082 2005 UN_{261}	17.4	X	287.99318	262.18925	78.83732	1.79393	0.0638983	0.23185650	2.6241573	21	6 5.7	20.6
417083 2005 UY_{263}	17.0	X	105.09371	91.66807	44.12499	11.91934	0.0159478	0.22414813	2.6839802	21	5 10.5	20.5
417084 2005 UZ_{267}	16.6	X	191.03959	54.64223	61.17030	13.73815	0.2098739	0.22796254	2.6539560	21	8 3.1	21.3
417085 2005 UC_{274}	16.7	X	268.75625	359.43993	351.17071	13.96102	0.1903131	0.23000694	2.6382063	21	5 1.0	20.9
417086 2005 UE_{291}	16.7	X	248.52775	54.58799	270.00128	5.72739	0.1749814	0.22109171	2.7086595	21	3 14.6	21.2
417087 2005 UC_{293}	16.9	X	197.74480	353.56525	6.15222	3.39187	0.1034215	0.21643481	2.7473752	21	3 15.5	21.2
417088 2005 UZ_{296}	16.7	X	85.53996	71.98873	48.98958	11.78799	0.2172276	0.21229043	2.7830164	21	4 28.6	20.2
417089 2005 UK_{299}	17.3	X	244.35851	140.66922	212.64079	1.15827	0.0991172	0.22318188	2.6917213	21	4 24.1	21.3
417090 2005 UQ_{303}	17.0	X	204.82052	249.14540	203.46597	11.28486	0.1572334	0.22933282	2.6433738	21	7 13.1	21.5
417091 2005 UP_{306}	17.0	X	191.90774	33.35037	32.27098	5.03941	0.0911806	0.22585052	2.6704758	21	5 29.6	21.0
417092 2005 UA_{309}	17.7	X	222.71705	335.75578	56.12979	2.69694	0.0902054	0.22797739	2.6538408	21	5 20.2	21.5
417093 2005 UE_{309}	17.3	X	10.48648	316.13583	98.25074	3.07455	0.1751532	0.25549301	2.4597069	21	—	—
417094 2005 UV_{318}	17.5	X	168.87430	121.55182	287.27756	1.45762	0.0855842	0.21911104	2.7249584	21	4 13.4	21.6
417095 2005 UZ_{331}	16.9	X	346.99814	152.65335	88.14159	6.07836	0.0587248	0.22027972	2.7153118	21	4 19.7	20.3
417096 2005 UJ_{338}	17.7	X	187.66938	241.39788	183.74431	1.81330	0.1254485	0.22534888	2.6744375	21	5 25.6	22.0
417097 2005 UC_{347}	17.6	X	204.21031	193.86723	160.79737	0.75879	0.0897639	0.21614175	2.7498580	21	3 15.5	21.8
417098 2005 UV_{358}	17.4	X	180.99759	70.36607	35.18465	11.87794	0.2621903	0.22877709	2.6476528	21	7 10.4	22.3
417099 2005 UE_{360}	17.6	X	245.79621	60.33004	298.17401	0.90410	0.0722566	0.22296977	2.6934282	21	5 4.7	21.5
417100 2005 UU_{372}	17.2	X	190.02946	90.49378	301.26575	1.63302	0.0564937	0.21810004	2.7333729	21	4 14.1	21.2
417101 2005 UC_{373}	17.4	X	183.40596	180.22012	253.27837	4.37157	0.0727295	0.22372437	2.6873682	21	5 31.2	21.3
417102 2005 UH_{380}	17.5	X	190.88994	257.11291	219.54897	10.70319	0.2559505	0.22897854	2.6460997	21	7 26.9	22.3
417103 2005 UC_{383}	17.1	X	222.75490	217.62245	124.64683	3.34937	0.0942595	0.21813377	2.7330911	21	3 20.3	21.2
417104 2005 UV_{383}	16.6	X	198.42643	318.81022	60.81237	12.79091	0.1978085	0.22229564	2.6988708	21	4 13.8	21.3
417105 2005 UC_{392}	17.2	X	128.60441	354.69258	66.75421	5.21569	0.0636636	0.21518556	2.7579982	21	3 15.9	21.1
417106 2005 UW_{392}	16.8	X	160.72407	82.46498	42.39637	5.84569	0.1853469	0.23058043	2.6338300	21	7 16.8	21.2
417107 2005 UD_{396}	16.4	X	161.87869	222.95064	215.06052	12.65105	0.1654879	0.22155280	2.7049000	21	5 18.7	20.7
417108 2005 UX_{425}	16.7	X	70.05816	133.83104	41.02721	10.10603	0.2065413	0.21925893	2.7237329	21	6 14.1	20.2
417109 2005 UJ_{428}	17.2	X	137.46054	200.94987	264.71205	3.62711	0.0141184	0.22166534	2.7039844	21	5 13.1	20.9
417110 2005 UN_{428}	16.9	X	181.66381	142.55225	244.00662	5.22544	0.0144072	0.21600401	2.7510270	21	3 25.9	20.9
417111 2005 UM_{439}	17.2	X	194.63276	141.29237	263.94034	3.48508	0.1720752	0.22370356	2.6875349	21	5 6.1	21.5
417112 2005 UT_{439}	16.5	X	233.70451	24.89253	333.17385	13.06484	0.0957129	0.22538820	2.6741264	21	4 12.2	20.8
417113 2005 UR_{449}	17.0	X	43.03660	315.57838	234.97884	7.72850	0.1348477	0.21833848	2.7313825	21	5 11.7	20.0
417114 2005 UT_{452}	17.1	X	89.90795	237.32539	260.92120	3.87307	0.0594272	0.22043283	2.7140543	21	4 29.9	20.7
417115 2005 UH_{477}	17.0	X	209.68988	197.51240	234.33728	15.23858	0.2544756	0.22666488	2.6640757	21	6 18.5	21.8
417116 2005 UF_{487}	17.0	X	224.50044	95.85864	266.46577	7.22096	0.1936560	0.22514816	2.6760267	21	4 6.5	21.5
417117 2005 UW_{489}	17.2	X	203.48630	73.52863	316.29505	8.32825	0.2194889	0.22387484	2.6861640	21	4 21.3	22.0
417118 2005 UD_{490}	16.4	X	127.78574	91.53365	13.35875	15.45225	0.1443993	0.22006148	2.7171067	21	5 11.2	20.7
417119 2005 UB_{496}	16.5	X	269.92279	90.14113	246.17400	12.82256	0.1421562	0.22901118	2.6458482	21	4 23.4	20.5
417120 2005 UO_{497}	16.7	X	205.78712	244.00594	167.44041	12.84584	0.1464319	0.22694390	2.6618916	21	5 27.6	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417121 2005 UO_{498}	16.4	X	277.90847	232.64180	83.62104	13.65869	0.1857787	0.22720273	2.6598696	21	4 11.1	20.6
417122 2005 UK_{501}	16.5	X	110.77177	347.31450	97.61523	14.89580	0.1606724	0.21286861	2.7779748	21	4 12.1	20.7
417123 2005 UM_{509}	17.2	X	233.43369	297.50686	47.74744	5.85082	0.2134754	0.22485318	2.6783666	21	3 28.9	21.7
417124 2005 UR_{512}	16.3	X	29.45792	311.94520	252.46437	12.35203	0.1417630	0.21735027	2.7396553	21	5 5.7	19.4
417125 2005 UT_{512}	16.6	X	232.11913	285.67486	69.73959	12.12390	0.2101541	0.22327718	2.6909553	21	4 12.5	21.2
417126 2005 UT_{525}	16.7	X	56.57702	69.06436	61.96983	9.86932	0.0471950	0.20985251	2.8045290	21	3 11.4	20.5
417127 2005 UP_{526}	16.4	X	309.87194	242.07738	26.47030	12.50804	0.2450351	0.22347551	2.6893630	21	3 8.7	20.2
417128 2005 UC_{527}	17.9	X	179.15515	34.64122	45.20492	3.12912	0.1099454	0.22322740	2.6913554	21	6 4.1	22.1
417129 2005 VG	16.6	X	221.36091	237.97858	201.94244	12.65657	0.1588080	0.23249779	2.6193289	21	7 12.8	21.0
417130 2005 VO_{4}	16.6	X	192.87015	34.72813	70.88270	14.60353	0.2107981	0.22784779	2.6548470	21	7 20.6	21.3
417131 2005 VE_{24}	17.5	X	81.49964	111.77664	51.70128	5.33404	0.0649084	0.22175803	2.7032309	21	5 23.8	21.1
417132 2005 VW_{25}	16.8	X	255.62207	91.29809	243.54815	9.63678	0.2130123	0.22576232	2.6711714	21	3 29.7	21.2
417133 2005 VN_{38}	16.8	X	130.30536	252.49991	168.83982	4.63485	0.0640050	0.21246164	2.7815211	21	3 15.7	20.7
417134 2005 VX_{43}	17.7	X	238.53990	21.50233	37.23216	7.83232	0.1590875	0.23555675	2.5966038	21	7 6.3	21.7
417135 2005 VE_{50}	17.2	X	177.52982	171.33534	255.18571	6.20288	0.1024191	0.22386060	2.6862779	21	5 15.8	21.4
417136 2005 VM_{58}	16.9	X	59.95151	189.53894	334.16732	4.71968	0.0152449	0.22080338	2.7110170	21	4 15.6	20.6
417137 2005 VF_{70}	17.1	X	155.72752	319.31081	87.80031	5.65980	0.0714595	0.21449944	2.7638763	21	3 30.9	21.1
417138 2005 VY_{73}	16.2	X	262.18341	203.89478	79.76770	12.34401	0.1083180	0.21155464	2.7894656	21	2 20.9	20.6
417139 2005 VM_{74}	17.0	X	236.00686	171.44159	224.72561	11.22184	0.1849572	0.22701336	2.6613487	21	6 1.9	21.3
417140 2005 VF_{76}	17.1	X	186.04401	76.96707	351.14698	10.03664	0.2499899	0.22492380	2.6778060	21	5 25.4	22.1
417141 2005 VF_{81}	16.4	X	88.46938	289.82436	244.33177	11.59083	0.1191309	0.22132355	2.7067676	21	6 25.0	20.1
417142 2005 VD_{83}	16.5	X	273.16654	115.59216	212.06565	10.72328	0.2059117	0.22532658	2.6746139	21	4 10.1	20.5
417143 2005 VY_{83}	16.9	X	214.24057	357.72261	5.59161	2.84887	0.0699619	0.22018231	2.7161125	21	4 5.4	21.0
417144 2005 VE_{90}	17.1	X	231.91523	85.92804	270.60627	5.30948	0.2692846	0.22288015	2.6941501	21	4 3.2	22.0
417145 2005 VL_{93}	16.4	X	80.64600	97.43525	79.86469	15.05152	0.1420328	0.22033324	2.7148721	21	6 22.7	20.0
417146 2005 VX_{103}	16.9	X	351.20994	195.05446	52.76063	10.00733	0.1900317	0.22627625	2.6671252	21	4 22.5	19.5
417147 2005 VN_{108}	16.9	X	207.15233	337.00557	4.10978	3.70443	0.1026492	0.21343434	2.7730637	21	3 2.9	21.2
417148 2005 VV_{109}	16.7	X	188.79643	22.23964	51.09452	11.58219	0.0849575	0.22606139	2.6688149	21	6 4.7	20.8
417149 2005 VU_{111}	17.4	X	198.79075	38.80165	336.62838	2.56863	0.1114303	0.21686890	2.7437078	21	4 3.6	21.7
417150 2005 VM_{114}	16.3	X	223.12862	257.98677	62.35379	7.04641	0.0482424	0.21085100	2.7956681	21	2 26.5	20.4
417151 2005 VR_{115}	17.4	X	182.23294	214.55429	263.97098	5.43095	0.1134727	0.23012816	2.6372798	21	7 26.4	21.4
417152 2005 VP_{116}	16.9	X	164.61574	134.45091	255.68234	7.83553	0.1608013	0.21519565	2.7579119	21	3 18.9	21.4
417153 2005 VA_{125}	16.9	X	7.97009	8.53521	157.94504	4.24246	0.0722348	0.19618626	2.9333034	21	2 11.7	20.6
417154 2005 WU_{4}	17.0	X	164.45692	72.59979	7.09984	9.71783	0.2896205	0.22017970	2.7161341	21	5 24.7	22.1
417155 2005 WE_{12}	17.2	X	149.47963	338.45347	65.45959	5.10053	0.1037739	0.21337971	2.7735370	21	3 22.7	21.3
417156 2005 WM_{20}	16.2	X	269.68200	117.35686	253.57888	13.06557	0.1469580	0.22956633	2.6415809	21	6 9.4	19.8
417157 2005 WX_{21}	15.4	X	318.43840	207.32363	257.59229	9.50148	0.1094279	0.12439914	3.9742740	21	12 9.8	20.5
417158 2005 WN_{23}	16.9	X	157.72753	5.14412	48.70623	8.39515	0.1191492	0.21597214	2.7512976	21	4 13.4	21.1
417159 2005 WK_{26}	16.7	X	175.62465	121.00569	262.13311	4.92317	0.0179944	0.21238546	2.7821862	21	3 14.3	20.7
417160 2005 WO_{32}	16.7	X	209.55007	180.59647	254.58072	10.13578	0.1611345	0.22677300	2.6632288	21	6 26.9	20.9
417161 2005 WF_{35}	17.4	X	148.76947	10.75225	52.98252	0.70210	0.0602742	0.21479380	2.7613507	21	4 8.9	21.2
417162 2005 WK_{43}	16.9	X	205.71373	179.35196	196.74101	9.04925	0.2363665	0.22119909	2.7077828	21	4 10.6	21.6
417163 2005 WK_{44}	16.3	X	132.05726	86.78902	57.73251	11.49397	0.0236487	0.22727125	2.6593350	21	6 28.8	20.0
417164 2005 WO_{50}	17.4	X	259.44259	95.08428	244.08417	5.44148	0.0569610	0.22151381	2.7052175	21	4 27.3	21.1
417165 2005 WG_{51}	17.4	X	128.94252	27.32159	65.54728	4.45905	0.0623274	0.21498315	2.7597289	21	4 23.8	21.3
417166 2005 WR_{51}	17.1	X	160.02845	336.79085	70.27655	7.16779	0.0398792	0.21287562	2.7779138	21	4 2.7	21.1
417167 2005 WH_{57}	19.0	X	21.37420	125.39151	262.09492	40.45861	0.3679559	0.44155335	1.7079714	21	—	—
417168 2005 WS_{57}	16.5	X	133.76292	205.43041	261.73522	10.96496	0.1112959	0.21961182	2.7208143	21	5 21.6	20.6
417169 2005 WJ_{71}	16.1	X	205.05659	344.59017	65.47299	12.88573	0.1738916	0.22312594	2.6921712	21	5 22.6	20.5
417170 2005 WQ_{71}	16.7	X	213.40941	308.12274	49.13509	9.26862	0.3119239	0.21984085	2.7189243	21	3 27.6	21.8
417171 2005 WZ_{74}	17.8	X	186.91941	38.70945	327.40154	2.57406	0.2077238	0.21639607	2.7477031	21	3 14.5	22.5
417172 2005 WS_{77}	16.6	X	155.51585	326.98487	63.80622	7.53691	0.0607205	0.20986283	2.8044371	21	3 10.8	20.7
417173 2005 WM_{81}	17.2	X	185.00329	113.93311	268.58026	2.46169	0.1053863	0.21415908	2.7668040	21	3 29.3	21.4
417174 2005 WV_{84}	17.8	X	171.67188	237.81624	261.87491	3.43369	0.3397433	0.22604708	2.6689275	21	8 11.5	22.9
417175 2005 WB_{93}	16.4	X	228.73814	187.26725	253.73266	9.58266	0.0945792	0.23058622	2.6337860	21	7 27.6	20.3
417176 2005 WM_{94}	16.4	X	250.73616	226.70071	87.77511	6.72273	0.0654964	0.21353428	2.7721984	21	3 20.9	20.5
417177 2005 WD_{104}	15.9	X	100.42681	221.48262	242.76781	17.40225	0.1227132	0.21199180	2.7856294	21	4 5.9	20.1
417178 2005 WO_{112}	17.1	X	206.61475	52.70444	76.51383	16.65742	0.2481627	0.23199222	2.6231338	21	9 4.2	21.9
417179 2005 WW_{114}	17.0	X	188.45091	212.54239	271.65094	7.28873	0.0818477	0.22724890	2.6595094	21	8 8.9	21.0
417180 2005 WQ_{124}	17.9	X	135.75902	4.87188	67.01137	4.81416	0.0839220	0.21323007	2.7748345	21	4 8.7	21.8
417181 2005 WC_{138}	17.2	X	183.46275	325.00173	61.73147	4.54322	0.0904693	0.21617537	2.7495729	21	4 4.4	21.4
417182 2005 WX_{138}	17.4	X	96.04708	98.82478	67.68639	9.75006	0.2082279	0.21897915	2.7260524	21	7 8.2	21.4
417183 2005 WV_{139}	17.3	X	175.36067	306.26025	66.21766	2.66687	0.2422859	0.21344617	2.7729612	21	3 16.3	22.2
417184 2005 WQ_{141}	16.4	X	341.25047	112.35967	106.17373	15.83227	0.1007572	0.20429625	2.8551512	21	3 14.1	20.3
417185 2005 WB_{151}	16.7	X	187.99157	145.95989	284.37499	4.95466	0.2624966	0.22211314	2.7003489	21	5 31.8	21.5
417186 2005 WK_{154}	17.2	X	192.41376	129.42980	280.82073	2.26688	0.2602110	0.22266845	2.6958574	21	5 10.6	22.0
417187 2005 WU_{154}	16.7	X	187.28940	4.22703	71.51864	6.58401	0.0304339	0.22186696	2.7023461	21	6 7.6	20.3
417188 2005 WA_{163}	16.6	X	244.90311	151.13564	245.50369	13.96591	0.1191809	0.23003762	2.6379717	21	6 17.3	20.4
417189 2005 WV_{169}	17.0	X	178.20675	296.12258	88.85369	4.53624	0.1001818	0.21407660	2.7675146	21	3 28.9	21.2
417190 2005 WQ_{172}	17.5	X	145.57366	269.41141	177.65067	1.58239	0.2446184	0.21755076	2.7379718	21	5 19.9	22.0
417191 2005 WK_{173}	17.1	X	99.16072	352.99880	120.41369	2.98249	0.1752596	0.21092889	2.7949798	21	4 30.0	20.9
417192 2005 WT_{182}	15.2	X	192.00674	118.46583	266.73502	29.98413	0.0343954	0.21614994	2.7497885	21	3 26.2	19.9
417193 2005 WS_{186}	17.1	X	196.66048	100.02895	284.56454	4.00813	0.1331289	0.21979418	2.7193092	21	4 11.5	21.5
417194 2005 WJ_{193}	15.8	X	187.24719	183.79198	266.07504	21.21759	0.0324468	0.22990900	2.6389555	21	6 25.6	19.4
417195 2005 WB_{196}	15.9	X	177.45329	204.77973	293.41774	11.88158	0.1193540	0.22355065	2.6887603	21	8 13.5	20.3
417196 2005 WQ_{198}	17.0	X	194.55986	137.67099	269.06973	5.46687	0.0316050	0.22060647	2.7126299	21	5 8.2	20.8
417197 2005 WS_{198}	17.1	X	249.95830	23.30020	288.07092	3.71200	0.0372239	0.21336813	2.7736374	21	3 13.3	21.1
417198 2005 WM_{201}	16.4	X	176.04855	113.74114	239.31911	12.76214	0.0938481	0.21117022	2.7928500	21	2 8.2	20.9
417199 2005 WH_{208}	17.0	X	1.35262	335.12090	291.91318	2.12500	0.0461507	0.21506387	2.7590384	21	6 14.9	20.6
417200 2005 XA_{4}	16.9	X	190.36820	104.03129	265.60342	11.86690	0.2176595	0.21642730	2.7474387	21	3 16.2	21.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417201 2005 XM_{4}	19.7	X	163.25233	345.42593	81.87387	34.14581	0.0640722	0.66213203	1.3036859	21	4 3.9	21.6
417202 2005 XL_{5}	17.7	X	198.68161	99.73458	287.79006	3.80756	0.1685431	0.21918345	2.7243582	21	4 17.2	22.2
417203 2005 XL_{11}	15.9	X	66.64928	335.78868	95.57608	10.32991	0.0836408	0.20105733	2.8857327	21	1 8.1	19.4
417204 2005 XS_{39}	15.8	X	114.64236	253.13760	282.16707	13.99718	0.4021130	0.21630161	2.7485030	21	8 16.4	21.0
417205 2005 XZ_{41}	17.4	X	251.00399	310.63113	73.13852	3.35596	0.1903431	0.22786418	2.6547197	21	5 31.1	21.4
417206 2005 XC_{50}	16.6	X	118.99333	185.37965	284.11782	7.19677	0.1832378	0.21383960	2.7695590	21	5 15.9	20.9
417207 2005 XE_{58}	17.5	X	141.38704	206.41754	254.32202	3.81881	0.0793149	0.21911135	2.7249558	21	5 19.1	21.3
417208 2005 XW_{58}	17.0	X	190.32055	68.47013	283.83135	1.91833	0.2227352	0.21263819	2.7799812	21	3 1.6	21.8
417209 2005 XY_{61}	16.8	X	218.51192	36.67207	49.44095	12.97680	0.2325684	0.23040697	2.6351518	21	7 17.4	21.4
417210 2005 XV_{77}	20.6	X	269.71645	9.28228	282.25341	16.84826	0.4141978	1.41908276	0.7842675	21	—	—
417211 2005 XL_{80}	18.4	X	262.32394	143.58112	53.36778	10.89465	0.4874315	0.43433932	1.7268315	21	—	—
417212 2005 XZ_{81}	17.1	X	133.80958	215.76417	221.65255	2.59804	0.0727314	0.21332540	2.7740078	21	4 9.6	21.0
417213 2005 XY_{86}	17.4	X	106.97265	80.94523	41.10425	4.48733	0.0460788	0.21568296	2.7537562	21	4 30.6	21.1
417214 2005 XF_{102}	16.6	X	145.89332	14.08891	113.55117	10.78754	0.1352256	0.21693639	2.7431387	21	7 2.7	20.9
417215 2005 XM_{103}	16.7	X	162.04969	66.88366	113.96214	12.27423	0.1576981	0.22684006	2.6627040	21	9 29.9	21.2
417216 2005 XV_{109}	17.4	X	306.54667	147.37850	293.74277	12.52193	0.2183210	0.24026379	2.5625784	21	11 1.6	20.1
417217 2005 YS	19.6	X	158.72877	327.90114	288.61448	19.59249	0.5503243	1.64377306	0.7110631	21	—	—
417218 2005 YL_{12}	17.0	X	168.56046	306.15402	83.23878	3.48139	0.1344647	0.21121936	2.7924168	21	3 26.2	21.4
417219 2005 YT_{12}	17.1	X	71.79331	112.79148	58.42977	2.71515	0.1582618	0.21140258	2.7908031	21	6 4.9	20.7
417220 2005 YV_{24}	16.5	X	206.67789	211.29762	108.50894	16.50082	0.1390076	0.20249360	2.8720710	21	2 7.9	21.2
417221 2005 YJ_{28}	16.8	X	221.93558	301.85139	102.99825	7.16731	0.0200583	0.21816994	2.7327890	21	6 11.7	20.6
417222 2005 YW_{31}	16.9	X	179.45311	352.42045	110.33184	12.17672	0.1293508	0.22063937	2.7123603	21	7 4.3	21.3
417223 2005 YH_{34}	17.1	X	145.07011	141.80550	293.70779	3.25097	0.1845713	0.21205184	2.7851035	21	4 29.6	21.5
417224 2005 YQ_{37}	16.2	X	187.66918	127.59767	312.35314	13.58108	0.1671371	0.22075360	2.7114246	21	6 13.3	20.9
417225 2005 YO_{41}	16.5	X	177.93035	26.42374	89.15634	14.79159	0.2112332	0.22566478	2.6719410	21	7 19.7	21.1
417226 2005 YE_{47}	16.8	X	200.92320	95.92217	303.13371	11.71217	0.2006027	0.21660571	2.7459299	21	4 30.4	21.7
417227 2005 YQ_{48}	17.1	X	110.95153	29.29688	104.39428	3.16087	0.1700796	0.21260283	2.7802895	21	6 7.3	21.1
417228 2005 YA_{50}	17.3	X	164.88109	215.22720	223.70265	3.08191	0.0731295	0.21898502	2.7260037	21	5 17.7	21.1
417229 2005 YK_{52}	17.7	X	43.71337	177.55834	244.32329	2.64014	0.0260592	0.31696315	2.1304117	21	—	—
417230 2005 YW_{56}	16.8	X	228.89500	231.57923	60.41415	3.09541	0.0381360	0.20191088	2.8775943	21	1 28.6	20.9
417231 2005 YT_{57}	17.4	X	176.03805	88.29663	304.02146	2.44129	0.1417469	0.21114217	2.7930972	21	4 3.2	21.9
417232 2005 YN_{70}	16.8	X	47.46100	153.21130	71.41226	9.42592	0.0546933	0.22326450	2.6910572	21	6 26.4	20.1
417233 2005 YB_{72}	15.9	X	265.99704	128.58854	280.38941	22.80245	0.1232976	0.23090413	2.6313679	21	7 24.6	19.7
417234 2005 YM_{74}	17.5	X	188.82632	144.23750	285.87951	3.86309	0.2546161	0.22126014	2.7072847	21	6 1.3	22.3
417235 2005 YA_{77}	16.9	X	232.43343	274.73943	86.99621	8.57813	0.2298990	0.21831327	2.7315928	21	4 18.2	21.6
417236 2005 YS_{88}	17.0	X	21.95877	290.88039	288.10639	3.91952	0.0678316	0.21191062	2.7863408	21	5 10.6	20.4
417237 2005 YY_{91}	16.5	X	187.95895	132.54799	293.13545	14.22963	0.2242566	0.22057848	2.7128595	21	5 25.1	21.4
417238 2005 YL_{92}	16.9	X	68.66888	290.62692	279.44772	3.28146	0.1503632	0.21687418	2.7436633	21	7 22.2	20.5
417239 2005 YF_{110}	16.4	X	127.29765	287.31151	275.03871	11.03646	0.2182230	0.22503935	2.6768893	21	9 16.2	21.1
417240 2005 YV_{117}	17.0	X	119.17544	109.95390	305.93028	9.61444	0.1217890	0.20319103	2.8654953	21	3 1.0	21.1
417241 2005 YH_{122}	16.6	X	171.06158	105.59831	309.36206	9.80504	0.2969986	0.21549384	2.7553672	21	4 28.6	21.8
417242 2005 YY_{132}	16.2	X	80.34891	125.07322	299.57622	10.07644	0.0520439	0.19907173	2.9048897	21	1 16.1	19.8
417243 2005 YY_{156}	16.8	X	153.30152	341.87253	112.62276	9.18618	0.1932863	0.21717900	2.7410955	21	6 2.8	21.4
417244 2005 YZ_{160}	16.7	X	111.22802	8.25353	124.98413	10.05134	0.2229174	0.21342641	2.7731324	21	6 13.9	21.1
417245 2005 YN_{161}	16.6	X	235.22343	143.03380	246.26577	7.97245	0.3568441	0.22633952	2.6666281	21	5 12.1	21.6
417246 2005 YZ_{184}	16.7	X	189.17687	311.87941	111.21893	10.48122	0.2744549	0.22037075	2.7145640	21	5 26.6	21.7
417247 2005 YD_{188}	16.1	X	119.06936	231.28552	115.91078	12.77123	0.0105233	0.18929966	3.0040201	21	—	—
417248 2005 YY_{191}	17.8	X	65.65062	48.80554	322.90466	4.67144	0.1274636	0.31289814	2.1488234	21	—	—
417249 2005 YE_{204}	17.3	X	140.97892	11.11962	120.68325	4.47767	0.1429157	0.21708676	2.7418719	21	7 3.5	21.6
417250 2005 YZ_{205}	17.0	X	151.47965	250.72613	175.31034	5.03886	0.1528369	0.21192675	2.7861995	21	4 24.1	21.4
417251 2005 YS_{207}	17.4	X	141.55938	88.40082	358.92154	1.62980	0.1045286	0.21159100	2.7891460	21	5 4.7	21.6
417252 2005 YN_{217}	16.9	X	38.25660	132.74915	30.67824	0.69656	0.1232155	0.20511302	2.8475666	21	3 27.1	19.9
417253 2005 YS_{222}	16.0	X	88.40509	219.29411	276.58581	12.36127	0.1371372	0.21311885	2.7757998	21	5 5.4	20.0
417254 2005 YW_{227}	16.7	X	12.36909	78.71281	107.80082	13.93485	0.1467923	0.20405001	2.8574478	21	3 19.0	20.1
417255 2005 YQ_{229}	16.1	X	142.94994	109.85825	308.35274	6.81124	0.0437228	0.20930325	2.8094334	21	3 21.3	20.2
417256 2005 YA_{238}	16.3	X	61.54690	128.27798	125.68314	18.43362	0.1372325	0.22343159	2.6897154	21	9 13.7	20.1
417257 2005 YD_{245}	17.2	X	46.37087	43.71644	112.02013	7.72226	0.0565377	0.20607669	2.8386824	21	3 28.7	20.9
417258 2005 YK_{245}	16.7	X	259.72357	291.67086	87.12072	7.44949	0.0597927	0.22214330	2.7001045	21	6 20.0	20.3
417259 2005 YM_{258}	17.3	X	189.93849	333.15834	110.65648	10.42789	0.1712253	0.22051704	2.7133633	21	6 20.4	21.8
417260 2005 YN_{260}	16.7	X	136.54411	116.18003	109.54758	13.32883	0.2635491	0.23032641	2.6357662	21	11 3.5	21.6
417261 2005 YX_{260}	17.1	X	168.11844	337.17372	142.76070	5.62327	0.0594059	0.22100815	2.7093421	21	7 13.1	21.1
417262 2005 YG_{271}	17.0	X	164.01581	127.50613	286.97118	7.59174	0.1500002	0.21122890	2.7923326	21	4 17.1	21.5
417263 2005 YV_{286}	15.9	X	40.37503	292.87996	278.07240	13.41181	0.1056699	0.21729639	2.7401082	21	6 1.9	19.2
417264 2006 AT_{2}	17.2	X	141.24824	39.05648	144.12130	21.18017	0.5999685	0.22114185	2.7082500	21	9 22.8	23.3
417265 2006 AQ_{6}	16.1	X	60.00293	124.98178	325.85087	9.95063	0.1062319	0.19892859	2.9062830	21	1 26.9	19.6
417266 2006 AD_{15}	17.7	X	115.31038	49.72111	298.33431	5.46683	0.0915040	0.31615865	2.1340242	21	—	—
417267 2006 AA_{25}	16.6	X	152.66745	76.28507	290.18404	13.63566	0.1651045	0.20331223	2.8643564	21	2 9.2	21.2
417268 2006 AM_{29}	16.8	X	101.15492	86.38419	61.69405	9.82796	0.2063470	0.21235344	2.7824659	21	6 18.8	20.9
417269 2006 AQ_{31}	16.5	X	193.65020	130.85029	313.72437	12.52882	0.2289914	0.22258887	2.6964999	21	6 24.3	21.3
417270 2006 AG_{32}	16.0	X	166.22240	155.86299	335.64499	15.98919	0.2470718	0.22122850	2.7075428	21	8 2.3	20.9
417271 2006 AQ_{32}	17.3	X	135.83514	337.65030	181.63325	2.43884	0.2041375	0.21963281	2.7206410	21	8 5.8	21.7
417272 2006 AU_{34}	16.7	X	176.63338	292.04628	96.44503	2.71211	0.0884130	0.20918083	2.8105293	21	3 30.6	20.9
417273 2006 AX_{42}	16.4	X	155.20260	236.02543	135.95363	10.00430	0.0236170	0.19859540	2.9095329	21	2 9.4	20.4
417274 2006 AL_{44}	13.8	X	243.23231	30.07036	328.66250	10.90919	0.0418969	0.08450253	5.1430758	21	5 10.9	20.9
417275 2006 AO_{47}	17.3	X	175.67490	28.98629	75.51044	6.26335	0.0904229	0.22096700	2.7096785	21	7 2.4	21.4
417276 2006 AV_{50}	16.4	X	27.89059	127.09096	117.92551	5.85402	0.0600344	0.21911362	2.7249370	21	6 25.8	19.6
417277 2006 AJ_{57}	16.8	X	217.16991	337.41850	117.04506	13.77040	0.1678841	0.22676148	2.6633191	21	7 29.4	20.9
417278 2006 AC_{62}	16.7	X	166.45741	96.59433	267.71864	4.96153	0.1679106	0.20326532	2.8647970	21	2 21.2	21.4
417279 2006 AT_{65}	17.1	X	171.03087	289.33027	89.22098	3.37959	0.0732763	0.20403541	2.8575841	21	3 12.5	21.3
417280 2006 AR_{67}	16.1	X	314.33465	22.73045	280.68539	5.33961	0.0774590	0.21498777	2.7596894	21	5 20.8	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417281 2006 AG_{90}	16.7	X	207.06624	152.64950	267.68448	10.63030	0.1169338	0.22333578	2.6904846	21	6 7.9	20.8
417282 2006 AZ_{96}	15.7	X	200.51023	0.42921	105.64921	32.69619	0.1061027	0.22785614	2.6547821	21	7 30.8	19.9
417283 2006 AL_{97}	15.5	X	331.89267	39.80791	78.10271	18.40290	0.0504402	0.18557510	3.0440813	21	—	—
417284 2006 AC_{105}	16.1	X	45.68036	120.01984	347.41348	9.38196	0.0460531	0.19058158	2.9905342	21	1 26.2	20.1
417285 2006 BH_{2}	16.3	X	51.10650	246.88948	310.68917	11.62058	0.1345100	0.20980859	2.8049204	21	6 4.6	19.9
417286 2006 BS_{3}	17.0	X	326.21874	97.05637	116.17702	2.33607	0.2355660	0.19652461	2.9299357	21	1 20.0	20.8
417287 2006 BH_{5}	16.8	X	139.45015	171.14016	302.41758	7.05438	0.1853486	0.21535947	2.7565131	21	6 11.9	21.3
417288 2006 BB_{6}	15.7	X	54.91901	277.64011	288.90876	11.28211	0.2194807	0.21090084	2.7952276	21	7 8.4	18.9
417289 2006 BK_{8}	17.0	X	146.91041	0.94885	131.27906	6.29194	0.1152791	0.21727625	2.7402775	21	7 8.2	21.1
417290 2006 BJ_{30}	16.6	X	133.43697	1.98130	123.10696	9.98562	0.1108800	0.21400306	2.7681485	21	6 15.2	20.8
417291 2006 BQ_{45}	16.4	X	107.39287	253.16444	323.24929	11.77303	0.1746847	0.21922408	2.7240216	21	9 13.9	20.7
417292 2006 BP_{57}	17.0	X	81.25583	188.37382	326.01104	7.69040	0.0751103	0.20963589	2.8064606	21	5 11.0	20.9
417293 2006 BV_{63}	17.1	X	46.91897	272.04409	297.38315	2.41858	0.0279190	0.21341986	2.7731891	21	6 1.7	20.8
417294 2006 BK_{66}	16.7	X	126.44933	64.19074	348.44442	2.73754	0.1628920	0.20345532	2.8630132	21	3 13.7	20.9
417295 2006 BB_{69}	16.7	X	46.81570	147.46752	77.64819	4.75897	0.0358441	0.21508755	2.7588359	21	6 24.1	20.3
417296 2006 BH_{69}	17.1	X	276.84471	333.33760	15.86573	5.15427	0.0403868	0.21533231	2.7567450	21	6 5.1	20.8
417297 2006 BA_{72}	16.4	X	60.65770	214.80686	342.57557	9.04801	0.1510776	0.21055182	2.7983158	21	6 23.7	20.0
417298 2006 BE_{80}	16.4	X	59.47911	80.18888	128.82422	12.31431	0.1743562	0.20895166	2.8125840	21	7 11.1	19.9
417299 2006 BT_{80}	15.8	X	96.44595	353.03591	140.41501	15.92075	0.0797866	0.20533944	2.8454730	21	5 13.3	20.0
417300 2006 BA_{82}	15.6	X	158.53194	26.17676	349.66962	11.48154	0.2072805	0.19810325	2.9143496	21	3 5.7	20.4
417301 2006 BM_{86}	16.6	X	129.56851	98.09860	124.19526	13.68677	0.2184750	0.22567276	2.6718780	21	10 23.9	21.4
417302 2006 BV_{90}	16.4	X	34.79621	30.27275	116.33378	13.69192	0.2027216	0.20035766	2.8924470	21	3 7.2	19.5
417303 2006 BE_{97}	16.2	X	169.81975	343.46845	341.28337	10.76308	0.0339987	0.18681047	3.0306462	21	1 5.4	20.8
417304 2006 BS_{97}	16.6	X	133.35257	354.56729	91.75837	4.88272	0.0726732	0.20977126	2.8052531	21	4 23.3	20.6
417305 2006 BA_{103}	13.5	X	319.21505	154.55222	145.80311	34.95483	0.0900252	0.08377394	5.1728524	21	6 7.2	20.5
417306 2006 BT_{109}	18.2	X	203.17550	234.98833	53.06930	2.15258	0.0866121	0.31773611	2.1269552	21	—	—
417307 2006 BB_{111}	16.3	X	145.08960	116.32955	329.03225	13.78745	0.0551343	0.20921459	2.8102270	21	4 25.3	20.7
417308 2006 BC_{113}	17.4	X	135.59594	64.64749	358.86280	2.07487	0.1621972	0.20613646	2.8381336	21	4 4.9	21.8
417309 2006 BR_{120}	17.7	X	128.73210	101.74575	166.85278	6.76916	0.1408360	0.29802136	2.2197520	21	12 19.8	21.1
417310 2006 BM_{133}	16.3	X	194.69493	87.34879	166.17345	8.88494	0.1555196	0.17597288	3.1538344	21	—	—
417311 2006 BF_{146}	17.0	X	107.05535	143.21304	27.97184	7.54403	0.1569375	0.21480866	2.7612233	21	7 21.9	21.2
417312 2006 BS_{146}	16.3	X	191.91980	21.67745	332.32240	9.22673	0.0649122	0.20179714	2.8786755	21	3 2.2	20.6
417313 2006 BV_{153}	18.4	X	275.14806	58.90292	125.84300	4.88422	0.0317252	0.31220539	2.1520009	21	—	—
417314 2006 BR_{154}	16.4	X	24.23645	68.55635	116.30625	4.23478	0.0957225	0.20141678	2.8822985	21	4 3.1	19.9
417315 2006 BA_{163}	17.1	X	106.32197	141.23723	321.01384	4.55586	0.0307899	0.20447845	2.8534550	21	3 31.8	21.1
417316 2006 BX_{163}	16.2	X	36.70865	321.86262	319.43840	9.53562	0.0472902	0.22282159	2.6946221	21	8 26.0	19.6
417317 2006 BL_{168}	17.9	X	20.94457	89.93455	331.57038	5.14769	0.0485381	0.30848963	2.1692470	21	—	—
417318 2006 BA_{169}	16.2	X	142.52632	239.10955	153.23223	14.88408	0.2199750	0.19947004	2.9010214	21	3 13.1	20.9
417319 2006 BT_{181}	16.5	X	129.50203	31.50079	332.53937	9.40065	0.1045517	0.19067533	2.9895538	21	1 14.1	20.9
417320 2006 BU_{228}	16.7	X	151.20348	67.22256	328.99508	10.70666	0.0463806	0.20262176	2.8708599	21	3 5.9	20.9
417321 2006 BJ_{247}	17.4	X	157.38752	277.14393	329.84956	6.90172	0.0792105	0.30043293	2.2078574	21	12 24.3	20.4
417322 2006 BU_{282}	16.2	X	136.26778	331.58835	351.06534	9.91465	0.1360661	0.18455178	3.0553236	21	—	—
417323 2006 BX_{283}	17.2	X	58.65290	90.78002	59.24689	1.91770	0.1636785	0.20377615	2.8600073	21	4 18.1	20.3
417324 2006 CE_{14}	13.7	X	324.43828	144.54223	143.29916	21.38601	0.0255495	0.08389668	5.1678058	21	6 2.2	20.7
417325 2006 CJ_{22}	17.1	X	183.28940	33.11747	41.04361	2.79082	0.0371891	0.21180298	2.7872847	21	5 31.8	21.1
417326 2006 CJ_{24}	17.2	X	167.69187	94.86220	326.09157	4.42240	0.1675048	0.21220136	2.7837952	21	4 30.9	21.8
417327 2006 CZ_{29}	13.6	X	175.41615	118.36446	313.29400	17.77436	0.0438657	0.08346158	5.1857510	21	5 22.8	20.9
417328 2006 CW_{46}	16.4	X	111.52882	264.69478	127.15011	10.64300	0.0203134	0.19313174	2.9641507	21	1 12.2	20.5
417329 2006 CH_{51}	16.6	X	115.95034	277.81799	139.69546	6.78688	0.0842183	0.20030412	2.8929625	21	2 26.8	20.5
417330 2006 DB_{3}	16.6	X	233.80172	274.38089	336.56353	6.63126	0.0993409	0.18412184	3.0600781	21	—	—
417331 2006 DO_{5}	17.0	X	139.47244	265.63894	161.23825	2.29231	0.0522016	0.20345738	2.8629938	21	4 2.6	21.1
417332 2006 DQ_{17}	16.3	X	351.48035	88.91520	124.28139	7.28578	0.0126162	0.20131320	2.8832871	21	3 27.1	20.3
417333 2006 DY_{21}	17.0	X	187.39969	1.35549	43.61227	2.61521	0.0989531	0.20696710	2.8305348	21	4 30.3	21.3
417334 2006 DX_{44}	16.8	X	180.02263	313.87282	121.97382	4.74671	0.0758251	0.21080386	2.7960848	21	5 31.9	21.0
417335 2006 DQ_{59}	15.8	X	146.31737	343.63387	353.81122	11.31029	0.0684052	0.18177497	3.0863606	21	—	—
417336 2006 DZ_{69}	16.5	X	328.43442	134.33725	69.33263	1.35354	0.1083187	0.19069581	2.9893398	21	1 31.4	20.4
417337 2006 DR_{79}	17.7	X	161.08217	309.10100	169.70709	7.07367	0.2825640	0.21661286	2.7458695	21	7 10.0	22.7
417338 2006 DE_{88}	17.2	X	124.27685	1.77245	161.65204	9.41452	0.2766257	0.21354443	2.7721105	21	8 4.9	21.9
417339 2006 DL_{96}	17.6	X	135.63491	268.69572	355.91960	6.52047	0.1240020	0.29390905	2.2404095	21	12 20.6	21.0
417340 2006 DW_{108}	16.5	X	86.72766	76.13876	347.46654	15.03586	0.0869179	0.19000348	2.9965970	21	2 2.9	20.6
417341 2006 DW_{112}	16.2	X	144.43570	308.76022	342.53102	11.23595	0.1175256	0.17390853	3.1787433	21	—	—
417342 2006 DR_{122}	16.6	X	206.52586	357.99602	102.63161	13.44315	0.2248206	0.22347980	2.6893286	21	7 24.4	21.2
417343 2006 DP_{133}	17.1	X	155.11052	345.84823	104.09912	3.86083	0.1580430	0.21045996	2.7991300	21	5 27.2	21.5
417344 2006 DR_{144}	17.0	X	52.39565	130.62683	2.07792	3.34420	0.0855199	0.19705152	2.9247103	21	3 7.9	20.4
417345 2006 DE_{154}	16.2	X	187.54971	60.13185	186.39428	18.76588	0.1326698	0.17139612	3.2097316	21	12 26.9	21.6
417346 2006 DJ_{157}	18.3	X	293.66250	95.57348	58.55610	2.08090	0.0828418	0.30750378	2.1738809	21	—	—
417347 2006 DR_{182}	17.8	X	24.35101	70.77112	340.87478	5.57373	0.1061891	0.30584582	2.1817301	21	—	—
417348 2006 DD_{201}	15.7	X	122.96786	10.12216	77.44324	13.10311	0.0477881	0.20406595	2.8572990	21	4 14.2	19.9
417349 2006 EP_{18}	16.5	X	203.31702	300.55675	357.57066	12.05790	0.0275155	0.18552744	3.0446026	21	1 12.3	21.1
417350 2006 EY_{18}	16.8	X	60.75448	123.44534	356.91482	11.85630	0.1071795	0.19516672	2.9435101	21	3 8.0	20.3
417351 2006 EM_{30}	16.6	X	2.23659	122.65551	5.85208	10.49992	0.0127905	0.18554134	3.0444505	21	—	—
417352 2006 EO_{35}	16.1	X	96.67934	29.77053	3.32799	15.44799	0.2180007	0.18729224	3.0254469	21	1 30.2	20.4
417353 2006 EF_{41}	16.2	X	101.36892	57.19860	349.61387	9.31276	0.0905587	0.18855258	3.0119499	21	1 31.2	20.3
417354 2006 EB_{57}	13.8	X	174.49601	199.89476	247.56918	3.99927	0.0145545	0.08121470	5.2809607	21	6 11.3	20.8
417355 2006 EY_{67}	16.3	X	46.90877	61.35380	333.78536	10.23568	0.0310825	0.18050808	3.1007848	21	—	—
417356 2006 FN_{13}	17.8	X	236.06191	356.01119	171.75535	3.41592	0.0785106	0.29638027	2.2279385	21	12 15.7	20.3
417357 2006 FD_{17}	18.2	X	257.54552	169.50151	18.05845	2.13139	0.1109719	0.30356185	2.1926598	21	—	—
417358 2006 FQ_{21}	16.2	X	169.07780	305.61511	4.13449	10.85654	0.1017095	0.18062069	3.0994958	21	—	—
417359 2006 FO_{28}	16.3	X	20.03435	140.49436	36.16596	11.16770	0.0258329	0.19186874	2.9771444	21	3 20.6	20.4
417360 2006 FY_{28}	16.1	X	218.72672	276.50715	31.65708	16.94483	0.1123321	0.18355013	3.0664290	21	2 13.9	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417361 2006 FT_{32}	16.3	X	187.12094	231.45830	53.30473	5.45114	0.1480701	0.17297962	3.1901131	21	—	—
417362 2006 FZ_{43}	16.5	X	133.01381	47.98263	125.39026	9.31410	0.1295731	0.21610930	2.7501333	21	8 17.6	20.7
417363 2006 FN_{53}	16.4	X	307.77488	27.56403	165.19377	1.68138	0.1878107	0.18242440	3.0790312	21	—	—
417364 2006 FF_{55}	16.7	X	351.71534	317.69490	189.27271	14.32169	0.0943705	0.18614562	3.0378582	21	—	—
417365 2006 GZ_{1}	15.8	X	240.18712	212.79229	47.71346	10.28278	0.0557604	0.18340414	3.0680560	21	1 5.9	20.5
417366 2006 GK_{2}	15.8	X	258.52719	193.40738	28.48557	14.98500	0.1749438	0.17725929	3.1385572	21	—	—
417367 2006 GD_{26}	17.6	X	54.52105	337.52212	39.53143	7.19777	0.1220857	0.29802574	2.2197302	21	—	—
417368 2006 GL_{27}	16.2	X	277.75761	160.59337	50.68885	6.18638	0.0876702	0.17879287	3.1205843	21	—	—
417369 2006 GD_{30}	16.2	X	308.84245	141.98133	42.70182	8.37059	0.1298974	0.18163805	3.0879114	21	—	—
417370 2006 GS_{35}	15.3	X	203.95577	272.83224	19.06837	18.41922	0.2836152	0.17685249	3.1433683	21	1 10.9	21.3
417371 2006 GH_{39}	17.0	X	257.15298	85.01664	88.94584	22.93570	0.2360897	0.30125596	2.2038344	21	—	—
417372 2006 GD_{47}	16.5	X	298.50255	30.13462	200.64879	3.48037	0.0563996	0.18721613	3.0262668	21	2 2.3	20.8
417373 2006 GJ_{55}	16.2	X	182.74324	260.48397	33.33234	12.10459	0.0373009	0.17644412	3.1482165	21	—	—
417374 2006 HL_{21}	16.6	X	347.76161	18.88894	140.91255	4.03615	0.0841949	0.18388800	3.0626718	21	1 7.6	20.5
417375 2006 HY_{23}	16.1	X	342.69402	129.51524	51.64811	9.89649	0.0898764	0.18508604	3.0494413	21	1 29.2	20.2
417376 2006 HJ_{29}	16.1	X	126.49351	271.12776	44.74622	19.01606	0.0870117	0.16889231	3.2413764	21	—	—
417377 2006 HL_{32}	15.6	X	290.11960	261.81192	315.84856	16.01082	0.1238888	0.18335644	3.0685881	21	1 3.5	20.3
417378 2006 HB_{53}	15.5	X	304.44265	97.28383	98.41277	10.67415	0.0494406	0.18148208	3.0896804	21	1 1.5	19.8
417379 2006 HS_{55}	15.9	X	272.88845	139.71639	64.61395	18.06466	0.1818819	0.17740386	3.1368518	21	—	—
417380 2006 HM_{57}	15.8	X	218.34457	169.46412	95.39112	7.08936	0.1174455	0.17495715	3.1660292	21	—	—
417381 2006 HR_{57}	17.2	X	131.30625	216.91739	39.38126	5.89494	0.1406675	0.28860896	2.2677552	21	12 4.4	20.6
417382 2006 HY_{59}	17.1	X	115.90979	174.90805	105.77079	7.61022	0.1169466	0.28882848	2.2666060	21	12 20.5	20.5
417383 2006 HZ_{67}	15.8	X	44.06859	354.81250	42.95639	11.41403	0.0743903	0.16831262	3.2488146	21	—	—
417384 2006 HR_{68}	16.1	X	259.42087	352.45886	207.51583	11.65035	0.0704580	0.17208466	3.2011641	21	—	—
417385 2006 HR_{71}	15.9	X	173.31873	240.24410	75.50636	12.72033	0.0612733	0.17561056	3.1581709	21	1 1.2	20.6
417386 2006 HP_{75}	16.0	X	80.91274	280.42854	133.34748	11.33486	0.0462508	0.17693055	3.1424437	21	1 7.5	20.3
417387 2006 HK_{93}	15.7	X	343.89164	251.94724	212.70730	16.46411	0.2543248	0.17482130	3.1676691	21	—	—
417388 2006 HC_{94}	16.0	X	71.25469	245.12053	188.14974	15.97670	0.2113334	0.18075589	3.0979500	21	2 3.6	20.0
417389 2006 HU_{100}	17.4	X	166.63816	125.34451	98.87225	4.73726	0.0733374	0.28926903	2.2643041	21	12 3.4	20.3
417390 2006 HA_{108}	16.3	X	200.34272	214.72984	76.12126	7.72043	0.0709236	0.17690054	3.1427990	21	—	—
417391 2006 HB_{115}	16.0	X	81.82283	44.33002	43.86710	10.84913	0.0829157	0.18743454	3.0239154	21	2 27.9	20.2
417392 2006 HK_{115}	16.2	X	194.49474	234.27624	45.66299	10.09814	0.0567750	0.17484835	3.1673424	21	—	—
417393 2006 HW_{116}	17.8	X	115.22721	45.22726	226.11854	5.41557	0.1016250	0.28733766	2.2744393	21	12 7.1	21.0
417394 2006 HY_{118}	17.9	X	226.24362	22.49370	193.47644	9.66623	0.0456963	0.29959155	2.2119892	21	—	—
417395 2006 HL_{122}	15.3	X	223.26199	152.86211	105.69020	28.92503	0.1677870	0.17523138	3.1627252	21	—	—
417396 2006 HM_{134}	16.6	X	136.56906	213.03166	188.44156	14.65734	0.1161113	0.19341298	2.9612766	21	3 4.9	21.2
417397 2006 HE_{149}	15.9	X	32.88281	231.61859	237.55722	21.99084	0.1136547	0.18024046	3.1038533	21	1 5.9	20.1
417398 2006 HC_{154}	15.9	X	260.80903	296.94798	58.76303	9.94197	0.1510237	0.19812181	2.9141676	21	5 11.9	20.3
417399 2006 HD_{154}	16.4	X	298.92406	116.72601	45.83613	11.58584	0.0909439	0.17493675	3.1662754	21	—	—
417400 2006 HG_{154}	15.5	X	216.75635	210.78809	74.29583	12.86187	0.0293743	0.17849191	3.1240911	21	1 11.1	20.1
417401 2006 JT_{3}	15.8	X	37.16149	230.50425	214.25141	10.05476	0.0923643	0.17844085	3.1246870	21	—	—
417402 2006 JO_{5}	17.0	X	58.22781	127.35189	39.38422	6.11615	0.1490199	0.19731363	2.9221197	21	5 7.9	20.4
417403 2006 JA_{10}	16.3	X	215.74066	246.94176	6.94582	1.57664	0.0609629	0.17238392	3.1974582	21	—	—
417404 2006 JC_{12}	17.6	X	93.98631	177.92934	93.49840	7.36641	0.1872429	0.28210817	2.3024610	21	11 21.7	21.2
417405 2006 JR_{14}	18.1	X	354.46943	293.12341	12.46515	2.29802	0.2148846	0.26892249	2.3771211	21	8 1.4	19.5
417406 2006 JO_{21}	16.1	X	332.48383	80.23404	102.05727	11.13632	0.0174151	0.18102975	3.0948249	21	1 24.6	20.5
417407 2006 JF_{30}	15.8	X	143.90479	298.93072	58.79870	10.88409	0.0711288	0.17911455	3.1168470	21	1 21.0	20.5
417408 2006 JT_{31}	16.2	X	277.88990	82.00593	117.38158	5.12490	0.0903522	0.17520086	3.1630926	21	—	—
417409 2006 JY_{34}	16.7	X	110.08191	254.01603	230.72757	4.91396	0.0343798	0.19712181	2.9240150	21	5 7.8	20.6
417410 2006 JN_{35}	16.2	X	291.81030	149.88821	70.66788	14.72153	0.1984777	0.18088230	3.0965066	21	—	—
417411 2006 JG_{39}	16.1	X	322.69829	172.20235	68.13195	15.34896	0.0479088	0.18833693	3.0142486	21	3 27.3	20.5
417412 2006 JM_{40}	15.6	X	56.12571	41.85180	56.41256	16.13632	0.0923804	0.18429271	3.0581864	21	2 6.0	19.8
417413 2006 JF_{48}	16.0	X	248.79302	176.70957	55.26022	16.89576	0.1365227	0.17614880	3.1517343	21	—	—
417414 2006 JP_{53}	16.2	X	301.06475	138.24814	74.32651	10.92539	0.1183677	0.18028802	3.1033075	21	1 9.0	20.7
417415 2006 JD_{54}	17.0	X	149.19686	197.85268	84.91493	8.34162	0.1453694	0.29352379	2.2423695	21	—	—
417416 2006 KV_{4}	17.5	X	309.35873	268.01258	65.03806	7.58331	0.1331706	0.26612634	2.3937428	21	6 13.7	20.2
417417 2006 KM_{11}	17.8	X	163.14708	215.90585	64.09692	6.14864	0.1620598	0.29537638	2.2329836	21	—	—
417418 2006 KX_{18}	17.5	X	6.28272	139.42885	167.86499	13.37781	0.2659265	0.27100473	2.3649291	21	9 14.5	18.6
417419 2006 KL_{21}	20.8	X	101.14673	214.21157	117.20828	9.35548	0.1273235	0.75069616	1.1990204	21	—	—
417420 2006 KK_{36}	15.9	X	131.95442	253.33567	126.02100	11.09266	0.0232659	0.18252168	3.0779372	21	1 24.4	20.3
417421 2006 KF_{37}	15.3	X	222.08903	174.25951	89.63876	17.90406	0.0615503	0.17697057	3.1419699	21	—	—
417422 2006 KZ_{42}	17.4	X	355.53070	77.90943	241.67457	12.02173	0.3025248	0.26786246	2.3833883	21	8 27.6	18.8
417423 2006 KJ_{43}	16.5	X	280.62508	85.81248	96.19377	2.46575	0.1294385	0.17299009	3.1899844	21	—	—
417424 2006 KC_{47}	17.9	X	24.35888	224.07799	98.83055	3.42824	0.2381457	0.27543148	2.3395213	21	11 13.5	20.2
417425 2006 KQ_{49}	16.5	X	305.19330	357.22781	204.96126	4.71407	0.1078867	0.18041066	3.1019009	21	1 1.9	21.0
417426 2006 KS_{50}	18.4	X	20.51281	113.50012	218.03398	5.06397	0.1895739	0.27779919	2.3262090	21	11 10.9	20.8
417427 2006 KD_{53}	15.6	X	35.12379	66.12379	72.56611	22.83436	0.1014408	0.18551574	3.0447306	21	3 3.5	19.9
417428 2006 KY_{59}	16.3	X	139.94467	237.18732	197.31084	10.10117	0.0945788	0.19108976	2.9852298	21	4 18.6	20.6
417429 2006 KG_{60}	15.8	X	72.49400	319.80583	101.46333	11.56638	0.0864313	0.17585753	3.1552134	21	1 10.4	19.9
417430 2006 KK_{68}	17.4	X	144.57609	225.40797	53.14792	7.66385	0.1145674	0.29265510	2.2468047	21	—	—
417431 2006 KW_{70}	15.8	X	273.66292	132.17891	89.80706	9.67631	0.0258031	0.17720695	3.1391751	21	—	—
417432 2006 KL_{71}	18.0	X	12.29937	154.44338	153.69740	5.55916	0.1997017	0.27134456	2.3629542	21	9 21.4	19.9
417433 2006 KM_{73}	17.6	X	357.35026	178.58130	174.60863	9.39786	0.2280856	0.27529842	2.3402751	21	11 7.0	19.4
417434 2006 KP_{73}	15.9	X	45.60047	348.00606	101.93154	17.47631	0.0596782	0.17642557	3.1484372	21	1 5.9	20.1
417435 2006 KQ_{75}	15.7	X	186.74369	151.61834	141.33027	17.26165	0.0548388	0.17527704	3.1621759	21	—	—
417436 2006 KE_{80}	16.1	X	83.68133	210.66368	206.20636	11.41138	0.0647890	0.17716906	3.1396227	21	1 14.6	20.6
417437 2006 KD_{81}	17.9	X	134.08730	103.47632	155.82191	5.05446	0.1375633	0.28749395	2.2736149	21	12 11.9	21.5
417438 2006 KE_{85}	15.5	X	264.98116	154.79142	92.70858	15.33921	0.2217729	0.17786154	3.1314683	21	1 3.4	20.7
417439 2006 KS_{91}	15.8	X	134.84320	294.49935	66.20567	13.84560	0.0719170	0.17630666	3.1498526	21	1 14.2	20.5
417440 2006 KJ_{95}	15.6	X	222.77559	169.26241	96.54256	10.85069	0.0721228	0.17433979	3.1734990	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417441 2006 KG_{100}	17.8	X	259.18856	289.91305	279.95474	5.80527	0.2158160	0.30455306	2.1878997	21	—	—
417442 2006 KU_{101}	17.7	X	19.03805	150.16508	175.42237	7.68444	0.2525814	0.27421016	2.3464629	21	11 11.9	20.1
417443 2006 KX_{119}	15.9	X	229.63423	219.24028	135.74391	10.34943	0.0348573	0.19131166	2.9829210	21	4 21.8	20.3
417444 2006 OE_{2}	18.4	X	126.02242	108.76158	114.25356	42.04196	0.1911773	0.40802688	1.8002944	21	11 24.0	22.1
417445 2006 OE_{11}	16.5	X	48.58577	324.91957	313.13878	14.27087	0.0863473	0.26823785	2.3811642	21	9 12.7	19.6
417446 2006 OZ_{11}	16.8	X	41.06666	333.77798	316.58308	10.19789	0.2388591	0.26761240	2.3848729	21	10 15.6	19.8
417447 2006 PQ_{5}	17.3	X	301.52355	31.85508	356.27991	3.56363	0.2699622	0.26196662	2.4190160	21	7 31.4	19.7
417448 2006 PM_{6}	17.2	X	340.40601	350.60965	354.89875	10.66207	0.2712057	0.26416076	2.4056024	21	9 2.6	18.3
417449 2006 PR_{18}	17.9	X	36.20663	258.02369	87.32787	2.26218	0.2119703	0.27503133	2.3417899	21	12 25.2	20.7
417450 2006 PM_{25}	16.0	X	337.90781	285.75130	328.82167	11.82541	0.3002699	0.18676114	3.0311799	21	3 19.4	19.4
417451 2006 PP_{43}	16.1	X	34.36354	264.47247	67.29774	22.15829	0.2813032	0.26876541	2.3780472	21	12 12.2	19.2
417452 2006 QE_{13}	17.0	X	85.72009	187.78471	81.50258	7.65449	0.1152181	0.27179417	2.3603475	21	11 3.2	20.3
417453 2006 QJ_{14}	18.0	X	338.74142	293.33157	22.85589	2.44537	0.2263533	0.26040492	2.4286779	21	7 4.3	19.8
417454 2006 QL_{14}	17.2	X	313.55131	357.92026	355.58291	3.81534	0.2497588	0.26004976	2.4308887	21	7 3.4	19.6
417455 2006 QX_{15}	17.4	X	336.83555	319.02310	31.70182	2.17810	0.2046087	0.26377490	2.4079478	21	9 2.5	19.1
417456 2006 QT_{32}	17.5	X	352.21898	124.83212	239.21915	3.40876	0.2526983	0.26687762	2.3892483	21	11 10.5	19.1
417457 2006 QX_{34}	18.0	X	310.98031	316.26932	23.03033	3.18111	0.1989922	0.25761168	2.4462022	21	6 15.0	20.4
417458 2006 QN_{35}	17.5	X	319.14544	101.70373	261.33526	1.24679	0.2229428	0.26104123	2.4247296	21	8 4.6	19.2
417459 2006 QT_{50}	16.8	X	313.70494	17.57644	16.69536	6.31579	0.1899592	0.26273146	2.4143191	21	9 20.5	18.8
417460 2006 QB_{51}	17.5	X	11.69063	322.23070	339.41671	10.24948	0.2522463	0.26403123	2.4063891	21	9 13.1	19.1
417461 2006 QX_{54}	17.6	X	87.00774	193.21498	84.81277	3.68096	0.2177053	0.27626038	2.3348392	21	11 24.1	21.1
417462 2006 QH_{55}	17.1	X	312.42936	73.39869	332.71413	12.13533	0.4071377	0.26344606	2.4099512	21	8 24.7	18.0
417463 2006 QD_{59}	17.4	X	326.41467	55.09999	310.65126	4.34154	0.2502065	0.26350423	2.4095965	21	8 24.1	18.7
417464 2006 QY_{64}	18.2	X	318.39046	40.09843	332.72858	2.70611	0.2183786	0.26214801	2.4179000	21	8 20.9	20.1
417465 2006 QW_{76}	17.7	X	311.87581	292.79984	140.79391	2.94440	0.1712129	0.27041106	2.3683893	21	11 21.9	19.7
417466 2006 QC_{92}	17.5	X	335.39354	352.51953	316.07799	4.11818	0.1925834	0.25867241	2.4395102	21	6 17.1	19.5
417467 2006 QN_{99}	17.2	X	39.21505	115.85221	173.43683	12.80869	0.1775917	0.26512547	2.3997633	21	10 8.4	19.9
417468 2006 QT_{106}	17.4	X	317.75296	194.46947	196.33837	4.07727	0.2414052	0.26379748	2.4078104	21	9 14.9	18.9
417469 2006 QU_{128}	17.1	X	355.67995	212.26364	165.23582	2.38561	0.2436638	0.26814032	2.3817416	21	12 9.9	19.0
417470 2006 QK_{146}	17.8	X	266.50386	57.38731	346.59012	9.09003	0.2333831	0.25550826	2.4596091	21	7 9.8	21.4
417471 2006 QJ_{183}	17.9	X	353.05173	61.01004	270.60828	1.21044	0.1340058	0.26148181	2.4220051	21	9 6.6	20.0
417472 2006 RZ_{7}	17.7	X	325.05000	149.55337	175.23987	1.19594	0.2033500	0.25676269	2.4515915	21	6 19.2	19.8
417473 2006 RD_{21}	18.2	X	332.07604	95.82847	220.21356	0.61382	0.1976238	0.25582140	2.4576015	21	6 21.3	20.3
417474 2006 RR_{22}	18.1	X	298.74727	291.14350	88.82863	3.28943	0.2128996	0.25876535	2.4389260	21	7 23.7	20.8
417475 2006 RF_{30}	15.7	X	257.98782	47.63342	248.40024	8.08681	0.0680161	0.17422119	3.1749391	21	3 3.7	20.6
417476 2006 RD_{37}	17.7	X	293.62114	265.30097	114.31763	3.37103	0.2018255	0.25685094	2.4510299	21	7 15.9	20.2
417477 2006 RH_{38}	17.3	X	50.32370	44.41207	251.27183	4.67833	0.1473047	0.26799450	2.3826055	21	10 25.7	20.2
417478 2006 RV_{38}	18.2	X	280.07151	263.23590	109.10787	3.59552	0.2815239	0.25347902	2.4727186	21	6 4.6	21.8
417479 2006 RC_{40}	17.2	X	318.26482	223.14983	160.80087	11.72751	0.2698992	0.26093297	2.4254002	21	8 30.8	18.8
417480 2006 RK_{41}	17.9	X	307.03381	190.59672	185.69967	0.97882	0.1952592	0.25886753	2.4382842	21	8 4.8	20.0
417481 2006 RP_{53}	18.6	X	288.35489	7.96993	33.76244	3.07882	0.2152407	0.25658348	2.4527329	21	8 8.2	21.3
417482 2006 RQ_{55}	18.1	X	273.89082	23.65218	52.49230	2.28930	0.1602077	0.25906584	2.4370397	21	9 14.2	20.8
417483 2006 RW_{59}	18.0	X	308.77004	334.38471	18.48275	3.27485	0.2255890	0.25522401	2.4614350	21	6 27.4	20.5
417484 2006 RR_{64}	15.7	X	74.66221	176.08243	295.19461	10.70300	0.0800567	0.17065284	3.2190450	21	3 10.2	20.2
417485 2006 RN_{69}	17.4	X	7.73223	196.61059	188.57218	3.12660	0.1323445	0.27145026	2.3623408	21	12 25.3	19.9
417486 2006 RJ_{72}	18.2	X	258.73223	118.17391	1.66887	4.50921	0.1047566	0.26735594	2.3863977	21	10 30.9	21.1
417487 2006 RV_{75}	17.7	X	259.37788	46.99741	21.40135	3.84140	0.1552164	0.25666315	2.4522253	21	8 14.8	20.8
417488 2006 RA_{84}	17.9	X	8.06609	66.96024	281.54528	0.54292	0.1924208	0.26596770	2.3946945	21	11 10.9	20.2
417489 2006 RW_{85}	17.5	X	295.98681	10.69498	11.33515	2.71064	0.2070482	0.25677442	2.4515168	21	7 23.4	20.3
417490 2006 RL_{90}	17.9	X	299.46050	209.76431	215.72157	1.93241	0.1743218	0.26250694	2.4156955	21	10 9.6	20.1
417491 2006 SH_{1}	17.7	X	319.22950	170.12825	192.65308	6.56317	0.1382861	0.25933382	2.4353606	21	8 14.6	20.1
417492 2006 SX_{5}	16.3	X	189.01838	302.69684	305.03978	21.23711	0.1900178	0.28455339	2.2892517	21	—	—
417493 2006 SP_{6}	17.3	X	28.96595	84.17030	255.79707	5.04002	0.1866518	0.26997377	2.3709461	21	12 3.3	19.8
417494 2006 SX_{33}	17.6	X	6.04760	3.18695	337.31571	6.33190	0.1688661	0.26510146	2.3999082	21	10 19.1	19.9
417495 2006 SK_{51}	17.8	X	183.37022	273.50385	158.81755	22.77570	0.1664838	0.37712521	1.8973422	21	5 29.8	21.0
417496 2006 SD_{64}	17.6	X	221.01932	253.08979	145.84565	23.74930	0.1290079	0.37935073	1.8899143	21	5 25.3	20.7
417497 2006 SW_{66}	17.7	X	6.57125	157.95446	161.69768	1.45183	0.1741448	0.26203374	2.4186029	21	9 21.1	19.8
417498 2006 SE_{71}	17.3	X	36.73440	240.31685	28.38905	8.83924	0.1054814	0.25499061	2.4629367	21	8 24.9	20.2
417499 2006 SS_{75}	17.8	X	5.49376	226.14671	126.97529	2.24519	0.2012051	0.26497729	2.4006579	21	11 15.2	19.9
417500 2006 SX_{112}	17.9	X	343.99391	355.02497	319.35149	0.60480	0.1746229	0.25820127	2.4424769	21	7 19.6	19.8
417501 2006 SN_{117}	17.8	X	309.24579	251.14822	161.03465	1.13314	0.1659367	0.26177386	2.4202034	21	10 10.8	20.0
417502 2006 SC_{119}	17.5	X	334.25166	9.34607	3.30103	2.44966	0.1976118	0.26477445	2.4018838	21	10 2.8	19.3
417503 2006 SV_{127}	16.4	X	56.25915	23.49069	273.50808	11.31682	0.2639130	0.26949933	2.3737278	21	11 20.4	19.9
417504 2006 SH_{185}	17.7	X	241.72359	94.15012	337.90702	3.45715	0.2105682	0.25120425	2.4876239	21	7 21.9	21.5
417505 2006 SX_{211}	17.7	X	321.14043	240.41168	21.89250	21.99551	0.0245134	0.37204869	1.9145624	21	3 29.0	19.5
417506 2006 SY_{221}	17.7	X	296.02513	71.98587	357.19499	2.64303	0.1936283	0.26363816	2.4087803	21	10 5.5	19.7
417507 2006 SD_{223}	17.9	X	271.84900	79.77312	11.24184	8.08723	0.0886632	0.26308174	2.4121756	21	10 12.5	20.8
417508 2006 SV_{227}	17.6	X	283.15441	146.25785	276.90903	3.29746	0.1534220	0.26023330	2.4297456	21	9 8.1	20.4
417509 2006 SH_{259}	17.9	X	6.89133	29.73843	282.49824	0.41519	0.1858952	0.25961680	2.4335906	21	9 10.3	19.9
417510 2006 SD_{263}	18.0	X	306.20007	210.06211	130.01190	1.36848	0.2375111	0.25176842	2.4839063	21	6 1.8	20.8
417511 2006 SL_{267}	17.3	X	213.23566	233.76524	240.52114	6.19178	0.0668733	0.25461698	2.4653456	21	8 26.6	20.8
417512 2006 SU_{271}	17.8	X	284.92233	162.54962	291.16720	4.19353	0.2127799	0.26236082	2.4165924	21	10 15.9	20.2
417513 2006 SZ_{282}	17.7	X	330.32744	342.92084	49.29574	4.31510	0.1854617	0.26547664	2.3976466	21	10 27.1	19.3
417514 2006 SW_{284}	17.4	X	270.29939	298.89843	104.32870	3.34631	0.2469775	0.25355187	2.4722450	21	7 9.6	20.8
417515 2006 SP_{289}	16.1	X	226.78550	318.62174	43.02714	22.43730	0.0329405	0.24044431	2.5612957	21	4 22.1	19.6
417516 2006 SU_{291}	16.8	X	319.36892	313.78516	51.04153	23.93467	0.2490953	0.25978437	2.4325440	21	8 19.5	19.6
417517 2006 SP_{312}	18.1	X	271.67059	335.82137	23.86450	7.29842	0.3044798	0.24821439	2.5075605	21	5 6.2	22.0
417518 2006 SQ_{329}	17.6	X	304.89054	348.24021	51.41229	3.38917	0.0986143	0.25990771	2.4317743	21	9 22.4	20.3
417519 2006 SJ_{334}	17.0	X	160.49265	150.67821	38.43080	7.16344	0.0954028	0.26231614	2.4168667	21	10 8.5	20.5
417520 2006 SL_{369}	17.7	X	304.51252	50.40234	61.90948	2.09881	0.1431276	0.27156608	2.3616691	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417521 2006 SY_{393}	17.4	X	344.84311	89.22880	234.84652	5.52908	0.1278761	0.25334306	2.4736032	21	8 5.6	19.8
417522 2006 SY_{404}	15.8	X	341.71908	293.75280	66.52411	3.31289	0.2665585	0.12268244	4.0112629	21	9 5.4	19.9
417523 2006 SA_{411}	17.9	X	336.89024	299.74585	16.39398	2.55604	0.2000762	0.25505254	2.4625380	21	7 2.9	19.9
417524 2006 TQ_{17}	17.7	X	309.51702	280.94861	164.72851	2.50845	0.1913649	0.26585254	2.3953860	21	12 2.8	19.3
417525 2006 TE_{27}	17.7	X	291.72059	347.48757	34.43813	2.67670	0.1795778	0.25376992	2.4708286	21	7 20.9	20.5
417526 2006 TZ_{30}	17.9	X	173.35536	76.35000	35.77028	8.19894	0.1465500	0.24493877	2.5298670	21	7 11.7	22.0
417527 2006 TD_{31}	15.7	X	1.00670	295.69585	38.12271	3.35571	0.2829195	0.12711613	3.9174393	21	9 17.2	19.5
417528 2006 TP_{39}	17.2	X	301.12560	32.48863	33.59946	7.04707	0.1274321	0.26123560	2.4235267	21	10 20.6	19.6
417529 2006 TE_{45}	17.3	X	264.15490	265.40104	113.22283	1.46257	0.0612596	0.24617937	2.5213605	21	6 25.1	20.3
417530 2006 TP_{46}	16.7	X	260.01796	310.84497	46.56049	12.54987	0.0320403	0.24152288	2.5536646	21	5 23.9	20.2
417531 2006 TR_{50}	17.9	X	232.73224	343.29768	46.30166	5.67450	0.2627843	0.24339438	2.5405575	21	5 15.2	22.3
417532 2006 TG_{51}	17.5	X	236.10028	336.03777	47.42191	4.85551	0.1185505	0.24194828	2.5506705	21	5 20.8	21.2
417533 2006 TG_{76}	17.5	X	348.39819	311.69485	61.66779	5.12995	0.1929206	0.26387346	2.4073482	21	11 8.7	19.4
417534 2006 TC_{82}	17.4	X	306.78595	88.36884	19.60900	11.81514	0.1754917	0.26851760	2.3795100	21	—	—
417535 2006 TN_{89}	17.5	X	355.06062	358.66598	326.52932	2.28054	0.1789732	0.25658888	2.4526985	21	9 2.6	19.5
417536 2006 TZ_{99}	17.0	X	256.78418	254.20929	229.73414	8.24039	0.1616091	0.26248020	2.4158595	21	10 24.1	19.8
417537 2006 TS_{102}	17.2	X	22.30087	310.84694	23.17219	5.39871	0.1233499	0.26321961	2.4113332	21	11 2.4	19.7
417538 2006 TQ_{120}	17.5	X	319.70510	266.12836	136.79409	8.11624	0.2032708	0.26153538	2.4216744	21	10 20.4	19.4
417539 2006 TH_{125}	17.7	X	256.32642	307.79228	41.95502	7.86161	0.1358842	0.24122447	2.5557702	21	4 27.9	21.3
417540 2006 TE_{126}	17.3	X	175.09897	37.39063	16.02318	8.72696	0.1774693	0.23560219	2.5962699	21	4 27.3	21.5
417541 2006 TG_{127}	17.9	X	257.13830	158.06600	210.37101	11.29662	0.1244149	0.24529579	2.5274116	21	5 25.2	21.6
417542 2006 UA_{8}	17.7	X	299.24240	280.28312	112.00670	2.49854	0.1880221	0.25562607	2.4588533	21	8 16.9	20.1
417543 2006 UF_{28}	18.3	X	264.51876	188.69987	222.85457	0.97227	0.2433151	0.25248311	2.4792167	21	7 14.4	21.9
417544 2006 UM_{33}	16.8	X	120.84910	246.38575	211.01267	16.70085	0.1494290	0.23249689	2.6193365	21	4 29.0	20.4
417545 2006 UK_{35}	18.0	X	113.63405	178.08759	210.18411	21.24524	0.0640362	0.35496658	1.9755032	21	—	—
417546 2006 UQ_{35}	16.1	X	346.58014	46.04403	301.46721	1.68905	0.2483241	0.12474369	3.9669524	21	8 29.4	20.2
417547 2006 UR_{35}	17.2	X	122.56506	240.99736	223.19920	10.65826	0.1232588	0.23414592	2.6070237	21	5 6.1	20.6
417548 2006 UW_{44}	17.7	X	169.65891	71.51402	45.02254	12.53374	0.2312135	0.24145175	2.5541661	21	7 15.6	22.3
417549 2006 UZ_{48}	17.5	X	199.08603	311.06893	295.62551	5.29904	0.1384371	0.28527972	2.2853643	21	—	—
417550 2006 UM_{55}	17.9	X	341.19903	274.55829	38.90179	20.26646	0.1196768	0.38432514	1.8735711	21	7 29.7	19.7
417551 2006 UF_{60}	17.5	X	23.76261	44.08098	258.43177	6.27176	0.1747818	0.25992815	2.4316469	21	9 24.6	20.0
417552 2006 UL_{78}	17.6	X	197.00481	19.66104	19.41811	12.80112	0.1928417	0.23899553	2.5716362	21	4 27.9	21.9
417553 2006 UO_{80}	17.6	X	338.16969	77.97525	207.63555	14.71477	0.1108314	0.24623258	2.5209973	21	5 29.5	20.5
417554 2006 US_{82}	17.3	X	230.81941	54.89833	359.88282	5.57642	0.1423154	0.24700067	2.5157682	21	6 23.7	21.2
417555 2006 UK_{87}	17.8	X	245.64869	128.70834	232.35220	4.15302	0.2058218	0.24127333	2.5554252	21	4 24.4	22.0
417556 2006 UP_{90}	15.5	X	347.38507	313.24804	37.05889	5.16566	0.2546996	0.12358977	3.9916062	21	9 6.6	19.6
417557 2006 UT_{96}	18.1	X	280.34311	15.37207	59.06973	4.39501	0.1518566	0.25876314	2.4389400	21	9 24.5	20.8
417558 2006 UF_{101}	17.6	X	244.84717	273.95734	90.40967	3.99448	0.1163343	0.24194544	2.5506905	21	5 7.1	21.2
417559 2006 UL_{112}	18.4	X	278.54565	64.05829	307.51505	2.03470	0.1934965	0.25326905	2.4740851	21	6 13.9	21.8
417560 2006 UU_{118}	17.7	X	214.76466	32.00184	30.85445	13.64750	0.2444574	0.24484803	2.5304920	21	6 10.3	22.2
417561 2006 UN_{132}	17.8	X	249.99785	339.01446	57.14456	1.01897	0.0719714	0.24765439	2.5113391	21	6 29.1	21.1
417562 2006 UJ_{142}	17.3	X	252.57020	211.49952	270.29354	4.25715	0.1669427	0.25976947	2.4326370	21	10 13.0	20.3
417563 2006 UH_{143}	16.9	X	149.75620	229.01281	215.94098	14.83430	0.1902836	0.23596896	2.5935789	21	5 16.9	21.0
417564 2006 UO_{156}	17.9	X	297.81232	327.89598	107.33142	2.49262	0.1596544	0.26340245	2.4102172	21	10 25.3	20.0
417565 2006 UJ_{174}	17.1	X	318.76631	45.13269	10.13624	6.73628	0.0649320	0.26251393	2.4156526	21	11 6.7	19.8
417566 2006 UK_{185}	17.3	X	239.58559	307.63006	63.65520	24.21021	0.0525260	0.37524698	1.9036682	21	5 10.6	19.3
417567 2006 UT_{196}	17.9	X	342.10780	166.35441	213.65632	0.79849	0.2039192	0.26274757	2.4142204	21	11 4.4	19.4
417568 2006 UB_{199}	17.0	X	21.16445	252.67895	46.15790	7.07640	0.1114772	0.25440695	2.4667023	21	9 12.2	19.7
417569 2006 UR_{212}	17.3	X	225.81212	111.71317	274.05820	4.54373	0.1619312	0.24032776	2.5621237	21	5 9.5	21.3
417570 2006 UA_{213}	17.0	X	59.41681	48.87544	247.24896	5.59310	0.1359619	0.26033183	2.4291325	21	11 4.7	20.1
417571 2006 UX_{214}	16.6	X	200.11337	4.55110	335.60366	5.34034	0.3067592	0.23149705	2.6268730	21	2 23.1	21.5
417572 2006 UY_{231}	16.9	X	246.22733	68.02222	227.42694	13.15178	0.1434573	0.23046665	2.6346969	21	2 4.4	21.4
417573 2006 UA_{234}	18.1	X	265.38960	64.17743	43.96410	5.36215	0.1355452	0.26176665	2.4202478	21	10 20.8	21.0
417574 2006 UA_{254}	17.7	X	292.23542	97.13079	221.77391	2.20376	0.0495089	0.24146013	2.5541070	21	5 13.9	21.0
417575 2006 UC_{269}	16.5	X	5.93399	192.69132	46.92586	13.56754	0.0992126	0.23913711	2.5706211	21	5 11.2	19.2
417576 2006 UK_{272}	17.8	X	251.96306	41.05298	39.57820	1.01787	0.2177227	0.25107863	2.4884536	21	8 12.2	21.4
417577 2006 UT_{273}	17.6	X	300.36023	330.25147	36.00095	4.95546	0.1868316	0.25149420	2.4857116	21	7 10.7	20.4
417578 2006 UC_{291}	17.4	X	168.49383	314.07288	90.36500	23.64417	0.1131858	0.36671658	1.9330764	21	4 10.4	20.5
417579 2006 UN_{326}	16.5	X	261.17911	342.25278	73.35581	16.98084	0.2472196	0.25248640	2.4791952	21	7 16.7	20.3
417580 2006 UR_{338}	16.0	X	29.16608	282.20617	279.14720	10.39600	0.0820974	0.22379906	2.6867703	21	4 24.1	19.4
417581 2006 VA_{3}	17.3	X	33.73456	307.78006	312.94022	53.35941	0.6783021	0.48566557	1.6029175	21	2 3.5	17.5
417582 2006 VX_{3}	17.0	X	199.62855	146.48185	240.36704	13.97920	0.0632617	0.23536117	2.5980421	21	4 15.2	21.0
417583 2006 VC_{7}	18.1	X	220.88426	134.22975	233.66763	19.94142	0.0888147	0.37040716	1.9202148	21	3 28.2	20.8
417584 2006 VV_{9}	17.4	X	214.08934	2.33984	238.11808	4.79384	0.1519954	0.27929436	2.3178995	21	—	—
417585 2006 VO_{16}	15.8	X	355.61068	55.31006	296.79674	1.77559	0.2354636	0.12549065	3.9511950	21	9 24.1	19.9
417586 2006 VN_{30}	16.5	X	24.04965	269.89600	51.24631	12.04185	0.1609218	0.25845886	2.4408538	21	10 26.5	19.1
417587 2006 VF_{45}	18.0	X	273.66255	149.69605	292.89799	1.57812	0.1869773	0.25840594	2.4411870	21	9 16.3	20.8
417588 2006 VH_{50}	17.8	X	321.28037	96.14419	287.99179	1.22309	0.1885184	0.25692465	2.4505611	21	9 18.0	19.8
417589 2006 VQ_{55}	17.9	X	256.42978	229.64743	112.73647	1.56387	0.1318162	0.23862465	2.5743001	21	4 19.6	21.6
417590 2006 VZ_{61}	17.4	X	291.39863	105.66261	243.38305	7.76698	0.1994192	0.24699953	2.5157760	21	5 30.2	20.5
417591 2006 VE_{64}	17.8	X	233.82089	37.37529	89.96756	2.32073	0.1318695	0.25539374	2.4603443	21	10 4.8	21.0
417592 2006 VL_{69}	16.4	X	272.07131	129.17814	239.98929	5.45694	0.1910607	0.24542209	2.5265445	21	6 3.4	20.0
417593 2006 VB_{85}	16.8	X	164.17228	193.90244	257.10675	12.00554	0.1152450	0.23721936	2.5844569	21	6 2.8	20.8
417594 2006 VF_{87}	17.1	X	229.91094	97.72153	10.45183	6.95995	0.2062022	0.25154834	2.4853549	21	8 28.4	20.9
417595 2006 VS_{94}	17.5	X	148.75619	42.31512	75.48463	5.92253	0.1896007	0.23710179	2.5853112	21	6 25.9	21.6
417596 2006 VO_{104}	17.4	X	189.22047	192.62544	192.87027	11.84773	0.1820584	0.23476088	2.6024690	21	4 7.5	21.5
417597 2006 VJ_{108}	17.5	X	255.98103	349.59531	24.96311	3.86447	0.0762422	0.24291551	2.5438952	21	6 6.0	20.9
417598 2006 VM_{117}	17.1	X	347.37978	271.86013	49.15977	6.82410	0.1518203	0.25202706	2.4822066	21	8 11.7	19.4
417599 2006 VA_{125}	17.7	X	170.93366	87.86502	46.80612	7.71218	0.1637124	0.24413615	2.5354088	21	8 9.5	21.9
417600 2006 VM_{125}	17.5	X	206.47202	13.76467	38.27473	3.69266	0.0744560	0.23940695	2.5686891	21	5 28.1	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417601 2006 VR_{126}	17.2	X	272.86690	168.39793	281.63853	4.96822	0.1280584	0.25819493	2.4425169	21	10 3.4	20.1
417602 2006 VQ_{128}	17.5	X	284.64666	340.02776	1.49459	4.23497	0.1734211	0.24483894	2.5305547	21	5 13.6	21.0
417603 2006 VM_{132}	17.8	X	182.27712	247.81307	219.75339	5.30761	0.1680723	0.24258830	2.5461822	21	7 12.0	22.0
417604 2006 VR_{138}	17.6	X	240.68993	20.46448	67.00829	8.42349	0.1280212	0.25059595	2.4916479	21	8 23.6	21.2
417605 2006 VH_{140}	17.1	X	249.34782	108.09477	238.98347	9.98172	0.1125743	0.23632273	2.5909899	21	4 17.2	20.9
417606 2006 VE_{148}	17.0	X	253.05614	326.64990	64.53071	4.27852	0.1645186	0.24082846	2.5585712	21	6 14.2	20.8
417607 2006 WG	18.6	X	243.29632	99.33732	234.62800	20.41903	0.0591295	0.36942323	1.9236228	21	3 4.1	21.5
417608 2006 WS_{2}	17.2	X	115.68828	237.32597	231.46738	10.96473	0.2537999	0.22913576	2.6448891	21	5 20.4	21.2
417609 2006 WD_{21}	17.2	X	333.72329	239.54131	134.41120	3.27902	0.1195017	0.25668985	2.4520552	21	10 4.9	19.5
417610 2006 WK_{21}	17.3	X	209.83317	86.03451	108.25405	5.65189	0.1479662	0.26278909	2.4139661	21	12 1.7	20.8
417611 2006 WY_{24}	15.3	X	222.38653	63.41377	106.11232	6.72682	0.1897378	0.12432445	3.9758654	21	10 26.2	21.5
417612 2006 WQ_{29}	18.3	X	250.92416	136.58828	112.00380	8.07271	0.3934555	0.48649106	1.6011037	21	—	—
417613 2006 WY_{35}	17.4	X	272.97088	237.48926	95.16994	9.13863	0.1842112	0.24058114	2.5603244	21	4 22.6	21.3
417614 2006 WP_{50}	16.4	X	321.01636	237.07994	78.55227	15.80816	0.1543595	0.24395358	2.5366736	21	6 6.1	18.9
417615 2006 WQ_{51}	17.0	X	339.93213	251.50209	56.44664	6.74435	0.1106091	0.24556144	2.5255885	21	7 5.4	19.6
417616 2006 WB_{83}	17.4	X	281.72010	335.81743	52.49562	7.60286	0.1991507	0.25140221	2.4863179	21	7 11.9	20.7
417617 2006 WA_{88}	17.7	X	256.45133	214.46542	148.67735	4.03304	0.1476295	0.24185762	2.5513079	21	5 15.3	21.5
417618 2006 WR_{93}	15.3	X	2.27750	255.80726	84.24958	6.04130	0.2667880	0.12488983	3.9638571	21	9 28.9	19.4
417619 2006 WE_{127}	16.9	X	222.36965	159.80485	287.38852	11.31216	0.1462173	0.24023690	2.5627696	21	7 25.6	20.7
417620 2006 WB_{131}	15.9	X	207.93611	90.69442	13.75389	22.05583	0.1099236	0.24237480	2.5476773	21	8 17.7	20.1
417621 2006 WQ_{137}	18.0	X	211.83071	185.94611	237.49761	7.14616	0.1401984	0.24196535	2.5505505	21	6 15.3	21.9
417622 2006 WO_{142}	16.6	X	154.02881	11.33437	77.35974	14.28957	0.1108643	0.23562559	2.5960980	21	5 21.7	20.5
417623 2006 WW_{143}	17.5	X	189.42832	343.63795	98.78981	2.60354	0.1479921	0.24006616	2.5639846	21	6 17.7	21.4
417624 2006 WP_{150}	16.8	X	255.44122	285.77709	107.61762	6.75264	0.2560103	0.24557447	2.5254993	21	6 10.2	20.8
417625 2006 WU_{151}	17.1	X	160.14424	135.50044	23.09650	5.43181	0.2300082	0.24473124	2.5312970	21	8 29.8	21.5
417626 2006 WD_{164}	17.3	X	327.42148	101.44419	209.38717	3.36079	0.1063385	0.24557932	2.5254660	21	6 16.9	20.0
417627 2006 WH_{170}	16.8	X	50.22571	159.16356	73.93177	17.71231	0.0839333	0.24190650	2.5509642	21	7 18.2	20.1
417628 2006 WW_{171}	17.0	X	139.87506	271.04431	243.61482	16.11419	0.1120385	0.24238979	2.5475722	21	7 24.7	21.2
417629 2006 WF_{181}	17.2	X	294.39093	305.16305	77.78511	7.22293	0.1748106	0.25129877	2.4870001	21	7 28.4	20.0
417630 2006 WB_{183}	17.4	X	237.95938	278.10205	84.54781	24.77580	0.0679395	0.36952182	1.9232806	21	5 2.7	20.1
417631 2006 WX_{183}	17.2	X	220.86086	314.12533	96.97092	15.42852	0.1245270	0.23655007	2.5893296	21	6 10.9	21.2
417632 2006 WU_{184}	17.4	X	156.36084	227.39577	278.81842	3.79209	0.2606399	0.23676708	2.5877472	21	8 8.7	22.0
417633 2006 WZ_{189}	16.8	X	316.42882	3.86563	97.96759	10.35270	0.1560576	0.26718918	2.3873906	21	—	—
417634 2006 XG_{1}	18.5	X	285.37684	344.09774	38.46799	20.50115	0.5959828	0.25597741	2.4566029	21	5 14.5	23.1
417635 2006 XE_{8}	15.6	X	102.45847	283.34262	268.55455	27.41399	0.1801354	0.23827297	2.5768325	21	8 1.8	19.9
417636 2006 XM_{10}	16.9	X	251.31908	71.51990	312.63900	3.67959	0.2602436	0.24224782	2.5485674	21	5 23.8	21.1
417637 2006 XM_{16}	16.9	X	192.61796	162.40169	287.04861	12.78517	0.1431682	0.23809878	2.5780892	21	6 30.4	20.9
417638 2006 XT_{30}	17.3	X	32.37312	347.79488	112.77113	6.09044	0.1656525	0.27735430	2.3286959	21	—	—
417639 2006 XA_{37}	16.4	X	268.36174	272.18446	94.33006	8.53995	0.2042312	0.24023187	2.5628054	21	5 26.4	20.1
417640 2006 XN_{43}	16.7	X	239.62038	169.91608	286.00824	12.29974	0.0299038	0.24559332	2.5253700	21	9 5.1	20.3
417641 2006 XW_{45}	17.3	X	218.66144	146.70930	308.94043	4.28569	0.2131898	0.24615261	2.5215432	21	7 29.3	21.3
417642 2006 XX_{53}	17.3	X	251.06515	105.04197	270.33515	12.99843	0.2836879	0.24323262	2.5416837	21	5 9.3	21.7
417643 2006 XL_{56}	17.1	X	259.01297	223.51001	264.82257	5.43718	0.0786506	0.25667559	2.4521461	21	11 14.6	20.0
417644 2006 XR_{56}	17.7	X	174.44165	11.08000	100.70540	23.93078	0.0782943	0.37731870	1.8966935	21	7 11.1	19.7
417645 2006 XY_{57}	16.3	X	187.77956	352.65160	80.57154	15.54320	0.0410526	0.23511181	2.5998787	21	6 5.1	19.8
417646 2006 XS_{66}	17.0	X	175.29434	196.71084	224.56254	12.18173	0.2574042	0.23367112	2.6105540	21	5 11.6	21.6
417647 2006 XF_{67}	16.8	X	241.80979	186.88550	219.83477	2.87308	0.2180987	0.24096713	2.5575895	21	6 17.5	20.7
417648 2006 XD_{70}	16.8	X	72.98951	80.83641	87.89571	13.65633	0.1889646	0.22988395	2.6391472	21	6 8.5	20.0
417649 2006 XV_{70}	16.8	X	298.45370	323.31775	279.73211	7.57374	0.1054393	0.21530674	2.7569632	21	2 4.5	20.8
417650 2006 XK_{71}	16.3	X	176.25592	126.14356	308.02387	21.46749	0.0461941	0.23064452	2.6333421	21	5 18.4	20.5
417651 2006 XT_{71}	17.4	X	224.26243	66.65130	98.08028	6.73696	0.1322162	0.25859711	2.4399838	21	11 12.7	20.7
417652 2006 XV_{72}	17.5	X	222.90090	140.39048	268.87063	18.86283	0.1038517	0.37757911	1.8958214	21	6 6.9	19.6
417653 2006 YY_{7}	16.6	X	298.21368	62.11121	349.92006	7.98025	0.2134870	0.25410777	2.4686381	21	9 9.3	19.0
417654 2006 YW_{12}	16.6	X	242.21469	337.84235	126.81995	15.54692	0.0560497	0.24513951	2.5284857	21	9 29.6	20.2
417655 2006 YF_{13}	19.9	X	295.87711	95.43105	205.27631	10.53381	0.4034968	1.11896058	0.9188815	21	12 30.2	19.2
417656 2006 YL_{16}	16.9	X	251.42940	72.79309	325.26315	4.55561	0.2252641	0.24180456	2.5516811	21	6 14.8	21.0
417657 2006 YJ_{19}	17.4	X	221.64099	139.81221	273.85877	3.60469	0.2263553	0.23901617	2.5714881	21	6 7.5	21.6
417658 2006 YR_{20}	17.8	X	251.92533	29.40760	86.57105	5.46435	0.1493824	0.25501247	2.4627960	21	10 11.5	21.0
417659 2006 YN_{21}	17.0	X	150.50255	214.24057	280.71533	6.76498	0.1396130	0.23751618	2.5823033	21	7 16.7	20.9
417660 2006 YY_{25}	16.7	X	93.12793	231.88955	297.10887	10.64048	0.1345802	0.23108699	2.6299796	21	6 27.9	20.2
417661 2006 YR_{30}	17.1	X	161.99839	32.53657	93.32895	10.40533	0.0151563	0.23740687	2.5830959	21	7 12.8	20.6
417662 2006 YF_{31}	17.6	X	202.66919	34.45558	10.14885	2.04047	0.0895056	0.23198472	2.6231903	21	5 13.9	21.6
417663 2006 YJ_{36}	17.7	X	156.42246	55.56375	75.79248	5.19021	0.1963228	0.23596574	2.5936025	21	7 21.2	22.0
417664 2006 YT_{37}	16.8	X	17.99834	126.43481	77.28905	5.77097	0.0781837	0.22149521	2.7053689	21	4 16.1	20.0
417665 2006 YZ_{43}	17.4	X	215.46169	265.74209	89.72053	23.57649	0.1120360	0.36193172	1.9500764	21	3 25.5	20.6
417666 2006 YA_{53}	17.5	X	221.98971	120.93327	288.04300	2.13338	0.1801184	0.23556815	2.5965200	21	6 4.5	21.8
417667 2007 AJ	16.6	X	173.58321	57.32944	74.55810	31.23550	0.3158836	0.23503830	2.6004207	21	8 10.9	22.0
417668 2007 AQ	16.0	X	194.77770	304.22595	117.79171	22.63873	0.0495854	0.23189570	2.6238616	21	6 4.0	20.1
417669 2007 AH_{2}	16.4	X	175.72430	137.21688	292.24787	31.91715	0.2716749	0.23305195	2.6151758	21	5 20.6	21.6
417670 2007 AV_{4}	17.4	X	262.08158	300.08402	110.77580	3.19177	0.2034634	0.24615081	2.5215555	21	7 16.2	20.7
417671 2007 AQ_{6}	17.4	X	264.69728	80.68593	312.38208	19.03224	0.1079934	0.37533930	1.9033560	21	7 13.6	19.4
417672 2007 AJ_{7}	17.0	X	198.52877	169.79082	272.41047	3.73886	0.1754435	0.23786827	2.5797544	21	6 25.5	21.0
417673 2007 AV_{10}	16.6	X	100.16147	24.02893	104.58771	14.89346	0.1955663	0.22515548	2.6759687	21	5 25.7	20.6
417674 2007 AO_{13}	17.4	X	159.93206	248.75219	277.48227	4.09290	0.1145798	0.24264260	2.5458023	21	9 2.8	21.4
417675 2007 AD_{14}	16.4	X	110.97497	166.52605	292.85275	13.05360	0.1333217	0.22303531	2.6929004	21	4 11.1	20.5
417676 2007 AC_{17}	16.2	X	26.37943	243.49843	304.71579	13.55890	0.1213115	0.22055108	2.7130841	21	3 29.0	19.5
417677 2007 AJ_{20}	16.8	X	244.48049	91.55816	316.06046	10.45064	0.2638701	0.24205413	2.5499268	21	6 17.3	21.1
417678 2007 AO_{20}	16.6	X	231.55003	72.03724	9.31884	7.62070	0.1924559	0.24274674	2.5450742	21	7 27.2	20.6
417679 2007 AN_{21}	17.2	X	168.71215	21.36140	111.54351	8.72931	0.1235982	0.23854649	2.5748624	21	8 2.2	21.2
417680 2007 AO_{28}	17.5	X	191.34946	281.40512	157.08510	1.05233	0.1174940	0.23455573	2.6039862	21	6 14.9	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417681 2007 AZ_{28}	17.9	X	226.53676	146.77697	310.81278	7.47901	0.1404885	0.24232262	2.5480429	21	8 14.0	21.5
417682 2007 AX_{30}	17.7	X	226.32124	175.09970	296.19566	3.06154	0.1675054	0.24542151	2.5265485	21	8 28.8	21.5
417683 2007 AH_{31}	16.7	X	151.67562	101.62332	38.17870	12.82519	0.1919599	0.23185007	2.6242058	21	7 30.9	21.3
417684 2007 BN_{4}	17.1	X	263.69172	30.03728	314.30814	19.68567	0.0531024	0.36490820	1.9394576	21	4 15.4	19.9
417685 2007 BK_{5}	17.2	X	204.31606	227.76293	211.99366	3.48153	0.2241470	0.23861023	2.5744038	21	6 25.7	21.5
417686 2007 BV_{8}	17.0	X	101.84423	22.48001	106.28058	8.72281	0.1656830	0.22510985	2.6763303	21	5 22.1	20.8
417687 2007 BM_{14}	16.8	X	243.49521	13.73872	328.02306	5.11224	0.1086285	0.22436319	2.6822648	21	4 5.3	21.0
417688 2007 BY_{24}	17.7	X	253.48607	98.05650	340.54394	2.07174	0.1269241	0.24552752	2.5258211	21	8 23.4	21.2
417689 2007 BQ_{34}	15.6	X	291.74107	9.07556	123.02123	11.24231	0.2154637	0.12479446	3.9658764	21	11 24.1	20.8
417690 2007 BG_{42}	17.4	X	155.73594	202.88897	310.27597	0.85034	0.1463950	0.23686422	2.5870396	21	8 15.0	21.3
417691 2007 BM_{47}	16.9	X	209.02982	43.60127	337.83418	13.64555	0.1190540	0.22367862	2.6877347	21	4 15.1	21.4
417692 2007 BM_{51}	17.5	X	94.28714	127.79679	8.02143	4.66089	0.1330389	0.22365702	2.6879078	21	5 13.5	21.2
417693 2007 BF_{52}	17.3	X	118.85717	127.59045	87.36445	5.92709	0.0908584	0.24088305	2.5581847	21	9 25.8	21.0
417694 2007 BA_{55}	17.7	X	250.91805	159.67726	254.50752	2.80296	0.2170140	0.24354681	2.5394973	21	7 6.2	21.4
417695 2007 BF_{55}	17.2	X	168.00682	27.35263	104.96403	9.54067	0.1733335	0.23761145	2.5816130	21	8 1.5	21.4
417696 2007 BE_{56}	17.4	X	264.66344	227.76526	123.75104	24.91060	0.1009456	0.36674446	1.9329784	21	5 16.6	20.3
417697 2007 BZ_{57}	16.4	X	124.57274	139.45524	341.17043	13.49926	0.2213075	0.22502017	2.6770413	21	6 8.3	20.9
417698 2007 BD_{58}	16.3	X	95.49835	240.40402	305.87540	11.72678	0.2025937	0.23003998	2.6379537	21	8 1.2	20.2
417699 2007 BZ_{59}	16.9	X	192.74123	265.64264	216.78500	9.23879	0.2747079	0.24012449	2.5635694	21	8 4.2	21.6
417700 2007 BU_{63}	16.9	X	231.52583	254.73694	141.81486	9.68661	0.2524728	0.23667089	2.5884482	21	5 26.4	21.4
417701 2007 BU_{64}	16.7	X	191.56809	70.45476	308.89610	4.40170	0.0746465	0.21896434	2.7261754	21	3 30.0	20.8
417702 2007 BZ_{67}	16.3	X	10.59689	282.23471	341.36803	14.61169	0.0938256	0.22754873	2.6571726	21	6 27.3	19.6
417703 2007 BL_{68}	16.5	X	175.71555	212.86479	316.27477	12.84886	0.0637778	0.24250599	2.5467584	21	9 20.2	20.4
417704 2007 BK_{71}	17.2	X	161.41272	317.23843	162.95970	4.31075	0.1651748	0.23247955	2.6194667	21	7 9.3	21.4
417705 2007 BU_{74}	16.9	X	47.03329	90.53241	141.30600	9.46941	0.1567524	0.22836860	2.6508091	21	7 20.3	20.0
417706 2007 BB_{78}	16.7	X	286.57042	323.34579	335.17431	8.21806	0.0816368	0.21898858	2.7259742	21	4 2.7	20.6
417707 2007 BT_{78}	17.6	X	143.26057	36.64950	115.41757	3.67622	0.1307265	0.23673321	2.5879940	21	7 31.8	21.6
417708 2007 BQ_{90}	16.7	X	64.68604	303.84643	304.44195	8.83420	0.0966531	0.23823292	2.5771214	21	8 28.1	20.1
417709 2007 BG_{95}	17.3	X	245.34062	114.68207	300.71551	11.71138	0.1669945	0.24094666	2.5577344	21	7 8.6	21.0
417710 2007 CP_{9}	17.3	X	227.62472	126.31253	290.84437	2.45157	0.2217636	0.23893935	2.5720393	21	6 17.5	21.4
417711 2007 CY_{9}	17.3	X	188.46828	179.68004	305.40731	7.37874	0.0837811	0.24022961	2.5628215	21	8 12.1	21.1
417712 2007 CJ_{10}	17.4	X	140.41531	210.72430	287.38273	1.30689	0.1490483	0.23266526	2.6180726	21	7 11.6	21.5
417713 2007 CK_{10}	17.4	X	94.17828	192.44893	314.87810	1.59332	0.0712159	0.22551578	2.6731177	21	5 20.0	20.9
417714 2007 CT_{11}	16.6	X	116.88238	223.58284	299.77674	11.97872	0.1220841	0.23150981	2.6267764	21	7 17.3	20.3
417715 2007 CJ_{14}	16.8	X	88.62160	343.03172	152.76426	14.38875	0.1076094	0.22072981	2.7116193	21	5 8.1	20.7
417716 2007 CM_{15}	17.0	X	204.93202	40.38442	57.57251	7.37499	0.1464178	0.23991408	2.5650681	21	7 24.8	21.1
417717 2007 CZ_{15}	17.1	X	188.18130	107.51099	354.33356	7.01959	0.1736362	0.23655730	2.5892768	21	7 12.5	21.4
417718 2007 CL_{21}	16.3	X	83.29296	234.51897	295.98546	14.73787	0.1111987	0.22632814	2.6667175	21	6 13.0	20.0
417719 2007 CQ_{21}	16.6	X	66.71034	233.77507	294.07448	9.86079	0.0915435	0.22287241	2.6942125	21	5 9.6	20.1
417720 2007 CY_{21}	17.3	X	196.32756	45.55760	85.32413	3.72341	0.1530333	0.24135912	2.5548196	21	8 27.5	21.3
417721 2007 CP_{22}	16.2	X	274.42104	63.47429	319.45532	11.11788	0.2966092	0.24257780	2.5462557	21	6 10.0	20.2
417722 2007 CV_{23}	17.6	X	228.20038	326.92986	146.97557	11.22979	0.2234151	0.24538085	2.5268275	21	8 30.3	21.5
417723 2007 CR_{25}	16.2	X	24.21995	302.92947	289.97868	10.38330	0.1070678	0.22964088	2.6410092	21	6 4.8	19.3
417724 2007 CD_{29}	16.5	X	8.37172	284.12469	308.39901	8.60680	0.0756842	0.22478619	2.6788987	21	5 3.9	19.9
417725 2007 CQ_{32}	14.8	X	301.48598	352.64207	140.04271	17.56582	0.1717610	0.12466026	3.9687221	21	12 14.1	20.0
417726 2007 CJ_{37}	16.5	X	111.11687	49.53850	135.39031	13.50479	0.1125587	0.23341305	2.6124779	21	8 6.7	20.1
417727 2007 CP_{38}	16.5	X	302.24298	301.11738	311.82675	10.99252	0.0455022	0.21541583	2.7560323	21	2 28.7	20.3
417728 2007 CS_{41}	17.0	X	136.16947	156.95656	323.91155	2.91902	0.2137193	0.22841905	2.6504188	21	6 20.1	21.3
417729 2007 CY_{41}	16.3	X	146.80846	206.36738	327.48181	12.91904	0.1307921	0.23614360	2.5923000	21	8 30.7	20.4
417730 2007 CS_{42}	16.9	X	169.64991	324.28483	148.12586	8.37558	0.1548769	0.23325113	2.6136868	21	7 6.9	21.1
417731 2007 CW_{43}	17.8	X	260.10219	207.21097	201.80743	1.12195	0.1724102	0.24048629	2.5609976	21	7 15.2	21.2
417732 2007 CX_{43}	17.0	X	95.22644	28.63746	147.69373	13.93017	0.1805128	0.22774346	2.6556577	21	7 15.5	20.9
417733 2007 CO_{48}	17.3	X	98.19936	279.43043	267.54009	3.44909	0.1116567	0.23082591	2.6319624	21	7 24.1	21.0
417734 2007 CR_{52}	16.2	X	194.80990	349.83766	106.11592	11.35998	0.1962022	0.23509851	2.5999767	21	7 9.1	20.5
417735 2007 CN_{53}	16.4	X	116.96596	213.69729	337.93759	13.05992	0.1968935	0.23362627	2.6108882	21	8 30.1	20.5
417736 2007 CP_{55}	17.0	X	272.85917	73.20752	303.85822	2.74235	0.2047964	0.24165410	2.5527401	21	6 13.0	20.6
417737 2007 CM_{59}	16.5	X	78.90381	21.59761	173.33475	13.78718	0.1786320	0.22685835	2.6625608	21	7 18.7	20.3
417738 2007 CQ_{61}	17.1	X	139.80659	216.05667	338.13673	11.88821	0.2203933	0.23759339	2.5817438	21	9 20.6	21.6
417739 2007 CZ_{65}	15.8	X	259.61948	288.54864	244.79214	8.06146	0.0792744	0.19173861	2.9784913	21	12 29.7	19.9
417740 2007 CS_{75}	17.4	X	186.01887	291.78634	140.80824	3.42416	0.0790236	0.22921097	2.6443105	21	6 2.4	21.3
417741 2007 CM_{79}	16.8	X	182.51793	111.83998	46.70805	8.21526	0.1192162	0.24090071	2.5580596	21	9 21.8	20.8
417742 2007 DG	17.0	X	109.73652	211.07275	306.32043	18.25414	0.0430107	0.36525601	1.9382262	21	6 18.2	19.2
417743 2007 DZ_{3}	17.7	X	167.93177	240.09820	304.58893	5.32418	0.2714940	0.24127939	2.5553824	21	10 1.3	22.4
417744 2007 DH_{5}	16.5	X	261.93963	17.88243	318.50808	13.98873	0.1439056	0.22855936	2.6493340	21	4 9.1	20.8
417745 2007 DL_{9}	15.7	X	9.82263	288.19829	266.70090	12.58761	0.1087601	0.21381908	2.7697362	21	3 11.5	19.3
417746 2007 DA_{13}	17.3	X	191.09783	148.47296	299.17001	5.06878	0.2655556	0.23465037	2.6032860	21	6 24.6	22.0
417747 2007 DX_{15}	17.0	X	126.43583	177.61643	353.52350	11.37559	0.1168802	0.23282248	2.6168938	21	8 10.1	21.0
417748 2007 DC_{16}	17.1	X	270.19728	243.61336	25.01628	4.97994	0.0722644	0.20948463	2.8078115	21	2 12.5	21.2
417749 2007 DG_{19}	17.5	X	173.70337	120.44517	339.55268	4.18246	0.1979910	0.23146203	2.6271379	21	6 26.1	21.9
417750 2007 DP_{20}	16.6	X	177.91323	138.99565	340.89458	14.35059	0.0624660	0.23298627	2.6156673	21	7 29.4	20.5
417751 2007 DE_{40}	16.8	X	216.23074	241.16613	96.71648	7.39556	0.0518260	0.21862365	2.7290068	21	3 11.3	20.8
417752 2007 DP_{40}	17.3	X	112.30022	309.47695	177.85859	8.90539	0.1526171	0.22168164	2.7038519	21	5 30.3	21.3
417753 2007 DH_{44}	17.5	X	124.17043	351.30154	170.12376	13.68046	0.1206630	0.22990915	2.6389543	21	7 20.6	21.6
417754 2007 DV_{45}	17.5	X	204.25921	161.73077	310.68933	11.79396	0.0983038	0.24192318	2.5508469	21	8 12.2	21.3
417755 2007 DR_{46}	17.2	X	99.03265	20.90885	127.79142	5.50836	0.1789558	0.22778332	2.6553480	21	6 14.2	21.0
417756 2007 DO_{47}	13.5	X	247.66556	193.39504	165.08958	28.19274	0.0396371	0.08488562	5.1275900	21	5 23.6	20.8
417757 2007 DR_{49}	17.6	X	180.69460	64.69055	99.95169	3.15149	0.1214164	0.24224409	2.5485936	21	9 25.5	21.4
417758 2007 DK_{50}	16.2	X	89.40219	190.90757	341.04294	13.96638	0.0730873	0.22567849	2.6718328	21	6 16.8	20.1
417759 2007 DZ_{50}	17.4	X	89.84017	209.39918	324.65308	6.25341	0.0728797	0.22580772	2.6708132	21	6 20.5	21.0
417760 2007 DP_{56}	16.9	X	172.99177	264.42818	153.00574	7.80790	0.1366548	0.22352582	2.6889594	21	5 4.0	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417761 2007 DR_{59}	16.5	X	59.45468	256.18726	339.56382	11.91771	0.2339728	0.22744701	2.6579648	21	8 28.5	19.8
417762 2007 DR_{66}	17.8	X	291.71069	340.33091	77.43265	2.38894	0.0994226	0.24329354	2.5412594	21	9 24.1	20.6
417763 2007 DF_{69}	17.5	X	190.33713	77.13578	343.07395	3.86178	0.1116544	0.22556410	2.6727360	21	5 20.5	21.6
417764 2007 DK_{84}	17.1	X	93.78180	61.63034	173.22573	9.27009	0.1302668	0.23195911	2.6233834	21	9 23.8	20.7
417765 2007 DK_{92}	16.4	X	131.64999	128.70712	342.17064	16.51274	0.1114543	0.22407583	2.6845575	21	5 18.9	20.7
417766 2007 DS_{92}	17.1	X	127.25851	321.90513	143.26791	5.52496	0.0683655	0.22147196	2.7055582	21	5 8.9	20.9
417767 2007 DX_{96}	14.1	X	32.84162	44.89510	177.47832	16.36652	0.0478069	0.08415016	5.1574229	21	6 7.8	20.9
417768 2007 DF_{101}	17.7	X	195.69644	134.22324	349.92419	6.85696	0.1547256	0.23863368	2.5742352	21	8 17.9	21.7
417769 2007 DF_{110}	16.5	X	97.09670	123.09117	41.07975	12.44707	0.0967458	0.22492874	2.6777668	21	6 19.1	20.3
417770 2007 DN_{112}	15.7	X	171.33098	228.64770	60.05827	24.17323	0.1780802	0.17931026	3.1145785	21	—	—
417771 2007 DG_{113}	16.8	X	91.37918	96.82306	99.16187	15.82088	0.2602193	0.22640428	2.6661196	21	8 20.4	21.1
417772 2007 DV_{113}	16.5	X	209.06819	37.02526	348.43292	8.32470	0.0322641	0.21894020	2.7263758	21	4 26.1	20.4
417773 2007 DZ_{115}	17.6	X	226.13023	32.69001	334.68261	5.06496	0.0151741	0.21890484	2.7266693	21	4 25.9	21.5
417774 2007 EY_{4}	17.7	X	222.04933	295.78767	173.72066	6.75074	0.2469531	0.24148126	2.5539580	21	8 14.9	21.9
417775 2007 ED_{5}	17.2	X	44.56472	4.28956	163.79184	3.01449	0.0406818	0.21733062	2.7398205	21	4 5.5	20.8
417776 2007 ED_{13}	16.3	X	83.42561	106.64875	149.52640	11.00753	0.1308683	0.24043075	2.5613920	21	10 13.5	20.1
417777 2007 ES_{13}	16.7	X	80.69841	178.34819	357.50487	8.56794	0.1086037	0.22404964	2.6847666	21	6 15.3	20.3
417778 2007 EE_{21}	17.4	X	158.91842	146.76026	2.40777	8.57263	0.1839854	0.23316015	2.6143667	21	8 16.6	21.7
417779 2007 ET_{23}	16.2	X	101.54162	12.91605	44.73034	6.35922	0.0663283	0.20249607	2.8720477	21	2 7.7	20.1
417780 2007 EX_{32}	16.4	X	221.93920	14.74883	16.80604	11.77468	0.1057928	0.22256636	2.6966818	21	5 14.9	20.7
417781 2007 EA_{33}	17.5	X	244.13042	209.09022	199.67875	2.61943	0.1703037	0.23546521	2.5972767	21	6 27.1	21.3
417782 2007 EM_{35}	16.5	X	143.67539	258.54951	27.06191	8.91857	0.1134829	0.18327543	3.0694923	21	—	—
417783 2007 EL_{41}	17.3	X	118.38238	5.87858	153.02344	4.81989	0.1170138	0.23119740	2.6291422	21	7 11.6	21.1
417784 2007 EW_{41}	16.7	X	275.94532	133.42574	150.63493	14.10279	0.1097373	0.21383147	2.7696292	21	3 4.0	20.7
417785 2007 EZ_{57}	17.5	X	208.34642	272.27939	149.06681	5.52750	0.2561848	0.23578582	2.5949217	21	6 6.0	22.0
417786 2007 EP_{72}	16.5	X	34.54755	191.88692	4.40606	12.86893	0.1197658	0.21550808	2.7552458	21	4 28.9	19.8
417787 2007 EK_{77}	17.1	X	161.34632	9.78497	152.62187	4.72617	0.1813780	0.23460421	2.6036275	21	9 1.7	21.4
417788 2007 EV_{78}	16.3	X	91.80170	146.51156	3.14212	12.26933	0.1121076	0.22025032	2.7155534	21	5 23.4	20.2
417789 2007 EM_{79}	16.9	X	60.10962	349.87395	193.55410	13.99339	0.0731002	0.21698199	2.7427544	21	5 23.7	20.6
417790 2007 EK_{87}	16.7	X	89.93203	96.39142	42.77800	9.19586	0.0729030	0.21485975	2.7607855	21	5 4.7	20.4
417791 2007 ED_{88}	16.6	X	168.35308	70.31898	1.82028	11.77570	0.0864365	0.22061325	2.7125744	21	5 9.1	20.8
417792 2007 ED_{95}	16.2	X	189.22465	74.03160	12.56977	22.03814	0.0938148	0.22627766	2.6671141	21	6 22.9	20.7
417793 2007 EA_{109}	16.4	X	308.00564	229.47749	17.77286	15.94086	0.2064349	0.20415829	2.8564374	21	2 18.4	20.6
417794 2007 EL_{119}	16.6	X	11.15505	234.68692	29.14199	14.19387	0.1372004	0.21858985	2.7292881	21	6 28.6	19.8
417795 2007 ES_{120}	16.2	X	116.81086	121.65983	14.82469	15.48257	0.0949713	0.22315927	2.6919031	21	6 4.3	20.3
417796 2007 EJ_{121}	16.5	X	148.44494	67.95731	130.75412	13.04634	0.1113252	0.24091931	2.5579280	21	10 9.6	20.6
417797 2007 ER_{131}	17.1	X	128.65195	122.26546	4.31874	5.50089	0.0386953	0.22183239	2.7026267	21	6 1.2	20.9
417798 2007 EX_{133}	16.9	X	269.72873	118.11740	174.25318	3.55098	0.0650368	0.20922928	2.8100954	21	3 12.1	20.9
417799 2007 EU_{134}	16.5	X	89.12423	20.97980	168.43625	14.25078	0.1842151	0.22484583	2.6784250	21	7 24.9	20.6
417800 2007 EC_{146}	17.9	X	211.07278	328.17627	151.96089	5.55736	0.2761786	0.24044022	2.5613247	21	8 18.2	22.3
417801 2007 EV_{146}	17.2	X	104.41761	316.09490	143.12521	5.47914	0.0754150	0.21362883	2.7713804	21	4 4.1	21.0
417802 2007 EF_{152}	16.4	X	217.13268	285.46309	49.89599	4.58787	0.1006591	0.20926259	2.8097973	21	3 7.9	20.7
417803 2007 EQ_{166}	17.0	X	162.22008	74.94860	103.08366	8.40977	0.2543608	0.23697612	2.5862252	21	9 25.7	21.7
417804 2007 EU_{167}	17.4	X	175.77593	182.20768	319.98536	4.05291	0.1927931	0.23551446	2.5969146	21	8 19.6	21.7
417805 2007 EV_{169}	16.6	X	123.68433	106.54931	8.49998	12.82830	0.1752359	0.22179818	2.7029047	21	5 24.5	20.9
417806 2007 ED_{171}	17.7	X	184.85538	197.78135	292.35110	3.35790	0.2005664	0.23792681	2.5793313	21	8 11.8	22.1
417807 2007 EV_{187}	16.4	X	91.18283	13.47141	128.38145	13.36661	0.2270323	0.22107434	2.7088014	21	6 4.9	20.4
417808 2007 EJ_{192}	16.4	X	3.68587	190.11463	4.53034	9.21268	0.1002392	0.21007656	2.8025346	21	3 11.3	19.6
417809 2007 EN_{193}	17.3	X	353.29092	272.95294	343.88118	3.39535	0.0233286	0.22395896	2.6854913	21	5 19.1	20.7
417810 2007 EW_{205}	16.5	X	298.53026	12.30636	305.29706	8.83256	0.0267530	0.22825694	2.6516735	21	5 23.4	20.2
417811 2007 EB_{206}	17.1	X	253.18006	278.68372	108.75740	3.58974	0.1071707	0.22809925	2.6528955	21	6 16.9	20.7
417812 2007 EC_{210}	17.3	X	136.02599	225.34364	278.60138	4.08808	0.2093296	0.23031777	2.6358321	21	7 18.5	21.5
417813 2007 EJ_{212}	16.2	X	94.96556	336.98892	131.57489	10.98946	0.1554375	0.21630155	2.7485035	21	4 18.5	20.1
417814 2007 EN_{216}	16.4	X	93.70273	89.76391	107.39724	12.88030	0.1333440	0.22636998	2.6663889	21	8 6.1	20.2
417815 2007 EL_{217}	17.0	X	161.08900	91.34124	3.71193	4.96752	0.1310412	0.22525003	2.6752199	21	6 5.2	21.1
417816 2007 FA	20.1	X	5.97512	135.45409	156.41365	16.32958	0.2658033	0.70510271	1.2501663	21	12 3.5	20.9
417817 2007 FX_{2}	16.1	X	218.95689	2.48241	104.24424	15.01249	0.1962215	0.23799916	2.5788085	21	8 16.5	20.3
417818 2007 FT_{11}	17.7	X	131.57678	332.34127	165.77246	2.51108	0.1789508	0.22911862	2.6450210	21	7 4.8	21.9
417819 2007 FQ_{15}	17.0	X	97.89123	251.19981	276.97064	3.14197	0.1748316	0.22513283	2.6761482	21	7 7.6	20.7
417820 2007 FX_{20}	17.1	X	195.65476	49.17294	34.99834	6.61998	0.1313167	0.22816476	2.6523877	21	6 26.6	21.3
417821 2007 FF_{22}	16.9	X	33.70010	181.65017	14.84852	7.75168	0.1092042	0.21482534	2.7610803	21	4 29.8	20.1
417822 2007 FJ_{23}	16.9	X	123.75484	97.15787	23.47131	10.80594	0.1007651	0.21957360	2.7211301	21	5 24.5	21.0
417823 2007 FQ_{29}	17.0	X	119.01027	282.18781	163.09805	4.11150	0.0718934	0.21247338	2.7814187	21	4 3.2	20.9
417824 2007 FU_{29}	16.2	X	3.28170	269.47300	5.51672	13.19187	0.1474220	0.22265719	2.6959484	21	7 1.2	19.3
417825 2007 FM_{32}	16.6	X	250.72124	260.36822	34.31426	13.95402	0.0692231	0.20109406	2.8853814	21	3 1.2	21.1
417826 2007 FR_{38}	16.6	X	73.66226	107.85247	84.09392	9.73592	0.1990100	0.21981921	2.7191027	21	7 13.1	20.2
417827 2007 FG_{39}	17.0	X	143.57169	74.62526	119.73919	11.83049	0.2349935	0.23523175	2.5989949	21	10 1.9	21.7
417828 2007 FA_{47}	16.2	X	193.14557	56.50532	40.70633	14.74212	0.0682263	0.22704040	2.6611373	21	7 14.9	20.4
417829 2007 FS_{48}	14.1	X	163.04060	82.22213	21.56702	10.53958	0.0613256	0.08344022	5.1866358	21	6 18.2	21.3
417830 2007 FE_{49}	14.0	X	95.13943	149.05897	19.57489	18.09756	0.0840217	0.08224818	5.2366297	21	6 23.2	21.2
417831 2007 FP_{49}	16.4	X	87.74377	112.52084	116.35797	14.06321	0.1113954	0.22854227	2.6494660	21	9 10.3	20.3
417832 2007 FV_{49}	15.9	X	91.26083	84.32477	93.85844	15.85452	0.0293376	0.22100285	2.7093855	21	6 21.4	19.5
417833 2007 GG_{4}	16.4	X	54.25030	158.24478	43.17444	10.15482	0.1326490	0.21820738	2.7324764	21	6 14.4	19.8
417834 2007 GH_{5}	16.3	X	200.81889	309.40487	102.12505	14.99077	0.0781595	0.21447836	2.7640574	21	5 26.1	20.6
417835 2007 GK_{32}	16.8	X	52.63489	5.39953	184.25828	9.13343	0.0709972	0.21482241	2.7611054	21	5 20.9	20.4
417836 2007 GP_{41}	17.4	X	155.04079	119.26394	31.09941	7.81293	0.1529784	0.22789113	2.6545104	21	8 14.1	21.7
417837 2007 GZ_{52}	17.2	X	162.94261	121.38213	25.04990	12.78132	0.2039486	0.23061490	2.6335676	21	8 19.9	21.8
417838 2007 GU_{56}	16.3	X	96.34330	0.51008	56.70576	12.84655	0.0425899	0.19731373	2.9221187	21	1 30.4	20.5
417839 2007 GD_{65}	16.4	X	84.61960	48.31602	220.99198	13.40171	0.1291003	0.23220452	2.6215347	21	10 26.2	20.1
417840 2007 GJ_{74}	17.2	X	173.45251	72.27206	91.32509	6.69813	0.2838506	0.23648958	2.5897711	21	9 15.4	21.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417841 2007 GT_{76}	16.1	X	52.30545	235.81820	45.01544	14.50464	0.1406653	0.22933130	2.6433855	21	10 8.8	19.6
417842 2007 GF_{77}	16.5	X	13.15024	66.94471	142.38885	13.70844	0.1617907	0.21029604	2.8005843	21	4 19.3	19.7
417843 2007 HS_{1}	16.9	X	51.61737	336.60585	207.80731	7.15553	0.1877071	0.21579299	2.7528201	21	5 26.9	19.9
417844 2007 HP_{8}	14.2	X	194.49726	69.27236	7.71045	7.49018	0.0738596	0.08402127	5.1626961	21	6 19.6	21.4
417845 2007 HT_{32}	16.8	X	105.41644	115.61284	20.22411	9.96163	0.1108344	0.21559744	2.7544844	21	5 23.9	20.8
417846 2007 HL_{40}	17.0	X	272.31453	172.80798	96.11535	2.78033	0.0813714	0.19936089	2.9020802	21	2 14.7	21.3
417847 2007 HR_{46}	16.0	X	182.05755	231.86435	51.98848	11.81446	0.2487257	0.18156867	3.0886979	21	—	—
417848 2007 HZ_{51}	16.5	X	193.25380	206.98417	82.41258	10.16953	0.0891710	0.18626418	3.0365689	21	—	—
417849 2007 HG_{57}	16.6	X	162.13080	88.72113	201.71997	11.26164	0.1106174	0.17933229	3.1143235	21	—	—
417850 2007 HV_{58}	16.2	X	0.78823	118.99569	80.52474	16.03460	0.0956450	0.20527482	2.8460701	21	3 22.5	20.0
417851 2007 HQ_{60}	16.5	X	210.64045	50.19454	46.27356	22.67196	0.0532368	0.22633355	2.6666750	21	8 12.5	20.8
417852 2007 HL_{61}	16.9	X	60.70098	347.95605	179.07869	8.35567	0.1569256	0.21120529	2.7925408	21	5 14.8	20.3
417853 2007 HS_{96}	16.2	X	246.04181	282.08444	45.36914	15.39339	0.1642356	0.20382528	2.8595478	21	3 27.9	20.9
417854 2007 JM	16.3	X	214.21228	76.77424	198.33795	18.42548	0.1068510	0.18515408	3.0486941	21	—	—
417855 2007 JN	15.5	X	198.51450	195.53467	95.39595	24.15703	0.0943636	0.18548394	3.0450786	21	—	—
417856 2007 JZ	15.4	X	111.07270	253.65982	61.83487	27.17768	0.2934651	0.17120415	3.2121305	21	—	—
417857 2007 JE_{9}	17.2	X	145.77178	12.03381	157.55663	5.04909	0.3302032	0.23133512	2.6280987	21	8 31.9	22.1
417858 2007 JK_{11}	16.5	X	65.86272	144.69330	44.76750	10.31099	0.1929649	0.21611326	2.7500997	21	6 26.8	20.0
417859 2007 JX_{12}	15.5	X	120.75786	230.79830	95.92712	18.65642	0.2491093	0.17349458	3.1837975	21	—	—
417860 2007 JK_{16}	15.9	X	76.79376	125.07828	117.86103	15.45313	0.1756576	0.22649527	2.6654055	21	9 25.9	20.0
417861 2007 JW_{17}	16.3	X	149.36500	190.29755	129.55841	15.15730	0.0882033	0.18096730	3.0955369	21	—	—
417862 2007 JX_{23}	16.6	X	163.84376	333.85597	185.34081	17.81793	0.0565856	0.22624162	2.6673973	21	8 26.5	20.6
417863 2007 JN_{45}	16.2	X	133.49421	241.21204	75.23799	18.41829	0.1542751	0.17615819	3.1516223	21	—	—
417864 2007 KQ_{3}	16.5	X	135.14106	122.20989	101.56595	13.93248	0.1534197	0.23444096	2.6048360	21	10 29.4	20.9
417865 2007 LA_{28}	16.4	X	94.62090	122.70365	107.77761	12.98650	0.2179114	0.22727774	2.6592844	21	10 4.1	20.8
417866 2007 LY_{33}	15.3	X	174.34848	230.39814	98.53342	24.18183	0.1984515	0.18617213	3.0375699	21	1 24.9	20.5
417867 2007 MO	15.9	X	109.64768	132.82195	119.38468	32.40555	0.2284907	0.22766850	2.6562406	21	11 19.9	21.0
417868 2007 MX_{2}	15.5	X	354.63590	177.95475	282.64151	12.18887	0.0516885	0.17144128	3.2091680	21	—	—
417869 2007 MO_{6}	15.8	X	137.87554	142.17480	278.27278	14.67575	0.0756720	0.19105646	2.9855767	21	3 19.1	20.5
417870 2007 ME_{9}	15.8	X	149.85332	44.64103	236.77390	26.93798	0.2269692	0.17265665	3.1940902	21	12 29.2	21.6
417871 2007 MB_{24}	18.2	X	188.53349	269.14209	271.13696	47.70433	0.6999966	0.38362362	1.8758545	21	9 8.1	23.7
417872 2007 ND_{1}	15.5	X	230.45234	152.43172	109.02336	23.12271	0.1978198	0.18175882	3.0865434	21	—	—
417873 2007 NJ_{4}	17.6	X	81.63967	69.93348	241.96457	4.27430	0.2242332	0.29952293	2.2123270	21	—	—
417874 2007 NC_{5}	18.1	X	247.88635	20.53120	165.84643	19.32152	0.8872026	0.25791902	2.4442585	21	10 16.8	23.5
417875 2007 OG_{1}	14.7	X	151.59803	95.21823	261.71287	24.41877	0.2694882	0.17285946	3.1915913	21	2 2.8	20.5
417876 2007 PX_{7}	17.8	X	87.76099	12.92560	318.20292	6.59161	0.2075862	0.30265684	2.1970286	21	—	—
417877 2007 PP_{19}	18.1	X	66.06833	130.14540	182.80264	4.41349	0.1767556	0.29569523	2.2313781	21	12 16.5	21.2
417878 2007 PV_{21}	17.8	X	113.02558	336.86494	335.70063	6.39641	0.2335431	0.30466054	2.1873851	21	—	—
417879 2007 PY_{23}	15.6	X	178.24765	357.38648	316.14431	16.32037	0.1782062	0.17430147	3.1739642	21	1 13.0	20.9
417880 2007 PG_{26}	17.5	X	115.76986	317.61326	27.32471	5.26100	0.2269151	0.30676768	2.1773570	21	—	—
417881 2007 PB_{46}	18.3	X	94.75959	145.52945	154.57191	5.74081	0.1884335	0.29824487	2.2186429	21	12 28.9	21.8
417882 2007 PS_{48}	16.7	X	99.52310	256.62620	69.55849	10.49380	0.2061006	0.23301334	2.6154647	21	—	—
417883 2007 QR_{3}	15.5	X	166.92531	33.11623	318.13478	17.13238	0.1563004	0.17804804	3.1292812	21	2 10.4	20.5
417884 2007 QB_{12}	17.5	X	103.02305	28.56793	272.22843	5.90761	0.1964499	0.30106502	2.2047661	21	—	—
417885 2007 QZ_{16}	17.9	X	46.15433	49.18086	280.78518	4.15319	0.1990813	0.29317730	2.2441359	21	12 18.7	20.8
417886 2007 RF_{6}	17.6	X	109.05270	18.69907	298.04791	5.07911	0.1681289	0.30226273	2.1989380	21	—	—
417887 2007 RT_{10}	18.2	X	48.50223	151.25568	192.02308	4.06060	0.1999232	0.29454864	2.2371651	21	—	—
417888 2007 RN_{11}	17.1	X	264.22334	197.32895	330.49237	7.69555	0.0076133	0.30176757	2.2013428	21	—	—
417889 2007 RO_{16}	15.0	X	197.41472	339.25824	337.72038	23.12280	0.2285609	0.17584776	3.1553303	21	2 5.2	20.6
417890 2007 RD_{27}	18.7	X	45.54353	101.37590	214.95175	2.70660	0.2427577	0.29094731	2.2555882	21	12 5.8	21.6
417891 2007 RL_{32}	15.6	X	171.49850	323.32865	5.97565	15.70871	0.1857891	0.17447546	3.1718537	21	1 28.5	21.0
417892 2007 RQ_{34}	18.5	X	45.51325	169.44011	163.22586	3.92537	0.2483863	0.29306030	2.2447332	21	12 27.7	21.6
417893 2007 RX_{38}	17.9	X	85.75136	334.73767	349.93383	3.20055	0.2134880	0.29845415	2.2176056	21	—	—
417894 2007 RW_{40}	18.3	X	30.22584	322.92870	26.83382	3.55739	0.2629517	0.29085475	2.2560667	21	—	—
417895 2007 RN_{43}	17.2	X	29.83405	24.60255	326.03389	6.67610	0.1429003	0.29042184	2.2583082	21	12 16.7	19.9
417896 2007 RU_{44}	16.0	X	102.26549	99.79504	305.19081	5.32793	0.0983160	0.17104109	3.2141717	21	1 31.8	20.5
417897 2007 RJ_{54}	17.4	X	91.33482	7.30562	287.37331	3.57082	0.1778541	0.29421598	2.2388511	21	12 17.9	20.8
417898 2007 RL_{73}	17.8	X	20.83920	3.56425	349.24998	4.65961	0.1410217	0.29060030	2.2573835	21	12 5.6	20.2
417899 2007 RR_{98}	17.8	X	25.24779	335.94150	63.77309	3.86184	0.1625424	0.29515162	2.2341171	21	—	—
417900 2007 RE_{102}	15.6	X	205.70132	32.96172	335.59843	15.68513	0.1304027	0.18600218	3.0394198	21	3 29.9	20.6
417901 2007 RN_{105}	18.1	X	80.31345	296.12643	38.35132	3.93472	0.1879901	0.29760255	2.2218341	21	—	—
417902 2007 RY_{109}	16.1	X	63.33309	282.94579	164.95374	4.61550	0.1375824	0.17038520	3.2224149	21	2 5.1	20.0
417903 2007 RZ_{111}	18.3	X	39.86739	42.55423	328.60304	0.72545	0.0660173	0.29511170	2.2343186	21	—	—
417904 2007 RO_{113}	16.2	X	194.99877	2.36289	334.56739	8.49741	0.0649910	0.17704377	3.1411038	21	2 17.9	20.8
417905 2007 RL_{136}	15.8	X	108.70913	40.04446	355.49894	18.92469	0.1632117	0.17096189	3.2151643	21	2 12.9	20.6
417906 2007 RW_{138}	18.5	X	29.13937	166.10065	187.75453	3.88017	0.2527715	0.29137154	2.2533983	21	—	—
417907 2007 RU_{141}	18.0	X	10.95567	194.98977	187.50362	2.65212	0.2319477	0.28993631	2.2608286	21	—	—
417908 2007 RZ_{141}	17.6	X	9.34576	358.23422	11.14784	5.98623	0.1827152	0.28753103	2.2734194	21	12 17.8	19.9
417909 2007 RT_{143}	18.2	X	345.51670	56.93337	315.88537	4.44577	0.1841992	0.28532645	2.2851148	21	11 3.1	19.8
417910 2007 RQ_{145}	17.1	X	44.56996	10.54518	345.90827	7.39120	0.1932582	0.29269246	2.2466135	21	—	—
417911 2007 RR_{149}	17.3	X	93.69307	263.02029	32.56192	8.85747	0.1597767	0.29414294	2.2392217	21	12 19.6	20.8
417912 2007 RX_{157}	17.7	X	101.34851	248.05099	44.40971	7.19140	0.2451251	0.29798314	2.2199418	21	12 27.8	21.5
417913 2007 RC_{158}	17.7	X	119.27415	284.65859	10.25327	5.95290	0.1444503	0.30058576	2.2071090	21	—	—
417914 2007 RZ_{164}	18.2	X	60.97834	109.02824	185.08238	6.45714	0.1338812	0.28901692	2.2656207	21	11 10.4	21.1
417915 2007 RL_{172}	15.9	X	177.86837	270.05369	78.47797	3.96867	0.0895104	0.17543976	3.1602203	21	2 16.3	20.7
417916 2007 RW_{199}	18.2	X	12.49964	39.90095	339.57192	3.55924	0.1521032	0.29050406	2.2578820	21	—	—
417917 2007 RS_{201}	18.0	X	88.24981	111.16321	194.89484	4.09001	0.2032808	0.29527072	2.2335163	21	12 30.7	21.6
417918 2007 RZ_{204}	17.6	X	253.20859	186.48764	342.95375	7.06955	0.0138857	0.29661489	2.2267634	21	—	—
417919 2007 RO_{211}	17.4	X	308.24967	17.49949	303.49842	1.50346	0.2163237	0.27054719	2.3675947	21	5 9.6	20.0
417920 2007 RB_{215}	17.9	X	348.96874	71.89407	346.19395	6.71452	0.0952861	0.29260690	2.2470514	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
417921 2007 RJ_{215}	16.0	X	75.45213	356.26863	353.52659	11.61649	0.1541841	0.15572803	3.4215655	21	—	—
417922 2007 RF_{220}	17.8	X	165.97195	29.39987	200.61937	7.16737	0.1036478	0.29278582	2.2461359	21	12 8.8	21.0
417923 2007 RQ_{233}	17.6	X	81.38396	254.81639	80.81346	3.48975	0.1903464	0.29850913	2.2173332	21	—	—
417924 2007 RG_{236}	17.7	X	23.88026	331.65534	15.77355	4.93352	0.1773457	0.29060094	2.2573802	21	12 8.7	20.2
417925 2007 RS_{244}	18.1	X	51.21137	310.28650	52.37751	2.46098	0.1073930	0.29509403	2.2344078	21	—	—
417926 2007 RV_{269}	18.1	X	349.57955	167.40654	222.80315	5.20706	0.1584549	0.28727878	2.2747500	21	12 9.7	20.1
417927 2007 RG_{278}	15.8	X	204.99688	296.60682	48.64811	16.89015	0.1326642	0.18093619	3.0958917	21	3 17.5	21.0
417928 2007 RX_{288}	17.3	X	309.08040	27.82313	50.73615	6.03663	0.1083724	0.28113882	2.3077504	21	11 28.3	19.4
417929 2007 RE_{289}	17.8	X	28.02324	103.11587	219.14426	1.99543	0.2334044	0.28132436	2.3067356	21	11 17.7	20.2
417930 2007 RW_{290}	15.3	X	348.97510	27.96868	37.12018	10.24727	0.0602027	0.14846224	3.5323092	21	12 10.3	20.2
417931 2007 RG_{293}	18.3	X	202.63060	192.18751	46.13956	2.56404	0.0584439	0.30182347	2.2010710	21	—	—
417932 2007 RU_{298}	17.9	X	337.91775	205.41497	204.81197	5.10189	0.1561384	0.28322750	2.2963907	21	12 15.5	19.8
417933 2007 RY_{308}	18.3	X	3.36005	85.18996	319.03029	4.43568	0.1318653	0.29316141	2.2442170	21	—	—
417934 2007 RU_{310}	17.7	X	17.45158	232.01253	90.80410	4.86036	0.2660276	0.28430994	2.2905583	21	11 9.2	19.8
417935 2007 RG_{315}	17.9	X	71.53535	316.28902	35.78140	5.46414	0.1793049	0.29869036	2.2164363	21	—	—
417936 2007 RT_{317}	18.2	X	347.62887	307.70786	78.05172	2.11786	0.1956313	0.28700912	2.2761747	21	12 3.7	19.6
417937 2007 RM_{322}	17.8	X	44.97436	115.52749	224.63391	5.77852	0.1488525	0.29122842	2.2541365	21	12 23.3	20.6
417938 2007 RK_{325}	17.4	X	137.86899	228.53459	39.50182	7.28838	0.2171025	0.29501921	2.2347855	21	12 25.9	21.1
417939 2007 SU_3	17.1	X	48.10139	0.67298	3.52958	5.98840	0.2010754	0.29435304	2.2381561	21	—	—
417940 2007 SE_4	17.5	X	72.08941	64.61626	246.12006	4.69601	0.1782617	0.29338352	2.2430842	21	12 19.4	20.7
417941 2007 SL_7	17.6	X	7.85402	357.49410	26.11830	6.59333	0.0984445	0.28986585	2.2611950	21	12 23.0	20.1
417942 2007 SJ_{10}	18.7	X	75.04939	259.33006	58.94766	2.16389	0.1858186	0.29376315	2.2411513	21	—	—
417943 2007 SH_{13}	16.0	X	91.11566	103.52696	356.72887	9.88702	0.1977273	0.17444537	3.1722184	21	4 6.6	20.4
417944 2007 SS_{18}	17.8	X	10.48010	313.38998	357.78700	5.55973	0.2415911	0.27856608	2.3219377	21	9 28.6	19.4
417945 2007 TL_{10}	17.8	X	78.15162	320.54413	23.74975	3.44763	0.1979607	0.29803607	2.2196790	21	—	—
417946 2007 TN_{10}	17.6	X	82.95319	114.02946	184.97316	4.37384	0.2230575	0.29250393	2.2475787	21	12 18.7	21.1
417947 2007 TJ_{16}	17.5	X	73.43882	162.30866	219.74557	5.64720	0.2388372	0.30145306	2.2028737	21	—	—
417948 2007 TY_{19}	17.4	X	140.62059	278.25907	10.47880	7.19797	0.1497725	0.30012439	2.2093704	21	—	—
417949 2007 TB_{23}	18.7	X	58.83985	173.83398	40.10726	38.28785	0.1976488	0.69517265	1.2620433	21	10 6.4	20.4
417950 2007 TL_{33}	17.2	X	61.65784	349.59285	31.35257	7.84929	0.1672148	0.29815159	2.2191056	21	—	—
417951 2007 TU_{47}	17.6	X	139.65352	342.20471	283.93446	2.38534	0.1335415	0.29411826	2.2393470	21	12 26.5	20.8
417952 2007 TQ_{49}	18.6	X	334.57652	65.97274	343.48878	1.78598	0.1993941	0.28513473	2.2861390	21	12 11.8	20.2
417953 2007 TM_{68}	15.8	X	12.04321	45.84313	43.36498	11.83582	0.1938683	0.15500028	3.4322670	21	—	—
417954 2007 TY_{69}	17.9	X	37.58260	125.16590	203.51847	2.86540	0.2189914	0.28876187	2.2669546	21	12 8.9	20.7
417955 Mallama	15.4	X	92.60835	107.35805	237.07267	8.60774	0.0961506	0.15474949	3.4359743	21	—	—
417956 2007 TW_{74}	17.3	X	344.73424	213.60645	218.67010	7.20370	0.1046801	0.29184336	2.2509689	21	—	—
417957 2007 TF_{77}	18.0	X	325.24913	171.33877	226.60283	5.44347	0.1710533	0.28153978	2.3055588	21	10 27.5	19.6
417958 2007 TE_{87}	18.2	X	287.90936	265.38132	180.49017	5.26260	0.1459067	0.28069888	2.3101611	21	10 28.2	20.3
417959 2007 TP_{87}	17.1	X	242.52794	46.73762	54.97768	7.69734	0.0975462	0.27490811	2.3424897	21	9 20.9	20.2
417960 2007 TW_{92}	18.1	X	340.68367	297.94712	136.84719	2.28352	0.1340636	0.29075776	2.2565684	21	—	—
417961 2007 TS_{104}	18.1	X	14.68154	121.82034	204.24939	8.43149	0.1787276	0.27939979	2.3173164	21	10 21.7	20.2
417962 2007 TD_{106}	17.5	X	12.22710	190.85341	211.49464	6.58257	0.0874303	0.29182921	2.2510417	21	—	—
417963 2007 TQ_{109}	17.4	X	8.96773	200.86708	227.73882	4.36463	0.1653803	0.29645387	2.2275697	21	—	—
417964 2007 TL_{113}	17.8	X	24.24031	301.85599	61.03575	6.48439	0.2454421	0.28993836	2.2608179	21	—	—
417965 2007 TH_{114}	18.1	X	45.15360	41.28079	350.93098	5.25976	0.2119258	0.29692501	2.2252127	21	—	—
417966 2007 TX_{119}	17.6	X	136.90514	276.65554	53.57839	5.98867	0.2544757	0.30614550	2.1803061	21	—	—
417967 2007 TB_{121}	16.3	X	85.05227	79.33837	1.94167	9.33662	0.0809899	0.17582409	3.1556134	21	2 22.4	20.6
417968 2007 TP_{127}	17.3	X	33.25039	226.00187	64.88757	3.18325	0.2025320	0.27793451	2.3254539	21	10 7.1	19.6
417969 2007 TV_{140}	17.8	X	74.99920	141.79024	138.04875	3.24753	0.1765658	0.28418166	2.2912476	21	11 12.3	20.9
417970 2007 TL_{142}	16.1	X	91.21168	148.09454	199.42338	7.34961	0.1410757	0.15690816	3.4043878	21	—	—
417971 2007 TC_{155}	17.4	X	48.88355	339.35450	3.03304	7.00367	0.1497943	0.29100612	2.2552843	21	—	—
417972 2007 TW_{156}	17.9	X	67.47717	43.69186	282.36506	1.91106	0.2558940	0.29334641	2.2432733	21	—	—
417973 2007 TF_{165}	17.6	X	23.67729	353.80270	27.16543	5.71387	0.1682661	0.29039720	2.2584359	21	—	—
417974 2007 TX_{167}	17.9	X	346.89702	22.53384	10.55499	6.81869	0.1308097	0.28617510	2.2805949	21	12 3.2	20.0
417975 2007 TD_{168}	17.9	X	61.31198	337.54178	355.66453	3.56764	0.1883638	0.29253028	2.2474437	21	—	—
417976 2007 TA_{172}	17.4	X	27.16734	348.98529	44.97423	8.30659	0.1163649	0.29390368	2.2404368	21	—	—
417977 2007 TM_{173}	18.5	X	345.57870	344.85517	16.55926	0.97661	0.1725000	0.28197909	2.3031636	21	10 15.5	20.0
417978 Haslehner	16.1	X	114.46648	65.62125	22.66686	9.80208	0.0701572	0.17648427	3.1477390	21	4 5.1	20.7
417979 2007 TW_{186}	17.5	X	2.42615	331.75842	71.91751	7.13623	0.0878165	0.29026775	2.2591073	21	—	—
417980 2007 TP_{193}	16.4	X	100.27247	50.26322	357.92724	7.38250	0.1782170	0.17116423	3.2126299	21	2 15.5	20.8
417981 2007 TP_{216}	17.3	X	35.77525	345.56232	29.99992	8.40806	0.1517456	0.29124751	2.2540380	21	—	—
417982 2007 TL_{217}	18.3	X	0.75128	136.56881	254.43869	2.37161	0.1187285	0.28612775	2.2808465	21	12 24.4	20.4
417983 2007 TY_{217}	17.5	X	52.12727	287.52480	28.20260	7.14185	0.1449649	0.28371247	2.2937730	21	11 26.3	20.4
417984 2007 TO_{221}	17.8	X	145.28159	246.65682	5.11794	4.72987	0.1268952	0.29802966	2.2197108	21	12 14.2	21.0
417985 2007 TH_{224}	15.8	X	157.18015	30.27918	314.78497	11.95003	0.1450655	0.17772861	3.1330295	21	1 26.1	20.6
417986 2007 TU_{229}	18.6	X	305.41331	41.64529	35.77413	1.99223	0.1460952	0.28283810	2.2984979	21	11 17.9	20.4
417987 2007 TO_{234}	17.7	X	350.35314	11.15209	56.51201	6.82306	0.0800658	0.28962955	2.2624247	21	—	—
417988 2007 TW_{274}	17.7	X	185.28630	160.95708	42.71882	3.90739	0.1308468	0.28817728	2.2700193	21	11 21.8	21.0
417989 2007 TN_{275}	17.7	X	63.45056	297.87718	55.71556	6.10179	0.1493984	0.29605692	2.2295604	21	—	—
417990 2007 TO_{284}	18.5	X	283.50061	326.50719	165.91073	3.02554	0.0928211	0.29329280	2.2435467	21	—	—
417991 2007 TP_{302}	17.9	X	85.12661	72.35424	226.45054	4.08801	0.1617139	0.28929115	2.2641887	21	12 15.3	21.1
417992 2007 TJ_{346}	17.7	X	4.36358	4.03568	40.93685	7.95629	0.0911276	0.29244649	2.2478730	21	—	—
417993 2007 TG_{356}	18.4	X	0.34850	278.54292	90.27118	6.61867	0.1979183	0.28409373	2.2917203	21	12 3.5	20.2
417994 2007 TV_{360}	15.7	X	149.61227	326.34795	88.71737	10.25518	0.0702767	0.17446855	3.1719375	21	4 9.2	20.6
417995 2007 TM_{368}	17.8	X	19.13360	222.46267	147.00466	3.38079	0.2002073	0.29026332	2.2591303	21	—	—
417996 2007 TZ_{372}	15.9	X	162.46208	289.56698	157.54606	17.40856	0.1243044	0.19299185	2.9655829	21	6 1.3	20.9
417997 2007 TC_{378}	17.8	X	53.41871	234.15201	103.59199	3.09290	0.2079591	0.29209526	2.2496746	21	—	—
417998 2007 TL_{384}	18.2	X	261.38614	4.23153	140.08935	6.20787	0.0951430	0.28494921	2.2871312	21	12 15.6	20.7
417999 2007 TG_{400}	17.6	X	46.31466	211.07569	117.57995	7.79151	0.3273619	0.29050307	2.2578872	21	—	—
418000 2007 TY_{400}	17.9	X	335.36145	239.83339	208.58292	4.78908	0.1692090	0.28819360	2.2699337	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418001 2007 TB_{405}	17.6	X	50.45392	70.78968	240.19048	6.18150	0.1685930	0.28320017	2.2965384	21	11 22.6	20.2
418002 2007 TR_{418}	15.8	X	295.66516	282.94395	219.07733	9.43294	0.0215710	0.15307366	3.4610064	21	—	—
418003 2007 TC_{429}	18.0	X	72.87967	137.83508	194.79941	2.87079	0.1376329	0.29274621	2.2463384	21	—	—
418004 2007 TM_{433}	17.8	X	38.49251	289.18028	71.52797	6.17213	0.1743661	0.29170457	2.2516829	21	—	—
418005 2007 TA_{443}	15.3	X	162.72577	229.92452	109.18563	12.68417	0.1709532	0.17005021	3.2266455	21	1 27.2	20.4
418006 2007 TE_{446}	17.8	X	41.58547	268.28250	100.06102	7.51989	0.1843913	0.29304066	2.2448334	21	—	—
418007 2007 TN_{446}	17.7	X	86.34593	316.69545	57.65996	6.11365	0.1191044	0.30204210	2.2000087	21	—	—
418008 2007 TW_{450}	16.9	X	95.06170	41.29531	240.25091	9.61042	0.1317520	0.28819124	2.2699460	21	11 30.9	20.2
418009 2007 TD_{451}	17.9	X	4.72555	90.67217	252.16835	2.00890	0.2380195	0.28037643	2.3119319	21	11 6.7	19.6
418010 2007 TH_{451}	17.6	X	2.97855	299.60167	64.57439	7.10796	0.1357914	0.28395331	2.2924758	21	11 21.2	19.8
418011 2007 TC_{452}	17.4	X	47.67869	165.37830	231.46423	7.66490	0.2228111	0.29472203	2.2362876	21	—	—
418012 2007 UZ_{2}	17.6	X	32.58083	194.04552	181.38405	6.06993	0.1279319	0.29232027	2.2485200	21	—	—
418013 2007 UG_{4}	17.1	X	301.50875	159.36690	203.70550	23.24172	0.1996518	0.27130119	2.3632060	21	6 30.6	20.4
418014 2007 UZ_{6}	17.8	X	345.69841	141.26499	219.36901	1.10309	0.2420672	0.27964068	2.3159854	21	10 20.1	19.0
418015 2007 UN_{24}	17.8	X	20.45210	146.59825	192.65716	6.49958	0.1728241	0.28289264	2.2982025	21	11 21.2	20.2
418016 2007 UG_{34}	17.0	X	219.76131	169.34287	296.48370	11.29468	0.2093396	0.26994063	2.3711401	21	8 10.9	20.8
418017 2007 UQ_{42}	17.7	X	31.45757	31.72983	301.62791	2.92765	0.1588331	0.28377543	2.2934337	21	11 25.6	20.2
418018 2007 UP_{43}	18.0	X	357.83760	163.90260	192.16984	6.11458	0.1290147	0.28183804	2.3039319	21	10 29.8	20.1
418019 2007 UA_{52}	17.7	X	3.97065	185.66218	209.90908	5.50314	0.1347269	0.28659085	2.2783888	21	—	—
418020 2007 UP_{58}	17.6	X	233.80264	132.43845	32.66823	6.37030	0.1014431	0.28696290	2.2764190	21	12 1.8	20.5
418021 2007 UV_{60}	18.1	X	55.35055	278.22532	58.37890	4.81608	0.0984577	0.28679909	2.2772858	21	12 23.6	20.9
418022 2007 UW_{75}	18.1	X	331.11521	225.96663	264.51106	2.51628	0.1489854	0.29666762	2.2264996	21	—	—
418023 2007 UF_{78}	17.7	X	23.65939	114.32114	242.20594	6.23547	0.1371997	0.28786062	2.2716838	21	12 14.6	20.1
418024 2007 UF_{84}	17.8	X	273.87177	342.18023	43.55024	2.11564	0.1959711	0.26825794	2.3810453	21	6 27.2	20.8
418025 2007 UZ_{87}	18.2	X	1.93149	335.24882	41.84387	3.79912	0.2306009	0.28463249	2.2888276	21	12 24.2	20.2
418026 2007 UP_{94}	17.9	X	288.27289	26.79488	28.08163	5.60743	0.1278698	0.27571781	2.3379013	21	9 14.8	20.3
418027 2007 UL_{98}	17.3	X	273.32269	84.64347	49.55529	8.57443	0.0760061	0.28584371	2.2823572	21	12 21.9	19.9
418028 2007 UG_{102}	18.0	X	14.52944	104.34552	226.32249	6.07741	0.2339871	0.27940657	2.3172789	21	11 6.9	20.0
418029 2007 UB_{104}	18.0	X	280.23106	298.41370	81.31488	3.59200	0.1866803	0.26726587	2.3869338	21	6 28.7	20.9
418030 2007 UK_{115}	17.2	X	107.58356	275.14698	40.76393	7.96708	0.1913524	0.29541216	2.2328033	21	—	—
418031 2007 UW_{118}	17.7	X	93.56122	301.19443	19.08179	5.36610	0.1794302	0.29374800	2.2412283	21	—	—
418032 2007 UQ_{119}	18.8	X	353.64744	183.11768	202.82786	6.59107	0.0992133	0.28671155	2.2777493	21	12 3.3	21.1
418033 2007 UV_{134}	16.2	X	78.07143	79.04436	45.83806	7.92567	0.1157462	0.17381736	3.1798547	21	4 12.6	20.5
418034 2007 VH	17.8	X	16.86662	342.34311	44.99316	7.15241	0.1799304	0.29221962	2.2490363	21	—	—
418035 2007 VD_{9}	17.6	X	353.69666	305.59590	79.39267	9.31168	0.2207301	0.28412123	2.2915725	21	12 18.2	19.4
418036 2007 VO_{12}	17.9	X	359.96475	54.82706	323.66502	4.28379	0.1696757	0.28464014	2.2887865	21	12 11.9	20.1
418037 2007 VV_{17}	18.1	X	271.78411	315.72060	202.52703	4.44113	0.0626630	0.29339659	2.2430176	21	—	—
418038 2007 VE_{22}	16.9	X	229.18228	261.94134	228.21628	7.06360	0.0428061	0.28104636	2.3082565	21	10 15.9	19.7
418039 2007 VG_{26}	17.5	X	154.07997	14.35743	241.53108	5.66056	0.0748521	0.29081353	2.2562799	21	12 29.7	20.6
418040 2007 VM_{61}	18.0	X	33.06150	329.21553	341.06969	1.78746	0.2217019	0.27891533	2.3199990	21	11 5.0	20.5
418041 2007 VL_{75}	17.7	X	132.25256	190.09813	62.27374	5.27950	0.0779229	0.28505725	2.2865533	21	11 29.8	20.9
418042 2007 VU_{78}	17.2	X	154.89651	329.11710	223.41288	9.36901	0.1669002	0.27349140	2.3505722	21	10 3.9	20.9
418043 2007 VF_{83}	18.0	X	90.14383	68.14437	208.62429	6.87937	0.0970212	0.28299537	2.2976463	21	11 15.9	21.0
418044 2007 VV_{95}	17.8	X	313.11499	53.12767	36.47826	6.20316	0.0905311	0.28558882	2.2837151	21	12 24.2	20.0
418045 2007 VL_{96}	17.7	X	322.31853	138.65065	267.45828	4.23210	0.2175680	0.28109335	2.3079993	21	10 31.8	19.2
418046 2007 VV_{106}	17.7	X	141.80333	9.46166	262.07773	1.76467	0.1684303	0.29158083	2.2523199	21	—	—
418047 2007 VU_{107}	17.9	X	20.17282	291.02534	59.38880	1.28974	0.2225757	0.28457591	2.2891309	21	12 14.2	20.2
418048 2007 VW_{111}	18.0	X	324.75016	170.23627	230.38755	2.94343	0.1591480	0.27950660	2.3167260	21	10 30.6	19.8
418049 2007 VX_{115}	17.9	X	203.92840	255.26269	206.63850	6.14130	0.1228412	0.26363036	2.4088279	21	7 27.2	21.5
418050 2007 VL_{121}	17.3	X	43.93979	277.32957	26.12469	8.25890	0.2699669	0.28251908	2.3002279	21	11 17.4	20.3
418051 2007 VQ_{127}	16.0	X	223.56142	323.15185	8.25627	9.91856	0.0151970	0.18055607	3.1002353	21	3 16.2	20.5
418052 2007 VC_{136}	16.1	X	46.97596	154.29091	59.52735	10.94406	0.2227246	0.18643909	3.0346695	21	7 5.7	19.7
418053 2007 VV_{141}	18.1	X	352.27865	158.46631	186.61145	2.36429	0.2265194	0.27792345	2.3255156	21	10 8.9	19.4
418054 2007 VS_{142}	18.2	X	351.66438	239.26709	196.48702	3.81995	0.1377628	0.29035135	2.2586736	21	—	—
418055 2007 VP_{152}	18.2	X	306.22012	104.13787	307.40812	1.74667	0.1779363	0.27634796	2.3343459	21	10 3.2	19.9
418056 2007 VU_{154}	17.6	X	109.66585	28.66458	286.92801	3.90510	0.1653104	0.29536574	2.2330373	21	—	—
418057 2007 VS_{159}	17.7	X	138.46322	147.23354	97.05886	5.94432	0.1127382	0.28343504	2.2952695	21	11 27.0	21.0
418058 2007 VC_{162}	17.9	X	14.93817	295.90473	35.80794	6.18649	0.1855018	0.27835696	2.3231004	21	10 31.3	20.1
418059 2007 VB_{164}	18.3	X	263.70928	242.64718	282.91663	1.45269	0.1183029	0.28798469	2.2710313	21	—	—
418060 2007 VD_{168}	17.8	X	8.24346	285.73196	56.79525	6.17068	0.2645016	0.27989854	2.3145628	21	11 18.8	19.7
418061 2007 VE_{181}	18.1	X	339.42321	73.96715	42.44321	3.69444	0.1634395	0.29571466	2.2312804	21	—	—
418062 2007 VA_{189}	18.1	X	357.35699	118.30855	283.67739	1.36422	0.1386031	0.28676590	2.2774615	21	—	—
418063 2007 VE_{190}	17.4	X	334.23153	25.26148	22.68902	6.94030	0.1153413	0.28266082	2.2994588	21	11 29.3	19.6
418064 2007 VQ_{192}	17.7	X	270.82407	327.37984	92.31612	3.60685	0.1358039	0.26600923	2.3944453	21	8 21.9	20.6
418065 2007 VO_{194}	18.3	X	324.46470	351.10901	93.25016	1.42100	0.1734252	0.28160299	2.3052138	21	—	—
418066 2007 VX_{197}	17.5	X	260.88036	327.47266	95.34097	7.19087	0.0867105	0.26275588	2.4141695	21	8 21.1	20.6
418067 2007 VJ_{199}	17.8	X	197.14355	359.54518	224.27013	4.09120	0.1338638	0.29250258	2.2475856	21	12 31.5	20.9
418068 2007 VY_{200}	18.0	X	213.61489	290.12359	221.88468	4.86693	0.1085341	0.27889081	2.3201349	21	10 17.3	21.1
418069 2007 VP_{210}	18.1	X	17.00719	85.16135	309.98518	3.51726	0.1450205	0.29004747	2.2602510	21	—	—
418070 2007 VL_{216}	17.8	X	353.85120	74.69331	295.16399	1.72824	0.1959203	0.28108584	2.3080404	21	11 19.4	19.6
418071 2007 VH_{221}	17.4	X	93.83673	226.87725	79.49940	9.64448	0.1509953	0.28960735	2.2625403	21	—	—
418072 2007 VU_{221}	17.5	X	357.32863	189.14320	267.15843	6.67242	0.1521791	0.29597790	2.2299572	21	—	—
418073 2007 VT_{226}	17.3	X	11.01525	88.05933	246.42451	11.60281	0.2990049	0.28287900	2.2982763	21	11 18.8	19.2
418074 2007 VT_{235}	17.8	X	357.76193	298.19035	59.28210	7.51150	0.1370789	0.27751475	2.3277982	21	11 1.4	20.0
418075 2007 VW_{238}	17.7	X	307.03516	257.91331	244.69225	7.21278	0.0511305	0.29315331	2.2442583	21	—	—
418076 2007 VX_{251}	17.5	X	52.41770	105.14690	249.74021	8.91846	0.1856545	0.29186578	2.2508537	21	—	—
418077 2007 VQ_{269}	17.5	X	322.20766	288.42490	116.29929	5.16593	0.1351429	0.27877705	2.3207661	21	11 3.9	19.5
418078 2007 VB_{280}	17.9	X	157.92997	148.97687	50.57212	7.33757	0.0684128	0.27662683	2.3327768	21	10 21.2	21.1
418079 2007 VZ_{283}	17.5	X	243.73086	18.93892	63.99973	7.35736	0.0687813	0.26869581	2.3784578	21	8 30.8	20.6
418080 2007 VL_{285}	17.3	X	62.46090	177.37632	70.95411	8.31211	0.1145977	0.26612131	2.3937729	21	9 7.2	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418081 2007 VW_{293}	15.6	X	25.74980	354.81904	71.70753	15.86112	0.0745279	0.15148911	3.4850988	21	—	—
418082 2007 VK_{307}	15.9	X	63.40294	99.86177	60.66523	13.66974	0.0849293	0.17649652	3.1475934	21	5 3.6	20.1
418083 2007 VV_{307}	16.3	X	176.23796	267.39528	249.00730	20.07795	0.3152281	0.26331529	2.4107490	21	8 27.4	21.2
418084 2007 VR_{310}	17.9	X	287.99386	93.95682	358.87770	2.89202	0.1656283	0.27469488	2.3437017	21	11 1.3	20.2
418085 2007 VC_{311}	15.6	X	258.02462	18.64889	100.40557	4.61606	0.1216183	0.12583968	3.9438857	21	10 10.9	21.3
418086 2007 VN_{312}	17.4	X	0.27456	299.48965	71.89847	7.83477	0.1368861	0.27727229	2.3291550	21	11 25.7	19.5
418087 2007 VP_{323}	18.4	X	313.13371	171.45329	282.33010	1.78154	0.1779426	0.28542736	2.2845762	21	—	—
418088 2007 VN_{326}	17.9	X	311.75850	3.49065	88.54388	4.14070	0.1302089	0.28433876	2.2904036	21	12 25.3	19.7
418089 2007 VT_{327}	17.7	X	24.11264	25.73790	326.10645	6.35383	0.1768812	0.28490223	2.2873826	21	12 14.3	20.3
418090 2007 VB_{328}	17.3	X	92.86162	38.39531	278.46323	7.60798	0.1208592	0.29034681	2.2586972	21	—	—
418091 2007 VA_{333}	17.9	X	251.38066	73.29271	68.51224	7.78611	0.0442772	0.28183194	2.3039652	21	12 3.3	20.3
418092 2007 VD_{333}	15.7	X	99.32603	149.54888	257.65727	9.07476	0.1221618	0.16049101	3.3535303	21	2 2.2	20.5
418093 2007 VH_{334}	17.8	X	268.86543	20.96764	39.09568	2.74324	0.1954948	0.26986164	2.3716027	21	8 9.7	20.7
418094 2007 WV_{4}	19.6	X	117.77333	297.63441	249.89084	38.32910	0.4409607	0.54383442	1.4864772	21	9 3.1	23.3
418095 2007 WN_{6}	17.0	X	303.49951	65.69275	25.10683	7.54419	0.0631325	0.28254369	2.3000943	21	12 8.0	19.5
418096 2007 WN_{8}	17.7	X	298.33450	175.73533	277.39201	4.02522	0.1714179	0.28080324	2.3095887	21	11 24.4	19.4
418097 2007 WB_{34}	17.6	X	311.35566	152.90032	274.60746	5.51235	0.1023507	0.28014188	2.3132222	21	11 15.2	19.8
418098 2007 WC_{58}	17.4	X	230.47991	344.92620	124.94240	9.65155	0.0990150	0.26224348	2.4173131	21	9 14.3	20.7
418099 2007 WS_{60}	17.4	X	325.72542	6.06493	19.72654	3.39879	0.1602382	0.27628584	2.3346958	21	10 8.1	19.1
418100 2007 WZ_{61}	17.4	X	230.96822	289.80529	252.38405	5.46748	0.1313331	0.28401468	2.2921455	21	12 16.9	20.1
418101 2007 WG_{63}	17.7	X	324.93223	134.59608	309.59700	5.18911	0.1288628	0.28539640	2.2847414	21	—	—
418102 2007 XZ_{3}	18.0	X	328.33032	122.33385	262.31281	2.61190	0.2357143	0.27671875	2.3322601	21	10 8.2	19.2
418103 2007 XB_{12}	18.3	X	273.67886	42.43282	67.71291	3.60345	0.1524786	0.28043843	2.3115912	21	11 6.4	20.5
418104 2007 XP_{16}	17.8	X	338.10345	157.29349	281.67234	4.82705	0.1907911	0.28646477	2.2790572	21	—	—
418105 2007 XJ_{25}	16.3	X	90.46090	18.46105	259.78666	22.76881	0.1470873	0.27706356	2.3303247	21	11 20.9	19.9
418106 2007 XV_{27}	16.5	X	279.30105	146.51612	279.58314	24.31157	0.2514709	0.26871212	2.3783616	21	8 10.4	19.9
418107 2007 XC_{43}	17.9	X	139.23161	230.59763	289.16768	1.47802	0.1360361	0.25885255	2.4383783	21	8 7.2	21.5
418108 2007 XS_{50}	17.3	X	276.53058	34.54496	106.63835	23.51285	0.2069674	0.27845806	2.3225381	21	12 20.8	19.5
418109 2007 XV_{56}	17.2	X	305.00192	19.11450	73.55463	6.63990	0.1576752	0.28200711	2.3030110	21	12 10.4	19.0
418110 2007 XY_{58}	17.3	X	310.03792	75.69160	309.54912	5.95906	0.1286077	0.26614878	2.3936082	21	9 2.9	19.8
418111 2007 YD_{2}	18.5	X	13.23431	87.19337	313.59591	25.24991	0.2015625	0.43063980	1.7367072	21	—	—
418112 2007 YU_{4}	16.8	X	320.70313	148.85796	272.60047	4.97277	0.1759382	0.27973752	2.3154508	21	11 24.1	18.4
418113 2007 YN_{11}	18.3	X	230.71957	178.08445	334.79205	5.21444	0.1238054	0.27321553	2.3521542	21	11 4.0	21.4
418114 2007 YT_{12}	17.8	X	267.54577	30.12905	51.58332	6.44829	0.0683728	0.26810110	2.3819739	21	9 30.7	20.7
418115 2007 YA_{13}	17.1	X	36.84690	245.26675	58.98022	7.60275	0.0636147	0.26628688	2.3927806	21	10 9.3	20.0
418116 2007 YU_{16}	17.1	X	216.04113	106.95967	81.47043	10.43469	0.0482191	0.28216944	2.3021276	21	12 17.7	19.9
418117 2007 YJ_{31}	17.6	X	9.61195	295.87362	94.08453	6.55324	0.2098541	0.28336269	2.2956602	21	—	—
418118 2007 YM_{32}	17.8	X	347.45852	240.84580	231.33657	1.73269	0.1092414	0.29375853	2.2411748	21	—	—
418119 2007 YN_{35}	17.7	X	298.01552	357.49214	93.21470	6.88140	0.0751223	0.27686060	2.3314635	21	11 29.0	20.2
418120 2007 YO_{37}	17.6	X	175.51917	140.23284	57.07039	2.97939	0.1711904	0.26935163	2.3745955	21	10 30.9	21.4
418121 2007 YH_{40}	17.8	X	197.95336	17.51415	133.90779	5.76787	0.0443274	0.26691294	2.3890375	21	10 6.2	20.9
418122 2007 YQ_{42}	17.0	X	243.89031	180.18456	299.71497	8.29690	0.1434266	0.26926460	2.3751072	21	10 1.1	20.4
418123 2007 YY_{47}	18.2	X	334.20362	317.48134	128.68628	1.73618	0.1722886	0.28638339	2.2794890	21	—	—
418124 2007 YD_{58}	17.7	X	304.05739	6.57314	96.56702	6.53118	0.1166022	0.27929405	2.3179013	21	12 25.5	19.7
418125 2007 YW_{61}	17.9	X	180.25795	250.51417	278.10505	1.26772	0.1532685	0.26035260	2.4290033	21	9 27.9	21.7
418126 2007 YD_{64}	18.3	X	326.79120	167.32991	277.39111	1.31678	0.1666361	0.28104240	2.3082782	21	—	—
418127 2007 YK_{64}	17.3	X	141.92255	153.61914	112.19485	4.63955	0.1209510	0.27640554	2.3340217	21	12 25.5	20.7
418128 2007 YY_{64}	17.9	X	253.84352	142.08080	284.72373	1.65079	0.1548460	0.26061859	2.4273503	21	8 3.8	21.3
418129 2007 YE_{69}	18.0	X	309.95566	84.31601	300.07489	5.02623	0.1228587	0.26817444	2.3815396	21	9 2.4	20.5
418130 2007 YO_{73}	17.8	X	264.19319	148.80624	298.43271	4.36836	0.1957774	0.26727563	2.3868757	21	9 7.4	20.8
418131 2008 AR_{9}	17.6	X	271.47428	264.73501	129.58411	8.40311	0.0873784	0.25886401	2.4383064	21	7 23.2	20.7
418132 2008 AY_{13}	17.8	X	196.10987	260.78162	268.61213	4.55920	0.1500189	0.26720730	2.3872826	21	10 14.0	21.4
418133 2008 AN_{25}	17.5	X	238.94128	37.45679	94.66826	3.65225	0.1193286	0.26819871	2.3813959	21	10 21.5	20.6
418134 2008 AB_{27}	18.0	X	301.08635	167.07387	301.27705	1.99169	0.1468071	0.27729751	2.3290138	21	12 25.7	19.8
418135 2008 AG_{33}	19.4	X	205.61845	155.63016	38.33166	16.00127	0.3374253	0.55837479	1.4605581	21	—	—
418136 2008 AN_{35}	18.3	X	211.67053	17.82743	134.10180	2.11341	0.1190242	0.26769469	2.3843841	21	10 14.1	21.5
418137 2008 AY_{35}	17.4	X	260.55177	124.01320	303.57440	5.45097	0.1084991	0.26316142	2.4116886	21	8 20.0	20.5
418138 2008 AK_{43}	17.6	X	310.84447	56.41863	101.24565	3.67769	0.1127187	0.28994571	2.2607798	21	—	—
418139 2008 AC_{44}	18.1	X	200.05493	157.79467	342.12144	0.99200	0.1197482	0.26099504	2.4250156	21	9 13.6	21.4
418140 2008 AG_{50}	18.2	X	238.62396	164.91932	307.53676	4.68909	0.0779722	0.26750267	2.3855250	21	9 25.9	21.3
418141 2008 AR_{52}	18.4	X	248.85767	204.04517	272.44133	1.10323	0.1228128	0.27008851	2.3702745	21	10 10.6	21.4
418142 2008 AF_{59}	16.0	X	227.36215	316.11519	203.25073	1.71805	0.1972102	0.12465338	3.9688683	21	10 15.8	22.1
418143 2008 AJ_{59}	17.8	X	146.98325	302.60164	264.12197	1.49505	0.1499740	0.26340821	2.4101820	21	10 15.0	21.4
418144 2008 AA_{60}	17.9	X	240.66790	126.40773	12.05452	7.29284	0.1341539	0.27251365	2.3561913	21	10 27.3	20.9
418145 2008 AA_{65}	17.5	X	220.86740	12.04827	142.59328	5.63087	0.1762656	0.26873527	2.3782250	21	10 22.9	21.0
418146 2008 AT_{67}	18.2	X	289.37481	297.93564	122.69808	2.60904	0.1725262	0.26801295	2.3824961	21	9 15.8	20.5
418147 2008 AF_{72}	18.2	X	225.27370	30.58946	89.11307	4.86313	0.1666211	0.26422541	2.4052099	21	9 12.8	21.8
418148 2008 AK_{78}	17.4	X	117.75266	131.40888	92.33756	4.18637	0.1073772	0.26161259	2.4211979	21	10 8.3	20.9
418149 2008 AR_{79}	17.8	X	263.42849	303.41957	143.31845	6.37297	0.0757637	0.26525245	2.3989974	21	9 29.4	20.7
418150 2008 AL_{84}	18.1	X	265.60364	347.45505	122.04982	3.63126	0.1382867	0.27105259	2.3646508	21	10 25.1	20.7
418151 2008 AV_{85}	17.5	X	314.67168	80.07346	320.55078	6.11721	0.1243699	0.26893911	2.3770231	21	10 5.4	19.8
418152 2008 AS_{86}	17.7	X	122.94056	61.43449	125.07090	8.40057	0.1064271	0.25521706	2.4614797	21	8 24.4	21.2
418153 2008 AR_{90}	18.4	X	193.61655	314.00669	204.68736	1.74803	0.1425963	0.26549757	2.3975206	21	9 29.9	22.0
418154 2008 AZ_{90}	18.4	X	306.71971	308.08647	170.67967	1.87062	0.1462195	0.28241021	2.3008190	21	—	—
418155 2008 AS_{94}	18.1	X	160.92138	178.39452	12.39379	1.23228	0.1270934	0.26349409	2.4096583	21	10 8.9	21.7
418156 2008 AW_{97}	17.6	X	267.39312	147.29865	326.24493	5.94746	0.1754913	0.27274655	2.3548498	21	10 22.7	20.5
418157 2008 AH_{98}	18.4	X	276.04767	62.74434	25.91248	2.59353	0.1409773	0.27010050	2.3702044	21	10 9.4	21.0
418158 2008 AR_{101}	18.1	X	255.25916	199.69224	265.45675	3.15707	0.2074878	0.27008703	2.3702831	21	9 18.9	21.2
418159 2008 AB_{106}	18.1	X	214.78063	125.43989	9.23099	2.63457	0.1357515	0.26671722	2.3902061	21	9 22.2	21.6
418160 2008 AK_{107}	17.2	X	279.43147	101.54679	304.76631	5.70962	0.1067361	0.26327348	2.4110042	21	8 17.5	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418161 2008 AU_{107}	17.9	X	208.32928	358.45176	131.23637	3.43556	0.1372823	0.26350217	2.4096090	21	9 8.9	21.4
418162 2008 AY_{111}	18.0	X	284.38002	28.37674	26.84252	0.77215	0.1868508	0.26556947	2.3970879	21	8 26.3	20.4
418163 2008 AR_{113}	17.6	X	308.64833	97.54199	39.92120	10.25636	0.1729328	0.28447848	2.2896535	21	—	—
418164 2008 AK_{115}	17.7	X	173.18849	0.84074	155.69993	3.09352	0.1330551	0.25620077	2.4551749	21	9 6.8	21.4
418165 2008 AW_{133}	18.3	X	320.74381	195.93985	209.48793	0.72986	0.1742742	0.27295246	2.3536653	21	10 27.4	19.9
418166 2008 AY_{137}	17.2	X	22.27745	212.18018	28.38086	9.40849	0.1155702	0.23908252	2.5710123	21	6 11.8	20.1
418167 2008 BA_{3}	17.9	X	333.95178	7.88144	35.43310	3.25685	0.2093071	0.27739566	2.3284644	21	11 27.5	19.3
418168 2008 BA_{4}	17.4	X	166.07787	212.13886	329.38727	6.16437	0.1226681	0.26346040	2.4098637	21	9 30.0	21.1
418169 2008 BF_{4}	18.4	X	206.60041	136.80951	344.51510	4.53847	0.1601652	0.26125301	2.4234191	21	8 24.7	21.9
418170 2008 BD_{12}	17.9	X	262.96757	332.80986	131.63675	6.65738	0.1513018	0.26888233	2.3773578	21	10 12.9	20.8
418171 2008 BD_{21}	17.6	X	186.89626	172.44583	324.59826	6.33650	0.0490815	0.25609181	2.4558712	21	8 28.9	20.9
418172 2008 BQ_{21}	17.8	X	282.53429	288.80543	140.82251	1.69194	0.1616700	0.26505395	2.4001950	21	9 18.2	20.3
418173 2008 BY_{21}	17.0	X	25.29392	77.11423	147.47837	12.39513	0.0741014	0.23731864	2.5837361	21	5 26.9	20.3
418174 2008 BU_{22}	16.2	X	296.29540	2.71472	332.56488	13.36434	0.1699856	0.24522735	2.5278819	21	5 18.0	19.7
418175 2008 BW_{27}	18.0	X	215.14034	357.40012	163.27232	1.69512	0.1259075	0.27015507	2.3698852	21	10 28.7	21.2
418176 2008 BU_{30}	18.2	X	228.19879	196.46653	310.59408	1.35594	0.1391361	0.26817461	2.3815385	21	10 22.9	21.5
418177 2008 BX_{31}	17.5	X	249.59971	133.83846	335.50179	1.03343	0.1369311	0.26588401	2.3951970	21	9 29.3	20.5
418178 2008 BQ_{33}	17.4	X	317.18981	258.17062	163.52430	5.06340	0.1920236	0.27128729	2.3632868	21	11 15.4	19.1
418179 2008 BP_{34}	17.8	X	273.03956	299.25007	138.25046	6.80262	0.0527568	0.26341613	2.4101337	21	10 4.5	20.7
418180 2008 BU_{34}	17.3	X	200.81977	318.52329	153.42828	7.27953	0.0659547	0.25412141	2.4685497	21	8 10.8	20.8
418181 2008 BD_{46}	17.6	X	319.53528	283.44491	141.39200	6.48217	0.0924615	0.27154112	2.3618138	21	11 27.2	20.1
418182 2008 BK_{51}	17.9	X	222.25508	283.18760	213.12918	1.82755	0.1411693	0.26595318	2.3947817	21	10 1.4	21.3
418183 2008 CC_{2}	16.1	X	230.07625	243.31657	299.89581	21.84895	0.2155761	0.27315552	2.3524987	21	12 2.0	19.6
418184 2008 CU_{4}	16.3	X	302.23756	195.34560	310.55185	25.19494	0.1700366	0.28181873	2.3040371	21	—	—
418185 2008 CP_{5}	17.3	X	284.72294	358.07828	95.70083	9.00616	0.1801024	0.27283927	2.3543162	21	10 30.5	19.7
418186 2008 CE_{8}	17.9	X	213.84731	269.41941	243.14277	2.58457	0.1332903	0.26747330	2.3856996	21	10 13.9	21.1
418187 2008 CH_{8}	17.1	X	347.56273	272.25121	326.99568	13.11540	0.1429256	0.23237258	2.6202705	21	3 28.9	20.2
418188 2008 CS_{12}	18.1	X	247.58983	151.40812	356.52866	4.87116	0.1770284	0.27168774	2.3609640	21	11 11.7	21.2
418189 2008 CN_{16}	17.9	X	290.95895	266.70419	158.12441	3.37397	0.2783512	0.26817921	2.3815113	21	9 4.5	19.9
418190 2008 CO_{24}	18.0	X	306.83111	25.86049	56.77523	2.03697	0.1575345	0.27225143	2.3577039	21	11 25.4	19.8
418191 2008 CF_{25}	17.8	X	309.38030	346.08007	87.44824	3.04793	0.2028870	0.27163032	2.3612967	21	11 13.9	19.3
418192 2008 CH_{28}	17.7	X	248.07915	83.46788	6.79696	5.01845	0.0687011	0.26201561	2.4187145	21	9 12.3	20.8
418193 2008 CV_{32}	17.4	X	239.92709	194.07155	339.94130	5.93782	0.1025737	0.27443865	2.3451603	21	12 20.6	20.3
418194 2008 CX_{41}	17.4	X	304.43166	119.92886	321.65475	6.77062	0.0779166	0.26947826	2.3738516	21	11 21.6	20.2
418195 2008 CR_{43}	17.0	X	323.69530	262.03928	12.00250	7.68124	0.1531736	0.23301371	2.6154619	21	4 11.3	20.1
418196 2008 CB_{56}	17.9	X	207.57646	30.73403	114.77354	5.93898	0.1630732	0.26232511	2.4168117	21	9 28.4	21.6
418197 2008 CG_{59}	17.3	X	261.80193	36.44294	163.89462	3.79360	0.1778026	0.28237299	2.3010211	21	—	—
418198 2008 CN_{70}	19.0	X	277.72757	114.35005	150.69744	24.45356	0.3795977	1.25366565	0.8518208	21	—	—
418199 2008 CY_{77}	17.7	X	189.13419	113.57459	44.64176	3.25005	0.1596718	0.25986166	2.4320616	21	9 24.9	21.4
418200 2008 CB_{80}	17.7	X	293.43011	330.91122	95.30841	4.10141	0.1437940	0.26718380	2.3874226	21	10 7.5	20.1
418201 2008 CZ_{88}	17.1	X	254.74061	220.32895	3.05491	9.59063	0.1847015	0.28299440	2.2976515	21	—	—
418202 2008 CW_{92}	16.9	X	7.41485	260.18053	343.76644	10.83932	0.1485002	0.23609599	2.5926485	21	5 16.0	19.7
418203 2008 CD_{102}	18.0	X	294.71919	225.93067	153.42263	9.15736	0.1115524	0.25940904	2.4348898	21	8 1.0	20.9
418204 2008 CE_{110}	17.5	X	14.48239	52.57237	199.82114	3.39099	0.0489849	0.24034065	2.5620321	21	6 14.1	20.6
418205 2008 CF_{122}	18.0	X	214.75395	287.56551	226.76162	3.06524	0.1458706	0.26803463	2.3823676	21	10 16.2	21.3
418206 2008 CQ_{127}	17.5	X	92.74656	69.36791	150.92958	6.59789	0.0989057	0.25205397	2.4820300	21	8 31.8	20.9
418207 2008 CY_{128}	18.2	X	311.06348	193.91083	250.54063	1.92172	0.1918146	0.27526346	2.3404732	21	12 7.4	19.7
418208 2008 CX_{129}	18.3	X	177.43880	273.12030	255.39855	0.93049	0.1016594	0.26036576	2.4289214	21	9 27.3	21.8
418209 2008 CU_{139}	18.0	X	237.36427	239.36933	254.53566	1.38906	0.1687388	0.26757789	2.3850779	21	10 12.3	21.3
418210 2008 CN_{147}	17.6	X	177.60196	341.79654	167.04571	9.23751	0.1409401	0.25655437	2.4529184	21	8 31.2	21.4
418211 2008 CF_{154}	17.9	X	311.65310	347.98357	104.43590	4.45156	0.1226829	0.27360434	2.3499253	21	12 22.1	19.8
418212 2008 CG_{158}	18.0	X	197.89312	128.80007	47.51612	2.90360	0.1423551	0.26423709	2.4051391	21	10 27.4	21.5
418213 2008 CB_{159}	17.3	X	264.49075	238.12111	294.19499	5.49650	0.1438394	0.27751650	2.3277884	21	—	—
418214 2008 CT_{159}	16.6	X	138.08250	149.87591	106.85046	9.39162	0.2041085	0.26807338	2.3821380	21	12 9.9	20.6
418215 2008 CS_{160}	16.8	X	286.24391	100.79304	239.40771	3.06713	0.1951232	0.24066945	2.5596981	21	5 12.1	20.3
418216 2008 CQ_{164}	17.5	X	324.67418	287.09353	130.34617	5.22885	0.2060395	0.27204932	2.3588715	21	11 27.3	19.1
418217 2008 CO_{166}	18.2	X	275.23457	139.05980	356.97145	20.05975	0.0698788	0.42450397	1.7534022	21	—	—
418218 2008 CB_{170}	18.1	X	330.45569	136.04050	296.54220	4.32943	0.1635568	0.27611991	2.3356310	21	—	—
418219 2008 CY_{170}	16.9	X	168.86084	348.42584	164.21394	10.41857	0.1234677	0.25570186	2.4583674	21	8 27.5	20.6
418220 Kestutis	18.0	X	207.90930	342.94431	150.09553	2.93374	0.1247963	0.26158594	2.4213624	21	9 13.3	21.3
418221 2008 CY_{181}	16.7	X	126.14473	124.70043	130.48705	13.37499	0.0557892	0.26493289	2.4009261	21	11 26.5	20.3
418222 2008 CY_{186}	17.6	X	285.42448	109.68936	27.27090	7.46143	0.1963235	0.27827138	2.3235767	21	—	—
418223 2008 CN_{194}	16.5	X	287.02501	277.51539	11.95441	11.83953	0.1352651	0.22546916	2.6734862	21	3 19.7	20.2
418224 2008 CY_{196}	17.9	X	279.29095	92.94085	320.24009	2.38603	0.0622793	0.25949050	2.4343802	21	9 3.8	20.6
418225 2008 CJ_{203}	17.3	X	233.42060	168.95253	339.34757	7.43911	0.0622903	0.26485975	2.4013681	21	11 8.3	20.5
418226 2008 CK_{203}	16.1	X	291.20766	295.41833	51.90465	4.67546	0.2217509	0.24338055	2.5406537	21	5 23.8	19.5
418227 2008 CC_{204}	18.1	X	264.21876	6.59460	119.31254	3.42646	0.1526776	0.26871319	2.3783553	21	11 11.8	20.9
418228 2008 CM_{207}	17.6	X	196.15465	159.80940	347.90168	7.17255	0.1161282	0.25800382	2.4437229	21	9 19.0	21.2
418229 2008 CD_{208}	17.4	X	344.51167	164.90389	135.43822	1.92188	0.0901932	0.24647446	2.5193476	21	7 3.1	20.2
418230 2008 CJ_{208}	14.0	X	352.98540	243.18465	27.84604	17.57768	0.0542270	0.08414284	5.1577223	21	6 9.1	20.8
418231 2008 CR_{208}	16.8	X	49.59007	66.05531	121.49632	9.33545	0.0923000	0.23513718	2.5996917	21	5 15.8	20.0
418232 2008 CA_{209}	18.0	X	290.11686	304.04169	186.93581	5.06013	0.1484802	0.28041407	2.3117251	21	—	—
418233 2008 DV	18.2	X	272.38701	258.50800	308.97778	31.31052	0.4513890	0.43299882	1.7303936	21	—	—
418234 2008 DW_{9}	17.9	X	329.58143	109.82705	311.71334	3.42617	0.2048233	0.27691833	2.3311394	21	12 16.9	19.4
418235 2008 DA_{20}	17.7	X	129.20885	331.44563	187.99400	7.76843	0.1113736	0.24696643	2.5160007	21	7 23.0	21.5
418236 2008 DS_{26}	18.0	X	264.14665	139.72003	11.92709	3.78249	0.1803128	0.27437335	2.3455324	21	12 13.5	20.3
418237 2008 DG_{30}	18.5	X	223.23600	301.86213	175.78407	1.62545	0.1401653	0.26035914	2.4289626	21	9 7.6	21.9
418238 2008 DR_{30}	18.3	X	268.35191	10.73780	141.89236	3.67984	0.1166678	0.27869832	2.3212031	21	—	—
418239 2008 DW_{31}	18.1	X	268.44742	40.65504	92.02251	3.07250	0.1725958	0.27215402	2.3582665	21	11 24.9	20.4
418240 2008 DY_{36}	17.1	X	10.90698	85.27926	356.16484	23.42593	0.2058214	0.28649222	2.2789117	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418241 2008 DH_{40}	18.4	X	132.20250	349.52858	178.54377	21.78281	0.0880691	0.39439470	1.8415436	21	8 9.9	20.8
418242 2008 DO_{40}	18.3	X	267.01760	338.74674	189.21285	6.52884	0.2484519	0.27521894	2.3407256	21	12 31.1	20.6
418243 2008 DF_{47}	17.3	X	99.51413	73.67451	101.02310	3.73232	0.1533366	0.24090310	2.5580427	21	7 15.8	20.7
418244 2008 DN_{56}	17.2	X	309.34574	225.87835	326.12853	8.00895	0.1743288	0.29012664	2.2598397	21	—	—
418245 2008 DZ_{57}	15.0	X	310.76081	121.03444	224.67388	12.31635	0.2034697	0.24493638	2.5298835	21	6 23.0	18.0
418246 2008 DO_{61}	17.8	X	266.02521	49.24019	96.28537	2.26888	0.1242060	0.27350447	2.3504973	21	12 16.9	20.2
418247 2008 DT_{64}	18.3	X	230.96585	341.01682	142.22431	5.55583	0.1237290	0.26249214	2.4157863	21	9 28.4	21.6
418248 2008 DL_{67}	16.9	X	229.29309	57.52840	324.46181	8.25174	0.0102950	0.23671819	2.5881034	21	5 18.4	20.5
418249 2008 DO_{72}	18.5	X	227.87206	149.58284	326.03226	1.26390	0.1456020	0.26171752	2.4205507	21	9 9.5	21.9
418250 2008 DM_{77}	17.0	X	305.04890	314.17653	14.56030	4.59486	0.1751198	0.24318489	2.5420163	21	5 24.5	20.2
418251 2008 DS_{80}	17.4	X	220.88063	154.56712	36.41016	6.12015	0.1002230	0.26920777	2.3754414	21	12 16.6	20.5
418252 2008 DH_{82}	17.1	X	156.35628	325.93831	160.05142	12.13758	0.0939459	0.24483340	2.5305929	21	7 8.7	21.0
418253 2008 DU_{82}	18.2	X	238.78635	99.55908	53.72368	3.99209	0.1752678	0.26748759	2.3856147	21	11 8.8	21.3
418254 2008 DM_{85}	18.1	X	210.84475	77.96567	30.01599	1.87993	0.1504945	0.25430639	2.4673525	21	8 12.1	21.9
418255 2008 DF_{88}	17.6	X	276.43602	44.23353	34.03177	6.92156	0.1894020	0.26614664	2.3936210	21	9 18.8	20.3
418256 2008 DE_{89}	18.0	X	240.93442	26.77776	84.54078	3.43438	0.1381937	0.26041085	2.4286410	21	9 22.4	21.3
418257 2008 EG_{6}	17.4	X	183.95094	93.45690	83.89537	5.95064	0.1680973	0.26286279	2.4135148	21	10 15.6	21.2
418258 2008 EF_{7}	13.2	X	12.20395	126.85710	148.19058	31.52361	0.0362626	0.08246027	5.2276467	21	7 12.7	20.2
418259 2008 EF_{12}	17.1	X	267.87984	285.47990	16.54822	8.37988	0.1268731	0.22722415	2.6597025	21	3 14.9	21.1
418260 2008 EG_{12}	17.7	X	302.43279	6.06304	88.59951	3.20788	0.1834172	0.27249653	2.3562900	21	12 3.2	19.2
418261 2008 EL_{14}	16.7	X	303.02479	153.57985	138.09826	8.25559	0.1986257	0.22954273	2.6417620	21	4 2.8	20.3
418262 2008 EO_{24}	17.1	X	151.24742	99.30621	18.96439	15.69307	0.0245832	0.24249801	2.5468142	21	6 16.4	20.8
418263 2008 EA_{29}	16.7	X	342.09497	213.72506	32.47047	12.34034	0.1358641	0.22643659	2.6658660	21	4 9.3	19.6
418264 2008 EW_{29}	17.0	X	77.92381	56.22952	139.43800	15.78641	0.0572652	0.24520021	2.5280684	21	7 1.5	20.5
418265 2008 EA_{32}	16.4	X	70.15781	181.84704	100.95542	28.26455	0.3049784	2.03892411	0.6159357	21	—	—
418266 2008 EH_{33}	17.6	X	284.73527	195.19738	170.53026	3.05117	0.0337127	0.24458474	2.5323077	21	7 9.9	20.8
418267 2008 ES_{38}	17.4	X	341.11614	174.71257	91.73208	6.30137	0.1825636	0.23252576	2.6191196	21	4 30.3	20.1
418268 2008 EO_{44}	16.7	X	301.49648	328.09497	12.97436	10.62565	0.0626786	0.24119360	2.5559883	21	6 25.6	20.1
418269 2008 EM_{46}	17.4	X	242.28869	168.57280	314.53255	5.61130	0.1590019	0.26504793	2.4002314	21	10 2.6	20.8
418270 2008 EO_{47}	17.3	X	22.71187	106.07537	138.30108	4.69457	0.0691086	0.23601204	2.5932633	21	6 17.0	20.3
418271 2008 EW_{52}	16.8	X	294.73449	274.19522	6.81547	11.22007	0.1744490	0.22316236	2.6918783	21	3 13.0	20.6
418272 2008 ES_{58}	16.8	X	337.36795	333.40838	318.14246	9.02106	0.1779962	0.24390309	2.5370236	21	5 25.6	19.6
418273 2008 EE_{80}	16.9	X	17.96630	158.04409	96.25743	3.84229	0.1269473	0.23865586	2.5740757	21	6 26.7	19.3
418274 2008 EB_{82}	17.1	X	174.96957	211.49406	352.44248	8.19095	0.1448380	0.26232407	2.4168180	21	11 4.7	20.9
418275 2008 ED_{86}	17.7	X	272.59993	74.72160	53.50300	4.74561	0.1739550	0.27122072	2.3636734	21	11 24.5	19.9
418276 2008 EJ_{90}	16.0	X	274.67945	315.22148	189.89892	4.13546	0.1991804	0.12506046	3.9602508	21	11 17.0	21.4
418277 2008 EW_{96}	18.0	X	197.75103	322.32055	172.61243	1.25242	0.1346852	0.25875908	2.4389655	21	9 3.4	21.4
418278 2008 EQ_{107}	17.3	X	232.63780	104.90857	317.98555	8.62301	0.1550349	0.25793730	2.4441430	21	7 6.2	20.9
418279 2008 EL_{111}	16.7	X	199.06018	322.21170	8.37190	14.48164	0.1194879	0.22020833	2.7158986	21	2 14.7	21.1
418280 2008 EX_{111}	17.6	X	243.21717	357.19925	81.79193	4.18756	0.1680833	0.25618135	2.4552989	21	8 7.4	21.0
418281 2008 EC_{113}	17.6	X	86.97278	7.74781	194.26269	15.32437	0.0582041	0.24338090	2.5406512	21	7 19.5	21.3
418282 2008 EQ_{120}	16.9	X	33.55859	307.30865	13.19476	6.57359	0.1199447	0.25523926	2.4613369	21	10 29.2	19.8
418283 2008 EA_{131}	17.2	X	328.65567	125.63888	142.31568	6.56938	0.2709549	0.22748568	2.6576636	21	3 26.2	20.3
418284 2008 ED_{132}	16.6	X	274.12425	275.76236	95.96848	3.86777	0.1888680	0.24373740	2.5381733	21	6 9.8	20.0
418285 2008 EC_{137}	18.2	X	271.83237	19.95574	108.48786	2.25585	0.1315245	0.26920774	2.3754416	21	11 30.2	20.8
418286 2008 EX_{139}	17.2	X	18.06566	358.80080	209.50457	6.98117	0.0793414	0.22916338	2.6446766	21	4 18.9	20.1
418287 2008 EC_{153}	16.6	X	259.68729	330.67081	36.54134	12.86662	0.1178514	0.23799822	2.5788154	21	5 24.5	20.4
418288 2008 EU_{155}	17.2	X	49.13884	89.10326	151.41465	7.15675	0.0874304	0.23585190	2.5944370	21	7 25.6	20.3
418289 2008 EH_{158}	17.9	X	238.74185	77.87043	28.46261	5.17968	0.1893867	0.25980112	2.4324394	21	9 6.5	21.3
418290 2008 EN_{161}	17.0	X	296.70989	170.80533	178.08336	4.23917	0.1555589	0.24311692	2.5424900	21	6 14.4	20.2
418291 2008 EY_{161}	17.2	X	306.83985	13.17063	34.98122	6.51422	0.1113091	0.25682991	2.4511637	21	10 6.5	19.6
418292 2008 EN_{166}	16.1	X	348.99005	190.14221	70.69713	16.83526	0.1347319	0.23229880	2.6208253	21	5 13.7	19.0
418293 2008 FF	17.6	X	226.45391	343.42048	190.81072	2.14513	0.1339760	0.26647704	2.3916421	21	11 27.1	20.7
418294 2008 FS_{8}	18.5	X	217.21250	58.21896	36.05623	2.99421	0.1706402	0.25601964	2.4563327	21	7 30.4	22.3
418295 2008 FA_{11}	18.0	X	178.28790	188.75525	43.15508	4.02353	0.0913256	0.27065862	2.3669449	21	12 21.2	21.4
418296 2008 FA_{25}	17.4	X	198.80034	325.23065	53.57964	7.76770	0.1012515	0.23036330	2.6354849	21	4 10.0	21.4
418297 2008 FU_{28}	17.8	X	119.82262	239.00933	329.61032	4.49946	0.1332886	0.25380435	2.4706052	21	9 18.5	21.5
418298 2008 FZ_{28}	18.0	X	246.02041	139.60289	12.78602	5.31969	0.1445880	0.27134446	2.3629548	21	11 20.9	21.0
418299 2008 FD_{37}	16.7	X	350.67294	170.47864	170.90668	6.47794	0.1679639	0.25248049	2.4792339	21	9 18.3	18.7
418300 2008 FT_{38}	17.9	X	265.90151	359.42299	139.56836	4.21480	0.2307725	0.27032960	2.3688650	21	11 20.3	20.5
418301 2008 FJ_{40}	17.5	X	7.24535	194.16585	58.41800	4.22899	0.1263425	0.23330088	2.6133152	21	6 2.6	20.2
418302 2008 FO_{40}	18.4	X	220.46872	209.39760	190.29987	21.44035	0.0839425	0.38517209	1.8708236	21	5 22.5	20.9
418303 2008 FS_{42}	17.6	X	357.87292	102.73574	185.01036	8.01390	0.0532053	0.24288506	2.5441078	21	7 7.4	20.7
418304 2008 FU_{49}	17.9	X	68.16142	175.24196	27.48545	3.25374	0.0294808	0.23897247	2.5718017	21	6 22.5	21.2
418305 2008 FU_{51}	17.1	X	284.01021	327.07246	29.50615	6.57073	0.1213905	0.24029708	2.5623418	21	6 11.4	20.5
418306 2008 FK_{53}	17.9	X	193.51415	124.39632	38.07451	3.61158	0.1276749	0.25727794	2.4483172	21	10 6.1	21.4
418307 2008 FV_{53}	16.9	X	111.79296	320.34877	192.70733	12.84272	0.1795130	0.23928089	2.5695912	21	7 2.6	21.0
418308 2008 FL_{56}	17.4	X	239.18417	277.03608	64.04673	6.26249	0.0196955	0.23003173	2.6380168	21	4 11.3	21.0
418309 2008 FJ_{57}	16.5	X	270.51674	303.06864	33.30873	14.92045	0.0550176	0.22991003	2.6389476	21	5 6.2	20.0
418310 2008 FR_{66}	17.1	X	67.16457	151.78880	53.96133	5.71007	0.2022271	0.23614556	2.5922856	21	7 24.9	20.4
418311 2008 FN_{70}	17.0	X	151.50460	254.77120	219.67856	9.04835	0.0688082	0.23495112	2.6010640	21	6 16.7	20.8
418312 2008 FF_{88}	18.4	X	201.40668	223.71564	197.62622	19.23042	0.0886964	0.38460056	1.8726766	21	5 29.9	20.9
418313 2008 FN_{96}	17.3	X	128.04903	337.06445	184.20680	7.12257	0.2205832	0.24280816	2.5446450	21	8 1.9	21.6
418314 2008 FO_{97}	17.8	X	257.56382	190.76037	320.80014	2.67883	0.1293986	0.27190642	2.3596979	21	12 10.4	20.5
418315 2008 FY_{98}	17.5	X	72.62755	26.63583	169.41776	9.93590	0.1408211	0.23669804	2.5882503	21	7 6.6	20.9
418316 2008 FN_{99}	16.4	X	235.77175	293.13106	54.56187	15.49295	0.1277392	0.22430458	2.6827320	21	4 11.6	20.7
418317 2008 FO_{99}	17.3	X	50.61382	143.18093	69.69083	10.71490	0.0339028	0.23482772	2.6019752	21	6 11.5	20.6
418318 2008 FZ_{101}	16.9	X	263.25849	157.10361	188.18396	14.71032	0.1178289	0.22829717	2.6513620	21	5 4.9	20.8
418319 2008 FB_{104}	16.0	X	249.67678	284.50207	59.36621	14.82323	0.2735135	0.22114390	2.7082333	21	4 10.2	20.8
418320 2008 FR_{104}	16.5	X	275.52012	277.31079	44.95523	14.21580	0.1051157	0.22487695	2.6781779	21	4 21.6	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418321 2008 FS_{111}	16.5	X	247.85210	206.86353	91.27995	8.17534	0.1214885	0.21390330	2.7690091	21	2 20.5	20.8
418322 2008 FW_{116}	17.7	X	138.20485	307.26465	198.88710	5.01829	0.1375077	0.24165806	2.5527123	21	7 17.9	21.6
418323 2008 FP_{118}	17.8	X	192.87991	72.61488	124.47760	3.16687	0.1471744	0.26365794	2.4086599	21	11 17.8	21.4
418324 2008 FU_{124}	16.8	X	254.29252	289.62390	66.64653	9.51433	0.1409230	0.23037955	2.6353609	21	5 5.9	20.8
418325 2008 FD_{127}	17.0	X	264.59458	79.52939	199.92664	12.92040	0.1323230	0.21161377	2.7889459	21	2 7.8	21.5
418326 2008 FO_{128}	16.9	X	5.87343	190.77375	56.42217	7.16275	0.1161059	0.23023900	2.6364333	21	5 23.1	19.7
418327 2008 FP_{128}	16.6	X	262.31586	3.83237	40.62139	14.63720	0.0426084	0.24239432	2.5475404	21	8 6.9	20.3
418328 2008 FZ_{134}	14.0	X	30.44272	170.18333	72.02263	7.65525	0.0922341	0.08357307	5.1811378	21	6 29.9	20.5
418329 2008 GC_{3}	16.8	X	68.49450	102.70040	102.39622	14.13638	0.1164166	0.23956253	2.5675769	21	7 10.3	19.9
418330 2008 GF_{4}	16.2	X	20.46016	236.38292	341.82440	15.58313	0.1814263	0.22956670	2.6415781	21	5 1.4	19.1
418331 2008 GH_{6}	16.7	X	293.63037	195.44389	92.58211	5.07486	0.1852009	0.22343383	2.6896975	21	3 19.8	20.5
418332 2008 GE_{7}	17.7	X	267.45522	5.28197	106.69726	2.85864	0.1426511	0.26209713	2.4182129	21	10 28.7	20.4
418333 2008 GH_{7}	18.0	X	248.70458	314.54405	173.52808	3.85992	0.2157433	0.26315120	2.4117511	21	10 12.6	21.3
418334 2008 GQ_{7}	14.0	X	305.72631	219.91111	87.65681	5.37383	0.0531656	0.08119294	5.2819042	21	5 26.6	20.7
418335 2008 GK_{9}	15.7	X	106.11666	215.97981	34.92659	27.72141	0.1273477	0.17713536	3.1400210	21	10 22.9	20.6
418336 2008 GZ_{13}	16.6	X	162.41223	26.99140	19.48703	15.39660	0.1608370	0.22943131	2.6426172	21	4 8.5	20.6
418337 2008 GS_{16}	17.1	X	264.34255	143.83976	198.45620	12.04655	0.1471075	0.23117424	2.6293179	21	4 27.5	20.9
418338 2008 GD_{21}	17.4	X	280.04246	231.86259	46.08845	22.99406	0.0604011	0.36989877	1.9219738	21	2 22.7	20.2
418339 2008 GL_{21}	17.5	X	220.68970	290.99817	264.42246	1.79652	0.1413875	0.26896760	2.3768552	21	12 16.8	20.6
418340 2008 GZ_{34}	17.0	X	269.45236	69.32364	192.78396	7.65358	0.1670370	0.21455018	2.7634406	21	1 21.2	21.5
418341 2008 GR_{35}	13.6	X	11.12099	176.07316	76.13012	12.99785	0.0747179	0.08286293	5.2106974	21	6 13.9	20.2
418342 2008 GF_{37}	17.5	X	101.81510	122.11813	45.69338	13.68709	0.1156801	0.23646585	2.5899444	21	7 4.3	21.3
418343 2008 GG_{46}	13.8	X	259.79682	305.59119	60.34476	25.71027	0.0433643	0.08283581	5.2118348	21	6 6.9	20.8
418344 2008 GJ_{48}	17.3	X	331.21628	67.31228	334.40576	6.32023	0.1104331	0.26548744	2.3975816	21	11 8.2	19.8
418345 2008 GB_{61}	17.2	X	352.94507	179.60305	118.97965	7.96081	0.1104192	0.23871370	2.5736599	21	7 15.3	19.7
418346 2008 GX_{62}	18.2	X	103.41524	271.24041	210.63039	20.56749	0.0912109	0.37708571	1.8974747	21	4 14.3	19.8
418347 2008 GN_{69}	16.7	X	74.00727	161.10481	61.73434	13.75461	0.2312398	0.23907075	2.5710968	21	9 6.4	20.6
418348 2008 GL_{76}	16.9	X	239.82473	319.22241	10.57525	4.75790	0.2487013	0.21990471	2.7183979	21	3 13.1	21.6
418349 2008 GM_{81}	16.7	X	57.62743	194.82570	70.78498	10.16763	0.0303821	0.24335564	2.5408271	21	9 10.1	20.1
418350 2008 GB_{88}	16.7	X	293.97127	245.68301	34.40509	6.77242	0.1555143	0.22241044	2.6979420	21	3 14.4	20.5
418351 2008 GL_{90}	17.0	X	278.99017	237.54631	45.99574	5.66411	0.1339610	0.22012440	2.7165890	21	3 4.8	21.0
418352 2008 GC_{93}	16.8	X	49.73813	148.47437	39.98565	14.54900	0.1187411	0.23259474	2.6186017	21	5 15.2	19.9
418353 2008 GC_{97}	17.0	X	287.02309	139.45410	130.30851	4.51677	0.0641163	0.21921552	2.7240925	21	3 4.4	20.8
418354 2008 GD_{97}	17.3	X	108.09165	85.40597	110.56687	3.89833	0.1179836	0.24328175	2.5413415	21	8 20.0	20.9
418355 2008 GM_{98}	16.9	X	78.33415	14.20717	184.34919	11.32415	0.1779165	0.23672154	2.5880790	21	7 22.6	20.6
418356 2008 GV_{100}	17.4	X	93.49863	118.89900	77.75625	3.10256	0.0883111	0.23975844	2.5661780	21	7 29.6	20.8
418357 2008 GX_{100}	16.9	X	348.71544	217.34181	44.97962	11.76044	0.0968465	0.22932847	2.6434072	21	5 14.5	20.0
418358 2008 GA_{102}	17.1	X	14.53882	187.22065	64.43191	8.25583	0.1740173	0.23188586	2.6239358	21	6 17.8	19.4
418359 2008 GL_{104}	17.1	X	249.53034	238.68115	107.67055	4.22833	0.0988534	0.22852475	2.6496015	21	4 22.5	21.0
418360 2008 GT_{107}	16.7	X	208.14433	98.36435	233.15121	6.75291	0.2335506	0.21089556	2.7952742	21	2 17.2	21.7
418361 2008 GQ_{111}	18.5	X	139.82123	132.04985	26.54692	24.73547	0.1028396	0.39382462	1.8433203	21	8 27.7	21.4
418362 2008 GP_{115}	17.3	X	96.74151	196.76050	342.12442	5.23844	0.1468459	0.24073951	2.5592014	21	7 18.2	20.8
418363 2008 GV_{117}	16.8	X	64.85400	13.51767	162.75996	14.80967	0.1917190	0.23121207	2.6290310	21	6 8.3	20.2
418364 2008 GY_{117}	17.0	X	349.36260	219.71585	49.29569	8.52315	0.1598052	0.23227450	2.6210081	21	5 20.3	19.5
418365 2008 GT_{119}	16.3	X	46.04417	202.83974	53.15666	15.54525	0.0727619	0.23894677	2.5719860	21	8 18.6	19.8
418366 2008 GD_{123}	17.3	X	91.25730	347.07334	203.43063	7.93322	0.1243778	0.23942010	2.5685951	21	7 20.6	20.9
418367 2008 GB_{127}	16.5	X	12.12609	155.03504	73.86833	17.82969	0.1318854	0.22761124	2.6566861	21	5 12.8	19.4
418368 2008 GL_{127}	17.7	X	282.22248	314.43281	63.76848	22.55369	0.0666673	0.38870436	1.8594726	21	7 28.0	19.9
418369 2008 GO_{132}	16.6	X	92.68687	145.94076	88.14003	15.89863	0.0570972	0.24358012	2.5392658	21	9 21.7	20.4
418370 2008 GJ_{133}	16.6	X	287.08068	321.87226	50.86133	10.66381	0.0358661	0.23976859	2.5661056	21	7 26.1	20.1
418371 2008 GU_{133}	16.4	X	356.35407	183.87398	71.64337	14.72814	0.2137071	0.22880090	2.6474691	21	5 14.0	18.8
418372 2008 GB_{138}	13.8	X	346.98711	64.81291	207.99315	13.78812	0.1453232	0.08404365	5.1617795	21	6 2.7	20.1
418373 2008 GX_{138}	14.2	X	346.56848	200.50133	72.87772	6.26614	0.0860815	0.08149500	5.2688449	21	6 5.2	20.6
418374 2008 GM_{141}	13.8	X	92.75838	339.42996	189.04744	19.36981	0.0337455	0.08041435	5.3159433	21	6 14.7	21.0
418375 2008 GA_{145}	16.3	X	357.22764	163.55124	30.77484	11.89271	0.1335397	0.22226602	2.6991105	21	2 27.3	19.5
418376 2008 GG_{146}	17.1	X	94.77210	331.69711	181.91706	14.80237	0.0764242	0.22981855	2.6396479	21	6 1.3	20.9
418377 2008 HA_{5}	17.3	X	37.48725	214.01744	31.00056	12.67950	0.1141658	0.23844417	2.5755990	21	7 21.5	20.5
418378 2008 HC_{5}	17.4	X	319.15301	81.85373	35.73777	7.72159	0.1557192	0.27591719	2.3367749	21	—	—
418379 2008 HK_{6}	17.7	X	205.91876	128.24130	35.80606	5.89095	0.1303518	0.26001240	2.4311216	21	10 20.9	21.3
418380 2008 HF_{9}	17.3	X	143.91685	356.69297	151.80648	10.61243	0.1256602	0.24177931	2.5518587	21	7 26.4	21.2
418381 2008 HX_{15}	16.4	X	192.21186	274.38912	205.09456	14.55662	0.0709394	0.24263724	2.5458398	21	8 5.9	20.4
418382 2008 HE_{16}	17.0	X	95.31069	117.82288	77.54446	14.09227	0.0237062	0.23694886	2.5864235	21	7 20.9	20.5
418383 2008 HM_{17}	16.5	X	171.34728	312.12558	83.43618	12.28046	0.0776958	0.22201776	2.7011223	21	4 6.1	20.7
418384 2008 HJ_{21}	16.8	X	134.78540	34.24154	132.28757	4.68109	0.1965771	0.24212790	2.5494089	21	8 15.2	20.7
418385 2008 HQ_{22}	17.3	X	128.50509	155.26710	286.77436	1.04442	0.0034852	0.22558311	2.6725859	21	3 29.2	20.8
418386 2008 HK_{29}	18.4	X	125.83121	329.51503	211.24363	20.71210	0.0312536	0.39259320	1.8471728	21	8 10.9	20.9
418387 2008 HL_{34}	17.5	X	75.27784	86.73182	132.61905	11.23363	0.0792990	0.23856789	2.5747084	21	8 2.9	20.9
418388 2008 HE_{45}	17.4	X	84.85062	149.14641	72.20550	12.73931	0.1178940	0.24224415	2.5485931	21	8 31.5	21.1
418389 2008 HH_{57}	16.9	X	324.99434	151.30233	142.50478	12.60735	0.0098203	0.23133333	2.6281122	21	6 3.4	20.6
418390 2008 HV_{57}	16.7	X	221.82274	232.64369	108.86966	12.98384	0.0287164	0.21955974	2.7212446	21	3 25.7	20.8
418391 2008 HP_{60}	16.2	X	314.73886	192.00244	83.47268	14.70161	0.1523404	0.22318828	2.6916699	21	4 10.5	19.9
418392 2008 HT_{66}	17.7	X	224.18299	209.88181	74.66514	23.45483	0.0524296	0.35653168	1.9697176	21	—	—
418393 2008 HG_{67}	13.6	X	327.78973	242.11257	53.80259	42.51327	0.0384560	0.08318696	5.1971575	21	5 31.3	20.5
418394 2008 HO_{69}	13.7	X	312.84410	243.80429	74.90707	9.96024	0.0682361	0.08261674	5.2210437	21	6 14.6	20.5
418395 2008 HG_{70}	16.7	X	279.52391	170.62139	119.08665	14.59779	0.1730740	0.21659729	2.7460011	21	3 10.6	21.0
418396 2008 JL_{4}	16.4	X	306.69958	153.34267	98.08780	8.87179	0.1637350	0.21584054	2.7524157	21	2 21.7	20.3
418397 2008 JS_{4}	16.3	X	238.57303	272.26976	27.40123	12.98150	0.2100354	0.21162902	2.7888120	21	2 12.4	21.2
418398 2008 JJ_{21}	16.3	X	44.57825	281.03023	350.87328	16.12246	0.2363828	0.24038597	2.5617101	21	9 24.1	19.3
418399 2008 JT_{22}	13.4	X	152.52928	6.37106	106.38522	13.59856	0.0450813	0.08353500	5.1827119	21	6 18.2	20.4
418400 2008 JL_{27}	13.4	X	332.98571	88.48764	209.74076	22.55771	0.0432902	0.08212561	5.2418386	21	6 17.0	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418401 2008 JP_{32}	16.9	X	84.19237	346.85000	222.85945	9.55149	0.0657557	0.23830415	2.5766078	21	7 27.5	20.5
418402 2008 KH_{7}	16.1	X	174.47765	159.35929	190.26648	12.06036	0.3300088	0.19961675	2.8995998	21	2 18.4	21.5
418403 2008 KD_{12}	17.6	X	91.30585	297.14840	239.57070	19.70690	0.0516611	0.38303092	1.8777892	21	6 17.3	19.3
418404 2008 KX_{16}	16.5	X	107.50683	91.66092	100.56185	16.39450	0.0766612	0.23856395	2.5747368	21	8 10.7	20.2
418405 2008 KB_{18}	17.1	X	208.59540	82.44668	80.11107	11.92095	0.1389513	0.25652751	2.4530896	21	10 25.4	20.8
418406 2008 KF_{18}	16.6	X	18.35244	70.47334	132.65654	13.32861	0.2036214	0.22450815	2.6811101	21	4 19.5	19.3
418407 2008 KG_{21}	16.8	X	169.54518	323.93664	172.79723	6.32017	0.1301264	0.24232994	2.5479916	21	8 6.2	20.7
418408 2008 KD_{29}	16.3	X	189.72125	23.14056	67.28165	29.75999	0.0904671	0.23675869	2.5878083	21	6 25.4	20.4
418409 2008 KC_{31}	17.1	X	61.99271	31.93074	177.82582	8.96423	0.0637973	0.23252408	2.6191322	21	6 28.2	20.6
418410 2008 LL	17.7	X	196.55782	263.18288	206.39367	18.92417	0.1113879	0.38953107	1.8568407	21	7 29.9	20.5
418411 2008 LH_{3}	17.0	X	270.17811	147.77425	170.66341	13.29812	0.0591460	0.22029897	2.7151536	21	4 17.2	20.9
418412 2008 LP_{5}	17.2	X	329.97799	140.92991	143.14768	12.83048	0.1122176	0.22675976	2.6633325	21	5 17.9	20.6
418413 2008 LU_{8}	16.6	X	82.43507	160.62611	66.72765	14.17596	0.0722668	0.24104014	2.5570730	21	8 30.6	20.3
418414 2008 LH_{10}	16.5	X	167.37706	70.51380	82.28116	15.51705	0.0534722	0.24263841	2.5458317	21	9 2.5	20.4
418415 2008 LV_{10}	16.5	X	27.67483	200.77519	77.32457	15.39854	0.1313918	0.23674014	2.5879435	21	8 28.5	19.7
418416 2008 LV_{16}	20.3	X	93.76955	121.90344	236.52499	4.71209	0.6254381	0.32628600	2.0896350	21	1 8.9	20.8
418417 2008 LV_{17}	17.0	X	220.38268	163.46845	180.16389	12.02219	0.0660433	0.21587264	2.7521429	21	3 19.3	20.9
418418 2008 LW_{17}	15.5	X	126.98409	39.73401	293.46203	15.92370	0.2086842	0.17897102	3.1185131	21	—	—
418419 2008 MT_{1}	15.7	X	214.75100	80.78359	239.86826	15.76555	0.1106907	0.20449746	2.8532781	21	2 7.8	20.5
418420 2008 MK_{5}	16.2	X	280.86346	229.11342	53.01674	13.17219	0.1588994	0.20876582	2.8142529	21	3 8.0	20.6
418421 2008 NB_{4}	16.7	X	141.53963	271.47071	34.89635	20.41096	0.4070094	0.18185980	3.0854008	21	—	—
418422 2008 NA_{5}	16.4	X	100.89820	257.81030	48.82003	9.04746	0.2002935	0.24782056	2.5102164	21	—	—
418423 2008 NK_{5}	16.2	X	158.71347	25.72388	292.15834	9.62840	0.3133991	0.18414012	3.0598755	21	1 7.3	21.4
418424 2008 NM_{5}	16.4	X	99.21353	167.07436	225.58029	14.93231	0.2733732	0.18116166	3.0933224	21	1 30.9	21.0
418425 2008 OR	16.2	X	140.84119	276.45465	273.35243	26.38740	0.1111948	0.23556299	2.5965579	21	8 29.6	20.8
418426 2008 OQ_{3}	16.2	X	127.56560	197.67339	154.02944	15.74230	0.2821867	0.18297620	3.0728379	21	1 17.3	21.1
418427 2008 OM_{7}	15.7	X	133.73318	23.02428	306.48298	19.52164	0.2315413	0.18272437	3.0756606	21	—	—
418428 2008 OF_{11}	16.1	X	202.15766	67.21831	306.95935	11.60405	0.0794984	0.20602588	2.8391491	21	4 1.2	20.6
418429 2008 OC_{17}	17.8	X	291.96379	3.80013	318.87779	17.97811	0.0749939	0.36700165	1.9320753	21	4 21.9	20.4
418430 2008 OP_{22}	16.7	X	175.91166	44.11336	308.84300	1.01245	0.1267598	0.19422343	2.9530330	21	2 17.3	21.2
418431 2008 OO_{24}	16.4	X	300.29351	310.70529	341.17296	11.09103	0.1203281	0.20874722	2.8144201	21	4 6.1	20.3
418432 2008 OF_{25}	16.1	X	252.39911	17.32253	314.21545	14.40102	0.1411315	0.20476176	2.8508223	21	3 26.6	20.9
418433 2008 PV	16.5	X	94.47097	75.89401	196.29937	7.06145	0.1264760	0.24134380	2.5549277	21	11 12.1	20.2
418434 2008 PX_{2}	16.7	X	100.44416	84.15284	293.61380	13.85866	0.2869232	0.18126839	3.0921080	21	1 20.9	20.9
418435 2008 PE_{9}	16.4	X	331.05156	312.12372	328.39758	11.89421	0.2002237	0.21605289	2.7506119	21	4 21.9	19.8
418436 2008 PG_{10}	16.7	X	123.53130	98.38235	231.95957	5.90273	0.2325297	0.17929868	3.1147126	21	—	—
418437 2008 PX_{10}	16.0	X	64.59400	64.66371	293.72300	13.17526	0.2501864	0.17135971	3.2101863	21	—	—
418438 2008 PX_{21}	15.9	X	92.03027	240.35699	112.17965	7.97881	0.2590090	0.17393047	3.1784760	21	—	—
418439 2008 QH_{5}	15.9	X	117.48768	31.96056	359.81821	8.67116	0.2311861	0.18345918	3.0674425	21	2 20.5	20.5
418440 2008 QM_{5}	16.0	X	129.13716	0.45704	0.18014	9.69556	0.1039581	0.18098362	3.0953508	21	1 11.8	20.6
418441 2008 QS_{8}	16.9	X	129.46901	8.58272	351.85448	0.47931	0.2339818	0.18396999	3.0617617	21	1 24.8	21.7
418442 2008 QF_{11}	15.8	X	125.46859	139.28336	172.01810	24.03440	0.2875266	0.17482611	3.1676111	21	—	—
418443 2008 QC_{18}	16.3	X	75.31369	54.18645	348.52285	9.58507	0.2527520	0.17701967	3.1413889	21	1 15.3	20.1
418444 2008 QM_{23}	16.5	X	118.68114	54.59554	313.16609	4.14870	0.1668276	0.17924779	3.1153021	21	1 15.2	21.0
418445 2008 QN_{26}	16.4	X	158.37580	197.29487	144.32870	10.31957	0.1929428	0.18793186	3.0185783	21	1 24.1	21.4
418446 2008 QA_{34}	16.0	X	49.50187	71.10391	351.64968	11.63983	0.1436567	0.17622196	3.1508619	21	—	—
418447 2008 QW_{43}	16.2	X	158.78580	248.36118	124.85504	15.10815	0.2860995	0.19204564	2.9753159	21	3 11.4	21.5
418448 2008 QN_{45}	16.2	X	123.41402	43.74738	306.39019	10.07077	0.1510531	0.17839370	3.1252377	21	—	—
418449 2008 QR_{46}	16.0	X	98.89371	27.61075	327.74065	16.28397	0.1189974	0.17488665	3.1668800	21	—	—
418450 2008 QN_{47}	16.5	X	114.49512	265.75134	117.72505	2.12903	0.1835415	0.18244055	3.0788496	21	1 30.5	20.9
418451 2008 QY_{47}	16.5	X	129.37985	38.41486	324.19859	8.97233	0.1212108	0.18222745	3.0812494	21	1 15.6	21.1
418452 2008 RN_{5}	15.7	X	94.87315	233.00204	176.17276	27.21825	0.1907807	0.18127728	3.0920070	21	2 5.5	20.2
418453 2008 RS_{5}	17.1	X	138.36921	224.24375	118.71911	2.40462	0.1745121	0.18042584	3.1017269	21	1 7.2	21.7
418454 2008 RL_{9}	16.4	X	220.00622	44.64331	208.40550	9.05027	0.1061409	0.17882099	3.1202571	21	—	—
418455 2008 RB_{15}	16.4	X	145.17691	147.64393	198.88270	10.10492	0.1437950	0.18309989	3.0714539	21	1 12.6	21.3
418456 2008 RK_{24}	15.9	X	135.28246	45.71476	294.36358	7.12177	0.2876231	0.17911191	3.1168776	21	1 12.9	20.9
418457 2008 RK_{28}	16.3	X	78.46725	84.37832	323.44055	3.73056	0.1177327	0.18018085	3.1045378	21	1 5.2	20.3
418458 2008 RY_{32}	16.9	X	75.80949	222.19520	207.78831	4.72860	0.1424818	0.18287165	3.0740090	21	1 29.4	20.8
418459 2008 RP_{37}	16.0	X	136.80328	328.86715	353.39854	11.67491	0.0608898	0.17609741	3.1523474	21	—	—
418460 2008 RA_{40}	16.4	X	120.53930	177.69482	180.77200	8.79144	0.1144469	0.17922796	3.1155320	21	—	—
418461 2008 RR_{40}	16.3	X	71.61686	48.13007	1.04209	9.88704	0.1155597	0.17752812	3.1353880	21	—	—
418462 2008 RU_{41}	16.7	X	87.01738	235.91928	118.51518	0.46647	0.2165976	0.17111205	3.2132830	21	—	—
418463 2008 RR_{42}	16.4	X	170.82262	115.32854	178.43021	12.50029	0.0330479	0.17592233	3.1544386	21	—	—
418464 2008 RX_{46}	17.0	X	144.73332	156.02837	192.76459	1.05440	0.1576617	0.18180085	3.0860676	21	1 18.0	21.6
418465 2008 RD_{49}	16.3	X	83.24002	171.00054	249.74325	5.98233	0.1688814	0.18451847	3.0556914	21	1 31.4	20.3
418466 2008 RT_{52}	16.6	X	177.09475	353.14778	290.97801	5.68625	0.2173987	0.18296196	3.0729973	21	—	—
418467 2008 RM_{54}	16.6	X	132.25914	72.55185	303.93885	7.51075	0.1144179	0.18766270	3.0214639	21	1 31.6	21.0
418468 2008 RT_{56}	16.8	X	90.15295	158.26682	190.95704	8.82539	0.0838905	0.17168184	3.2061695	21	—	—
418469 2008 RD_{64}	16.0	X	150.90030	317.50418	3.70709	16.93496	0.2100217	0.18083010	3.0971024	21	—	—
418470 2008 RV_{85}	16.3	X	140.36531	341.79083	334.30791	8.75512	0.0718417	0.17418354	3.1753965	21	—	—
418471 2008 RY_{85}	16.4	X	108.88751	48.67800	317.22446	9.76978	0.0862162	0.17719486	3.1393180	21	—	—
418472 2008 RT_{87}	16.2	X	181.98617	96.82658	229.09058	9.44770	0.0181689	0.18374357	3.0642765	21	1 15.9	20.8
418473 2008 RZ_{87}	16.5	X	45.88505	238.79314	207.09795	15.72942	0.1951574	0.17584382	3.1553774	21	1 5.4	20.3
418474 2008 RA_{88}	17.0	X	83.45508	192.06008	228.05968	7.97311	0.0735835	0.18127195	3.0920676	21	1 18.8	21.2
418475 2008 RQ_{92}	16.6	X	120.02818	228.94819	154.74056	2.87775	0.1189724	0.18318352	3.0705189	21	1 27.9	20.9
418476 2008 RZ_{92}	16.6	X	59.40201	75.14890	12.79065	9.93630	0.1090997	0.18183205	3.0857147	21	1 28.8	20.6
418477 2008 RW_{93}	16.3	X	54.35683	84.95902	8.89356	12.00209	0.1209386	0.18213300	3.0823145	21	1 30.4	20.2
418478 2008 RG_{96}	16.2	X	119.45157	332.64886	344.52967	9.85009	0.2090545	0.17546306	3.1599406	21	—	—
418479 2008 RQ_{96}	16.4	X	89.55034	43.13036	10.28180	12.87331	0.0764143	0.18030937	3.1030625	21	1 25.6	20.8
418480 2008 RH_{102}	16.5	X	104.67682	23.75774	0.56840	10.82163	0.0688572	0.18000218	3.1065920	21	1 6.2	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418481 2008 RF_{104}	16.8	X	60.40896	109.91108	325.51713	8.98624	0.2186344	0.17690631	3.1427307	21	1 25.5	20.3
418482 2008 RN_{104}	16.5	X	121.75602	121.74856	269.71437	9.08236	0.1528998	0.18425569	3.0585959	21	2 9.3	21.1
418483 2008 RQ_{104}	17.1	X	78.66783	18.64044	41.33694	1.05920	0.1877877	0.18069097	3.0986920	21	1 29.8	20.8
418484 2008 RF_{106}	16.1	X	79.68808	263.86908	119.17686	14.82149	0.2760443	0.17245654	3.1965605	21	—	—
418485 2008 RT_{106}	16.3	X	157.59012	132.30626	193.65764	15.77158	0.0761641	0.17898104	3.1183967	21	—	—
418486 2008 RJ_{111}	16.3	X	18.51713	73.01046	16.60874	11.64391	0.0544897	0.17483478	3.1675064	21	—	—
418487 2008 RT_{112}	16.5	X	84.97956	147.27026	268.55487	4.84881	0.1385296	0.18078653	3.0976000	21	1 25.4	20.6
418488 2008 RM_{114}	16.1	X	260.32435	15.96066	197.97213	15.13549	0.0306742	0.17429366	3.1740590	21	—	—
418489 2008 RA_{117}	16.4	X	96.90682	173.87388	212.07320	8.33813	0.0775988	0.17419683	3.1752350	21	—	—
418490 2008 RG_{118}	16.6	X	126.14541	168.54321	203.05478	9.20284	0.0796003	0.18007841	3.1057151	21	1 14.5	21.2
418491 2008 RG_{122}	16.4	X	36.81480	119.13956	9.52167	8.65973	0.0565940	0.18852101	3.0122861	21	2 10.9	20.4
418492 2008 RG_{124}	16.7	X	113.67133	195.81745	180.97287	9.83883	0.1037985	0.18130312	3.0917131	21	1 9.7	21.2
418493 2008 RV_{129}	16.6	X	197.56653	235.49872	125.61498	3.01983	0.1202707	0.19724391	2.9228082	21	3 20.0	21.1
418494 2008 RB_{131}	16.5	X	134.39631	352.60641	13.08322	9.15599	0.0773870	0.18078594	3.0976068	21	1 20.9	21.1
418495 2008 RF_{135}	17.0	X	75.98059	2.90157	50.08613	2.10615	0.2203003	0.17775179	3.1327571	21	1 22.6	20.7
418496 2008 RG_{140}	16.2	X	177.93462	10.70806	345.19526	11.36522	0.1118013	0.19056616	2.9906955	21	2 23.8	20.9
418497 2008 RH_{141}	16.1	X	153.20826	181.65264	113.94676	2.20752	0.1580233	0.17812588	3.1283694	21	—	—
418498 2008 RR_{143}	16.1	X	166.64336	293.06503	356.35108	13.00349	0.1528434	0.17851666	3.1238024	21	—	—
418499 2008 RZ_{144}	16.5	X	140.36354	189.36457	189.34570	9.97139	0.1110269	0.18903461	3.0068274	21	2 9.4	21.1
418500 2008 RD_{145}	16.9	X	210.20227	13.73469	288.79647	1.33777	0.0707339	0.18849602	3.0125523	21	1 21.9	21.5
418501 2008 RF_{146}	16.3	X	132.34946	177.48230	220.56892	15.04934	0.0655490	0.18843071	3.0132483	21	2 15.4	20.9
418502 2008 RK_{146}	16.5	X	112.76826	55.00960	8.21566	12.03085	0.1472473	0.18697607	3.0288565	21	3 13.9	20.9
418503 2008 RL_{146}	16.9	X	152.50388	111.06814	241.68745	1.96011	0.1858498	0.18683231	3.0304100	21	1 31.3	21.7
418504 2008 SA_{3}	15.7	X	150.45742	308.15649	3.54623	17.13737	0.2520877	0.18164800	3.0877986	21	—	—
418505 2008 SZ_{4}	17.7	X	175.52294	348.89640	20.37697	14.00805	0.1424070	0.34676867	2.0065169	21	2 24.4	20.5
418506 2008 SA_{6}	15.4	X	179.47579	273.48754	35.18150	17.20634	0.1898528	0.18288233	3.0738893	21	1 6.9	20.8
418507 2008 SH_{21}	16.9	X	108.95724	58.91668	321.10779	4.73977	0.1692092	0.18308502	3.0716201	21	1 18.4	21.1
418508 2008 SY_{26}	16.4	X	236.32493	259.36795	0.07541	10.84231	0.1067120	0.18451134	3.0557701	21	—	—
418509 2008 SA_{35}	16.7	X	126.47875	252.33450	151.98952	1.02176	0.1810092	0.18615573	3.0377482	21	3 8.1	21.1
418510 2008 SD_{35}	16.7	X	92.42482	249.82489	150.04357	0.32863	0.0710199	0.17870305	3.1216299	21	1 8.3	20.8
418511 2008 SR_{38}	16.1	X	359.40366	90.73663	27.04400	9.16005	0.0585548	0.17481119	3.1677913	21	—	—
418512 2008 SN_{39}	15.9	X	32.53923	71.59591	29.22748	9.63766	0.0531726	0.17816476	3.1279142	21	1 1.4	20.2
418513 2008 SS_{39}	16.6	X	118.41983	306.22063	77.68816	2.12814	0.1845301	0.18139152	3.0907086	21	2 5.2	21.0
418514 2008 ST_{40}	16.2	X	115.22163	351.08789	358.85366	9.43965	0.0856843	0.17822999	3.1271511	21	—	—
418515 2008 SB_{45}	16.5	X	165.59418	285.57260	33.10490	0.81317	0.1646922	0.18014209	3.1049832	21	1 4.1	21.5
418516 2008 SL_{53}	16.1	X	51.78859	263.97909	189.97309	15.65410	0.2332243	0.17744036	3.1364216	21	1 29.9	19.7
418517 2008 SL_{56}	16.8	X	146.40125	130.63108	186.23088	3.31332	0.1388607	0.17557477	3.1586001	21	—	—
418518 2008 SU_{56}	16.8	X	90.35808	145.98703	201.28344	0.40104	0.1551298	0.16883476	3.2421130	21	—	—
418519 2008 SX_{57}	15.8	X	84.90461	359.65281	31.92336	9.53964	0.0678591	0.17382959	3.1797056	21	—	—
418520 2008 ST_{59}	16.0	X	86.36290	11.25098	43.36289	9.82437	0.0796404	0.17828368	3.1265232	21	1 21.9	20.3
418521 2008 SX_{59}	16.6	X	184.22811	315.11092	14.51471	11.57476	0.2707500	0.18967644	3.0000405	21	2 8.1	22.1
418522 2008 SA_{61}	15.8	X	93.21049	74.85250	358.05740	14.73816	0.2990897	0.18249639	3.0782215	21	3 21.6	20.1
418523 2008 SO_{62}	16.1	X	98.60463	355.85609	1.31613	28.22410	0.1531394	0.17351094	3.1835974	21	—	—
418524 2008 SS_{63}	16.2	X	28.52930	95.90380	358.73279	15.41762	0.0577578	0.17731363	3.1379159	21	—	—
418525 2008 SH_{64}	15.9	X	151.43323	296.80916	350.99237	5.91168	0.1396608	0.17065282	3.2190452	21	—	—
418526 2008 SY_{65}	15.9	X	75.92916	350.44454	29.32156	27.74894	0.1475051	0.16916260	3.2379228	21	—	—
418527 2008 SW_{71}	15.9	X	322.59645	140.72778	20.75836	27.46829	0.1340332	0.17275192	3.1929157	21	—	—
418528 2008 SE_{72}	16.4	X	103.20041	98.23155	292.37976	9.14100	0.1681059	0.18011855	3.1052536	21	1 23.3	20.7
418529 2008 SK_{73}	15.9	X	113.05958	359.91439	325.09523	8.86018	0.0648430	0.17650154	3.1475336	21	—	—
418530 2008 SS_{78}	16.7	X	147.89446	327.11364	336.35941	5.83688	0.1414608	0.17574651	3.1565421	21	—	—
418531 2008 SB_{84}	16.4	X	101.86583	177.85214	208.01724	10.96419	0.1269596	0.17916951	3.1162095	21	1 9.0	20.8
418532 Saruman	16.7	X	85.77099	49.99500	301.96613	4.00829	0.1817826	0.16953067	3.2332345	21	—	—
418533 2008 SC_{87}	16.9	X	89.15892	158.10512	263.45514	5.20344	0.1540851	0.18177657	3.0863424	21	2 8.3	21.0
418534 2008 SZ_{87}	16.0	X	84.79038	58.30458	337.39852	14.86585	0.2554232	0.17878356	3.1206926	21	1 22.7	20.0
418535 2008 SV_{88}	16.7	X	139.99042	81.40202	269.88991	2.29505	0.1923750	0.18380349	3.0636105	21	1 19.5	21.4
418536 2008 SW_{90}	16.6	X	120.86024	32.57294	7.40661	9.84078	0.1605747	0.18428285	3.0582954	21	2 25.8	21.1
418537 2008 SG_{92}	17.0	X	100.52383	16.89754	5.97399	2.91964	0.2974262	0.17787846	3.1312697	21	1 30.8	21.3
418538 2008 SS_{98}	15.9	X	103.65940	269.53972	89.48508	3.37941	0.1072917	0.17236353	3.1977105	21	—	—
418539 2008 SK_{101}	16.9	X	172.61982	321.79553	39.99934	14.00944	0.1098341	0.18802267	3.0176063	21	3 3.5	21.8
418540 2008 SR_{102}	16.2	X	62.95843	75.26294	32.93304	10.45867	0.1100796	0.18171542	3.0870349	21	3 2.2	20.2
418541 2008 SW_{102}	16.3	X	60.75869	308.33869	140.69906	5.68137	0.1342247	0.17822290	3.1272340	21	1 31.8	20.1
418542 2008 SY_{102}	15.7	X	29.70671	63.44799	41.14763	20.76578	0.1529583	0.17418853	3.1753360	21	1 1.6	19.7
418543 2008 SZ_{102}	16.0	X	150.83479	222.20739	176.51306	11.60712	0.1333559	0.18912987	3.0058176	21	3 20.8	20.6
418544 2008 SB_{104}	16.0	X	53.30627	30.00016	26.76596	26.47556	0.0922020	0.17116670	3.2125990	21	—	—
418545 2008 SQ_{107}	16.7	X	122.13330	108.48246	227.05668	8.71600	0.0769975	0.17405778	3.1769259	21	—	—
418546 2008 SS_{107}	16.0	X	278.40958	0.93791	212.39370	15.64003	0.0782160	0.18093262	3.0959324	21	—	—
418547 2008 ST_{107}	16.6	X	49.83945	233.46917	210.58341	13.35356	0.2843797	0.17489958	3.1667239	21	1 18.8	19.9
418548 2008 SQ_{113}	16.1	X	20.55015	304.02696	146.80148	5.62681	0.1761873	0.17123643	3.2117269	21	—	—
418549 2008 SO_{115}	15.5	X	162.49946	289.08393	33.52705	16.84504	0.1355245	0.18006962	3.1058243	21	1 4.4	20.6
418550 2008 SF_{117}	16.0	X	118.33131	59.73334	17.30058	9.84055	0.0602082	0.19039924	2.9924432	21	3 24.6	20.2
418551 2008 SF_{119}	17.1	X	109.15917	343.16898	26.42532	0.59043	0.1601732	0.17580582	3.1558321	21	1 5.9	21.6
418552 2008 SJ_{119}	16.3	X	66.67654	15.59926	27.92297	8.37328	0.0344343	0.17238119	3.1974919	21	—	—
418553 2008 SD_{121}	16.1	X	32.50622	243.53752	211.59576	7.76778	0.0631479	0.17516762	3.1634927	21	—	—
418554 2008 SH_{121}	16.3	X	114.57463	334.28955	13.10154	4.66625	0.1635350	0.17333499	3.1857515	21	—	—
418555 2008 SG_{122}	16.6	X	190.38052	319.24633	21.00262	12.94826	0.1322239	0.18805481	3.0172625	21	2 22.4	21.6
418556 2008 SD_{123}	16.8	X	76.21777	160.35739	248.88419	0.30206	0.1466268	0.17495649	3.1660371	21	1 8.2	20.6
418557 2008 SM_{123}	16.8	X	103.65826	165.52622	221.70357	0.21967	0.1638663	0.17737002	3.1372508	21	1 20.4	21.1
418558 2008 SH_{125}	16.9	X	137.65424	63.48001	272.27980	1.29541	0.1654875	0.17601312	3.1533538	21	—	—
418559 2008 SU_{130}	16.2	X	32.00399	85.47045	21.20061	11.34614	0.0594155	0.17662274	3.1460936	21	1 9.5	20.5
418560 2008 SD_{139}	16.4	X	54.12683	321.36076	95.15944	5.23784	0.1224477	0.17074891	3.2178373	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418561 2008 SE_{140}	15.9	X	112.19774	351.95723	341.56910	10.23730	0.2330268	0.17404967	3.1770247	21	—	—
418562 2008 SL_{140}	16.1	X	59.19236	171.20042	278.67444	10.12123	0.0697578	0.18287501	3.0739713	21	1 22.1	20.2
418563 2008 SM_{140}	16.3	X	161.17879	33.10055	299.02726	10.08710	0.1493484	0.18300483	3.0725174	21	1 14.0	21.2
418564 2008 SY_{144}	16.2	X	64.52541	249.04348	173.26165	5.40734	0.1798105	0.17274716	3.1929745	21	1 10.2	20.0
418565 2008 SN_{150}	16.1	X	2.24880	123.36415	18.03595	10.27535	0.1799782	0.17723770	3.1388120	21	—	—
418566 2008 SM_{154}	16.0	X	127.25249	343.38289	14.31433	9.13056	0.1307495	0.18066558	3.0989824	21	1 9.2	20.6
418567 2008 ST_{154}	15.9	X	123.84380	1.72572	14.03632	17.44480	0.1174295	0.18288007	3.0739146	21	1 29.6	20.6
418568 2008 SM_{156}	15.3	X	87.92679	15.91928	44.69209	29.33411	0.1655609	0.17789311	3.1310978	21	2 27.3	20.2
418569 2008 ST_{157}	16.2	X	51.80978	213.28230	197.12709	8.38477	0.2153803	0.17305970	3.1891290	21	—	—
418570 2008 SD_{161}	15.9	X	70.34066	46.89039	9.30628	10.78792	0.1584927	0.17779282	3.1322751	21	1 10.9	19.9
418571 2008 SE_{169}	16.0	X	78.72593	50.08951	347.42003	15.57992	0.1796132	0.17734342	3.1375645	21	1 4.1	20.2
418572 2008 SP_{172}	16.1	X	62.11433	76.35487	30.09092	10.82298	0.0856139	0.18082546	3.0971554	21	2 24.4	20.3
418573 2008 SA_{173}	16.5	X	152.72624	290.53828	32.29854	6.13345	0.1639465	0.17684011	3.1435150	21	—	—
418574 2008 SU_{177}	16.1	X	103.60294	41.99074	26.41689	10.43129	0.0659280	0.18265172	3.0764760	21	2 28.9	20.5
418575 2008 SY_{184}	16.1	X	38.47540	203.99967	226.73272	16.65954	0.1549624	0.17004402	3.2267239	21	—	—
418576 2008 SD_{186}	16.5	X	98.72789	93.83264	335.73500	8.94892	0.1258705	0.18919120	3.0051681	21	2 26.9	20.4
418577 2008 SJ_{188}	16.4	X	164.46114	83.56096	212.62711	15.22529	0.2309599	0.17645450	3.1480930	21	—	—
418578 2008 SO_{188}	16.4	X	112.81085	150.85212	208.65487	9.89852	0.2181278	0.17635684	3.1492551	21	1 4.5	21.1
418579 2008 SM_{196}	16.9	X	60.22771	215.36214	204.40022	5.13544	0.1272317	0.17195697	3.2027487	21	—	—
418580 2008 SB_{200}	16.3	X	81.34985	206.17848	233.58399	8.09819	0.0429393	0.18208764	3.0828264	21	2 4.1	20.7
418581 2008 SM_{200}	16.6	X	79.68725	195.13169	266.44763	3.45149	0.1329354	0.18408147	3.0605255	21	3 13.7	20.7
418582 2008 SM_{201}	16.5	X	83.14588	86.55063	23.24460	14.22550	0.1988342	0.18515704	3.0486617	21	4 10.1	20.4
418583 2008 SS_{206}	16.7	X	101.97849	290.05361	65.53310	8.86114	0.2247921	0.17122038	3.2119276	21	—	—
418584 2008 SM_{211}	16.0	X	101.20751	160.79664	224.47044	8.55015	0.0814243	0.17435601	3.1733022	21	1 3.1	20.5
418585 2008 SJ_{217}	16.4	X	179.55331	48.96691	252.25957	8.56784	0.0413206	0.17948044	3.1126094	21	—	—
418586 2008 SP_{218}	16.6	X	112.99334	26.36052	341.40668	6.98364	0.2251517	0.17924472	3.1153377	21	1 17.6	21.1
418587 2008 SL_{233}	16.6	X	84.71987	230.36098	178.77732	15.77307	0.1310137	0.17919882	3.1158697	21	1 15.1	21.0
418588 2008 SO_{233}	16.5	X	187.40560	251.62801	28.27433	10.75247	0.1430770	0.17877242	3.1208222	21	—	—
418589 2008 SB_{235}	16.0	X	76.91708	281.70459	175.09762	11.39149	0.0813286	0.18809090	3.0168764	21	2 24.7	20.1
418590 2008 SM_{240}	16.2	X	37.39272	20.37276	58.93095	10.55639	0.0740227	0.17269288	3.1936435	21	—	—
418591 2008 SS_{241}	16.4	X	135.16350	259.54806	83.80956	4.30628	0.1968653	0.17953619	3.1119650	21	1 7.4	21.0
418592 2008 SY_{242}	16.1	X	97.73202	275.04001	206.28489	12.04619	0.1136380	0.19104629	2.9856827	21	4 30.6	20.2
418593 2008 SY_{246}	16.1	X	213.18773	75.31755	264.35104	18.32412	0.2705637	0.19729200	2.9223332	21	2 24.9	21.8
418594 2008 SC_{248}	16.7	X	73.62645	208.53590	204.72710	0.73460	0.2225143	0.17526634	3.1623047	21	1 19.4	20.3
418595 2008 SY_{253}	16.0	X	52.53067	35.16019	42.53896	9.73931	0.0820416	0.17703115	3.1412531	21	1 2.1	20.1
418596 2008 SO_{257}	16.1	X	36.41567	73.22623	29.84100	16.03623	0.2210092	0.17467307	3.1694610	21	1 17.5	19.7
418597 2008 SX_{258}	16.5	X	57.75023	254.14839	207.77908	9.18384	0.0573426	0.18517957	3.0484143	21	2 1.2	20.7
418598 2008 ST_{259}	16.6	X	148.70425	299.77788	47.78325	5.49311	0.1485364	0.18205648	3.0831782	21	1 21.0	21.4
418599 2008 SC_{260}	16.6	X	338.24420	174.78926	114.50348	4.98003	0.1512076	0.21226079	2.7832755	21	6 1.7	19.7
418600 2008 SA_{261}	16.1	X	44.70383	24.58088	62.21457	4.67874	0.1167694	0.17426836	3.1743662	21	1 3.9	20.0
418601 2008 SH_{262}	16.6	X	131.01236	235.45528	86.25213	2.33491	0.1730024	0.17374786	3.1807027	21	—	—
418602 2008 SP_{265}	15.7	X	336.59920	157.18986	3.40457	12.38333	0.0612202	0.17851562	3.1238145	21	—	—
418603 2008 SM_{269}	16.1	X	101.47275	48.72276	18.14770	8.97939	0.1223571	0.18311501	3.0712847	21	3 2.9	20.4
418604 2008 SY_{270}	16.3	X	167.05405	269.85364	46.99391	10.86559	0.0877605	0.17576979	3.1562633	21	—	—
418605 2008 SM_{271}	16.6	X	51.37236	7.71562	89.08524	2.56857	0.1608159	0.17562858	3.1579549	21	1 30.4	20.2
418606 2008 SJ_{274}	16.0	X	143.53336	38.80619	342.44977	10.67972	0.1132828	0.18647644	3.0342642	21	2 20.0	20.5
418607 2008 SF_{277}	16.6	X	70.27486	20.17126	38.22118	3.16944	0.1003033	0.17753177	3.1353450	21	1 5.1	20.7
418608 2008 SX_{277}	16.1	X	67.95220	1.77774	49.91609	12.06105	0.0593717	0.17422326	3.1749139	21	—	—
418609 2008 SZ_{279}	16.3	X	65.83129	13.17247	22.86568	15.16321	0.0843552	0.17404601	3.1770692	21	—	—
418610 2008 SV_{286}	15.6	X	113.38317	67.96965	253.29320	15.05691	0.1121484	0.16950538	3.2335560	21	—	—
418611 2008 SQ_{287}	16.2	X	24.82045	111.15239	0.95884	9.19903	0.0469102	0.17672553	3.1448735	21	1 6.1	20.5
418612 2008 SK_{288}	15.7	X	118.68607	67.46312	279.51148	21.05651	0.2786201	0.17686734	3.1431923	21	1 4.4	20.5
418613 2008 SH_{291}	16.0	X	71.88017	203.64380	202.25873	17.33334	0.2087347	0.17683605	3.1435631	21	1 2.5	20.1
418614 2008 SJ_{291}	15.3	X	116.66031	62.97912	284.67884	15.28094	0.2339737	0.17793596	3.1305951	21	—	—
418615 2008 SH_{300}	16.3	X	240.59757	326.33371	35.17728	5.20592	0.1273799	0.20903726	2.8118161	21	4 28.8	20.5
418616 2008 SL_{300}	15.6	X	76.13830	145.48733	250.86121	16.53432	0.2137784	0.17582445	3.1556092	21	—	—
418617 2008 SK_{302}	16.4	X	35.83871	122.90133	23.93319	7.96155	0.2401444	0.18016622	3.1047060	21	3 15.7	19.4
418618 2008 SO_{308}	16.2	X	90.67701	113.38976	277.04719	11.19690	0.1627748	0.17591521	3.1545237	21	1 7.2	20.2
418619 2008 TW_{5}	16.3	X	111.61610	326.63220	12.90612	15.11364	0.2591529	0.17303133	3.1894776	21	—	—
418620 2008 TS_{7}	16.4	X	59.09903	23.58925	16.56085	25.11551	0.1958277	0.17178404	3.2048977	21	—	—
418621 2008 TJ_{10}	16.6	X	117.85355	27.94124	355.15777	6.38731	0.1315555	0.18147017	3.0898156	21	1 28.8	21.0
418622 2008 TO_{14}	16.7	X	173.71624	12.45664	0.16171	9.71063	0.0746368	0.19260501	2.9695524	21	3 9.2	21.1
418623 2008 TU_{19}	16.6	X	189.54825	305.30767	36.63005	10.54616	0.1186104	0.18589560	3.0405814	21	2 22.9	21.5
418624 2008 TZ_{31}	15.9	X	251.18892	211.93917	32.02706	17.46451	0.0617860	0.17863736	3.1223951	21	—	—
418625 2008 TD_{33}	16.5	X	54.14704	255.86764	194.56308	14.78765	0.3214309	0.17413656	3.1759677	21	2 11.9	19.8
418626 2008 TX_{33}	16.4	X	50.69808	36.08142	61.47786	5.05213	0.1110122	0.17836717	3.1255475	21	1 26.4	20.2
418627 2008 TD_{34}	16.0	X	37.69958	260.89097	197.86124	14.86860	0.1153245	0.17551973	3.1592604	21	1 4.9	20.2
418628 2008 TW_{34}	15.7	X	336.11709	34.40265	1.94390	5.32023	0.0627154	0.15473179	3.4362362	21	10 20.6	20.3
418629 2008 TC_{37}	16.5	X	144.34421	49.30095	341.74504	5.62935	0.1027751	0.18951874	3.0017045	21	3 1.8	20.9
418630 2008 TF_{37}	16.5	X	200.40379	302.14516	356.11118	9.86566	0.1515709	0.18536679	3.0463615	21	1 11.4	21.6
418631 2008 TT_{40}	16.1	X	88.89709	169.84986	226.51408	14.51858	0.2160914	0.17676911	3.1443566	21	1 16.1	20.4
418632 2008 TM_{42}	16.5	X	9.38618	173.94300	303.36812	8.62791	0.0349214	0.17652522	3.1472522	21	—	—
418633 2008 TB_{45}	16.0	X	311.04359	158.20303	37.09137	16.72464	0.0593705	0.17733562	3.1376565	21	1 10.4	20.7
418634 2008 TL_{47}	16.2	X	81.64142	342.04189	63.60828	9.96294	0.0769098	0.17456227	3.1708020	21	1 3.2	20.5
418635 2008 TA_{48}	17.0	X	139.97162	97.23692	223.46623	11.58739	0.1613250	0.17542810	3.1603604	21	—	—
418636 2008 TE_{51}	16.3	X	123.63773	311.67547	29.47341	9.01921	0.0730144	0.17415966	3.1756868	21	—	—
418637 2008 TE_{52}	15.7	X	155.23007	333.29937	341.16842	12.82949	0.0582828	0.17512302	3.1640298	21	—	—
418638 2008 TL_{52}	15.4	X	252.34772	173.32107	20.39832	21.69973	0.0633908	0.16946360	3.2340875	21	—	—
418639 2008 TM_{53}	16.6	X	61.38895	333.67468	103.93881	2.34494	0.1594487	0.17765500	3.1338949	21	1 21.7	20.3
418640 2008 TM_{55}	17.3	X	93.37822	65.43525	20.22369	0.57346	0.2240297	0.18406242	3.0607366	21	3 27.3	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418641 2008 TD_{56}	17.1	X	115.19221	144.81780	223.10189	0.77427	0.1693825	0.17747006	3.1360717	21	1 11.7	21.6
418642 2008 TS_{58}	16.6	X	133.87453	327.58207	26.64745	10.96411	0.1222799	0.17877609	3.1207796	21	1 12.1	21.4
418643 2008 TO_{59}	16.3	X	79.08424	59.83099	33.14278	9.36408	0.1205547	0.18402597	3.0611408	21	3 6.5	20.4
418644 2008 TU_{61}	16.2	X	249.37240	9.04226	215.56026	3.33863	0.1287198	0.17492155	3.1664587	21	—	—
418645 2008 TH_{63}	16.7	X	169.04235	138.67679	205.78372	10.14271	0.0740344	0.18340024	3.0680995	21	1 27.1	21.4
418646 2008 TT_{65}	15.6	X	69.19648	82.67877	11.16872	21.38605	0.1646322	0.18182861	3.0857536	21	3 4.1	19.6
418647 2008 TJ_{66}	16.4	X	218.19787	239.83025	38.60912	16.00449	0.1744164	0.18172541	3.0869217	21	1 2.9	21.8
418648 2008 TU_{72}	16.0	X	354.25614	271.12466	240.92791	5.08742	0.0500130	0.17737627	3.1371771	21	1 11.3	20.3
418649 2008 TQ_{76}	16.8	X	138.00347	186.82914	160.62295	0.71928	0.1676335	0.18038298	3.1022182	21	1 11.3	21.5
418650 2008 TT_{76}	16.5	X	179.18797	292.91284	27.53527	3.19583	0.1580308	0.18460614	3.0547239	21	1 17.5	21.4
418651 2008 TQ_{83}	16.2	X	103.20190	353.61334	5.77905	10.51415	0.0869599	0.17379941	3.1800737	21	—	—
418652 2008 TZ_{83}	16.8	X	136.74913	109.84390	203.34058	16.15908	0.2217676	0.17444106	3.1722707	21	—	—
418653 2008 TT_{84}	16.0	X	36.97904	41.08802	20.88084	10.05631	0.0124955	0.17169786	3.2059700	21	—	—
418654 2008 TV_{84}	16.8	X	171.23773	4.16000	20.65139	12.26685	0.0944159	0.19268907	2.9686887	21	3 23.8	21.4
418655 2008 TK_{87}	16.4	X	61.09839	350.36481	65.08880	6.12115	0.1519484	0.17299172	3.1899644	21	—	—
418656 2008 TN_{91}	16.7	X	165.42789	269.94446	36.22560	6.39437	0.2438163	0.18031594	3.1029871	21	—	—
418657 2008 TM_{92}	16.9	X	84.64024	258.80954	152.66345	2.02227	0.1814553	0.17909388	3.1170867	21	1 26.8	20.7
418658 2008 TV_{93}	16.0	X	215.83644	96.91743	183.08338	9.18609	0.0461280	0.18140472	3.0905587	21	1 2.1	20.7
418659 2008 TJ_{101}	16.2	X	79.53829	74.25369	20.85541	11.50175	0.0542518	0.18620002	3.0372665	21	3 1.1	20.4
418660 2008 TF_{105}	15.9	X	235.48873	213.88608	21.70406	15.90028	0.0700531	0.17329212	3.1862769	21	—	—
418661 2008 TO_{112}	16.3	X	61.60111	36.94135	359.34822	9.56240	0.2765049	0.17061328	3.2195426	21	—	—
418662 2008 TO_{118}	16.3	X	262.46043	257.78049	354.77026	8.56250	0.0031959	0.18561609	3.0436331	21	1 27.3	20.6
418663 2008 TW_{118}	16.6	X	109.61428	60.40222	0.29475	10.04071	0.1100794	0.18758153	3.0223354	21	3 1.9	20.8
418664 2008 TP_{127}	16.5	X	88.88680	42.65363	329.95388	5.69431	0.1327144	0.17308932	3.1887652	21	—	—
418665 2008 TZ_{128}	15.9	X	143.32611	93.54677	223.28868	14.55853	0.0306630	0.17328436	3.1863720	21	—	—
418666 2008 TG_{130}	16.7	X	277.93352	260.47853	9.01348	10.03381	0.0132795	0.18955971	3.0012720	21	3 5.8	21.0
418667 2008 TO_{130}	16.4	X	69.43611	126.60063	260.03728	3.43480	0.1660941	0.17018586	3.2249308	21	—	—
418668 2008 TU_{130}	16.4	X	38.75101	256.97546	212.87489	26.15888	0.2371990	0.17538472	3.1608815	21	1 20.3	20.3
418669 2008 TK_{131}	15.6	X	203.72867	37.82061	238.81371	7.79215	0.0573566	0.17587701	3.1549804	21	—	—
418670 2008 TW_{131}	16.1	X	219.61978	258.93074	358.24665	8.60394	0.0537202	0.17489282	3.1668055	21	—	—
418671 2008 TY_{131}	16.6	X	198.39972	11.55813	273.43450	4.15450	0.0750571	0.17720896	3.1391515	21	—	—
418672 2008 TS_{138}	16.2	X	65.35260	30.55539	20.01557	18.83534	0.0766621	0.17299792	3.1898882	21	—	—
418673 2008 TW_{147}	16.5	X	278.64569	223.79649	27.04519	10.83487	0.0318883	0.18886452	3.0086324	21	2 11.7	20.9
418674 2008 TD_{151}	16.8	X	86.59270	340.30661	70.30873	3.15067	0.0996268	0.18032914	3.1028356	21	1 17.6	20.8
418675 2008 TA_{164}	16.7	X	115.92041	210.38666	241.16400	10.88038	0.0207018	0.19465419	2.9486748	21	3 28.2	20.9
418676 2008 TO_{164}	16.3	X	237.27512	75.61626	197.79876	13.51232	0.0545375	0.18040806	3.1019307	21	1 15.3	21.2
418677 2008 TZ_{166}	16.4	X	20.80156	145.74140	351.67152	15.69532	0.0766723	0.18276926	3.0751569	21	2 2.3	20.5
418678 2008 TE_{168}	16.9	X	309.39430	250.98360	21.90719	7.41010	0.0258806	0.19624924	2.9326758	21	4 13.2	20.9
418679 2008 TC_{169}	15.8	X	92.01261	315.07795	75.32065	8.69459	0.1567202	0.17298714	3.1900207	21	1 9.8	20.0
418680 2008 TP_{171}	15.4	X	91.72311	167.50858	237.11790	25.92373	0.2168175	0.17789560	3.1310686	21	1 23.9	20.1
418681 2008 TB_{172}	16.5	X	121.36038	214.18562	139.00797	1.84157	0.1383274	0.17171265	3.2057860	21	—	—
418682 2008 TJ_{172}	16.4	X	13.27177	306.33634	195.46032	0.20843	0.0660631	0.17840292	3.1251300	21	1 23.9	20.5
418683 2008 TC_{174}	16.7	X	87.41852	354.25863	32.85435	5.86031	0.1297070	0.17689294	3.1428890	21	—	—
418684 2008 TM_{175}	16.4	X	109.20981	30.56980	58.17088	13.46939	0.0961464	0.18808982	3.0168880	21	4 6.8	20.8
418685 2008 TB_{181}	16.4	X	58.87189	358.77220	76.18703	5.94843	0.2231337	0.17662209	3.1461014	21	1 22.4	19.8
418686 2008 TJ_{189}	15.9	X	12.31238	57.04419	61.80742	21.98314	0.1104074	0.17007038	3.2263905	21	—	—
418687 2008 UG_{2}	16.3	X	134.82832	106.92487	228.55276	9.80415	0.1422157	0.18054705	3.1003385	21	—	—
418688 2008 UT_{3}	16.7	X	100.27108	112.79620	329.55827	8.93919	0.3141503	0.18500222	3.0503622	21	4 8.0	21.4
418689 2008 UQ_{4}	15.4	X	74.16117	31.90698	21.40902	27.91345	0.1431716	0.17825706	3.1268344	21	1 15.8	19.9
418690 2008 UE_{6}	16.1	X	51.01888	123.08057	318.16815	8.55261	0.2021748	0.17516648	3.1635064	21	1 13.9	19.6
418691 2008 UR_{6}	16.7	X	132.55704	85.27848	307.16799	3.38781	0.3155635	0.18523173	3.0478421	21	3 11.5	21.8
418692 2008 UW_{7}	17.0	X	119.15234	324.12277	26.95144	1.60601	0.2313376	0.17796144	3.1302962	21	1 4.5	21.6
418693 2008 UP_{9}	16.3	X	68.55688	18.04231	15.65191	15.39365	0.1352977	0.17389138	3.1789523	21	—	—
418694 2008 UP_{10}	15.9	X	28.83403	98.02306	4.19906	12.25978	0.1037784	0.17752691	3.1354021	21	—	—
418695 2008 UF_{12}	16.9	X	214.80021	357.78645	7.01068	6.03832	0.0740687	0.19925228	2.9031346	21	4 9.3	21.2
418696 2008 UH_{14}	16.5	X	46.48673	247.21094	194.29542	10.55781	0.0725973	0.17910492	3.1169586	21	—	—
418697 2008 UV_{16}	16.4	X	219.73727	58.09939	201.88995	12.77592	0.0539428	0.17728436	3.1382613	21	—	—
418698 2008 UB_{17}	16.1	X	26.37696	314.21736	201.40811	21.66565	0.2321877	0.18469674	3.0537248	21	2 24.3	19.5
418699 2008 UB_{24}	16.3	X	45.70163	277.98464	215.15664	9.26134	0.0394771	0.18874773	3.0098734	21	2 21.2	20.5
418700 2008 UM_{24}	15.8	X	337.89624	127.10783	41.72290	11.16372	0.0952641	0.17657565	3.1466529	21	1 6.9	20.1
418701 2008 US_{29}	16.7	X	124.16370	288.33998	98.47290	2.18214	0.1790651	0.18002579	3.1063203	21	2 14.2	21.4
418702 2008 UY_{30}	15.6	X	27.12986	349.45096	50.07850	13.11650	0.0992055	0.16134470	3.3416906	21	—	—
418703 2008 UE_{31}	16.3	X	178.59511	232.45526	114.96336	2.06717	0.0934109	0.18400993	3.0613187	21	2 13.6	21.1
418704 2008 UP_{36}	16.6	X	55.68529	82.75885	32.57359	11.43170	0.1549642	0.17858573	3.1229969	21	3 6.2	20.5
418705 2008 UU_{37}	16.3	X	72.47891	44.88400	35.22200	10.47069	0.2223330	0.17556362	3.1587339	21	2 25.7	20.3
418706 2008 UL_{41}	15.6	X	92.10542	318.73206	46.25087	28.12974	0.1812423	0.16894717	3.2406747	21	—	—
418707 2008 UH_{42}	16.5	X	67.26596	299.83052	48.36852	12.61530	0.0650808	0.23575759	2.5951289	21	—	—
418708 2008 UO_{42}	15.9	X	14.27467	129.96458	51.95951	12.24641	0.0029716	0.18657088	3.0332402	21	3 22.4	20.3
418709 2008 UC_{48}	16.9	X	167.23907	89.81191	234.12738	1.63475	0.0718964	0.17891842	3.1191243	21	1 4.5	21.6
418710 2008 UO_{48}	16.2	X	350.96084	319.88287	207.17154	15.13596	0.1949998	0.17913104	3.1166557	21	1 6.4	20.2
418711 2008 UG_{53}	16.2	X	75.62401	41.89258	57.78865	12.81494	0.0421385	0.17971691	3.1098785	21	3 3.3	20.7
418712 2008 US_{60}	16.0	X	107.17283	136.72921	243.71584	8.20582	0.0797221	0.17441930	3.1725345	21	1 4.6	20.5
418713 2008 UK_{61}	16.1	X	103.26761	203.76265	250.80446	6.93215	0.1088546	0.18658628	3.0330733	21	3 30.8	20.4
418714 2008 UO_{66}	16.3	X	39.68259	109.06603	33.52877	16.28260	0.1403909	0.18073325	3.0982088	21	3 15.4	20.2
418715 2008 UC_{75}	16.3	X	141.68722	156.23366	254.56870	9.46699	0.1173643	0.18502495	3.0501124	21	3 20.3	21.1
418716 2008 UQ_{78}	15.8	X	44.83358	71.28380	58.29435	16.48444	0.1682639	0.18045433	3.1014005	21	3 11.5	19.7
418717 2008 UR_{80}	15.6	X	329.09141	255.48756	271.46281	7.98192	0.1097852	0.17222675	3.1994032	21	—	—
418718 2008 UP_{83}	16.1	X	196.38500	108.38547	261.30533	7.27081	0.1149485	0.19547610	2.9404035	21	3 24.6	20.9
418719 2008 UQ_{83}	16.4	X	108.47160	72.45665	341.16402	9.26680	0.1244992	0.18382976	3.0633186	21	2 21.2	20.7
418720 2008 UT_{87}	15.2	X	95.69284	35.86054	279.85892	14.90839	0.3254221	0.16645950	3.2728819	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418721 2008 UX_{88}	16.1	X	108.38620	347.12944	41.32207	12.01113	0.1248566	0.17997550	3.1068989	21	1 25.0	20.6
418722 2008 UY_{90}	16.6	X	82.51679	14.71266	31.62046	2.18735	0.1331003	0.17562592	3.1579868	21	1 12.2	20.7
418723 2008 UG_{96}	16.3	X	164.46733	292.65029	45.65408	18.83383	0.2717650	0.18425131	3.0586445	21	2 7.2	21.9
418724 2008 UK_{99}	16.3	X	341.47693	199.59935	308.12306	4.65715	0.0663321	0.17664452	3.1458350	21	—	—
418725 2008 UO_{103}	17.2	X	120.98455	321.21099	9.90205	1.16187	0.2033714	0.17242159	3.1969925	21	—	—
418726 2008 UN_{106}	15.8	X	217.01572	229.49339	15.40794	15.05459	0.0606470	0.17453786	3.1710976	21	—	—
418727 2008 UD_{110}	16.1	X	4.63422	242.90362	264.01257	6.94080	0.1801317	0.17502450	3.1652170	21	1 8.9	19.7
418728 2008 UC_{111}	16.1	X	311.38053	207.08859	20.64800	12.42565	0.0957303	0.18496925	3.0507247	21	2 15.8	20.5
418729 2008 UX_{111}	16.0	X	277.55420	353.36043	244.77038	8.53891	0.0237588	0.18074734	3.0980477	21	1 21.7	20.5
418730 2008 UE_{113}	16.7	X	51.07258	137.10192	236.66379	8.82240	0.1151303	0.16222642	3.3295714	21	—	—
418731 2008 UX_{114}	16.5	X	57.25833	134.36455	276.87325	6.22221	0.1640307	0.16933095	3.2357763	21	—	—
418732 2008 UK_{118}	15.8	X	201.94693	38.89665	248.03624	10.26407	0.0332293	0.17408086	3.1766451	21	—	—
418733 2008 UX_{124}	15.8	X	99.84842	114.93433	267.82584	12.83983	0.0503295	0.17079191	3.2172973	21	—	—
418734 2008 UQ_{127}	15.8	X	66.29214	16.12832	67.45597	10.66665	0.1104049	0.17315326	3.1879801	21	2 4.4	20.0
418735 2008 UC_{130}	17.0	X	101.50523	41.12148	329.23913	1.57155	0.0904713	0.17244779	3.1966687	21	—	—
418736 2008 UU_{133}	16.3	X	25.49749	122.21848	45.20525	10.65797	0.0130880	0.18702041	3.0283777	21	3 17.4	20.6
418737 2008 UX_{133}	16.7	X	85.31026	349.18431	29.13150	1.56039	0.1607959	0.17006612	3.2264443	21	—	—
418738 2008 UK_{135}	16.8	X	102.23097	253.34478	220.06531	7.89732	0.1185690	0.19016069	2.9949452	21	4 25.9	21.1
418739 2008 UH_{139}	15.9	X	32.16093	36.67151	44.78833	9.66731	0.0750040	0.16901144	3.2398530	21	—	—
418740 2008 UO_{144}	16.6	X	62.99563	297.30484	161.34774	1.09408	0.1344175	0.17764706	3.1339882	21	2 16.7	20.3
418741 2008 UQ_{145}	16.9	X	85.22647	284.19839	105.30576	2.08536	0.1348586	0.17106965	3.2138140	21	—	—
418742 2008 UG_{149}	16.4	X	97.39966	343.75423	53.40081	23.25452	0.1185811	0.17356391	3.1829497	21	1 23.0	21.2
418743 2008 UO_{149}	16.8	X	141.96264	199.85567	133.93139	2.03000	0.1437022	0.17608512	3.1524940	21	—	—
418744 2008 UR_{152}	16.9	X	54.55082	35.92196	55.67389	3.91844	0.0672588	0.17836448	3.1255789	21	1 21.1	21.0
418745 2008 UQ_{155}	16.2	X	334.99634	104.08478	45.07862	9.54742	0.0156140	0.17400707	3.1775431	21	—	—
418746 2008 UC_{157}	15.7	X	130.83431	296.90262	54.61070	10.58237	0.0199366	0.17059627	3.2197565	21	—	—
418747 2008 UP_{157}	16.4	X	62.61255	15.36052	64.36974	2.86843	0.0510264	0.17371470	3.1811075	21	1 16.9	20.6
418748 2008 UM_{158}	15.8	X	182.91320	45.77326	270.62570	14.75951	0.0553503	0.17360140	3.1824913	21	1 10.5	20.6
418749 2008 UF_{162}	16.0	X	4.84594	100.48875	18.94567	11.97188	0.0400208	0.17341410	3.1847825	21	—	—
418750 2008 UB_{165}	16.4	X	140.04459	101.93292	237.58426	5.30163	0.1634340	0.17682613	3.1436807	21	1 3.8	21.3
418751 2008 UR_{168}	16.3	X	46.89385	22.99128	55.91230	11.08473	0.1049420	0.17210216	3.2009472	21	—	—
418752 2008 UQ_{169}	15.7	X	270.87616	150.83378	57.10255	17.57970	0.0932919	0.17048754	3.2211253	21	—	—
418753 2008 UP_{177}	16.5	X	16.53826	108.02360	10.15068	5.40061	0.1621653	0.17270461	3.1934989	21	—	—
418754 2008 UA_{188}	16.1	X	147.81826	316.81047	81.00529	11.58955	0.0588781	0.18296101	3.0730080	21	3 16.2	20.8
418755 2008 UK_{189}	15.6	X	3.46130	107.73681	15.04424	15.41423	0.0460320	0.17871933	3.1214403	21	—	—
418756 2008 UC_{197}	15.4	X	78.03732	305.61145	93.34750	23.40585	0.1540690	0.17319168	3.1875086	21	—	—
418757 2008 UJ_{199}	15.1	X	284.26017	335.21603	288.94278	32.71151	0.1048006	0.17190937	3.2033399	21	2 8.3	20.2
418758 2008 UT_{204}	16.3	X	152.44808	67.46821	293.56663	5.38471	0.2166814	0.18457715	3.0550436	21	2 11.9	21.3
418759 2008 UZ_{204}	16.1	X	348.28373	73.87628	45.86064	11.37715	0.0520139	0.16905925	3.2392422	21	—	—
418760 2008 UU_{208}	16.5	X	76.57159	108.39981	311.29568	1.84987	0.2149426	0.17491647	3.1665201	21	1 31.2	20.3
418761 2008 UO_{209}	16.1	X	9.40596	84.39677	33.58064	11.36026	0.1235249	0.17167886	3.2062066	21	—	—
418762 2008 UF_{211}	15.9	X	180.51618	254.82244	38.85536	16.40915	0.0630551	0.17277280	3.1926585	21	—	—
418763 2008 UD_{224}	16.2	X	75.95444	66.98980	342.85748	6.03011	0.0733070	0.17122336	3.2118904	21	1 1.6	20.5
418764 2008 UA_{227}	16.5	X	93.56466	23.54027	49.09387	16.69841	0.0895681	0.17824995	3.1269176	21	3 2.1	21.1
418765 2008 UY_{227}	15.6	X	165.35824	117.76235	253.50569	14.75056	0.0011273	0.18016624	3.1047057	21	2 14.5	20.4
418766 2008 UU_{239}	15.8	X	121.04282	58.30809	283.52787	7.44622	0.2025016	0.17104978	3.2140629	21	—	—
418767 2008 UP_{242}	15.7	X	11.79911	275.12418	270.34168	15.06139	0.1827452	0.18215109	3.0821105	21	3 3.9	19.5
418768 2008 UX_{242}	16.4	X	69.82313	102.04454	338.28391	8.01980	0.1957033	0.17424933	3.1745973	21	2 14.0	20.3
418769 2008 UB_{254}	15.5	X	290.92872	329.24843	230.37592	10.05943	0.0902896	0.17217763	3.2000117	21	—	—
418770 2008 UW_{262}	16.1	X	96.54849	332.56861	38.04147	5.28535	0.0867124	0.16683477	3.2679721	21	—	—
418771 2008 UZ_{262}	15.2	X	321.08592	310.91111	249.51016	27.06319	0.2028943	0.17225723	3.1990257	21	1 2.5	19.9
418772 2008 UW_{263}	16.7	X	63.74358	252.75811	212.37887	15.92903	0.1048031	0.18513134	3.0489438	21	2 15.9	20.9
418773 2008 UQ_{264}	15.7	X	87.86063	68.07467	14.79159	9.33175	0.0832425	0.18228997	3.0805449	21	2 27.9	19.9
418774 2008 UA_{265}	15.5	X	223.04149	245.76761	20.15899	10.03017	0.0354071	0.17475871	3.1684255	21	—	—
418775 2008 UO_{267}	16.6	X	91.09831	336.86416	76.43546	1.46880	0.0291186	0.17764921	3.1339630	21	1 17.9	20.8
418776 2008 UZ_{267}	15.9	X	92.14255	21.56625	47.92019	11.67173	0.1728452	0.17982694	3.1086098	21	3 5.1	20.3
418777 2008 UX_{272}	16.0	X	313.08709	348.82824	235.74215	22.92085	0.1476636	0.18216673	3.0819340	21	1 24.5	20.8
418778 2008 UJ_{276}	16.1	X	172.47382	263.84841	37.20088	9.54711	0.0812697	0.17338762	3.1851068	21	—	—
418779 2008 UV_{276}	15.6	X	332.38500	104.58208	40.91100	14.44780	0.0450046	0.17138886	3.2098222	21	—	—
418780 2008 UU_{280}	16.0	X	67.33673	309.15057	123.98819	6.72809	0.0774291	0.17697670	3.1418973	21	1 16.4	19.9
418781 2008 UP_{290}	16.0	X	218.97472	41.03368	243.74751	8.89875	0.0626525	0.17937211	3.1138626	21	1 10.4	20.8
418782 2008 UG_{298}	16.0	X	148.16844	78.45544	243.10819	17.63426	0.1435408	0.17191412	3.2032809	21	—	—
418783 2008 UU_{302}	16.3	X	296.48712	212.05145	45.77872	8.43937	0.0598313	0.18461500	3.0546262	21	3 9.9	20.6
418784 2008 UB_{314}	16.5	X	46.36764	128.94951	320.55909	4.55586	0.1594192	0.17425612	3.1745147	21	1 12.6	20.1
418785 2008 US_{322}	16.2	X	122.28452	146.70976	243.85203	10.58712	0.0603047	0.18193833	3.0845129	21	1 27.9	20.7
418786 2008 UU_{322}	16.7	X	210.02587	40.30150	244.99157	10.20574	0.1118781	0.18069979	3.0985912	21	1 2.2	21.7
418787 2008 UH_{323}	16.1	X	96.68735	171.01140	269.39929	10.60280	0.0972160	0.18226562	3.0808192	21	3 1.4	20.6
418788 2008 UF_{330}	16.3	X	58.16198	87.03447	39.32694	9.75920	0.0417920	0.18524394	3.0477082	21	3 10.3	20.5
418789 2008 UR_{337}	16.0	X	328.33749	318.81121	217.42158	8.11219	0.1497600	0.17297950	3.1901146	21	—	—
418790 2008 UJ_{346}	15.9	X	77.36810	341.79714	117.43894	16.72408	0.1094140	0.17050320	3.2209280	21	3 13.8	20.4
418791 2008 UR_{347}	16.5	X	119.87038	133.34928	225.85134	8.24554	0.0592854	0.17369725	3.1813204	21	—	—
418792 2008 UX_{357}	15.8	X	97.05630	111.04963	299.02885	9.18535	0.0655072	0.17801572	3.1296599	21	1 25.4	20.2
418793 2008 UD_{358}	15.9	X	205.92322	329.03661	348.82304	4.97013	0.1356083	0.18044261	3.1015347	21	2 7.1	20.8
418794 2008 UP_{364}	15.7	X	117.58002	283.91734	77.41270	19.79724	0.1715336	0.17519619	3.1631487	21	1 7.2	20.4
418795 2008 UM_{366}	16.7	X	96.61170	278.58944	68.16742	2.39270	0.1549486	0.16920991	3.2373192	21	—	—
418796 2008 UN_{366}	16.5	X	234.72656	70.00416	198.97994	4.49003	0.0984894	0.18190147	3.0849295	21	1 7.2	21.3
418797 2008 VF	19.5	X	61.47830	3.26096	234.41641	26.20068	0.3257223	1.14293116	0.9059885	21	—	—
418798 2008 VY	16.0	X	144.43453	298.29491	73.69669	10.73696	0.1230659	0.18139698	3.0906466	21	2 14.4	20.8
418799 2008 VN_{10}	16.0	X	221.68456	228.34866	70.60541	12.71925	0.1368539	0.18247329	3.0784813	21	1 31.9	21.1
418800 2008 VT_{14}	16.3	X	118.85516	143.27563	268.57272	10.93763	0.2809699	0.18225952	3.0808880	21	3 15.2	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418801 2008 VO_{15}	16.8	X	110.05988	239.04943	136.12033	0.29485	0.1641925	0.17562299	3.1580219	21	1 14.1	21.3
418802 2008 VN_{16}	16.6	X	55.80644	278.97763	158.28335	0.91424	0.0729994	0.17422789	3.1748576	21	1 5.8	20.8
418803 2008 VG_{18}	15.8	X	305.22377	150.93701	49.44065	29.28556	0.1739394	0.17574922	3.1565096	21	—	—
418804 2008 VU_{20}	15.9	X	88.96466	63.55666	66.17471	14.14936	0.0618563	0.18903684	3.0068037	21	4 26.4	20.1
418805 2008 VT_{22}	15.7	X	124.80671	150.03506	212.49578	11.01757	0.0576966	0.17274348	3.1930198	21	1 1.3	20.4
418806 2008 VO_{25}	16.3	X	25.67771	25.65023	90.40080	4.53257	0.0781455	0.17626105	3.1503959	21	1 10.3	20.3
418807 2008 VL_{26}	15.4	X	243.57059	198.71408	33.50667	17.21016	0.0784525	0.17122527	3.2118665	21	—	—
418808 2008 VB_{29}	16.0	X	347.26430	221.49158	280.83684	6.24598	0.0360283	0.17160986	3.2070659	21	—	—
418809 2008 VO_{30}	16.0	X	114.18874	333.68831	19.05843	4.22085	0.1537812	0.17074066	3.2179410	21	—	—
418810 2008 VJ_{32}	16.0	X	167.18158	279.11608	63.68772	15.38265	0.2105774	0.18190576	3.0848810	21	2 9.3	21.4
418811 2008 VQ_{36}	16.7	X	76.30601	47.43398	73.91941	10.69230	0.0536518	0.18632477	3.0359106	21	3 30.5	21.0
418812 2008 VF_{39}	15.4	X	199.71181	239.70705	90.65671	18.47140	0.0965618	0.18353026	3.0666503	21	2 19.2	20.4
418813 2008 VP_{39}	16.1	X	66.86468	47.12588	52.81188	27.01510	0.1331325	0.17621353	3.1509623	21	3 13.9	20.7
418814 2008 VC_{41}	15.4	X	180.37622	45.23724	253.52329	16.10755	0.1998856	0.17505480	3.1648518	21	—	—
418815 2008 VQ_{45}	16.2	X	146.04505	348.63911	24.79605	11.39200	0.0950110	0.17922662	3.1155474	21	2 16.3	21.0
418816 2008 VY_{46}	16.9	X	111.76937	201.20385	182.69128	0.67473	0.1733781	0.17513377	3.1639003	21	1 27.6	21.3
418817 2008 VE_{56}	15.6	X	356.05048	242.23338	300.22176	9.69694	0.0508252	0.18257511	3.0773366	21	2 16.9	19.7
418818 2008 VP_{57}	15.9	X	356.58925	125.59269	56.03560	27.30697	0.0679695	0.18108178	3.0942321	21	3 6.8	20.6
418819 2008 VQ_{61}	15.8	X	216.26347	213.36214	63.28009	11.73140	0.1137752	0.17683041	3.1436299	21	—	—
418820 2008 VF_{66}	15.7	X	41.38615	136.01324	214.62131	8.17336	0.0876995	0.15055978	3.4994254	21	11 25.9	20.5
418821 2008 VH_{67}	16.1	X	103.82026	262.31620	183.20777	17.32536	0.2475080	0.18115432	3.0934059	21	4 13.2	20.7
418822 2008 VO_{71}	16.5	X	105.72262	9.58902	91.19056	12.63494	0.1427750	0.18464370	3.0543096	21	4 24.1	21.1
418823 2008 VX_{76}	16.3	X	163.52238	247.41066	69.65089	17.40821	0.1158204	0.17282943	3.1919611	21	—	—
418824 2008 VY_{78}	15.0	X	287.08907	344.37195	282.82736	25.67348	0.1148972	0.17362061	3.1822566	21	2 15.4	20.1
418825 2008 VQ_{79}	15.8	X	292.23602	37.54980	281.66249	10.90126	0.0341723	0.19814984	2.9138927	21	5 17.8	19.9
418826 2008 VB_{80}	15.9	X	22.81276	241.08105	266.88932	7.45502	0.2036500	0.17342105	3.1846974	21	2 11.1	19.4
418827 2008 VQ_{80}	15.8	X	76.00727	43.97256	71.94262	13.45849	0.1343122	0.18252245	3.0779284	21	4 5.3	20.0
418828 2008 WN_{3}	16.1	X	180.18935	73.71344	231.09695	8.93456	0.1077771	0.17640678	3.1486607	21	—	—
418829 2008 WB_{4}	15.6	X	323.99021	138.11071	46.75506	19.68026	0.1196079	0.17735762	3.1373971	21	1 3.7	20.2
418830 2008 WJ_{5}	16.3	X	358.03295	97.91093	49.79998	16.61822	0.1984410	0.17322139	3.1871441	21	—	—
418831 2008 WA_{6}	16.2	X	205.41569	39.64820	237.79300	11.29684	0.0548196	0.17389853	3.1788652	21	—	—
418832 2008 WM_{8}	16.5	X	350.39004	324.73037	158.04834	2.38107	0.0828021	0.16899203	3.2401012	21	—	—
418833 2008 WJ_{18}	16.7	X	125.14919	83.76732	281.41654	2.28770	0.0661856	0.17588349	3.1549029	21	1 6.7	21.0
418834 2008 WH_{22}	16.3	X	65.66782	72.35951	44.11798	11.16027	0.1135653	0.18438661	3.0571480	21	3 17.2	20.3
418835 2008 WH_{23}	15.6	X	91.91754	358.65989	59.35355	11.47701	0.0713824	0.17684933	3.1434057	21	2 2.5	20.1
418836 2008 WL_{28}	15.9	X	138.50460	288.38790	60.10078	10.01121	0.0776965	0.17352252	3.1834557	21	1 4.5	20.6
418837 2008 WW_{29}	15.7	X	118.81136	161.24127	259.66255	17.14471	0.1283157	0.18027452	3.1034624	21	3 5.3	20.7
418838 2008 WD_{33}	16.2	X	113.62540	341.69955	52.74888	10.71261	0.1852270	0.17794820	3.1304515	21	2 17.2	20.9
418839 2008 WM_{33}	16.0	X	61.12624	39.11348	28.19101	9.21840	0.0505267	0.17401484	3.1774485	21	—	—
418840 2008 WX_{33}	16.1	X	165.36047	68.26333	234.94040	17.72115	0.1289070	0.17295386	3.1904299	21	—	—
418841 2008 WZ_{34}	16.5	X	135.75867	286.56589	55.28631	12.32246	0.0753667	0.17367311	3.1816152	21	—	—
418842 2008 WT_{48}	15.9	X	98.86090	27.49718	61.99139	13.23864	0.1220592	0.18378180	3.0638515	21	3 31.0	20.3
418843 2008 WW_{51}	16.4	X	60.95999	162.51422	253.30877	3.92720	0.1948165	0.17131476	3.2107477	21	—	—
418844 2008 WZ_{55}	15.9	X	319.24795	214.30080	37.56853	10.73892	0.0741873	0.19004159	2.9961964	21	3 28.4	19.9
418845 2008 WM_{59}	15.3	X	63.76573	18.48387	64.96507	22.65561	0.1101797	0.17515350	3.1636626	21	2 2.4	19.7
418846 2008 WJ_{60}	21.3	X	92.40552	170.04110	259.43132	16.69272	0.2915364	0.48762369	1.5986235	21	—	—
418847 2008 WR_{60}	16.3	X	126.05234	200.51371	231.83222	4.75323	0.1290461	0.18664444	3.0324432	21	4 2.9	20.9
418848 2008 WL_{62}	16.0	X	68.25433	15.10131	68.53411	28.84902	0.1517920	0.17351577	3.1835383	21	2 20.8	20.6
418849 2008 WM_{64}	20.6	X	273.51192	256.66666	91.44560	33.52506	0.1064373	0.97741809	1.0055781	21	11 18.6	21.7
418850 2008 WQ_{66}	16.5	X	84.01987	200.01347	242.65357	11.19873	0.2931328	0.17657742	3.1466319	21	3 18.2	20.9
418851 2008 WE_{75}	16.3	X	70.98140	50.13895	54.36666	10.27263	0.0754323	0.18346968	3.0673254	21	3 5.1	20.5
418852 2008 WH_{78}	16.5	X	72.12979	250.87268	196.58734	4.67110	0.1212543	0.17533737	3.1614505	21	2 13.7	20.7
418853 2008 WJ_{87}	15.7	X	224.59498	204.89668	62.44668	17.57772	0.1670440	0.17577936	3.1561488	21	—	—
418854 2008 WO_{88}	16.0	X	120.46248	318.30124	64.11917	10.38847	0.0534044	0.17427317	3.1743078	21	1 22.1	20.6
418855 2008 WM_{92}	15.8	X	41.41729	263.21003	250.88639	9.82013	0.0802584	0.18337959	3.0683299	21	3 15.5	20.0
418856 2008 WT_{92}	15.3	X	154.83481	248.15260	71.60759	17.33898	0.2296949	0.17676195	3.1444416	21	—	—
418857 2008 WD_{98}	16.3	X	130.21725	334.83560	50.54717	11.73221	0.1446058	0.17804013	3.1293739	21	2 19.9	21.2
418858 2008 WA_{102}	15.6	X	48.55669	41.80875	96.33680	16.35879	0.2004364	0.17528193	3.1621171	21	4 2.5	19.5
418859 2008 WL_{102}	15.3	X	146.78668	254.01019	112.56693	19.47033	0.1550675	0.17943784	3.1131021	21	2 12.0	20.2
418860 2008 WF_{105}	16.0	X	90.82903	9.68288	74.96464	9.47784	0.1028279	0.17873725	3.1212317	21	3 11.0	20.4
418861 2008 WG_{105}	16.2	X	27.27392	33.73215	88.04712	2.89770	0.1104106	0.17140601	3.2096082	21	1 20.9	20.1
418862 2008 WM_{109}	16.3	X	172.10750	131.01542	255.68058	8.41109	0.1243253	0.18692831	3.0293724	21	3 22.5	21.2
418863 2008 WA_{110}	16.3	X	34.50373	71.98317	60.97682	7.97265	0.2019589	0.17411088	3.1762799	21	2 22.2	19.8
418864 2008 WS_{133}	16.0	X	93.58862	137.97718	296.71485	7.03177	0.2098233	0.17783703	3.1317560	21	3 9.5	20.4
418865 2008 WR_{134}	16.2	X	13.57962	100.94861	115.37948	16.87954	0.1865544	0.17746472	3.1361347	21	5 7.3	19.9
418866 2008 WR_{135}	15.9	X	49.34765	203.44241	270.63246	11.36479	0.0911771	0.17445783	3.1720674	21	2 7.8	20.1
418867 2008 WJ_{137}	15.8	X	84.62613	208.07127	266.89821	16.71154	0.1977943	0.18280721	3.0747313	21	4 11.9	20.3
418868 2008 WA_{139}	15.6	X	134.23064	307.41907	88.38491	19.22767	0.1398586	0.17932743	3.1143797	21	3 10.8	20.7
418869 2008 WN_{139}	15.9	X	54.72255	38.33793	97.41446	15.68785	0.2469700	0.17487520	3.1670183	21	4 16.6	19.9
418870 2008 XV_{4}	17.2	X	243.91676	75.18467	286.13382	15.73105	0.1196038	0.35027594	1.9931004	21	4 13.7	20.3
418871 2008 XB_{5}	15.6	X	149.44821	135.60682	270.45090	15.06177	0.1388582	0.18611322	3.0382108	21	3 20.9	20.7
418872 2008 XS_{7}	16.2	X	59.02361	69.62859	43.14442	17.12515	0.2153713	0.17845461	3.1245264	21	3 20.0	20.1
418873 2008 XL_{11}	15.9	X	229.24291	288.69325	24.59774	7.69569	0.0117588	0.18111393	3.0938659	21	3 2.6	20.3
418874 2008 XR_{25}	15.8	X	88.01445	223.85960	261.46613	19.70355	0.1859216	0.18479458	3.0526468	21	4 30.7	20.3
418875 2008 XM_{44}	16.4	X	60.88070	84.40699	19.00894	9.81639	0.0915379	0.17778934	3.1323160	21	2 19.1	20.5
418876 2008 XR_{52}	15.6	X	117.38540	104.54035	294.24314	24.33602	0.2560698	0.17343887	3.1844793	21	2 19.5	20.8
418877 2008 YK_{21}	18.3	X	296.11908	228.87589	281.84056	2.42813	0.0762467	0.30806652	2.1712327	21	—	—
418878 2008 YB_{22}	16.1	X	26.58935	89.41675	123.40065	18.94805	0.1355533	0.17932582	3.1143983	21	5 23.8	20.2
418879 2008 YN_{28}	16.2	X	127.18190	7.29162	91.66123	11.40285	0.1936568	0.18867322	3.0106658	21	5 17.5	21.0
418880 2008 YT_{33}	15.7	X	61.86357	31.05523	111.40188	16.65136	0.0872464	0.18181567	3.0859000	21	4 13.9	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418881 2008 YN_{65}	15.6	X	131.67370	97.55469	321.78110	15.09752	0.2419528	0.17766544	3.1337722	21	3 30.2	20.9
418882 2008 YD_{74}	15.6	X	99.53419	153.33113	303.59607	8.96979	0.0512539	0.17724608	3.1387132	21	3 20.4	20.1
418883 2008 YH_{88}	16.1	X	3.13880	286.90752	285.35213	6.34697	0.1108372	0.17926478	3.1151054	21	4 2.2	20.1
418884 2008 YW_{99}	18.4	X	56.08793	280.58047	109.56615	4.97523	0.0854024	0.31168642	2.1543890	21	—	—
418885 2008 YQ_{104}	15.7	X	216.66645	260.98261	116.45840	11.97579	0.0961915	0.18476948	3.0529233	21	5 2.8	20.6
418886 2008 YV_{104}	16.1	X	125.33831	342.12668	118.79011	12.89193	0.1167617	0.18248322	3.0783695	21	5 12.3	20.9
418887 2008 YF_{115}	15.9	X	42.73616	231.58789	291.78072	25.81482	0.0879430	0.17685203	3.1433737	21	3 19.3	20.6
418888 2008 YB_{126}	17.6	X	168.06614	289.62957	306.48632	3.95721	0.1010766	0.29822106	2.2187609	21	12 19.8	20.7
418889 2008 YP_{135}	15.9	X	114.71976	108.53944	287.46493	14.56626	0.2312373	0.17395262	3.1782061	21	2 16.2	20.8
418890 2008 YE_{148}	17.8	X	143.50463	347.23795	268.41807	3.86678	0.1578507	0.29562667	2.2317231	21	12 16.7	21.1
418891 Vizi	15.4	X	110.98486	307.65983	73.12066	17.48974	0.2177932	0.17644954	3.1481520	21	2 1.4	20.2
418892 2008 YC_{167}	15.1	X	13.82312	79.24920	101.51377	24.83417	0.1829170	0.17374396	3.1807503	21	3 25.2	19.2
418893 2008 YQ_{170}	15.8	X	88.42503	122.75265	326.04738	26.11314	0.2311279	0.17271591	3.1933596	21	3 15.1	20.5
418894 2008 YT_{171}	16.4	X	167.42159	296.70278	99.81923	6.62357	0.1600960	0.18078815	3.0975814	21	4 8.1	21.5
418895 2009 AM_{1}	15.7	X	108.00068	36.46375	99.49172	11.15203	0.0442482	0.18764530	3.0216507	21	5 24.2	20.1
418896 2009 AK_{15}	19.4	X	76.76368	6.45540	186.80408	13.83228	0.4288385	0.65717729	1.3102304	21	9 4.8	20.4
418897 2009 AC_{25}	15.7	X	118.96964	343.82771	126.87335	28.42512	0.0964286	0.18123743	3.0924602	21	5 20.9	20.8
418898 2009 AT_{37}	15.5	X	320.10551	285.61447	296.61889	13.17994	0.0868040	0.16938059	3.2351440	21	2 14.8	20.1
418899 2009 AY_{49}	15.8	X	4.24706	77.30495	137.37610	19.22201	0.1008246	0.17316050	3.1878912	21	4 19.3	20.1
418900 2009 BE_{2}	19.2	X	31.71872	138.29144	93.09468	23.43404	0.3533713	0.50591999	1.5598452	21	9 5.3	20.6
418901 2009 BX_{22}	15.6	X	86.76191	357.08920	126.68984	25.31887	0.0636119	0.17461024	3.1702213	21	4 23.7	20.5
418902 2009 BE_{47}	17.9	X	200.14242	263.45342	305.06793	4.03533	0.0546708	0.29516074	2.2340711	21	12 26.3	20.6
418903 2009 BB_{48}	17.4	X	238.38406	253.45206	311.26875	3.81205	0.0788118	0.30529670	2.1843454	21	—	—
418904 2009 BZ_{69}	17.3	X	184.07032	248.09562	324.85240	7.79483	0.0377964	0.29741088	2.2227886	21	12 13.6	20.1
418905 2009 BX_{72}	17.9	X	229.74973	66.74871	126.41350	4.66232	0.0721146	0.29837538	2.2179958	21	—	—
418906 2009 BA_{76}	17.6	X	228.86320	173.86627	337.70793	4.53554	0.0800673	0.29267389	2.2467085	21	11 10.0	20.4
418907 2009 BY_{79}	15.6	X	24.80521	194.09084	344.15025	9.85494	0.1574323	0.17237845	3.1975259	21	3 27.5	19.2
418908 2009 BX_{92}	17.7	X	211.58046	112.54150	132.72788	5.08123	0.0541080	0.30681593	2.1771287	21	—	—
418909 2009 BS_{148}	18.0	X	116.07027	206.30171	95.71223	2.66503	0.0833311	0.30136241	2.2033154	21	—	—
418910 2009 BO_{158}	18.4	X	336.02926	284.23397	162.30025	1.69476	0.0849106	0.29985628	2.2106871	21	—	—
418911 2009 BZ_{164}	18.0	X	290.74924	171.30315	352.24236	4.32771	0.1680688	0.30602950	2.1808570	21	—	—
418912 2009 BR_{172}	18.0	X	354.18861	95.30573	315.97261	5.12102	0.1089044	0.29746580	2.2225150	21	—	—
418913 2009 BU_{177}	18.0	X	174.85712	120.36864	70.03499	7.28666	0.0483442	0.28556503	2.2838419	21	10 31.7	21.0
418914 2009 BW_{177}	18.0	X	58.58803	239.63550	141.16060	4.86835	0.1636083	0.30631891	2.1794831	21	—	—
418915 2009 BN_{181}	17.4	X	179.95470	275.74230	334.71205	5.84019	0.0959560	0.29956268	2.2121313	21	—	—
418916 2009 BX_{182}	18.0	X	346.02797	282.38825	130.86223	2.93396	0.1059453	0.29687328	2.2254712	21	—	—
418917 2009 BH_{188}	17.3	X	149.20869	230.44769	9.68436	5.68454	0.1621793	0.28601558	2.2814428	21	11 29.9	21.0
418918 2009 CT_{26}	17.9	X	244.67168	48.65865	98.84573	3.24272	0.1071632	0.29261762	2.2469965	21	11 24.6	20.3
418919 2009 CN_{27}	17.5	X	186.61450	114.35604	83.06945	3.39958	0.1615075	0.28791776	2.2713832	21	11 13.7	20.7
418920 2009 CZ_{31}	17.7	X	255.94425	179.98587	337.76712	8.54324	0.0794412	0.29607763	2.2294564	21	—	—
418921 2009 CV_{32}	17.8	X	129.53595	178.42436	59.97904	1.92546	0.1821260	0.28120641	2.3073806	21	11 11.0	21.5
418922 2009 CL_{36}	17.9	X	160.37384	328.02694	338.12932	8.69444	0.0188918	0.30995168	2.1624200	21	—	—
418923 2009 CH_{39}	18.3	X	40.71080	56.10995	344.04042	3.76537	0.1608137	0.30704642	2.1760391	21	—	—
418924 2009 CO_{39}	16.2	X	96.44385	171.46270	280.97758	8.83612	0.1639266	0.18069186	3.0986819	21	3 26.4	20.8
418925 2009 CZ_{45}	18.4	X	53.15069	52.27181	313.98693	1.67784	0.0198499	0.30268033	2.1969150	21	—	—
418926 2009 CG_{51}	17.7	X	348.43776	331.88020	111.44800	3.03397	0.1117727	0.30468903	2.1872487	21	—	—
418927 2009 CQ_{62}	18.0	X	268.57752	105.00210	70.85819	5.52374	0.0971191	0.30317184	2.1945398	21	—	—
418928 2009 DJ_{1}	17.8	X	111.73023	155.59926	37.48721	8.31759	0.1918966	0.27170031	2.3608911	21	9 1.5	21.5
418929 2009 DM_{1}	17.0	X	191.01375	219.72079	197.57123	15.20457	0.6405528	0.20033963	2.8926205	21	5 20.1	23.5
418930 2009 DG_{2}	15.2	X	326.66198	269.03379	333.01907	18.18869	0.0929283	0.16986040	3.2290489	21	3 16.8	19.8
418931 2009 DM_{6}	18.1	X	209.37030	15.44314	140.53030	5.62785	0.0845752	0.28844735	2.2686022	21	10 24.9	21.0
418932 2009 DL_{11}	18.2	X	301.88155	338.21930	125.32151	2.22588	0.0586671	0.29696063	2.2250347	21	12 29.1	20.4
418933 2009 DV_{20}	15.5	X	94.93979	318.22818	139.26874	28.41763	0.1624353	0.17399498	3.1776903	21	4 13.3	20.4
418934 2009 DL_{21}	18.0	X	105.11600	256.09320	34.19328	1.93005	0.1008253	0.29465805	2.2366113	21	12 21.7	21.2
418935 2009 DJ_{59}	16.5	X	89.48555	225.40407	350.19615	21.66725	0.1930150	0.26685996	2.3893537	21	9 6.0	19.8
418936 2009 DU_{59}	17.4	X	55.77944	143.27350	137.84966	7.17130	0.1058478	0.27425160	2.3462265	21	10 11.9	20.3
418937 2009 DT_{72}	18.3	X	339.99410	302.51502	161.96190	3.00940	0.1104377	0.30524761	2.1845796	21	—	—
418938 2009 DB_{74}	17.6	X	190.10134	67.60981	158.93203	7.52927	0.0946348	0.29520696	2.2338379	21	—	—
418939 2009 DH_{78}	18.4	X	299.34150	102.55184	31.55925	4.42245	0.0950050	0.30219537	2.1992647	21	—	—
418940 2009 DA_{89}	18.1	X	271.11482	304.69861	195.94121	2.81774	0.0841907	0.29652981	2.2271894	21	12 29.9	20.4
418941 2009 DJ_{92}	17.6	X	96.75868	23.79401	261.54694	2.67744	0.1563248	0.28302539	2.2974838	21	12 8.2	21.0
418942 2009 DC_{95}	17.5	X	157.26329	55.25470	139.45351	5.67659	0.0960150	0.27766933	2.3269342	21	10 14.5	20.8
418943 2009 DQ_{102}	17.3	X	20.25457	221.46933	97.28079	4.74960	0.2095460	0.27285019	2.3542534	21	10 27.1	19.5
418944 2009 DB_{106}	18.0	X	187.48227	349.36153	175.48885	6.39246	0.0595260	0.27856745	2.3219301	21	10 9.9	21.1
418945 2009 DA_{129}	17.6	X	230.29498	346.80666	163.69858	3.85180	0.0809232	0.28412513	2.2915515	21	11 11.9	20.5
418946 2009 DV_{135}	17.3	X	220.10681	210.28186	312.80759	6.81628	0.0495783	0.28439765	2.2900874	21	11 16.9	20.3
418947 2009 ED_{3}	17.7	X	352.50474	21.60896	85.45028	4.51568	0.0831530	0.30594039	2.1812805	21	—	—
418948 2009 EU_{20}	17.8	X	190.33469	166.80521	1.70939	2.85088	0.1021124	0.28043671	2.3116006	21	10 13.4	20.8
418949 2009 EM_{22}	17.7	X	17.82188	2.97535	354.20212	3.84248	0.1049925	0.28312764	2.2969306	21	11 29.4	20.3
418950 2009 EK_{24}	17.7	X	103.62837	102.85532	110.89151	3.91912	0.1167935	0.26618043	2.3934184	21	9 9.8	21.0
418951 2009 ER_{30}	15.2	X	194.81962	148.95026	42.35423	3.37175	0.1432770	0.12575343	3.9456887	21	10 27.3	21.3
418952 2009 FW_{6}	17.5	X	76.34247	144.34002	119.55939	3.39757	0.1827662	0.27161507	2.3613850	21	10 23.6	20.7
418953 2009 FN_{24}	17.7	X	185.64134	131.85357	90.75775	4.72935	0.1680445	0.28938526	2.2636978	21	12 13.9	20.8
418954 2009 FN_{31}	17.8	X	195.07800	169.86939	57.39988	3.43320	0.1106970	0.29017524	2.2595874	21	—	—
418955 2009 FW_{51}	17.4	X	37.90904	123.89284	135.15526	5.63645	0.1586244	0.26137718	2.4226515	21	8 17.0	19.7
418956 2009 FY_{62}	17.4	X	115.94930	231.01047	14.32462	6.75396	0.1067548	0.27504097	2.3417352	21	11 1.1	20.9
418957 2009 FR_{70}	17.4	X	155.44084	97.76804	107.98213	7.75162	0.1271743	0.27663540	2.3327286	21	10 27.7	21.0
418958 2009 FZ_{70}	17.8	X	100.31505	17.95826	234.64661	1.47456	0.1927402	0.27262506	2.3555493	21	11 1.7	21.5
418959 2009 FW_{74}	17.2	X	133.50690	227.86512	60.26921	7.18021	0.1005890	0.28851866	2.2682284	21	—	—
418960 2009 FG_{76}	17.1	X	62.47717	175.42537	64.90998	8.09010	0.1100719	0.26047537	2.4282400	21	8 24.9	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
418961 2009 GH	17.3	X	246.83176	181.93174	355.44564	8.61724	0.1226717	0.29368134	2.2415675	21	—	—
418962 2009 GC_6	18.3	X	331.26846	73.29745	50.77996	4.59071	0.0916559	0.30021819	2.2089102	21	—	—
418963 2009 HC_4	15.1	X	237.66661	79.52301	78.11752	9.21828	0.0783689	0.12690869	3.9217069	21	11 7.4	20.8
418964 2009 HL_{13}	17.5	X	167.69479	157.09140	76.66570	6.65368	0.1724931	0.28456625	2.2891827	21	12 9.5	21.1
418965 2009 HP_{14}	17.0	X	45.63497	150.40695	136.28578	7.26632	0.1082565	0.26993227	2.3711890	21	10 4.8	19.8
418966 2009 HO_{21}	17.6	X	165.78624	16.25016	207.57128	9.83418	0.0878254	0.28292694	2.2980167	21	11 30.2	20.9
418967 2009 HE_{29}	17.3	X	11.94621	279.48655	35.96622	8.14689	0.1645675	0.26739292	2.3861777	21	9 28.5	19.5
418968 2009 HX_{34}	17.5	X	104.16830	313.08174	12.35299	8.29309	0.0127686	0.29137078	2.2534022	21	—	—
418969 2009 HX_{50}	17.4	X	48.85988	306.56114	71.15925	7.49461	0.1250560	0.28940152	2.2636130	21	—	—
418970 2009 HA_{56}	17.8	X	127.89119	213.63479	23.94921	12.72002	0.1267776	0.27514532	2.3411431	21	11 3.7	21.3
418971 2009 HQ_{62}	18.4	X	273.48613	343.28248	138.96360	3.76181	0.1069293	0.28919882	2.2646706	21	12 3.0	20.6
418972 2009 HV_{68}	17.8	X	87.63128	226.16709	12.96756	1.18835	0.1509758	0.26582202	2.3955693	21	9 27.6	21.1
418973 2009 HW_{74}	17.3	X	334.07471	156.59929	140.08773	6.80801	0.1357809	0.25525666	2.4612251	21	6 4.6	20.0
418974 2009 HE_{90}	17.6	X	98.50321	189.82786	55.15596	1.99557	0.1602642	0.27110778	2.3643298	21	10 19.0	21.0
418975 2009 HW_{91}	15.7	X	207.73305	302.88925	49.10606	31.66338	0.2326949	0.23120664	2.6290722	21	4 1.4	20.8
418976 2009 HA_{100}	18.2	X	158.72273	183.71911	42.47067	7.43397	0.0898828	0.28055987	2.3109241	21	11 23.4	21.3
418977 2009 HM_{100}	17.4	X	71.46954	199.88191	64.24127	5.72858	0.0877541	0.26517440	2.3994681	21	10 5.4	20.5
418978 2009 HG_{105}	17.3	X	234.79602	6.39227	124.06177	7.17106	0.0654256	0.27681052	2.3317447	21	10 24.9	20.3
418979 2009 HJ_{106}	13.6	X	299.69021	248.67219	68.80751	15.22227	0.1248439	0.08320543	5.1963885	21	5 21.8	20.3
418980 2009 JO_7	16.2	X	333.78769	343.73115	231.70624	14.14915	0.1174960	0.23456925	2.6038862	21	2 5.9	19.8
418981 2009 JG_8	18.0	X	218.83268	5.59904	177.63447	7.46048	0.1070447	0.28423058	2.2909847	21	12 7.2	21.0
418982 2009 JQ_{11}	17.6	X	229.16666	52.66453	120.38560	6.25679	0.0452828	0.28221553	2.3018770	21	12 15.6	20.3
418983 2009 KS_1	17.8	X	145.07175	169.78450	66.12017	2.98098	0.1807221	0.27709986	2.3301212	21	11 20.9	21.6
418984 2009 KZ_1	16.9	X	78.95092	207.84997	77.80257	12.22278	0.2419843	0.26777148	2.3839282	21	11 27.7	20.6
418985 2009 KL_6	17.6	X	11.79148	201.65660	121.78539	7.59149	0.1407590	0.26295743	2.4129357	21	10 7.3	20.1
418986 2009 KJ_9	13.3	X	324.61817	230.67643	55.29885	22.55115	0.1442060	0.08302084	5.2040880	21	5 15.4	19.7
418987 2009 KX_{11}	13.4	X	225.27420	315.53887	65.15633	20.94394	0.0770567	0.08345372	5.1860763	21	5 18.9	20.5
418988 2009 KT_{14}	13.8	X	349.70074	112.01633	153.66156	18.34130	0.0915469	0.08427547	5.1523094	21	6 3.5	20.5
418989 2009 KA_{16}	17.3	X	227.88645	56.56556	87.85609	9.50781	0.1870508	0.27959627	2.3162306	21	10 19.7	20.6
418990 2009 KY_{18}	17.1	X	274.05008	174.91320	113.13596	6.08956	0.2045419	0.22512833	2.6761839	21	2 23.9	21.4
418991 2009 LB_6	17.0	X	95.01676	350.44502	289.02171	6.19426	0.1104391	0.26529205	2.3987587	21	11 21.6	20.6
418992 2009 ME_3	16.9	X	264.32781	44.36359	275.35157	5.04790	0.1983384	0.22777568	2.6554073	21	3 21.1	21.1
418993 2009 MS_9	9.8	X	0.39816	128.60919	220.18217	67.98373	0.9715312	0.00012997	385.9896027	21	11 21.5	22.6
418994 2009 NG	15.9	X	193.40435	79.97016	282.73717	18.28021	0.3312879	0.21056251	2.7982210	21	3 8.7	21.5
418995 2009 OP	16.2	X	256.44623	352.48862	310.55211	13.35129	0.2413876	0.22298023	2.6933439	21	2 19.2	20.8
418996 2009 OH_{10}	16.4	X	229.91228	22.44650	304.44456	12.91580	0.1387422	0.21785877	2.7353906	21	2 28.7	20.9
418997 2009 OP_{10}	12.9	X	349.70606	155.21230	120.13316	34.56304	0.1513434	0.08311293	5.2002431	21	6 16.6	19.3
418998 2009 OY_{10}	17.0	X	238.70800	137.91119	159.38537	12.89599	0.1974867	0.21641705	2.7475255	21	2 2.9	21.8
418999 2009 OE_{12}	16.6	X	42.39174	329.08818	285.55627	14.17161	0.0742549	0.24339554	2.5405494	21	7 31.3	19.7
419000 2009 OW_{13}	16.7	X	229.91699	353.99435	326.95565	3.99570	0.1570886	0.21834476	2.7313302	21	2 25.3	20.9
419001 2009 OW_{21}	17.5	X	262.24275	83.27642	235.08897	9.85233	0.3159963	0.22507063	2.6766412	21	3 7.2	22.3
419002 2009 OS_{23}	16.5	X	238.93550	44.61084	280.76864	10.78221	0.1334866	0.22095809	2.7097514	21	3 6.6	21.1
419003 2009 OC_{24}	16.9	X	358.28455	29.97075	287.66482	12.59463	0.1201969	0.24683403	2.5169003	21	8 18.9	19.7
419004 2009 PG_2	16.7	X	256.15858	36.19306	301.66355	10.98817	0.1977663	0.22672718	2.6635876	21	4 1.6	21.2
419005 2009 PQ_4	16.7	X	210.10126	157.79045	186.57143	4.59609	0.1683736	0.21646174	2.7471473	21	3 7.5	21.1
419006 2009 PV_6	16.3	X	334.13212	345.99916	272.92500	11.43863	0.0947071	0.23143988	2.6273056	21	4 10.9	19.8
419007 2009 PF_8	17.0	X	323.63832	6.61647	315.23167	6.59299	0.1924621	0.23836508	2.5761687	21	6 14.0	19.8
419008 2009 PA_{11}	16.8	X	231.60489	359.06427	12.94146	6.99670	0.3079575	0.22474036	2.6792630	21	4 20.8	21.6
419009 2009 PO_{16}	16.6	X	264.99133	6.62267	347.15145	13.95419	0.2662606	0.22813891	2.6525880	21	4 23.1	21.2
419010 2009 PY_{16}	17.0	X	273.76574	265.23565	76.25549	13.04514	0.2877209	0.23157593	2.6262764	21	4 24.5	21.3
419011 2009 PB_{17}	16.9	X	255.19164	40.58843	313.06692	10.97078	0.2164474	0.22809009	2.6529665	21	4 19.1	21.4
419012 2009 PY_{17}	17.8	X	245.90428	32.30156	2.43131	2.49919	0.1111100	0.23242118	2.6199052	21	6 17.2	21.5
419013 2009 QA_3	16.5	X	309.13576	344.26544	274.40936	10.76809	0.1510575	0.22469016	2.6796620	21	2 25.7	20.3
419014 2009 QH_5	16.4	X	171.80959	316.97196	278.52434	23.38841	0.2369223	0.27382112	2.3486849	21	12 11.4	20.5
419015 2009 QF_6	17.0	X	239.19628	64.96124	256.90176	14.84765	0.3295277	0.21992726	2.7182121	21	2 20.6	22.4
419016 2009 QE_7	17.4	X	228.58524	148.40612	205.53195	8.91355	0.2844859	0.22277435	2.6950030	21	3 29.6	22.2
419017 2009 QA_{10}	16.8	X	187.38629	96.04896	251.54436	6.45643	0.2354123	0.21046548	2.7990810	21	2 20.4	21.8
419018 2009 QS_{10}	17.0	X	194.96617	79.79661	267.55105	3.67112	0.1170478	0.21344266	2.7729916	21	2 24.3	21.5
419019 2009 QQ_{12}	16.8	X	203.48796	41.88348	329.04318	8.37376	0.1063336	0.21810061	2.7333682	21	3 30.9	21.1
419020 2009 QH_{22}	16.5	X	192.93881	356.48088	347.10162	13.45737	0.1907253	0.21122149	2.7923979	21	2 23.6	21.2
419021 2009 QR_{22}	16.8	X	240.91801	14.89867	347.49288	11.85258	0.2056593	0.22522414	2.6754249	21	4 18.7	21.3
419022 2009 QF_{31}	18.4	X	35.80608	167.81395	336.25001	42.41587	0.1428815	0.54485317	1.4846237	21	—	—
419023 2009 QT_{36}	16.8	X	232.07412	342.55591	19.94227	14.43536	0.2010686	0.21969246	2.7201485	21	4 15.4	21.4
419024 2009 QZ_{36}	16.9	X	280.28666	282.26316	335.84462	8.46293	0.1116443	0.21410681	2.7672542	21	2 5.1	20.8
419025 2009 QF_{39}	16.9	X	109.18179	231.48496	343.69285	6.49587	0.0972516	0.24431073	2.5342008	21	9 12.1	20.6
419026 2009 QJ_{40}	17.3	X	209.38606	91.03098	270.76871	0.34483	0.2523059	0.21773738	2.7364072	21	3 27.1	21.9
419027 2009 QP_{47}	16.3	X	187.41913	34.71009	18.29504	9.79798	0.2128557	0.21999870	2.7176236	21	5 8.3	21.0
419028 2009 QY_{48}	17.1	X	255.64820	21.94703	4.75788	10.31809	0.1758198	0.23161616	2.6259723	21	6 8.7	21.2
419029 2009 QA_{54}	15.7	X	32.77536	273.84858	159.94187	9.63511	0.1193133	0.19128610	2.9831868	21	—	—
419030 2009 QX_{54}	16.8	X	201.15085	170.62077	210.94380	7.08038	0.1626354	0.21802074	2.7340357	21	4 13.6	21.3
419031 2009 QB_{55}	16.5	X	260.03597	252.23608	101.50072	13.45789	0.2834109	0.22579128	2.6709429	21	4 29.1	21.1
419032 2009 QY_{55}	17.6	X	236.93908	136.24976	189.18258	8.38354	0.2032108	0.21759422	2.7376073	21	3 5.9	22.3
419033 2009 QT_{57}	16.4	X	255.69042	221.88439	123.87542	19.46034	0.3748819	0.22566833	2.6719129	21	4 11.5	21.6
419034 2009 QM_{58}	17.2	X	261.19306	125.67576	192.81820	6.28560	0.0324717	0.21934630	2.7230096	21	4 7.0	20.7
419035 2009 QV_{63}	16.5	X	93.83767	200.67609	159.55621	10.55764	0.1072543	0.18888040	3.0084638	21	—	—
419036 2009 QF_{64}	16.5	X	208.84362	65.46454	336.38355	14.10227	0.0612766	0.22910594	2.6451186	21	5 13.6	20.7
419037 2009 RH_8	17.3	X	255.63428	126.03109	207.60639	4.42489	0.1208752	0.22048372	2.7136367	21	4 9.2	21.2
419038 2009 RW_8	17.0	X	173.82979	215.69185	198.96973	6.92506	0.0970451	0.21665043	2.7455521	21	4 28.4	21.1
419039 2009 RW_{11}	17.3	X	214.52750	177.77475	178.72046	3.75748	0.1089734	0.21498120	2.7597457	21	3 28.2	21.4
419040 2009 RU_{12}	16.0	X	261.47263	328.74468	11.95696	11.79779	0.1473295	0.22319623	2.6916060	21	4 19.4	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419041 2009 RX_{17}	17.1	X	257.02292	181.63116	171.81655	6.29909	0.0707716	0.22309698	2.6924041	21	5 13.9	21.0
419042 2009 RZ_{17}	16.4	X	86.83245	168.45619	22.52147	10.97389	0.0347860	0.22839491	2.6506055	21	7 4.6	20.2
419043 2009 RC_{20}	17.2	X	213.96304	150.95676	241.00784	5.81742	0.2736136	0.22198459	2.7013913	21	5 4.1	22.1
419044 2009 RT_{27}	16.5	X	289.67770	329.64545	356.75746	12.57159	0.2859520	0.22940132	2.6428475	21	4 12.7	20.6
419045 2009 RP_{28}	17.2	X	196.71965	253.95267	148.79843	1.69350	0.2709272	0.21951926	2.7215791	21	5 5.9	22.2
419046 2009 RN_{36}	17.0	X	204.16983	132.35658	182.81669	11.57588	0.2193595	0.21067327	2.7972402	21	1 27.2	22.0
419047 2009 RT_{36}	17.3	X	202.37331	101.97414	287.88858	6.04965	0.2336004	0.21942796	2.7223340	21	4 21.9	22.2
419048 2009 RQ_{41}	16.9	X	248.17737	65.15657	292.30355	5.32641	0.0667563	0.22271930	2.6954471	21	5 5.3	20.9
419049 2009 RW_{41}	16.4	X	71.36081	205.70566	285.92227	4.84124	0.0191448	0.21178477	2.7874445	21	3 20.8	20.2
419050 2009 RJ_{43}	16.8	X	124.19337	256.67406	221.43802	8.23131	0.1234372	0.21758664	2.7376708	21	5 27.5	20.7
419051 2009 RO_{46}	17.4	X	140.01186	222.17962	225.43963	2.69111	0.1745482	0.21312063	2.7757844	21	5 10.3	21.7
419052 2009 RS_{63}	16.2	X	173.71012	248.40913	154.06356	15.72026	0.3045403	0.21499432	2.7596334	21	4 24.2	21.4
419053 2009 RP_{69}	16.7	X	231.38398	72.30283	310.85091	11.17730	0.1740000	0.22612429	2.6683200	21	5 8.7	21.2
419054 2009 RX_{69}	16.6	X	211.71529	40.05700	16.79718	15.30679	0.1658870	0.22232625	2.6986230	21	6 2.7	21.3
419055 2009 RX_{71}	17.4	X	139.19842	357.04175	37.80760	2.42908	0.0764584	0.20250005	2.8720101	21	2 25.1	21.4
419056 2009 RN_{72}	16.7	X	209.59622	349.31786	19.49662	4.36407	0.0865210	0.21479364	2.7613520	21	4 7.8	20.7
419057 2009 RL_{73}	17.1	X	164.95412	230.06379	185.29057	8.96182	0.1803530	0.21304218	2.7764658	21	4 25.4	21.7
419058 2009 RS_{74}	16.5	X	204.97939	68.80686	353.99034	5.63027	0.1230172	0.22484663	2.6784187	21	6 8.0	20.7
419059 2009 ST_{1}	16.4	X	78.82111	239.10327	339.90419	7.56923	0.1138942	0.23819977	2.5773604	21	8 14.3	19.7
419060 2009 SL_{9}	17.0	X	293.99561	329.60159	314.99461	5.49524	0.0189763	0.21921668	2.7240829	21	4 3.9	20.8
419061 2009 SX_{19}	13.6	X	303.39937	142.41295	173.28657	29.74963	0.0764922	0.08334861	5.1904358	21	6 1.3	20.7
419062 2009 SH_{20}	15.8	X	247.70207	65.79979	233.22149	16.65469	0.1793664	0.21305251	2.7763760	21	2 8.5	20.7
419063 2009 SD_{21}	16.7	X	232.05101	27.74828	340.34933	14.03377	0.1985126	0.22205554	2.7008159	21	4 16.9	21.4
419064 2009 SY_{23}	16.3	X	84.48530	255.43248	315.87438	6.28117	0.1612707	0.23717673	2.5847666	21	8 16.3	19.7
419065 2009 SD_{35}	16.7	X	330.09834	55.84690	210.77414	12.79669	0.1410578	0.22116724	2.7080428	21	4 15.1	20.0
419066 2009 SK_{45}	17.0	X	227.92304	93.67768	251.07604	3.95559	0.1755243	0.21483191	2.7610240	21	3 22.1	21.6
419067 2009 SY_{46}	16.5	X	42.46212	343.35539	214.95982	12.41005	0.1106133	0.21746106	2.7387247	21	5 20.2	19.7
419068 2009 SL_{49}	17.1	X	230.48951	173.38671	187.90639	11.03068	0.1521199	0.22452881	2.6809456	21	4 17.0	21.3
419069 2009 SB_{51}	17.6	X	176.16485	26.07458	31.26828	2.18741	0.0852350	0.21977844	2.7194390	21	5 2.6	21.7
419070 2009 SR_{55}	17.1	X	145.41906	157.96760	322.12655	6.71548	0.1221882	0.22162240	2.7043337	21	6 21.9	21.3
419071 2009 SJ_{58}	17.3	X	197.79579	164.97797	262.40048	5.12145	0.1260116	0.22214030	2.7001288	21	6 7.3	21.4
419072 2009 SY_{60}	17.2	X	229.57693	89.93415	283.86185	4.03812	0.0773009	0.22011176	2.7166929	21	5 4.6	21.3
419073 2009 SC_{61}	16.4	X	166.38034	131.48401	225.02699	9.14735	0.1185498	0.20214338	2.8753875	21	2 7.4	21.0
419074 2009 SL_{61}	16.7	X	153.63144	84.58437	3.27612	15.80538	0.2447368	0.21367612	2.7709715	21	5 22.4	21.7
419075 2009 SN_{74}	16.0	X	138.11754	77.49313	193.15965	24.87225	0.1422978	0.17638696	3.1488965	21	12 12.2	21.5
419076 2009 SY_{78}	17.1	X	245.94644	74.57883	285.39334	4.84608	0.0447584	0.22303997	2.6928629	21	5 8.8	20.9
419077 2009 SN_{99}	17.0	X	249.92144	73.36453	218.85900	6.82027	0.2544727	0.21432172	2.7654041	21	2 2.5	22.0
419078 2009 SH_{106}	16.5	X	338.28359	292.70720	340.05675	13.63939	0.1127951	0.22926575	2.6438893	21	5 4.3	19.9
419079 2009 SB_{110}	16.3	X	239.29845	323.59697	342.78639	15.76710	0.2791766	0.21493524	2.7601391	21	2 14.9	21.3
419080 2009 SG_{114}	16.7	X	186.20374	170.83769	222.80206	5.78213	0.0891440	0.21591022	2.7518235	21	4 13.2	20.9
419081 2009 SZ_{122}	17.2	X	255.90739	11.35790	305.32831	5.02705	0.1290929	0.21653865	2.7464968	21	3 17.1	21.3
419082 2009 SQ_{124}	16.9	X	210.63004	117.13285	218.95491	8.43123	0.2001362	0.21042261	2.7994612	21	2 24.2	21.9
419083 2009 SU_{124}	17.0	X	261.14437	111.22773	232.82854	6.63899	0.0245728	0.22115090	2.7081761	21	5 11.2	20.6
419084 2009 SK_{125}	16.5	X	246.81673	112.74980	215.63358	10.59038	0.1366745	0.21633548	2.7482161	21	3 21.4	20.9
419085 2009 SE_{126}	16.8	X	247.77902	8.73974	337.62622	5.79101	0.0547308	0.21934582	2.7230136	21	4 21.3	20.7
419086 2009 SV_{127}	16.5	X	286.86892	65.23493	311.34695	12.22936	0.2165468	0.23391190	2.6087622	21	6 30.3	20.0
419087 2009 SK_{128}	17.1	X	195.39333	129.44053	246.38993	3.32496	0.0839361	0.21284503	2.7781800	21	3 31.3	21.3
419088 2009 SQ_{130}	16.8	X	261.09847	266.77382	29.69005	11.54654	0.1522692	0.21289239	2.7777679	21	3 3.5	21.2
419089 2009 SW_{133}	16.4	X	32.51569	43.20887	45.75913	9.39720	0.0617220	0.18934584	3.0035316	21	—	—
419090 2009 SF_{140}	16.3	X	274.28817	52.62889	221.11984	10.29034	0.1127065	0.21106774	2.7937539	21	2 12.6	20.7
419091 2009 SE_{141}	16.9	X	113.07375	69.61644	358.21220	6.37732	0.0481183	0.20502374	2.8483932	21	3 2.4	20.8
419092 2009 SZ_{144}	17.1	X	293.66675	274.05976	27.47065	3.57099	0.1340874	0.22492562	2.6777915	21	4 10.8	20.7
419093 2009 SQ_{146}	16.8	X	68.92006	187.27701	192.06116	7.24860	0.1902711	0.18276761	3.0751754	21	—	—
419094 2009 SQ_{147}	16.8	X	210.98385	233.90871	203.24032	12.80681	0.2420128	0.22722304	2.6597111	21	6 26.4	21.6
419095 2009 SQ_{149}	16.6	X	201.39420	6.50896	343.47016	8.36263	0.2097446	0.21203058	2.7852897	21	3 7.8	21.2
419096 2009 SX_{155}	16.9	X	246.66373	146.88917	190.99051	12.70054	0.1295641	0.21861241	2.7291004	21	4 5.1	21.1
419097 2009 SE_{156}	17.3	X	230.89206	221.58339	159.27452	4.65541	0.1181367	0.22685299	2.6626027	21	5 14.4	21.4
419098 2009 SF_{157}	16.9	X	209.30852	106.36680	202.62273	14.14615	0.1552608	0.20263079	2.8707746	21	1 23.5	21.9
419099 2009 SW_{158}	17.0	X	164.61373	232.55947	219.76094	9.52576	0.2525659	0.21610184	2.7501966	21	6 10.6	21.9
419100 2009 SA_{159}	17.5	X	232.35293	107.58731	248.67977	4.87300	0.0746884	0.21596963	2.7513189	21	4 15.6	21.7
419101 2009 SX_{160}	17.3	X	163.83094	146.44278	293.99252	4.95503	0.0560184	0.22207963	2.7006206	21	5 15.9	21.3
419102 2009 SK_{165}	17.7	X	236.80226	85.29240	283.57513	4.14509	0.0688669	0.22247482	2.6974215	21	5 7.1	21.5
419103 2009 SF_{167}	16.8	X	244.75441	84.78817	263.22628	15.01969	0.2999043	0.22270276	2.6955806	21	3 27.9	21.9
419104 2009 SK_{171}	16.9	X	249.52425	315.29459	45.70277	8.54638	0.1402509	0.22519638	2.6756447	21	5 5.5	21.0
419105 2009 SA_{173}	16.9	X	211.44954	107.70854	206.65974	10.19788	0.1001762	0.20651162	2.8346953	21	1 31.4	21.5
419106 2009 SG_{179}	16.7	X	224.75078	293.99439	158.90895	13.95908	0.0958372	0.23897219	2.5718036	21	8 9.7	20.5
419107 2009 SG_{180}	17.3	X	182.98304	88.06066	302.52863	5.33735	0.0551841	0.21571797	2.7534583	21	4 2.8	21.4
419108 2009 SN_{183}	16.7	X	200.89355	133.64309	243.00181	7.06398	0.1569380	0.21424072	2.7661010	21	4 5.8	21.4
419109 2009 SS_{183}	16.9	X	228.41696	82.81836	252.82009	6.14161	0.1519137	0.21317073	2.7753494	21	3 11.6	21.5
419110 2009 SL_{185}	17.2	X	219.50599	122.35753	244.52423	4.13728	0.0791511	0.21620021	2.7493623	21	4 14.8	21.4
419111 2009 SX_{188}	16.0	X	233.48604	318.70962	348.61819	12.18019	0.2098418	0.21225161	2.7833558	21	2 14.4	20.8
419112 2009 SQ_{192}	17.2	X	170.66872	69.90284	337.27577	4.06898	0.0533683	0.21459368	2.7630671	21	4 11.0	21.2
419113 2009 SZ_{192}	16.7	X	171.81330	157.41785	234.00474	2.91556	0.1053742	0.21112448	2.7932533	21	3 27.3	20.9
419114 2009 SA_{193}	17.6	X	167.53771	81.90523	337.49406	3.92323	0.0676336	0.21603196	2.7507897	21	4 23.7	21.7
419115 2009 SU_{198}	16.6	X	116.26859	98.80742	2.77773	12.76828	0.2315283	0.20824509	2.8189424	21	5 5.8	21.2
419116 2009 SY_{200}	16.8	X	201.85832	113.65223	226.90603	8.21296	0.2339494	0.21055144	2.7983191	21	2 22.6	21.9
419117 2009 SV_{201}	17.0	X	232.77034	290.81207	40.08463	4.80525	0.0766114	0.21190263	2.7864109	21	3 18.9	21.1
419118 2009 SO_{203}	17.3	X	234.70657	197.15009	163.41844	6.11996	0.0762926	0.21823419	2.7322526	21	4 26.8	21.3
419119 2009 SB_{205}	17.4	X	184.19455	28.40394	18.66122	2.03151	0.0793575	0.21495453	2.7599739	21	4 28.3	21.4
419120 2009 SX_{209}	17.2	X	210.93720	341.30390	12.52678	4.36409	0.0792202	0.21256468	2.7806221	21	3 22.4	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419121 2009 SL_{211}	17.0	X	189.80680	189.66021	177.93604	2.57525	0.0997673	0.21001994	2.8030382	21	3 17.4	21.1
419122 2009 SH_{213}	16.8	X	158.30481	16.62658	34.66551	6.21783	0.0461996	0.21056790	2.7981733	21	4 4.6	20.8
419123 2009 SK_{214}	17.3	X	217.17675	292.96267	70.12822	1.09754	0.0859992	0.21515071	2.7582960	21	4 8.9	21.3
419124 2009 SO_{216}	16.4	X	30.05011	207.16478	184.93055	27.49603	0.1313676	0.17887072	3.1196788	21	—	—
419125 2009 SP_{227}	17.1	X	227.27143	255.40980	91.66138	1.81736	0.0817478	0.21432652	2.7653628	21	3 31.6	21.2
419126 2009 SK_{231}	16.7	X	161.42536	63.63642	353.71704	11.29684	0.0287184	0.21672139	2.7449527	21	4 9.2	20.6
419127 2009 SX_{232}	16.7	X	272.66202	320.60012	22.26139	14.31050	0.2270008	0.22781816	2.6550772	21	4 24.9	20.9
419128 2009 SB_{239}	16.6	X	210.70166	85.30427	260.22984	12.99831	0.2725358	0.21536209	2.7564908	21	3 3.0	21.9
419129 2009 SU_{240}	16.6	X	220.52364	125.18076	260.54740	10.53192	0.1535567	0.22112254	2.7084077	21	5 5.2	21.1
419130 2009 SK_{242}	16.8	X	206.52583	32.89196	302.58328	6.63024	0.2272025	0.21083753	2.7957872	21	2 21.6	21.7
419131 2009 SZ_{242}	16.8	X	225.41214	41.56812	345.08814	12.95472	0.2783577	0.22271093	2.6955147	21	5 1.2	21.8
419132 2009 SC_{245}	16.5	X	200.41476	5.62636	35.78868	14.38189	0.1440218	0.21743983	2.7389030	21	5 6.5	20.8
419133 2009 SO_{246}	16.6	X	285.38380	318.90155	21.93921	13.21788	0.1965520	0.22937180	2.6430743	21	5 9.2	20.4
419134 2009 ST_{250}	16.7	X	111.28344	139.11798	32.09200	15.38704	0.0562908	0.22655900	2.6649057	21	7 15.3	20.7
419135 2009 SX_{264}	16.5	X	194.71124	334.63519	33.30676	8.64913	0.2317609	0.21271977	2.7792705	21	3 26.5	21.4
419136 2009 SR_{265}	16.2	X	27.98556	272.33211	20.36720	13.57120	0.1166443	0.23855265	2.5748181	21	9 15.1	19.2
419137 2009 SV_{265}	16.4	X	31.40043	243.93024	220.97310	9.46012	0.1642161	0.18836046	3.0139975	21	—	—
419138 2009 SH_{269}	17.1	X	217.72378	169.48225	198.12212	5.11493	0.0544696	0.21730330	2.7400501	21	4 16.3	20.8
419139 2009 SV_{274}	15.7	X	127.74035	295.42060	17.54002	17.25362	0.2349047	0.18815864	3.0161523	21	—	—
419140 2009 SZ_{278}	17.2	X	261.00511	298.70241	51.81713	3.93429	0.1118994	0.22408096	2.6845165	21	5 8.1	20.9
419141 2009 SD_{279}	17.0	X	142.08180	285.85078	175.66656	9.85548	0.1217373	0.21760565	2.7375114	21	5 26.9	21.3
419142 2009 SU_{282}	16.9	X	240.07041	316.67362	46.03725	7.08961	0.1066994	0.22135531	2.7065086	21	5 1.2	20.9
419143 2009 SX_{287}	16.5	X	95.80170	312.97615	218.17977	13.92187	0.0854816	0.22409539	2.6844013	21	6 24.9	20.4
419144 2009 SK_{288}	16.7	X	188.71612	114.53133	258.37169	4.12689	0.0756902	0.21012347	2.8021175	21	3 19.9	20.9
419145 2009 SF_{290}	17.2	X	169.48575	352.26226	69.15380	5.02948	0.0911896	0.21435956	2.7650785	21	5 2.5	21.4
419146 2009 SC_{294}	17.3	X	131.66771	283.76259	131.61740	2.19957	0.1541152	0.20648337	2.8349539	21	3 22.2	21.5
419147 2009 SD_{294}	17.1	X	253.18719	308.21149	26.76203	5.26524	0.1242834	0.22041895	2.7141682	21	4 8.7	21.0
419148 2009 SA_{302}	16.0	X	117.85578	114.46032	351.69873	24.93218	0.1427175	0.21616583	2.7496538	21	4 23.8	20.5
419149 2009 SQ_{316}	17.5	X	159.13351	342.01263	63.63887	0.83672	0.0747327	0.21353117	2.7722254	21	3 30.6	21.5
419150 2009 SG_{319}	17.0	X	278.47937	42.09938	253.79766	2.91345	0.0750846	0.21463694	2.7626958	21	3 23.6	20.9
419151 2009 SJ_{324}	16.9	X	208.88878	175.72704	110.24987	3.78215	0.1395596	0.20017198	2.8942355	21	—	—
419152 2009 SC_{325}	17.2	X	237.32471	110.93785	257.89655	5.22171	0.0388536	0.22095357	2.7097883	21	5 11.2	21.0
419153 2009 SB_{329}	16.8	X	272.90656	253.90120	95.25406	5.39984	0.2703055	0.23102935	2.6304170	21	5 2.0	20.9
419154 2009 SO_{335}	16.8	X	220.04682	91.76561	215.90911	8.50022	0.0630505	0.20320353	2.8653778	21	2 2.1	21.3
419155 2009 SD_{337}	16.9	X	168.48214	86.92487	308.51522	6.49913	0.1936427	0.21216655	2.7840997	21	3 31.4	21.6
419156 2009 SM_{337}	17.1	X	230.12855	314.26435	65.00555	6.20576	0.2402550	0.22237595	2.6982209	21	5 3.9	21.7
419157 2009 SN_{337}	16.7	X	274.41511	332.92548	2.74988	12.89503	0.2999963	0.22967261	2.6407660	21	4 9.1	21.0
419158 2009 SC_{341}	17.2	X	190.25934	254.79000	187.82098	2.09749	0.0994542	0.22391866	2.6858135	21	6 19.6	21.2
419159 2009 ST_{344}	15.9	X	142.85859	279.93393	26.58250	16.65784	0.1178955	0.18629183	3.0362685	21	—	—
419160 2009 SZ_{344}	17.1	X	175.82502	356.62797	55.71299	4.73373	0.0980532	0.21528021	2.7571897	21	4 27.6	21.2
419161 2009 SK_{354}	16.7	X	246.47573	99.86078	230.30262	4.79714	0.0576700	0.21156853	2.7893435	21	3 31.5	20.7
419162 2009 SY_{354}	16.5	X	214.64171	41.48638	35.60045	14.44968	0.0564826	0.23028140	2.6361096	21	7 14.7	20.5
419163 2009 SY_{357}	16.5	X	172.25741	70.07712	38.82460	17.09471	0.1642635	0.22409446	2.6844087	21	7 6.3	21.2
419164 2009 SU_{359}	16.4	X	255.41598	191.51029	189.54081	13.46783	0.1675531	0.22632667	2.6667291	21	6 4.8	20.7
419165 2009 SA_{361}	16.7	X	252.84794	160.39607	223.09237	13.30321	0.1802000	0.22886998	2.6469363	21	6 2.9	20.8
419166 2009 TB_{5}	16.9	X	211.47422	316.03274	46.31023	3.17437	0.2442130	0.21387694	2.7692367	21	3 30.8	21.7
419167 2009 TQ_{5}	16.6	X	166.36562	214.78435	206.32567	8.78582	0.2789911	0.21112414	2.7932563	21	5 6.9	21.5
419168 2009 TV_{5}	16.9	X	215.05467	209.65204	190.07208	6.27181	0.2157226	0.22146102	2.7056473	21	5 17.8	21.5
419169 2009 TP_{9}	16.7	X	131.37122	267.88924	204.03501	14.29183	0.1792317	0.21505994	2.7590720	21	6 2.3	21.2
419170 2009 TK_{13}	17.4	X	49.73413	290.50679	106.09167	4.07542	0.1981200	0.26569155	2.3963535	21	—	—
419171 2009 TG_{20}	16.6	X	210.31355	77.71328	296.74545	10.47709	0.1677887	0.21796282	2.7345200	21	4 7.9	21.3
419172 2009 TX_{25}	16.8	X	209.44911	37.40830	341.57349	8.86761	0.2270746	0.21483656	2.7609843	21	4 13.8	21.7
419173 2009 TY_{29}	16.8	X	206.50604	260.91769	164.16536	12.96409	0.2588124	0.22363410	2.6880914	21	6 10.0	21.8
419174 2009 TA_{31}	17.5	X	169.12255	138.76846	298.46974	6.03664	0.2930439	0.21484080	2.7609479	21	5 26.8	22.5
419175 2009 TP_{32}	15.9	X	137.66933	140.42013	226.82241	11.19499	0.0726417	0.19603301	2.9348319	21	1 17.4	20.3
419176 2009 TH_{33}	16.4	X	220.46637	342.32125	47.48201	13.37808	0.1315350	0.21952183	2.7215579	21	5 12.6	20.7
419177 2009 TK_{33}	16.7	X	199.35356	229.40333	182.88242	4.86806	0.1657893	0.21757465	2.7377714	21	5 21.2	21.2
419178 2009 TU_{33}	16.7	X	183.45064	106.24391	265.34779	6.47230	0.2455549	0.21040729	2.7995971	21	3 17.1	21.7
419179 2009 TJ_{39}	16.2	X	206.68957	308.00691	70.44037	29.29986	0.2557058	0.21373945	2.7704241	21	4 27.3	21.5
419180 2009 TM_{40}	16.5	X	181.53898	344.29035	96.54579	10.29416	0.1203511	0.22099596	2.7094418	21	6 8.9	20.7
419181 2009 TN_{40}	16.3	X	237.97509	317.61459	48.07201	26.20654	0.1133958	0.22063719	2.7123782	21	5 3.8	20.4
419182 2009 TN_{42}	16.4	X	142.51257	160.06928	238.98289	11.69151	0.0761101	0.20100591	2.8862249	21	2 27.7	20.8
419183 2009 TL_{43}	15.9	X	26.57148	316.48314	124.50905	17.40007	0.2382493	0.18157108	3.0886706	21	—	—
419184 2009 TF_{47}	16.1	X	163.11735	76.65347	261.96142	8.76302	0.2150744	0.19723383	2.9229077	21	1 23.6	21.0
419185 2009 UP_{2}	15.8	X	78.67206	306.84352	43.34386	23.25596	0.2338411	0.18067770	3.0988437	21	—	—
419186 2009 UY_{11}	16.9	X	166.73695	309.16893	59.81547	11.51807	0.3316220	0.20510323	2.8476573	21	3 15.1	22.3
419187 2009 UA_{24}	16.6	X	50.64676	270.29238	208.10956	14.38158	0.1316001	0.19727629	2.9224883	21	2 12.9	20.4
419188 2009 UP_{27}	16.8	X	194.49067	211.89699	203.08890	9.40681	0.1914726	0.21579448	2.7528074	21	5 20.1	21.4
419189 2009 UG_{28}	17.2	X	170.84253	257.96037	106.15917	3.04843	0.1125732	0.20052234	2.8908632	21	2 25.1	21.6
419190 2009 UX_{30}	16.6	X	230.47854	343.00363	53.59777	5.35884	0.1366683	0.22129294	2.7070172	21	5 31.2	20.7
419191 2009 UA_{33}	16.4	X	130.46033	82.44977	48.77453	8.92170	0.2422308	0.21242696	2.7818238	21	6 30.3	21.1
419192 2009 UM_{37}	17.0	X	289.75818	80.69120	183.43738	1.53696	0.0215901	0.20311590	2.8662019	21	3 7.7	20.8
419193 2009 UT_{40}	17.0	X	228.00038	139.31707	178.16610	5.52800	0.0377810	0.21120743	2.7925219	21	2 24.4	21.1
419194 2009 UZ_{49}	16.5	X	274.00658	237.58372	58.08062	4.47124	0.0708966	0.21217640	2.7840134	21	3 22.4	20.4
419195 2009 UY_{50}	17.3	X	220.57854	344.86142	21.70995	3.13526	0.2053553	0.21636503	2.7479658	21	4 11.7	21.9
419196 2009 UZ_{56}	16.9	X	70.36348	245.12266	245.64143	3.91600	0.0613151	0.20435176	2.8546342	21	3 25.3	20.7
419197 2009 UA_{66}	16.3	X	134.21169	25.65514	61.04078	7.23883	0.0118734	0.21332947	2.7739724	21	4 17.2	20.1
419198 2009 UO_{66}	17.0	X	88.33920	256.05831	151.28305	3.49839	0.0718068	0.19297036	2.9658031	21	1 8.5	20.9
419199 2009 UZ_{69}	17.8	X	215.38453	328.15085	39.30160	23.08797	0.0314565	0.38320298	1.8772270	21	4 4.8	20.0
419200 2009 UT_{80}	17.2	X	245.92967	152.58568	261.74283	2.32333	0.1694519	0.22916309	2.6446788	21	7 6.5	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419201 2009 UW_{82}	17.0	X	202.92383	320.37133	73.00935	5.68494	0.1738760	0.21385596	2.7694178	21	5 1.5	21.6
419202 2009 UV_{84}	17.2	X	163.58117	292.57669	135.83310	2.47086	0.2532823	0.20978095	2.8051668	21	5 12.7	22.1
419203 2009 UN_{90}	16.4	X	322.50535	247.89405	67.15924	14.14942	0.1875811	0.23354627	2.6114843	21	6 2.3	19.2
419204 2009 UC_{96}	16.9	X	223.85518	164.59254	148.51769	2.64533	0.0529747	0.20253165	2.8717113	21	2 16.0	20.9
419205 2009 UN_{99}	16.6	X	165.69665	46.28511	50.76582	8.17444	0.1594997	0.21577716	2.7529547	21	6 13.7	21.1
419206 2009 UQ_{101}	16.2	X	136.26024	56.09174	56.25617	15.02427	0.1281332	0.21319333	2.7751533	21	6 1.2	20.4
419207 2009 UH_{103}	17.3	X	153.40325	1.02704	48.10791	2.73416	0.0966279	0.20464083	2.8519453	21	3 31.9	21.5
419208 2009 UU_{107}	16.8	X	89.07733	267.18130	127.91424	11.50638	0.3024265	0.18931445	3.0038636	21	1 29.1	20.5
419209 2009 UJ_{110}	17.0	X	173.82774	198.40530	236.27732	7.22519	0.2063318	0.21294438	2.7773157	21	5 26.3	21.5
419210 2009 UD_{113}	16.6	X	192.80815	140.45651	239.13526	11.24583	0.1532025	0.21013994	2.8019710	21	4 1.3	21.3
419211 2009 UJ_{113}	17.3	X	262.14069	282.04432	41.82240	5.43407	0.1101570	0.21897272	2.7261058	21	4 7.0	21.2
419212 2009 UY_{117}	15.9	X	37.42034	168.16083	244.07968	9.97182	0.0666325	0.18104405	3.0946619	21	—	—
419213 2009 UB_{130}	16.7	X	275.77983	347.28904	62.34559	15.10775	0.2445950	0.23232608	2.6206202	21	7 28.4	20.5
419214 2009 UO_{132}	16.3	X	246.24604	110.64826	266.35934	11.99352	0.1275059	0.22255367	2.6967843	21	5 23.3	20.4
419215 2009 UR_{133}	17.5	X	258.13065	256.23081	54.76875	5.21225	0.0570935	0.21146697	2.7902365	21	3 24.9	21.5
419216 2009 UY_{134}	17.3	X	201.02226	163.75037	180.42641	9.10841	0.3110742	0.20958319	2.8069311	21	2 28.9	22.5
419217 2009 UQ_{137}	16.4	X	194.59018	79.65478	300.21473	5.29043	0.0675989	0.21368686	2.7708787	21	4 2.8	20.6
419218 2009 UQ_{146}	16.2	X	351.68401	93.83957	59.08904	14.56460	0.1159094	0.18398284	3.0616192	21	—	—
419219 2009 UB_{150}	16.2	X	51.89823	127.52276	272.68031	11.16478	0.1846293	0.17991362	3.1076113	21	—	—
419220 2009 UN_{151}	17.3	X	237.57785	298.11312	64.10528	6.29944	0.2305509	0.22121514	2.7076518	21	4 20.8	21.8
419221 2009 UY_{151}	15.7	X	97.08009	243.31933	253.29503	20.43043	0.1138717	0.21114541	2.7930687	21	5 16.9	19.6
419222 2009 UV_{152}	17.0	X	153.44256	77.13807	52.82722	8.90411	0.0534151	0.22227153	2.6990659	21	7 9.9	20.9
419223 2009 UM_{154}	16.5	X	63.19023	200.09489	248.35583	3.36369	0.1481320	0.18753605	3.0228241	21	2 2.2	20.2
419224 2009 UV_{154}	17.5	X	286.55878	335.78514	22.07554	6.06300	0.1066727	0.22762911	2.6565471	21	6 20.0	21.0
419225 2009 VP_{4}	16.9	X	270.15400	342.76279	358.06876	3.17645	0.0316839	0.21762561	2.7373440	21	5 17.1	20.5
419226 2009 VF_{7}	15.9	X	20.70407	166.40343	258.43277	8.40710	0.0954967	0.17737654	3.1371739	21	—	—
419227 2009 VL_{7}	16.5	X	208.77613	6.33158	39.86285	9.84785	0.1623642	0.21748863	2.7384933	21	5 20.0	20.9
419228 2009 VT_{9}	16.7	X	127.07492	147.51431	33.09911	13.68264	0.1856145	0.22663412	2.6643167	21	8 31.2	21.2
419229 2009 VP_{11}	16.3	X	140.05148	289.32953	68.64134	9.03536	0.0633121	0.18866205	3.0107846	21	1 13.1	20.7
419230 2009 VB_{17}	16.5	X	58.21955	347.55237	60.49195	8.49641	0.2166571	0.18091490	3.0961346	21	—	—
419231 2009 VO_{23}	16.5	X	195.10776	352.46985	78.70133	10.31854	0.1557640	0.21656375	2.7462846	21	6 9.1	20.9
419232 2009 VT_{23}	17.2	X	109.45181	165.92714	312.77379	3.22902	0.2888969	0.20239232	2.8730292	21	5 30.9	21.8
419233 2009 VW_{23}	16.4	X	67.90289	114.40322	276.92731	6.65961	0.1410928	0.17944247	3.1130486	21	—	—
419234 2009 VB_{24}	16.2	X	353.40957	53.06739	50.22825	12.61390	0.2416537	0.17352693	3.1834018	21	—	—
419235 2009 VE_{24}	16.2	X	113.04863	55.11820	52.88964	11.03460	0.0727673	0.20415873	2.8564332	21	4 26.8	20.1
419236 2009 VN_{29}	15.5	X	98.95463	99.37703	239.11200	14.55824	0.0211878	0.17563330	3.1578983	21	—	—
419237 2009 VX_{30}	16.9	X	120.10247	39.00569	9.83908	5.81705	0.0891333	0.19638014	2.9313725	21	2 23.3	21.1
419238 2009 VO_{31}	17.1	X	116.20721	99.69458	31.23416	9.11429	0.1175233	0.21111330	2.7933519	21	6 1.5	21.2
419239 2009 VJ_{39}	16.3	X	262.60536	152.40458	241.36235	7.30194	0.1977672	0.22942216	2.6426875	21	6 24.3	20.3
419240 2009 VY_{39}	16.0	X	99.80424	130.29014	255.58278	9.63588	0.0791515	0.18672157	3.0316080	21	—	—
419241 2009 VW_{41}	17.0	X	166.44953	331.51446	106.35168	3.79674	0.1651748	0.21181639	2.7871671	21	5 23.1	21.5
419242 2009 VU_{42}	16.1	X	71.71525	11.48878	60.36517	10.76755	0.2137235	0.18795766	3.0183020	21	2 8.8	19.8
419243 2009 VR_{43}	16.4	X	16.21526	64.50371	61.10712	27.52078	0.2540796	0.18360853	3.0657788	21	—	—
419244 2009 VY_{47}	16.4	X	162.72302	94.79112	208.31150	7.39006	0.0830786	0.18249853	3.0781974	21	—	—
419245 2009 VS_{50}	15.7	X	90.08675	287.66808	54.67577	16.76171	0.1153477	0.17593816	3.1542493	21	—	—
419246 2009 VP_{52}	17.2	X	8.04297	337.14634	229.07570	3.60864	0.0449608	0.20933566	2.8091434	21	4 2.6	20.8
419247 2009 VO_{59}	16.4	X	121.09325	332.16770	95.29525	6.77230	0.2172095	0.20036520	2.8923745	21	4 5.4	20.9
419248 2009 VT_{61}	15.9	X	132.07703	74.66686	239.04715	17.81401	0.0972100	0.17836661	3.1255540	21	—	—
419249 2009 VJ_{62}	15.8	X	335.80744	60.12598	58.82808	10.55030	0.0495748	0.17610894	3.1522097	21	—	—
419250 2009 VP_{62}	15.7	X	0.46204	55.02520	68.26947	13.43476	0.0113412	0.18315044	3.0708887	21	—	—
419251 2009 VS_{63}	17.1	X	57.27080	29.25411	39.88357	1.07559	0.1757764	0.18330603	3.0691507	21	1 3.6	20.5
419252 2009 VD_{64}	16.1	X	152.80726	192.81173	242.33744	14.36657	0.1159782	0.20660680	2.8338247	21	5 1.9	20.5
419253 2009 VB_{68}	16.5	X	195.65640	338.74685	49.83334	7.10035	0.0937459	0.20885373	2.8134631	21	4 19.6	20.7
419254 2009 VE_{70}	16.7	X	193.24029	356.44252	50.92873	6.72780	0.1518169	0.21188407	2.7865736	21	5 9.0	21.1
419255 2009 VW_{77}	14.8	X	310.39897	239.76627	253.67719	25.31125	0.2237230	0.17293823	3.1906222	21	—	—
419256 2009 VP_{81}	16.4	X	88.74490	82.55043	36.75971	15.22011	0.1069377	0.20422687	2.8557978	21	4 15.5	20.3
419257 2009 VK_{85}	17.2	X	36.46616	303.63393	92.32208	3.19553	0.1725020	0.17422171	3.1749328	21	—	—
419258 2009 VP_{87}	17.0	X	112.41560	221.30087	179.69018	3.77067	0.1107851	0.19149790	2.9809867	21	2 5.7	21.1
419259 2009 VX_{92}	16.6	X	259.09535	294.28177	74.67371	16.11880	0.2529560	0.22697392	2.6616569	21	5 16.6	20.9
419260 2009 VA_{94}	16.4	X	98.33231	331.00419	66.71531	11.02316	0.1357474	0.19076456	2.9886215	21	1 21.4	20.5
419261 2009 VT_{94}	17.0	X	195.66961	20.84248	326.45655	1.32904	0.0669328	0.19988794	2.8969766	21	2 27.2	21.2
419262 2009 VT_{99}	16.0	X	126.87749	282.50447	53.70080	9.14966	0.1697315	0.18263719	3.0766392	21	—	—
419263 2009 VH_{100}	15.9	X	32.32571	9.14400	66.37273	14.65772	0.0944911	0.17991498	3.1075956	21	—	—
419264 2009 VX_{101}	16.9	X	189.57975	86.26266	267.69972	7.65702	0.0796547	0.20116504	2.8847026	21	2 25.5	21.4
419265 2009 VU_{105}	16.3	X	257.07580	321.56454	22.37565	15.91865	0.2110279	0.21918727	2.7243266	21	4 14.8	20.7
419266 2009 VR_{108}	16.9	X	190.53257	64.41422	53.11079	24.15865	0.2594743	0.22450902	2.6811031	21	8 7.4	22.1
419267 2009 VS_{109}	15.8	X	100.21450	333.72921	66.37694	13.84532	0.1238498	0.19004341	2.9961773	21	1 26.2	20.1
419268 2009 VW_{110}	16.0	X	100.02651	324.58363	31.37025	16.94265	0.1063312	0.18333978	3.0687741	21	—	—
419269 2009 VU_{112}	16.5	X	46.79925	11.80954	67.50914	7.99723	0.1108707	0.18250068	3.0781733	21	—	—
419270 2009 VS_{114}	16.2	X	38.78097	184.70560	297.12767	9.03021	0.1212682	0.18205847	3.0831557	21	2 4.1	20.0
419271 2009 VX_{115}	16.5	X	63.35948	325.39073	78.64396	6.65480	0.1401352	0.17996407	3.1070305	21	—	—
419272 2009 WC_{1}	17.7	X	354.30212	351.83425	246.31583	20.06186	0.0752757	0.37929492	1.8900996	21	3 19.2	19.9
419273 2009 WN_{3}	16.8	X	14.32932	75.24099	60.33572	10.45936	0.0458916	0.19132848	2.9827462	21	1 17.4	20.8
419274 2009 WY_{3}	17.9	X	349.36873	351.20262	104.01788	3.52859	0.1472347	0.25945997	2.4345712	21	—	—
419275 2009 WE_{10}	15.8	X	206.86939	308.10711	79.92948	25.86923	0.2444825	0.21299227	2.7768995	21	5 5.9	21.0
419276 2009 WW_{10}	17.0	X	111.08668	123.06560	4.21856	7.64602	0.1723526	0.21045122	2.7992074	21	5 28.6	21.2
419277 2009 WU_{11}	17.3	X	164.51658	219.21579	160.89612	2.35952	0.0780360	0.20390669	2.8587865	21	3 6.1	21.6
419278 2009 WD_{12}	17.1	X	200.62314	258.72841	76.46919	3.09712	0.0696673	0.20273626	2.8697788	21	2 18.9	21.3
419279 2009 WL_{12}	17.6	X	152.74927	227.82656	176.58237	2.81249	0.0390049	0.20343890	2.8631673	21	3 19.2	21.5
419280 2009 WT_{12}	17.5	X	140.61408	254.89260	162.10254	2.31585	0.0607105	0.20339459	2.8635831	21	3 23.4	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419281 2009 WB_{15}	16.4	X	66.21052	180.54947	236.90101	13.93567	0.1214317	0.18296512	3.0729619	21	—	—
419282 2009 WV_{15}	15.9	X	55.81922	14.78890	126.46274	6.98833	0.1583411	0.18553881	3.0444782	21	4 6.2	19.6
419283 2009 WM_{21}	16.6	X	141.17986	242.11598	170.23426	6.13931	0.0657503	0.20195981	2.8771295	21	3 19.0	20.6
419284 2009 WM_{22}	15.7	X	150.65395	242.02994	86.49234	12.30892	0.0482131	0.18176905	3.0864276	21	—	—
419285 2009 WW_{23}	16.9	X	165.12686	344.66404	30.08424	3.89733	0.2059886	0.20226193	2.8742637	21	3 10.2	21.6
419286 2009 WN_{24}	16.1	X	206.15099	218.93984	68.84381	11.50645	0.0763249	0.19061197	2.9902163	21	—	—
419287 2009 WQ_{28}	16.2	X	114.36408	310.13337	244.48375	13.17748	0.0437902	0.22607467	2.6687104	21	8 9.3	20.2
419288 2009 WR_{30}	16.5	X	118.62628	152.97936	243.59177	12.78657	0.0899546	0.19175335	2.9783386	21	1 31.9	21.0
419289 2009 WD_{31}	16.9	X	55.50230	311.50020	101.48626	2.27353	0.1568176	0.18098091	3.0953817	21	—	—
419290 2009 WB_{33}	16.5	X	141.27392	356.39499	72.77071	11.32075	0.0357752	0.20252245	2.8717983	21	4 10.8	20.7
419291 2009 WQ_{33}	16.7	X	109.73085	356.34372	97.40634	3.49110	0.1340204	0.19984895	2.8973534	21	4 13.4	20.8
419292 2009 WV_{33}	16.5	X	131.41947	127.64767	239.79651	9.16590	0.0631680	0.18699837	3.0286156	21	1 12.1	20.9
419293 2009 WH_{34}	16.4	X	44.77362	320.42208	82.85617	2.77963	0.0874951	0.17418854	3.1753358	21	—	—
419294 2009 WR_{34}	16.1	X	301.55285	327.32057	267.15653	8.52861	0.0262274	0.19147776	2.9811957	21	2 11.6	20.4
419295 2009 WG_{35}	16.9	X	9.93101	276.23020	28.60336	13.91066	0.1062070	0.23819635	2.5773851	21	9 2.6	20.0
419296 2009 WX_{35}	17.1	X	148.21868	199.38270	189.97600	1.70707	0.0756153	0.20352154	2.8623921	21	2 26.8	21.1
419297 2009 WK_{40}	16.7	X	187.05340	304.80357	41.73787	2.38405	0.0932123	0.19644565	2.9307207	21	2 19.8	21.2
419298 2009 WQ_{41}	16.8	X	40.06093	203.43508	300.32145	2.63856	0.1314341	0.19208994	2.9748584	21	3 5.4	20.3
419299 2009 WX_{42}	16.2	X	248.11920	305.25044	81.61029	17.80031	0.0641803	0.22059005	2.7127646	21	6 15.3	19.8
419300 2009 WA_{47}	15.9	X	124.98359	3.88173	74.30697	16.33024	0.1135730	0.20374607	2.8602889	21	4 14.9	20.3
419301 2009 WG_{47}	16.9	X	151.33688	315.79394	105.63629	9.09714	0.3301158	0.20552754	2.8437366	21	5 2.0	22.1
419302 2009 WE_{48}	17.4	X	91.45948	333.33398	150.80254	1.82075	0.1618562	0.20085943	2.8876279	21	5 2.5	21.3
419303 2009 WC_{49}	16.8	X	43.90682	333.04234	126.53496	10.51523	0.1201313	0.18600391	3.0394009	21	1 15.1	20.5
419304 2009 WV_{50}	16.3	X	273.93630	117.42874	54.39562	12.57094	0.0462747	0.17455286	3.1709160	21	—	—
419305 2009 WO_{59}	16.6	X	315.90260	194.79805	77.93946	4.97031	0.0583000	0.21177893	2.7874957	21	4 17.7	20.2
419306 2009 WN_{61}	17.0	X	185.98662	240.48889	193.60298	5.41322	0.0597371	0.21650502	2.7467813	21	6 4.8	21.1
419307 2009 WL_{66}	16.5	X	237.88544	310.41553	58.52977	15.31014	0.0762488	0.21704851	2.7421940	21	5 10.7	20.4
419308 2009 WQ_{71}	16.5	X	29.14449	66.77718	67.92180	15.69115	0.3617580	0.18506937	3.0496243	21	2 16.7	18.9
419309 2009 WM_{72}	16.8	X	160.21452	226.77939	117.07146	2.33776	0.1365288	0.19299830	2.9655168	21	1 23.8	21.4
419310 2009 WN_{74}	15.8	X	248.11899	142.45755	87.25041	7.95213	0.1242923	0.18161122	3.0882155	21	—	—
419311 2009 WS_{75}	16.3	X	166.79802	287.26533	78.14517	12.58157	0.1260114	0.19798837	2.9154768	21	2 28.5	21.0
419312 2009 WZ_{75}	17.0	X	135.81525	334.13967	133.37555	3.43057	0.0859442	0.21012968	2.8020622	21	5 23.7	21.1
419313 2009 WZ_{79}	18.0	X	345.95070	359.18719	239.94274	18.68666	0.0594620	0.37560367	1.9024628	21	3 9.3	20.3
419314 2009 WN_{82}	16.6	X	287.28022	357.81407	339.84915	5.25967	0.0178074	0.21851525	2.7299093	21	6 7.2	20.3
419315 2009 WH_{83}	16.7	X	266.87580	251.56608	20.98630	7.38172	0.0182737	0.19823672	2.9130413	21	2 22.5	20.8
419316 2009 WJ_{83}	15.7	X	157.40036	88.18771	271.39862	8.68702	0.1494928	0.19612746	2.9338897	21	2 6.3	20.3
419317 2009 WN_{85}	16.5	X	47.24729	34.09492	36.59971	11.26893	0.0342536	0.18213479	3.0822944	21	—	—
419318 2009 WM_{87}	16.5	X	85.00238	118.18123	283.62815	6.35105	0.0777435	0.18504691	3.0498711	21	—	—
419319 2009 WS_{90}	17.3	X	186.07357	225.88576	191.43102	7.69634	0.2212100	0.21365737	2.7711336	21	5 16.3	22.1
419320 2009 WY_{93}	15.8	X	54.47187	233.75826	203.34088	9.43442	0.0498731	0.18582274	3.0413762	21	—	—
419321 2009 WG_{96}	16.7	X	53.39271	220.03917	60.89630	6.04794	0.1864192	0.23855401	2.5748083	21	10 15.4	20.0
419322 2009 WO_{101}	16.5	X	152.31641	266.46627	228.28179	13.45697	0.1277953	0.22083905	2.7107250	21	7 14.6	21.0
419323 2009 WU_{104}	16.1	X	341.85766	122.19424	11.33053	11.88962	0.0296212	0.18009373	3.1055389	21	—	—
419324 2009 WV_{104}	15.6	X	38.05447	154.33118	265.98624	8.66006	0.1003981	0.18139685	3.0906481	21	—	—
419325 2009 WY_{110}	16.2	X	67.28819	149.61023	72.04741	15.37698	0.0456399	0.22372246	2.6873836	21	7 21.9	19.9
419326 2009 WR_{119}	16.2	X	211.24069	207.75168	64.69944	11.55573	0.0782947	0.18562589	3.0435260	21	—	—
419327 2009 WR_{128}	17.5	X	173.31267	344.42613	33.53588	2.41973	0.0842897	0.20274297	2.8697155	21	3 14.1	21.8
419328 2009 WZ_{131}	16.5	X	206.73740	295.03267	63.89021	2.74605	0.2002840	0.20487388	2.8497821	21	3 24.6	21.4
419329 2009 WX_{133}	16.9	X	137.47174	181.23543	252.36164	3.56215	0.1273109	0.20521093	2.8466608	21	4 15.0	21.3
419330 2009 WO_{134}	16.2	X	124.52505	304.78694	99.92988	11.82647	0.1195930	0.19623761	2.9327917	21	3 2.0	20.6
419331 2009 WE_{149}	15.4	X	353.08702	61.60478	66.69010	27.29950	0.2040381	0.18037607	3.1022975	21	—	—
419332 2009 WW_{156}	17.0	X	137.77458	97.36884	329.75423	6.30709	0.0686360	0.20446950	2.8535383	21	3 30.7	21.1
419333 2009 WW_{160}	17.0	X	118.51027	106.96384	338.55111	1.36186	0.0378808	0.20263542	2.8707309	21	3 28.9	20.8
419334 2009 WC_{161}	16.3	X	98.68745	133.33523	256.80679	8.39856	0.1085722	0.18945222	3.0024072	21	1 6.3	20.3
419335 2009 WS_{164}	15.6	X	49.59009	314.40784	68.36039	16.65052	0.0110313	0.17039776	3.2222566	21	—	—
419336 2009 WF_{166}	16.3	X	163.70612	271.79682	71.35826	9.47037	0.1425138	0.18989442	2.9977442	21	1 29.3	21.1
419337 2009 WT_{169}	15.9	X	61.72012	182.29133	267.28994	11.69669	0.1015697	0.18875171	3.0098311	21	1 25.3	19.9
419338 2009 WN_{171}	16.0	X	216.22245	211.15486	35.54030	10.85871	0.0301540	0.18030425	3.1031213	21	—	—
419339 2009 WN_{172}	17.2	X	200.07374	24.67808	83.46960	12.47561	0.2661679	0.22322140	2.6914036	21	7 27.9	22.0
419340 2009 WN_{176}	16.1	X	160.88713	56.10337	273.61741	8.47760	0.0865723	0.18817447	3.0159831	21	1 4.0	20.6
419341 2009 WH_{177}	17.1	X	131.56138	205.03503	290.94436	7.08485	0.2520193	0.21164486	2.7886729	21	7 7.9	21.7
419342 2009 WX_{180}	16.5	X	246.68614	273.05242	100.90609	6.36195	0.0515495	0.21613969	2.7498755	21	5 30.2	20.3
419343 2009 WP_{181}	15.5	X	1.78894	221.23821	241.38079	20.27586	0.0663608	0.17636032	3.1492137	21	—	—
419344 2009 WE_{182}	16.3	X	164.11400	115.60025	278.49536	8.65789	0.1093532	0.20114881	2.8848578	21	3 20.5	20.9
419345 2009 WJ_{185}	16.3	X	136.61700	71.05300	228.61024	4.63340	0.1243487	0.17920140	3.1158398	21	—	—
419346 2009 WT_{185}	16.9	X	139.97951	57.29813	53.04731	11.10942	0.2465771	0.21125235	2.7921260	21	6 11.8	21.7
419347 2009 WS_{186}	16.6	X	157.48111	65.87642	251.76682	7.92836	0.1556186	0.18773530	3.0206848	21	—	—
419348 2009 WS_{187}	15.7	X	67.69707	91.44546	241.50863	17.08674	0.1083414	0.16913039	3.2383338	21	12 11.6	20.5
419349 2009 WO_{198}	16.8	X	228.76594	269.32555	92.21475	13.90252	0.2104401	0.21347466	2.7727146	21	4 19.1	21.7
419350 2009 WQ_{200}	16.5	X	133.05671	120.41288	237.94620	9.57059	0.1142438	0.18713820	3.0271068	21	1 9.8	21.0
419351 2009 WM_{208}	16.1	X	73.57842	171.91982	259.19512	12.88445	0.1064601	0.18734359	3.0248940	21	1 20.2	20.1
419352 2009 WB_{209}	17.0	X	69.53015	128.67146	316.47095	1.11923	0.1768283	0.18871076	3.0102665	21	2 12.7	20.6
419353 2009 WN_{209}	15.5	X	208.61762	190.31800	74.27595	15.22301	0.0296058	0.17821734	3.1272990	21	—	—
419354 2009 WN_{215}	15.9	X	114.97903	287.10875	78.90664	11.29871	0.2149709	0.18706234	3.0279252	21	1 14.2	20.3
419355 2009 WE_{222}	16.9	X	194.85384	254.96005	112.57174	3.17784	0.0822950	0.20626454	2.8369586	21	3 24.1	21.2
419356 2009 WO_{224}	16.3	X	220.46654	149.06579	255.71211	5.63238	0.0490166	0.21472102	2.7619746	21	6 7.0	20.1
419357 2009 WV_{249}	15.9	X	340.91092	314.59675	266.14966	11.39236	0.0244159	0.19889762	2.9065847	21	3 12.7	20.1
419358 2009 WE_{250}	16.6	X	125.27550	94.75976	257.54687	7.06100	0.1575595	0.18452166	3.0556562	21	1 1.3	21.0
419359 2009 WA_{254}	16.2	X	97.24075	167.41300	253.07010	9.14112	0.0839483	0.19047898	2.9916079	21	2 4.3	20.5
419360 2009 WB_{257}	16.1	X	111.24950	157.92138	254.70856	10.03266	0.1104153	0.19130200	2.9830215	21	2 14.7	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419361 2009 WA_{260}	17.0	X	125.47005	343.64356	68.99805	3.05768	0.0819009	0.19506875	2.9444957	21	3 5.3	21.2
419362 2009 WD_{260}	16.4	X	4.80622	54.82383	81.11873	4.57971	0.1208010	0.17586465	3.1551283	21	1 1.5	20.3
419363 2009 WL_{260}	15.7	X	104.97009	262.79462	98.52575	17.18401	0.2354075	0.17675303	3.1445473	21	1 1.2	20.0
419364 2009 WE_{264}	16.2	X	71.46718	147.65919	308.36738	8.14045	0.1307798	0.17986044	3.1082238	21	2 23.1	20.3
419365 2009 XF_{1}	15.8	X	15.01943	49.84152	70.89012	17.43270	0.1718469	0.17777864	3.1324417	21	—	—
419366 2009 XP_{1}	15.6	X	43.42004	101.02646	32.61728	11.22362	0.1690956	0.19143839	2.9816045	21	3 7.4	19.0
419367 2009 XQ_{3}	15.8	X	76.49631	57.84355	92.05016	16.05401	0.0981813	0.20282517	2.8689402	21	5 11.1	19.8
419368 2009 XL_{4}	16.3	X	122.77789	128.90788	249.10788	11.07032	0.0522113	0.18690572	3.0296164	21	1 12.8	20.7
419369 2009 XT_{8}	16.1	X	314.02886	126.94765	216.25522	10.96280	0.0398607	0.22330626	2.6907217	21	7 17.2	19.8
419370 2009 XU_{12}	16.7	X	17.87811	236.09603	244.73713	11.29882	0.3095167	0.18102071	3.0949279	21	—	—
419371 2009 XJ_{13}	16.9	X	219.46483	358.78994	48.62243	5.60167	0.0348353	0.21625918	2.7488625	21	6 9.9	20.7
419372 2009 XC_{14}	16.0	X	356.89843	189.22555	55.32058	14.49645	0.1291701	0.21629865	2.7485281	21	5 5.3	19.1
419373 2009 XO_{14}	15.1	X	270.10742	81.21496	109.85452	22.30782	0.0075438	0.16918414	3.2376480	21	—	—
419374 2009 XB_{16}	15.7	X	357.13712	70.26500	108.89514	17.59620	0.2229952	0.18148803	3.0896128	21	2 1.6	19.1
419375 2009 XK_{16}	16.2	X	10.68236	182.39878	288.32060	9.02179	0.1367266	0.17393010	3.1784805	21	—	—
419376 2009 XJ_{21}	15.7	X	309.90329	72.16978	102.01297	10.15335	0.0395091	0.17443917	3.1722936	21	—	—
419377 2009 YR_{2}	16.3	X	223.58041	130.17649	271.35199	11.85974	0.1781662	0.21323844	2.7747619	21	5 28.1	20.8
419378 2009 YP_{5}	16.1	X	17.78596	230.73578	108.97169	13.69313	0.1239894	0.23141517	2.6274925	21	11 4.5	19.5
419379 2009 YN_{9}	15.8	X	342.40589	293.84989	269.79586	16.24278	0.0885984	0.18731555	3.0251958	21	2 14.7	20.1
419380 2009 YT_{9}	15.6	X	3.17245	199.27928	271.34510	16.28836	0.0830055	0.17248812	3.1961704	21	—	—
419381 2009 YX_{11}	16.2	X	180.22744	18.46258	78.29659	6.58149	0.0601688	0.21225987	2.7832835	21	6 27.2	20.2
419382 2009 YM_{12}	16.4	X	359.05966	218.04502	303.22985	9.05055	0.0380153	0.18358940	3.0659918	21	1 28.9	20.4
419383 2009 YO_{12}	16.5	X	109.05136	2.65594	59.05125	3.98301	0.2461382	0.19131767	2.9828586	21	3 19.9	20.8
419384 2009 YU_{12}	16.7	X	159.37217	80.40300	300.43920	9.29643	0.1307862	0.19280520	2.9674965	21	3 3.3	21.5
419385 2009 YA_{21}	16.3	X	97.32478	359.35511	84.97757	8.33270	0.2272188	0.19085654	2.9876612	21	4 3.5	20.6
419386 2009 YM_{21}	16.2	X	300.63505	238.42189	311.28023	8.60148	0.0466325	0.17446439	3.1719878	21	—	—
419387 2009 YT_{21}	17.0	X	67.84053	138.67396	310.37348	7.99897	0.1281309	0.18320797	3.0702457	21	2 9.3	20.8
419388 2009 YM_{22}	16.3	X	232.81413	9.85411	76.12231	10.89237	0.0569231	0.22272144	2.6954299	21	8 19.7	20.2
419389 2010 AA_{6}	15.3	X	47.96040	353.96290	91.63389	17.99398	0.0749054	0.18138640	3.0907667	21	1 3.0	19.3
419390 2010 AT_{10}	16.8	X	58.39643	103.34103	341.08352	5.48662	0.1299044	0.18133428	3.0913590	21	1 22.5	20.6
419391 2010 AO_{11}	16.0	X	6.07272	193.91722	303.40709	15.36982	0.0247549	0.17954004	3.1119206	21	1 12.2	20.3
419392 2010 AA_{12}	15.4	X	44.27557	169.16861	279.85130	8.06991	0.0630101	0.17535143	3.1612815	21	1 3.3	19.6
419393 2010 AO_{13}	17.1	X	105.30981	272.57973	144.91056	2.00834	0.3358790	0.18991811	2.9974950	21	3 20.8	21.6
419394 2010 AN_{22}	16.6	X	24.06022	291.10425	174.47224	0.87490	0.1477315	0.17407319	3.1767384	21	—	—
419395 2010 AA_{26}	16.4	X	14.89589	48.22898	74.36701	1.88551	0.2061415	0.17433667	3.1735369	21	—	—
419396 2010 AZ_{30}	16.3	X	62.09794	145.36135	300.94867	11.01973	0.1424374	0.18171243	3.0870687	21	1 29.9	20.0
419397 2010 AD_{32}	15.8	X	300.49439	38.07507	142.94853	11.14419	0.0163124	0.16745003	3.2599622	21	—	—
419398 2010 AV_{33}	16.0	X	39.82539	345.50894	110.26687	10.44746	0.0601975	0.17534095	3.1614075	21	1 5.4	20.2
419399 2010 AK_{35}	15.8	X	351.85154	295.28622	298.66238	10.50728	0.1405828	0.19066245	2.9896885	21	4 5.8	19.6
419400 2010 AE_{38}	17.2	X	204.22935	225.48034	121.79303	24.78052	0.0650376	0.35955022	1.9586778	21	2 14.1	19.5
419401 2010 AU_{38}	17.7	X	168.29223	302.53805	128.62691	24.33429	0.1088748	0.37357024	1.9093602	21	5 14.0	20.8
419402 2010 AY_{39}	15.9	X	67.59838	131.70853	307.08578	7.76036	0.1866341	0.18271308	3.0757872	21	2 3.7	19.6
419403 2010 AY_{41}	17.5	X	96.15427	44.32952	124.30444	24.29438	0.0692616	0.37760701	1.8957280	21	6 21.6	19.7
419404 2010 AM_{44}	15.8	X	49.45382	12.20714	113.25968	17.79205	0.1404272	0.18340358	3.0680623	21	3 6.4	19.7
419405 2010 AX_{48}	15.6	X	93.43045	180.96908	264.57088	8.20746	0.0621069	0.18584786	3.0411022	21	2 27.4	19.9
419406 2010 AG_{55}	16.4	X	77.37772	102.41852	347.22732	6.49927	0.1411205	0.18134153	3.0912765	21	2 27.5	20.2
419407 2010 AC_{59}	15.7	X	345.60430	50.03404	106.82711	28.48330	0.2022473	0.17490292	3.1666837	21	—	—
419408 2010 AS_{59}	17.0	X	183.59007	14.03441	82.62918	10.14174	0.2561365	0.21181606	2.7871700	21	6 29.9	21.9
419409 2010 AT_{64}	15.5	X	87.50693	287.91491	116.65012	9.62704	0.0699641	0.17388846	3.1789879	21	1 8.5	19.7
419410 2010 AR_{66}	16.2	X	65.60761	281.79267	144.85381	16.76804	0.2704865	0.17650984	3.1474349	21	1 28.9	19.6
419411 2010 AV_{66}	16.2	X	59.03648	134.24364	316.81726	9.33288	0.0767766	0.17467814	3.1693996	21	1 28.0	20.2
419412 2010 AM_{67}	16.7	X	117.61163	76.80073	301.53599	6.88226	0.3253206	0.18990140	2.9976708	21	2 11.4	21.4
419413 2010 AK_{70}	15.3	X	16.92915	351.05584	111.55467	25.95903	0.1477555	0.17208635	3.2011432	21	—	—
419414 2010 AS_{74}	15.4	X	1.97736	246.69680	304.26090	24.51096	0.2793584	0.18095590	3.0956669	21	2 11.9	18.6
419415 2010 AF_{78}	16.2	X	218.93839	300.69361	107.46363	8.74159	0.2247144	0.21258535	2.7804419	21	5 31.6	21.0
419416 2010 AN_{79}	16.5	X	44.74890	229.93821	284.21975	5.04314	0.2144635	0.18556881	3.0441501	21	4 4.4	19.9
419417 2010 AY_{79}	16.2	X	44.06790	115.15962	356.43344	15.44322	0.2481372	0.18090210	3.0962805	21	2 16.2	19.3
419418 2010 AF_{81}	15.2	X	88.06450	239.99121	133.26170	27.26212	0.1940683	0.16966666	3.2315065	21	—	—
419419 2010 AR_{103}	16.1	X	30.48754	220.97207	343.99679	7.70989	0.1339828	0.18399840	3.0614466	21	5 9.9	19.8
419420 2010 AY_{103}	15.9	X	93.68475	286.77258	188.09062	26.44441	0.2622580	0.18555092	3.0443457	21	5 10.3	20.6
419421 2010 AC_{116}	16.9	X	190.38292	263.81550	132.61533	6.78333	0.1175342	0.21483635	2.7609860	21	4 25.2	21.3
419422 2010 BA	16.6	X	329.24164	104.51924	64.31025	2.40256	0.1493842	0.17323657	3.1869579	21	—	—
419423 2010 BA_{3}	15.4	X	75.11830	55.02242	318.69355	17.48040	0.1020877	0.16848753	3.2465657	21	—	—
419424 2010 BB_{6}	15.7	X	28.63244	227.12904	252.97071	13.05880	0.2524308	0.17552227	3.1592299	21	1 15.7	18.9
419425 2010 BC_{6}	16.2	X	55.85240	197.91455	285.18788	11.54686	0.3447044	0.18272580	3.0756445	21	3 31.8	19.6
419426 2010 BU_{6}	15.9	X	345.53156	279.30437	287.22971	10.65753	0.1232824	0.17259173	3.1948911	21	2 24.8	20.2
419427 2010 BD_{8}	15.3	X	50.15696	224.77607	251.31042	14.88227	0.0538779	0.16872788	3.2434819	21	2 7.8	19.9
419428 2010 BR_{59}	16.4	X	169.28418	271.64880	222.81516	11.64451	0.2260896	0.22404551	2.6847997	21	7 31.5	21.3
419429 2010 BW_{62}	16.8	X	232.58086	262.00783	148.29082	13.34353	0.2719133	0.22567244	2.6718805	21	6 11.8	21.6
419430 2010 CD_{5}	16.2	X	128.13517	318.23975	134.54787	10.27112	0.0959151	0.19056336	2.9907247	21	5 1.8	20.7
419431 2010 CC_{33}	16.3	X	27.84528	205.62793	345.69683	9.12196	0.1341157	0.18891214	3.0081268	21	4 15.2	20.0
419432 2010 CN_{33}	16.7	X	24.51693	115.21928	17.57612	5.50222	0.1066729	0.17660196	3.1463404	21	1 30.7	20.6
419433 2010 CL_{35}	17.6	X	208.64330	92.24490	348.04302	19.75607	0.1092013	0.38107168	1.8842200	21	7 12.5	20.3
419434 2010 CY_{42}	16.2	X	52.82392	113.45159	338.16367	9.24710	0.2103143	0.17676370	3.1444208	21	2 1.2	19.6
419435 2010 CW_{43}	15.7	X	57.74423	175.20802	271.42431	7.83085	0.0587902	0.17915584	3.1163680	21	1 16.7	19.8
419436 2010 CT_{56}	15.5	X	58.33485	147.12286	329.74676	23.36028	0.0851042	0.18095458	3.0956819	21	2 24.5	19.6
419437 2010 CV_{58}	15.6	X	14.79007	163.33375	322.37120	8.23641	0.1126297	0.17293567	3.1906536	21	1 6.6	19.5
419438 2010 CP_{73}	16.0	X	104.36124	103.21310	318.15166	14.27880	0.1760593	0.18297529	3.0728480	21	2 28.3	20.4
419439 2010 CP_{74}	16.6	X	158.46745	359.74518	141.93257	5.77646	0.0512160	0.20977467	2.8052227	21	7 29.8	20.6
419440 2010 CQ_{75}	16.5	X	22.97950	72.09437	116.97684	3.67038	0.2110194	0.18389039	3.0626452	21	4 12.4	19.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419441 2010 CS_{76}	15.2	X	257.30865	205.35771	333.80324	9.17859	0.0135577	0.15059164	3.4989318	21	—	—
419442 2010 CN_{82}	17.8	X	176.24574	270.83576	165.93720	23.51414	0.1078852	0.37013152	1.9211680	21	5 26.3	20.9
419443 2010 CS_{82}	15.9	X	46.31257	300.57864	175.78618	15.74921	0.0547155	0.17117907	3.2124443	21	2 6.6	20.3
419444 2010 CN_{85}	15.4	X	237.56105	283.59697	341.99582	14.82004	0.0318627	0.16829378	3.2490571	21	1 16.2	20.3
419445 2010 CF_{99}	16.4	X	68.84032	350.82157	99.55889	2.36141	0.1571918	0.17531120	3.1617651	21	2 19.5	20.3
419446 2010 CZ_{100}	16.0	X	14.68421	283.89074	138.08445	13.01205	0.0724496	0.15885310	3.3765427	21	—	—
419447 2010 CX_{117}	16.7	X	50.34917	31.18815	84.33062	2.67136	0.1448556	0.18319184	3.0704260	21	2 19.1	20.2
419448 2010 CO_{124}	15.8	X	32.49346	203.08837	300.04045	7.39217	0.1343645	0.18073815	3.0981528	21	2 20.9	19.5
419449 2010 CE_{128}	16.2	X	47.55226	343.75297	103.70513	16.11460	0.2394710	0.17756579	3.1349445	21	1 16.8	19.2
419450 2010 CW_{128}	16.1	X	359.89587	349.70272	166.04741	15.71373	0.2205693	0.17450419	3.1715055	21	1 7.3	19.9
419451 2010 CJ_{129}	15.7	X	353.16743	122.08304	34.15139	15.60232	0.1849807	0.17294259	3.1905685	21	1 2.9	19.8
419452 2010 CC_{138}	16.5	X	51.80125	18.14596	133.52966	5.48630	0.2029534	0.18351119	3.0668628	21	4 18.8	20.0
419453 2010 CN_{139}	16.3	X	24.66909	20.64502	176.54384	11.57296	0.1474245	0.18419751	3.0592400	21	4 25.1	19.9
419454 2010 CX_{141}	15.9	X	213.11492	338.34371	124.08457	26.35008	0.0642435	0.21974579	2.7197084	21	8 13.1	19.9
419455 2010 CY_{141}	15.7	X	355.23833	174.76002	320.52717	11.39646	0.0741535	0.17379161	3.1801689	21	—	—
419456 2010 CJ_{142}	16.1	X	64.33826	50.24890	121.97122	13.11311	0.0453812	0.19962672	2.8995032	21	5 15.4	20.2
419457 2010 CQ_{144}	15.7	X	46.87599	224.41236	289.65759	13.75518	0.0910274	0.18355939	3.0663259	21	3 21.3	19.9
419458 2010 CC_{146}	15.9	X	74.94278	355.32032	111.20634	16.92160	0.0694999	0.18293129	3.0733407	21	3 13.0	20.3
419459 2010 CX_{147}	16.8	X	73.80962	328.22832	169.78115	10.69083	0.2245160	0.18618503	3.0374295	21	5 9.5	20.9
419460 2010 CJ_{148}	16.8	X	96.63408	220.80969	328.99604	6.82308	0.2328623	0.20449908	2.8532630	21	8 10.7	21.2
419461 2010 CJ_{153}	15.5	X	59.82181	120.24966	5.25503	17.18624	0.1621018	0.18214420	3.0821881	21	3 21.9	19.1
419462 2010 CW_{157}	16.3	X	10.82806	171.07324	358.12169	6.40570	0.1671103	0.17638125	3.1489645	21	2 21.1	19.8
419463 2010 CX_{157}	18.4	X	167.83376	298.66683	156.94455	22.88416	0.1122281	0.37388983	1.9082720	21	6 12.6	21.4
419464 2010 CC_{180}	18.6	X	129.55223	217.00049	352.32979	15.24548	0.3219451	0.38435779	1.8734650	21	10 11.9	22.0
419465 2010 CK_{180}	15.9	X	89.40780	104.94072	355.72739	16.13695	0.1933002	0.18536758	3.0463528	21	4 1.7	20.1
419466 2010 CO_{181}	16.1	X	348.06179	199.51660	347.85868	10.32970	0.1357339	0.17629516	3.1499896	21	2 9.9	20.0
419467 2010 CA_{182}	15.8	X	154.73489	64.60734	321.76280	8.25122	0.0628956	0.18162523	3.0880567	21	3 2.8	20.4
419468 2010 CS_{183}	16.4	X	64.06193	114.11377	10.63471	12.48933	0.1917206	0.18155167	3.0888907	21	3 30.9	20.0
419469 2010 CA_{184}	16.2	X	40.97383	66.30555	92.29632	14.94867	0.2870813	0.18306339	3.0718621	21	4 24.1	19.4
419470 2010 CE_{185}	15.5	X	60.06115	101.96567	343.07569	23.83303	0.1911101	0.17591763	3.1544947	21	2 9.4	19.4
419471 2010 CQ_{204}	16.7	X	194.82203	282.34745	106.56062	9.53179	0.2239176	0.21261422	2.7801902	21	4 22.2	21.6
419472 2010 DW_{1}	19.9	X	134.17783	9.63183	157.12498	23.76826	0.2001839	0.72683804	1.2251171	21	9 15.9	19.8
419473 2010 DS_{5}	16.3	X	157.17721	285.95855	131.54444	9.01170	0.0948521	0.19391454	2.9561681	21	4 19.1	20.9
419474 2010 DN_{32}	16.2	X	81.41606	38.46349	82.02562	14.40186	0.2012674	0.17440473	3.1727112	21	4 28.1	20.7
419475 2010 DE_{37}	16.9	X	46.40304	127.74060	347.33160	4.41220	0.1146693	0.17618495	3.1513031	21	2 11.1	20.7
419476 2010 DY_{40}	16.2	X	342.88027	76.98451	114.34232	10.16592	0.2061687	0.18109819	3.0940451	21	1 25.1	20.0
419477 2010 DD_{42}	16.3	X	90.04839	111.64811	323.50923	9.02064	0.1168763	0.18225566	3.0809315	21	2 21.8	20.5
419478 2010 DN_{43}	16.2	X	53.02082	235.80445	322.98048	4.67061	0.1607798	0.19174480	2.9784272	21	6 14.8	19.9
419479 2010 DS_{49}	16.2	X	29.03437	357.50924	108.23962	11.41359	0.1421263	0.17755963	3.1350170	21	1 1.2	19.8
419480 2010 DC_{52}	16.1	X	53.75387	281.77100	243.52206	11.73398	0.2363391	0.17790256	3.1309869	21	5 13.5	19.8
419481 2010 DE_{61}	15.6	X	302.59794	105.87463	76.96401	22.76444	0.0438040	0.18069441	3.0986528	21	—	—
419482 2010 DW_{66}	15.5	X	177.40015	44.61296	266.89273	21.41671	0.0965281	0.18461827	3.0545901	21	—	—
419483 2010 DA_{75}	15.8	X	349.65097	53.61685	169.37951	13.17037	0.0945470	0.18255207	3.0775956	21	3 31.9	19.7
419484 2010 EJ_{7}	15.4	X	329.73933	75.33050	87.31080	15.14155	0.1559618	0.17828356	3.1265246	21	—	—
419485 2010 EK_{9}	16.1	X	84.20838	77.12633	351.06978	8.01140	0.1014708	0.18810003	3.0167788	21	2 5.2	20.0
419486 2010 EK_{16}	16.3	X	168.25462	344.17399	113.06335	9.43657	0.1115180	0.21321344	2.7749787	21	6 16.3	20.6
419487 2010 EM_{29}	16.8	X	83.38748	316.17337	148.95870	4.25212	0.2590772	0.18426860	3.0584531	21	4 14.8	20.9
419488 2010 EB_{30}	15.9	X	27.76180	332.29163	156.26413	15.71906	0.2315356	0.17475337	3.1684900	21	1 27.7	19.1
419489 2010 EH_{36}	15.4	X	39.22924	134.14463	309.23309	15.34854	0.1031568	0.17434173	3.1734755	21	—	—
419490 2010 ET_{43}	16.5	X	64.03091	116.72149	331.22931	10.80670	0.2076001	0.17701831	3.1414050	21	2 14.9	20.2
419491 2010 EY_{45}	17.8	X	124.26639	64.05272	20.75699	20.84286	0.0929796	0.35838464	1.9629224	21	3 28.7	19.7
419492 2010 ES_{75}	16.2	X	69.57665	312.41733	186.12239	12.28936	0.0980417	0.18230268	3.0804016	21	4 14.0	20.3
419493 2010 EF_{105}	16.3	X	347.30010	95.26948	49.37456	18.72132	0.2916314	0.16711712	3.2642902	21	—	—
419494 2010 EF_{108}	16.2	X	87.25712	288.00199	183.16379	12.64386	0.1766758	0.18253644	3.0777712	21	4 15.3	20.4
419495 2010 EJ_{124}	15.3	X	22.98869	169.25243	1.02488	18.31219	0.0764154	0.17693948	3.1423379	21	3 16.2	19.4
419496 2010 ES_{124}	16.3	X	27.76946	144.73490	5.21237	15.84784	0.1634963	0.17668629	3.1453391	21	3 2.6	19.9
419497 2010 EC_{126}	17.8	X	135.19964	128.01294	358.77641	19.55454	0.0751819	0.36958658	1.9230560	21	6 5.8	20.5
419498 2010 ES_{126}	16.1	X	344.00358	53.53010	122.01449	13.37483	0.2961120	0.16792041	3.2538715	21	—	—
419499 2010 EV_{127}	15.8	X	341.98660	107.98797	78.32742	15.99766	0.1860705	0.17317761	3.1876813	21	1 23.9	19.9
419500 2010 EP_{140}	15.7	X	59.87411	259.64719	280.94829	9.07090	0.0737408	0.18833941	3.0142220	21	5 18.4	19.7
419501 2010 FZ_{25}	15.9	X	15.20856	161.37265	356.63999	11.11365	0.0662849	0.17255412	3.1953553	21	2 19.9	20.1
419502 2010 FY_{27}	16.1	X	53.29218	106.15775	29.66684	16.03839	0.1916328	0.17975456	3.1094443	21	3 31.9	19.7
419503 2010 FE_{83}	16.0	X	69.21218	307.94579	168.40889	16.60349	0.1527444	0.17875138	3.1210672	21	3 24.3	19.9
419504 2010 FG_{83}	15.4	X	19.56823	67.47043	99.44949	26.71829	0.1914955	0.17398249	3.1778425	21	3 17.5	19.5
419505 2010 FG_{98}	16.4	X	140.92792	37.69581	54.98576	7.00073	0.0657418	0.18664544	3.0324324	21	5 9.5	20.8
419506 2010 GE_{11}	15.9	X	279.28694	102.15060	108.12529	10.02951	0.0554280	0.17427684	3.1742632	21	—	—
419507 2010 GW_{27}	16.0	X	11.57062	144.77047	34.08788	20.13777	0.2263869	0.17927808	3.1149512	21	3 13.9	19.5
419508 2010 GR_{62}	16.0	X	19.93289	132.82654	49.38433	29.63737	0.3281645	0.17772677	3.1330512	21	4 14.1	18.9
419509 2010 GB_{66}	16.2	X	46.67351	313.62663	202.50012	15.62302	0.1957310	0.17972686	3.1097638	21	4 12.4	19.7
419510 2010 GB_{113}	15.7	X	93.86959	73.60648	61.20193	10.25548	0.0547918	0.18247833	3.0784245	21	5 5.7	20.1
419511 2010 GR_{116}	17.9	X	26.33511	88.81753	203.39141	7.70425	0.2052360	0.28444336	2.2898420	21	9 24.9	19.9
419512 2010 GV_{145}	16.0	X	23.59719	119.92471	59.92898	17.47561	0.1790612	0.17982079	3.1086807	21	4 7.9	19.7
419513 2010 GY_{163}	16.2	X	271.00763	344.23238	221.59060	7.08478	0.0420420	0.16928395	3.2363752	21	—	—
419514 2010 GY_{172}	15.5	X	49.74196	53.06783	95.03829	11.45465	0.0664370	0.18082579	3.0971517	21	3 30.5	19.8
419515 2010 HS_{10}	13.1	X	20.62094	321.37482	277.35864	10.91423	0.0420759	0.08217752	5.2396309	21	6 9.9	19.8
419516 2010 HN_{14}	15.7	X	55.74072	93.08368	322.22882	14.46509	0.0777120	0.17028803	3.2236407	21	—	—
419517 2010 HU_{22}	13.2	X	291.52583	38.23956	306.04129	20.53422	0.0595711	0.08207627	5.2439393	21	6 21.4	20.2
419518 2010 HS_{27}	16.5	X	81.05082	149.58570	317.21471	8.30632	0.1324180	0.18798481	3.0180114	21	3 19.8	20.5
419519 2010 HZ_{100}	17.6	X	105.02372	330.06578	344.55532	7.02821	0.2463510	0.29597491	2.2299722	21	—	—
419520 2010 JG_{1}	17.5	X	102.80534	89.33996	69.51120	24.95649	0.1886721	0.36745369	1.9304904	21	6 29.9	19.9

Planet		H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
		m		°	°	°	°		°				
419521	2010 JQ_{34}	18.2	X	168.61980	83.76524	178.76094	3.20530	0.1432188	0.31262521	2.1500739	21	—	—
419522	2010 JU_{38}	18.4	X	156.05937	146.02626	211.73496	21.90927	0.0643893	0.33753777	2.0429346	21	—	—
419523	2010 JA_{65}	15.8	X	45.93055	48.93852	68.76107	19.71503	0.1932890	0.17959379	3.1112997	21	2 28.6	19.7
419524	2010 JV_{80}	13.6	X	2.24998	32.13379	245.74394	21.11383	0.1435863	0.08314856	5.1987574	21	6 29.6	19.9
419525	2010 JD_{82}	17.8	X	129.14525	196.77129	83.73654	7.83122	0.1674392	0.30647587	2.1787389	21	—	—
419526	2010 JH_{123}	16.7	X	358.46707	180.30401	134.74782	16.12344	0.2928225	0.26878047	2.3779584	21	9 12.6	17.9
419527	2010 KN_{4}	15.8	X	0.50320	254.76437	260.07887	12.87114	0.1830843	0.17357796	3.1827778	21	1 10.6	19.6
419528	2010 KA_{33}	15.7	X	345.48705	270.26310	319.77383	13.64856	0.2720369	0.18040655	3.1019480	21	3 6.4	19.3
419529	2010 KL_{73}	17.0	X	342.80562	33.81792	268.47732	9.09519	0.2305092	0.26190945	2.4193680	21	6 19.5	18.5
419530	2010 KF_{78}	16.6	X	24.21529	352.43340	202.44515	1.50596	0.1487029	0.18564086	3.0433624	21	4 18.4	19.8
419531	2010 KT_{88}	17.5	X	312.08414	221.29533	141.49702	5.80314	0.2463283	0.26325305	2.4111290	21	7 14.9	19.9
419532	2010 KM_{94}	17.8	X	6.29655	31.82693	275.03945	4.32903	0.2405775	0.26823746	2.3811665	21	9 5.5	19.4
419533	2010 KJ_{104}	15.6	X	50.61925	137.83266	313.00748	15.38424	0.2081470	0.17316065	3.1878894	21	1 26.8	18.9
419534	2010 KT_{117}	17.7	X	85.71051	200.27530	93.61741	8.62033	0.2651862	0.29415125	2.2391795	21	12 17.9	21.3
419535	2010 LS_{4}	16.8	X	15.76425	357.00767	314.76912	10.89249	0.2638740	0.27114136	2.3641346	21	10 7.5	19.0
419536	2010 LE_{82}	17.4	X	18.62380	255.36048	144.72724	11.64958	0.1647217	0.28682257	2.2771615	21	—	—
419537	2010 MO_{6}	17.6	X	292.70730	180.83944	217.37280	4.15644	0.2242658	0.26279464	2.4139321	21	8 5.6	20.2
419538	2010 MF_{14}	16.3	X	23.87634	117.01843	45.09448	16.95548	0.2188011	0.17730820	3.1379800	21	3 17.2	19.8
419539	2010 MA_{65}	17.6	X	20.20902	226.66888	79.52904	4.08748	0.1868093	0.26852405	2.3794720	21	10 3.3	19.8
419540	2010 NO_{3}	17.7	X	267.88606	353.43828	7.20692	1.21054	0.2025821	0.25618968	2.4552457	21	5 15.8	21.4
419541	2010 NH_{6}	17.1	X	79.79514	1.79726	301.10544	9.93580	0.0617073	0.28809922	2.2704293	21	12 3.7	20.1
419542	2010 NX_{21}	17.9	X	29.92833	333.82818	356.07948	5.74985	0.1397824	0.27389547	2.3482599	21	11 11.9	20.7
419543	2010 OC_{4}	16.2	X	0.12190	293.75837	277.47685	12.41421	0.2017533	0.17602883	3.1531661	21	3 17.3	19.9
419544	2010 OX_{34}	15.8	X	196.76663	322.77853	39.35915	13.29057	0.1834929	0.22969669	2.6405814	21	3 22.4	20.3
419545	2010 OS_{50}	17.4	X	19.31106	304.67801	53.14310	5.97619	0.2460964	0.27533480	2.3400689	21	12 24.8	20.0
419546	2010 OG_{64}	15.8	X	274.47684	138.55169	140.88865	18.43808	0.0097226	0.16966847	3.2314836	21	3 18.1	20.5
419547	2010 OV_{74}	15.5	X	84.11456	9.83233	141.37001	28.63726	0.0992281	0.18221195	3.0814241	21	5 27.6	20.4
419548	2010 OR_{81}	17.3	X	212.84033	337.31312	36.82811	11.15404	0.1302354	0.23498912	2.6007836	21	4 16.3	21.2
419549	2010 OZ_{83}	15.6	X	324.66131	196.63461	54.96854	12.20676	0.0457641	0.17464387	3.1698142	21	4 10.8	20.0
419550	2010 OM_{90}	17.4	X	193.35587	136.10018	246.27488	0.26231	0.2284052	0.23149261	2.6269066	21	4 7.6	21.8
419551	2010 OM_{106}	17.0	X	162.77127	102.74497	310.57010	10.44274	0.1972677	0.22863185	2.6487739	21	4 14.1	21.6
419552	2010 OF_{118}	17.7	X	223.34905	17.85937	18.34419	11.29470	0.1373914	0.24119016	2.5560126	21	5 19.9	21.8
419553	2010 PA_{25}	17.6	X	349.65682	134.99385	174.07717	6.21236	0.1896238	0.26625994	2.3929419	21	7 22.6	19.5
419554	2010 PA_{52}	16.9	X	211.74054	83.46235	0.94374	16.80706	0.1866564	0.24565339	2.5249583	21	7 14.4	21.3
419555	2010 PJ_{62}	17.3	X	160.35865	135.50210	125.67355	4.74148	0.1862048	0.29710972	2.2242903	21	—	—
419556	2010 PO_{73}	18.2	X	353.74650	19.14626	306.33217	0.51093	0.2028155	0.26974377	2.3722936	21	9 3.3	19.4
419557	2010 PC_{77}	18.0	X	16.84426	292.31775	31.92896	1.55220	0.1939784	0.27346841	2.3507040	21	10 24.1	19.9
419558	2010 PO_{77}	17.2	X	334.71224	356.46456	316.19684	2.18601	0.3074300	0.26152231	2.4217551	21	6 1.3	18.9
419559	2010 QA_{1}	17.7	X	329.31464	219.22078	145.25028	2.78642	0.2270481	0.26913092	2.3758936	21	9 4.7	18.9
419560	2010 QX_{3}	17.5	X	27.96439	13.97874	2.94243	4.99265	0.1861100	0.28554448	2.2839515	21	—	—
419561	2010 RL_{4}	17.8	X	317.44546	271.23684	114.16138	3.52591	0.1989407	0.26859779	2.3790365	21	9 14.6	19.5
419562	2010 RF_{5}	17.3	X	341.20362	180.00172	149.91319	6.08039	0.1184391	0.26453096	2.4033575	21	8 10.7	19.6
419563	2010 RS_{7}	17.3	X	232.30942	324.94202	147.98480	7.74484	0.0728668	0.27032576	2.3688875	21	9 23.9	20.3
419564	2010 RM_{9}	17.8	X	328.28653	40.65072	317.26754	2.83912	0.2347921	0.26561133	2.3968360	21	8 18.4	19.2
419565	2010 RT_{10}	17.5	X	23.55425	226.57212	194.97026	5.48777	0.1368972	0.29149360	2.2527692	21	—	—
419566	2010 RN_{12}	17.7	X	25.45394	347.27202	326.73099	5.43798	0.2513329	0.27429984	2.3459514	21	10 31.8	20.2
419567	2010 RX_{18}	17.3	X	43.52493	107.16782	290.33912	8.76108	0.1798606	0.29345124	2.2427391	21	—	—
419568	2010 RS_{47}	17.3	X	25.24231	143.20574	183.64579	6.35125	0.1425135	0.27329259	2.3517121	21	11 4.3	19.8
419569	2010 RQ_{48}	18.0	X	351.75062	203.80172	175.76791	0.84164	0.1848743	0.27436111	2.3456021	21	11 27.3	19.9
419570	2010 RY_{48}	18.1	X	319.82135	206.79819	175.33584	1.76943	0.1488425	0.26662825	2.3907378	21	9 17.7	20.1
419571	2010 RL_{50}	18.0	X	23.51151	305.58458	19.99360	1.45913	0.2032174	0.27261871	2.3555859	21	11 7.9	20.4
419572	2010 RQ_{50}	18.1	X	20.11551	116.55179	177.38604	2.18507	0.2200697	0.26623792	2.3930739	21	9 16.4	20.0
419573	2010 RE_{52}	17.9	X	316.05964	168.20373	153.70287	3.42895	0.1881835	0.25446108	2.4663524	21	5 31.7	20.5
419574	2010 RE_{53}	17.4	X	61.88991	157.82065	198.48613	6.26926	0.1489982	0.28895034	2.2659687	21	—	—
419575	2010 RH_{53}	17.4	X	276.43413	80.36600	301.61554	3.59373	0.1946259	0.25881744	2.4385988	21	6 25.7	20.4
419576	2010 RY_{58}	17.6	X	85.26642	311.69875	326.62859	6.62801	0.0994610	0.27884424	2.3203933	21	11 8.5	20.9
419577	2010 RB_{65}	17.6	X	312.67118	159.49783	228.95083	7.42649	0.2529473	0.26863277	2.3788299	21	8 23.8	19.8
419578	2010 RV_{67}	17.6	X	258.17795	317.76967	39.59657	5.38278	0.1772084	0.24081437	2.5586710	21	5 4.9	21.5
419579	2010 RL_{71}	17.9	X	320.56365	42.32140	341.08365	2.12252	0.1972675	0.26889887	2.3772602	21	9 16.8	19.5
419580	2010 RA_{79}	17.9	X	302.67249	253.62563	148.87831	2.56774	0.2306808	0.26722015	2.3872061	21	9 1.9	20.0
419581	2010 RD_{80}	17.9	X	303.42359	157.34363	217.92584	1.98076	0.2187318	0.26272493	2.4143591	21	7 22.8	20.4
419582	2010 RQ_{81}	17.6	X	11.49516	176.64029	157.15280	6.86212	0.1485051	0.27182929	2.3601443	21	10 23.7	19.9
419583	2010 RY_{81}	17.6	X	341.89269	24.74253	12.71262	7.15397	0.1403738	0.27570158	2.3379930	21	11 27.8	19.8
419584	2010 RC_{94}	18.2	X	51.96040	68.49076	235.09475	4.89999	0.1818539	0.27894538	2.3198323	21	11 15.7	21.0
419585	2010 RN_{96}	17.5	X	83.11402	299.53928	282.83385	3.67527	0.0576667	0.25953582	2.4340968	21	8 14.6	20.5
419586	2010 RE_{98}	17.7	X	299.70350	97.80429	339.92854	8.80509	0.1607727	0.27261200	2.3556245	21	10 28.9	20.0
419587	2010 RK_{98}	17.5	X	122.58599	62.16670	203.97157	8.75818	0.1198677	0.28315637	2.2967752	21	12 8.3	21.0
419588	2010 RA_{102}	17.8	X	9.36696	39.64469	311.61025	1.56789	0.2292138	0.27376783	2.3489897	21	11 25.6	19.9
419589	2010 RS_{103}	17.5	X	4.22088	345.59031	349.86602	2.37798	0.1915416	0.26940306	2.3742933	21	10 13.9	19.3
419590	2010 RD_{105}	17.9	X	305.63505	71.39330	0.55169	2.22124	0.1784383	0.27101577	2.3648649	21	11 2.9	19.6
419591	2010 RC_{107}	17.5	X	70.50234	245.62365	18.05485	3.50343	0.1761821	0.26902396	2.3765233	21	10 13.7	20.5
419592	2010 RX_{110}	18.2	X	318.46112	205.27598	151.43992	1.37839	0.1847708	0.26194540	2.4191466	21	7 30.1	20.3
419593	2010 RV_{111}	17.7	X	54.20591	117.93573	164.34632	2.44410	0.2150245	0.27283789	2.3543241	21	10 25.8	20.6
419594	2010 RS_{112}	17.2	X	107.13324	32.63379	229.88847	8.15078	0.0229359	0.27503231	2.3417844	21	11 8.4	20.1
419595	2010 RW_{112}	17.9	X	328.70510	123.09626	284.25387	4.59785	0.2084878	0.27270368	2.3550966	21	11 18.1	19.5
419596	2010 RB_{113}	17.9	X	340.42178	144.19795	311.23982	5.74126	0.0939924	0.28842342	2.2687277	21	—	—
419597	2010 RH_{113}	17.8	X	351.51256	74.25967	248.53305	5.32249	0.1327872	0.26269956	2.4145145	21	8 17.9	20.1
419598	2010 RO_{115}	17.4	X	18.94763	341.46054	316.70262	3.80395	0.2014715	0.26838901	2.3802700	21	9 16.3	19.4
419599	2010 RT_{117}	17.5	X	294.54842	292.71161	107.73829	3.21625	0.2111103	0.26240334	2.4163313	21	8 17.5	19.9
419600	2010 RT_{118}	17.2	X	324.29592	230.52865	156.01495	7.27316	0.1306533	0.26767852	2.3844801	21	10 8.1	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419601 2010 RE_{119}	17.3	X	342.07784	333.58889	32.25727	6.67582	0.1435656	0.26858047	2.3791387	21	10 11.6	19.4
419602 2010 RT_{120}	18.2	X	43.82586	337.51143	329.78573	5.17628	0.2259462	0.27693710	2.3310341	21	11 14.8	21.1
419603 2010 RO_{121}	17.7	X	259.70250	197.52716	253.69172	5.56963	0.0778694	0.26968928	2.3726131	21	9 25.2	20.6
419604 2010 RF_{125}	17.7	X	34.71760	155.92010	134.21770	3.05857	0.1694738	0.26844588	2.3799339	21	10 1.0	20.2
419605 2010 RJ_{125}	18.1	X	308.88894	259.26238	119.11812	2.25709	0.1960603	0.26335215	2.4105241	21	8 12.8	20.4
419606 2010 RQ_{128}	17.8	X	320.04269	128.83928	223.51775	5.67288	0.1502605	0.26220619	2.4175423	21	7 29.3	20.2
419607 2010 RJ_{136}	18.4	X	294.10551	222.80594	114.85249	2.99836	0.2413325	0.25216997	2.4812688	21	5 12.1	21.6
419608 2010 RM_{140}	16.7	X	17.24273	319.91302	345.35136	20.54860	0.0873980	0.26539126	2.3981609	21	9 8.8	19.2
419609 2010 RX_{140}	18.0	X	269.29148	81.38652	343.70037	4.09730	0.2201554	0.26301950	2.4125561	21	8 12.8	21.1
419610 2010 RL_{141}	18.1	X	346.95911	84.60292	229.42397	1.12444	0.1861652	0.26218582	2.4176675	21	7 25.4	19.7
419611 2010 RH_{142}	17.8	X	290.82739	153.37621	257.94405	3.74650	0.1065128	0.26570128	2.3962950	21	9 11.2	20.6
419612 2010 RJ_{146}	18.4	X	341.69179	198.12638	208.48877	2.62372	0.1847186	0.27592609	2.3367247	21	12 18.5	20.2
419613 2010 RY_{149}	17.8	X	4.69851	0.38668	332.02750	4.42096	0.1985739	0.27099427	2.3649900	21	10 10.1	19.8
419614 2010 RA_{152}	18.0	X	40.99069	109.91091	178.19187	6.86462	0.1120365	0.26727769	2.3868634	21	9 27.2	20.6
419615 2010 RS_{164}	17.6	X	136.85528	352.06129	272.57708	4.36105	0.1257953	0.28880353	2.2667366	21	12 21.1	21.0
419616 2010 RT_{166}	17.4	X	187.80736	320.73404	77.15401	3.64651	0.1816802	0.23531545	2.5983786	21	4 22.4	21.7
419617 2010 RS_{173}	18.0	X	97.89682	353.26254	276.22699	1.23750	0.1908758	0.27808419	2.3246194	21	11 21.0	21.7
419618 2010 RE_{175}	17.4	X	267.70710	50.27114	19.32959	7.43889	0.0898777	0.26272480	2.4143599	21	9 9.3	20.3
419619 2010 RC_{182}	17.7	X	348.14477	202.08218	145.14005	9.31315	0.2131547	0.26780132	2.3837511	21	10 1.1	19.3
419620 2010 RK_{182}	17.3	X	45.33643	20.46476	284.54796	6.27105	0.1201311	0.27563371	2.3383768	21	10 27.0	20.2
419621 2010 SN	17.7	X	330.82780	197.13920	171.48948	6.63028	0.1406953	0.26637748	2.3922380	21	9 20.5	19.8
419622 2010 SQ_{11}	17.9	X	48.85542	322.04359	349.44573	6.33318	0.2509066	0.27829516	2.3234444	21	11 30.5	21.2
419623 2010 SR_{14}	18.1	X	214.53311	288.31082	156.63278	2.67177	0.1631962	0.25283932	2.4768876	21	7 14.5	22.0
419624 2010 SO_{16}	20.5	X	106.40278	109.15477	40.36490	14.51544	0.0754426	0.98040927	1.0035317	21	—	—
419625 2010 SQ_{18}	17.5	X	342.94727	47.68026	29.78182	4.70252	0.0802753	0.28396612	2.2924069	21	—	—
419626 2010 SY_{18}	18.0	X	316.48059	219.33893	187.58826	6.43212	0.2598580	0.26792324	2.3830279	21	10 10.7	19.3
419627 2010 SM_{22}	18.1	X	302.68355	251.27367	165.38259	2.31940	0.1576320	0.26982462	2.3718197	21	10 7.2	20.1
419628 2010 SL_{23}	17.5	X	88.05058	286.14048	355.94935	5.77834	0.2092844	0.28196587	2.3032355	21	11 28.4	21.1
419629 2010 SS_{29}	17.5	X	357.19391	320.11087	43.15013	2.04865	0.1972823	0.27117076	2.3639638	21	11 13.9	19.2
419630 2010 SK_{34}	17.7	X	295.28667	62.15594	8.47282	5.65341	0.1771192	0.26708144	2.3880326	21	10 9.5	19.9
419631 2010 SD_{42}	17.8	X	275.09601	275.82227	124.71465	2.01930	0.1909851	0.25760008	2.4462756	21	7 20.5	20.9
419632 2010 TO_{3}	17.4	X	31.60584	3.89053	341.73960	6.70676	0.1332068	0.27549587	2.3391567	21	12 6.4	20.3
419633 2010 TU_{3}	17.9	X	352.66549	145.77330	176.22450	3.59008	0.1277249	0.26358937	2.4090776	21	8 21.2	20.1
419634 2010 TK_{5}	18.0	X	319.75852	216.57674	136.11244	3.29222	0.2090258	0.26135196	2.4228073	21	7 22.2	20.1
419635 2010 TG_{9}	17.9	X	53.20653	106.95997	203.71362	2.20714	0.0972404	0.27588565	2.3369530	21	11 14.1	20.6
419636 2010 TF_{13}	17.8	X	341.69017	325.17485	340.36741	4.80570	0.1235490	0.25591594	2.4569962	21	7 4.3	20.3
419637 2010 TY_{13}	18.1	X	261.51624	153.18890	257.36576	3.37171	0.0919074	0.25794518	2.4440932	21	7 30.8	21.3
419638 2010 TO_{17}	17.8	X	262.26814	136.17757	320.60322	3.86773	0.1218468	0.26698903	2.3885836	21	9 30.5	20.8
419639 2010 TU_{19}	17.3	X	97.04716	207.78295	89.06836	6.76931	0.1602102	0.28511949	2.2862205	21	12 23.5	20.6
419640 2010 TL_{22}	18.3	X	233.24397	116.59315	21.00059	2.85690	0.1357837	0.27045387	2.3681393	21	10 17.7	21.4
419641 2010 TP_{22}	17.5	X	114.98022	246.86057	17.95158	6.98576	0.0918996	0.27887899	2.3202005	21	11 24.8	20.8
419642 2010 TY_{25}	17.5	X	6.53178	54.73614	227.36662	4.06665	0.0511914	0.25740623	2.4475037	21	7 13.7	20.4
419643 2010 TA_{26}	17.9	X	323.43943	208.22803	203.36886	6.29767	0.0896365	0.27602717	2.3361542	21	11 14.8	20.1
419644 2010 TU_{28}	18.0	X	334.13740	7.05262	329.34510	1.74986	0.2174759	0.26292256	2.4131491	21	7 29.2	19.6
419645 2010 TP_{29}	18.2	X	355.54981	118.46673	215.38809	1.71892	0.0980920	0.26586427	2.3953155	21	9 13.8	20.4
419646 2010 TT_{35}	17.4	X	3.93312	284.30071	67.87835	3.36468	0.1233970	0.27075482	2.3663842	21	10 31.9	19.8
419647 2010 TV_{35}	17.1	X	126.08041	38.20075	44.08065	5.09064	0.1664263	0.22747572	2.6577412	21	4 18.1	20.9
419648 2010 TW_{37}	17.9	X	309.79333	5.02265	0.89539	2.07665	0.2460957	0.26021034	2.4298885	21	7 16.4	20.0
419649 2010 TX_{41}	18.0	X	264.54975	78.84170	353.90971	2.77324	0.0580766	0.26302331	2.4125328	21	9 11.7	21.0
419650 2010 TG_{49}	17.1	X	84.90606	229.76585	56.91727	3.45876	0.1995870	0.27859405	2.3217823	21	12 1.1	20.7
419651 2010 TJ_{58}	18.0	X	291.00144	275.56617	82.85758	2.61498	0.1981833	0.25782930	2.4448255	21	6 11.6	21.0
419652 2010 TG_{62}	17.4	X	101.63257	320.21277	275.51973	4.11634	0.0745109	0.26736299	2.3863557	21	9 28.3	20.7
419653 2010 TT_{62}	17.8	X	351.69387	112.95147	235.03993	4.51225	0.2018767	0.26854180	2.3793671	21	10 5.1	19.5
419654 2010 TW_{69}	18.1	X	306.49374	240.12600	203.37281	4.36861	0.0884118	0.27850036	2.3223029	21	12 2.2	20.3
419655 2010 TC_{73}	18.1	X	265.83110	46.43326	11.40856	3.87827	0.1722249	0.25856959	2.4401569	21	8 5.9	21.2
419656 2010 TC_{79}	17.8	X	307.87895	321.44974	45.77553	2.12645	0.2049303	0.25888503	2.4381744	21	7 22.5	20.2
419657 2010 TZ_{84}	17.5	X	28.20687	275.00379	30.16922	4.87429	0.0809076	0.26729672	2.3867502	21	9 27.9	20.1
419658 2010 TG_{88}	17.9	X	41.57426	241.05936	153.90068	2.13904	0.0586404	0.29077868	2.2564602	21	—	—
419659 2010 TH_{92}	17.7	X	316.81667	144.91442	228.97453	6.45834	0.1695845	0.26452182	2.4034129	21	8 22.5	20.1
419660 2010 TN_{101}	17.4	X	167.59385	56.19396	32.28935	11.40533	0.0669789	0.24406097	2.5359294	21	5 29.5	21.1
419661 2010 TM_{102}	17.1	X	65.65883	306.07380	41.27328	6.99932	0.1460610	0.28710310	2.2756779	21	—	—
419662 2010 TV_{102}	17.6	X	71.07224	268.30678	40.86422	7.48789	0.1285456	0.28024675	2.3126451	21	12 7.9	20.8
419663 2010 TG_{104}	17.6	X	311.10475	315.85900	28.97869	6.63070	0.1544166	0.25737605	2.4476949	21	7 2.4	20.3
419664 2010 TE_{110}	17.6	X	213.14141	75.42502	49.66053	6.67206	0.0701150	0.26388690	2.4072664	21	9 17.4	20.9
419665 2010 TS_{113}	17.9	X	284.95672	95.01347	206.12012	15.87939	0.1666828	0.24039607	2.5616383	21	3 21.8	21.7
419666 2010 TZ_{137}	16.7	X	243.96931	339.16332	42.80198	7.95828	0.3539406	0.23968652	2.5666913	21	5 9.0	21.3
419667 2010 TT_{141}	17.5	X	326.87448	108.24678	253.84511	5.93960	0.1282099	0.26177101	2.4202209	21	8 28.8	20.0
419668 2010 TN_{142}	17.3	X	286.79631	41.76420	274.25210	4.64285	0.1459810	0.24207705	2.5497659	21	4 15.4	21.0
419669 2010 TC_{144}	17.1	X	62.41562	259.82064	10.61766	10.24279	0.2160078	0.26615320	2.3935817	21	10 16.8	20.3
419670 2010 TD_{148}	16.8	X	339.29810	184.31370	35.73760	6.56504	0.0943959	0.22736029	2.6586406	21	3 6.2	20.1
419671 2010 TP_{153}	16.4	X	107.73612	258.69163	259.03570	3.80633	0.1580254	0.22412588	2.6841578	21	7 2.9	20.3
419672 2010 TB_{168}	18.0	X	28.76545	59.91870	239.90298	0.68191	0.1891153	0.26599129	2.3945529	21	10 6.4	20.3
419673 2010 TC_{170}	17.6	X	298.17724	308.54411	85.51112	2.41561	0.1827342	0.26061239	2.4273888	21	8 19.4	20.0
419674 2010 TD_{172}	18.3	X	296.19956	27.63598	353.74660	5.04234	0.2221513	0.25907381	2.4369898	21	7 20.7	21.0
419675 2010 TW_{172}	17.9	X	279.31260	196.38538	223.36610	2.40634	0.1626177	0.26099461	2.4250183	21	8 27.1	20.7
419676 2010 TQ_{173}	17.6	X	215.78782	293.89849	92.45199	5.19604	0.1315054	0.23952165	2.5678690	21	5 4.7	21.6
419677 2010 TJ_{179}	17.4	X	298.75637	264.84346	152.79247	7.76737	0.0921101	0.26957915	2.3732593	21	10 11.8	20.0
419678 2010 TJ_{180}	17.4	X	264.50499	357.07620	72.19780	6.94494	0.1143304	0.25870197	2.4393244	21	8 31.9	20.6
419679 2010 TV_{183}	16.5	X	2.81947	244.19900	6.47947	14.83129	0.0509552	0.24236750	2.5477284	21	5 18.2	19.8
419680 2010 TP_{185}	17.9	X	301.84422	140.21067	347.14116	1.86243	0.1016412	0.28390740	2.2927229	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419681 2010 TR_{185}	17.8	X	317.06995	24.19764	344.79485	6.34807	0.1511725	0.26117282	2.4239151	21	8 22.2	20.1
419682 2010 TF_{187}	17.5	X	10.54904	209.24019	113.43391	4.65431	0.1533292	0.26748413	2.3856352	21	10 4.9	19.7
419683 2010 UV	17.9	X	28.74897	325.32361	339.23868	1.71551	0.2094134	0.26713452	2.3877162	21	10 16.7	20.3
419684 2010 UZ	18.1	X	286.27264	73.05548	32.52370	6.52954	0.2009809	0.26944214	2.3740637	21	11 10.7	20.3
419685 2010 UT_{3}	17.0	X	114.95100	208.30029	227.92887	13.23979	0.1106683	0.22157700	2.7047031	21	3 16.3	21.0
419686 2010 UY_{11}	17.7	X	349.88747	298.52221	27.65592	4.05132	0.2101065	0.26235012	2.4166581	21	8 26.7	19.2
419687 2010 UC_{12}	17.1	X	148.77712	225.18500	210.26480	6.87430	0.1758391	0.23047794	2.6346108	21	5 2.9	21.2
419688 2010 UV_{12}	17.8	X	9.69081	9.29109	22.61334	6.32801	0.1292056	0.27861823	2.3216479	21	—	—
419689 2010 UJ_{15}	17.6	X	290.47011	22.78534	38.54751	10.11070	0.2070810	0.26293212	2.4130905	21	9 16.5	20.2
419690 2010 UW_{21}	17.4	X	332.12125	338.48627	63.47862	6.71392	0.2284066	0.27034432	2.3687790	21	11 19.9	18.8
419691 2010 UP_{31}	17.4	X	17.45048	194.45566	137.47088	5.19583	0.2445558	0.27265437	2.3553805	21	11 16.4	19.7
419692 2010 UP_{37}	16.6	X	247.80198	282.10803	48.65827	11.93911	0.1387206	0.22872203	2.6480777	21	3 31.4	20.8
419693 2010 UY_{40}	17.5	X	323.25574	280.60189	75.86377	2.35265	0.1934202	0.26020625	2.4299140	21	8 9.3	19.4
419694 2010 UC_{41}	16.8	X	205.12130	155.83932	265.18935	10.60124	0.0664325	0.23884549	2.5727131	21	6 8.4	20.4
419695 2010 UO_{41}	17.3	X	254.24817	219.57416	237.39490	5.17303	0.0987701	0.26242803	2.4161797	21	9 21.9	20.5
419696 2010 UV_{41}	16.9	X	339.74834	335.17460	47.37754	10.27026	0.1116875	0.27027408	2.3691894	21	10 31.7	19.2
419697 2010 UU_{44}	17.4	X	224.86342	184.31041	273.76655	5.99268	0.0637308	0.25572523	2.4582176	21	8 20.0	20.8
419698 2010 UO_{50}	16.5	X	346.22466	292.11601	301.76824	10.78494	0.1624025	0.22870544	2.6482057	21	3 17.5	19.6
419699 2010 UF_{55}	17.0	X	177.05476	36.19279	43.97293	13.20679	0.1554212	0.23637131	2.5906349	21	6 1.1	21.2
419700 2010 UY_{58}	16.6	X	269.23603	98.18745	246.19217	7.74346	0.1297040	0.23811559	2.5779679	21	5 5.5	20.4
419701 2010 UE_{59}	16.8	X	262.47227	286.78365	52.02668	12.83630	0.0859335	0.23327483	2.6135098	21	4 28.8	20.4
419702 2010 UV_{59}	16.7	X	111.84375	46.12822	56.49913	14.57231	0.1770858	0.22117599	2.7079713	21	5 1.8	20.6
419703 2010 UG_{63}	17.0	X	186.16031	42.61942	39.00496	19.04026	0.2077588	0.23857835	2.5746332	21	6 10.0	21.6
419704 2010 UH_{69}	17.2	X	159.18336	232.59895	220.36420	12.81079	0.2316969	0.23412046	2.6072127	21	6 5.9	21.7
419705 2010 UX_{70}	16.4	X	101.36086	174.37822	270.82393	13.50256	0.1582258	0.22014801	2.7163947	21	3 14.7	20.4
419706 2010 UU_{74}	16.9	X	306.98386	327.85007	64.55488	8.13410	0.1128442	0.25875946	2.4389631	21	9 16.9	19.6
419707 2010 UV_{75}	17.4	X	352.99370	59.22953	273.24636	5.89511	0.0264033	0.25609232	2.4558680	21	8 31.9	20.5
419708 2010 UM_{76}	17.2	X	319.76543	198.84759	231.94124	8.11878	0.1804972	0.27120287	2.3637771	21	12 5.1	18.9
419709 2010 UN_{76}	17.8	X	312.70188	106.01049	310.80960	3.68642	0.1825698	0.26676152	2.3899414	21	10 22.6	19.9
419710 2010 UN_{79}	17.5	X	218.49541	45.91791	343.13953	5.44179	0.0944716	0.23679285	2.5875594	21	5 9.1	21.4
419711 2010 UW_{80}	16.6	X	153.60778	221.70000	227.15143	21.34034	0.0676563	0.23419652	2.6066482	21	5 16.4	20.2
419712 2010 UO_{88}	17.2	X	268.99753	194.38890	269.41997	9.49549	0.1600445	0.26435860	2.4044020	21	10 10.8	20.3
419713 2010 UO_{93}	17.2	X	268.08221	277.03444	239.51231	20.93192	0.2406537	0.27455612	2.3444913	21	12 16.2	19.5
419714 2010 UK_{98}	17.2	X	146.27562	224.56474	264.94233	3.17647	0.1432587	0.23905411	2.5712161	21	7 5.8	21.0
419715 2010 UW_{100}	17.3	X	11.33959	57.22752	295.08086	6.81192	0.1450562	0.27040784	2.3684081	21	11 14.1	19.8
419716 2010 UL_{105}	18.1	X	221.76225	20.33217	80.56503	3.03499	0.1448474	0.25234125	2.4801458	21	8 15.1	21.7
419717 2010 VC_{14}	17.4	X	343.44807	345.71476	52.14864	6.33195	0.1128049	0.27192836	2.3595710	21	11 29.2	19.7
419718 2010 VR_{17}	16.6	X	59.13127	312.06248	69.73306	25.50996	0.2607937	0.28839185	2.2688933	21	—	—
419719 2010 VB_{18}	17.6	X	29.33309	205.59055	83.82798	5.45697	0.2247553	0.26190601	2.4193892	21	10 1.4	20.1
419720 2010 VY_{19}	16.7	X	194.76133	6.24038	105.73598	5.21324	0.1416559	0.23453701	2.6041248	21	7 31.8	20.8
419721 2010 VT_{23}	17.0	X	299.57777	283.61971	48.68820	7.87859	0.1204769	0.24385125	2.5373832	21	5 30.6	20.1
419722 2010 VP_{24}	17.8	X	275.55076	132.10314	230.52810	6.03943	0.2105247	0.24701990	2.5156376	21	5 27.1	21.2
419723 2010 VE_{25}	17.4	X	228.61335	307.23507	60.29965	3.27513	0.1649550	0.23415922	2.6069250	21	4 21.2	21.5
419724 2010 VU_{25}	17.7	X	262.95794	22.31704	66.83483	4.37171	0.1600924	0.25836326	2.4414559	21	9 17.9	20.7
419725 2010 VX_{25}	18.1	X	270.67385	257.15212	200.16431	1.52131	0.1700301	0.26192615	2.4192652	21	10 6.8	20.8
419726 2010 VM_{26}	18.4	X	292.43460	286.66944	145.12726	1.11744	0.1929935	0.26218915	2.4176471	21	10 3.3	20.4
419727 2010 VU_{28}	17.4	X	333.04014	304.14366	104.29619	3.40162	0.2025810	0.27108793	2.3644452	21	12 2.0	18.9
419728 2010 VR_{29}	16.2	X	170.34527	157.06173	241.08425	12.46606	0.0942392	0.22677700	2.6631976	21	3 28.7	20.4
419729 2010 VX_{31}	17.4	X	347.45196	262.32849	88.12004	3.75256	0.1866167	0.26401749	2.4064726	21	10 1.2	19.2
419730 2010 VF_{36}	16.4	X	184.80227	229.50569	260.39960	13.61119	0.0559017	0.25253449	2.4788805	21	8 10.6	20.2
419731 2010 VS_{46}	17.2	X	242.50453	148.65392	271.09986	4.96665	0.0811171	0.24711815	2.5149708	21	7 20.1	20.6
419732 2010 VW_{46}	16.8	X	342.56208	237.28782	44.82874	7.52202	0.1569149	0.24007633	2.5639122	21	5 25.8	19.5
419733 2010 VY_{46}	17.3	X	220.85582	228.49528	264.59065	5.35103	0.1117322	0.25699580	2.4501088	21	9 25.5	20.8
419734 2010 VS_{51}	16.3	X	323.61405	43.33432	263.09541	14.13444	0.1129140	0.24141498	2.5544255	21	6 2.9	19.3
419735 2010 VY_{51}	17.6	X	154.79604	41.89596	57.68299	7.03378	0.2339999	0.23319122	2.6141344	21	6 10.1	22.0
419736 2010 VB_{52}	17.7	X	235.90336	142.89156	65.11046	6.44531	0.0713879	0.28582655	2.2824486	21	—	—
419737 2010 VZ_{60}	17.5	X	48.11186	179.49313	177.86683	5.80939	0.2619263	0.28106796	2.3081383	21	—	—
419738 2010 VW_{66}	17.3	X	8.63168	204.29546	119.79597	6.34283	0.1602861	0.26460504	2.4029089	21	10 4.5	19.6
419739 2010 VY_{70}	17.4	X	341.75611	281.77355	122.63030	7.59182	0.2066032	0.27336129	2.3513180	21	12 17.7	19.2
419740 2010 VN_{72}	17.8	X	290.56944	136.87423	234.25593	12.79318	0.2425132	0.25535975	2.4605626	21	6 20.9	21.0
419741 2010 VT_{73}	17.2	X	269.52744	31.34734	56.63078	8.80410	0.1704476	0.26139490	2.4225420	21	9 26.7	20.2
419742 2010 VG_{74}	17.5	X	256.62974	180.66994	169.32961	6.35658	0.2566532	0.24236964	2.5477134	21	4 18.5	21.6
419743 2010 VN_{74}	17.1	X	331.81909	16.89800	46.01541	7.64706	0.0709197	0.27366893	2.3495555	21	12 12.7	19.6
419744 2010 VP_{77}	17.9	X	279.73153	305.02371	105.44933	6.74189	0.2174505	0.25954790	2.4340213	21	8 7.2	20.8
419745 2010 VH_{80}	16.9	X	357.80692	165.38372	58.54893	8.31162	0.1201101	0.22958486	2.6414388	21	4 8.0	19.8
419746 2010 VT_{81}	17.1	X	210.95641	45.84910	50.80755	5.70820	0.1603551	0.24440405	2.5335557	21	7 28.4	21.1
419747 2010 VW_{83}	17.7	X	192.32506	21.79060	56.05835	7.85621	0.0796636	0.23856762	2.5747104	21	6 15.1	21.4
419748 2010 VD_{85}	17.1	X	146.52916	96.30361	62.20884	5.26009	0.2500346	0.24021739	2.5629084	21	8 19.3	21.6
419749 2010 VA_{86}	17.2	X	161.64541	31.60434	60.41308	5.69072	0.1684846	0.23201180	2.6229862	21	6 3.9	21.5
419750 2010 VB_{87}	18.5	X	273.77963	303.13131	36.25670	9.22629	0.2998673	0.24416838	2.5351856	21	4 15.7	22.7
419751 2010 VB_{89}	17.1	X	295.56003	300.60911	29.28404	4.52616	0.1854250	0.24345440	2.5401399	21	5 10.9	20.3
419752 2010 VN_{90}	17.6	X	271.80734	69.69337	280.19550	3.33265	0.2796399	0.24408777	2.5357438	21	4 26.8	21.5
419753 2010 VP_{90}	16.6	X	116.19886	270.46269	255.58295	9.80390	0.1908712	0.23550438	2.5969887	21	7 24.2	20.8
419754 2010 VF_{95}	16.5	X	76.21152	27.34985	98.73945	16.07992	0.0668781	0.21194057	2.7860783	21	4 6.9	20.5
419755 2010 VU_{96}	17.9	X	290.31257	356.71929	60.43608	3.58346	0.1828312	0.26132321	2.4229850	21	9 10.6	20.4
419756 2010 VX_{98}	16.0	X	184.39355	11.05424	125.67958	34.78110	0.1854788	0.23218963	2.6216467	21	8 21.7	20.5
419757 2010 VW_{103}	17.6	X	284.01374	356.37527	67.96559	5.01092	0.1686767	0.25877957	2.4388367	21	9 13.5	20.3
419758 2010 VY_{105}	18.0	X	236.86462	191.55195	216.14287	11.00150	0.1459492	0.24520690	2.5280224	21	6 19.8	21.9
419759 2010 VS_{110}	17.5	X	320.76420	274.20216	90.81529	5.60867	0.2020218	0.26025124	2.4296340	21	8 17.9	19.5
419760 2010 VA_{112}	17.3	X	357.76526	196.77557	223.37245	6.73791	0.0761212	0.27825328	2.3236775	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419761 2010 VK_{114}	17.4	X	184.26067	73.49058	4.22631	4.21767	0.1866370	0.23584011	2.5945234	21	6 6.3	21.7
419762 2010 VO_{114}	17.7	X	313.91079	61.65682	348.16209	3.42643	0.2022040	0.26427308	2.4049207	21	10 12.4	19.7
419763 2010 VQ_{114}	17.1	X	241.52924	79.59866	325.76204	3.39619	0.1038381	0.24413874	2.5353908	21	6 27.3	20.6
419764 2010 VP_{120}	17.3	X	285.71692	357.70975	73.04833	6.79949	0.0849784	0.26069486	2.4268769	21	10 9.8	20.1
419765 2010 VX_{122}	17.5	X	182.42609	293.21435	259.29667	5.68110	0.1561287	0.26560429	2.3968784	21	10 29.9	21.3
419766 2010 VA_{131}	17.7	X	257.95747	239.97576	129.76811	6.69137	0.2120536	0.24611874	2.5217746	21	5 19.0	21.6
419767 2010 VC_{132}	17.4	X	112.47588	239.21220	50.94380	7.08781	0.1831978	0.28243289	2.3006958	21	12 29.9	21.2
419768 2010 VF_{133}	17.6	X	319.93610	65.54269	53.37232	6.15318	0.2064928	0.27884112	2.3204106	21	—	—
419769 2010 VO_{133}	17.1	X	249.76938	279.64315	51.60005	10.21733	0.2182821	0.23464580	2.6033199	21	3 27.1	21.5
419770 2010 VC_{134}	17.6	X	69.59821	118.91505	212.71274	1.23655	0.2301905	0.28177997	2.3042484	21	—	—
419771 2010 VF_{137}	18.0	X	247.02405	273.51841	157.27180	2.10266	0.1948467	0.25162449	2.4848534	21	7 26.6	21.5
419772 2010 VO_{146}	16.8	X	8.70183	165.73967	86.64792	8.17291	0.0920266	0.24058678	2.5602844	21	6 5.3	19.4
419773 2010 VR_{147}	17.5	X	304.82578	8.46690	79.71539	6.64889	0.0948506	0.27072110	2.3665807	21	12 3.5	19.7
419774 2010 VT_{147}	17.8	X	286.56466	254.46642	122.05286	2.55386	0.2106622	0.25247170	2.4792914	21	6 29.1	20.8
419775 2010 VW_{151}	16.9	X	116.33180	135.78927	86.73154	8.29804	0.0475372	0.25738161	2.4476597	21	10 2.1	20.3
419776 2010 VF_{161}	17.5	X	9.10085	153.56820	241.58930	5.35483	0.0922314	0.27634863	2.3343421	21	—	—
419777 2010 VG_{165}	17.6	X	222.56419	154.22118	263.62542	4.99811	0.2152125	0.24198125	2.5504388	21	6 14.2	21.9
419778 2010 VZ_{170}	17.3	X	231.26395	129.46399	238.24694	3.49769	0.2852254	0.23735651	2.5834612	21	4 16.1	21.8
419779 2010 VL_{172}	17.3	X	338.10716	247.39750	46.72514	3.15186	0.1346591	0.24222782	2.5487077	21	6 7.6	19.8
419780 2010 VQ_{173}	17.4	X	226.56241	113.55888	246.21809	6.33022	0.2100404	0.23209970	2.6223239	21	4 4.9	22.0
419781 2010 VP_{178}	17.9	X	180.58969	125.16168	357.24656	0.45827	0.0660420	0.24716382	2.5146610	21	8 1.3	21.5
419782 2010 VF_{182}	17.4	X	233.21527	14.36971	357.21251	3.77514	0.0816401	0.23546551	2.5972745	21	5 4.5	21.3
419783 2010 VM_{185}	17.9	X	299.22973	69.25826	0.67409	6.37921	0.0870162	0.26573561	2.3960886	21	10 25.5	20.4
419784 2010 VN_{196}	17.3	X	150.72864	130.94285	22.52425	4.44798	0.1736825	0.24454271	2.5325979	21	8 13.7	21.5
419785 2010 VQ_{198}	16.6	X	227.45780	278.42365	71.14372	16.12596	0.0187800	0.22751513	2.6574343	21	4 13.6	20.5
419786 2010 VY_{199}	17.4	X	185.97937	350.27091	79.77928	15.10359	0.2324286	0.23570853	2.5954890	21	5 30.9	21.9
419787 2010 VP_{203}	17.5	X	359.40941	289.06107	44.45766	2.96199	0.1993454	0.26444968	2.4038499	21	10 1.9	19.3
419788 2010 VZ_{204}	18.1	X	348.93114	204.36159	188.59863	2.03895	0.1577678	0.27195226	2.3594327	21	12 7.9	20.2
419789 2010 VB_{206}	18.2	X	263.87407	95.81485	337.18503	0.78691	0.1691204	0.25804281	2.4434768	21	8 23.6	21.4
419790 2010 VX_{208}	17.2	X	357.78155	300.66834	22.16003	7.10142	0.1433451	0.25989044	2.4318821	21	9 6.9	19.4
419791 2010 VQ_{210}	17.2	X	254.23136	321.69314	239.73562	7.78220	0.1467464	0.28958213	2.2626717	21	—	—
419792 2010 VV_{216}	16.6	X	146.16982	340.73236	47.41403	6.30086	0.0694565	0.21756403	2.7378605	21	2 23.7	20.6
419793 2010 VD_{217}	17.3	X	288.61737	123.80152	345.01157	6.73310	0.0628051	0.27599008	2.3363634	21	12 8.5	20.0
419794 2010 VT_{218}	17.4	X	315.21651	51.24779	271.80243	6.62753	0.2053827	0.25205682	2.4820113	21	5 27.7	20.0
419795 2010 VR_{219}	17.3	X	155.04932	217.12786	42.23490	6.89527	0.0875819	0.28111565	2.3078772	21	—	—
419796 2010 WU_{3}	17.4	X	344.16538	24.88757	188.14757	2.04330	0.0350277	0.22161382	2.7044035	21	3 8.5	20.7
419797 2010 WP_{13}	17.6	X	254.49412	279.78232	44.78450	4.74926	0.3118251	0.23562719	2.5960862	21	3 14.3	22.2
419798 2010 WK_{15}	16.8	X	132.55817	206.32569	65.18730	11.97993	0.1522170	0.27634373	2.3343697	21	12 22.8	20.4
419799 2010 WP_{29}	17.7	X	332.33149	324.74833	104.94277	6.60289	0.1526163	0.27300720	2.3533507	21	12 29.9	19.7
419800 2010 WH_{30}	16.6	X	273.75021	233.16649	69.58828	11.90347	0.1687580	0.22863853	2.6487223	21	3 21.9	20.8
419801 2010 WM_{48}	17.8	X	345.43776	329.26356	56.49996	3.44955	0.1798912	0.26732596	2.3865761	21	11 20.5	19.8
419802 2010 WT_{48}	17.0	X	358.91772	206.91448	66.78367	7.85626	0.1664016	0.24047693	2.5610641	21	6 17.0	19.2
419803 2010 WH_{50}	16.3	X	297.33442	201.63613	280.28684	26.68897	0.2359814	0.27665434	2.3326221	21	—	—
419804 2010 WC_{54}	16.8	X	359.88804	331.82861	286.12197	4.57024	0.0492628	0.23450448	2.6043656	21	5 29.4	19.9
419805 2010 WW_{54}	16.8	X	76.44867	67.58792	55.07164	13.77729	0.0460717	0.21895197	2.7262781	21	3 28.3	20.6
419806 2010 WN_{55}	17.5	X	241.24632	121.06060	269.61415	5.61271	0.3093111	0.24025295	2.5626555	21	5 20.1	22.0
419807 2010 WU_{56}	17.3	X	333.43741	309.18279	90.28157	8.53553	0.1100492	0.26687937	2.3892378	21	11 14.8	19.7
419808 2010 WD_{59}	17.6	X	213.33169	82.95679	297.67890	2.73601	0.3128199	0.23474050	2.6026196	21	4 17.9	22.4
419809 2010 WD_{62}	17.4	X	209.01524	132.99569	315.61140	0.48121	0.0742961	0.24349528	2.5398555	21	7 19.8	20.9
419810 2010 WE_{64}	16.8	X	295.41924	255.25675	83.05369	5.14096	0.1692077	0.24299442	2.5433445	21	5 26.4	19.8
419811 2010 WD_{67}	17.6	X	216.89741	140.38148	285.24309	3.18480	0.1607510	0.24111982	2.5565097	21	6 22.2	21.6
419812 2010 WL_{69}	17.4	X	181.71482	149.63519	306.21558	0.87786	0.1339366	0.23754261	2.5821117	21	6 27.6	21.3
419813 2010 WS_{70}	16.3	X	233.85397	236.59346	97.45731	13.41581	0.0786105	0.21575048	2.7531817	21	3 28.7	20.7
419814 2010 WT_{74}	16.8	X	258.95728	246.29413	88.51429	8.79522	0.1439506	0.23703238	2.5858159	21	4 15.1	20.8
419815 2010 XB_{5}	17.7	X	205.33721	323.03334	96.05857	2.52509	0.0826373	0.23786442	2.5797823	21	6 5.6	21.3
419816 2010 XO_{8}	17.0	X	154.03952	301.18165	107.57175	8.18058	0.1597888	0.22111934	2.7084338	21	4 7.9	21.3
419817 2010 XZ_{9}	16.9	X	324.37731	202.53841	95.97397	10.38134	0.1591016	0.23926167	2.5697288	21	5 19.6	19.8
419818 2010 XH_{12}	16.9	X	178.17669	269.80396	284.71134	5.23798	0.0721847	0.25460252	2.4654389	21	10 31.1	20.5
419819 2010 XJ_{13}	16.6	X	96.80883	355.74522	84.98546	5.02443	0.0750034	0.21333122	2.7739573	21	3 1.7	20.3
419820 2010 XN_{14}	16.2	X	213.66244	180.10830	249.44383	12.36458	0.1830703	0.23754222	2.5821146	21	6 22.3	20.5
419821 2010 XG_{19}	17.5	X	204.83133	213.00332	216.22349	8.22626	0.1423317	0.23795605	2.5791200	21	6 15.8	21.6
419822 2010 XE_{23}	17.7	X	267.49586	279.30826	69.42122	2.62864	0.0169752	0.23621896	2.5917486	21	5 26.3	20.8
419823 2010 XZ_{37}	17.0	X	229.11398	353.52834	82.15431	10.46064	0.1185686	0.24084477	2.5584557	21	7 22.9	20.8
419824 2010 XC_{42}	16.8	X	167.52731	351.50783	91.05651	12.60796	0.1588878	0.22669354	2.6638512	21	5 30.1	21.1
419825 2010 XH_{42}	16.9	X	206.79959	269.90090	101.54018	6.67985	0.0933303	0.21970759	2.7200237	21	4 10.9	21.1
419826 2010 XL_{42}	17.9	X	296.73337	1.36051	41.45656	3.30629	0.1612765	0.26526311	2.3989331	21	9 4.1	20.2
419827 2010 XE_{43}	16.5	X	224.66280	348.79257	102.37186	13.45757	0.0994025	0.23997223	2.5646537	21	8 10.5	20.3
419828 2010 XX_{45}	16.2	X	306.59563	223.40683	117.42981	16.46343	0.1825922	0.23799041	2.5788718	21	6 15.8	19.3
419829 2010 XK_{52}	17.9	X	193.56465	210.78359	291.09475	15.49606	0.5207064	0.23883903	2.5727594	21	8 19.4	23.5
419830 2010 XM_{54}	16.4	X	99.36027	260.53270	167.47516	9.05539	0.1825666	0.21129217	2.7917752	21	3 2.4	20.1
419831 2010 XH_{57}	17.2	X	173.70513	197.20176	319.14847	6.78885	0.1665847	0.23578951	2.5948947	21	9 3.5	21.3
419832 2010 XE_{59}	16.4	X	111.10052	13.56626	76.96934	10.21413	0.1282673	0.21771425	2.7366010	21	4 11.6	20.3
419833 2010 XZ_{60}	16.9	X	126.49381	83.56493	65.06998	22.41350	0.1180684	0.23787165	2.5797300	21	7 7.1	21.0
419834 2010 XW_{66}	17.5	X	224.10857	151.33661	209.51064	5.18722	0.0431982	0.22613868	2.6682068	21	4 14.3	21.3
419835 2010 XU_{68}	16.0	X	163.67956	221.54429	263.78815	29.08254	0.1426808	0.23747536	2.5825992	21	7 11.1	20.4
419836 2010 XJ_{71}	17.5	X	220.18427	253.21076	165.76725	4.08060	0.2588715	0.23764498	2.5813701	21	6 11.8	22.0
419837 2010 XW_{79}	17.2	X	224.16707	182.89874	245.50019	4.19968	0.2112002	0.23835610	2.5762334	21	6 29.2	21.4
419838 2010 XR_{82}	17.1	X	248.18354	84.00419	317.00327	10.84961	0.0835635	0.23532459	2.5983112	21	7 3.4	20.8
419839 2010 XK_{84}	16.4	X	259.51511	86.44954	264.77554	12.22495	0.1161304	0.23408720	2.6074597	21	5 3.5	20.4
419840 2010 XA_{85}	16.5	X	322.64869	223.39208	102.94161	6.95933	0.0954455	0.24421830	2.5348401	21	7 3.1	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419841 2010 XB_{85}	16.8	X	178.27056	158.34290	239.75325	11.88871	0.1632914	0.22556071	2.6727628	21	4 10.3	21.3
419842 2010 XN_{87}	16.9	X	140.08679	189.77770	283.96365	4.02848	0.0740114	0.21950852	2.7216679	21	6 3.1	20.9
419843 2010 YX_{2}	16.7	X	249.86612	331.78551	23.27103	6.79011	0.0221162	0.22388456	2.6860862	21	5 9.9	20.3
419844 2010 YP_{5}	17.9	X	233.14521	92.38193	308.76304	2.36073	0.2690957	0.23898082	2.5717417	21	5 29.6	22.3
419845 2011 AO	16.6	X	193.73405	341.64382	103.87694	8.53773	0.1045266	0.23296589	2.6158198	21	6 26.9	20.4
419846 2011 AH_{4}	15.7	X	167.72688	42.78537	102.57872	28.29581	0.0060024	0.23780912	2.5801822	21	8 20.7	19.6
419847 2011 AO_{5}	16.8	X	279.18947	146.99504	350.84239	7.56793	0.0881569	0.26844639	2.3799308	21	12 31.8	19.6
419848 2011 AO_{7}	16.8	X	175.00084	297.41242	108.32180	13.83746	0.2609792	0.22336544	2.6902465	21	4 28.9	21.8
419849 2011 AO_{8}	17.0	X	145.04620	128.96519	292.83221	4.11891	0.1265398	0.21607051	2.7504625	21	4 6.3	21.1
419850 2011 AT_{9}	16.2	X	170.37773	346.69198	109.40848	22.88354	0.0334603	0.22859423	2.6490645	21	6 16.5	20.1
419851 2011 AY_{9}	17.5	X	253.23260	185.06049	296.05851	4.43578	0.1283028	0.25627243	2.4547171	21	10 18.3	20.7
419852 2011 AG_{10}	17.3	X	228.02417	120.63329	290.13057	1.86582	0.1164840	0.23446124	2.6046858	21	6 17.6	21.0
419853 2011 AM_{10}	16.8	X	116.37475	73.79517	289.39469	10.64461	0.1609468	0.19461804	2.9490400	21	1 3.2	20.9
419854 2011 AQ_{10}	17.4	X	280.80935	243.33824	139.89110	0.76018	0.2193576	0.24461869	2.5320734	21	6 29.3	20.7
419855 2011 AW_{11}	17.5	X	164.93058	190.99520	294.25644	4.88475	0.1241050	0.23310043	2.6148131	21	7 18.6	21.4
419856 2011 AX_{11}	16.8	X	54.31674	57.02896	113.34925	14.95174	0.0321567	0.21588839	2.7520091	21	4 28.4	20.7
419857 2011 AB_{12}	16.6	X	192.48252	137.73632	293.09452	11.05000	0.1600794	0.22911166	2.6450746	21	6 5.5	20.9
419858 2011 AC_{13}	15.8	X	245.94863	228.00205	325.13649	15.09338	0.1559549	0.17268255	3.1937708	21	12 24.0	20.6
419859 2011 AU_{14}	16.9	X	186.86363	148.39392	316.64604	14.03412	0.0490076	0.23407194	2.6075730	21	7 18.4	20.6
419860 2011 AX_{14}	15.7	X	336.57278	172.82376	313.54542	16.32946	0.1824692	0.18379340	3.0637226	21	—	—
419861 2011 AD_{15}	15.7	X	284.59231	178.06702	35.58339	12.67163	0.1574636	0.17674430	3.1446509	21	—	—
419862 2011 AP_{15}	15.7	X	34.25824	297.02769	252.04899	12.14406	0.1408364	0.21141662	2.7906795	21	4 21.9	18.9
419863 2011 AW_{15}	16.4	X	230.49519	8.57676	56.09674	14.42216	0.1250722	0.23861394	2.5743772	21	7 8.6	20.4
419864 2011 AV_{20}	17.0	X	80.41636	210.47520	320.61218	4.16117	0.1481982	0.21939396	2.7226152	21	6 15.3	20.5
419865 2011 AR_{21}	17.6	X	198.64692	178.32070	309.55180	9.91259	0.1296575	0.24142264	2.5543714	21	8 23.3	21.6
419866 2011 AB_{22}	16.5	X	119.66560	47.65617	114.51303	13.36288	0.1130755	0.22801641	2.6535380	21	7 17.4	20.2
419867 2011 AF_{24}	16.8	X	77.59110	41.24905	106.50722	5.29078	0.1805192	0.21381763	2.7697488	21	5 17.5	20.3
419868 2011 AG_{24}	17.1	X	215.58554	304.03171	122.60085	5.89466	0.2474517	0.23586602	2.5943335	21	6 18.1	21.5
419869 2011 AL_{27}	15.9	X	305.89932	236.04635	299.07036	9.80276	0.0742826	0.18566710	3.0430756	21	—	—
419870 2011 AP_{27}	16.6	X	354.85937	292.55255	295.69310	7.66376	0.0190136	0.21463339	2.7627263	21	4 10.7	20.4
419871 2011 AV_{27}	18.0	X	221.81367	143.21986	281.70394	4.45930	0.3191474	0.23889200	2.5723792	21	6 17.0	22.5
419872 2011 AW_{27}	17.1	X	196.43804	211.59100	212.85278	1.22276	0.1283286	0.22817233	2.6523290	21	6 2.1	21.3
419873 2011 AK_{32}	18.0	X	151.13489	48.79820	29.48254	2.47773	0.2675255	0.22245003	2.6976219	21	5 14.1	22.7
419874 2011 AL_{32}	17.0	X	178.50565	323.93434	85.86439	6.07104	0.2101159	0.22334364	2.6904214	21	5 1.2	21.6
419875 2011 AP_{33}	17.2	X	247.80400	17.45284	336.60157	5.73248	0.0601776	0.22289541	2.6940271	21	4 30.6	21.1
419876 2011 AT_{33}	16.9	X	183.26705	353.50055	22.60491	4.91725	0.0865061	0.21271423	2.7793187	21	3 21.5	21.0
419877 2011 AY_{33}	17.5	X	176.28029	310.69253	159.56446	7.67976	0.1474223	0.23270250	2.6177933	21	7 10.1	21.8
419878 2011 AF_{35}	16.2	X	313.70006	261.07644	99.68841	12.75900	0.2454299	0.24742163	2.5129139	21	7 15.8	18.5
419879 2011 AO_{35}	16.2	X	56.90526	224.84619	297.06403	9.11428	0.0635956	0.21273690	2.7791213	21	4 12.1	20.0
419880 2011 AH_{37}	19.7	X	225.67114	322.37147	102.07433	9.65783	0.6719960	0.24261994	2.5459609	21	6 6.5	25.4
419881 2011 AW_{38}	17.4	X	239.00485	324.64304	96.08429	6.58603	0.1949650	0.24089589	2.5580938	21	7 5.1	21.1
419882 2011 AS_{39}	16.1	X	49.37068	125.15164	269.68095	8.31623	0.0886603	0.18137195	3.0909310	21	—	—
419883 2011 AO_{40}	15.3	X	38.92162	97.20735	291.01478	25.87243	0.0911616	0.17613873	3.1518544	21	—	—
419884 2011 AL_{41}	17.2	X	70.54693	139.12983	8.67772	4.43344	0.0901279	0.21351451	2.7723695	21	4 20.7	20.7
419885 2011 AG_{42}	17.7	X	135.41132	118.93583	33.19199	2.57695	0.1391879	0.23030594	2.6359224	21	7 24.7	21.8
419886 2011 AQ_{43}	16.0	X	23.95796	326.08473	118.04116	10.60851	0.1221407	0.18606180	3.0387706	21	—	—
419887 2011 AL_{45}	16.2	X	233.11107	96.51630	310.80430	21.42071	0.0284082	0.22855902	2.6493366	21	7 1.9	20.1
419888 2011 AW_{45}	16.3	X	274.67671	61.18954	138.41644	11.44447	0.0730991	0.18133533	3.0913470	21	—	—
419889 2011 AX_{45}	16.5	X	98.02691	352.95171	136.27526	9.03287	0.1659045	0.21374671	2.7703614	21	5 19.3	20.5
419890 2011 AY_{49}	17.3	X	130.71485	74.78343	71.69996	3.11345	0.1436404	0.22836628	2.6508270	21	7 12.3	21.4
419891 2011 AW_{52}	16.6	X	167.16671	154.95693	325.41980	12.44891	0.1011718	0.22952353	2.6419093	21	7 16.4	20.7
419892 2011 AS_{53}	17.0	X	284.82165	59.68291	327.97440	6.99183	0.0454521	0.24382177	2.5375877	21	8 9.4	20.1
419893 2011 AE_{54}	17.4	X	242.25522	161.14959	306.67933	6.11212	0.1213407	0.25026066	2.4938729	21	9 15.9	20.8
419894 2011 AU_{54}	17.7	X	156.93889	97.59757	15.62499	2.66284	0.0967337	0.22903123	2.6456938	21	6 23.4	21.7
419895 2011 AV_{60}	17.5	X	213.42303	332.22871	93.71291	2.52697	0.1553088	0.23418005	2.6067704	21	6 19.6	21.6
419896 2011 AQ_{61}	16.9	X	146.04752	31.09603	116.73223	4.95948	0.1681617	0.23191602	2.6237083	21	7 30.9	21.1
419897 2011 AY_{61}	17.8	X	175.43900	11.66479	47.44717	3.53677	0.1781840	0.22362900	2.6881322	21	5 7.2	22.0
419898 2011 AO_{65}	17.7	X	230.42863	321.60734	103.83353	5.26070	0.2120143	0.23799728	2.5788221	21	7 1.3	21.8
419899 2011 AG_{66}	17.2	X	166.01367	297.60782	118.10420	3.93712	0.1646830	0.21780523	2.7358388	21	4 25.9	21.7
419900 2011 AN_{67}	16.7	X	324.39605	241.39006	123.95480	5.27449	0.2584674	0.25205938	2.4819945	21	8 16.9	18.3
419901 2011 AQ_{67}	17.5	X	105.14026	350.60382	126.44928	1.64721	0.0071454	0.21629344	2.7485722	21	4 16.5	21.1
419902 2011 AT_{67}	16.5	X	221.18536	189.32903	121.21062	10.43700	0.0619945	0.20347663	2.8628133	21	2 10.7	20.7
419903 2011 AG_{74}	16.3	X	150.71907	256.19210	279.64626	20.54001	0.1482239	0.23569397	2.5955959	21	8 27.7	20.9
419904 2011 AW_{74}	17.0	X	221.00854	124.98443	305.16856	10.76073	0.1514617	0.23672010	2.5880895	21	7 3.8	21.1
419905 2011 AY_{74}	16.2	X	216.42693	121.14085	304.95236	21.54007	0.0383633	0.23140193	2.6275928	21	7 4.3	20.1
419906 2011 AW_{79}	16.2	X	256.15919	9.34446	32.20766	9.01835	0.1786943	0.23979669	2.5659051	21	6 30.3	20.1
419907 2011 BQ_{1}	16.9	X	83.28863	318.30080	286.86114	3.56205	0.1512130	0.23963400	2.5670663	21	9 25.9	20.5
419908 2011 BB_{6}	17.4	X	207.43101	291.34073	108.01663	2.98761	0.0992083	0.22508559	2.6765226	21	5 13.8	21.5
419909 2011 BC_{6}	17.7	X	172.93617	152.51785	311.50361	1.37210	0.1688765	0.23103484	2.6303753	21	6 29.9	21.9
419910 2011 BD_{7}	16.6	X	111.64919	297.88354	111.87290	6.14107	0.0743321	0.20158684	2.8806772	21	2 10.5	20.5
419911 2011 BM_{8}	17.5	X	231.66041	358.04025	102.50094	4.31498	0.0779960	0.24461604	2.5320917	21	9 2.9	21.0
419912 2011 BR_{9}	16.2	X	42.98980	78.03903	307.13716	9.65925	0.1195090	0.17858940	3.1229541	21	—	—
419913 2011 BM_{10}	16.8	X	75.58028	359.39974	156.08175	10.18216	0.1456929	0.21022651	2.8012018	21	5 21.1	20.6
419914 2011 BK_{12}	16.5	X	212.64835	80.49510	257.71604	4.68011	0.0682696	0.20825083	2.8188906	21	3 2.9	20.8
419915 2011 BU_{12}	17.0	X	109.26759	335.52492	111.88711	3.82187	0.1607624	0.21058735	2.7980010	21	4 7.6	20.9
419916 2011 BC_{13}	16.1	X	128.96894	248.83261	92.30247	13.23052	0.1101303	0.18731375	3.0252153	21	—	—
419917 2011 BA_{14}	16.5	X	155.14013	128.79332	331.60473	10.92711	0.1537102	0.22419886	2.6835752	21	6 7.0	20.9
419918 2011 BQ_{16}	16.9	X	273.40395	197.27871	101.32650	5.51134	0.0373751	0.21183471	2.7870064	21	3 30.7	20.8
419919 2011 BF_{19}	16.9	X	85.22128	331.23749	131.19400	3.60209	0.0779328	0.20534287	2.8454413	21	3 14.4	20.6
419920 2011 BN_{21}	16.2	X	28.95431	157.41277	294.97233	13.90745	0.1832964	0.19130530	2.9829872	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
419921 2011 BB_{23}	17.3	X	107.82349	159.37852	300.76546	5.06954	0.0967712	0.21010463	2.8022850	21	4 8.4	21.2
419922 2011 BJ_{24}	17.7	X	300.40065	188.83918	191.07404	8.08740	0.6415370	0.26459602	2.4029635	21	5 20.3	21.7
419923 2011 BF_{27}	16.3	X	68.05640	347.27458	126.12545	16.15155	0.0932116	0.20319810	2.8654288	21	3 9.6	20.1
419924 2011 BT_{29}	16.6	X	190.98193	312.74685	103.30763	12.82673	0.0144905	0.22150211	2.7053127	21	5 20.9	20.5
419925 2011 BO_{31}	16.8	X	220.35401	89.56024	326.83554	10.94189	0.0246486	0.22799208	2.6537268	21	6 25.2	20.6
419926 2011 BD_{33}	17.2	X	170.10338	106.35444	313.91706	3.46158	0.0515059	0.21563046	2.7542032	21	4 26.9	21.1
419927 2011 BW_{33}	16.9	X	266.66173	57.68786	319.07891	6.38163	0.0294087	0.22885316	2.6470660	21	7 1.7	20.5
419928 2011 BE_{35}	17.5	X	234.16676	129.79584	301.60932	1.36419	0.2631073	0.24054526	2.5605790	21	7 8.3	21.6
419929 2011 BL_{44}	16.3	X	43.56947	259.70585	296.39462	8.35341	0.0995332	0.21344980	2.7729298	21	5 14.9	19.8
419930 2011 BO_{51}	16.9	X	94.78470	145.12539	331.98725	10.70570	0.1948452	0.21160841	2.7889930	21	4 25.8	21.0
419931 2011 BP_{51}	17.5	X	246.22095	106.25824	331.35170	9.90926	0.2224929	0.24418716	2.5350557	21	8 2.5	21.4
419932 2011 BC_{52}	15.5	X	254.92241	94.62979	122.62457	16.35795	0.1635469	0.17864134	3.1223487	21	—	—
419933 2011 BQ_{54}	16.9	X	276.54187	23.93039	19.14377	4.55754	0.1943049	0.24405266	2.5359870	21	7 26.8	20.1
419934 2011 BE_{55}	17.3	X	204.24394	8.82539	83.07437	3.68100	0.1756120	0.23489281	2.6014944	21	7 13.4	21.6
419935 2011 BG_{55}	16.8	X	111.78640	93.63302	327.56489	13.96252	0.1417429	0.20347152	2.8628612	21	3 2.4	20.9
419936 2011 BK_{62}	17.0	X	135.06943	300.78466	95.06702	6.86088	0.0732257	0.20158502	2.8806946	21	2 22.7	21.2
419937 2011 BQ_{62}	16.7	X	44.04915	0.05513	100.58359	10.64583	0.0880341	0.19275513	2.9680104	21	1 14.2	20.4
419938 2011 BG_{68}	17.1	X	117.89940	58.98635	44.50708	4.31582	0.0303977	0.21435632	2.7651064	21	4 18.9	20.7
419939 2011 BL_{75}	16.5	X	147.27348	261.98163	157.31353	13.41901	0.1992478	0.21037316	2.7998998	21	4 17.9	21.2
419940 2011 BC_{79}	17.1	X	253.81301	310.77805	86.82982	5.25907	0.2791263	0.24128638	2.5553330	21	6 11.4	21.2
419941 2011 BB_{80}	15.9	X	277.79868	100.49110	115.09913	12.91406	0.0768764	0.18801750	3.0176615	21	—	—
419942 2011 BD_{82}	16.8	X	63.84824	64.96889	86.86557	5.97931	0.1033323	0.21170789	2.7881193	21	4 21.8	20.3
419943 2011 BL_{82}	17.1	X	131.65943	120.58173	98.08363	8.54425	0.1906335	0.24286964	2.5442155	21	10 19.9	21.4
419944 2011 BQ_{82}	15.9	X	337.08692	211.25872	323.52347	15.90781	0.0408390	0.19583475	2.9368125	21	1 17.5	20.0
419945 2011 BW_{82}	16.6	X	121.37460	0.68471	89.86601	4.86570	0.0697614	0.21229445	2.7829813	21	4 13.9	20.5
419946 2011 BX_{82}	16.5	X	284.67531	258.57134	115.93980	14.77060	0.1709798	0.23872364	2.5735885	21	6 30.6	19.9
419947 2011 BJ_{84}	15.6	X	215.00327	276.50582	338.57361	17.50066	0.0595844	0.18100351	3.0951240	21	—	—
419948 2011 BY_{86}	17.1	X	184.04421	282.34073	136.44394	4.11688	0.0849035	0.22128263	2.7071012	21	5 14.5	21.2
419949 2011 BB_{89}	16.1	X	36.36859	294.48947	137.82167	10.44284	0.0531073	0.18276483	3.0752066	21	—	—
419950 2011 BE_{89}	17.2	X	238.87188	277.72658	141.99349	4.54448	0.1461256	0.23530927	2.5984240	21	7 8.2	21.0
419951 2011 BA_{90}	17.4	X	141.20484	336.95690	117.33391	3.02950	0.0620044	0.21647663	2.7470213	21	5 10.2	21.3
419952 2011 BW_{94}	17.1	X	161.31544	320.10238	94.60323	7.32138	0.0581143	0.21588214	2.7520622	21	4 15.2	21.2
419953 2011 BF_{96}	17.6	X	254.63355	330.67283	78.84686	5.25196	0.1665011	0.24101100	2.5572791	21	7 10.8	21.2
419954 2011 BH_{96}	15.8	X	173.07486	300.91967	319.76502	14.91693	0.0709980	0.17492131	3.1664617	21	—	—
419955 2011 BV_{96}	16.7	X	50.71452	263.08636	314.43099	9.00548	0.1281912	0.21780410	2.7358483	21	7 3.0	20.1
419956 2011 BM_{99}	16.9	X	3.72549	79.56841	224.36601	2.20874	0.0635886	0.23355958	2.6113852	21	8 9.6	20.0
419957 2011 BW_{99}	15.8	X	292.97494	221.15924	305.47480	9.66718	0.0274947	0.17691383	3.1426417	21	—	—
419958 2011 BM_{100}	16.9	X	176.26857	233.43970	295.23915	8.45538	0.1120490	0.23991788	2.5650410	21	9 19.9	21.0
419959 2011 BO_{100}	15.9	X	317.93895	241.12957	298.47564	9.04960	0.0595297	0.18481922	3.0523755	21	—	—
419960 2011 BW_{100}	15.7	X	241.85491	258.98971	324.19844	14.76344	0.0456276	0.17581200	3.1557581	21	—	—
419961 2011 BL_{102}	17.4	X	206.08242	299.67185	131.88362	4.89863	0.1549173	0.23310662	2.6147669	21	6 19.9	21.6
419962 2011 BT_{102}	16.1	X	93.57020	290.61312	87.13109	13.87080	0.1451117	0.19251020	2.9705273	21	—	—
419963 2011 BH_{114}	16.6	X	14.70098	69.48869	72.02097	6.57319	0.1090767	0.19310819	2.9643917	21	1 21.2	20.2
419964 2011 BW_{117}	17.6	X	206.36039	36.05701	352.44725	4.78923	0.2570837	0.22808876	2.6529768	21	4 23.5	22.4
419965 2011 BU_{118}	16.2	X	32.23568	35.59597	93.49933	7.12264	0.0314452	0.19722560	2.9229891	21	2 1.1	20.1
419966 2011 BY_{140}	16.6	X	282.04276	135.43923	83.02521	6.88846	0.1555057	0.18875381	3.0098088	21	—	—
419967 2011 BO_{154}	15.6	X	243.55496	322.29601	312.95421	12.37509	0.0800660	0.18906108	3.0065467	21	1 24.4	20.2
419968 2011 BN_{161}	16.2	X	2.14418	234.97370	261.74677	7.59385	0.0954866	0.18987730	2.9979244	21	—	—
419969 2011 BZ_{161}	17.3	X	70.37413	31.77185	117.91513	4.81762	0.0368100	0.21254601	2.7807850	21	4 19.2	21.0
419970 2011 BC_{162}	15.5	X	342.42325	154.72493	48.64428	11.53392	0.0577058	0.19315426	2.9639203	21	3 2.7	19.6
419971 2011 BJ_{162}	16.9	X	250.67147	234.81416	124.07478	15.66209	0.0429397	0.22179416	2.7029373	21	5 20.4	21.0
419972 2011 CO	16.3	X	141.47830	174.38411	344.36663	14.18707	0.1156156	0.22944541	2.6425090	21	8 10.2	20.4
419973 2011 CQ	16.9	X	74.26467	102.26678	5.97145	7.54510	0.1943396	0.20251682	2.8718515	21	3 22.8	20.3
419974 2011 CK_{3}	16.1	X	296.12477	246.49036	291.37654	11.80509	0.0528113	0.18331387	3.0690632	21	—	—
419975 2011 CM_{3}	15.4	X	196.70149	359.28443	283.69736	9.72670	0.0721791	0.18553440	3.0445264	21	—	—
419976 2011 CD_{4}	17.6	X	184.48015	126.03144	355.70071	5.08821	0.2614184	0.23475639	2.6025022	21	8 1.9	22.3
419977 2011 CL_{5}	17.1	X	186.06374	325.12207	163.69083	8.15715	0.1583503	0.23454725	2.6040490	21	8 11.7	21.4
419978 2011 CN_{9}	16.6	X	163.62681	283.21396	138.32889	9.62432	0.0853895	0.21411237	2.7672063	21	4 28.8	20.9
419979 2011 CP_{10}	16.6	X	82.91891	174.02299	330.23910	11.54104	0.0651378	0.21304304	2.7764582	21	4 25.2	20.6
419980 2011 CX_{14}	17.6	X	279.52506	81.80722	308.57096	2.71324	0.2188000	0.24125969	2.5555215	21	7 7.9	20.8
419981 2011 CU_{15}	16.9	X	248.28874	347.87264	3.71734	6.07932	0.1477949	0.21822962	2.7322908	21	4 20.5	21.1
419982 2011 CZ_{16}	17.2	X	211.67570	354.86230	102.31312	3.57748	0.1519414	0.23600063	2.5933468	21	7 28.8	21.1
419983 2011 CV_{19}	17.0	X	135.90463	343.36140	113.63269	7.54016	0.0341521	0.21515331	2.7582737	21	5 6.1	20.9
419984 2011 CP_{22}	17.4	X	94.63641	178.29431	305.70535	4.13128	0.1081551	0.21259220	2.7803822	21	4 24.6	21.3
419985 2011 CG_{23}	17.6	X	128.68744	106.29760	14.96201	3.23438	0.1535152	0.21960426	2.7208768	21	6 7.8	21.7
419986 2011 CE_{26}	16.6	X	159.87889	276.69787	127.94274	4.72067	0.1034137	0.21083335	2.7958241	21	4 3.4	20.8
419987 2011 CK_{27}	17.2	X	162.17093	317.96759	125.53211	7.90553	0.1264276	0.21966023	2.7204145	21	5 25.3	21.6
419988 2011 CK_{29}	17.4	X	151.23533	99.08062	327.06118	2.89710	0.1664836	0.21425841	2.7659487	21	4 22.4	21.8
419989 2011 CS_{29}	17.0	X	250.11092	174.46296	253.17473	4.38197	0.1397598	0.23981299	2.5657888	21	7 31.6	20.7
419990 2011 CF_{32}	16.9	X	218.85509	126.98246	295.59503	12.84528	0.1614926	0.22907365	2.6453672	21	6 20.9	21.2
419991 2011 CH_{32}	17.2	X	107.24828	322.79666	123.34049	3.06092	0.0333195	0.20347787	2.8628017	21	3 16.3	21.2
419992 2011 CU_{32}	17.1	X	173.30283	276.92150	117.14282	6.30115	0.0285111	0.20989000	2.8041950	21	4 1.1	21.1
419993 2011 CW_{32}	15.8	X	306.00126	194.66996	315.37723	15.61964	0.0970875	0.17700275	3.1415890	21	—	—
419994 2011 CB_{33}	16.6	X	72.77544	330.76736	151.79140	10.92441	0.0762744	0.20669254	2.8330409	21	3 23.9	20.3
419995 2011 CT_{35}	16.0	X	222.04975	250.73959	329.44541	8.09453	0.0559153	0.17422981	3.1748344	21	—	—
419996 2011 CC_{38}	17.1	X	155.51948	325.37829	105.04406	4.80474	0.0787252	0.21548856	2.7554121	21	4 28.7	21.1
419997 2011 CX_{38}	17.4	X	213.08996	299.67832	67.56620	3.45480	0.0888455	0.21418584	2.7665735	21	4 10.8	21.5
419998 2011 CE_{40}	16.3	X	242.54596	143.58475	115.49289	10.94615	0.0089015	0.18981561	2.9985740	21	1 7.6	20.4
419999 2011 CW_{42}	16.6	X	325.27769	25.48342	250.92961	5.03459	0.0145662	0.21666770	2.7454061	21	5 8.1	20.2
420000 2011 CU_{45}	16.8	X	112.31787	139.62828	67.17193	4.46154	0.1582091	0.23186381	2.6241021	21	9 12.5	20.9