Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328001 2007 HQ_{2}	15.9	X	151.16625	273.34686	37.27182	6.38827	0.1197571	0.19914842	2.9041440	20	—	—
328002 2007 HQ_{4}	15.4	X	53.78589	258.67233	66.63388	10.36058	0.0900682	0.18118397	3.0930685	20	11 23.9	19.8
328003 2007 HY_{18}	17.8	X	39.60325	177.16053	42.70562	22.97577	0.0186258	0.38640107	1.8668546	20	6 14.2	19.8
328004 2007 HU_{27}	16.7	X	241.21111	64.73553	104.32948	1.74980	0.1780597	0.19221652	2.9735522	20	11 26.8	21.0
328005 2007 HP_{34}	16.7	X	222.36794	89.98995	57.73212	0.40687	0.0942795	0.18370375	3.0647193	20	10 19.9	21.1
328006 2007 HO_{41}	16.3	X	14.10728	342.54648	67.24133	7.27863	0.0453728	0.19268650	2.9687151	20	—	—
328007 2007 HQ_{41}	16.0	X	117.68722	279.47346	78.69870	8.75310	0.0924324	0.20046456	2.8914187	20	—	—
328008 2007 HX_{45}	15.4	X	54.02172	92.61649	223.47052	24.26134	0.2380812	0.17374715	3.1807114	20	11 30.5	20.2
328009 2007 HK_{66}	16.0	X	131.34617	41.28916	198.85273	9.77323	0.0690967	0.17908579	3.1171806	20	11 5.6	20.8
328010 2007 HP_{66}	16.0	X	329.84520	276.18696	183.85037	9.99937	0.0700495	0.19293230	2.9661931	20	—	—
328011 2007 HZ_{66}	16.6	X	146.78507	105.33385	197.18833	12.63578	0.1671335	0.19148817	2.9810877	20	—	—
328012 2007 HO_{68}	16.6	X	204.52903	93.56140	198.84240	17.25341	0.2309617	0.20559911	2.8430766	20	1 8.0	21.9
328013 2007 HC_{70}	17.6	X	141.48858	350.07601	79.68637	24.59023	0.1150464	0.37349234	1.9096257	20	4 27.7	20.4
328014 2007 HD_{89}	15.8	X	11.40660	313.40590	66.12662	10.55028	0.0894570	0.18263413	3.0766736	20	12 4.9	19.9
328015 2007 HO_{96}	16.0	X	112.12169	215.60675	61.34175	12.37841	0.0976995	0.18254949	3.0776245	20	11 29.9	20.6
328016 2007 HK_{97}	16.1	X	223.46721	36.90503	158.98238	11.40775	0.1973880	0.19152993	2.9806543	20	12 8.3	20.8
328017 2007 JO	16.1	X	117.00571	114.49231	151.62690	13.45948	0.1427384	0.17890591	3.1192697	20	11 27.2	21.3
328018 2007 JM_{8}	16.1	X	166.93761	192.69266	55.09404	10.55897	0.0291737	0.18907182	3.0064328	20	12 23.7	20.5
328019 2007 JP_{8}	16.2	X	280.15413	245.16335	228.27043	15.27968	0.0784824	0.18670109	3.0318297	20	11 21.5	20.1
328020 2007 JH_{10}	15.9	X	88.07912	51.32673	232.07478	16.15011	0.0355199	0.18042520	3.1017343	20	11 5.5	20.4
328021 2007 JK_{10}	16.6	X	151.69055	289.46467	357.33144	0.89102	0.0628377	0.19359198	2.9594509	20	—	—
328022 2007 JJ_{12}	15.7	X	153.22598	133.43771	138.87311	10.86820	0.1074894	0.18879333	3.0093887	20	—	—
328023 2007 JZ_{15}	16.4	X	265.26454	276.13875	221.56092	10.68527	0.0792609	0.18678573	3.0309139	20	12 1.5	20.5
328024 2007 JS_{18}	16.1	X	145.71774	264.47740	72.19393	15.14345	0.2605592	0.19638370	2.9313370	20	1 20.5	21.1
328025 2007 JM_{23}	15.8	X	167.48081	45.02289	162.85782	14.48087	0.0966573	0.18024516	3.1037994	20	11 6.7	20.8
328026 2007 JB_{27}	15.7	X	35.26576	153.00825	211.56536	10.45263	0.0915729	0.18243834	3.0788744	20	12 18.4	20.0
328027 2007 KU_{2}	15.7	X	128.27217	355.24801	261.66245	11.85079	0.0746728	0.18091485	3.0961351	20	11 20.9	20.4
328028 2007 KU_{5}	16.6	X	132.61610	217.36041	100.05389	3.66304	0.2232441	0.18980226	2.9987145	20	—	—
328029 2007 KM_{6}	16.0	X	307.64456	257.04756	234.64795	9.60524	0.0025616	0.19364981	2.9588617	20	—	—
328030 2007 KV_{7}	17.3	X	317.24117	247.78921	55.11077	22.49954	0.0585279	0.38435076	1.8734879	20	6 5.7	18.8
328031 2007 KX_{8}	15.3	X	110.61061	202.72889	110.88990	12.15982	0.1343093	0.18532182	3.0468543	20	—	—
328032 2007 LP_{1}	15.7	X	219.13848	21.49657	196.02878	8.69659	0.0263187	0.19219313	2.9737935	20	—	—
328033 2007 LQ_{1}	15.6	X	78.66787	225.32303	86.42717	17.06143	0.2012933	0.17791059	3.1308927	20	12 16.5	20.6
328034 2007 LX_{3}	15.5	X	78.03755	260.48424	82.22326	16.38615	0.2502607	0.18214173	3.0822161	20	—	—
328035 2007 LS_{4}	15.7	X	228.67604	87.39449	77.79854	19.26481	0.0435036	0.18410882	3.0602223	20	11 25.9	20.1
328036 2007 LK_{6}	16.0	X	211.76753	47.36417	147.49277	15.37965	0.0830502	0.18728558	3.0255186	20	12 8.1	20.7
328037 2007 LX_{7}	16.2	X	220.96436	282.25293	217.18781	23.97499	0.2441864	0.18010583	3.1054000	20	9 18.3	21.6
328038 2007 LP_{9}	16.1	X	115.44497	85.11998	223.06299	10.21099	0.0854948	0.18670773	3.0317579	20	—	—
328039 2007 LD_{16}	16.3	X	121.59955	147.67245	155.71516	10.15491	0.1555493	0.18625046	3.0367181	20	—	—
328040 2007 LJ_{16}	15.8	X	98.51067	171.93349	133.03548	11.12473	0.0253332	0.18497165	3.0506983	20	12 14.9	20.3
328041 2007 LN_{17}	15.8	X	128.14070	273.51408	57.46055	9.11647	0.0846248	0.19593725	2.9357882	20	—	—
328042 2007 LK_{18}	15.2	X	105.05385	166.28458	99.26107	30.42364	0.2113801	0.17733019	3.1377205	20	11 26.4	20.8
328043 2007 LW_{32}	15.3	X	129.64902	172.83282	120.07610	20.83205	0.3019227	0.17930075	3.1146887	20	—	—
328044 2007 MS_{6}	16.5	X	122.79164	127.32639	159.90617	11.93385	0.0567522	0.18711215	3.0273878	20	12 22.5	21.2
328045 2007 MC_{7}	16.1	X	76.58879	50.59325	233.03581	8.54933	0.0640726	0.17533328	3.1614997	20	10 25.5	20.7
328046 2007 MA_{8}	16.3	X	162.86945	42.33717	177.78718	16.04922	0.1637568	0.18117130	3.0932127	20	11 14.2	21.6
328047 2007 MZ_{13}	16.1	X	199.88955	61.82065	171.68089	14.53877	0.0969583	0.19072853	2.9889979	20	—	—
328048 2007 MF_{14}	17.0	X	162.61481	85.52809	192.96292	12.19536	0.3797240	0.18780701	3.0199159	20	—	—
328049 2007 NA_{6}	15.8	X	135.88594	253.34754	17.45841	15.89535	0.2057014	0.17812319	3.1284010	20	12 15.1	21.4
328050 2007 NS_{6}	15.7	X	95.34565	257.95773	73.58529	17.22635	0.2310113	0.17823161	3.1271321	20	—	—
328051 2007 OW	15.2	X	91.38000	103.25532	205.48415	14.65146	0.0937588	0.17676891	3.1443591	20	12 14.8	20.1
328052 2007 RJ_{132}	17.3	X	308.85887	64.33899	185.91847	23.15732	0.0924241	0.35552494	1.9734343	20	2 19.2	19.8
328053 2007 TE_{25}	17.6	X	275.68084	97.08829	178.52438	22.49569	0.0940383	0.35221072	1.9857947	20	2 11.6	20.2
328054 2007 TS_{145}	14.9	X	227.48130	307.10022	70.75270	2.99114	0.1760898	0.12504280	3.9606238	20	5 11.5	21.0
328055 2007 TB_{227}	18.1	X	213.24535	112.09532	13.52254	4.28669	0.1457381	0.29679512	2.2258619	20	9 21.8	20.9
328056 2007 TS_{318}	17.7	X	191.18666	95.18328	50.76457	7.92759	0.1023710	0.29520200	2.2338629	20	10 1.3	20.7
328057 2007 TJ_{332}	18.0	X	330.10376	181.69064	262.21628	2.11671	0.0801753	0.31466102	2.1407901	20	—	—
328058 2007 TS_{442}	16.6	X	288.16404	268.76699	265.34207	11.19989	0.0775756	0.32552305	2.0928988	20	—	—
328059 2007 UB_{6}	19.5	X	176.37204	255.29606	56.85650	14.19991	0.1664492	0.57118999	1.4386296	20	—	—
328060 2007 US_{46}	18.0	X	58.29156	307.64830	61.57965	6.07125	0.1417226	0.32024964	2.1158114	20	—	—
328061 2007 UL_{48}	18.1	X	286.93675	11.45223	78.39432	3.16560	0.0908969	0.30437602	2.1887480	20	12 1.8	20.0
328062 2007 UZ_{97}	18.4	X	257.03027	335.49066	129.75829	0.46870	0.0908567	0.30211087	2.1996748	20	11 2.5	20.6
328063 2007 UH_{137}	17.3	X	301.27642	123.18829	205.63595	24.06999	0.1260690	0.37315045	1.9107919	20	6 11.2	19.4
328064 2007 VR_{56}	17.9	X	220.24838	27.30855	119.21617	3.90668	0.1286863	0.30082106	2.2059579	20	11 2.7	20.6
328065 2007 VJ_{83}	17.3	X	350.15186	297.90548	84.12122	7.15316	0.1479456	0.29989403	2.2105016	20	12 19.2	19.1
328066 2007 VQ_{124}	17.7	X	159.21756	267.35884	248.43557	4.34066	0.0828053	0.28864155	2.2675845	20	9 1.6	20.8
328067 2007 VK_{202}	17.7	X	257.62169	59.17782	42.39720	5.09580	0.1103626	0.29508053	2.2344759	20	10 24.5	20.0
328068 2007 VQ_{208}	17.9	X	341.37897	10.28530	34.00652	3.73440	0.1200384	0.30304210	2.1951662	20	—	—
328069 2007 VF_{245}	17.8	X	283.09734	9.98183	72.86898	3.85728	0.0910059	0.30217498	2.1993637	20	11 13.8	19.8
328070 2007 VD_{310}	17.5	X	76.08997	304.61010	50.67317	4.81301	0.2064742	0.31612663	2.1341683	20	—	—
328071 2007 VM_{330}	17.8	X	165.98944	124.35287	0.85977	3.77646	0.1348961	0.27702825	2.3305227	20	7 31.4	21.2
328072 2007 WM	17.9	X	219.30274	57.41418	0.14496	6.88974	0.2134832	0.28194980	2.3033230	20	6 18.8	21.7
328073 2007 WE_{8}	17.9	X	343.22978	47.01874	14.65706	4.55877	0.1500482	0.31050043	2.1598715	20	—	—
328074 2007 WO_{62}	17.4	X	126.53586	154.73760	11.81530	3.54498	0.1274380	0.27513824	2.3411833	20	8 14.4	20.8
328075 2007 XK	17.3	X	225.38510	234.97723	194.74625	4.40341	0.1151206	0.28534423	2.2850199	20	7 20.7	20.3
328076 2007 XR_{28}	17.8	X	47.32126	80.77980	272.62074	4.32129	0.1444845	0.31116905	2.1567764	20	—	—
328077 2007 XK_{31}	17.9	X	308.61753	299.48483	106.92094	3.58422	0.1261875	0.29426469	2.2386040	20	11 2.5	19.7
328078 2007 XR_{31}	17.7	X	218.90122	318.23994	139.68587	5.42088	0.3036849	0.28457870	2.2891159	20	8 3.6	21.4
328079 2007 XU_{40}	17.8	X	306.29247	36.87034	32.90565	6.26022	0.0968967	0.30337372	2.1935662	20	12 5.2	19.8
328080 2007 XG_{48}	17.0	X	238.11820	47.53259	81.23170	6.19649	0.0582826	0.29600445	2.2298238	20	11 12.7	19.5

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328081 2007 XH_{56}	18.1	X	245.54972	242.44749	207.14463	0.55938	0.1742464	0.29328288	2.2435973	20	9 6.4	20.9
328082 2007 XL_{57}	17.3	X	179.91034	8.64459	104.34721	4.48719	0.1488880	0.28123067	2.3072479	20	7 28.6	20.8
328083 2007 XH_{58}	17.2	X	152.44699	195.16620	51.28726	4.80991	0.0696793	0.30205238	2.1999588	20	12 30.6	20.0
328084 2007 YN_{26}	17.2	X	187.38365	66.76361	76.58019	7.49774	0.0849735	0.28594011	2.2818442	20	9 24.3	20.4
328085 2007 YA_{31}	17.4	X	203.45519	111.09676	86.85545	6.07513	0.0246746	0.30677317	2.1773310	20	—	—
328086 2007 YB_{44}	17.1	X	283.72859	278.35963	131.96148	6.78031	0.1069402	0.28674848	2.2775537	20	9 22.2	19.4
328087 2007 YP_{44}	17.6	X	159.68526	69.54790	85.06527	3.59918	0.0937742	0.28005644	2.3136927	20	9 3.8	20.8
328088 2007 YS_{49}	17.8	X	164.58597	161.42346	316.00354	1.97640	0.1147817	0.27589470	2.3369019	20	7 18.4	21.3
328089 2007 YE_{63}	17.7	X	102.44240	158.59047	36.47772	2.52430	0.1231745	0.27452473	2.3446701	20	8 25.6	20.9
328090 2007 YG_{63}	17.7	X	26.40957	244.66820	349.36245	2.99178	0.0876706	0.26670725	2.3902656	20	6 24.4	20.2
328091 2007 YR_{63}	17.6	X	186.03355	66.82171	59.21409	2.47560	0.0500943	0.27986650	2.3147394	20	8 28.4	20.7
328092 2007 YC_{64}	17.7	X	103.98939	232.59435	324.78070	1.97717	0.1009411	0.27572861	2.3378402	20	8 26.9	20.9
328093 2007 YH_{64}	17.7	X	97.72524	60.36546	115.10264	2.87138	0.1662517	0.26919943	2.3754905	20	7 27.7	21.1
328094 2007 YA_{68}	17.7	X	23.43425	242.15624	117.19129	5.07464	0.1825761	0.30186860	2.2008516	20	—	—
328095 2007 YJ_{72}	17.2	X	141.20705	161.46314	71.01803	6.89267	0.0680406	0.29160113	2.2522153	20	11 26.7	20.3
328096 2008 AR	17.4	X	157.08167	28.06780	96.40158	5.99650	0.1754018	0.27410835	2.3470438	20	7 21.0	21.0
328097 2008 AD_{14}	17.4	X	81.62450	14.99577	271.71277	5.35902	0.1061006	0.29304766	2.2447977	20	12 2.1	20.4
328098 2008 AJ_{16}	18.1	X	159.21882	227.94890	234.04839	2.81921	0.1696770	0.27123509	2.3635899	20	6 22.6	21.7
328099 2008 AW_{17}	17.4	X	74.20879	136.88874	141.62004	2.99227	0.0864925	0.28785427	2.2717172	20	11 10.9	20.3
328100 2008 AJ_{20}	17.7	X	156.25727	0.20464	100.03051	2.91121	0.1404368	0.26816325	2.3816058	20	6 16.5	21.3
328101 2008 AK_{22}	17.8	X	158.63038	102.23709	357.28283	2.72628	0.1250626	0.26794925	2.3828737	20	6 17.3	21.4
328102 2008 AZ_{22}	17.4	X	213.23879	357.39478	101.01455	4.23993	0.1471134	0.28012738	2.3133021	20	8 13.8	20.6
328103 2008 AO_{23}	17.2	X	254.56354	287.82766	115.45335	7.67988	0.1123879	0.27771072	2.3267030	20	7 22.4	19.9
328104 2008 AG_{25}	17.6	X	35.21626	213.52522	89.25002	3.75100	0.1682807	0.28282151	2.2985878	20	11 5.3	20.3
328105 2008 AZ_{31}	17.6	X	132.28629	26.82507	129.51901	5.76684	0.1650141	0.27497811	2.3420921	20	8 7.7	21.2
328106 2008 AA_{32}	17.0	X	246.72822	313.77759	126.50057	7.73449	0.1917060	0.28832210	2.2692591	20	8 23.9	19.8
328107 2008 AG_{37}	18.1	X	176.89552	200.26771	284.12230	1.52943	0.1557808	0.27807414	2.3246754	20	8 8.6	21.8
328108 2008 AF_{42}	17.4	X	311.78620	169.09226	226.60241	3.73614	0.1472555	0.29316430	2.2442022	20	10 19.2	18.9
328109 2008 AQ_{42}	17.7	X	212.70566	294.78780	137.84739	3.30868	0.2123863	0.27905795	2.3192084	20	7 2.6	21.3
328110 2008 AS_{47}	18.1	X	172.74554	165.38721	295.28621	2.88200	0.1997240	0.27568298	2.3380982	20	7 3.9	21.8
328111 2008 AW_{57}	17.6	X	162.46741	323.92248	147.07786	2.37098	0.1294447	0.27327975	2.3517857	20	7 7.0	21.1
328112 2008 AL_{65}	17.6	X	95.75619	7.79846	156.69062	5.05385	0.1361172	0.26668440	2.3904022	20	7 5.5	20.8
328113 2008 AS_{65}	17.2	X	220.36258	305.87119	118.57177	5.97864	0.1007335	0.27591574	2.3367831	20	7 9.3	20.5
328114 2008 AO_{66}	18.2	X	163.64854	9.66032	105.14335	2.23893	0.1364300	0.27286518	2.3541672	20	7 13.7	21.6
328115 2008 AK_{68}	17.0	X	267.91336	285.30011	122.49265	6.73673	0.1087136	0.28271907	2.2991430	20	8 20.2	19.4
328116 2008 AR_{69}	16.7	X	61.45520	87.30884	124.68190	6.00402	0.1240323	0.26659246	2.3909517	20	7 25.0	19.5
328117 2008 AB_{71}	17.4	X	101.43342	47.74438	145.46412	6.06998	0.1630641	0.27149706	2.3620693	20	8 24.8	20.8
328118 2008 AY_{71}	17.2	X	275.33735	276.05770	154.58188	6.55400	0.1737615	0.29147846	2.2528472	20	9 27.6	19.3
328119 2008 AK_{73}	17.9	X	171.80533	212.64971	291.21257	2.29091	0.1110912	0.28051985	2.3111439	20	8 30.5	21.1
328120 2008 AU_{74}	17.9	X	169.54552	192.60869	271.07448	4.10480	0.1555949	0.27347200	2.3506834	20	7 4.7	21.5
328121 2008 AY_{96}	17.5	X	109.16963	219.20791	345.43216	6.89057	0.0672918	0.27897457	2.3196705	20	9 9.4	20.3
328122 2008 AL_{100}	17.8	X	192.81320	333.53785	158.01938	6.59139	0.1299681	0.28220179	2.3019517	20	9 6.1	21.1
328123 2008 AB_{102}	17.4	X	335.69075	290.82045	103.22542	6.11791	0.1343638	0.29959795	2.2119577	20	12 9.5	19.2
328124 2008 AA_{103}	18.6	X	205.53907	38.31073	84.08837	2.74889	0.1457290	0.28640224	2.2793890	20	9 8.1	21.7
328125 2008 AN_{111}	18.0	X	180.20700	358.16549	120.21038	2.07072	0.1303700	0.27708179	2.3302225	20	8 5.2	21.4
328126 2008 AX_{114}	18.0	X	114.59341	11.20921	155.33677	2.59457	0.1612948	0.27106144	2.3645993	20	8 2.2	21.4
328127 2008 BV	17.4	X	96.06724	252.21858	29.46989	7.14120	0.1571403	0.29617513	2.2289671	20	12 13.9	20.8
328128 2008 BN_{2}	17.7	X	184.41762	120.95987	348.83452	7.42450	0.1152208	0.27649103	2.3335405	20	7 31.6	21.1
328129 2008 BD_{7}	17.2	X	96.28517	70.28393	150.85959	6.72986	0.0819315	0.27856448	2.3219466	20	9 19.3	20.2
328130 2008 BY_{8}	17.3	X	118.49598	103.43577	88.37273	6.16869	0.1754138	0.27463354	2.3440507	20	9 13.5	21.0
328131 2008 BC_{10}	17.5	X	215.36058	115.60882	341.94187	8.08273	0.0521962	0.27922641	2.3182755	20	8 25.8	20.4
328132 2008 BZ_{16}	17.3	X	136.10457	187.69221	311.42910	5.99415	0.0850547	0.27149496	2.3620815	20	7 14.8	20.5
328133 2008 BD_{19}	17.2	X	121.47853	121.93655	100.32613	10.15989	0.0538063	0.28919525	2.2646892	20	10 24.9	20.3
328134 2008 BG_{23}	17.7	X	94.16186	26.66332	137.81910	1.69186	0.1502376	0.26322976	2.4112712	20	7 5.6	20.9
328135 2008 BL_{23}	17.2	X	80.64099	78.09403	141.86968	6.66608	0.1501486	0.26950742	2.3736803	20	9 5.6	20.4
328136 2008 BC_{30}	17.9	X	111.63209	237.10242	287.89928	4.66461	0.1585817	0.26995491	2.3710564	20	7 27.4	21.4
328137 2008 BY_{33}	17.1	X	177.25925	25.38693	125.45147	5.34586	0.0484020	0.28019670	2.3129205	20	9 22.0	20.1
328138 2008 BX_{35}	17.5	X	181.49778	18.45132	85.09405	2.33484	0.1366542	0.27097226	2.3651180	20	7 17.1	21.1
328139 2008 BG_{36}	17.6	X	150.06617	289.09964	164.02603	2.16140	0.1187121	0.26202562	2.4186529	20	5 30.7	21.2
328140 2008 BS_{38}	18.3	X	114.15053	311.46109	176.31665	2.10098	0.1420642	0.26166554	2.4208713	20	6 8.3	21.8
328141 2008 BH_{39}	17.8	X	177.99169	59.63360	103.12861	5.41953	0.1080915	0.28572537	2.2829874	20	10 6.5	21.1
328142 2008 BS_{41}	16.6	X	132.83891	15.93130	159.58343	7.21510	0.0680160	0.27247947	2.3563883	20	8 28.5	19.9
328143 2008 BB_{51}	17.5	X	11.61832	176.77115	149.39388	4.33054	0.1505723	0.28327800	2.2961177	20	10 31.5	19.8
328144 2008 BM_{51}	17.4	X	296.52575	7.29415	46.61378	5.46115	0.2138805	0.29164537	2.2519876	20	10 9.8	18.7
328145 2008 CE_{2}	17.3	X	148.18642	305.22711	200.93858	9.37897	0.1506434	0.27444927	2.3450998	20	8 6.2	21.1
328146 2008 CA_{10}	17.8	X	89.36122	81.49480	138.28525	3.45235	0.1123791	0.27455450	2.3445005	20	9 11.4	20.8
328147 2008 CB_{25}	17.0	X	10.64732	276.06202	358.44316	7.10366	0.0954763	0.26659436	2.3909403	20	8 1.1	19.5
328148 2008 CT_{29}	17.7	X	182.11207	132.71443	335.40592	6.36636	0.0798250	0.27477041	2.3432722	20	7 27.2	21.0
328149 2008 CY_{42}	17.5	X	129.00990	166.45466	1.99639	6.51046	0.0450415	0.27121090	2.3637305	20	8 14.8	20.6
328150 2008 CC_{43}	17.9	X	110.97196	66.93680	82.79967	3.52429	0.1171729	0.26371311	2.4083239	20	7 1.6	21.1
328151 2008 CG_{54}	17.6	X	183.37874	254.30700	188.52847	4.26140	0.2028761	0.27240656	2.3568088	20	6 19.9	21.6
328152 2008 CE_{65}	17.5	X	138.01820	334.83572	163.37765	4.73278	0.1801182	0.27042110	2.3683307	20	7 19.8	21.3
328153 2008 CT_{86}	17.6	X	97.09458	116.55374	75.92284	3.30668	0.1385034	0.26826293	2.3810158	20	8 17.2	20.9
328154 2008 CJ_{105}	17.8	X	106.70496	112.75638	36.57646	3.34807	0.2088996	0.26462660	2.4027784	20	7 6.9	21.4
328155 2008 CW_{129}	17.7	X	128.11754	16.83622	163.40982	4.46291	0.0837797	0.27491219	2.3424665	20	8 30.5	20.7
328156 2008 CB_{130}	17.6	X	207.99622	262.54478	167.24721	2.53972	0.1569366	0.27274788	2.3548421	20	6 27.8	21.2
328157 2008 CB_{132}	17.5	X	94.17816	185.99341	6.22153	2.11947	0.1477045	0.26802913	2.3824002	20	8 13.8	20.7
328158 2008 CA_{133}	18.3	X	82.71100	172.97006	333.97834	4.62410	0.1482503	0.25816024	2.4427357	20	5 25.4	21.4
328159 2008 CD_{133}	17.4	X	85.79060	52.79702	150.80321	3.80539	0.1272616	0.26850152	2.3796051	20	8 15.8	20.6
328160 2008 CE_{138}	17.6	X	355.93723	167.99236	116.30523	4.43989	0.0382586	0.26695259	2.3888009	20	7 15.2	20.2

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328161 2008 CL_{158}	17.3	X	127.34000	272.39485	249.69492	4.01995	0.1713286	0.27078133	2.3662297	20	8 8.7	21.1
328162 2008 CH_{178}	17.7	X	143.94789	351.37726	154.53224	2.51778	0.1548704	0.27398844	2.3477286	20	8 4.4	21.3
328163 2008 CP_{179}	17.0	X	173.99739	111.74952	43.99433	6.31159	0.0545700	0.27977805	2.3152273	20	9 24.7	20.1
328164 2008 CN_{192}	17.2	X	115.97709	255.11608	232.52312	7.23448	0.1415229	0.26283418	2.4136900	20	6 10.0	20.5
328165 2008 CH_{194}	17.3	X	55.53119	282.21744	171.73763	6.23384	0.1900002	0.23998511	2.5645619	20	2 2.1	19.7
328166 2008 CN_{196}	17.5	X	171.76423	142.52043	336.93794	7.66834	0.0672851	0.27290857	2.3539176	20	7 31.1	20.7
328167 2008 CV_{197}	18.0	X	122.97409	104.20611	323.90175	1.00294	0.1571083	0.25323448	2.4743103	20	4 1.1	21.3
328168 2008 CY_{200}	17.7	X	19.39893	137.73037	144.04601	3.57032	0.1795268	0.26648509	2.3915939	20	9 8.1	19.8
328169 2008 CC_{201}	17.0	X	52.48923	95.46910	173.87938	8.63794	0.1254161	0.27346971	2.3506965	20	10 4.8	19.9
328170 2008 CL_{210}	17.8	X	163.03682	258.88185	202.61343	2.07988	0.1849712	0.26873742	2.3782123	20	6 25.8	21.6
328171 2008 CE_{215}	17.5	X	172.33031	108.89753	8.22012	5.68757	0.1114572	0.27320158	2.3522343	20	7 27.9	21.0
328172 2008 CJ_{215}	17.3	X	115.52928	88.24272	100.72090	4.91451	0.0944970	0.27330177	2.3516594	20	8 30.5	20.5
328173 2008 CM_{215}	16.7	X	66.00082	154.31594	96.24704	7.22610	0.0826168	0.27408656	2.3471683	20	9 23.3	19.7
328174 2008 DP	17.5	X	102.84607	158.96216	78.00184	3.46438	0.1905103	0.28058760	2.3107718	20	10 26.2	21.1
328175 2008 DN_{1}	18.0	X	140.70809	249.35626	229.36087	0.81873	0.1325301	0.26731046	2.3866684	20	6 24.5	21.5
328176 2008 DU_{3}	17.4	X	54.63792	180.97577	24.58092	3.15682	0.1195458	0.26239848	2.4163611	20	7 4.3	20.1
328177 2008 DH_{15}	17.5	X	42.57124	100.45041	142.98809	3.14768	0.1928746	0.26209423	2.4182308	20	8 22.7	20.1
328178 2008 DZ_{23}	17.6	X	25.31600	60.91565	175.22964	1.63651	0.1347992	0.26052364	2.4279400	20	6 30.9	19.8
328179 2008 DS_{27}	17.9	X	127.11226	34.75506	142.90404	0.87249	0.1441516	0.27586955	2.3370439	20	8 29.7	21.1
328180 2008 DB_{33}	17.2	X	239.88880	325.45681	96.91025	3.03562	0.1890514	0.27594325	2.3366277	20	7 19.5	20.6
328181 2008 DF_{36}	17.1	X	357.17483	286.96558	354.81705	15.58553	0.1741805	0.26003193	2.4309999	20	7 25.2	19.5
328182 2008 DL_{36}	18.0	X	73.57419	309.02774	238.88999	0.57133	0.1274464	0.26049168	2.4281386	20	7 7.9	21.0
328183 2008 DN_{36}	18.0	X	81.44461	351.04552	196.41873	1.40820	0.1992523	0.26190353	2.4194045	20	7 28.3	21.4
328184 2008 DB_{37}	16.3	X	317.91064	52.55743	97.81583	12.36577	0.1306889	0.23119069	2.6291931	20	—	—
328185 2008 DX_{40}	16.9	X	63.24111	78.30591	149.20230	7.19004	0.1791394	0.26474687	2.4020506	20	8 27.9	20.0
328186 2008 DK_{55}	17.9	X	132.25667	301.66765	174.93759	6.22486	0.1532145	0.26220936	2.4175229	20	6 14.5	21.6
328187 2008 DK_{59}	17.6	X	14.99510	343.78194	263.00558	1.92097	0.1502137	0.25931237	2.4354949	20	6 28.6	19.8
328188 2008 DY_{70}	17.0	X	66.41016	168.65154	50.83488	12.16567	0.0773187	0.26815338	2.3816642	20	8 10.0	20.2
328189 2008 DD_{72}	17.7	X	38.79472	288.62638	347.90871	1.17232	0.1626620	0.27231368	2.3573446	20	9 29.9	20.2
328190 2008 DP_{73}	17.6	X	123.88139	339.67944	183.18854	6.61846	0.0324979	0.26890318	2.3772348	20	7 25.7	20.8
328191 2008 DF_{81}	17.6	X	40.41487	31.78222	194.29404	2.01894	0.1636899	0.25928306	2.4356784	20	7 17.7	20.2
328192 2008 DO_{88}	17.6	X	79.83868	82.46686	161.48697	6.89246	0.0718395	0.27588197	2.3369737	20	9 28.2	20.5
328193 2008 EF_{6}	17.3	X	95.12190	113.01095	67.41159	5.85313	0.1652250	0.26417809	2.4054972	20	8 1.6	20.7
328194 2008 ER_{6}	17.4	X	112.91286	84.96788	68.35136	7.05784	0.1513650	0.26411839	2.4058596	20	7 13.2	20.9
328195 2008 EH_{16}	17.5	X	54.58614	217.04617	0.15734	2.48095	0.1393356	0.25964415	2.4334197	20	7 25.0	20.3
328196 2008 EQ_{16}	17.5	X	106.14971	329.85785	179.61228	5.63469	0.0482519	0.25832721	2.4416830	20	6 15.9	20.7
328197 2008 EU_{24}	16.8	X	113.90817	11.31513	96.34264	7.64568	0.0961329	0.25502098	2.4627412	20	5 8.2	20.2
328198 2008 EN_{25}	16.7	X	337.93051	182.13569	85.97879	7.39547	0.1016834	0.25320861	2.4744788	20	5 19.3	19.4
328199 2008 EX_{38}	15.9	X	250.99116	288.90910	146.62639	10.31526	0.0877530	0.19790853	2.9162609	20	8 27.6	20.0
328200 2008 EW_{47}	17.1	X	297.20978	62.29770	178.28142	4.13707	0.2246665	0.23503834	2.6004205	20	1 23.1	20.8
328201 2008 EL_{48}	16.8	X	16.75292	328.82230	189.18694	8.75569	0.1042113	0.23919183	2.5702290	20	2 15.2	19.7
328202 2008 EA_{50}	17.5	X	264.08180	244.21659	141.08446	4.14101	0.0375826	0.27012538	2.3700588	20	7 21.3	20.2
328203 2008 EQ_{54}	16.9	X	39.55403	174.03213	41.35245	6.80634	0.0797705	0.25533964	2.4606918	20	6 16.6	19.8
328204 2008 EC_{55}	17.4	X	24.46531	82.70603	176.45911	8.87540	0.0828453	0.26020063	2.4299490	20	7 26.2	20.3
328205 2008 EE_{56}	17.3	X	86.76486	104.60149	159.46486	6.66925	0.0756915	0.28355446	2.2946250	20	11 5.9	20.4
328206 2008 EJ_{69}	16.9	X	85.49889	124.89500	70.63450	11.45446	0.1659457	0.26622685	2.3931402	20	8 13.9	20.4
328207 2008 EU_{69}	16.8	X	64.96206	97.44756	84.76453	9.49125	0.0487615	0.25943492	2.4347279	20	6 4.3	19.7
328208 2008 EZ_{79}	17.7	X	88.69915	52.27743	89.65802	2.37648	0.1324265	0.25514992	2.4619114	20	5 25.6	20.8
328209 2008 EY_{81}	17.2	X	46.42703	55.56755	188.58776	5.37325	0.2368889	0.26257842	2.4152570	20	9 4.9	20.1
328210 2008 EL_{89}	17.1	X	48.18955	335.61522	258.52931	4.15745	0.1967701	0.26181347	2.4199593	20	8 16.3	20.0
328211 2008 EO_{96}	18.0	X	127.57478	304.54830	162.32810	2.28303	0.1295078	0.26103680	2.4247570	20	5 25.3	21.4
328212 2008 EB_{109}	17.9	X	221.68349	250.55168	157.60788	2.27573	0.2025564	0.27306988	2.3529906	20	6 9.8	21.7
328213 2008 EF_{111}	17.0	X	49.32166	189.36122	57.37615	6.67490	0.1276826	0.26593899	2.3948668	20	8 31.0	19.9
328214 2008 EC_{116}	17.8	X	29.61309	43.06131	178.97137	6.38992	0.0665484	0.25704476	2.4497976	20	6 9.6	20.7
328215 2008 EJ_{122}	17.5	X	4.38224	81.29661	199.12091	1.94799	0.2058197	0.25904023	2.4372004	20	8 4.8	19.3
328216 2008 ED_{129}	17.3	X	51.38279	106.40895	158.56756	12.78543	0.2254275	0.26742808	2.3859686	20	10 13.7	20.6
328217 2008 EQ_{131}	17.4	X	30.30356	156.48183	104.08317	3.73872	0.1815076	0.26186596	2.4196359	20	8 26.9	19.9
328218 2008 ET_{139}	17.7	X	99.48433	172.93137	331.62093	4.13466	0.1372868	0.25676692	2.4515645	20	6 12.5	21.0
328219 2008 EC_{148}	16.8	X	293.59230	153.39357	190.15299	6.55617	0.2478845	0.26018336	2.4300565	20	5 30.5	19.8
328220 2008 EK_{151}	16.7	X	352.31571	65.53843	160.47764	5.03832	0.1301078	0.24351204	2.5397390	20	4 11.1	19.2
328221 2008 ES_{155}	16.4	X	250.48034	144.51613	144.97830	14.79852	0.2122367	0.22977806	2.6399580	20	2 9.4	20.8
328222 2008 FZ_{3}	17.2	X	17.57238	81.74604	146.68991	2.97705	0.1392236	0.25580864	2.4576832	20	6 3.9	19.4
328223 2008 FC_{7}	16.8	X	216.00899	189.42338	102.58629	1.89033	0.0915721	0.22774296	2.6556617	20	1 17.5	20.8
328224 2008 FY_{10}	17.4	X	20.70634	208.24136	86.66808	3.31384	0.2034569	0.27135851	2.3628732	20	10 6.9	19.8
328225 2008 FM_{11}	17.7	X	51.40921	223.47866	355.72667	1.28347	0.1342843	0.26408228	2.4060790	20	7 22.1	20.2
328226 2008 FU_{15}	17.0	X	286.13441	139.85615	144.40430	6.50920	0.1335470	0.24069276	2.5595328	20	3 19.8	20.5
328227 2008 FY_{27}	16.2	X	121.69347	323.92431	133.42559	6.78708	0.0731503	0.24566846	2.5248551	20	5 1.5	19.7
328228 2008 FA_{34}	17.4	X	35.44493	231.50600	13.47536	1.94722	0.1413374	0.26254137	2.4154843	20	8 4.7	19.9
328229 2008 FL_{38}	16.5	X	249.05410	218.67747	160.22514	6.78013	0.1242451	0.25845068	2.4409053	20	6 8.8	20.0
328230 2008 FR_{41}	16.7	X	158.77396	192.46507	182.78717	14.51027	0.0761290	0.24218533	2.5490058	20	2 23.9	20.4
328231 2008 FP_{46}	17.4	X	43.18567	110.95770	125.90903	1.77710	0.1701029	0.26185739	2.4196887	20	8 9.9	19.8
328232 2008 FB_{53}	17.0	X	41.48605	350.70072	159.65522	4.32533	0.1461108	0.24275070	2.5450465	20	3 25.4	19.4
328233 2008 FB_{55}	17.5	X	6.97845	12.64517	170.81026	2.38222	0.1301849	0.24183013	2.5515012	20	3 5.6	20.0
328234 2008 FX_{55}	16.8	X	267.78874	176.63512	190.31743	3.96919	0.1584468	0.25871136	2.4392654	20	6 10.5	19.9
328235 2008 FH_{58}	16.3	X	160.31647	331.18776	36.31978	22.48956	0.0149344	0.23385334	2.6091978	20	2 26.7	20.4
328236 2008 FD_{61}	15.8	X	354.11647	158.89489	39.51688	14.63717	0.0943910	0.23867935	2.5739068	20	3 15.6	19.0
328237 2008 FG_{62}	17.3	X	311.35950	348.06833	328.38979	2.20482	0.0736259	0.26257671	2.4152676	20	6 16.9	20.0
328238 2008 FC_{63}	16.9	X	147.52676	315.43813	126.20496	6.55742	0.0973834	0.25224379	2.4807846	20	5 13.1	20.5
328239 2008 FU_{64}	17.3	X	346.60161	51.16471	176.83116	4.18455	0.1360844	0.24385602	2.5373501	20	4 1.5	19.7
328240 2008 FH_{66}	16.7	X	135.16620	243.80972	182.26615	3.94681	0.1463147	0.24299202	2.5433612	20	4 12.2	20.3

Planet		H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
		m		°	°	°	°		°				
328241	2008 FZ$_{66}$	17.4	X	268.05064	80.53272	204.43415	5.07777	0.1879303	0.23443105	2.6049094	20	2 20.1	21.6
328242	2008 FK$_{67}$	16.2	X	237.87273	28.71048	198.08340	12.75995	0.0599290	0.21943703	2.7222590	20	—	—
328243	2008 FU$_{75}$	16.9	X	233.74384	251.81312	25.10920	4.58470	0.1946907	0.22661378	2.6644762	20	1 14.3	21.3
328244	2008 FW$_{76}$	17.3	X	358.33883	151.48081	159.16200	12.91175	0.1746740	0.26979851	2.3719727	20	9 10.6	19.1
328245	2008 FF$_{84}$	17.6	X	95.58724	199.23385	311.46031	1.17984	0.1289412	0.25946784	2.4345219	20	6 15.2	20.8
328246	2008 FE$_{90}$	17.3	X	75.35467	237.65633	356.81943	5.22494	0.1079046	0.27368650	2.3494550	20	9 13.0	20.3
328247	2008 FM$_{100}$	16.3	X	141.75236	230.09604	177.79948	13.06260	0.2550576	0.24188234	2.5511341	20	4 5.9	20.5
328248	2008 FR$_{103}$	16.8	X	281.31227	158.64802	152.72682	5.98474	0.2636756	0.24096791	2.5575840	20	3 31.7	20.7
328249	2008 FL$_{105}$	17.4	X	294.87120	211.31349	70.66442	4.05531	0.1496823	0.24366942	2.5386453	20	3 25.6	20.7
328250	2008 FB$_{107}$	17.3	X	121.77789	92.46833	37.70792	6.65093	0.0642350	0.25660797	2.4525768	20	6 10.7	20.6
328251	2008 FO$_{107}$	17.2	X	237.54265	279.27475	64.48812	4.61797	0.1296243	0.24579706	2.5239743	20	4 10.6	21.1
328252	2008 FT$_{107}$	16.8	X	312.71497	28.76159	187.09494	15.09702	0.0637214	0.23546504	2.5972779	20	1 31.1	20.6
328253	2008 FX$_{111}$	17.2	X	18.46362	325.38336	201.60495	13.66286	0.2010674	0.23900294	2.5715831	20	2 27.8	19.7
328254	2008 FM$_{112}$	17.0	X	311.61572	199.41004	142.65657	7.07723	0.1367665	0.27048040	2.3679845	20	7 18.3	19.4
328255	2008 FO$_{126}$	16.7	X	238.41828	147.90711	199.42672	12.11665	0.3043628	0.23921888	2.5700353	20	4 1.9	21.1
328256	2008 FP$_{126}$	16.9	X	17.25781	197.10911	62.08770	6.92868	0.1077064	0.25877632	2.4388571	20	7 19.8	19.5
328257	2008 FB$_{128}$	17.0	X	335.46018	260.44553	66.99988	6.37468	0.0910480	0.26336876	2.4104227	20	8 17.7	19.6
328258	2008 FN$_{133}$	17.0	X	226.30747	333.09373	10.50748	6.15325	0.0943531	0.24558821	2.5254050	20	3 30.2	20.8
328259	2008 FV$_{136}$	16.3	X	2.37114	132.28348	92.09052	5.23085	0.0172986	0.24688268	2.5165697	20	4 30.8	19.5
328260	2008 GQ$_{5}$	17.8	X	41.79363	137.10293	148.88283	5.04946	0.1903046	0.27183322	2.3601215	20	10 24.1	20.7
328261	2008 GV$_{6}$	16.6	X	96.83504	237.36681	160.00510	3.63140	0.0306885	0.22681702	2.6628843	20	1 4.9	20.0
328262	2008 GX$_{13}$	18.2	X	103.40094	74.60759	70.48674	2.21656	0.1335419	0.25835816	2.4414880	20	6 17.8	21.6
328263	2008 GX$_{18}$	16.7	X	43.77719	148.73899	79.98983	7.69466	0.0382498	0.25802114	2.4436135	20	7 8.2	19.7
328264	2008 GG$_{20}$	17.1	X	66.71272	312.68538	196.43440	5.33899	0.1046200	0.24706951	2.5153009	20	4 29.8	20.1
328265	2008 GE$_{23}$	17.1	X	265.08519	171.89261	162.00377	7.20585	0.1154138	0.25086555	2.4898625	20	4 30.9	20.6
328266	2008 GQ$_{25}$	17.9	X	349.98163	140.21385	148.43423	4.73319	0.1918576	0.25657267	2.4528018	20	7 11.3	19.6
328267	2008 GD$_{31}$	16.7	X	111.75931	163.51733	167.31882	6.50595	0.1029562	0.21685449	2.7438294	20	—	—
328268	2008 GP$_{37}$	17.0	X	0.05156	86.29447	79.86523	5.22085	0.0809154	0.23329445	2.6133632	20	2 5.5	20.1
328269	2008 GC$_{39}$	16.9	X	265.82276	110.46777	147.97088	4.68972	0.1046621	0.22869473	2.6482884	20	1 26.6	20.7
328270	2008 GJ$_{44}$	16.7	X	266.31021	260.79233	52.82106	15.58651	0.1522392	0.24276854	2.5449218	20	4 5.9	20.5
328271	2008 GY$_{47}$	16.8	X	11.11299	45.84040	90.66011	8.26799	0.0606519	0.22764495	2.6564238	20	1 15.3	20.0
328272	2008 GP$_{48}$	17.3	X	30.47791	222.84542	79.42313	3.56883	0.2067306	0.27426495	2.3461504	20	11 2.2	20.0
328273	2008 GT$_{48}$	17.3	X	326.15923	289.61949	17.51184	6.56506	0.1230839	0.26191997	2.4193032	20	6 22.9	19.8
328274	2008 GZ$_{51}$	17.0	X	320.44282	164.38979	189.05546	6.22971	0.0405736	0.26938025	2.3744273	20	8 28.8	19.9
328275	2008 GJ$_{54}$	17.2	X	127.40155	325.86322	54.23842	3.30067	0.0482327	0.22846194	2.6500870	20	1 25.6	20.7
328276	2008 GN$_{63}$	17.4	X	308.63801	184.20163	144.77823	4.28511	0.1566703	0.25817708	2.4426295	20	6 18.8	20.0
328277	2008 GY$_{63}$	17.7	X	347.80205	82.99908	199.63512	10.09549	0.2328269	0.25392036	2.4698526	20	6 23.1	19.6
328278	2008 GV$_{68}$	16.8	X	206.84018	135.61188	199.21756	16.84162	0.2448042	0.22849386	2.6498403	20	2 24.1	21.7
328279	2008 GA$_{69}$	17.0	X	39.63389	23.56762	98.66688	4.57535	0.1527047	0.23535240	2.5981066	20	2 11.9	19.5
328280	2008 GS$_{69}$	16.6	X	60.54986	312.80840	180.93314	12.21844	0.1088525	0.23982346	2.5657142	20	3 30.5	19.6
328281	2008 GP$_{82}$	16.8	X	298.59616	242.94058	44.03004	10.77034	0.0916783	0.24630484	2.5205042	20	4 15.6	19.9
328282	2008 GC$_{87}$	17.5	X	4.95007	173.02936	135.71612	3.03091	0.2330188	0.26998325	2.3708905	20	10 2.2	19.3
328283	2008 GJ$_{91}$	17.7	X	52.87556	94.67947	93.10859	1.66055	0.1334723	0.25265728	2.4780772	20	6 6.6	20.4
328284	2008 GR$_{98}$	16.4	X	280.13876	144.84427	178.50044	6.93705	0.3395386	0.23962570	2.5671256	20	4 4.8	20.3
328285	2008 GR$_{101}$	17.1	X	271.85093	176.16053	146.93957	4.22936	0.0624207	0.24703435	2.5155395	20	5 2.3	20.3
328286	2008 GS$_{102}$	16.9	X	167.76505	258.94944	110.20347	5.33665	0.0794588	0.23358421	2.6112015	20	3 2.6	20.7
328287	2008 GM$_{109}$	16.2	X	148.18168	269.87505	73.94226	11.20420	0.0688963	0.21944903	2.7221597	20	1 8.8	20.1
328288	2008 GQ$_{109}$	17.3	X	311.97321	45.17499	205.01203	9.20707	0.1618355	0.23641384	2.5903242	20	2 29.3	20.8
328289	2008 GK$_{111}$	16.4	X	220.72123	83.91330	203.33612	12.86076	0.1776289	0.22651471	2.6652530	20	1 12.7	21.0
328290	2008 GY$_{113}$	17.3	X	150.36771	253.45355	225.55589	4.32097	0.0646636	0.26050437	2.4280597	20	7 1.4	20.6
328291	2008 GV$_{119}$	17.2	X	302.04499	222.20147	68.74291	5.98693	0.2896951	0.23975446	2.5662064	20	3 26.9	20.6
328292	2008 GN$_{123}$	16.5	X	145.14661	189.95296	208.08173	7.50285	0.2658377	0.24253267	2.5465716	20	3 25.7	20.8
328293	2008 GZ$_{128}$	17.5	X	288.58138	245.24825	48.47668	5.67073	0.2845089	0.23814918	2.5777254	20	3 15.6	21.3
328294	2008 GJ$_{129}$	16.6	X	202.59473	205.45394	128.06952	7.40027	0.2781950	0.22950332	2.6420644	20	2 24.3	21.3
328295	2008 GP$_{130}$	16.9	X	36.65705	353.23116	139.42876	4.57746	0.1184444	0.23635870	2.5907270	20	2 18.1	19.6
328296	2008 GJ$_{132}$	16.6	X	223.09209	267.90887	87.05978	6.53095	0.1653873	0.23765534	2.5812951	20	4 9.9	20.8
328297	2008 GG$_{133}$	17.1	X	104.63686	313.32011	170.11232	0.88769	0.1280412	0.24784113	2.5100775	20	5 20.2	20.6
328298	2008 GN$_{136}$	17.0	X	276.31120	133.87014	183.12705	13.54373	0.1657237	0.24447168	2.5330884	20	4 14.9	20.5
328299	2008 GP$_{137}$	17.0	X	44.49963	71.21237	50.71659	22.64732	0.1278017	0.23808004	2.5782245	20	3 3.1	20.5
328300	2008 GR$_{137}$	16.9	X	49.42017	356.21450	165.29690	7.81818	0.1033931	0.24257147	2.5463000	20	4 21.4	19.8
328301	2008 GR$_{138}$	16.8	X	141.93238	203.27120	210.80798	2.36554	0.0832734	0.24067810	2.5596368	20	3 27.9	20.4
328302	2008 GU$_{138}$	16.8	X	210.33131	329.43436	55.31282	2.86939	0.1213467	0.25205623	2.4820151	20	5 3.9	20.4
328303	2008 GN$_{142}$	16.2	X	264.45681	246.78300	335.48576	11.57976	0.2780282	0.22583370	2.6706084	20	—	—
328304	2008 GQ$_{144}$	16.3	X	267.83262	190.62987	119.35173	8.66978	0.0325806	0.24553092	2.5257978	20	4 16.4	19.8
328305	Jackmcdevitt	16.7	X	292.43647	185.60405	115.67276	6.14613	0.2560314	0.24189296	2.5510594	20	4 2.4	20.2
328306	2008 HS$_{10}$	17.3	X	299.35783	64.11310	220.46889	5.98340	0.2065902	0.24044467	2.5612931	20	3 22.5	20.6
328307	2008 HT$_{17}$	17.1	X	286.09003	240.49568	72.92865	14.98053	0.2677454	0.24229589	2.5482304	20	4 13.7	20.9
328308	2008 HO$_{19}$	17.0	X	337.81637	61.80379	155.91457	11.06585	0.1255875	0.23785883	2.5798227	20	3 4.6	19.8
328309	2008 HT$_{21}$	15.9	X	244.73701	209.58548	93.35294	15.32995	0.2407863	0.22952616	2.6418892	20	2 23.9	20.6
328310	2008 HZ$_{21}$	16.2	X	272.50536	220.84454	47.48424	33.44058	0.2193373	0.23062101	2.6335211	20	2 20.5	21.1
328311	2008 HN$_{32}$	16.7	X	277.05683	231.55296	90.38689	5.52731	0.2613651	0.24211463	2.5495020	20	4 10.9	20.6
328312	2008 HJ$_{33}$	17.4	X	302.66056	177.83463	122.00266	6.52529	0.2169731	0.24311360	2.5425132	20	4 20.1	20.6
328313	2008 HU$_{36}$	16.9	X	200.07261	101.95454	204.06224	13.25587	0.1277127	0.22210329	2.7004288	20	1 16.8	21.4
328314	2008 HH$_{55}$	16.8	X	59.88001	355.79693	81.40142	4.09859	0.0816281	0.22440942	2.6818964	20	1 11.8	20.1
328315	2008 HJ$_{55}$	16.9	X	64.53757	48.96446	59.65775	12.61738	0.1366211	0.23494456	2.6011124	20	3 13.4	20.2
328316	2008 HB$_{57}$	16.4	X	265.33594	119.57543	152.85204	12.13625	0.0448545	0.23332726	2.6131182	20	2 18.8	20.0
328317	2008 HA$_{59}$	17.2	X	213.62647	312.25076	63.01039	5.20604	0.0189678	0.24617025	2.5214228	20	5 1.6	20.4
328318	2008 HX$_{60}$	16.7	X	290.74848	63.70935	219.44314	14.17509	0.0826851	0.24394596	2.5367264	20	3 26.6	20.2
328319	2008 JK$_{7}$	16.8	X	277.18219	180.13221	104.34409	10.52473	0.1562453	0.23527926	2.5986450	20	3 9.7	20.7
328320	2008 JN$_{7}$	16.7	X	48.71364	319.62897	179.03977	14.21422	0.0608293	0.23862919	2.5742675	20	3 11.8	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328321 2008 JN_{10}	17.6	X	316.44714	105.08196	163.13708	5.51443	0.2247294	0.24274604	2.5450791	20	3 24.4	20.4
328322 2008 JX_{13}	16.2	X	338.12431	96.66006	167.71212	5.69902	0.0925557	0.24443101	2.5333694	20	5 15.4	19.0
328323 2008 JB_{15}	16.9	X	284.78882	126.36980	155.33441	4.86036	0.1477233	0.23769493	2.5810085	20	3 11.9	20.6
328324 2008 JR_{15}	16.9	X	17.24286	342.85830	182.64946	12.67438	0.0461505	0.23489813	2.6014552	20	2 28.6	20.2
328325 2008 JW_{15}	17.6	X	312.51545	7.04454	238.40368	1.47881	0.0941069	0.24112702	2.5564588	20	3 6.8	20.8
328326 2008 JK_{19}	17.4	X	103.03244	17.00938	96.83053	6.04651	0.1918780	0.25175138	2.4840184	20	5 15.2	20.9
328327 2008 JY_{25}	16.7	X	284.34171	130.66710	189.22062	14.40642	0.1602942	0.24351807	2.5396971	20	4 30.0	20.2
328328 2008 JJ_{26}	16.3	X	356.77240	305.69978	227.50742	30.70364	0.2752537	0.23481053	2.6021021	20	1 4.4	19.6
328329 2008 JC_{28}	16.1	X	82.20433	280.48493	212.50715	13.39398	0.0389823	0.24192722	2.5508185	20	4 19.0	19.4
328330 2008 JU_{28}	17.1	X	190.97152	194.88019	118.04749	5.06341	0.2330068	0.21834577	2.7313218	20	1 22.8	21.7
328331 2008 JT_{30}	16.2	X	158.47958	188.69545	142.10122	10.63013	0.1409219	0.21664486	2.7455991	20	1 10.8	20.6
328332 2008 JZ_{31}	16.4	X	58.53489	284.41765	230.72146	10.62123	0.1880646	0.24474078	2.5312312	20	5 7.9	19.1
328333 2008 JG_{34}	16.4	X	292.63914	179.44284	95.55623	15.43415	0.2628533	0.23633833	2.5908759	20	3 2.7	20.4
328334 2008 JO_{34}	16.4	X	252.36191	194.11063	120.74840	9.58425	0.1170200	0.23596581	2.5936020	20	3 24.8	20.3
328335 2008 JU_{35}	15.8	X	241.48231	220.47189	144.14481	12.88128	0.2914214	0.23960051	2.5673055	20	4 30.9	20.4
328336 2008 JZ_{35}	17.0	X	101.86477	9.56917	80.63034	4.72084	0.0883804	0.23725014	2.5842333	20	3 29.9	20.4
328337 2008 JX_{36}	16.6	X	170.80927	250.55198	136.21382	11.20619	0.0238496	0.23560630	2.5962397	20	3 26.8	20.2
328338 2008 JV_{39}	17.0	X	242.01002	107.26813	212.40974	4.31551	0.1075279	0.23547134	2.5972316	20	3 15.2	20.8
328339 2008 KU_{1}	17.1	X	275.78211	120.22937	184.61037	6.18927	0.0396850	0.24025564	2.5626364	20	4 15.8	20.4
328340 2008 KV_{1}	16.5	X	118.19968	273.77136	117.67704	7.12298	0.0476673	0.22426631	2.6830372	20	1 28.4	20.1
328341 2008 KP_{2}	16.6	X	160.56895	235.32520	97.44326	6.21081	0.0609723	0.22060810	2.7126166	20	1 7.9	20.5
328342 2008 KZ_{2}	17.0	X	276.54146	183.11759	135.34826	8.29659	0.2258747	0.23948867	2.5681048	20	4 11.2	20.8
328343 2008 KH_{6}	17.1	X	294.63054	9.91806	245.68301	3.46865	0.1647893	0.23459972	2.6036607	20	2 15.1	20.7
328344 2008 KP_{7}	17.8	X	277.92026	83.03696	205.16556	1.59119	0.1679322	0.23741995	2.5830010	20	3 8.6	21.5
328345 2008 KW_{12}	17.4	X	337.58436	5.87635	211.16364	4.05907	0.1135158	0.23768140	2.5811065	20	3 2.7	20.3
328346 2008 KX_{15}	16.2	X	63.68450	307.32538	181.15569	12.46852	0.1153012	0.23726604	2.5841179	20	3 29.2	19.2
328347 2008 KJ_{23}	17.1	X	259.87930	101.20556	207.79432	8.75970	0.2502683	0.23299495	2.6156023	20	3 6.3	21.5
328348 2008 KE_{31}	16.3	X	105.27647	162.08186	199.95172	13.35269	0.1227831	0.21221821	2.7836478	20	—	—
328349 2008 KF_{41}	17.5	X	245.76250	118.17872	196.27653	13.30856	0.1277268	0.23616137	2.5921700	20	3 9.9	21.6
328350 2008 LU_{2}	16.5	X	50.79098	78.52730	70.17543	15.26474	0.0511494	0.24051279	2.5608094	20	4 6.2	19.9
328351 2008 LY_{2}	16.9	X	187.31910	151.08239	143.73068	5.81931	0.0822807	0.21725532	2.7404535	20	—	—
328352 2008 LV_{7}	16.4	X	199.10007	155.71598	181.34474	13.88378	0.2693588	0.22446771	2.6814321	20	2 23.1	21.3
328353 2008 LG_{8}	16.3	X	345.71728	44.29108	169.13405	9.92107	0.1436499	0.23776705	2.5804866	20	3 9.0	19.1
328354 2008 LL_{15}	16.0	X	90.30315	348.11662	81.02120	16.72548	0.0473397	0.22724445	2.6595441	20	2 13.7	19.8
328355 2008 LZ_{16}	16.0	X	74.06007	261.67878	210.05829	11.71452	0.1342430	0.23534404	2.5981681	20	3 22.1	19.1
328356 2008 MT	15.9	X	274.45608	192.39044	107.83558	15.47376	0.2474728	0.23002967	2.6380326	20	3 18.4	20.2
328357 2008 NE_{2}	16.2	X	172.87411	15.99855	269.46005	4.02843	0.0740459	0.20391300	2.8587276	20	—	—
328358 2008 OE_{3}	15.9	X	174.57370	156.48702	181.13957	11.95988	0.2624055	0.20957942	2.8069648	20	2 7.4	21.0
328359 2008 OZ_{3}	16.3	X	213.30638	357.28483	295.41456	8.38167	0.2658134	0.21182616	2.7870814	20	1 16.4	21.3
328360 2008 OL_{4}	16.3	X	202.18904	128.97021	186.27668	14.77260	0.1733855	0.21235471	2.7824548	20	1 31.0	21.2
328361 2008 OX_{10}	15.2	X	125.94873	69.24624	254.02980	9.43444	0.1282262	0.19729503	2.9223033	20	—	—
328362 2008 OY_{10}	15.8	X	201.37681	45.55962	252.24737	6.94923	0.1895279	0.21052021	2.7985958	20	1 12.4	20.5
328363 2008 OX_{19}	15.7	X	85.36357	158.38985	156.30323	10.79342	0.0262613	0.18222198	3.0813110	20	12 10.9	20.3
328364 2008 OH_{24}	15.8	X	34.88446	175.98970	157.46263	11.42954	0.0673521	0.17570818	3.1570011	20	11 8.9	20.3
328365 2008 PN_{6}	15.9	X	209.67898	354.03645	276.91376	12.93394	0.1977892	0.20918317	2.8105084	20	—	—
328366 2008 PY_{21}	15.6	X	27.59828	221.35541	146.47908	11.57280	0.0761520	0.18080990	3.0973331	20	12 11.9	20.0
328367 2008 QR_{7}	15.6	X	1.59508	265.82268	136.42377	12.08499	0.1822243	0.18003858	3.1061732	20	12 29.9	19.4
328368 2008 QT_{10}	15.9	X	39.61602	159.25879	170.83865	10.53138	0.1530597	0.17353070	3.1833557	20	11 21.3	20.4
328369 2008 QJ_{16}	15.7	X	82.65028	215.58951	126.52909	13.77412	0.1809041	0.18617037	3.0375890	20	—	—
328370 2008 QY_{17}	15.8	X	11.72735	163.06443	205.36778	9.66340	0.0705539	0.17703130	3.1412513	20	11 19.5	19.9
328371 2008 QP_{18}	16.2	X	144.05312	65.27490	195.44210	15.15472	0.0385228	0.18437523	3.0572738	20	12 12.9	20.9
328372 2008 QH_{19}	17.0	X	226.69252	125.44568	180.55512	8.57337	0.2968003	0.21704716	2.7422054	20	2 6.6	22.1
328373 2008 QG_{21}	15.6	X	92.06698	355.84507	296.80401	9.98294	0.0724594	0.17944719	3.1129939	20	11 23.9	20.4
328374 2008 QG_{26}	16.8	X	203.02679	157.77528	144.42434	8.75544	0.2103660	0.21006907	2.8026012	20	1 19.4	21.7
328375 2008 QR_{27}	15.2	X	97.32937	204.78055	132.37995	10.92666	0.0270878	0.18937382	3.0032358	20	—	—
328376 2008 QH_{28}	15.6	X	82.89865	208.78498	120.08471	10.25745	0.1299023	0.18386693	3.0629058	20	—	—
328377 2008 QH_{48}	16.0	X	103.44654	86.50564	184.78465	25.57051	0.2187824	0.17973973	3.1096152	20	11 25.0	21.5
328378 2008 RD_{8}	15.8	X	188.64129	18.42579	193.76097	12.69236	0.1146439	0.18057829	3.0999809	20	11 28.9	20.7
328379 2008 RO_{31}	16.0	X	25.82600	167.10885	173.37511	11.56916	0.1104804	0.17179060	3.2048161	20	11 9.7	20.3
328380 2008 RP_{40}	16.6	X	102.00767	161.05380	174.71832	6.40522	0.2194522	0.18834733	3.0141375	20	—	—
328381 2008 RK_{41}	14.1	X	260.93353	96.26431	8.29885	7.27562	0.0784862	0.08134237	5.2754335	20	9 29.5	21.0
328382 2008 RT_{46}	16.2	X	128.60740	78.23690	187.98300	3.71590	0.0605473	0.17569881	3.1571133	20	12 1.9	20.9
328383 2008 RR_{56}	15.5	X	294.14606	248.80569	186.34460	13.54234	0.0350011	0.17050969	3.2208464	20	10 26.7	20.0
328384 2008 RA_{63}	15.7	X	75.80907	181.73012	163.48558	9.73590	0.1291088	0.18418401	3.0593895	20	—	—
328385 2008 RL_{74}	16.3	X	86.79379	309.37315	8.05822	5.85685	0.2862414	0.18350845	3.0668933	20	—	—
328386 2008 RE_{83}	16.5	X	86.77396	99.03410	207.15915	3.37596	0.0982820	0.18139429	3.0906772	20	12 8.9	21.0
328387 2008 RC_{90}	16.3	X	162.74894	49.38186	221.01658	7.66940	0.1519550	0.18709013	3.0276253	20	—	—
328388 2008 RD_{97}	16.4	X	115.12901	296.74217	356.54806	3.22147	0.2359601	0.18197625	3.0840843	20	12 28.1	21.7
328389 2008 RK_{98}	16.0	X	282.54570	211.36506	71.65662	18.77666	0.2971594	0.22654562	2.6650106	20	3 2.7	20.6
328390 2008 RP_{101}	16.0	X	336.95460	211.15441	177.47916	13.12417	0.0509294	0.17008135	3.2262518	20	10 26.2	20.4
328391 2008 RT_{105}	15.3	X	3.54176	252.82035	110.83354	6.53021	0.1406892	0.16943105	3.2345017	20	11 8.4	19.3
328392 2008 RF_{113}	16.0	X	132.88160	117.94164	197.18944	13.63351	0.1115635	0.19050612	2.9913238	20	—	—
328393 2008 RY_{118}	14.9	X	46.82573	239.52456	89.12575	27.97883	0.2911164	0.17537577	3.1609890	20	12 15.9	19.6
328394 2008 RT_{124}	16.4	X	134.73430	268.80373	8.74309	1.54357	0.1126948	0.18544492	3.0455057	20	12 23.7	21.2
328395 2008 RC_{129}	15.5	X	46.79807	287.52415	34.64332	18.18836	0.1728814	0.17263195	3.1943949	20	11 17.6	20.0
328396 2008 RF_{132}	15.7	X	92.42449	206.15382	142.82435	13.84094	0.1566266	0.18766612	3.0214272	20	—	—
328397 2008 RD_{139}	15.4	X	78.08825	81.53909	243.89191	10.81392	0.1294863	0.18092053	3.0960703	20	12 24.6	20.2
328398 2008 RN_{143}	16.4	X	117.97378	99.57236	191.99743	11.12481	0.1231621	0.18349856	3.0670036	20	12 23.8	21.4
328399 2008 SW_{3}	15.7	X	210.52860	286.64825	26.56767	7.50379	0.2940045	0.21160792	2.7889974	20	2 9.2	20.9
328400 2008 SM_{30}	16.0	X	201.44329	122.32344	155.02298	12.98414	0.0762465	0.20401419	2.8577822	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328401 2008 SO_{30}	15.8	X	44.33262	36.75665	299.86750	7.45135	0.1375045	0.17322802	3.1870628	20	11 29.7	20.3
328402 2008 SF_{34}	15.7	X	0.92999	202.67326	162.42850	6.29389	0.1506195	0.17110221	3.2134063	20	11 6.9	19.6
328403 2008 SE_{47}	15.8	X	112.20717	291.50488	25.23987	12.62488	0.2481736	0.18529772	3.0471184	20	—	—
328404 2008 SH_{48}	15.4	X	195.65195	128.22995	353.36022	9.96950	0.0347024	0.15723002	3.3997403	20	8 23.5	20.3
328405 2008 SG_{52}	16.1	X	85.95732	97.94356	198.54627	3.14084	0.1216815	0.17434354	3.1734535	20	11 27.9	20.8
328406 2008 SR_{54}	16.3	X	105.12903	82.21494	191.20272	7.40963	0.1630516	0.17410386	3.1763654	20	11 23.6	21.4
328407 2008 SH_{61}	15.1	X	49.70978	10.11861	319.29951	23.30370	0.2539185	0.17611352	3.1521551	20	12 15.9	20.1
328408 2008 SV_{63}	16.2	X	79.10743	111.94689	218.21186	4.90795	0.1419355	0.17936895	3.1138992	20	—	—
328409 2008 SH_{75}	16.7	X	93.18587	28.81782	289.67553	2.77231	0.1327046	0.18266809	3.0762923	20	—	—
328410 2008 SN_{78}	16.7	X	65.23545	33.76047	314.70632	3.16916	0.1927388	0.18174134	3.0867413	20	—	—
328411 2008 SS_{89}	16.3	X	107.24717	68.47336	181.96921	5.15575	0.0821668	0.17362983	3.1821439	20	10 23.5	21.0
328412 2008 SK_{94}	16.2	X	183.96392	124.10267	184.53062	12.84419	0.1812419	0.20355299	2.8620973	20	1 10.7	21.2
328413 2008 ST_{106}	15.2	X	45.74889	318.27355	26.70957	23.80324	0.1653902	0.17455902	3.1708414	20	12 11.6	20.1
328414 2008 SP_{126}	15.4	X	86.40008	244.16951	246.72854	3.67916	0.1246248	0.12597901	3.9409773	20	5 8.9	21.0
328415 2008 SZ_{157}	16.3	X	57.89163	170.54886	183.78391	9.99611	0.1086678	0.18100808	3.0950718	20	—	—
328416 2008 SC_{158}	15.6	X	37.72869	182.41830	185.78424	15.31795	0.2266922	0.17878154	3.1207162	20	—	—
328417 2008 SB_{161}	16.2	X	71.36599	312.61515	7.72429	10.90217	0.1618135	0.17774519	3.1328347	20	12 14.3	21.1
328418 2008 SZ_{164}	16.7	X	224.69610	118.34985	189.40533	19.26362	0.3605583	0.21359442	2.7716781	20	2 4.4	22.3
328419 2008 SM_{174}	15.7	X	133.86561	306.55017	340.47536	13.90629	0.1887996	0.18554426	3.0444187	20	—	—
328420 2008 SC_{213}	16.4	X	281.82295	47.71452	355.23448	1.65334	0.0353691	0.15915945	3.3722086	20	8 28.7	21.2
328421 2008 SA_{238}	15.7	X	67.24418	294.86886	30.75252	4.77431	0.1584342	0.17632038	3.1496892	20	12 16.3	20.5
328422 2008 SY_{250}	16.3	X	155.88448	205.16197	53.25570	0.94930	0.1648540	0.18222885	3.0812336	20	12 19.4	21.3
328423 2008 SP_{253}	14.9	X	47.48986	293.44201	54.81616	14.23212	0.2083554	0.17509211	3.1644021	20	12 27.4	19.6
328424 2008 SR_{255}	15.8	X	109.65725	148.96663	131.38640	4.98903	0.1138469	0.17316612	3.1878223	20	12 2.1	20.8
328425 2008 SZ_{278}	14.9	X	43.12078	190.97603	65.93300	10.93065	0.0315049	0.14586649	3.5740918	20	8 8.3	20.0
328426 2008 SW_{279}	16.9	X	118.46546	295.87362	7.41427	5.46095	0.1349463	0.18579973	3.0416273	20	—	—
328427 2008 SX_{285}	15.6	X	66.96076	211.85506	117.54073	11.68221	0.2164966	0.17655598	3.1468866	20	12 27.3	20.5
328428 2008 SZ_{293}	15.8	X	112.99630	143.14523	160.99962	12.79053	0.1221830	0.18393088	3.0621958	20	—	—
328429 2008 SK_{299}	15.9	X	116.18605	98.96845	184.08399	8.00933	0.2146156	0.17873903	3.1212109	20	12 16.2	21.3
328430 2008 TG_{4}	16.1	X	147.36833	112.91364	195.15158	10.68246	0.1400819	0.19189942	2.9768271	20	—	—
328431 2008 TK_{4}	16.1	X	75.81660	151.04449	194.45320	11.49340	0.1181512	0.18206179	3.0831182	20	—	—
328432 2008 TP_{9}	16.0	X	71.54607	265.67574	29.68763	3.57009	0.1485483	0.17102039	3.2144311	20	11 13.2	20.8
328433 2008 TW_{11}	15.6	X	140.98820	50.29017	190.86560	15.73005	0.0506655	0.17362454	3.1822086	20	11 16.2	20.5
328434 2008 TM_{15}	15.5	X	145.81098	63.90052	198.07713	10.96032	0.1333845	0.18149514	3.0895321	20	12 15.3	20.6
328435 2008 TZ_{16}	15.7	X	62.03418	95.54174	222.01860	14.65618	0.1748073	0.16966043	3.2315857	20	12 2.7	20.5
328436 2008 TC_{21}	16.4	X	82.33247	299.73432	5.67750	0.30563	0.1747499	0.17173428	3.2055168	20	12 8.9	21.3
328437 2008 TH_{24}	15.6	X	29.53395	179.47059	202.74702	17.98330	0.2052154	0.17770010	3.1333646	20	—	—
328438 2008 TF_{32}	15.9	X	56.92427	135.48297	194.38320	5.48962	0.1574526	0.17232243	3.1982189	20	12 10.0	20.5
328439 2008 TW_{32}	15.4	X	87.85451	276.69789	37.83225	10.48955	0.1947106	0.17793484	3.1306082	20	12 27.1	20.5
328440 2008 TT_{34}	15.5	X	204.39453	74.26029	4.30912	9.57486	0.0829143	0.14561042	3.5782807	20	7 7.2	21.1
328441 2008 TR_{54}	16.4	X	100.99750	286.64409	359.98892	2.02273	0.1601081	0.17503765	3.1650584	20	12 3.6	21.5
328442 2008 TX_{58}	15.4	X	61.31951	76.39982	71.01824	2.57971	0.0620791	0.12666906	3.9266513	20	4 20.3	20.8
328443 2008 TT_{62}	15.1	X	107.11247	209.88341	25.57780	8.36264	0.0542652	0.16007745	3.3593038	20	10 1.4	20.0
328444 2008 TQ_{68}	15.9	X	34.18533	305.03543	41.40547	14.87295	0.2029997	0.17020801	3.2246510	20	12 5.9	20.4
328445 2008 TD_{71}	15.1	X	121.41223	269.97176	184.46231	8.95564	0.0908207	0.12550152	3.9509670	20	5 2.6	20.9
328446 2008 TX_{87}	15.6	X	110.86816	242.76149	49.97974	10.56460	0.2050085	0.17825945	3.1268065	20	12 21.7	20.9
328447 2008 TT_{92}	16.5	X	138.24901	282.19654	16.85663	10.02245	0.2602548	0.19041964	2.9922295	20	—	—
328448 2008 TN_{100}	15.3	X	72.73888	142.57364	192.00647	27.42814	0.1444285	0.18184792	3.0855350	20	12 29.8	20.5
328449 2008 TB_{103}	15.2	X	40.03281	127.36976	220.39444	16.22602	0.1861292	0.17550374	3.1594523	20	12 15.2	19.8
328450 2008 TH_{111}	16.1	X	102.98128	85.47719	251.46142	4.16826	0.1994143	0.18530989	3.0469850	20	—	—
328451 2008 TQ_{113}	14.8	X	138.75627	330.25984	101.27661	3.76602	0.1291485	0.12507617	3.9599192	20	4 26.8	20.8
328452 2008 TB_{122}	15.3	X	103.12403	72.70761	238.62788	15.56625	0.1042542	0.18065153	3.0991430	20	12 29.5	20.2
328453 2008 TS_{170}	15.4	X	117.27620	62.32265	228.83874	25.55056	0.2888420	0.17617808	3.1513850	20	12 24.2	21.3
328454 2008 TY_{175}	14.8	X	63.09153	301.72919	196.92491	13.83420	0.1167705	0.12597687	3.9410218	20	4 19.3	20.1
328455 2008 TX_{179}	16.0	X	131.17501	206.94647	147.58057	16.38423	0.2458407	0.19474738	2.9477340	20	1 25.2	20.7
328456 2008 UG_{4}	16.0	X	81.04907	212.56425	142.18846	9.04841	0.3213374	0.18339443	3.0681644	20	—	—
328457 2008 UF_{98}	15.0	X	35.06493	297.44779	60.59707	27.23297	0.2203181	0.17102845	3.2143301	20	12 22.3	19.7
328458 2008 UF_{106}	16.6	X	136.19783	104.84138	207.20096	10.43353	0.1929898	0.19077668	2.9884949	20	—	—
328459 2008 UH_{106}	15.6	X	104.70366	83.11071	204.19585	15.13181	0.0459003	0.17470556	3.1690681	20	11 30.2	20.4
328460 2008 UN_{110}	15.5	X	94.67300	69.24602	252.91640	7.15369	0.3376249	0.18193280	3.0845754	20	—	—
328461 2008 US_{159}	15.4	X	75.15651	289.05666	56.76098	26.48550	0.2579936	0.17643300	3.1483488	20	—	—
328462 2008 UM_{189}	16.3	X	138.51489	285.58029	17.75655	9.73702	0.1756437	0.19006119	2.9959904	20	—	—
328463 2008 UJ_{202}	15.9	X	107.21641	172.29637	169.30888	8.65092	0.2606956	0.18701013	3.0284887	20	—	—
328464 2008 UY_{365}	14.4	X	106.74250	37.42453	232.69759	31.79436	0.0489492	0.17033728	3.2230194	20	11 10.8	19.1
328465 2008 VO_{20}	15.2	X	108.49203	230.30733	67.75052	15.13374	0.2754682	0.17443665	3.1723242	20	12 28.3	20.8
328466 2008 VW_{24}	16.1	X	80.17991	204.13817	109.24866	2.38547	0.1382475	0.17302047	3.1896110	20	12 12.8	20.9
328467 2008 WP_{42}	15.5	X	73.69904	264.24788	63.15839	26.52574	0.2333143	0.17145556	3.2089898	20	12 29.2	20.9
328468 2008 YY_{31}	17.2	X	167.36388	303.85476	116.21313	27.74462	0.1465161	0.37619463	1.9004699	20	5 16.2	20.5
328469 2009 BR_{96}	18.0	X	259.74426	258.29186	135.59690	24.57276	0.1039951	0.38881665	1.8591145	20	7 26.3	19.6
328470 2009 CU_{2}	17.5	X	210.63842	251.09037	141.27319	24.27611	0.0968939	0.37641993	1.8997115	20	5 21.6	20.5
328471 2009 CZ_{57}	17.2	X	198.16384	182.04182	173.18941	22.98646	0.0819162	0.35864202	1.9619831	20	3 3.1	19.5
328472 2009 DM_{44}	17.4	X	91.62546	133.83366	6.76035	20.19727	0.0675195	0.37070315	1.9191925	20	5 4.1	19.6
328473 2009 FW_{56}	17.4	X	110.71477	44.87040	56.68539	21.86973	0.0883824	0.36355512	1.9442669	20	4 24.1	19.6
328474 2009 FC_{59}	17.4	X	124.27302	22.38257	113.42071	2.91311	0.1639712	0.28399831	2.2922336	20	7 2.9	20.6
328475 2009 HJ_{2}	15.2	X	321.56549	169.17588	73.66435	18.92278	0.1475331	0.17580198	3.1558780	20	3 28.2	19.6
328476 2009 HD_{9}	18.2	X	123.08364	359.00425	271.87300	1.03349	0.1840050	0.30683262	2.1770498	20	12 27.9	21.4
328477 Eckstein	18.3	X	7.54069	278.52747	344.70885	0.78104	0.1633906	0.27691268	2.3311711	20	7 12.4	19.9
328478 2009 HH_{64}	17.5	X	98.91781	246.62615	58.95845	5.51651	0.0930619	0.30842107	2.1695684	20	—	—
328479 2009 HL_{103}	17.3	X	4.68761	280.31679	87.03626	6.71803	0.0695969	0.30017168	2.2091383	20	12 9.2	19.5
328480 2009 JW_{14}	17.8	X	319.62706	204.49031	232.59480	4.49724	0.0860603	0.30655239	2.1783763	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328481 2009 KA_{17}	17.6	X	61.05069	212.71826	131.21526	3.77637	0.1543952	0.30585740	2.1816750	20	—	—
328482 2009 KK_{20}	17.7	X	265.58645	321.20885	107.19965	3.89087	0.1399292	0.29124365	2.2540579	20	9 13.3	20.0
328483 2009 LZ_{5}	18.5	X	82.00525	203.43161	97.96578	3.16981	0.2481255	0.29311707	2.2444433	20	12 30.6	22.1
328484 2009 MJ_{5}	17.2	X	88.35622	153.40572	122.43681	4.61546	0.1035784	0.28898595	2.2657826	20	11 25.7	20.4
328485 2009 MO_{5}	18.3	X	148.03246	161.64018	130.20912	3.16852	0.2520733	0.30729419	2.1748693	20	—	—
328486 2009 MH_{7}	18.0	X	76.73278	91.22365	160.12674	9.79090	0.2325792	0.28612490	2.2808617	20	10 26.0	21.5
328487 2009 MX_{8}	16.9	X	262.00091	220.93763	118.59245	3.30271	0.2209813	0.25424870	2.4677257	20	4 20.8	20.7
328488 2009 MY_{9}	17.5	X	0.56773	9.23706	280.18874	2.26559	0.1739850	0.26759743	2.3849618	20	8 8.9	19.5
328489 2009 OP_{1}	18.4	X	33.53023	14.77491	271.40816	0.55133	0.1914458	0.27577200	2.3375950	20	10 11.3	20.9
328490 2009 ON_{2}	16.6	X	288.47306	36.87158	298.78839	3.08952	0.1305623	0.25937721	2.4350890	20	5 29.9	19.6
328491 2009 OX_{4}	17.8	X	54.64036	182.50102	133.06588	7.26527	0.1948499	0.28576784	2.2827612	20	12 18.5	21.1
328492 2009 OC_{6}	17.1	X	313.73196	174.14071	147.03539	7.39441	0.2260406	0.26182401	2.4198944	20	6 5.6	19.5
328493 2009 OJ_{17}	16.4	X	209.30999	59.69347	279.14698	11.41231	0.0651615	0.23744186	2.5828421	20	3 1.3	20.5
328494 2009 OX_{20}	17.1	X	342.41898	295.99506	352.38530	4.49935	0.2248066	0.26385536	2.4074583	20	6 19.4	18.8
328495 2009 OZ_{24}	17.2	X	291.54502	138.70198	204.57979	2.00909	0.1861806	0.25977137	2.4326252	20	6 5.9	20.0
328496 2009 PQ_{3}	17.0	X	280.59506	126.16460	218.68590	5.94585	0.1596386	0.25728601	2.4482660	20	5 27.7	20.1
328497 2009 PR_{4}	15.6	X	33.43017	83.71278	319.18560	13.78190	0.1532953	0.20504040	2.8482390	20	—	—
328498 2009 PG_{7}	17.7	X	75.90440	37.46483	257.45476	2.49284	0.2074242	0.28832292	2.2692548	20	12 14.2	21.2
328499 2009 PU_{11}	17.7	X	318.34238	317.22376	359.33932	2.01165	0.2202224	0.25998275	2.4313064	20	6 7.1	19.9
328500 2009 PR_{13}	18.3	X	94.26191	125.90875	169.37682	4.56351	0.1843745	0.29299426	2.2450705	20	12 30.2	21.8
328501 2009 PQ_{14}	16.8	X	35.99761	301.80718	349.69191	7.34936	0.1533369	0.27359994	2.3499505	20	10 13.4	19.6
328502 2009 PW_{14}	17.2	X	65.48405	13.55764	267.65474	3.68440	0.1613980	0.28120102	2.3074101	20	11 9.9	20.3
328503 2009 PD_{15}	17.9	X	6.06587	149.44251	162.25423	1.26049	0.2005629	0.27252294	2.3561377	20	10 3.1	19.8
328504 2009 PP_{15}	16.5	X	94.58430	190.37605	190.63907	5.82524	0.0608345	0.21358742	2.7717386	20	—	—
328505 2009 PM_{16}	16.3	X	115.24332	254.61363	172.14219	5.59987	0.0262616	0.23012916	2.6372722	20	3 5.1	19.7
328506 2009 PH_{17}	16.9	X	116.43851	157.25768	154.63458	2.42166	0.0604455	0.20392612	2.8586049	20	—	—
328507 2009 QV_{7}	15.7	X	266.91336	227.81867	188.63569	9.08581	0.0644424	0.17422417	3.1749029	20	8 21.6	20.2
328508 2009 QH_{9}	17.9	X	353.28599	357.98729	346.00376	1.74955	0.3054079	0.27376186	2.3490238	20	11 14.7	19.5
328509 2009 QC_{10}	17.2	X	304.16624	3.64885	348.96749	0.94686	0.1980812	0.26381914	2.4076786	20	7 10.6	19.2
328510 2009 QA_{11}	17.4	X	18.78145	177.20841	147.14486	6.07111	0.1891847	0.27592314	2.3367413	20	11 14.4	20.0
328511 2009 QF_{11}	17.5	X	347.51274	213.23219	138.89782	4.22172	0.1895479	0.27265102	2.3553998	20	10 28.2	19.4
328512 2009 QR_{11}	17.8	X	5.73425	189.00646	118.32247	3.69381	0.1905508	0.27223196	2.3578164	20	9 25.6	19.8
328513 2009 QP_{12}	17.6	X	344.71656	49.24572	249.49616	1.96347	0.2169868	0.26336275	2.4104594	20	7 15.6	19.1
328514 2009 QT_{15}	17.8	X	32.22258	145.78380	144.54162	1.76623	0.1761707	0.27161988	2.3613572	20	10 12.9	20.4
328515 2009 QR_{19}	17.7	X	345.51566	21.78903	278.85049	0.55557	0.1638283	0.26550619	2.3974687	20	7 22.4	19.4
328516 2009 QA_{20}	17.0	X	35.74194	294.36540	319.77196	4.11690	0.1081198	0.26625678	2.3929609	20	8 13.2	19.5
328517 2009 QN_{20}	17.5	X	347.59379	110.95565	202.18851	3.82506	0.1769247	0.26545931	2.3977510	20	8 16.7	19.4
328518 2009 QF_{22}	17.2	X	332.78010	188.30033	128.32852	2.03191	0.1978315	0.26362911	2.4088355	20	7 16.2	18.9
328519 2009 QZ_{23}	17.4	X	14.87647	101.83567	176.40691	4.20014	0.1447225	0.26919593	2.3755111	20	8 17.7	19.7
328520 2009 QK_{24}	17.0	X	349.50910	111.80119	187.29208	6.36560	0.2096365	0.26532048	2.3985873	20	7 28.7	18.8
328521 2009 QA_{29}	17.1	X	314.43631	301.69182	40.06429	5.60277	0.2402843	0.26412887	2.4057960	20	7 8.2	19.1
328522 2009 QC_{38}	16.9	X	208.40762	192.80170	163.38370	15.31697	0.1388171	0.23656678	2.5892076	20	3 28.8	21.0
328523 2009 QY_{47}	16.5	X	170.88872	189.52232	156.07694	7.69388	0.2977806	0.22585085	2.6704733	20	2 15.8	21.3
328524 2009 QB_{53}	16.6	X	20.65285	267.41817	94.85727	22.29560	0.2185791	0.28486677	2.2875725	20	—	—
328525 2009 QC_{56}	15.9	X	247.38823	257.49397	189.57065	11.26483	0.1081999	0.17491378	3.1665526	20	8 29.6	20.5
328526 2009 QR_{57}	16.7	X	144.30234	337.52274	18.14185	5.17152	0.0479035	0.22098184	2.7095572	20	1 16.9	20.5
328527 2009 QV_{58}	17.0	X	279.30868	220.62054	23.62357	3.71173	0.0471792	0.22753415	2.6572862	20	2 2.2	20.6
328528 2009 QK_{60}	16.3	X	55.89929	264.83275	111.46500	5.82264	0.1305089	0.20301948	2.8671092	20	—	—
328529 2009 QA_{62}	17.1	X	326.40056	250.35127	86.92609	5.30574	0.2594173	0.26531208	2.3986379	20	7 31.0	18.4
328530 2009 QX_{62}	17.7	X	59.61639	107.33389	164.39789	9.58166	0.1736311	0.27574452	2.3377503	20	10 26.1	20.9
328531 2009 RM_{4}	16.7	X	201.27685	35.88242	300.38935	4.01037	0.0639985	0.23344092	2.6122700	20	2 23.4	20.4
328532 2009 RD_{12}	16.8	X	179.78228	302.61254	9.78194	6.37432	0.0577464	0.21702216	2.7424160	20	1 5.6	20.8
328533 2009 RH_{14}	16.4	X	202.99766	119.07685	189.71051	5.50813	0.0592735	0.22170528	2.7036597	20	1 23.7	20.4
328534 2009 RE_{17}	16.6	X	111.10867	203.02382	172.21316	5.33417	0.0350916	0.21345131	2.7729167	20	—	—
328535 2009 RL_{18}	16.6	X	22.43517	244.92210	122.20300	2.35473	0.2468452	0.18912999	3.0058164	20	12 29.3	20.3
328536 2009 RQ_{20}	17.0	X	160.03320	160.72451	194.90255	4.64308	0.1297730	0.22069871	2.7118741	20	2 8.6	21.3
328537 2009 RU_{23}	17.0	X	354.07810	295.51642	165.34862	2.27667	0.0439557	0.20610667	2.8384071	20	—	—
328538 2009 RQ_{25}	15.5	X	308.12497	247.13321	189.96999	13.89846	0.1083836	0.18307067	3.0717807	20	11 14.6	19.4
328539 2009 RZ_{28}	15.7	X	335.36685	15.68328	345.09889	8.70150	0.0732958	0.17606838	3.1526939	20	9 16.3	19.8
328540 2009 RJ_{31}	16.2	X	252.27256	208.73811	226.11988	4.55899	0.1428238	0.16921797	3.2372163	20	8 15.3	21.0
328541 2009 RW_{33}	16.4	X	312.24211	228.42452	18.15421	4.88772	0.2091268	0.23412670	2.6071665	20	2 22.7	19.6
328542 2009 RR_{34}	16.8	X	214.38282	96.16757	200.31940	14.86607	0.0829191	0.21966113	2.7204071	20	1 19.1	21.3
328543 2009 RZ_{34}	15.6	X	344.77280	52.87200	22.83607	11.26712	0.0725875	0.19236111	2.9720620	20	—	—
328544 2009 RO_{35}	16.5	X	105.54014	183.85044	194.43170	9.86754	0.2243518	0.21133001	2.7914419	20	1 21.0	20.6
328545 2009 RV_{35}	16.0	X	299.08029	233.33659	201.82194	14.96785	0.0876444	0.18000093	3.1066062	20	10 29.4	19.9
328546 2009 RY_{41}	16.7	X	148.84781	21.99229	311.90506	5.50428	0.0534815	0.21425262	2.7659986	20	—	—
328547 2009 RK_{49}	16.3	X	259.13804	240.75713	201.52717	14.46465	0.0681943	0.17328164	3.1864053	20	9 11.9	20.9
328548 2009 RL_{50}	16.3	X	108.50844	30.75986	201.55746	9.01256	0.0456665	0.17511730	3.1640987	20	9 27.8	21.0
328549 2009 RK_{56}	16.2	X	6.02238	329.17087	111.44980	3.11829	0.0373276	0.19955032	2.9002433	20	—	—
328550 2009 RC_{57}	16.0	X	318.07130	346.65661	63.56204	5.98354	0.0479078	0.17962480	3.1109416	20	10 28.2	20.0
328551 2009 RE_{59}	16.7	X	133.07031	171.41756	180.59573	4.21766	0.0866458	0.21518292	2.7580207	20	1 3.5	20.5
328552 2009 RM_{60}	16.3	X	258.84554	2.54040	280.66077	10.58513	0.0463109	0.23438250	2.6052691	20	2 19.9	20.2
328553 2009 RN_{60}	17.0	X	330.73672	115.39688	228.68644	7.57774	0.2477630	0.26765431	2.3846239	20	8 22.6	18.5
328554 2009 RG_{63}	17.2	X	32.73494	8.07930	302.33032	1.54339	0.2133858	0.27527577	2.3404034	20	11 16.0	20.1
328555 2009 RH_{69}	16.4	X	274.17234	90.84008	243.54289	6.76205	0.0645494	0.25082979	2.4900992	20	5 18.8	19.6
328556 2009 RF_{72}	17.8	X	300.68933	253.42428	27.91921	7.04896	0.1728006	0.24176027	2.5519927	20	3 28.6	21.0
328557 2009 RB_{73}	16.7	X	123.95229	55.42164	296.55341	4.98832	0.0651699	0.21206974	2.7849469	20	—	—
328558 2009 RS_{73}	16.7	X	229.38057	91.11751	9.03516	11.60232	0.1346743	0.17086201	3.2164172	20	8 28.4	21.7
328559 2009 RY_{73}	15.9	X	335.59495	12.59040	5.06782	12.55178	0.0905687	0.18087269	3.0966162	20	10 8.5	19.7
328560 2009 RK_{74}	17.3	X	343.30812	262.24550	37.84446	3.54980	0.1908952	0.26165252	2.4209515	20	7 16.1	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328561 2009 RW_{74}	17.6	X	358.55350	255.35570	63.45291	3.10142	0.2050742	0.27038705	2.3685295	20	9 29.9	19.3
328562 2009 RX_{74}	16.5	X	104.00424	254.42017	150.18345	11.02288	0.1600692	0.22033075	2.7148925	20	2 12.2	20.0
328563 Mosplanetarium	16.8	X	333.32215	71.93792	245.11768	8.45383	0.3221624	0.26192091	2.4192975	20	7 1.2	17.8
328564 2009 SA_{9}	16.8	X	191.20508	91.67141	184.88868	24.70058	0.1503104	0.21702467	2.7423948	20	—	—
328565 2009 SH_{12}	17.6	X	1.41735	111.91298	186.64895	2.33394	0.1969583	0.26601723	2.3943973	20	8 28.9	19.5
328566 2009 SO_{16}	18.1	X	66.05633	309.26152	333.29093	2.07633	0.1790877	0.27995755	2.3142375	20	11 14.2	21.4
328567 2009 ST_{16}	15.4	X	255.39772	308.44072	187.17407	11.83086	0.0782607	0.18742880	3.0239772	20	11 17.9	19.7
328568 2009 SB_{19}	17.0	X	356.89172	221.12592	207.74136	1.57990	0.0646328	0.20033427	2.8926721	20	—	—
328569 2009 SU_{22}	18.0	X	7.39615	86.96056	239.24895	4.12256	0.1861830	0.27586775	2.3370541	20	10 25.3	20.2
328570 2009 SR_{23}	17.1	X	154.70429	152.30749	169.48003	1.91169	0.0790714	0.21812693	2.7331483	20	—	—
328571 2009 SY_{26}	17.6	X	316.32227	336.65069	358.80960	4.12861	0.2055140	0.26022300	2.4298097	20	7 7.6	19.8
328572 2009 SD_{27}	16.8	X	0.93323	227.55875	188.92954	11.59674	0.0412807	0.19601772	2.9349846	20	—	—
328573 2009 SJ_{27}	17.1	X	181.71824	175.77712	188.22785	6.34385	0.2358247	0.23078015	2.6323103	20	3 13.3	21.6
328574 2009 SP_{29}	16.6	X	150.73774	312.50268	17.06023	8.28875	0.0578667	0.21273549	2.7791336	20	—	—
328575 2009 SB_{35}	17.1	X	246.81540	302.35091	348.50315	4.07414	0.1636345	0.22977669	2.6399685	20	2 12.1	21.1
328576 2009 SH_{36}	17.5	X	308.39164	16.19799	253.51812	2.10058	0.1847258	0.24143127	2.5543106	20	3 18.9	20.7
328577 2009 SJ_{36}	15.9	X	274.78026	233.26075	211.91376	9.50452	0.0728384	0.17824125	3.1270193	20	10 7.6	20.3
328578 2009 SC_{37}	17.1	X	248.03924	113.58112	204.43547	11.23753	0.1126392	0.23583275	2.5945774	20	3 18.4	21.0
328579 2009 SO_{38}	15.5	X	148.14296	189.18214	16.30678	15.74550	0.0286761	0.17761477	3.1343681	20	10 10.6	19.9
328580 2009 SA_{40}	16.7	X	98.84890	135.33615	218.42419	1.25848	0.0755310	0.20384815	2.8593338	20	—	—
328581 2009 SF_{40}	16.8	X	110.28606	277.66023	9.43879	2.39424	0.0488113	0.18975287	2.9992349	20	12 8.3	21.1
328582 2009 SH_{43}	15.6	X	13.08771	141.99155	225.75114	9.54587	0.0917383	0.18466673	3.0540556	20	11 24.1	19.6
328583 2009 SY_{45}	17.0	X	228.34670	318.77805	18.23224	6.05690	0.1884153	0.23399115	2.6081732	20	3 20.7	21.3
328584 2009 SG_{46}	16.6	X	182.93586	129.36634	229.19833	4.97225	0.0480462	0.22615340	2.6680910	20	3 1.1	20.6
328585 2009 SM_{46}	16.3	X	239.76439	68.33354	211.90046	16.01540	0.0693125	0.22177203	2.7031171	20	1 25.0	20.6
328586 2009 SQ_{49}	16.2	X	237.25412	325.58853	359.22621	13.49770	0.1830806	0.23456278	2.6039341	20	3 13.9	20.3
328587 2009 SU_{55}	16.5	X	312.31918	218.05397	226.18106	10.98330	0.1038796	0.18694567	3.0291849	20	11 29.9	20.1
328588 2009 SF_{56}	16.1	X	271.18195	341.19637	243.68923	8.54486	0.1508040	0.21640416	2.7476346	20	—	—
328589 2009 SS_{58}	15.6	X	348.00861	212.96909	222.07940	11.76689	0.1419102	0.19236131	2.9720599	20	—	—
328590 2009 SQ_{61}	16.3	X	140.75453	17.02159	338.45659	5.74517	0.0718595	0.21541258	2.7560600	20	1 16.2	20.2
328591 2009 SP_{66}	16.4	X	198.54504	219.41155	58.33699	4.68299	0.0600414	0.21035699	2.8000433	20	—	—
328592 2009 ST_{67}	16.8	X	226.48300	216.25879	71.25225	5.16344	0.0558760	0.21993542	2.7181449	20	1 26.1	20.7
328593 2009 SE_{68}	15.9	X	248.60003	28.14791	59.34784	7.26788	0.1098047	0.17005698	3.2265600	20	9 5.9	20.6
328594 2009 SU_{69}	16.7	X	183.13412	24.89741	199.38195	5.64461	0.0355846	0.19677249	2.9274746	20	12 15.8	21.0
328595 2009 SO_{72}	17.3	X	34.66825	161.20284	221.43665	1.16529	0.0882179	0.19789415	2.9164022	20	—	—
328596 2009 SK_{74}	15.9	X	261.95987	257.80389	175.31639	11.47737	0.1221273	0.16996533	3.2277198	20	8 28.3	20.6
328597 2009 SS_{74}	16.3	X	203.32927	146.92854	179.34627	12.64583	0.0161233	0.22263935	2.6960924	20	2 13.4	20.1
328598 2009 SZ_{78}	16.6	X	21.63335	155.08080	221.17632	8.75724	0.0867260	0.19200477	2.9757381	20	12 17.0	20.6
328599 2009 SH_{87}	16.2	X	310.83651	226.75762	173.29829	9.10411	0.0677241	0.18194760	3.0844081	20	10 4.1	20.2
328600 2009 SU_{87}	16.7	X	249.79805	79.59119	116.20442	3.22871	0.0103737	0.20094857	2.8867739	20	—	—
328601 2009 SC_{88}	16.6	X	190.87172	149.58260	160.25890	6.09118	0.1392379	0.21891887	2.7265528	20	1 15.7	21.0
328602 2009 ST_{92}	16.1	X	217.84879	291.86533	40.13732	13.30687	0.2802273	0.23035060	2.6355817	20	3 8.9	21.0
328603 2009 SU_{96}	16.5	X	57.49037	300.54541	57.84369	5.10998	0.1257583	0.18951176	3.0017782	20	—	—
328604 2009 SH_{99}	16.7	X	118.95293	331.16167	8.64363	3.97462	0.1066140	0.20915978	2.8107179	20	—	—
328605 2009 SF_{100}	16.7	X	359.56524	165.31354	270.43559	0.94449	0.0537156	0.20087531	2.8874757	20	—	—
328606 2009 SD_{102}	15.8	X	339.83111	245.74741	168.32389	11.21300	0.0794686	0.18966458	3.0001656	20	12 5.6	19.8
328607 2009 SN_{106}	15.6	X	312.67752	259.64101	334.24501	9.09322	0.0446648	0.23422657	2.6064253	20	2 29.1	19.9
328608 2009 SL_{110}	15.6	X	333.38824	200.23020	179.28479	17.36952	0.1820286	0.17878006	3.1207334	20	10 9.3	18.9
328609 2009 SR_{114}	16.5	X	296.83410	262.31889	331.64112	5.97956	0.1287514	0.22883081	2.6472384	20	1 29.8	20.2
328610 2009 SR_{117}	15.9	X	100.94452	146.85846	213.50330	7.03388	0.2217121	0.20896971	2.8124220	20	—	—
328611 2009 SV_{117}	17.1	X	180.31156	335.52669	320.50256	3.52273	0.0385335	0.21228194	2.7830906	20	—	—
328612 2009 SB_{118}	16.4	X	36.56240	192.48580	222.18049	4.37286	0.1035796	0.20303361	2.8669762	20	—	—
328613 2009 SU_{126}	17.0	X	213.70957	353.69719	337.88609	4.39686	0.0524714	0.22944420	2.6425182	20	3 3.9	20.6
328614 2009 SN_{128}	16.9	X	168.76458	79.30988	237.82142	2.60051	0.0876690	0.21465192	2.7625673	20	—	—
328615 2009 SR_{132}	15.3	X	269.95315	62.12808	31.47942	11.16299	0.0648456	0.17918737	3.1160024	20	10 15.4	19.6
328616 2009 SS_{138}	16.0	X	199.69052	101.74178	33.66895	5.40044	0.0924564	0.16901252	3.2398392	20	9 11.0	20.9
328617 2009 SP_{142}	16.5	X	50.12286	245.39536	199.07137	6.17778	0.0438571	0.21403998	2.7678302	20	1 5.4	20.1
328618 2009 SG_{144}	16.3	X	211.83935	257.81500	27.94110	9.30422	0.1287113	0.21813685	2.7330654	20	1 8.3	20.8
328619 2009 SU_{144}	17.3	X	332.86675	302.08614	12.36444	4.92327	0.1846366	0.26160325	2.4212555	20	7 15.1	19.2
328620 2009 SD_{145}	17.0	X	163.46833	323.68126	44.80798	2.52003	0.1011829	0.22821014	2.6520361	20	2 27.4	20.9
328621 2009 SS_{146}	16.1	X	82.89594	324.88362	41.40004	8.93015	0.0706436	0.20159455	2.8806038	20	—	—
328622 2009 SL_{150}	15.9	X	281.24521	232.42851	0.75751	16.78562	0.2522839	0.22773788	2.6557012	20	—	—
328623 2009 SS_{150}	16.1	X	136.96471	128.88933	212.47364	5.68078	0.0326365	0.21303027	2.7765692	20	—	—
328624 2009 SF_{153}	17.2	X	304.41073	215.84470	322.55378	3.23730	0.0157828	0.21817761	2.7327250	20	—	—
328625 2009 SJ_{154}	18.0	X	42.35614	266.73520	10.06446	2.63848	0.2198824	0.27028336	2.3691352	20	10 14.2	20.9
328626 2009 SG_{159}	15.8	X	201.07756	313.14508	215.18735	23.24035	0.1023589	0.17827809	3.1265885	20	10 19.5	20.5
328627 2009 SW_{170}	16.5	X	136.10349	339.26204	28.05169	12.17592	0.1781475	0.21960940	2.7208343	20	2 10.2	20.8
328628 2009 SU_{176}	13.7	X	267.31382	132.92315	302.64627	6.91677	0.0760267	0.08340198	5.1882209	20	9 2.3	20.6
328629 2009 SE_{181}	16.7	X	95.62906	98.28077	241.48722	1.08382	0.0255572	0.20379200	2.8598591	20	—	—
328630 2009 SX_{182}	16.8	X	314.93338	143.82173	19.65753	4.13714	0.0390191	0.21295929	2.7771862	20	—	—
328631 2009 SG_{190}	16.6	X	282.34014	8.91634	253.76668	4.21978	0.0961030	0.23328469	2.6134361	20	2 18.6	20.3
328632 2009 SK_{195}	16.5	X	290.12360	62.45765	330.70791	2.47122	0.1782328	0.16969049	3.2312040	20	8 8.4	20.8
328633 2009 SB_{203}	16.7	X	173.04288	304.85805	55.07492	4.55919	0.1810552	0.22609281	2.6685676	20	3 2.9	21.0
328634 2009 SJ_{203}	17.7	X	19.42951	192.04186	105.93138	2.89240	0.1794691	0.26631208	2.3926296	20	10 3.8	20.1
328635 2009 SF_{205}	16.3	X	306.26094	40.05695	209.79460	12.96464	0.1316730	0.23105430	2.6302277	20	2 25.0	20.0
328636 2009 SV_{207}	16.0	X	330.51213	219.60300	8.88688	13.48964	0.0971984	0.23338566	2.6126823	20	3 14.5	19.1
328637 2009 SX_{208}	16.4	X	187.86520	99.37173	203.62614	5.63385	0.0528530	0.21521827	2.7577186	20	1 1.6	20.6
328638 2009 SK_{209}	16.0	X	290.44812	43.85592	14.53047	11.19842	0.1041498	0.17546109	3.1599642	20	9 23.7	20.1
328639 2009 SB_{213}	16.5	X	92.68693	5.45544	27.03234	4.65434	0.0768454	0.21079925	2.7961256	20	1 3.5	20.1
328640 2009 SK_{213}	15.5	X	251.63247	302.76871	198.41884	10.76655	0.1034890	0.18417258	3.0595160	20	11 15.3	19.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328641 2009 SG_{215}	17.1	X	357.22246	67.77717	254.88259	1.55330	0.1937768	0.26886161	2.3774799	20	9 28.3	18.8
328642 2009 SD_{216}	16.9	X	164.63651	323.70324	22.03794	2.43183	0.0975906	0.22208965	2.7005393	20	1 31.9	21.0
328643 2009 SX_{216}	16.1	X	336.88062	20.29288	23.00991	3.39703	0.1253097	0.18637936	3.0353178	20	11 15.8	19.7
328644 2009 SP_{220}	16.3	X	60.11603	294.16695	123.86943	5.37312	0.0638921	0.21138953	2.7909179	20	—	—
328645 2009 SK_{233}	15.4	X	266.82129	34.59923	35.97011	12.00184	0.0574240	0.17183947	3.2042085	20	9 16.7	20.0
328646 2009 SW_{233}	17.5	X	7.73197	91.45946	224.43131	1.58431	0.2270259	0.26904230	2.3764153	20	10 16.1	19.6
328647 2009 SZ_{235}	17.2	X	11.03094	263.24201	62.93808	7.05610	0.1579461	0.27499673	2.3419864	20	10 29.6	19.5
328648 2009 SP_{237}	15.8	X	341.80565	335.07752	87.37289	8.97910	0.1965330	0.19057809	2.9905706	20	12 26.4	19.0
328649 2009 SA_{238}	15.6	X	83.88720	284.33301	68.65260	9.94451	0.1101113	0.20281576	2.8690289	20	—	—
328650 2009 SR_{238}	17.3	X	8.43810	236.02124	105.07678	6.42759	0.2218482	0.27413176	2.3469102	20	11 26.1	19.8
328651 2009 SY_{241}	17.0	X	335.23392	305.55927	41.98757	5.51408	0.2611106	0.26797659	2.3827116	20	9 22.7	18.1
328652 2009 SA_{243}	15.4	X	272.25173	252.60765	208.76028	16.10972	0.0985924	0.18370679	3.0646855	20	10 23.1	19.4
328653 2009 SA_{248}	16.6	X	99.22239	358.55974	10.68345	6.26878	0.0781767	0.21213767	2.7843523	20	—	—
328654 2009 SQ_{252}	17.4	X	291.96285	116.69280	143.29417	5.30874	0.1071001	0.23080054	2.6321552	20	2 28.3	21.0
328655 2009 SV_{252}	16.5	X	70.59330	7.56902	63.01295	5.13980	0.0551513	0.21465628	2.7625298	20	1 18.7	20.1
328656 2009 SA_{253}	15.9	X	20.23592	168.98536	217.44126	5.26166	0.2318154	0.18650260	3.0339805	20	—	—
328657 2009 SY_{253}	15.6	X	223.20273	103.13200	55.43644	11.70346	0.1201778	0.18131740	3.0915509	20	11 1.2	20.2
328658 2009 SR_{255}	17.3	X	59.65269	59.63532	229.21195	20.76387	0.2234892	0.28049100	2.3113023	20	11 21.5	20.6
328659 2009 SY_{257}	17.0	X	124.56916	317.31761	40.71531	3.80729	0.0767695	0.21441969	2.7645616	20	—	—
328660 2009 SD_{262}	16.5	X	1.06897	132.34798	311.61343	5.38208	0.0238641	0.20233612	2.8735611	20	—	—
328661 2009 SG_{263}	15.4	X	61.05960	140.69617	171.85860	10.48518	0.0894089	0.18755528	3.0226175	20	11 20.2	19.8
328662 2009 SG_{265}	15.5	X	264.30584	83.66913	20.77582	14.47968	0.0698395	0.17783254	3.1318087	20	10 18.5	19.7
328663 2009 SR_{275}	16.4	X	194.09084	271.84334	35.69757	7.08137	0.0434968	0.21871013	2.7282874	20	1 15.1	20.4
328664 2009 SJ_{277}	17.7	X	17.14318	121.08384	141.51222	3.00782	0.2022648	0.25947524	2.4344757	20	8 5.3	19.7
328665 2009 SE_{278}	18.3	X	328.91511	239.47151	81.89815	2.50109	0.1975584	0.26032224	2.4291921	20	7 14.6	20.1
328666 2009 SJ_{282}	16.4	X	53.40959	296.32288	136.21140	5.29228	0.0520415	0.21192360	2.7862270	20	—	—
328667 2009 SP_{282}	17.3	X	234.56946	262.18308	57.41568	5.63089	0.1046747	0.23330284	2.6133006	20	3 11.9	21.3
328668 2009 SA_{283}	16.9	X	182.74225	196.04622	113.96444	4.65050	0.0918581	0.21713006	2.7415073	20	1 6.9	21.0
328669 2009 SJ_{283}	16.1	X	277.55498	343.50430	70.25154	5.66099	0.1689892	0.17055869	3.2202294	20	8 20.9	20.5
328670 2009 SM_{285}	17.0	X	138.39890	357.02641	346.44434	3.34460	0.1655082	0.21682498	2.7440784	20	1 9.2	21.1
328671 2009 SC_{289}	16.2	X	328.63385	213.45756	181.87886	9.75344	0.0675192	0.17981397	3.1087592	20	10 24.1	20.2
328672 2009 SO_{289}	16.0	X	187.81574	174.67604	170.85784	7.18334	0.0625034	0.22466479	2.6798637	20	2 21.4	19.8
328673 2009 SV_{289}	16.9	X	223.54846	287.01897	45.94301	8.17055	0.1772172	0.23343107	2.6123435	20	3 14.8	21.2
328674 2009 SV_{290}	16.6	X	188.54775	134.21141	166.51775	7.80698	0.1018312	0.21469308	2.7622142	20	1 2.1	20.9
328675 2009 SL_{293}	16.9	X	224.91790	149.04089	143.08228	6.17526	0.0509188	0.22500603	2.6771535	20	1 27.9	20.8
328676 2009 SS_{296}	15.6	X	220.08643	108.04359	26.73791	10.68948	0.0657290	0.17913048	3.1166621	20	10 5.9	20.2
328677 2009 SG_{309}	16.9	X	300.98457	165.72555	179.38319	6.65078	0.1817079	0.26026760	2.4295321	20	6 25.0	19.6
328678 2009 SY_{311}	17.3	X	39.23457	110.62501	171.16166	4.14347	0.1510758	0.27132381	2.3630746	20	10 7.0	20.1
328679 2009 SG_{323}	17.1	X	36.51360	276.25289	14.52113	5.91570	0.1850267	0.27252913	2.3561021	20	10 19.9	19.8
328680 2009 SE_{327}	15.3	X	62.79603	84.26099	256.67669	10.64113	0.0911792	0.19229968	2.9726949	20	12 24.9	19.6
328681 2009 SK_{332}	16.6	X	158.82612	186.59473	180.07132	7.65135	0.1728859	0.22605864	2.6688365	20	2 23.5	20.8
328682 2009 SE_{336}	15.8	X	265.45799	79.07771	11.57481	10.97707	0.0990820	0.17909112	3.1171188	20	9 30.3	19.9
328683 2009 SB_{341}	15.7	X	252.75422	106.32746	28.50847	12.65833	0.0991072	0.18635875	3.0355416	20	11 6.7	20.0
328684 2009 SF_{341}	16.7	X	142.63651	278.16419	40.83335	4.97095	0.0656627	0.20918766	2.8104682	20	—	—
328685 2009 SY_{342}	16.7	X	88.95487	333.59892	41.70151	4.93481	0.0827231	0.20831496	2.8183121	20	—	—
328686 2009 SB_{343}	17.7	X	259.12815	188.08375	129.08933	3.00850	0.2016588	0.24137625	2.5546988	20	3 23.1	21.5
328687 2009 SS_{344}	17.1	X	210.65218	262.94841	57.16812	3.52328	0.0628951	0.22518727	2.6757169	20	2 17.4	21.0
328688 2009 SE_{345}	16.9	X	168.29830	113.12692	157.46241	5.70142	0.0832029	0.20189676	2.8777285	20	—	—
328689 2009 SR_{347}	16.7	X	144.58564	228.38107	117.20463	5.15252	0.1096473	0.21466826	2.7624271	20	1 11.8	20.8
328690 2009 SH_{348}	15.5	X	304.27493	333.62992	74.07763	19.87015	0.2108319	0.17732036	3.1378365	20	9 28.8	19.6
328691 2009 SM_{351}	15.2	X	286.74812	182.28818	243.13592	16.39978	0.1770454	0.17707462	3.1407390	20	9 7.5	19.7
328692 2009 SP_{352}	16.0	X	357.85373	358.94781	50.79029	10.70091	0.0117143	0.19236613	2.9720103	20	12 18.2	20.1
328693 2009 SB_{353}	16.9	X	231.76467	330.81486	210.49078	9.41305	0.0166663	0.19291418	2.9663789	20	12 22.1	21.2
328694 2009 SO_{353}	16.6	X	81.12412	303.33113	64.84360	2.95323	0.0939441	0.19700886	2.9251325	20	—	—
328695 2009 SA_{357}	16.6	X	74.40810	143.77140	181.81558	0.78150	0.0512255	0.18870236	3.0103558	20	12 14.4	20.9
328696 2009 SG_{357}	16.2	X	175.81758	91.09549	215.13619	5.57307	0.0402379	0.20939604	2.8086033	20	—	—
328697 2009 SM_{358}	16.0	X	70.62307	279.66262	41.76606	11.21447	0.0613580	0.19025812	2.9939227	20	12 5.2	20.4
328698 2009 SG_{361}	16.2	X	290.74197	201.79320	31.80733	12.19772	0.1078375	0.22464201	2.6800449	20	1 28.8	20.2
328699 2009 SD_{362}	16.3	X	235.24189	47.69646	83.06743	2.54137	0.1255710	0.17606204	3.1527695	20	10 9.8	20.8
328700 2009 SC_{363}	16.3	X	288.94994	173.35202	226.41804	0.25725	0.0497521	0.17365749	3.1818060	20	9 2.5	20.6
328701 2009 SJ_{363}	16.5	X	92.35922	57.29092	311.01387	4.49281	0.0490530	0.21085574	2.7956262	20	—	—
328702 2009 SE_{364}	16.3	X	342.12642	357.93938	52.53542	9.73566	0.1029232	0.18715720	3.0269020	20	12 2.5	20.0
328703 2009 TN_{1}	16.2	X	122.32318	146.70362	215.22293	7.42544	0.3338963	0.21324532	2.7747022	20	1 31.4	20.8
328704 2009 TW_{2}	16.7	X	154.91783	270.40761	43.61130	4.35631	0.0845236	0.21119157	2.7926617	20	—	—
328705 2009 TG_{3}	16.5	X	232.53139	293.11200	24.25629	7.26348	0.2127383	0.23221846	2.6214297	20	3 1.3	21.0
328706 2009 TK_{6}	16.1	X	233.47291	303.31458	20.27978	11.62346	0.2040096	0.23173577	2.6250687	20	3 11.0	20.5
328707 2009 TS_{6}	15.3	X	332.51234	85.77733	2.60395	10.22794	0.0550448	0.19171800	2.9787047	20	—	—
328708 2009 TW_{8}	15.9	X	309.76203	35.02441	39.53876	10.95372	0.0857786	0.18426936	3.0584447	20	11 12.6	19.8
328709 2009 TT_{9}	16.4	X	169.46174	349.68612	356.42061	4.66204	0.1972910	0.22492184	2.6778216	20	2 12.4	20.7
328710 2009 TZ_{10}	15.1	X	311.36068	357.84562	35.34458	23.60043	0.1002552	0.17378432	3.1802578	20	10 1.3	19.4
328711 2009 TY_{12}	16.2	X	182.78424	290.16653	40.82715	14.82476	0.1995572	0.22328540	2.6908893	20	2 10.9	21.0
328712 2009 TA_{13}	16.3	X	180.33473	295.20678	58.45774	17.54974	0.2302498	0.22656914	2.6648261	20	3 10.5	21.2
328713 2009 TB_{14}	15.4	X	173.04000	301.69146	30.44006	15.06870	0.0866816	0.21584743	2.7523572	20	1 28.5	19.8
328714 2009 TE_{17}	16.2	X	160.00626	263.76830	117.02049	10.33816	0.1110558	0.22336733	2.6902312	20	3 13.8	20.4
328715 2009 TH_{17}	16.9	X	226.69236	229.14172	126.99615	4.43939	0.2404662	0.23799161	2.5788631	20	4 9.5	21.4
328716 2009 TP_{17}	16.9	X	191.98350	194.68380	166.37819	13.69193	0.1893976	0.23166617	2.6255944	20	3 18.9	21.3
328717 2009 TA_{18}	16.1	X	173.34565	62.09769	264.82374	14.01003	0.1421869	0.21659715	2.7460022	20	1 18.1	20.6
328718 2009 TA_{20}	16.0	X	12.03424	189.95405	208.59031	9.87209	0.1118994	0.18929025	3.0041197	20	—	—
328719 2009 TZ_{20}	15.7	X	289.12498	221.57960	184.57103	16.30383	0.1242984	0.17164137	3.2066735	20	8 29.2	20.0
328720 2009 TA_{21}	16.5	X	255.45033	132.92543	183.75144	14.63870	0.1245170	0.23739815	2.5831591	20	3 25.6	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328721 2009 TR_{21}	16.1	X	161.69476	326.18524	46.81384	14.62101	0.2294974	0.22368036	2.6877208	20	3 16.7	20.9
328722 2009 TF_{26}	17.2	X	354.76656	268.07398	50.31955	5.90308	0.2494455	0.26502590	2.4003644	20	9 26.8	18.8
328723 2009 TT_{33}	16.4	X	108.37401	133.96473	232.39000	4.73732	0.1028845	0.21043079	2.7993886	20	—	—
328724 2009 TX_{33}	15.6	X	318.11388	87.99804	310.38395	10.44907	0.1119991	0.17957252	3.1115453	20	10 2.5	19.6
328725 2009 TP_{36}	16.1	X	220.95807	139.91139	188.74966	13.28684	0.1591365	0.23024077	2.6364198	20	3 2.3	20.4
328726 2009 TF_{38}	15.6	X	318.10444	168.92937	248.45089	10.64310	0.0979877	0.17921261	3.1157099	20	10 31.9	19.5
328727 2009 TA_{41}	15.6	X	26.03098	296.85742	63.10694	14.51077	0.1316829	0.18368668	3.0649091	20	12 6.2	19.7
328728 2009 TO_{41}	16.3	X	123.20706	246.91186	106.58863	7.41904	0.0651508	0.20950838	2.8075992	20	—	—
328729 2009 TF_{43}	15.7	X	220.83708	65.28227	55.77997	8.60952	0.1373830	0.17106372	3.2138883	20	9 14.1	20.7
328730 2009 TE_{45}	16.2	X	259.59007	51.85455	271.34454	12.81035	0.1739158	0.24386500	2.5372878	20	3 25.8	20.3
328731 2009 TC_{46}	15.3	X	14.60803	296.20045	82.38629	22.93333	0.0396995	0.17673346	3.1447795	20	12 3.3	19.7
328732 2009 TG_{46}	12.9	X	298.17835	224.35015	188.83959	18.10541	0.0812512	0.08314857	5.1987569	20	9 13.5	19.6
328733 2009 TB_{48}	16.5	X	225.97040	245.56067	38.49148	8.15918	0.0576807	0.21994200	2.7180907	20	1 22.2	20.6
328734 2009 UA_{1}	17.2	X	71.03700	58.97135	212.12691	3.95337	0.3095258	0.27688235	2.3313414	20	11 17.4	20.9
328735 2009 UP_{10}	16.1	X	215.63181	275.88290	37.15570	13.99725	0.1255642	0.22613232	2.6682568	20	2 17.7	20.5
328736 2009 UC_{12}	16.8	X	243.27542	98.97083	222.38951	6.20226	0.2750157	0.23527931	2.5986446	20	3 5.9	21.4
328737 2009 UP_{20}	16.1	X	94.60108	343.93628	43.51913	9.59238	0.1531184	0.21077256	2.7963616	20	1 11.6	19.9
328738 2009 UL_{25}	15.5	X	276.27392	271.48809	223.32000	10.39413	0.0356886	0.18573609	3.0423220	20	12 16.7	19.8
328739 2009 UQ_{26}	15.5	X	304.14884	313.95274	59.48820	11.83087	0.1368297	0.16469369	3.2962344	20	8 14.1	19.9
328740 2009 UN_{28}	16.0	X	151.38717	61.87525	229.98275	10.48376	0.0804233	0.19819374	2.9134625	20	—	—
328741 2009 UM_{29}	16.9	X	257.70637	250.47532	46.15621	2.91476	0.1630138	0.22997574	2.6384449	20	3 1.0	21.0
328742 2009 UE_{30}	15.9	X	316.55168	57.56590	47.68862	10.48122	0.0259282	0.18986416	2.9980628	20	—	—
328743 2009 UF_{30}	17.2	X	209.11182	280.17510	46.14801	6.20200	0.2126064	0.22613242	2.6682560	20	2 22.8	21.8
328744 2009 UV_{31}	16.0	X	356.55067	28.03037	40.43015	5.01309	0.1308542	0.19007296	2.9958667	20	—	—
328745 2009 UY_{33}	16.5	X	185.16993	288.48154	54.83641	9.60355	0.1525760	0.22081788	2.7108983	20	2 24.6	21.0
328746 2009 UM_{36}	16.6	X	220.57152	99.14237	200.14522	4.62079	0.0972566	0.22015417	2.7163440	20	1 30.3	20.9
328747 2009 UK_{37}	16.6	X	235.43591	169.43954	52.89644	11.94048	0.0407515	0.19867141	2.9087907	20	—	—
328748 2009 UX_{39}	15.7	X	74.91511	263.72768	52.50821	10.58293	0.1066704	0.18247217	3.0784938	20	12 8.1	20.2
328749 2009 UR_{57}	15.9	X	234.78169	81.63456	36.63498	9.58752	0.0662187	0.17181563	3.2045049	20	10 2.6	20.5
328750 2009 UF_{59}	16.0	X	267.56419	67.31384	32.44478	9.88114	0.0872848	0.17569636	3.1571427	20	10 16.0	20.3
328751 2009 UQ_{60}	16.0	X	253.29389	30.45233	70.18129	6.55680	0.1160688	0.17627731	3.1502023	20	9 27.4	20.5
328752 2009 UU_{60}	15.7	X	220.33576	336.69871	175.08193	10.59791	0.0450863	0.18294386	3.0732000	20	10 30.5	20.2
328753 2009 UL_{64}	16.4	X	181.31995	43.98309	175.42065	9.91203	0.1873825	0.19043238	2.9920960	20	11 28.2	21.4
328754 2009 UE_{66}	15.7	X	313.08998	225.51173	190.82431	10.57756	0.0764882	0.18020647	3.1042437	20	10 27.4	19.7
328755 2009 UT_{70}	16.9	X	218.88867	175.63514	142.32287	6.00737	0.1327674	0.22799541	2.6537009	20	2 19.9	21.2
328756 2009 UL_{76}	17.0	X	231.29688	83.31175	220.42997	4.10823	0.0858301	0.22551743	2.6731047	20	2 15.2	21.0
328757 2009 UC_{88}	15.8	X	68.26641	351.95939	55.51692	18.53949	0.1285861	0.20467175	2.8516580	20	—	—
328758 2009 UM_{88}	15.0	X	32.40939	283.80901	46.33708	21.60925	0.0203815	0.17665434	3.1457184	20	10 27.3	19.5
328759 2009 UN_{88}	16.7	X	227.17305	221.31183	125.91754	3.15324	0.2304839	0.23493262	2.6012006	20	3 30.2	21.2
328760 2009 UE_{90}	16.0	X	221.94533	280.69313	72.47040	13.03697	0.2030198	0.23409150	2.6074277	20	4 8.4	20.5
328761 2009 UN_{94}	16.5	X	69.94264	278.21892	65.18357	2.96246	0.1029491	0.19422792	2.9529875	20	—	—
328762 2009 UZ_{94}	16.6	X	1.12436	282.17540	154.62251	2.30679	0.0654113	0.19691704	2.9260417	20	—	—
328763 2009 US_{96}	16.7	X	337.29247	255.29100	162.22848	2.54992	0.0963552	0.18473260	3.0533296	20	12 4.3	20.5
328764 2009 UW_{97}	13.4	X	309.54527	9.02603	55.85709	9.47015	0.0520858	0.08388515	5.1682797	20	10 17.9	20.1
328765 2009 UL_{99}	16.3	X	322.12905	218.52219	209.02111	7.34072	0.0618606	0.18164508	3.0878317	20	11 23.7	20.3
328766 2009 UR_{100}	15.1	X	235.45896	76.77917	59.97813	13.91767	0.0319109	0.17661917	3.1461359	20	10 31.6	19.6
328767 2009 UD_{102}	15.3	X	285.01137	28.55542	63.86227	10.57526	0.0592464	0.17950231	3.1123567	20	11 4.4	19.5
328768 2009 UV_{106}	16.1	X	227.21943	118.19592	59.33218	11.76486	0.0156446	0.18476673	3.0529536	20	12 9.8	20.4
328769 2009 UG_{107}	16.7	X	211.27075	105.45763	212.80175	4.98937	0.2099566	0.22353491	2.6888865	20	2 10.7	21.5
328770 2009 UX_{107}	15.3	X	97.85543	35.63156	53.42661	3.63081	0.2082796	0.12533746	3.9544139	20	4 14.6	21.0
328771 2009 UL_{108}	16.3	X	34.67132	161.92150	208.11374	1.21935	0.1502728	0.18756303	3.0225342	20	—	—
328772 2009 UY_{109}	16.0	X	51.30478	275.10895	57.44553	9.76091	0.1475629	0.18301579	3.0723947	20	12 6.8	20.5
328773 2009 UW_{115}	17.3	X	212.20471	276.18116	59.92057	2.72177	0.0741921	0.23037433	2.6354007	20	3 8.9	21.2
328774 2009 UV_{118}	17.0	X	175.38374	133.50050	202.83698	5.79590	0.0468123	0.22009129	2.7168614	20	1 26.2	21.0
328775 2009 UB_{129}	15.9	X	181.13467	82.32883	233.77911	13.99204	0.1670345	0.21377582	2.7701099	20	1 13.5	20.6
328776 2009 UA_{136}	16.8	X	258.05056	30.23629	303.84361	4.49952	0.1846779	0.24234580	2.5478805	20	4 10.4	20.8
328777 2009 UG_{136}	15.7	X	272.03935	196.16130	264.77275	9.66231	0.0765448	0.17538250	3.1609082	20	10 20.3	20.1
328778 2009 UL_{136}	14.8	X	296.17029	324.62745	115.99864	28.92239	0.1468836	0.17795587	3.1303616	20	11 6.9	19.3
328779 2009 UG_{137}	15.2	X	343.92127	338.23846	84.41412	18.98476	0.1178933	0.18291065	3.0735720	20	12 20.9	18.8
328780 2009 UM_{137}	15.5	X	333.82752	141.25406	248.75224	15.08505	0.0741121	0.17860690	3.1227501	20	10 19.4	19.7
328781 2009 UP_{137}	15.3	X	327.12945	108.83377	270.51954	14.49051	0.0682024	0.17266125	3.1940334	20	9 20.4	19.8
328782 2009 UV_{140}	16.0	X	108.58059	225.98181	65.51348	11.11929	0.1185439	0.18188900	3.0850705	20	12 14.3	20.9
328783 2009 UT_{146}	16.6	X	106.17941	271.14252	49.62484	9.82255	0.0649561	0.19145274	2.9814555	20	—	—
328784 2009 UB_{147}	15.9	X	315.78657	194.41686	231.13372	10.24393	0.0418062	0.17876918	3.1208600	20	11 11.7	20.0
328785 2009 UH_{150}	16.4	X	219.73401	137.36748	195.15350	15.06416	0.2698356	0.23323061	2.6138401	20	3 1.8	21.3
328786 2009 UH_{152}	15.7	X	101.26770	251.93473	93.83557	10.62657	0.0896553	0.19830546	2.9123682	20	—	—
328787 2009 UC_{153}	15.6	X	81.13141	107.98712	217.72425	18.58078	0.1240919	0.18761207	3.0220074	20	12 27.1	20.5
328788 2009 UC_{154}	16.0	X	233.81902	83.12276	35.82876	13.18280	0.1080824	0.17081552	3.2170007	20	9 28.8	20.8
328789 2009 UF_{155}	15.8	X	225.16993	87.50063	36.28205	8.26163	0.0271675	0.17037725	3.2225152	20	10 2.3	20.4
328790 2009 VJ_{1}	16.4	X	263.77145	197.04570	160.90281	14.26907	0.1844682	0.24443629	2.5333329	20	5 23.5	20.3
328791 2009 VO_{3}	15.1	X	68.95668	265.51079	93.30559	11.14558	0.1075438	0.19326991	2.9627378	20	—	—
328792 2009 VZ_{3}	16.1	X	255.67985	44.47305	243.80551	11.95503	0.1458203	0.22544275	2.6736950	20	2 13.2	20.5
328793 2009 VA_{5}	17.4	X	275.22833	60.24785	243.87945	6.69151	0.1942157	0.23682556	2.5873212	20	3 20.0	21.4
328794 2009 VX_{8}	15.8	X	31.52061	17.15269	6.36061	4.18862	0.0277280	0.19009458	2.9956396	20	12 30.5	19.9
328795 2009 VW_{9}	15.5	X	329.85666	330.39768	81.44139	6.03896	0.1269451	0.17836389	3.1255858	20	11 14.7	19.2
328796 2009 VJ_{17}	16.2	X	357.10229	25.91426	17.94313	5.05478	0.1756413	0.18385841	3.0630004	20	12 24.9	19.8
328797 2009 VF_{20}	15.7	X	8.13015	7.58249	27.81844	10.47604	0.0999275	0.18724801	3.0259233	20	12 22.4	19.8
328798 2009 VM_{27}	16.9	X	78.25453	131.49651	218.21477	4.33264	0.1651517	0.19503306	2.9448548	20	—	—
328799 2009 VU_{27}	15.4	X	357.37582	359.41595	44.63824	16.58990	0.0746141	0.18416538	3.0595957	20	12 12.5	19.6
328800 2009 VO_{29}	15.8	X	330.97545	7.77448	46.03381	10.09656	0.0954928	0.17973970	3.1096156	20	11 17.4	19.5

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328801 2009 VR_{32}	15.4	X	159.65944	192.91086	46.16944	12.40687	0.0296467	0.18033235	3.1027989	20	12 2.1	20.0
328802 2009 VJ_{38}	15.5	X	140.93140	200.44813	48.71312	16.67131	0.0527674	0.18082495	3.0971613	20	11 23.4	20.2
328803 2009 VH_{42}	16.6	X	56.02450	316.72319	60.70277	2.36647	0.0267449	0.19262960	2.9692997	20	—	—
328804 2009 VC_{43}	15.1	X	333.21288	334.91716	61.09281	28.65674	0.1384841	0.17469775	3.1691625	20	11 5.7	19.0
328805 2009 VJ_{45}	15.8	X	343.66762	356.06231	28.08679	9.54117	0.0682668	0.17453818	3.1710938	20	10 28.2	19.7
328806 2009 VQ_{45}	15.8	X	19.13314	328.77777	41.38335	18.19590	0.1000214	0.18339571	3.0681501	20	12 2.5	20.0
328807 2009 VO_{47}	15.4	X	202.53299	143.53463	67.34211	18.65933	0.1076526	0.18466882	3.0540326	20	12 10.3	20.0
328808 2009 VT_{57}	16.5	X	181.75665	267.55604	67.78087	13.46950	0.2388979	0.22054236	2.7131556	20	2 15.5	21.4
328809 2009 VO_{65}	15.8	X	130.31350	29.25187	258.98273	10.49009	0.1279014	0.18915602	3.0055407	20	—	—
328810 2009 VC_{66}	15.8	X	32.25495	325.02854	42.56279	9.77629	0.0964195	0.18455325	3.0553074	20	12 19.1	20.0
328811 2009 VP_{68}	16.3	X	9.60110	107.36009	284.21020	4.87423	0.1395760	0.18486910	3.0518264	20	12 24.6	20.2
328812 2009 VQ_{76}	15.1	X	19.65363	129.18493	240.77599	13.98752	0.0677203	0.18494167	3.0510280	20	12 2.6	19.2
328813 2009 VB_{79}	16.0	X	14.34987	14.85833	0.19300	13.23290	0.1400052	0.18398527	3.0615922	20	12 8.6	20.1
328814 2009 VW_{83}	15.4	X	236.50968	82.08946	45.92615	10.26277	0.0316678	0.17202916	3.2018526	20	10 20.4	19.9
328815 2009 VW_{91}	15.2	X	231.32244	33.29350	78.61589	10.63463	0.0527408	0.17073279	3.2180399	20	9 25.3	20.0
328816 2009 VM_{92}	15.9	X	357.31419	236.91575	127.10821	7.32060	0.1328345	0.17761031	3.1344205	20	10 31.9	19.7
328817 2009 VN_{92}	15.9	X	358.26536	8.02884	29.95050	11.00643	0.0782169	0.18328788	3.0693533	20	12 6.9	20.1
328818 2009 VR_{95}	16.7	X	42.10479	204.15071	177.60230	3.79878	0.1839438	0.18900637	3.0071269	20	—	—
328819 2009 VL_{98}	16.0	X	305.18319	248.77349	189.53226	9.66598	0.0509828	0.17886495	3.1197458	20	11 14.3	20.2
328820 2009 VY_{105}	15.6	X	352.80517	276.38037	121.18064	10.37374	0.1292724	0.18282535	3.0745280	20	12 6.2	19.5
328821 2009 VN_{107}	16.0	X	271.17202	117.60362	319.91604	4.02625	0.1519010	0.17038359	3.2224353	20	9 10.5	20.3
328822 2009 VM_{109}	15.5	X	326.67036	124.41863	262.99410	9.40661	0.0907702	0.17253109	3.1956397	20	10 2.7	19.7
328823 2009 VU_{111}	15.8	X	7.05144	276.67014	87.34654	10.41206	0.0673696	0.17689066	3.1429160	20	11 9.4	20.0
328824 2009 VK_{115}	15.7	X	111.16936	279.76274	68.48826	17.72651	0.1241544	0.20348430	2.8627413	20	—	—
328825 2009 VV_{115}	16.5	X	208.58037	237.10373	117.74999	12.72259	0.2208012	0.22912530	2.6449696	20	3 29.2	21.2
328826 2009 WU_{2}	16.7	X	288.82399	167.18986	107.98859	2.91567	0.0830760	0.23118587	2.6292297	20	3 19.3	20.2
328827 2009 WV_{8}	16.4	X	159.02227	287.88513	54.23006	11.60344	0.1835109	0.21770204	2.7367033	20	1 31.8	21.0
328828 2009 WB_{9}	15.8	X	337.65616	324.99848	76.22071	11.21282	0.1036725	0.17860389	3.1227852	20	11 14.5	19.7
328829 2009 WF_{17}	16.7	X	169.34451	0.57197	291.56293	0.97671	0.0452832	0.20375707	2.8601859	20	—	—
328830 2009 WX_{23}	15.8	X	71.36949	308.64458	46.49955	11.75144	0.0327535	0.19069252	2.9893742	20	—	—
328831 2009 WK_{25}	15.2	X	4.43291	340.67940	29.54622	27.78501	0.3059350	0.17982603	3.1086203	20	12 2.8	19.0
328832 2009 WJ_{26}	16.0	X	94.33322	325.74933	28.07728	11.56640	0.1027273	0.19714193	2.9238160	20	—	—
328833 2009 WP_{33}	15.4	X	129.72317	178.76327	78.81982	11.02290	0.0561426	0.17604368	3.1529887	20	11 23.5	20.1
328834 2009 WA_{43}	15.9	X	152.31366	281.29098	81.98359	16.20318	0.1963874	0.21549246	2.7553789	20	2 23.5	20.6
328835 2009 WD_{44}	15.0	X	346.21269	142.45101	246.45596	15.38224	0.0989653	0.17971547	3.1098951	20	11 9.1	18.9
328836 2009 WB_{46}	16.1	X	320.86776	42.65085	37.44797	11.40977	0.0957909	0.18564818	3.0432824	20	12 5.7	20.0
328837 2009 WU_{47}	15.4	X	288.93433	201.47880	239.57578	11.77181	0.1215718	0.17780779	3.1320994	20	10 13.8	19.6
328838 2009 WD_{55}	16.1	X	282.98396	233.80998	198.59395	8.62566	0.0638523	0.17460626	3.1702695	20	10 3.7	20.4
328839 2009 WE_{60}	15.4	X	78.77187	41.39989	76.72680	9.75906	0.1800617	0.12444970	3.9731975	20	4 26.1	20.9
328840 2009 WV_{69}	16.0	X	138.58336	40.96307	271.26818	8.60375	0.1048616	0.20043970	2.8916577	20	—	—
328841 2009 WY_{71}	15.6	X	71.12553	289.26729	195.62766	3.65029	0.1948405	0.12440465	3.9741566	20	4 23.9	20.9
328842 2009 WY_{73}	16.2	X	33.80971	146.34030	220.10873	5.55353	0.0510910	0.18227187	3.0807488	20	12 13.6	20.5
328843 2009 WN_{75}	15.9	X	190.39103	233.73184	83.61268	9.58110	0.1323474	0.21307142	2.7762117	20	1 26.7	20.4
328844 2009 WV_{75}	16.0	X	91.45015	273.74228	90.82411	7.12368	0.1022273	0.19803612	2.9150082	20	—	—
328845 2009 WG_{85}	16.1	X	7.69737	76.09650	277.92655	8.34973	0.0886459	0.17402020	3.1773833	20	10 23.8	20.4
328846 2009 WD_{94}	16.2	X	263.07870	19.83281	90.53021	2.58389	0.1361523	0.17851455	3.1238270	20	10 16.9	20.5
328847 2009 WK_{94}	16.3	X	205.83846	355.59026	225.37807	3.55659	0.0039811	0.18860359	3.0114068	20	—	—
328848 2009 WT_{95}	16.7	X	139.61205	130.35205	192.27822	1.66764	0.0645969	0.20078146	2.8883755	20	—	—
328849 2009 WA_{98}	16.0	X	209.71324	294.13511	215.23640	13.45711	0.0283259	0.17754523	3.1351864	20	10 12.6	20.5
328850 2009 WU_{107}	16.6	X	188.87766	350.49068	203.07379	4.92036	0.0867682	0.17881910	3.1202791	20	11 8.5	21.2
328851 2009 WD_{128}	15.4	X	77.26638	80.03866	245.88216	12.84194	0.1009849	0.18271473	3.0757687	20	12 21.7	20.0
328852 2009 WR_{142}	15.7	X	264.70328	55.88746	43.27999	9.95745	0.0806376	0.17670761	3.1450861	20	10 14.1	20.0
328853 2009 WB_{145}	16.2	X	273.39919	87.49774	356.43226	2.23584	0.1486888	0.17384773	3.1794844	20	9 23.6	20.5
328854 2009 WA_{146}	15.8	X	325.90463	44.67985	345.37114	8.49155	0.0774424	0.17369498	3.1813482	20	10 7.5	20.0
328855 2009 WA_{156}	15.8	X	134.91197	27.31173	247.40830	14.74196	0.1564387	0.18421598	3.0590354	20	12 20.2	20.8
328856 2009 WC_{156}	15.3	X	32.73583	83.28621	241.15217	15.83937	0.0793438	0.17169239	3.2060381	20	10 20.8	19.8
328857 2009 WU_{159}	16.1	X	106.81418	21.44948	267.76845	7.99643	0.1104265	0.18392402	3.0622718	20	12 10.4	20.8
328858 2009 WW_{170}	16.5	X	125.49605	280.36278	40.30951	11.63567	0.0942619	0.19790002	2.9163445	20	—	—
328859 2009 WL_{178}	15.9	X	215.33985	307.91251	228.18721	10.39850	0.0394823	0.17980621	3.1088487	20	11 21.1	20.3
328860 2009 WC_{190}	15.5	X	91.87664	188.57425	79.17305	4.84746	0.1058035	0.17028592	3.2236674	20	10 30.1	20.3
328861 2009 WX_{217}	15.6	X	290.08441	306.81025	133.17190	6.72933	0.1334255	0.17297054	3.1902248	20	10 17.5	19.8
328862 2009 WZ_{217}	15.6	X	348.72926	324.85231	106.55398	10.95458	0.0595604	0.18522775	3.0478858	20	—	—
328863 2009 WN_{220}	16.9	X	191.07349	142.77856	153.66786	1.88124	0.0775631	0.20846545	2.8169555	20	—	—
328864 2009 WB_{232}	15.7	X	153.72172	170.16738	75.50998	10.36139	0.0951074	0.18390377	3.0624967	20	12 4.6	20.5
328865 2009 WX_{233}	13.5	X	241.97295	86.53608	33.85794	8.37157	0.0811721	0.08133111	5.2759205	20	9 28.7	20.6
328866 2009 WZ_{234}	16.0	X	69.19025	290.73646	7.76777	7.82219	0.0678059	0.17543538	3.1602729	20	11 3.3	20.6
328867 2009 WH_{248}	16.9	X	229.38268	211.93429	117.69775	3.80838	0.1943769	0.23064779	2.6333172	20	3 12.9	21.2
328868 2009 WU_{248}	16.3	X	285.30842	226.04551	105.64351	9.43938	0.3080747	0.24624903	2.5208850	20	4 27.7	20.0
328869 2009 XS_{2}	15.5	X	152.30723	96.19495	115.64787	6.06959	0.0883806	0.17006019	3.2265194	20	10 25.1	20.5
328870 2009 XN_{7}	15.5	X	10.46174	275.27488	101.46722	19.03719	0.1722386	0.17555010	3.1588960	20	12 11.1	19.5
328871 2010 AO_{61}	14.9	X	321.15758	288.91101	93.89931	29.78510	0.1652419	0.17630979	3.1498154	20	10 6.5	19.3
328872 2010 AO_{92}	15.8	X	289.59054	229.22998	185.51170	16.42794	0.0907650	0.17423344	3.1747903	20	9 16.3	20.1
328873 2010 AA_{95}	16.4	X	334.02854	346.26210	70.73820	2.94210	0.1815920	0.18591019	3.0404224	20	12 1.2	19.5
328874 2010 AQ_{114}	15.9	X	45.36396	209.89286	136.31207	13.77353	0.0601533	0.18759679	3.0221715	20	12 8.2	20.3
328875 2010 AX_{115}	15.6	X	212.32137	318.02857	182.78020	20.83165	0.1091947	0.17270900	3.1934448	20	9 27.7	20.5
328876 2010 BT_{25}	16.0	X	132.98583	287.07715	100.85601	14.81573	0.1390162	0.21983282	2.7189905	20	2 27.3	20.2
328877 2010 BJ_{70}	12.9	X	279.21001	109.81394	330.90749	23.75615	0.0739078	0.08020313	5.3252727	20	9 15.9	20.0
328878 2010 BP_{94}	13.5	X	289.88494	34.84364	41.44637	9.61628	0.0604948	0.08188754	5.2519932	20	10 5.9	20.3
328879 2010 BQ_{105}	15.7	X	206.66112	53.71012	99.85414	20.15183	0.1250214	0.17167106	3.2063037	20	10 15.8	21.0
328880 2010 CJ_{10}	16.0	X	72.25264	239.06223	89.34975	7.03794	0.0762547	0.18497351	3.0506780	20	12 17.5	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328881 2010 CO_{130}	15.2	X	85.26110	254.96454	217.31061	8.30723	0.1815921	0.12460214	3.9699562	20	4 23.5	20.7
328882 2010 EV_{3}	15.6	X	29.52724	259.68778	81.84147	9.95801	0.1026563	0.17352455	3.1834309	20	11 14.8	19.9
328883 2010 HG	12.9	X	297.86817	65.11515	225.57583	10.88569	0.1405082	0.08201895	5.2463819	20	4 18.5	19.7
328884 2010 LJ_{109}	10.1	X	77.52604	136.73233	41.54825	24.77546	0.3075367	0.02049899	13.2225248	20	7 16.8	21.5
328885 2010 NU_{31}	16.4	X	62.53749	204.66550	201.82843	13.91366	0.2732053	0.22679668	2.6630434	20	—	—
328886 2010 OK_{35}	16.3	X	305.52467	143.58407	311.75518	4.89320	0.0310178	0.20831163	2.8183420	20	12 12.4	20.0
328887 2010 OJ_{58}	15.2	X	202.35702	87.50293	9.27321	22.72918	0.0724141	0.17703817	3.1411700	20	8 7.7	20.3
328888 2010 PS_{48}	16.0	X	112.85380	322.77582	104.86152	26.50843	0.1751787	0.24329276	2.5412649	20	4 6.3	20.3
328889 2010 RF_{9}	17.4	X	13.23907	328.92086	165.28424	23.17135	0.0497297	0.34865008	1.9992919	20	—	—
328890 2010 RL_{46}	17.7	X	256.64351	80.86777	330.93024	3.75057	0.1497454	0.28578155	2.2826882	20	8 1.8	20.3
328891 2010 RQ_{52}	18.0	X	184.29031	201.98057	198.86825	20.84658	0.1022119	0.36904170	1.9249484	20	4 24.1	20.3
328892 2010 RE_{87}	17.2	X	108.18925	147.69764	332.91347	5.99804	0.0712674	0.26435191	2.4044426	20	5 9.7	20.5
328893 2010 RU_{103}	17.7	X	134.70818	240.70810	199.99403	2.33587	0.1537258	0.25689928	2.4507224	20	4 30.5	21.4
328894 2010 RW_{125}	18.0	X	244.00139	356.95242	63.22742	3.42108	0.2039540	0.28230518	2.3013897	20	7 20.1	21.0
328895 2010 SR_{12}	16.1	X	69.58982	310.80927	185.58563	13.46304	0.1136992	0.25920177	2.4361877	20	4 17.9	18.9
328896 2010 SD_{19}	18.0	X	231.71235	352.75286	45.12510	2.80005	0.1892408	0.27324393	2.3519913	20	6 6.7	21.6
328897 2010 SV_{28}	17.8	X	157.56404	84.99237	11.60693	1.23965	0.1390093	0.26635175	2.3923920	20	6 12.8	21.3
328898 2010 TA_{6}	17.4	X	236.06087	259.90748	155.05795	7.60990	0.1779653	0.27771071	2.3267031	20	7 5.6	20.8
328899 2010 TN_{19}	17.5	X	349.16824	260.69899	346.49006	19.32986	0.0722118	0.37150990	1.9164131	20	4 19.5	19.5
328900 2010 TX_{19}	18.0	X	329.40034	95.18652	339.86271	2.42701	0.0771406	0.31449348	2.1415503	20	—	—
328901 2010 TK_{25}	17.3	X	185.24722	236.58840	259.13692	3.32518	0.1486908	0.28527569	2.2853859	20	8 31.6	20.7
328902 2010 TM_{28}	16.4	X	42.41668	173.22285	357.58720	12.54298	0.1651003	0.26001811	2.4310860	20	4 21.5	18.8
328903 2010 TW_{28}	17.9	X	198.71206	147.19567	329.48225	2.55772	0.0576431	0.28873225	2.2671096	20	8 30.4	20.6
328904 2010 TR_{40}	17.9	X	186.58062	218.00075	317.83505	3.17813	0.1141443	0.30080240	2.2060492	20	10 31.1	20.8
328905 2010 TP_{42}	17.8	X	69.31910	88.22588	3.89652	3.76069	0.1795992	0.23928276	2.5695778	20	2 26.4	20.5
328906 2010 TO_{129}	16.5	X	15.74566	48.49642	49.71329	13.94990	0.2323250	0.22404506	2.6848033	20	—	—
328907 2010 TD_{150}	17.0	X	120.08104	208.93331	143.07935	3.96379	0.1078062	0.23289476	2.6163524	20	—	—
328908 2010 TW_{155}	17.7	X	209.00673	80.53311	55.74196	4.94302	0.1438316	0.29374311	2.2412532	20	10 2.8	20.7
328909 2010 TR_{166}	16.8	X	39.55878	82.28296	2.29588	12.51364	0.2413909	0.22623787	2.6674268	20	—	—
328910 2010 TP_{167}	17.4	X	181.44433	10.33483	52.31196	4.80732	0.1764889	0.26308683	2.4121445	20	5 22.9	21.1
328911 2010 UZ_{9}	17.7	X	184.94027	217.84717	202.93039	0.85587	0.1665890	0.26280353	2.4138777	20	5 24.1	21.4
328912 2010 UW_{10}	16.4	X	19.71491	207.59943	225.22277	12.86985	0.1780173	0.21658411	2.7461125	20	—	—
328913 2010 UY_{10}	17.4	X	111.44331	185.72088	222.98327	3.08572	0.2340238	0.23806978	2.5782985	20	3 4.5	21.0
328914 2010 UT_{15}	16.9	X	66.19735	236.61876	203.72381	12.55182	0.2261510	0.23253250	2.6190690	20	2 7.3	19.9
328915 2010 UM_{21}	16.1	X	2.47781	245.99461	199.60627	11.67156	0.1296002	0.21780932	2.7358046	20	—	—
328916 2010 UH_{25}	17.7	X	336.26630	174.12441	227.43973	5.14734	0.1212753	0.29849062	2.2174249	20	12 19.3	19.6
328917 2010 US_{27}	16.7	X	354.80459	45.64953	52.83659	13.94486	0.1748875	0.21432608	2.7653665	20	—	—
328918 2010 US_{34}	17.8	X	219.59245	72.94518	3.75152	6.84227	0.0806370	0.27748191	2.3279819	20	7 30.5	20.9
328919 2010 UX_{35}	17.8	X	118.38339	14.96259	87.46569	3.59398	0.1566014	0.25421655	2.4679338	20	5 12.3	21.2
328920 2010 UO_{51}	16.4	X	346.60750	66.27527	52.42756	14.12194	0.1624244	0.21519750	2.7578961	20	—	—
328921 2010 UZ_{51}	17.4	X	203.97254	278.87762	157.22836	2.40519	0.1768818	0.27054278	2.3676205	20	6 30.9	21.0
328922 2010 UF_{57}	16.8	X	44.69806	214.24886	274.07711	4.93357	0.1727846	0.23404555	2.6077690	20	2 28.5	19.5
328923 2010 UG_{59}	17.8	X	166.23534	307.11545	350.11930	1.98535	0.0902550	0.32357867	2.1012745	20	—	—
328924 2010 UN_{64}	17.0	X	1.26145	82.31394	27.01542	5.11957	0.1208520	0.22086418	2.7105194	20	—	—
328925 2010 UO_{82}	17.5	X	349.24060	253.25954	130.17914	3.26629	0.1250026	0.30139335	2.2031646	20	12 16.9	19.7
328926 2010 UG_{95}	16.4	X	118.73857	224.04637	208.93788	14.60504	0.1029370	0.24483886	2.5305552	20	3 25.3	19.9
328927 2010 UP_{95}	16.6	X	106.57955	253.29237	152.59977	8.47525	0.2213212	0.23490935	2.6013723	20	2 24.5	20.0
328928 2010 UJ_{100}	15.6	X	201.15933	276.50017	219.85031	11.97406	0.1189569	0.18029417	3.1032369	20	9 6.7	20.7
328929 2010 VN	17.1	X	288.51106	234.91819	52.21517	22.02892	0.0543522	0.36059546	1.9548910	20	4 8.3	19.5
328930 2010 VG_{12}	17.5	X	189.77207	1.55995	51.04066	6.86029	0.1038624	0.26106491	2.4245830	20	5 18.4	21.1
328931 2010 VP_{13}	17.1	X	91.50380	219.57909	216.75519	1.70987	0.1047244	0.23640750	2.5903705	20	2 25.9	20.3
328932 2010 VX_{13}	17.3	X	195.11088	114.28496	52.04929	5.50914	0.0652567	0.29539399	2.2328949	20	11 4.2	20.1
328933 2010 VS_{17}	17.1	X	203.59318	304.99333	110.89477	11.68653	0.2413006	0.26500254	2.4005054	20	6 3.4	21.3
328934 2010 VV_{25}	16.7	X	254.36694	252.74394	220.93487	0.63980	0.1079499	0.18925304	3.0045134	20	10 14.6	20.9
328935 2010 VW_{25}	17.4	X	25.17333	63.39443	62.50940	3.09012	0.1516117	0.22839528	2.6506027	20	1 20.7	20.1
328936 2010 VS_{27}	17.4	X	307.21324	357.95649	64.69752	2.79881	0.0717177	0.29610261	2.2293310	20	11 24.5	19.6
328937 2010 VW_{37}	16.7	X	7.65478	262.10407	184.13628	8.22942	0.2785546	0.21460437	2.7629753	20	—	—
328938 2010 VM_{39}	16.9	X	237.69675	342.41952	82.91662	7.91699	0.1535090	0.27609337	2.3357807	20	7 26.7	20.1
328939 2010 VW_{39}	16.2	X	50.57946	182.81021	255.26412	12.75266	0.1269980	0.22644175	2.6658255	20	—	—
328940 2010 VW_{41}	16.8	X	33.46046	109.98424	55.12147	29.18562	0.0741801	0.24405771	2.5359520	20	4 12.1	20.3
328941 2010 VJ_{46}	16.9	X	1.69213	120.38546	7.32767	2.86771	0.0784955	0.22410150	2.6843525	20	—	—
328942 2010 VN_{57}	17.7	X	243.73524	282.63547	189.30280	3.31027	0.0600747	0.29233629	2.2484379	20	10 25.9	20.3
328943 2010 VB_{61}	16.3	X	84.23432	223.91259	203.65615	11.27830	0.2499781	0.23185835	2.6241434	20	2 24.6	19.6
328944 2010 VO_{62}	16.6	X	254.67421	79.16437	27.04192	4.98942	0.1287212	0.18483363	3.0522168	20	10 2.9	20.8
328945 2010 VR_{62}	17.5	X	277.47658	348.57470	38.22054	5.33539	0.1399469	0.27702901	2.3305185	20	7 29.5	20.2
328946 2010 VY_{62}	16.4	X	50.10068	42.97222	55.51981	12.50983	0.1481129	0.22692236	2.6620601	20	2 2.7	19.5
328947 2010 VJ_{69}	17.1	X	75.78257	279.82332	121.00618	5.51449	0.1981888	0.22588189	2.6702286	20	1 2.2	19.8
328948 2010 VQ_{71}	17.2	X	324.88593	318.58070	74.14790	6.79670	0.1044638	0.29376993	2.2411168	20	11 12.6	19.1
328949 2010 VL_{76}	17.1	X	213.15098	108.26707	53.25831	5.65876	0.0945724	0.29861884	2.2167901	20	11 17.0	19.4
328950 2010 VX_{85}	17.0	X	179.49867	27.70736	65.29322	7.44410	0.0335807	0.26574114	2.3960554	20	7 2.4	20.1
328951 2010 VM_{94}	17.8	X	132.50631	148.51535	55.89400	5.97848	0.0693525	0.28776097	2.2722082	20	10 11.3	20.8
328952 2010 VF_{105}	17.9	X	112.00266	40.43408	115.78279	2.72939	0.1065400	0.26440044	2.4041484	20	7 10.5	21.0
328953 2010 VT_{111}	16.8	X	29.25216	48.50411	81.58307	6.40207	0.1346786	0.23187101	2.6240478	20	2 3.8	19.5
328954 2010 VR_{120}	16.7	X	62.67071	61.14464	75.17931	8.40341	0.1430893	0.24138102	2.5546651	20	4 14.9	19.7
328955 2010 VW_{123}	17.1	X	62.82073	295.37544	269.19914	4.00485	0.1697778	0.26552535	2.3973534	20	7 23.2	19.9
328956 2010 VX_{130}	16.5	X	27.02805	186.80423	259.27329	3.93571	0.1325623	0.22087619	2.7104212	20	—	—
328957 2010 VP_{133}	17.5	X	23.62846	196.94781	205.49757	2.93217	0.0281001	0.31357155	2.1457458	20	—	—
328958 2010 VO_{134}	17.6	X	336.08550	30.99635	335.19881	4.03452	0.0300552	0.29075467	2.2565844	20	10 15.0	20.2
328959 2010 VG_{137}	17.3	X	260.99891	338.84064	68.60575	6.85293	0.0591461	0.27982780	2.3149528	20	8 19.4	20.1
328960 2010 VB_{142}	17.2	X	151.09930	7.89696	120.58060	4.36236	0.0531992	0.27057608	2.3674262	20	7 15.9	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
328961 2010 VJ_{148}	17.6	X	202.29726	34.49371	156.28765	3.79376	0.0712398	0.30127477	2.2037426	20	12 17.4	20.1
328962 2010 VP_{156}	16.6	X	31.00693	84.74362	28.57107	12.89699	0.2214265	0.22683403	2.6627511	20	1 17.5	19.2
328963 2010 VX_{158}	17.5	X	321.45218	230.77458	184.67881	7.05847	0.0714969	0.29931855	2.2133340	20	12 10.0	19.7
328964 2010 VN_{159}	16.8	X	96.24260	320.49072	126.01777	4.94135	0.1461951	0.24009254	2.5637968	20	3 25.8	20.1
328965 2010 VA_{160}	16.4	X	44.20703	280.26481	223.23468	12.09985	0.1228766	0.23701486	2.5859433	20	3 13.3	19.4
328966 2010 VF_{165}	17.7	X	251.50934	7.24137	31.74179	3.03103	0.1632890	0.27376723	2.3489931	20	7 4.3	20.8
328967 2010 VW_{170}	16.5	X	347.72553	102.84138	59.07524	12.01391	0.0738500	0.22979185	2.6398523	20	1 13.5	19.9
328968 2010 VZ_{172}	17.2	X	190.35931	20.50896	70.36183	5.24369	0.1166854	0.26680274	2.3896953	20	7 10.1	20.6
328969 2010 VH_{173}	17.6	X	60.77518	267.27402	78.68707	2.42489	0.2429561	0.31215630	2.1522265	20	—	—
328970 2010 VU_{173}	17.2	X	176.34292	223.40331	250.40022	4.50162	0.1567451	0.27043252	2.3682639	20	7 23.6	20.9
328971 2010 VZ_{174}	16.8	X	33.62235	273.73624	207.44362	3.01532	0.1804024	0.22968226	2.6406920	20	1 29.0	19.3
328972 2010 VJ_{179}	17.5	X	157.02965	150.33106	39.63197	3.76649	0.1237081	0.28806807	2.2705930	20	10 17.1	20.9
328973 2010 VG_{181}	17.2	X	121.94255	348.96900	70.95569	7.84211	0.1584097	0.24131840	2.5551070	20	3 26.1	20.9
328974 2010 VY_{183}	17.0	X	88.06112	49.54171	4.52553	5.66776	0.1984475	0.23018682	2.6368317	20	2 9.8	20.2
328975 2010 VF_{184}	17.6	X	336.40137	17.92355	32.87347	1.58164	0.1479866	0.30228568	2.1988267	20	—	—
328976 2010 VO_{192}	16.1	X	290.51907	76.70262	338.42258	9.58144	0.1063169	0.18771280	3.0209263	20	9 17.4	20.1
328977 2010 VE_{194}	17.1	X	67.04629	14.52676	64.92389	7.28203	0.1858507	0.23042290	2.6350304	20	2 9.3	20.0
328978 2010 VJ_{199}	16.1	X	42.47305	24.41080	62.35769	14.16219	0.1552461	0.22614148	2.6681847	20	—	—
328979 2010 VB_{200}	17.4	X	356.03115	219.95868	132.78171	5.92381	0.2534368	0.29746779	2.2225050	20	12 4.6	19.3
328980 2010 VT_{200}	15.2	X	193.29224	299.77609	193.16467	25.73608	0.2409940	0.17382231	3.1797943	20	8 19.7	21.0
328981 2010 WL_{7}	17.3	X	212.65702	22.43635	35.77962	4.82563	0.1333361	0.26678697	2.3897895	20	6 18.5	20.9
328982 2010 WV_{7}	16.3	X	288.22026	63.74746	353.95800	9.72409	0.0998760	0.18710696	3.0274438	20	9 19.7	20.1
328983 2010 WH_{10}	16.6	X	223.26584	40.38604	253.48966	8.08015	0.0352789	0.23668729	2.5883287	20	1 25.2	20.3
328984 2010 WM_{14}	16.7	X	29.05495	280.90081	233.05607	12.49850	0.1327319	0.23765263	2.5813147	20	2 28.2	19.7
328985 2010 WD_{16}	17.5	X	170.23157	10.89285	75.68700	5.89467	0.1579215	0.26081995	2.4261008	20	6 12.5	21.2
328986 2010 WQ_{29}	17.3	X	280.31056	261.88776	118.11813	4.94943	0.1548766	0.27850515	2.3222763	20	7 19.2	19.9
328987 2010 WS_{29}	16.8	X	107.63475	328.48967	90.92616	10.09275	0.1684299	0.23713434	2.5850746	20	3 11.4	20.5
328988 2010 WB_{48}	17.2	X	88.10041	203.23732	64.87682	6.35719	0.0796151	0.29040487	2.2583961	20	11 13.0	20.1
328989 2010 WG_{55}	17.1	X	166.15693	107.48783	287.82714	1.65541	0.1937420	0.24410541	2.5356216	20	4 5.1	21.2
328990 2010 WD_{56}	17.2	X	69.90104	302.38151	140.94825	5.51373	0.0996000	0.23188552	2.6239383	20	2 4.1	20.2
328991 2010 WX_{63}	17.1	X	55.66362	60.60865	68.03205	5.10160	0.0293581	0.23892633	2.5721328	20	3 9.1	20.4
328992 2010 WZ_{65}	15.9	X	280.58374	16.17093	69.34961	6.67154	0.2085680	0.18410009	3.0603191	20	10 2.0	19.8
328993 2010 WY_{71}	16.7	X	117.29925	12.34296	69.77606	5.24431	0.0903558	0.24314447	2.5422980	20	4 7.7	20.2
328994 2010 XQ_{3}	16.8	X	71.39737	59.85737	70.55494	13.15983	0.0741352	0.24580389	2.5239276	20	4 12.2	20.1
328995 2010 XL_{8}	15.5	X	291.41329	150.92543	227.19897	8.88847	0.0937514	0.17288331	3.1912979	20	7 30.9	19.9
328996 2010 XL_{17}	16.8	X	6.26364	13.05906	105.97720	5.18730	0.0504402	0.21522803	2.7576353	20	—	—
328997 2010 XQ_{18}	16.5	X	104.15465	314.44058	124.60522	6.69104	0.2194155	0.23891695	2.5722001	20	4 6.6	20.2
328998 2010 XW_{20}	17.5	X	98.83878	241.47798	260.50279	1.97166	0.0841072	0.25521133	2.4615165	20	5 31.5	20.5
328999 2010 XK_{37}	16.0	X	206.16402	187.57598	315.58197	4.07854	0.1532352	0.17354281	3.1832077	20	9 19.2	21.0
329000 2010 XM_{37}	16.1	X	69.95070	261.37131	72.18391	4.94867	0.0487864	0.19336858	2.9617299	20	12 19.5	20.2
329001 2010 XD_{38}	17.2	X	263.50750	64.49312	321.49871	5.26194	0.1166368	0.26617921	2.3934258	20	7 9.1	20.3
329002 2010 XN_{43}	16.5	X	107.26086	293.46357	172.86487	10.57794	0.1530938	0.24607279	2.5220885	20	5 6.2	20.1
329003 2010 XJ_{45}	17.2	X	6.13979	288.38468	81.37894	7.20357	0.1376169	0.29912907	2.2142686	20	12 25.2	19.6
329004 2010 XC_{50}	16.7	X	78.35373	299.35726	118.31410	8.88633	0.1079135	0.22918524	2.6445084	20	1 15.6	19.7
329005 2010 XO_{57}	15.8	X	281.96864	321.86959	260.30737	11.93765	0.1209020	0.22267085	2.6958381	20	—	—
329006 2010 XQ_{59}	16.0	X	221.50885	156.56356	117.53684	10.42165	0.0296307	0.21376543	2.7701997	20	1 4.7	19.9
329007 2010 XO_{62}	15.3	X	209.36799	46.86417	84.63249	17.46796	0.1975586	0.17307663	3.1889211	20	9 15.0	20.8
329008 2010 XZ_{64}	14.1	X	277.31673	356.39448	99.04809	8.72100	0.0855836	0.08434960	5.1492900	20	10 11.2	20.9
329009 2010 XD_{68}	16.6	X	106.52948	327.09090	80.84666	14.04246	0.2607905	0.22967759	2.6407277	20	3 11.2	20.7
329010 2010 XV_{75}	15.9	X	321.79630	41.16717	82.96773	14.63085	0.1793763	0.20636779	2.8360123	20	—	—
329011 2010 XY_{76}	17.0	X	337.65069	26.00802	102.38968	4.70868	0.1344222	0.21334843	2.7738081	20	—	—
329012 2010 XW_{78}	15.3	X	257.71039	346.98869	88.88251	16.73998	0.0550784	0.17835783	3.1256566	20	9 15.9	20.0
329013 2010 XV_{84}	17.0	X	283.06532	294.41641	81.82991	7.19511	0.1311132	0.27558086	2.3386758	20	7 23.1	19.5
329014 2010 YM_{5}	16.4	X	240.02332	217.81328	54.98632	3.82316	0.0190840	0.22394215	2.6856257	20	1 24.9	20.0
329015 2011 AG	16.3	X	276.03883	7.54054	120.77885	6.44959	0.1097723	0.18938074	3.0031626	20	12 1.9	20.2
329016 2011 AO_{2}	15.7	X	182.12192	253.73528	301.95635	8.02786	0.1203175	0.18016997	3.1046629	20	10 29.7	20.7
329017 2011 AL_{6}	15.4	X	297.49359	100.72404	313.58090	14.95098	0.2229270	0.17983897	3.1084711	20	9 5.5	19.3
329018 2011 AV_{6}	15.8	X	64.08304	182.18037	111.65446	10.42747	0.0489975	0.17858120	3.1230497	20	10 27.3	20.4
329019 2011 AB_{8}	16.8	X	336.03897	195.43569	265.07546	1.48814	0.1149943	0.20083821	2.8878313	20	—	—
329020 2011 AY_{8}	16.9	X	81.58507	338.66776	95.14456	3.65485	0.0479890	0.22433252	2.6825092	20	2 4.2	20.3
329021 2011 AL_{9}	16.4	X	306.12564	98.49869	297.41848	9.09680	0.0372354	0.17385375	3.1794110	20	9 17.5	21.0
329022 2011 AS_{11}	15.6	X	71.29005	31.06374	303.57915	9.77976	0.0949971	0.19172142	2.9786693	20	12 28.2	19.9
329023 2011 AX_{13}	15.8	X	206.56162	211.68139	103.87615	12.29215	0.0781811	0.22392079	2.6857965	20	2 7.7	19.9
329024 2011 AF_{14}	16.8	X	200.53684	255.79431	57.06540	3.72516	0.1666494	0.22167073	2.7039406	20	1 29.8	21.3
329025 2011 AX_{18}	16.3	X	180.68506	276.96475	336.10380	8.21114	0.1696633	0.19107262	2.9854083	20	—	—
329026 2011 AF_{22}	15.9	X	282.09465	308.08880	123.73196	10.71573	0.1540245	0.17885965	3.1198075	20	9 24.7	20.1
329027 2011 AO_{22}	15.9	X	156.51805	215.24847	92.52519	7.25792	0.0481633	0.20441903	2.8540078	20	—	—
329028 2011 AL_{23}	15.6	X	32.71851	254.66690	105.45750	13.84333	0.0837559	0.18891692	3.0080760	20	12 11.9	19.7
329029 2011 AF_{25}	17.2	X	237.48524	297.79295	119.62494	6.86580	0.1285731	0.26688039	2.3892317	20	7 16.7	20.5
329030 2011 AO_{25}	16.9	X	159.28689	346.23596	79.80144	2.89140	0.0510742	0.24444790	2.5332526	20	5 1.5	20.3
329031 2011 AV_{25}	16.9	X	64.78861	253.93400	153.84220	2.81416	0.0716130	0.21133545	2.7913941	20	—	—
329032 2011 AC_{30}	15.4	X	169.10483	110.55350	113.90668	24.89254	0.2069019	0.17863778	3.1223902	20	11 27.4	21.0
329033 2011 AV_{30}	15.6	X	44.34556	195.35594	317.01012	1.79272	0.1239633	0.12541752	3.9527308	20	4 9.1	20.7
329034 2011 AC_{32}	15.3	X	18.39641	262.99415	94.13609	11.92458	0.0482205	0.18261906	3.0768429	20	11 15.6	19.6
329035 2011 AJ_{33}	17.4	X	42.46618	99.15981	344.52546	4.00189	0.0495384	0.21405550	2.7676964	20	—	—
329036 2011 AE_{35}	15.2	X	247.54276	136.07291	310.71548	16.39211	0.2310410	0.17338966	3.1850817	20	8 14.1	20.1
329037 2011 AH_{38}	16.8	X	99.16834	107.37774	294.16903	3.89700	0.0688902	0.22058368	2.7128168	20	1 20.1	20.4
329038 2011 AU_{40}	16.8	X	182.77381	320.72937	15.84903	2.90022	0.1257712	0.22538552	2.6741476	20	2 9.4	21.0
329039 2011 AG_{41}	16.9	X	282.88365	265.60805	69.72969	5.38308	0.1915437	0.25602930	2.4562710	20	5 12.7	19.9
329040 2011 AY_{41}	16.7	X	342.89100	91.49748	56.00005	5.57661	0.0133618	0.21364784	2.7712160	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329041 2011 AP_{42}	16.3	X	71.33257	206.00748	73.38404	5.01045	0.0243628	0.17287057	3.1914546	20	10 11.6	20.8
329042 2011 AK_{43}	16.0	X	113.69363	168.46921	120.42399	11.67615	0.1206267	0.18456922	3.0551312	20	12 18.2	20.8
329043 2011 AY_{43}	15.9	X	301.29783	322.22463	117.84703	10.41102	0.0983730	0.18203211	3.0834533	20	11 10.4	19.9
329044 2011 AX_{44}	17.4	X	228.41380	3.93983	22.35627	0.87146	0.1900320	0.25402007	2.4692062	20	5 19.2	21.3
329045 2011 AY_{46}	15.9	X	106.37127	184.75770	143.80940	12.19674	0.0453756	0.19330382	2.9623913	20	—	—
329046 2011 AZ_{50}	16.9	X	248.15377	356.09162	256.43624	7.13535	0.0312613	0.21532135	2.7568384	20	1 8.1	20.8
329047 2011 AC_{51}	16.8	X	72.51544	194.93486	210.88660	5.36711	0.0467496	0.21130682	2.7916462	20	—	—
329048 2011 AZ_{51}	16.9	X	271.33051	64.41720	206.56174	5.84021	0.1202414	0.22623879	2.6674196	20	2 14.1	20.8
329049 2011 AR_{52}	16.5	X	200.69591	292.98913	99.71305	15.01426	0.1182242	0.24536228	2.5269551	20	5 9.9	20.6
329050 2011 AO_{53}	15.2	X	238.55239	34.89206	110.41526	18.26582	0.1689861	0.17878231	3.1207072	20	11 1.9	20.1
329051 2011 AN_{54}	16.1	X	145.53548	130.35078	102.44034	6.18943	0.0982373	0.17939490	3.1135989	20	11 12.6	21.0
329052 2011 AR_{58}	16.6	X	284.50806	304.30933	133.02477	1.63364	0.1548734	0.17995486	3.1071365	20	10 1.9	20.5
329053 2011 AN_{59}	16.6	X	272.93511	141.20373	141.47075	2.02808	0.1688825	0.23084351	2.6318286	20	2 26.5	20.5
329054 2011 AU_{59}	16.8	X	314.52195	312.21261	125.59404	5.54606	0.1341534	0.18790410	3.0188755	20	11 25.2	20.4
329055 2011 AN_{60}	16.2	X	115.46237	253.70853	128.16206	7.17432	0.0299590	0.21431308	2.7654784	20	1 11.5	20.1
329056 2011 AA_{64}	16.6	X	278.23743	337.12662	305.80897	7.16433	0.1449591	0.23401956	2.6079621	20	3 3.3	20.3
329057 2011 AF_{66}	16.9	X	82.19055	177.26587	119.97988	6.60589	0.1775916	0.28288040	2.2982687	20	12 20.0	20.4
329058 2011 AK_{68}	16.7	X	333.26939	108.73548	307.36684	3.81942	0.1143528	0.18340755	3.0680180	20	11 25.1	20.5
329059 2011 AE_{70}	15.7	X	341.70545	314.53973	88.05192	12.92317	0.0603788	0.18578088	3.0418330	20	11 22.9	19.7
329060 2011 AT_{70}	16.2	X	145.96970	204.08743	106.11215	8.37180	0.0796933	0.20516933	2.8470456	20	—	—
329061 2011 AX_{71}	16.3	X	253.77163	53.35074	79.60165	11.05409	0.1193324	0.18324364	3.0698473	20	11 7.2	20.6
329062 2011 AH_{72}	16.8	X	99.13037	16.23049	73.48804	4.29214	0.1082924	0.23477334	2.6023769	20	3 28.7	20.2
329063 2011 AR_{72}	16.6	X	3.97866	24.77963	83.58317	5.00343	0.0592701	0.21061811	2.7977286	20	—	—
329064 2011 AT_{74}	16.3	X	117.69649	303.06226	78.18945	14.74371	0.1605135	0.22373787	2.6872601	20	2 2.7	20.3
329065 2011 AS_{76}	15.6	X	75.46548	25.26445	84.56792	3.90032	0.1943376	0.12496848	3.9621939	20	4 12.6	21.0
329066 2011 BM_{2}	17.3	X	355.55270	157.36814	6.92802	2.87103	0.0226137	0.22493569	2.6777116	20	2 2.1	20.7
329067 2011 BW_{2}	16.3	X	194.01064	224.83212	53.30410	5.66820	0.1273350	0.21060323	2.7978603	20	—	—
329068 2011 BP_{4}	16.2	X	282.88280	87.67915	127.20880	9.52241	0.0987439	0.21265980	2.7797930	20	—	—
329069 2011 BV_{7}	16.9	X	211.52542	240.89678	113.37647	4.29914	0.0965960	0.23854249	2.5748912	20	3 30.5	20.8
329070 2011 BD_{8}	16.1	X	195.01803	247.16864	304.42547	3.42051	0.1025716	0.18015642	3.1048185	20	11 9.7	20.8
329071 2011 BO_{8}	16.4	X	132.43439	178.06987	67.47934	2.26874	0.1379674	0.17684043	3.1435111	20	11 14.1	21.5
329072 2011 BB_{11}	16.2	X	203.14703	31.81961	163.70890	5.43138	0.0671982	0.18477771	3.0528326	20	11 29.1	20.7
329073 2011 BJ_{12}	15.9	X	223.70789	229.95059	274.95372	7.47522	0.0679619	0.17730880	3.1379729	20	10 16.8	20.7
329074 2011 BL_{14}	15.2	X	95.75120	180.51674	143.57212	12.03487	0.0562958	0.18524104	3.0477400	20	—	—
329075 2011 BV_{14}	15.8	X	268.27511	343.99269	132.82001	12.45892	0.2380178	0.18383680	3.0632404	20	10 21.7	20.1
329076 2011 BL_{17}	16.1	X	300.71387	287.63611	123.12548	6.29615	0.1720495	0.17720880	3.1391533	20	9 21.8	19.9
329077 2011 BY_{26}	15.8	X	248.53445	113.63890	139.73220	13.81910	0.0740730	0.21299788	2.7768507	20	1 7.2	20.0
329078 2011 BA_{27}	15.6	X	289.21539	313.98618	151.89623	10.84245	0.0697909	0.18132044	3.0915162	20	11 26.5	19.9
329079 2011 BD_{30}	16.8	X	242.94316	241.88538	92.04179	10.97214	0.1342774	0.24105477	2.5569696	20	4 7.8	20.8
329080 2011 BB_{32}	15.6	X	143.40122	137.59062	121.62586	10.67180	0.0258000	0.18431696	3.0579181	20	12 11.4	20.1
329081 2011 BN_{34}	15.0	X	140.04180	7.52846	139.63799	17.67964	0.0407670	0.15034357	3.5027796	20	7 19.2	20.3
329082 2011 BG_{46}	15.9	X	157.59192	88.72062	154.11333	12.09404	0.0886173	0.17949934	3.1123910	20	12 6.1	20.9
329083 2011 BM_{47}	17.2	X	151.81775	201.64977	186.05557	5.83680	0.0424456	0.22509373	2.6764582	20	3 2.4	20.8
329084 2011 BX_{48}	15.3	X	276.05769	15.14004	126.42839	15.26247	0.0532604	0.18572426	3.0424512	20	12 23.9	19.6
329085 2011 BD_{50}	15.2	X	75.28687	137.66548	113.87217	11.07460	0.0309103	0.15753245	3.3953877	20	9 12.7	20.1
329086 2011 BQ_{53}	16.0	X	37.57526	250.45651	129.72613	10.20802	0.0925479	0.19168904	2.9790048	20	—	—
329087 2011 BK_{54}	15.9	X	27.58577	292.23656	85.31827	10.55964	0.1162954	0.18973352	2.9994388	20	12 29.9	19.8
329088 2011 BC_{56}	16.1	X	317.63840	184.32629	273.01281	9.39627	0.0893918	0.19242999	2.9713527	20	12 26.4	19.8
329089 2011 BJ_{63}	16.8	X	192.70433	0.26214	336.08488	3.09794	0.1117135	0.22378264	2.6869018	20	2 17.6	21.0
329090 2011 BU_{78}	15.3	X	70.00627	202.93315	155.21798	9.10051	0.1075213	0.19518612	2.9433151	20	—	—
329091 2011 BC_{85}	16.1	X	247.42020	46.29486	126.73273	10.62531	0.0319865	0.18971838	2.9995984	20	12 28.8	20.3
329092 2011 BL_{87}	16.6	X	90.20740	267.67927	121.08412	5.77678	0.0619056	0.21112365	2.7932606	20	—	—
329093 2011 BN_{92}	15.8	X	170.78498	99.70165	149.46515	16.73785	0.1342242	0.18525188	3.0476211	20	12 24.3	20.9
329094 2011 BE_{98}	15.5	X	76.16129	179.06085	106.87905	13.34111	0.1371196	0.17241325	3.1970957	20	11 11.1	20.4
329095 2011 BR_{100}	15.8	X	284.32355	317.66005	163.83117	12.36677	0.0176581	0.18140425	3.0905640	20	12 12.9	20.3
329096 2011 BK_{102}	16.7	X	331.27303	294.26767	98.52908	2.99039	0.1738185	0.18279840	3.0748301	20	10 24.2	20.0
329097 2011 BZ_{115}	16.9	X	162.87709	268.34437	98.09699	3.37839	0.1162677	0.22835081	2.6509468	20	2 25.5	20.9
329098 2011 BL_{117}	16.9	X	115.28040	334.05092	64.64397	6.77774	0.1408073	0.22699929	2.6614586	20	2 18.5	20.7
329099 2011 BN_{118}	16.4	X	115.75448	262.67426	78.55513	8.09905	0.0669920	0.20472556	2.8511584	20	—	—
329100 2011 BY_{119}	16.9	X	207.77132	318.57867	213.54484	0.46930	0.1114553	0.17926752	3.1150736	20	10 30.9	21.5
329101 2011 BB_{122}	16.4	X	165.89913	66.25608	119.80237	2.21154	0.0266841	0.16923738	3.2369688	20	10 7.4	21.2
329102 2011 BM_{123}	16.5	X	234.44088	236.75238	92.06721	5.29115	0.1501244	0.23182214	2.6244166	20	3 20.2	20.7
329103 2011 BE_{134}	16.0	X	90.48286	181.01347	81.16422	4.73390	0.0567086	0.17269759	3.1935854	20	10 17.4	20.7
329104 2011 BV_{135}	16.2	X	147.41493	177.78081	91.53067	7.16370	0.2176429	0.18872318	3.0101343	20	12 25.4	21.5
329105 2011 CG_{3}	15.7	X	347.31296	122.81045	287.31230	8.65140	0.0642592	0.18593776	3.0401218	20	12 7.7	19.6
329106 2011 CV_{3}	16.0	X	150.77953	77.20881	152.22813	10.42860	0.0380587	0.17622341	3.1508445	20	11 14.4	20.8
329107 2011 CG_{8}	15.9	X	296.52088	83.71597	346.38969	4.17582	0.1124509	0.17542950	3.1603436	20	10 13.3	19.9
329108 2011 CG_{11}	16.7	X	211.35043	147.55962	148.35435	5.43592	0.1179731	0.21316688	2.7753829	20	1 18.7	21.1
329109 2011 CL_{11}	16.6	X	304.97614	306.73774	151.31880	2.80376	0.0548665	0.18538974	3.0461100	20	12 8.5	20.5
329110 2011 CM_{13}	15.6	X	298.23472	48.34024	95.79814	9.88506	0.0132817	0.19575394	2.9376206	20	—	—
329111 2011 CG_{15}	16.1	X	341.13192	274.30889	133.04787	3.38810	0.0914524	0.18397491	3.0617072	20	11 27.3	19.8
329112 2011 CM_{15}	16.3	X	106.67050	254.76955	77.16371	4.51672	0.0816692	0.19425683	2.9526945	20	—	—
329113 2011 CQ_{18}	15.3	X	72.86446	96.32206	25.55117	5.08174	0.2348537	0.12408555	3.9809671	20	4 27.2	20.7
329114 2011 CM_{19}	17.1	X	207.14851	242.04701	144.95523	5.12357	0.0963761	0.24779446	2.5103927	20	5 6.3	20.8
329115 2011 CS_{20}	16.3	X	162.65393	104.61483	115.03943	2.52303	0.0367258	0.17619071	3.1512344	20	11 13.7	20.9
329116 2011 CS_{26}	15.6	X	112.40853	171.58080	119.42222	10.89216	0.0410074	0.18280663	3.0747378	20	12 14.6	20.2
329117 2011 CG_{27}	15.5	X	254.20295	293.08655	155.40365	14.68124	0.1764122	0.17072456	3.2181433	20	9 1.3	20.1
329118 2011 CJ_{32}	16.6	X	182.17964	188.65722	132.75010	5.88091	0.0451214	0.21150414	2.7899096	20	1 18.2	20.6
329119 2011 CP_{32}	16.3	X	354.96019	316.20626	134.44839	12.82984	0.0056340	0.19791501	2.9161973	20	—	—
329120 2011 CX_{37}	17.0	X	144.53304	4.17485	351.86724	3.95546	0.0851894	0.21533320	2.7567373	20	1 22.6	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329121 2011 CK_{49}	16.0	X	321.37781	280.00670	136.89272	10.17902	0.1379126	0.18296863	3.0729226	20	11 10.5	19.7
329122 2011 CO_{50}	15.1	X	81.84680	300.92701	290.08215	10.67299	0.0358034	0.15613991	3.4155457	20	8 19.3	20.0
329123 2011 CL_{59}	16.7	X	50.19696	211.48708	147.53198	5.32693	0.1001809	0.18655938	3.0333649	20	—	—
329124 2011 CU_{60}	16.4	X	335.92077	218.21853	160.13679	2.75310	0.0258205	0.16871364	3.2436645	20	10 10.3	20.7
329125 2011 CP_{64}	15.6	X	131.46598	200.97796	47.52512	8.52465	0.0795670	0.17276923	3.1927025	20	11 13.6	20.5
329126 2011 CB_{67}	16.7	X	142.66282	261.52061	148.87190	4.56154	0.0358615	0.23082315	2.6319833	20	3 21.4	20.4
329127 2011 CU_{67}	15.4	X	67.16628	207.25626	131.00854	11.80035	0.0019790	0.18205767	3.0831647	20	12 14.5	19.9
329128 2011 CW_{70}	16.3	X	305.98301	263.68200	202.43543	2.27336	0.1202561	0.18597041	3.0397660	20	12 16.4	20.0
329129 2011 CO_{71}	15.3	X	247.54544	23.67675	122.73748	10.42630	0.0861859	0.17915962	3.1163242	20	11 19.8	19.8
329130 2011 CX_{74}	15.5	X	346.95535	278.48946	143.70978	10.75717	0.1470580	0.18729470	3.0254203	20	12 29.6	19.1
329131 2011 CK_{75}	16.3	X	231.97420	354.69200	47.59078	10.36727	0.1275027	0.25696900	2.4502791	20	6 18.3	20.0
329132 2011 CM_{75}	15.5	X	158.13876	52.12055	170.34854	13.56061	0.1147090	0.17249099	3.1961350	20	11 12.5	20.7
329133 2011 CZ_{89}	16.1	X	87.79300	157.93450	158.19598	10.72127	0.0377007	0.18134672	3.0912176	20	12 16.0	20.8
329134 2011 CL_{90}	16.0	X	163.57873	118.66158	160.58924	9.57991	0.1282461	0.18902039	3.0069782	20	—	—
329135 2011 CA_{106}	16.9	X	7.20774	94.69483	306.01394	1.90266	0.1675423	0.18712951	3.0272005	20	—	—
329136 2011 DG_{5}	15.7	X	236.27594	71.50708	67.68929	11.72348	0.0999213	0.17711577	3.1402525	20	10 27.1	20.4
329137 2011 DU_{14}	16.3	X	100.52009	230.01098	157.84950	9.71494	0.1883089	0.21308234	2.7761168	20	1 22.4	20.0
329138 2011 DH_{25}	16.2	X	134.13195	106.32719	147.19652	6.55912	0.1240370	0.17748718	3.1358701	20	11 25.8	21.3
329139 2011 DY_{26}	15.5	X	196.16050	45.43567	145.87412	11.00251	0.0525523	0.17594441	3.1541746	20	11 18.3	20.3
329140 2011 DP_{45}	15.7	X	314.40461	259.45608	150.46194	5.67182	0.0573310	0.16842679	3.2473462	20	10 20.7	20.0
329141 2011 EW_{8}	16.1	X	189.28803	78.27175	131.41945	10.42090	0.0572913	0.18015746	3.1048065	20	12 1.9	20.8
329142 2011 EN_{55}	15.6	X	82.79566	245.71801	79.86327	11.79860	0.0732738	0.17685772	3.1433063	20	12 23.3	20.2
329143 2011 EO_{75}	15.5	X	134.88997	128.38141	131.47155	14.35216	0.1071056	0.17457789	3.1706129	20	12 4.2	20.7
329144 2011 UZ_{192}	17.0	X	25.98045	261.57438	222.78202	12.59221	0.4291412	0.23822062	2.5772101	20	—	—
329145 2011 WB_{67}	14.7	X	94.97421	35.02593	78.69967	10.94067	0.0559464	0.14747369	3.5480768	20	4 23.0	19.8
329146 2011 YO_{21}	15.5	X	183.56758	135.03998	344.48949	10.46525	0.0368158	0.17779087	3.1322981	20	8 8.9	20.2
329147 2011 YF_{31}	17.7	X	63.85108	279.30583	147.38114	2.25798	0.1659154	0.24206689	2.5498372	20	1 7.7	20.2
329148 2011 YB_{67}	15.3	X	319.82853	239.96228	101.91690	15.93081	0.0587835	0.17826712	3.1267169	20	8 2.9	19.5
329149 2011 YG_{68}	16.3	X	150.94994	240.83795	325.44528	7.14111	0.1665117	0.18773764	3.0206598	20	10 14.3	21.4
329150 2011 YC_{73}	13.6	X	313.98369	69.81450	337.40308	6.33392	0.0940710	0.08342067	5.1874462	20	9 25.5	20.2
329151 2012 AV_{16}	15.0	X	4.52174	328.62760	328.73327	13.95671	0.1008331	0.17343658	3.1845073	20	8 12.1	18.9
329152 2012 BH_{18}	17.8	X	37.29985	281.95032	201.87183	1.94477	0.1621146	0.24477235	2.5310136	20	2 5.6	20.1
329153 2012 BG_{19}	15.1	X	94.77755	85.75592	138.98301	16.70735	0.0373897	0.17931508	3.1145227	20	9 4.9	19.6
329154 2012 BT_{22}	16.5	X	351.41685	22.04684	115.72853	15.38664	0.0805846	0.23164022	2.6257905	20	—	—
329155 2012 BX_{22}	15.6	X	170.97702	22.68524	112.94838	12.30411	0.0872796	0.17841985	3.1249322	20	8 13.0	20.4
329156 2012 BK_{25}	15.7	X	169.53511	148.96792	8.82837	17.61728	0.1844490	0.17757111	3.1348819	20	9 9.9	21.0
329157 2012 BZ_{51}	16.5	X	272.37445	10.60376	166.44967	5.15911	0.0539915	0.21868749	2.7284757	20	—	—
329158 2012 BU_{54}	15.4	X	286.74750	276.55932	136.10753	12.39295	0.0513797	0.18254896	3.0776305	20	9 20.6	19.6
329159 2012 BA_{59}	17.2	X	54.36886	121.18514	30.42162	2.04452	0.1054167	0.26179218	2.4200905	20	4 11.8	19.5
329160 2012 BJ_{74}	15.2	X	98.50089	49.34940	143.22446	10.68701	0.0570437	0.17082488	3.2168832	20	7 29.8	19.9
329161 2012 BR_{87}	16.8	X	312.00242	147.56423	332.63030	4.26059	0.0641217	0.21514451	2.7583489	20	—	—
329162 2012 BC_{88}	15.7	X	291.28859	270.14821	130.90314	11.38815	0.1182912	0.18251654	3.0779949	20	9 1.8	19.7
329163 2012 BH_{101}	18.1	X	138.24513	325.68100	186.82803	5.56969	0.0924273	0.28392480	2.2926293	20	8 4.0	21.3
329164 2012 BA_{107}	15.6	X	307.88352	226.65571	346.72561	31.77522	0.1985739	0.23128855	2.6284515	20	1 18.9	19.9
329165 2012 BM_{120}	17.0	X	345.96547	249.71503	147.23405	4.65044	0.1082649	0.20506962	2.8479684	20	11 28.6	20.4
329166 2012 CH_{2}	16.5	X	287.59667	172.12280	337.41786	8.72585	0.0307187	0.21449477	2.7639164	20	—	—
329167 2012 CX_{14}	17.2	X	293.47028	347.31399	137.32775	5.32945	0.1495191	0.21068263	2.7971573	20	12 25.8	20.4
329168 2012 CW_{39}	16.0	X	221.75219	280.08570	174.63877	4.73440	0.0896461	0.17858428	3.1230138	20	8 13.8	20.7
329169 2012 CG_{47}	16.6	X	307.32976	167.97975	12.30720	8.38880	0.0901096	0.22657964	2.6647438	20	—	—
329170 2012 CH_{50}	16.5	X	124.80517	133.89175	175.45498	4.59811	0.0481680	0.21202286	2.7853573	20	—	—
329171 2012 CG_{55}	15.2	X	130.95511	6.42199	161.65136	11.88190	0.0552334	0.16866858	3.2442421	20	8 4.9	20.1
329172 2012 CH_{55}	15.5	X	120.28186	242.54202	347.17102	15.83115	0.2003527	0.17773738	3.1329264	20	10 13.2	20.9
329173 2012 DY_{3}	16.7	X	9.28800	116.96601	1.89417	31.12486	0.2719793	0.23403713	2.6078316	20	—	—
329174 2012 DO_{12}	16.1	X	0.28693	338.39649	77.44942	8.43038	0.0599497	0.21317945	2.7752737	20	—	—
329175 2012 DQ_{13}	16.1	X	244.38017	54.04471	180.35148	8.47980	0.0750181	0.21518609	2.7579936	20	—	—
329176 2012 DA_{17}	16.9	X	343.45112	161.30271	82.04726	2.93331	0.1612211	0.25338765	2.4733130	20	4 15.6	19.1
329177 2012 DQ_{19}	17.5	X	82.81634	259.31781	343.28535	3.01155	0.0315123	0.28906152	2.2653876	20	9 24.8	20.2
329178 2012 DP_{21}	17.8	X	141.63388	105.88386	1.50557	1.26315	0.1454199	0.27125496	2.3634745	20	6 11.0	21.1
329179 2012 DF_{22}	15.9	X	267.28342	213.38282	8.25734	16.78957	0.1881152	0.22108017	2.7087537	20	—	—
329180 2012 DC_{23}	16.0	X	93.95634	283.70983	316.64101	8.57918	0.0220536	0.17556810	3.1586801	20	9 15.5	20.6
329181 2012 DW_{23}	17.0	X	297.45493	3.99129	161.63190	5.37229	0.0896411	0.21602073	2.7508850	20	—	—
329182 2012 DZ_{25}	15.4	X	107.19317	264.98373	24.20585	13.66010	0.1243087	0.18540951	3.0458935	20	12 9.9	20.3
329183 2012 DN_{27}	17.3	X	28.10863	84.15029	167.91158	6.34792	0.2152763	0.26648085	2.3916193	20	8 13.6	19.5
329184 2012 DR_{27}	17.1	X	310.44129	238.88049	0.10339	7.02932	0.1547227	0.23850720	2.5751452	20	2 18.3	20.4
329185 2012 DN_{28}	17.0	X	109.09756	171.61892	11.03357	6.64635	0.0405870	0.27799500	2.3251165	20	8 9.1	20.0
329186 2012 DV_{28}	17.6	X	135.59087	117.71891	44.84043	2.83613	0.0904842	0.28083343	2.3094232	20	8 17.5	20.8
329187 2012 DM_{29}	15.8	X	299.42323	350.80809	106.94850	3.10694	0.0695448	0.19490771	2.9461174	20	12 1.9	19.5
329188 2012 DP_{29}	16.5	X	262.83557	191.99461	19.57906	7.44712	0.1292306	0.21541674	2.7560246	20	—	—
329189 2012 DQ_{31}	15.4	X	247.22652	80.43109	349.02538	11.46019	0.1419645	0.17359653	3.1825509	20	8 8.5	20.2
329190 2012 DB_{32}	15.6	X	36.77834	174.44183	147.43825	10.73842	0.0157076	0.18199489	3.0838738	20	10 22.9	20.0
329191 2012 DB_{36}	16.5	X	282.78990	24.42849	183.57970	16.72599	0.1736269	0.22127322	2.7071780	20	—	—
329192 2012 DJ_{36}	18.3	X	239.65921	267.78493	184.16192	3.99166	0.1109017	0.29694499	2.2251129	20	9 12.1	20.8
329193 2012 DF_{39}	16.1	X	70.60943	101.47916	247.88994	0.93261	0.0770084	0.19937464	2.9019468	20	—	—
329194 2012 DG_{39}	17.8	X	123.51511	192.34676	321.57590	0.69127	0.1179156	0.27422087	2.3464018	20	7 22.7	21.0
329195 2012 DL_{40}	17.6	X	151.85974	265.65666	174.97873	1.31235	0.1487788	0.26393651	2.4069648	20	5 17.7	21.2
329196 2012 DD_{45}	16.5	X	289.52967	127.71381	28.25703	9.32862	0.2093458	0.21063187	2.7976067	20	—	—
329197 2012 DU_{45}	18.0	X	85.59936	23.89301	103.88495	3.51036	0.1448832	0.25529326	2.4609898	20	5 4.6	21.0
329198 2012 DL_{46}	17.9	X	149.64006	100.69720	10.43371	2.33014	0.1645199	0.27218580	2.3580829	20	6 25.4	21.5
329199 2012 DP_{46}	17.3	X	153.84544	77.55892	36.91726	6.31158	0.1820681	0.27595153	2.3365810	20	7 5.2	21.1
329200 2012 DS_{47}	16.6	X	256.28582	54.19308	169.69235	5.82917	0.1197448	0.21701895	2.7424430	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329201 2012 DM_{48}	17.4	X	114.71007	358.13953	162.43262	6.46163	0.0524478	0.27536900	2.3398751	20	7 13.5	20.4
329202 2012 DA_{49}	16.7	X	83.32415	20.82253	8.98094	4.73390	0.0203497	0.21800935	2.7341309	20	—	—
329203 2012 DE_{49}	17.5	X	185.07172	87.92407	143.77341	6.30202	0.1379476	0.31493339	2.1395556	20	—	—
329204 2012 DL_{49}	15.7	X	161.84870	96.12314	73.66243	10.69829	0.2412742	0.17531746	3.1616899	20	9 18.0	21.4
329205 2012 DV_{52}	16.1	X	163.45243	30.54314	199.01079	8.51770	0.2028517	0.18368305	3.0649495	20	11 23.3	21.4
329206 2012 DN_{53}	17.1	X	13.14230	145.63571	96.31412	3.46878	0.1374539	0.25997053	2.4313826	20	6 15.7	19.3
329207 2012 DT_{54}	16.7	X	254.20755	304.35010	165.25780	2.39414	0.0479151	0.18633915	3.0357545	20	10 18.3	20.8
329208 2012 DX_{55}	15.8	X	135.27512	49.56329	175.68901	17.32978	0.1856437	0.17761842	3.1343251	20	10 28.3	21.2
329209 2012 DW_{57}	17.7	X	104.15478	15.97152	174.05414	4.76856	0.0717152	0.28538345	2.2848105	20	8 13.7	20.6
329210 2012 DF_{58}	15.4	X	241.85303	302.93393	169.42614	18.31126	0.1644272	0.18335185	3.0686394	20	9 20.4	19.8
329211 2012 DO_{59}	17.4	X	89.57210	200.57078	358.94175	7.78563	0.0405312	0.27784511	2.3259527	20	8 6.4	20.3
329212 2012 DN_{61}	15.6	X	76.16573	127.44886	184.78367	21.63235	0.0596235	0.18583654	3.0412257	20	12 2.4	20.4
329213 2012 DT_{73}	17.8	X	47.60629	193.47716	358.61858	0.15122	0.1551053	0.26271538	2.4144176	20	6 7.5	20.3
329214 2012 DT_{75}	16.0	X	128.34953	51.13282	191.85778	4.68434	0.0577647	0.17876379	3.1209228	20	11 4.9	20.7
329215 2012 DK_{76}	17.4	X	184.13366	114.99155	345.15039	2.58783	0.0784255	0.28071358	2.3100804	20	7 18.1	20.6
329216 2012 DV_{76}	17.0	X	12.86230	212.98696	324.00560	1.95352	0.0705771	0.24218867	2.5489824	20	3 8.5	19.9
329217 2012 DM_{77}	17.0	X	37.40063	153.44973	98.60563	5.10687	0.1943857	0.26864523	2.3787563	20	8 30.5	19.5
329218 2012 DS_{77}	17.2	X	133.65500	179.00070	311.41411	5.26272	0.1465333	0.27528981	2.3403238	20	7 4.5	20.6
329219 2012 DX_{81}	16.6	X	258.39877	237.57681	342.98323	9.11293	0.1007703	0.22008814	2.7168873	20	—	—
329220 2012 DY_{81}	16.5	X	52.92612	35.84353	347.02931	5.51921	0.0196604	0.20917402	2.8105904	20	—	—
329221 2012 DX_{82}	17.0	X	218.86696	192.49534	110.59964	4.99703	0.0909452	0.22879478	2.6475163	20	2 3.2	20.9
329222 2012 DP_{83}	17.2	X	90.73100	338.15120	170.81651	6.01934	0.1647531	0.26557000	2.3970847	20	6 12.4	20.4
329223 2012 DV_{83}	17.3	X	105.90710	146.32950	92.56905	3.59416	0.1798185	0.28863210	2.2676340	20	11 1.1	20.7
329224 2012 DK_{86}	15.3	X	198.96948	332.50569	181.94067	13.10713	0.1370722	0.17915721	3.1163521	20	9 29.4	20.1
329225 2012 EU_{2}	17.5	X	132.35257	287.32465	163.24063	5.16890	0.1859860	0.26581600	2.3956055	20	5 14.9	21.1
329226 2012 EK_{3}	16.9	X	15.28651	149.03776	330.81066	3.95823	0.0638796	0.22810252	2.6528702	20	—	—
329227 2012 EL_{3}	16.2	X	10.59635	105.19604	4.74392	9.79767	0.0877207	0.22450050	2.6811710	20	—	—
329228 2012 EM_{3}	17.8	X	108.18451	16.11943	185.49074	2.39358	0.1421033	0.28380619	2.2932680	20	9 10.9	21.0
329229 2012 EJ_{4}	17.3	X	76.06335	58.41183	133.86411	1.98949	0.1149255	0.26683559	2.3894991	20	7 15.9	20.2
329230 2012 EN_{4}	16.2	X	149.55266	173.24101	101.24810	3.30432	0.0260949	0.20284789	2.8687259	20	—	—
329231 2012 EZ_{5}	17.6	X	253.94944	266.01116	13.43407	7.70348	0.1567147	0.23297228	2.6157720	20	2 7.2	21.7
329232 2012 EW_{6}	17.5	X	68.00932	150.49576	13.42113	6.55109	0.0899519	0.26033355	2.4291218	20	5 17.6	20.4
329233 2012 EE_{11}	15.9	X	294.85199	241.19581	167.37733	9.91175	0.0785841	0.17784600	3.1316507	20	9 19.8	19.9
329234 2012 ET_{11}	17.1	X	185.42568	272.73902	50.59610	3.15975	0.0710038	0.22922388	2.6442112	20	1 23.9	20.9
329235 2012 EQ_{12}	16.0	X	103.87534	8.06349	230.84739	4.47967	0.1470651	0.17213033	3.2005979	20	10 9.8	20.9
329236 2012 FH_{10}	16.2	X	0.29436	70.03951	113.76938	14.56801	0.0497686	0.23834124	2.5763405	20	3 5.3	19.5
329237 2012 FG_{14}	15.9	X	272.75753	238.81712	51.02552	15.59834	0.0994202	0.24274242	2.5451044	20	3 22.1	19.7
329238 2012 FZ_{22}	16.4	X	117.60341	110.78379	137.54133	2.19060	0.1382217	0.17661360	3.1462021	20	11 4.5	21.4
329239 2012 FL_{36}	16.8	X	143.80808	289.59617	4.83267	1.65721	0.0522629	0.20566945	2.8424283	20	—	—
329240 2012 FZ_{36}	16.8	X	76.16651	343.87673	237.62988	5.97056	0.0649562	0.27939442	2.3173461	20	8 17.5	19.8
329241 2012 FT_{56}	14.7	X	47.33999	331.40348	173.74206	12.93186	0.0276118	0.12542175	3.9526420	20	3 27.9	20.1
329242 4564 T–2	17.6	X	320.44224	306.67812	43.17006	2.12690	0.1997032	0.27149735	2.3620676	20	8 14.4	19.2
329243 4063 T–3	16.8	X	57.79491	229.17812	168.54104	8.21203	0.2295536	0.21263895	2.7799746	20	—	—
329244 1992 UA	18.4	X	26.02847	196.66357	28.50109	7.77568	0.1222826	0.37972878	1.8886597	20	6 16.6	19.4
329245 1995 FP_{1}	17.8	X	148.57015	180.84304	23.84413	4.78342	0.1508503	0.29265778	2.2467909	20	10 26.6	21.3
329246 1995 FN_{14}	17.4	X	75.61157	25.64595	50.02779	4.98683	0.0220052	0.23088718	2.6314967	20	1 25.9	20.8
329247 1995 OY_{9}	16.8	X	160.86528	261.08702	303.09558	21.33082	0.1891599	0.28567982	2.2832301	20	10 26.0	21.1
329248 1995 QQ_{6}	17.8	X	112.77369	44.00451	332.78368	5.56560	0.2348976	0.29268122	2.2466710	20	1 19.6	20.4
329249 1995 US_{9}	16.1	X	303.91243	310.63402	8.34472	14.85601	0.1099966	0.22910838	2.6450998	20	5 29.5	19.7
329250 1995 UL_{36}	17.4	X	59.40066	133.80244	138.52970	3.89960	0.1101873	0.27510975	2.3413449	20	10 16.6	20.4
329251 1995 UU_{59}	17.4	X	189.34642	269.14084	207.64089	6.73318	0.1062223	0.22985831	2.6393434	20	8 7.9	21.6
329252 1995 VQ_{10}	17.9	X	38.63079	162.01642	150.93343	3.02713	0.2502245	0.27889310	2.3201222	20	12 3.5	21.0
329253 1996 MU	16.8	X	133.69067	204.91224	92.70003	26.35945	0.1835622	0.30688214	2.1768156	20	—	—
329254 1996 XB_{30}	17.7	X	190.54980	333.08665	76.79558	2.48265	0.1825897	0.27284410	2.3542884	20	5 15.2	21.4
329255 1997 TN_{1}	15.8	X	351.17678	158.26419	209.86733	9.97197	0.1281774	0.17214928	3.2003630	20	10 22.1	19.6
329256 1997 WZ_{10}	15.6	X	60.40030	128.91229	228.80255	6.58562	0.1454613	0.17819563	3.1275530	20	—	—
329257 1998 KC	15.7	X	337.64713	108.00484	67.74929	23.18629	0.2653325	0.26243833	2.4161165	20	—	—
329258 1998 RN_{10}	16.5	X	15.96944	236.99914	167.64168	4.14979	0.0555753	0.18950951	3.0018020	20	—	—
329259 1998 RW_{14}	18.0	X	8.09866	312.02805	8.40272	3.01384	0.1990256	0.26970322	2.3725313	20	10 18.8	20.0
329260 1998 SY_{40}	17.8	X	339.85308	137.92665	195.21325	2.70015	0.1947652	0.26787365	2.3833220	20	9 2.8	19.4
329261 1998 SW_{123}	17.2	X	310.94619	197.93220	175.07075	2.85150	0.3026866	0.26659949	2.3909097	20	8 9.9	18.4
329262 1998 UF_{1}	16.1	X	344.68570	151.49163	260.86202	24.14257	0.2090102	0.27417698	2.3466522	20	—	—
329263 1998 VB_{50}	16.3	X	304.82936	136.01538	227.61850	9.84507	0.2037159	0.26351795	2.4095129	20	7 24.7	18.8
329264 1999 CL_{123}	15.9	X	140.06554	36.64465	39.80188	13.14883	0.2150511	0.24420725	2.5349167	20	5 4.8	19.9
329265 1999 QZ	18.2	X	186.03540	98.29861	299.31056	0.57668	0.2031677	0.26736580	2.3863391	20	4 24.9	22.1
329266 1999 RK_{131}	17.1	X	165.36155	77.16711	333.01057	1.66596	0.0732807	0.21946312	2.7220432	20	4 18.7	21.2
329267 1999 RQ_{153}	17.4	X	18.81492	152.82026	218.03595	5.04932	0.1880982	0.29017777	2.2595743	20	—	—
329268 1999 RC_{235}	17.7	X	4.63844	303.04600	57.72531	4.47559	0.2377390	0.28667102	2.2779640	20	12 23.2	20.1
329269 1999 SQ_{14}	15.8	X	192.11322	94.59557	254.39601	13.45037	0.3272189	0.21633438	2.7482254	20	2 28.6	21.3
329270 1999 TH_{33}	17.9	X	40.19958	135.93146	206.40219	3.30863	0.2562696	0.28917817	2.2647784	20	—	—
329271 1999 TH_{125}	16.6	X	135.37099	162.34950	217.06011	7.17343	0.2303938	0.20967887	2.8060771	20	2 22.2	21.1
329272 1999 TP_{178}	17.4	X	324.40015	156.37284	225.16130	5.59973	0.1443671	0.28170684	2.3046472	20	10 20.2	19.1
329273 1999 TZ_{221}	17.9	X	356.01242	186.21389	178.12043	4.84858	0.2465131	0.28526968	2.2854180	20	12 15.6	20.1
329274 1999 TO_{256}	16.9	X	178.07562	159.76848	182.58958	3.48837	0.2107271	0.21248232	2.7813406	20	2 14.7	21.6
329275 1999 VP_{6}	19.9	X	285.30958	108.87841	227.11114	12.81937	0.3046158	0.60897076	1.3784947	20	4 8.1	20.8
329276 1999 VF_{40}	16.6	X	171.69390	293.04963	45.62269	21.11326	0.3722789	0.20992715	2.8038642	20	2 22.8	22.3
329277 1999 VR_{46}	16.9	X	17.85601	303.21292	45.19914	23.63310	0.2025889	0.28447890	2.2896513	20	12 14.2	20.0
329278 1999 VA_{107}	17.3	X	267.64629	355.85274	56.44700	11.83025	0.1286075	0.27495071	2.3422477	20	8 27.9	20.3
329279 1999 VD_{117}	16.0	X	253.03907	261.97955	222.36007	12.94402	0.2515763	0.18486832	3.0518350	20	10 2.9	20.6
329280 1999 VD_{141}	16.4	X	123.99122	318.63106	41.98398	13.31611	0.1364045	0.20430224	2.8550955	20	1 14.2	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329281 1999 VQ_{172}	15.5	X	153.77066	283.95313	62.57718	14.16329	0.2496967	0.20501583	2.8484666	20	2 8.5	20.5
329282 1999 WZ_{5}	16.1	X	313.37118	295.78706	103.37973	27.54537	0.3403862	0.28062977	2.3105403	20	11 9.9	17.9
329283 1999 XQ_{261}	17.1	X	307.77187	160.87442	236.78317	9.93038	0.1342267	0.27864515	2.3214984	20	10 7.1	19.4
329284 2000 CM_{106}	17.7	X	42.24522	115.93390	116.86237	2.06924	0.1482776	0.25984617	2.4321583	20	7 29.2	20.4
329285 2000 CU_{106}	17.6	X	46.31350	117.27757	134.82464	1.57541	0.1812030	0.26194305	2.4191611	20	9 8.3	20.2
329286 2000 DA_{67}	16.0	X	285.78637	310.62160	164.06309	16.65468	0.1528317	0.18020467	3.1042643	20	11 23.6	20.2
329287 2000 DJ_{91}	16.1	X	162.98232	65.93948	166.63883	7.66614	0.1266641	0.17560912	3.1581882	20	11 27.4	21.2
329288 2000 ES_{2}	16.6	X	176.85835	107.42869	336.80408	5.83068	0.0929745	0.25778403	2.4451117	20	6 15.8	20.2
329289 2000 FR_{4}	15.8	X	45.43654	31.06155	13.50050	9.97070	0.0307984	0.18157062	3.0886759	20	—	—
329290 2000 HT_{3}	15.7	X	157.15801	66.27020	203.95874	15.46549	0.1830046	0.17447121	3.1719052	20	12 30.4	21.2
329291 2000 JB_{6}	19.2	X	112.82680	175.62324	110.64413	10.64292	0.3453776	0.41292535	1.7860284	20	—	—
329292 2000 LK_{16}	15.0	X	310.30753	68.65238	253.64610	11.61814	0.3346560	0.24241017	2.5474294	20	5 8.5	18.0
329293 2000 NF_{19}	16.3	X	262.93727	17.70257	319.52720	3.76827	0.2973068	0.23701295	2.5859572	20	4 8.5	20.6
329294 2000 QP_{36}	16.3	X	251.75865	196.69442	160.03654	5.80132	0.2619251	0.23715944	2.5848922	20	4 29.7	20.6
329295 2000 QQ_{184}	16.7	X	229.70488	261.28869	109.92793	5.00199	0.2991209	0.23469656	2.6029445	20	4 27.2	21.3
329296 2000 QF_{199}	16.5	X	213.85724	209.11041	157.53412	6.31453	0.2120316	0.23228428	2.6209345	20	4 13.2	20.9
329297 2000 QW_{213}	17.0	X	248.13426	326.78693	16.03729	4.01235	0.2534138	0.23412716	2.6071630	20	4 8.2	21.3
329298 2000 RM	17.1	X	209.88881	144.87108	212.64017	13.23604	0.2857430	0.23087839	2.6315635	20	3 24.3	21.9
329299 2000 RB_{37}	16.0	X	186.39881	204.52014	176.65406	31.31650	0.1064074	0.22948683	2.6421910	20	4 7.6	20.2
329300 2000 RR_{57}	16.5	X	38.20665	228.43768	204.71808	9.17162	0.2103834	0.21150755	2.7898797	20	—	—
329301 2000 RM_{77}	15.5	X	260.73185	290.42903	44.91535	29.63706	0.3783664	0.23201657	2.6229502	20	4 11.5	20.4
329302 2000 RF_{82}	16.1	X	187.08187	147.12742	218.49297	11.46207	0.2010135	0.22746667	2.6578116	20	3 16.6	20.7
329303 2000 RW_{90}	16.3	X	338.16683	85.53334	216.49299	10.44779	0.2905906	0.24204680	2.5499783	20	6 22.1	18.0
329304 2000 RB_{100}	15.9	X	337.37851	53.55969	258.31177	13.38918	0.1860946	0.24283809	2.5444359	20	7 14.8	18.3
329305 2000 SY_{16}	16.3	X	272.50308	111.27625	210.86088	11.67784	0.1894050	0.23458389	2.6037778	20	4 12.2	19.9
329306 2000 SJ_{19}	16.1	X	177.83512	139.38625	239.69989	11.98073	0.1204260	0.22637021	2.6663871	20	3 21.5	20.5
329307 2000 SM_{31}	17.2	X	212.20109	148.72357	195.19350	2.09124	0.2182291	0.22876097	2.6477771	20	3 13.4	21.6
329308 2000 SW_{37}	16.5	X	280.27041	262.08470	62.53864	5.16488	0.2704783	0.23628605	2.5912581	20	4 15.8	20.3
329309 2000 SR_{57}	16.8	X	280.33284	316.52436	8.51529	3.19740	0.2632380	0.23663729	2.5886933	20	4 15.1	20.5
329310 2000 SF_{68}	15.8	X	234.81458	311.00230	28.12338	13.08263	0.1897914	0.23019624	2.6367598	20	3 30.9	20.1
329311 2000 SW_{89}	15.4	X	185.16443	153.93546	242.78107	15.82472	0.1893274	0.23159999	2.6260945	20	4 22.1	19.9
329312 2000 SA_{130}	15.6	X	177.67514	149.95809	235.62292	11.50904	0.2718467	0.22779403	2.6552647	20	4 3.4	20.5
329313 2000 SG_{183}	17.6	X	285.05906	214.42245	161.95260	2.77598	0.2282083	0.29175463	2.2514253	20	7 8.5	20.0
329314 2000 SV_{204}	17.1	X	272.83185	155.92846	173.55608	4.46349	0.3028655	0.23553623	2.5967545	20	4 9.9	21.2
329315 2000 SZ_{224}	16.7	X	200.02541	318.16257	10.59416	9.14522	0.2164313	0.22425581	2.6831210	20	2 19.1	21.4
329316 2000 SL_{253}	16.6	X	264.01459	226.42276	97.76169	4.94741	0.2297268	0.23377970	2.6097457	20	4 4.5	20.6
329317 2000 SY_{258}	16.8	X	323.89006	117.07196	233.40004	2.74685	0.2454562	0.24289332	2.5440502	20	8 10.9	18.6
329318 2000 SA_{313}	15.7	X	250.07225	89.03363	253.49272	11.20112	0.2820164	0.23298474	2.6156787	20	4 3.2	20.3
329319 2000 SL_{315}	15.9	X	171.06578	140.03142	243.11941	13.83620	0.1505305	0.22515741	2.6759535	20	3 20.3	20.5
329320 2000 SJ_{355}	15.9	X	132.32896	343.16013	49.65779	14.69020	0.2028960	0.22100724	2.7093496	20	3 13.4	20.4
329321 2000 TY_{31}	17.1	X	282.68674	233.00078	86.91976	4.20874	0.2044834	0.23550072	2.5970156	20	4 21.5	20.6
329322 2000 TQ_{38}	16.3	X	224.39808	287.19962	60.61729	6.37490	0.3514893	0.23155607	2.6264266	20	3 25.9	21.3
329323 2000 UW_{67}	16.2	X	207.84904	123.60834	232.19547	12.41234	0.1555790	0.22612387	2.6683232	20	3 21.8	20.8
329324 2000 UB_{73}	15.9	X	226.61669	104.97638	238.31389	10.89683	0.1845542	0.22680021	2.6630158	20	3 22.2	20.4
329325 2000 UU_{106}	16.0	X	174.64638	316.45638	68.79485	13.41863	0.1801145	0.22461767	2.6802385	20	4 8.0	20.6
329326 2000 VB_{14}	17.7	X	55.46785	130.10007	218.81257	5.32713	0.2162103	0.30449796	2.1881636	20	—	—
329327 2000 VR_{55}	16.1	X	100.37821	154.73603	256.24155	12.60226	0.1472066	0.21512909	2.7584807	20	2 9.4	20.1
329328 2000 WH_{30}	16.1	X	111.71239	316.48032	74.56019	15.35737	0.1601617	0.21511710	2.7585833	20	2 10.5	20.2
329329 2000 WW_{37}	16.2	X	206.61311	126.79617	221.42558	12.67854	0.2556989	0.22424058	2.6832424	20	3 10.4	21.2
329330 2000 WD_{51}	17.4	X	185.65226	12.63189	79.90177	26.58749	0.1382072	0.38193928	1.8813654	20	7 9.5	20.0
329331 2000 WH_{67}	18.1	X	272.39798	317.18925	72.74115	23.15283	0.0920179	0.38782385	1.8622860	20	8 30.4	20.4
329332 2000 YZ_{128}	16.1	X	7.55780	352.26076	96.59144	9.66258	0.1827524	0.20130067	2.8834067	20	—	—
329333 2001 CF_{46}	15.2	X	261.32557	5.00869	115.10151	25.08213	0.1862289	0.18615107	3.0377989	20	10 31.5	19.9
329334 2001 FS_{96}	17.3	X	165.92729	49.65621	94.56793	5.13355	0.2233099	0.27663779	2.3327152	20	8 25.1	21.2
329335 2001 FR_{136}	15.6	X	213.09378	94.96132	93.55155	11.48011	0.2358629	0.18384132	3.0631901	20	11 16.4	20.7
329336 2001 FT_{216}	17.9	X	94.63761	156.17375	342.93804	0.95881	0.1253100	0.26540971	2.3980497	20	5 27.9	21.0
329337 2001 HA_{26}	17.9	X	91.13618	122.18425	99.58332	1.66270	0.1631539	0.27186334	2.3599472	20	9 21.4	21.2
329338 2001 JW_{2}	19.1	X	174.01150	87.88941	247.25402	9.58655	0.4884939	0.44531763	1.6983328	20	1 27.7	22.1
329339 2001 JP_{4}	15.4	X	145.60762	193.59559	82.43708	21.01258	0.1811778	0.18041412	3.1018612	20	12 29.7	20.6
329340 2001 LM_{5}	19.3	X	52.22458	255.90712	270.17967	12.54788	0.0345416	0.72112817	1.2315756	20	1 17.9	17.8
329341 2001 OU_{53}	16.4	X	300.79788	250.60268	83.33446	10.78319	0.1397385	0.25336013	2.4734921	20	6 14.9	19.1
329342 2001 OL_{100}	17.5	X	336.89046	221.81388	116.16622	4.36375	0.3341085	0.26019195	2.4300030	20	9 7.8	18.0
329343 2001 QG_{96}	19.7	X	131.94110	192.63014	170.48278	23.49335	0.2686754	0.44148212	1.7081551	20	—	—
329344 2001 QW_{152}	15.6	X	86.18922	243.37379	151.67987	11.07432	0.0879513	0.17784324	3.1316831	20	1 5.2	19.9
329345 2001 QW_{266}	16.1	X	190.26988	169.95582	164.19317	14.69017	0.2710540	0.23832150	2.5764827	20	2 13.4	20.7
329346 2001 QW_{292}	16.3	X	320.82585	118.07239	226.88667	14.13963	0.1741217	0.20414794	2.8565339	20	7 24.6	19.8
329347 2001 RY_{21}	16.3	X	83.20470	205.96371	167.88223	9.42078	0.2915496	0.22514624	2.6760419	20	—	—
329348 2001 RY_{30}	17.2	X	125.94108	202.61139	161.92784	2.25224	0.1691523	0.23113026	2.6296514	20	1 18.9	20.9
329349 2001 RK_{116}	15.9	X	356.67237	313.19390	6.05430	6.84100	0.1261071	0.15356979	3.4535483	20	8 27.3	20.1
329350 2001 SF_{6}	16.9	X	96.50842	230.98652	241.11424	1.29670	0.1126803	0.24133950	2.5549581	20	4 21.7	20.0
329351 2001 SS_{116}	16.4	X	288.21868	169.36922	249.09340	5.77180	0.1267503	0.26143607	2.4222876	20	9 28.4	18.9
329352 2001 SN_{160}	17.4	X	227.54283	166.93394	205.70660	8.40197	0.2373457	0.24483091	2.5306100	20	4 28.9	21.7
329353 2001 SW_{173}	16.5	X	225.55861	335.46028	27.50208	16.47230	0.1613569	0.24311372	2.5425123	20	4 18.8	20.5
329354 2001 SR_{220}	15.8	X	89.77161	227.77430	160.52117	5.33278	0.1627581	0.17431640	3.1737829	20	1 12.5	20.0
329355 2001 SZ_{221}	17.1	X	99.21571	281.07593	142.90867	3.97654	0.2562402	0.23083762	2.6318734	20	3 16.1	20.6
329356 2001 SO_{259}	17.7	X	305.22128	277.18054	65.74092	2.85881	0.2060036	0.25434293	2.4671162	20	6 25.1	20.1
329357 2001 SC_{261}	15.7	X	98.15665	208.28324	243.34251	16.76313	0.1362291	0.23138109	2.6277506	20	3 25.9	19.6
329358 2001 SG_{338}	17.2	X	169.25322	28.70077	355.88348	3.90865	0.0597220	0.23827989	2.5767826	20	3 19.9	20.9
329359 2001 TT_{55}	16.2	X	117.44171	99.19323	223.26654	7.41393	0.2826146	0.17049578	3.2210215	20	—	—
329360 2001 TA_{111}	15.8	X	116.81194	108.60722	223.65713	12.48352	0.2894092	0.17119025	3.2123045	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329361 2001 TG_{119}	15.8	X	288.11680	24.56923	264.41369	13.88407	0.0820457	0.24161522	2.5530139	20	3 27.2	19.6
329362 2001 TF_{156}	17.2	X	156.70142	213.77706	193.23727	12.42922	0.1677615	0.23814132	2.5777822	20	4 11.5	21.1
329363 2001 TQ_{180}	15.0	X	84.87762	76.01807	233.01738	12.41255	0.2705413	0.16321304	3.3161396	20	12 21.3	20.6
329364 2001 UT_{38}	17.3	X	48.08089	173.64032	203.73195	1.76813	0.2445744	0.21811136	2.7332784	20	—	—
329365 2001 UA_{107}	17.2	X	250.09498	295.74660	51.36763	3.19551	0.2242017	0.24405520	2.5359694	20	4 18.1	21.2
329366 2001 UZ_{135}	16.4	X	261.08216	284.80431	53.90458	10.50160	0.1093656	0.24291015	2.5439326	20	5 2.5	19.8
329367 2001 UB_{138}	17.3	X	122.15964	242.88579	170.62083	4.67656	0.1761183	0.23240270	2.6200441	20	3 17.0	21.1
329368 2001 UL_{155}	15.9	X	73.97080	34.22079	54.74309	22.71699	0.0345141	0.22884308	2.6471437	20	2 22.1	19.9
329369 2001 UO_{166}	16.9	X	259.20327	252.17046	49.12738	4.89707	0.0546350	0.23893960	2.5720375	20	3 20.2	20.5
329370 2001 UY_{190}	15.3	X	343.66341	136.09277	217.13962	8.74613	0.0770131	0.15395272	3.4478191	20	9 13.5	19.9
329371 2001 UJ_{229}	16.9	X	188.72901	272.34485	117.77481	6.29521	0.1172588	0.24080317	2.5587504	20	4 21.8	20.9
329372 2001 VR_{70}	16.3	X	230.63699	307.72521	66.26382	6.36502	0.1403425	0.24094586	2.5577401	20	5 10.6	20.3
329373 2001 VC_{79}	16.4	X	105.87274	178.90839	229.62988	7.33200	0.1694177	0.22782215	2.6550462	20	2 17.1	20.1
329374 2001 WK_{5}	16.4	X	17.48111	94.42371	244.61862	7.51649	0.3449799	0.26061426	2.4273772	20	12 21.2	19.4
329375 2001 WV_{9}	16.2	X	260.78166	270.01361	90.51544	12.67481	0.1981034	0.24458415	2.5323118	20	5 21.1	19.9
329376 2001 WA_{48}	16.4	X	253.75907	284.07732	79.95314	15.30309	0.1313623	0.24453850	2.5326269	20	5 25.3	20.0
329377 2001 WP_{72}	17.1	X	246.94105	277.87170	72.77189	4.29740	0.2492547	0.24362797	2.5389332	20	4 18.4	21.3
329378 2001 WT_{72}	16.6	X	194.45109	297.90084	61.38766	12.46790	0.0990927	0.23505203	2.6003195	20	3 23.9	20.7
329379 2001 WK_{74}	16.9	X	152.52948	332.63874	73.52746	5.18847	0.0555266	0.23495258	2.6010532	20	3 31.0	20.6
329380 2001 WN_{88}	16.6	X	158.97788	340.86941	57.06156	18.89643	0.2028990	0.23394910	2.6084857	20	4 12.0	21.1
329381 2001 WJ_{91}	16.0	X	206.21294	334.38248	46.93744	13.71116	0.1912108	0.23882097	2.5728892	20	4 25.1	20.2
329382 2001 XH_{39}	16.3	X	104.06884	3.82096	55.68039	14.27762	0.2772075	0.22708863	2.6607605	20	3 25.4	20.4
329383 2001 XO_{79}	17.2	X	210.91231	292.95930	79.70285	13.54333	0.1990278	0.23879024	2.5731099	20	4 22.2	21.7
329384 2001 XZ_{111}	16.3	X	163.04665	169.83894	228.62463	11.60364	0.1145137	0.23250580	2.6192695	20	3 31.8	20.5
329385 2001 XA_{119}	16.6	X	61.39410	344.03742	79.76505	10.63340	0.2863345	0.21931983	2.7232287	20	1 23.8	19.1
329386 2001 XG_{126}	16.9	X	159.15819	333.52876	70.98839	7.52472	0.1087908	0.23429917	2.6058868	20	4 10.2	20.9
329387 2001 XS_{150}	16.5	X	134.03020	321.16301	87.11377	14.67430	0.2397596	0.23038773	2.6352985	20	4 5.6	21.0
329388 2001 XW_{155}	16.1	X	213.73538	142.83186	233.56938	3.98404	0.1253500	0.23675807	2.5878128	20	4 26.2	20.1
329389 2001 XJ_{187}	16.0	X	358.63285	199.47300	271.34919	14.69879	0.1116958	0.21453518	2.7635694	20	—	—
329390 2001 YP_{2}	19.0	X	213.78235	288.69991	92.65060	27.94737	0.4798345	0.34821235	2.0009671	20	5 2.6	23.6
329391 2001 YD_{4}	16.5	X	128.56306	117.79930	9.45349	28.52375	0.2301295	0.28556207	2.2838577	20	7 5.0	20.9
329392 2001 YJ_{11}	16.7	X	90.95362	292.60082	123.06829	5.06144	0.2976511	0.22275823	2.6951330	20	3 2.8	20.2
329393 2001 YM_{17}	16.8	X	260.53625	129.19910	235.06827	4.13353	0.2330886	0.24394543	2.5367301	20	5 18.8	20.6
329394 2001 YO_{25}	16.7	X	148.21888	327.37743	69.34278	12.83918	0.1930198	0.23176876	2.6248196	20	3 30.3	21.1
329395 2002 AC	17.9	X	136.18709	132.16825	72.95125	34.75432	0.6485719	0.29129687	2.2537834	20	11 2.2	23.6
329396 2002 AT_{46}	16.4	X	215.19030	253.78606	121.89308	3.31287	0.2156867	0.23568008	2.5956978	20	4 24.6	20.7
329397 2002 AP_{55}	18.1	X	277.21177	285.66956	128.58802	3.90659	0.1694371	0.30240409	2.1982527	20	9 7.5	20.2
329398 2002 AB_{147}	16.7	X	221.01371	211.14952	155.93068	2.11364	0.2162768	0.23597179	2.5935582	20	4 18.2	21.1
329399 2002 AY_{161}	16.0	X	351.57953	183.64607	300.97262	7.16378	0.1708836	0.21277031	2.7788304	20	—	—
329400 2002 AN_{173}	17.1	X	12.47348	17.83971	114.13100	10.41813	0.1573753	0.21767823	2.7369029	20	1 6.7	19.9
329401 2002 BE_{2}	15.4	X	169.98923	281.73039	132.75448	29.37421	0.3371073	0.23452873	2.6041861	20	5 16.6	20.9
329402 2002 BM_{13}	16.4	X	16.13442	5.13452	78.74440	10.32630	0.2786565	0.21314290	2.7755910	20	—	—
329403 2002 CP_{17}	16.4	X	157.28214	125.04726	339.64124	4.35232	0.1440123	0.23736906	2.5833702	20	6 22.9	20.4
329404 2002 CS_{21}	16.3	X	311.23188	67.20789	128.67726	14.14508	0.1070927	0.21565697	2.7539775	20	1 4.3	20.1
329405 2002 CW_{218}	18.0	X	216.89079	31.48363	150.22551	4.33688	0.1887340	0.30442481	2.1885141	20	12 7.6	20.6
329406 2002 CB_{292}	16.6	X	39.00428	41.24331	60.80030	10.77420	0.1969007	0.21826220	2.7320188	20	1 19.7	19.3
329407 2002 EH_{23}	17.0	X	66.09568	286.33532	150.34343	4.37819	0.0474045	0.21428302	2.7657369	20	1 18.1	20.6
329408 2002 EM_{42}	17.3	X	188.11696	280.63773	304.21730	4.10279	0.0853836	0.30639769	2.1791095	20	—	—
329409 2002 ED_{95}	16.1	X	24.00631	313.51654	161.42812	17.89537	0.0847728	0.21307427	2.7761869	20	1 7.6	19.8
329410 2002 EX_{155}	17.5	X	41.76857	209.36912	174.94514	2.76533	0.2142191	0.31181528	2.1537954	20	—	—
329411 2002 GN_{97}	18.1	X	58.62574	290.10220	351.58457	2.32374	0.2436918	0.28918345	2.2647508	20	11 14.1	21.4
329412 2002 JJ_{48}	16.9	X	145.03097	222.00819	34.93996	6.82091	0.1536090	0.29809078	2.2194073	20	12 30.1	20.2
329413 2002 JJ_{68}	16.9	X	110.13246	67.79651	244.91963	5.74505	0.2227567	0.29960770	2.2119097	20	—	—
329414 2002 KH_{16}	15.7	X	165.50090	239.54841	53.18806	12.87794	0.0139374	0.19670157	2.9281782	20	—	—
329415 2002 LS_{9}	15.8	X	220.25963	9.01528	233.18233	15.62292	0.2390192	0.19660435	2.9291434	20	—	—
329416 2002 MF_{6}	16.0	X	92.91679	221.42978	125.73189	12.22392	0.1697148	0.18433224	3.0577491	20	—	—
329417 2002 MC_{7}	18.0	X	38.38468	99.49180	234.01914	5.34654	0.2114150	0.28508949	2.2863808	20	12 25.3	21.2
329418 2002 NV_{4}	16.0	X	87.04549	79.88759	272.01644	4.49129	0.1622579	0.18487111	3.0518043	20	—	—
329419 2002 NV_{8}	17.4	X	42.60783	141.29370	131.20854	7.62792	0.1775974	0.27991571	2.3144681	20	10 7.5	20.2
329420 2002 NX_{20}	17.3	X	70.45848	31.15179	269.49927	6.37550	0.2054977	0.28598302	2.2816160	20	12 15.8	20.8
329421 2002 NJ_{45}	15.6	X	227.78808	44.28962	278.09839	12.79305	0.1983556	0.20345418	2.8630239	20	2 26.2	20.7
329422 2002 NQ_{54}	16.2	X	158.87710	346.77081	305.36588	4.56213	0.2356783	0.18854079	3.0120753	20	—	—
329423 2002 NU_{60}	15.7	X	81.56488	201.89585	131.73503	11.19427	0.1108356	0.18097501	3.0954490	20	—	—
329424 2002 NY_{64}	16.2	X	104.98218	220.60963	90.46994	6.92859	0.1439791	0.18295885	3.0730322	20	—	—
329425 2002 NT_{69}	16.4	X	90.72944	333.87657	4.47596	5.22011	0.1350649	0.18332561	3.0689322	20	—	—
329426 2002 NH_{71}	15.9	X	111.91685	40.12147	262.41418	10.16920	0.0587323	0.18263204	3.0766970	20	12 27.3	20.4
329427 2002 NT_{72}	17.4	X	62.52340	156.07252	131.10096	6.85548	0.1201068	0.28420494	2.2911224	20	11 13.3	20.5
329428 2002 NL_{76}	16.3	X	105.56129	61.66420	236.96273	8.80419	0.0660824	0.17969248	3.1101604	20	12 16.1	21.0
329429 2002 NY_{76}	16.0	X	68.44215	205.89143	118.08004	19.92984	0.1302953	0.17753905	3.1352592	20	12 15.5	20.9
329430 2002 NM_{77}	16.7	X	81.75568	102.06490	243.12480	3.22109	0.1382168	0.18315027	3.0708905	20	—	—
329431 2002 NV_{77}	17.5	X	83.40624	30.97944	338.66495	3.12840	0.2364926	0.24050113	2.5608922	20	—	—
329432 2002 NE_{78}	17.6	X	10.09959	198.24379	152.95184	7.53606	0.1437466	0.28302990	2.2974594	20	12 2.8	20.2
329433 2002 NJ_{78}	16.4	X	102.11068	176.07303	133.50634	2.51746	0.0554483	0.18211488	3.0825190	20	12 25.1	21.0
329434 2002 OR	17.1	X	106.91538	33.99498	251.27649	6.80992	0.2388266	0.29111716	2.2547108	20	12 29.3	20.8
329435 2002 OM_{11}	17.1	X	294.90437	201.30455	166.26790	28.11238	0.1537073	0.38290388	1.8782045	20	8 6.3	18.8
329436 2002 OC_{20}	18.2	X	42.61779	102.00835	219.37795	0.36207	0.2754392	0.28362805	2.2942281	20	12 21.8	21.5
329437 2002 OA_{22}	19.4	X	32.70491	318.63878	174.09562	6.88348	0.2431678	1.08946081	0.9353949	20	—	—
329438 2002 PL	17.9	X	359.10404	131.06662	159.62240	2.10638	0.1924386	0.27440744	2.3453381	20	8 10.9	19.3
329439 2002 PG_{9}	15.5	X	105.18851	33.79646	277.56052	9.88892	0.1187980	0.18146824	3.0898375	20	—	—
329440 2002 PZ_{13}	16.5	X	113.16321	34.54055	266.71548	5.12395	0.1885718	0.18256582	3.0774410	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329441 2002 PN_{19}	15.5	X	347.23003	196.63023	251.55961	2.63996	0.0643253	0.18424567	3.0587068	20	—	—
329442 2002 PV_{25}	17.5	X	350.51816	160.90411	203.73077	1.66914	0.2284466	0.27997172	2.3141594	20	11 30.3	19.2
329443 2002 PD_{26}	17.2	X	288.62939	204.81640	173.65914	2.31226	0.2292924	0.27177223	2.3604746	20	7 16.2	19.7
329444 2002 PC_{66}	17.7	X	75.95723	155.99944	143.87975	5.87875	0.1803910	0.28768231	2.2726224	20	12 18.6	21.1
329445 2002 PK_{72}	16.3	X	97.69522	124.51039	212.91905	10.47458	0.2144617	0.18284038	3.0743594	20	—	—
329446 2002 PO_{72}	15.5	X	136.22176	69.75171	245.93908	9.25380	0.1303107	0.18663929	3.0324990	20	—	—
329447 2002 PP_{104}	17.6	X	22.94763	112.63210	232.35606	5.44363	0.2552206	0.28226980	2.3015819	20	12 27.7	20.5
329448 2002 PG_{106}	15.3	X	154.19425	30.69938	255.24468	8.15257	0.1113206	0.18463712	3.0543822	20	—	—
329449 2002 PA_{115}	15.5	X	108.38178	174.74622	155.16448	17.34498	0.1806956	0.18227215	3.0807456	20	—	—
329450 2002 PY_{115}	15.2	X	333.39933	187.91724	212.67979	16.63505	0.2021280	0.16871758	3.2436140	20	11 2.8	18.6
329451 2002 PT_{151}	17.5	X	8.72311	12.04773	339.01505	4.30017	0.1926091	0.28185446	2.3038425	20	12 5.9	20.0
329452 2002 PP_{167}	15.9	X	78.00546	59.78949	263.95441	10.06894	0.0688802	0.17863514	3.1224209	20	12 16.1	20.5
329453 2002 PT_{167}	16.7	X	72.91975	230.39969	117.49268	2.21390	0.1826892	0.17935209	3.1140942	20	—	—
329454 2002 PF_{175}	16.1	X	108.96163	310.64959	25.24508	4.63477	0.2527010	0.18393486	3.0621516	20	—	—
329455 2002 PR_{176}	15.9	X	76.91192	248.22298	103.20307	10.90875	0.0918690	0.18279955	3.0748172	20	—	—
329456 2002 PB_{188}	16.0	X	136.59442	125.66243	124.35204	13.02310	0.0861668	0.17880289	3.1204677	20	11 25.3	21.0
329457 2002 PE_{191}	17.7	X	330.31542	318.65851	333.15977	9.11825	0.1285943	0.26935801	2.3745580	20	6 4.9	20.2
329458 2002 PM_{193}	16.3	X	164.52069	125.47850	144.92315	11.41409	0.1162416	0.18573605	3.0423225	20	—	—
329459 2002 PF_{196}	17.1	X	359.11222	316.46048	41.86891	7.46764	0.1401975	0.28020510	2.3128743	20	11 21.1	19.3
329460 2002 PK_{198}	15.5	X	198.15989	273.02484	285.38037	9.88146	0.0500571	0.17955057	3.1117989	20	11 25.7	20.2
329461 2002 PN_{199}	18.1	X	322.00225	149.20861	141.55139	3.98217	0.1492303	0.26853049	2.3794339	20	5 17.9	20.5
329462 2002 QA_{4}	15.9	X	357.41779	226.98650	145.56200	11.61712	0.1557805	0.17075627	3.2177449	20	11 12.9	19.9
329463 2002 QO_{6}	15.3	X	71.75406	122.36892	226.97879	8.20028	0.1615067	0.17792649	3.1307062	20	—	—
329464 2002 QK_{12}	15.8	X	12.21265	197.44079	172.99350	9.45313	0.0708776	0.17411610	3.1762165	20	11 22.8	20.1
329465 2002 QH_{19}	17.9	X	351.58305	308.74989	33.80660	2.90361	0.2144788	0.27687226	2.3313980	20	10 24.7	19.6
329466 2002 QV_{24}	14.7	X	14.64833	133.34176	247.54624	25.01453	0.2351579	0.17258058	3.1950288	20	12 25.2	18.8
329467 2002 QM_{29}	15.7	X	32.01745	234.11518	130.06573	15.50913	0.1007980	0.17629965	3.1499361	20	12 15.7	20.2
329468 2002 QM_{30}	15.7	X	334.07728	278.55483	111.18297	6.32162	0.1389092	0.17024134	3.2242301	20	10 23.9	19.5
329469 2002 QM_{35}	15.9	X	136.18090	241.50204	74.99891	4.02526	0.1621292	0.18470479	3.0536361	20	—	—
329470 2002 QU_{38}	17.3	X	274.97500	244.53862	142.16585	1.00992	0.2676878	0.26768125	2.3844639	20	6 30.7	20.0
329471 2002 QL_{48}	18.1	X	64.96925	311.68544	332.41294	2.77241	0.0974844	0.28237223	2.3010253	20	11 5.2	21.2
329472 2002 QA_{51}	15.8	X	334.86472	212.90623	191.99779	5.79014	0.0955736	0.17168598	3.2061179	20	11 11.8	19.8
329473 2002 QN_{62}	17.7	X	190.41834	73.67679	291.39740	1.10095	0.2116065	0.25488325	2.4636283	20	3 19.7	21.9
329474 2002 QX_{68}	17.9	X	65.56519	129.32505	147.93469	7.47622	0.1161651	0.28052611	2.3111095	20	11 2.9	21.0
329475 2002 QV_{72}	16.5	X	127.92820	303.47843	340.23287	14.94286	0.2386718	0.18128525	3.0919163	20	12 27.9	22.1
329476 2002 QX_{84}	15.7	X	6.03799	236.38782	176.74309	12.29333	0.0534850	0.17920923	3.1157491	20	—	—
329477 2002 QH_{90}	16.2	X	95.22521	235.46694	97.04860	6.28143	0.1470879	0.18017280	3.1046303	20	—	—
329478 2002 QH_{91}	16.4	X	127.41353	38.64669	230.69501	9.66087	0.0950043	0.17727405	3.1383830	20	12 5.5	21.3
329479 2002 QN_{91}	15.4	X	31.24520	276.39735	80.43840	6.59703	0.1291614	0.17320597	3.1873333	20	12 7.3	19.5
329480 2002 QP_{94}	17.8	X	8.10283	104.52087	233.02228	5.85349	0.1368027	0.27918468	2.3185065	20	11 5.7	20.2
329481 2002 QD_{96}	15.8	X	175.37937	121.14844	119.34038	10.84103	0.0910927	0.18235488	3.0798138	20	12 20.1	20.5
329482 2002 QC_{102}	16.2	X	40.11095	233.24732	119.37177	2.16519	0.1613287	0.17497814	3.1657761	20	12 18.3	20.4
329483 2002 QP_{108}	15.9	X	280.32033	326.66515	144.76235	12.36264	0.0394042	0.17685737	3.1433104	20	11 24.4	20.4
329484 2002 QY_{108}	16.4	X	78.68755	90.39554	254.00217	1.13653	0.0777004	0.18125594	3.0922496	20	—	—
329485 2002 QD_{113}	17.5	X	23.51335	352.36647	315.08609	4.96540	0.2058521	0.27760423	2.3272980	20	10 27.1	20.2
329486 2002 QR_{113}	15.8	X	168.27477	343.42915	256.25651	8.94384	0.1853583	0.18070856	3.0984910	20	12 7.6	20.8
329487 2002 QY_{114}	15.9	X	39.66482	142.37107	212.52245	4.40523	0.1303982	0.17521674	3.1629014	20	12 16.2	20.3
329488 2002 QJ_{115}	16.0	X	133.15787	163.78313	117.91859	6.57648	0.1378673	0.18024950	3.1037495	20	12 26.4	21.1
329489 2002 QT_{116}	17.8	X	185.66046	19.18383	342.40934	7.52108	0.1374221	0.25397513	2.4694975	20	3 9.8	21.7
329490 2002 QS_{117}	15.4	X	61.33282	211.22106	157.87979	17.70211	0.1248629	0.18125984	3.0922053	20	—	—
329491 2002 QQ_{132}	16.0	X	320.20651	311.88703	123.23442	8.13799	0.1148625	0.17614711	3.1517544	20	11 28.8	19.9
329492 2002 QQ_{140}	15.3	X	189.12153	0.32377	213.66195	10.23666	0.0829359	0.17767065	3.1337108	20	12 2.6	20.1
329493 2002 QG_{145}	15.9	X	40.19327	284.09653	78.12020	11.06351	0.2267804	0.17525690	3.1624182	20	—	—
329494 2002 RO_{9}	16.2	X	65.35165	272.39226	73.45354	2.23296	0.1701461	0.17759482	3.1346028	20	—	—
329495 2002 RS_{39}	15.3	X	48.30071	212.37779	159.08268	25.11633	0.2001808	0.17802533	3.1295473	20	—	—
329496 2002 RW_{72}	17.4	X	357.65860	1.25436	331.04822	3.40332	0.2138256	0.27656489	2.3331250	20	10 19.4	19.2
329497 2002 RZ_{103}	16.1	X	133.85786	132.06951	187.18601	13.85849	0.3322794	0.18257760	3.0773087	20	—	—
329498 2002 RY_{122}	15.3	X	81.96986	222.64402	137.80955	12.55330	0.2539013	0.18031975	3.1029433	20	—	—
329499 2002 RL_{123}	17.1	X	24.26364	305.30269	30.32107	6.99848	0.1658582	0.28056790	2.3108800	20	12 1.9	19.8
329500 2002 RP_{124}	15.5	X	75.81318	214.04333	125.67727	14.03166	0.1440654	0.17772764	3.1330409	20	—	—
329501 2002 RA_{134}	17.1	X	350.48716	224.05743	118.22361	7.63777	0.1570360	0.27526424	2.3404688	20	10 17.9	19.3
329502 2002 RM_{137}	16.4	X	294.19529	240.96765	157.09734	22.56814	0.3147188	0.27005710	2.3704583	20	8 8.9	18.9
329503 2002 RU_{139}	15.2	X	66.33533	211.02134	133.97958	20.75988	0.1674946	0.17557447	3.1586037	20	—	—
329504 2002 RN_{142}	15.8	X	25.81865	168.37780	201.14374	8.71416	0.0765639	0.17347184	3.1840757	20	12 8.8	20.2
329505 2002 RB_{161}	16.1	X	27.99727	202.61148	175.79985	6.02770	0.1240304	0.17519893	3.1631158	20	12 28.4	20.4
329506 2002 RN_{162}	16.1	X	50.69992	168.02528	172.66087	11.31598	0.1056952	0.17361853	3.1822820	20	12 9.8	20.8
329507 2002 RC_{169}	15.4	X	95.89281	106.25008	177.62743	21.27680	0.0816050	0.17189737	3.2034889	20	11 21.4	20.5
329508 2002 RY_{175}	15.3	X	357.78898	209.05442	191.52655	15.77393	0.0622700	0.17378855	3.1802062	20	12 8.1	19.8
329509 2002 RG_{183}	14.8	X	17.06368	161.36799	225.98734	16.37239	0.2139041	0.17346315	3.1841821	20	—	—
329510 2002 RH_{184}	16.5	X	56.98032	117.94665	211.48149	12.18298	0.2701358	0.17299160	3.1899658	20	12 22.2	21.5
329511 2002 RB_{185}	15.5	X	61.45623	102.08029	253.96733	7.57279	0.1604909	0.17659313	3.1464453	20	—	—
329512 2002 RV_{200}	15.8	X	79.02966	252.28308	70.62538	8.81665	0.1934198	0.17574790	3.1565254	20	12 28.3	20.7
329513 2002 RT_{229}	17.6	X	293.15082	281.43047	91.15310	6.05210	0.2037427	0.26910922	2.3760213	20	7 20.9	19.8
329514 2002 RG_{238}	17.6	X	116.48131	279.75423	115.24527	2.11756	0.2355249	0.24544885	2.5263609	20	2 23.1	21.0
329515 2002 RL_{242}	15.6	X	117.10698	151.05540	157.85941	18.99056	0.1155651	0.18082885	3.0971166	20	—	—
329516 2002 RK_{267}	15.6	X	84.01422	240.19599	90.10510	10.38759	0.0654378	0.17669264	3.1452638	20	12 29.5	20.1
329517 2002 RF_{290}	16.4	X	194.97741	42.07694	238.76438	8.12071	0.0284599	0.18844018	3.0131474	20	—	—
329518 2002 RL_{291}	17.2	X	319.34576	329.66542	44.87934	7.83578	0.1469094	0.27550222	2.3391208	20	9 30.6	19.1
329519 2002 RW_{291}	16.7	X	321.30750	324.44358	55.47192	8.44317	0.1920073	0.27674143	2.3321327	20	10 13.8	18.3
329520 2002 SV	19.8	X	251.63821	327.00620	352.63742	16.77564	0.2366471	0.59340119	1.4025029	20	2 20.4	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329521 2002 SS_{17}	16.4	X	140.82759	111.38538	188.95651	10.21131	0.3462043	0.18291612	3.0735107	20	—	—
329522 2002 SR_{25}	17.3	X	23.85217	304.44047	28.01213	8.24265	0.2418995	0.27915154	2.3186901	20	12 8.6	20.2
329523 2002 SK_{47}	18.0	X	29.13578	308.24177	16.82600	2.17920	0.2619927	0.28006361	2.3136532	20	12 9.5	20.9
329524 2002 TT_{6}	16.9	X	283.66382	2.04022	17.41112	6.95142	0.1130981	0.26768628	2.3844340	20	8 2.2	19.6
329525 2002 TW_{7}	17.3	X	250.02966	203.74249	185.70059	4.85778	0.2007101	0.26389042	2.4072450	20	6 14.0	20.8
329526 2002 TU_{10}	18.0	X	207.05694	217.75673	191.23449	20.68883	0.1123765	0.37120065	1.9174773	20	6 2.9	20.8
329527 2002 TK_{12}	16.7	X	288.28468	344.30725	46.59277	7.09574	0.1003447	0.27056612	2.3674843	20	8 31.0	19.3
329528 2002 TK_{18}	17.6	X	223.87452	211.25155	191.73197	4.92461	0.2282397	0.26112642	2.4242022	20	6 3.5	21.5
329529 2002 TA_{23}	17.5	X	16.72544	158.89808	197.72383	2.00459	0.2412215	0.28002557	2.3138627	20	—	—
329530 2002 TM_{30}	16.9	X	261.99912	157.54377	209.42660	6.50189	0.1437660	0.26190263	2.4194100	20	6 5.4	20.1
329531 2002 TV_{35}	15.8	X	92.09476	137.45839	193.58480	7.88125	0.1876385	0.17604745	3.1529438	20	—	—
329532 2002 TM_{38}	15.8	X	31.90653	123.44570	245.57504	2.29132	0.2131771	0.17045957	3.2214777	20	—	—
329533 2002 TA_{51}	15.7	X	60.72213	140.48795	209.75736	13.79673	0.2582448	0.17224920	3.1991253	20	—	—
329534 2002 TM_{56}	15.7	X	50.14450	137.83215	202.05836	16.91849	0.1493944	0.17119731	3.2122161	20	12 12.4	20.5
329535 2002 TL_{61}	15.3	X	89.44979	20.42419	272.64749	8.35082	0.1039256	0.17109088	3.2135481	20	11 24.0	20.2
329536 2002 TJ_{72}	15.5	X	65.76250	115.70474	230.61266	15.13393	0.2176961	0.17430672	3.1739004	20	—	—
329537 2002 TW_{81}	16.1	X	69.74283	279.97284	44.67567	10.20115	0.2316479	0.17362106	3.1822511	20	12 24.9	21.2
329538 2002 TH_{93}	14.9	X	122.98256	19.68585	231.92561	16.32249	0.0355188	0.17031493	3.2233013	20	11 5.4	19.7
329539 2002 TA_{127}	15.9	X	60.44529	192.27756	149.26241	12.14649	0.2246161	0.17442840	3.1724241	20	—	—
329540 2002 TR_{162}	17.2	X	135.75203	252.99194	173.09047	22.92140	0.1050264	0.36116345	1.9528409	20	4 1.9	19.4
329541 2002 TV_{173}	17.1	X	279.03003	336.53354	58.57503	5.94368	0.2243796	0.26862171	2.3788952	20	7 28.4	19.9
329542 2002 TB_{199}	15.4	X	98.43696	59.82951	266.10940	11.14998	0.2778230	0.17617191	3.1514586	20	—	—
329543 2002 TO_{230}	15.7	X	36.26589	264.81618	104.56948	11.18445	0.3259985	0.17418594	3.1753674	20	—	—
329544 2002 TV_{241}	17.3	X	157.62584	347.28423	59.24218	22.84351	0.0814350	0.36188315	1.9502508	20	4 10.5	20.0
329545 2002 TN_{271}	16.1	X	180.23721	78.55057	223.98659	5.74307	0.3526272	0.18848750	3.0126431	20	1 9.0	21.8
329546 2002 TN_{279}	15.4	X	22.39831	139.07437	235.04651	18.43726	0.1973788	0.17044081	3.2217141	20	12 23.2	19.8
329547 2002 TG_{289}	14.7	X	65.43394	102.66449	249.56592	14.25938	0.2016028	0.17235083	3.1978675	20	—	—
329548 2002 TE_{297}	15.9	X	37.59403	178.41752	203.60942	14.71515	0.1900709	0.17334913	3.1855782	20	—	—
329549 2002 TG_{326}	17.5	X	64.90618	117.06068	181.99916	5.31274	0.1680044	0.28124480	2.3071706	20	12 4.6	20.9
329550 2002 TJ_{342}	15.9	X	152.31434	137.55780	111.88055	5.57721	0.1203641	0.17282442	3.1920228	20	12 5.9	21.1
329551 2002 TW_{366}	18.2	X	335.58758	260.81778	74.55882	7.15664	0.1603271	0.27025042	2.3693277	20	9 1.8	20.2
329552 2002 TE_{376}	17.1	X	305.19600	223.40898	140.36916	9.13840	0.2602765	0.26827557	2.3809410	20	7 18.9	19.3
329553 2002 TW_{377}	16.6	X	89.52628	229.07508	75.27385	2.03358	0.1547392	0.17402573	3.1773159	20	12 13.0	21.6
329554 2002 TB_{381}	18.3	X	0.53217	161.90519	180.73474	2.55393	0.2698156	0.27702399	2.3305466	20	11 23.3	20.3
329555 2002 UB_{3}	16.2	X	322.24729	297.65614	87.96155	22.76951	0.3183974	0.27303913	2.3531672	20	11 8.2	17.7
329556 2002 UA_{12}	15.9	X	83.67838	92.89104	257.04204	22.29492	0.2846089	0.28996524	2.2606783	20	—	—
329557 2002 UJ_{14}	15.4	X	117.60170	96.98923	200.45816	15.37903	0.1093385	0.17489807	3.1667422	20	12 27.1	20.6
329558 2002 UV_{20}	15.4	X	36.11256	129.71992	232.78908	13.92982	0.2269633	0.17019681	3.2247925	20	12 31.1	20.0
329559 2002 UC_{31}	16.6	X	15.05801	68.96505	267.24360	4.68656	0.1578562	0.27557761	2.3386942	20	11 17.1	19.0
329560 2002 UK_{61}	15.6	X	157.15768	77.26112	206.13079	15.92013	0.1732295	0.18456726	3.0551528	20	—	—
329561 2002 UV_{65}	15.8	X	148.36320	65.88489	188.38959	17.84895	0.1391663	0.17435563	3.1733069	20	12 8.2	21.2
329562 2002 UV_{71}	17.5	X	35.08779	86.29306	230.38062	8.02997	0.2492587	0.27700952	2.3306278	20	12 3.5	20.6
329563 2002 UM_{79}	16.9	X	49.37571	203.70954	271.41541	5.15359	0.0951177	0.24156615	2.5533597	20	2 10.7	19.9
329564 2002 VC_{14}	17.2	X	48.67057	101.75289	232.32106	20.48520	0.2667149	0.28084615	2.3093534	20	—	—
329565 2002 VH_{35}	17.3	X	306.08120	305.94220	63.45720	2.93853	0.1993084	0.26728554	2.3868167	20	8 12.8	19.2
329566 2002 VR_{41}	17.4	X	107.54726	168.74766	209.81923	1.73795	0.2548022	0.23875661	2.5733515	20	1 25.6	20.7
329567 2002 VS_{42}	17.1	X	187.74909	260.79124	150.74140	0.64708	0.2015792	0.25468868	2.4648829	20	5 14.8	21.1
329568 2002 VH_{55}	15.0	X	71.43477	278.59146	76.57755	26.43390	0.2574711	0.17453587	3.1711218	20	—	—
329569 2002 VP_{57}	17.3	X	8.46844	258.18694	94.60876	4.37023	0.2362536	0.27725540	2.3292497	20	12 14.9	19.8
329570 2002 VK_{75}	17.3	X	7.57983	285.97983	69.33733	8.39806	0.2360972	0.27645053	2.3337685	20	12 16.3	19.8
329571 2002 VC_{92}	18.9	X	296.73099	231.80147	243.60074	27.31882	0.2787967	0.55837521	1.4605574	20	—	—
329572 2002 VY_{106}	17.1	X	246.82949	134.41649	264.45890	3.93522	0.1454604	0.26169754	2.4206739	20	6 29.9	20.5
329573 2002 VQ_{131}	17.3	X	347.92914	302.86313	47.71046	3.15749	0.2125331	0.27302687	2.3532377	20	10 28.1	18.8
329574 2002 VH_{132}	17.4	X	238.34061	193.38399	206.89678	5.82231	0.1246056	0.26082594	2.4260637	20	6 23.9	20.8
329575 2002 VS_{138}	15.5	X	21.48338	97.61195	232.64618	7.35851	0.0681428	0.15933754	3.3696954	20	10 10.0	20.0
329576 2002 VB_{142}	17.1	X	45.94239	44.32791	269.29112	8.48470	0.2147219	0.27613626	2.3355388	20	12 6.6	20.4
329577 2002 VU_{142}	17.5	X	259.61173	128.64275	220.11335	20.24834	0.0896388	0.36924648	1.9242366	20	5 13.3	19.3
329578 2002 VS_{143}	17.7	X	314.99079	288.66932	65.97647	3.39244	0.2303706	0.26835195	2.3804892	20	8 4.0	19.3
329579 2002 WY_{17}	16.8	X	171.68895	282.16143	134.97685	7.40572	0.1198584	0.25128396	2.4870979	20	5 8.7	20.7
329580 2002 WW_{22}	13.2	X	210.55390	144.92204	233.95968	24.23151	0.0533653	0.08322599	5.1955325	20	5 4.4	20.3
329581 2002 XV_{43}	17.3	X	102.86383	18.47477	7.54554	3.60981	0.2595740	0.23731735	2.5837454	20	1 31.9	20.7
329582 2002 XK_{44}	16.5	X	123.58000	85.63894	341.18027	4.55956	0.1875326	0.24298601	2.5434031	20	4 3.2	20.2
329583 2002 XC_{72}	16.4	X	78.05802	98.88327	19.72796	5.40795	0.2229868	0.24248205	2.5469260	20	4 22.3	19.3
329584 2002 XD_{98}	16.6	X	68.86555	98.64316	43.29647	14.66999	0.1510986	0.24458620	2.5322976	20	4 30.4	19.6
329585 2002 XW_{107}	17.3	X	94.71855	19.54521	84.51717	19.09020	0.1833771	0.24199599	2.5503352	20	4 28.7	21.1
329586 2002 XY_{118}	17.5	X	14.32843	229.91471	91.63720	3.58702	0.2452745	0.27279080	2.3545951	20	11 11.1	19.8
329587 2003 AJ_{1}	16.6	X	65.04155	335.29645	161.55568	5.35523	0.1844121	0.24027319	2.5625116	20	4 24.1	19.4
329588 2003 AX_{39}	16.6	X	65.60386	241.73379	237.98558	4.07348	0.2593744	0.23733627	2.5836082	20	4 10.4	19.5
329589 2003 BO_{10}	17.4	X	19.80862	46.30380	102.89925	7.60815	0.3156364	0.23219616	2.6215976	20	2 5.9	18.7
329590 2003 BF_{19}	16.4	X	75.78925	55.62843	68.85192	7.66394	0.1185853	0.23757371	2.5818864	20	4 14.4	19.6
329591 2003 BV_{21}	17.1	X	235.50654	209.19629	143.08175	24.24567	0.0694142	0.35734003	1.9667460	20	4 26.7	20.0
329592 2003 BG_{43}	17.2	X	52.15361	337.60062	127.27087	8.09518	0.2814765	0.23424279	2.6063050	20	2 29.1	19.3
329593 2003 BG_{58}	16.5	X	59.14850	4.82581	133.21446	13.42458	0.1278677	0.23745435	2.5827515	20	4 11.4	19.8
329594 2003 BG_{76}	16.3	X	359.78871	108.88508	94.27715	13.97746	0.1321652	0.23599777	2.5933678	20	3 30.5	19.4
329595 2003 BA_{85}	16.6	X	37.24431	86.39303	63.50666	5.90381	0.1942069	0.23554042	2.5967238	20	3 24.4	19.0
329596 2003 CJ_{17}	17.0	X	136.21676	36.69103	42.61975	4.32921	0.2172876	0.24153355	2.5535894	20	5 5.7	21.0
329597 2003 CT_{25}	16.0	X	120.12648	29.09770	62.62924	14.04182	0.1486148	0.23975629	2.5661933	20	5 1.9	19.7
329598 2003 DJ_{11}	16.9	X	64.22509	307.81535	177.03971	9.91845	0.1369711	0.23679304	2.5875580	20	3 28.4	19.8
329599 2003 EQ_{37}	16.5	X	22.61870	81.00263	65.02979	12.45127	0.2105203	0.23052037	2.6342875	20	2 18.2	19.0
329600 2003 FF_{8}	16.6	X	331.10764	121.84083	206.88221	14.16596	0.1194062	0.24551032	2.5259391	20	7 30.5	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329601 2003 FD_{66}	17.0	X	300.54633	87.98434	159.38535	4.08204	0.1709034	0.22937405	2.6430570	20	2 12.8	20.5
329602 2003 FS_{94}	16.3	X	331.32961	26.49185	166.60785	14.10641	0.1871200	0.22381559	2.6866381	20	1 12.8	19.8
329603 2003 FJ_{96}	16.1	X	292.46570	137.86221	76.98766	6.47633	0.1254744	0.22314437	2.6920230	20	1 1.5	20.0
329604 2003 FN_{101}	16.3	X	315.69308	45.98979	185.34441	11.77964	0.1446163	0.22940494	2.6428197	20	2 13.6	19.8
329605 2003 FZ_{121}	16.0	X	20.11020	338.04821	188.13120	32.85193	0.1432797	0.22827525	2.6515317	20	3 5.3	19.1
329606 2003 FH_{131}	16.8	X	333.34244	314.66800	249.10420	2.52726	0.1254688	0.22702248	2.6612774	20	2 7.7	20.1
329607 2003 GE_{10}	16.2	X	18.59434	8.67954	141.47252	15.63577	0.1798381	0.22761815	2.6566323	20	2 9.9	18.7
329608 2003 GD_{40}	16.3	X	1.31346	140.43864	36.53338	11.97353	0.1197526	0.22904629	2.6455778	20	2 24.9	19.4
329609 2003 GL_{42}	16.3	X	339.60275	79.67522	117.73118	13.43996	0.1673170	0.22700515	2.6614128	20	2 5.0	19.3
329610 2003 GU_{54}	17.8	X	106.41851	134.35850	35.34974	2.96528	0.1334763	0.30101798	2.2049958	20	7 29.1	20.8
329611 2003 HX_4	16.8	X	307.52927	61.50129	156.23120	6.71296	0.2188334	0.22238295	2.6981643	20	1 9.3	20.7
329612 2003 JR_6	16.1	X	262.90612	191.92765	70.49866	9.89172	0.1789159	0.21859151	2.7292743	20	1 25.2	20.5
329613 2003 JU_{16}	15.2	X	260.02549	161.43716	90.78209	36.88744	0.1209634	0.21694467	2.7430690	20	1 11.1	19.6
329614 2003 KU_2	17.6	X	274.39112	246.70615	105.27553	5.40251	0.6774491	0.22377723	2.6869450	20	4 7.9	23.1
329615 2003 LV_1	18.6	X	213.11539	105.26609	75.33245	34.08818	0.0526352	0.54656536	1.4815216	20	—	—
329616 2003 OM_2	17.4	X	75.39693	319.95106	335.81537	6.23775	0.2179804	0.30327563	2.1940392	20	12 18.1	20.8
329617 2003 OW_8	15.7	X	89.04031	153.86691	201.01484	10.92205	0.1450250	0.19589848	2.9361754	20	—	—
329618 2003 ON_{21}	18.0	X	54.56478	259.91456	36.46414	1.36794	0.1955641	0.30067267	2.2066836	20	11 26.1	21.1
329619 2003 OS_{22}	15.7	X	102.49685	205.44903	158.34804	8.73360	0.4512655	0.19502497	2.9449363	20	2 1.5	20.3
329620 2003 OE_{33}	15.5	X	148.99371	70.90416	247.85183	9.57363	0.1003695	0.19774821	2.9178369	20	—	—
329621 2003 QW_{13}	15.7	X	83.68934	315.06900	328.46265	8.22976	0.1163227	0.18402096	3.0611963	20	11 8.0	20.4
329622 2003 QY_{25}	16.7	X	298.23605	71.20158	253.65220	2.03352	0.2724149	0.22441547	2.6818482	20	5 6.1	20.1
329623 2003 QK_{94}	16.4	X	131.15007	313.14405	43.89505	6.73560	0.3110834	0.20000669	2.8958298	20	2 5.9	21.2
329624 2003 QS_{110}	16.1	X	181.12595	295.89341	24.48887	7.45834	0.2918940	0.20456962	2.8526071	20	1 29.4	21.4
329625 2003 QA_{113}	15.6	X	348.95681	349.35599	45.04867	22.04719	0.2493784	0.17922120	3.1156102	20	11 29.5	18.9
329626 2003 RR_{12}	16.3	X	215.21824	350.55190	359.53349	4.96142	0.1681335	0.21268431	2.7795794	20	3 25.6	20.8
329627 2003 RP_{24}	15.5	X	90.02041	113.39042	281.54648	8.71799	0.0769440	0.19840653	2.9113790	20	1 4.9	19.2
329628 2003 SF_{34}	15.7	X	349.91100	257.27708	178.07763	21.91473	0.0840931	0.18641263	3.0349567	20	—	—
329629 2003 SM_{44}	17.6	X	66.42559	141.19337	202.10928	7.47401	0.1736593	0.30411399	2.1900051	20	—	—
329630 2003 SC_{46}	16.3	X	61.98218	298.85565	71.62737	2.08697	0.2521578	0.18858806	3.0115720	20	—	—
329631 2003 SO_{51}	15.6	X	88.90104	329.48814	32.07748	10.90089	0.1139231	0.19097991	2.9863745	20	—	—
329632 2003 SZ_{59}	17.1	X	217.63005	347.17454	30.71516	8.26487	0.1350405	0.27491274	2.3424633	20	4 30.1	20.7
329633 2003 SD_{69}	15.8	X	14.37663	176.73795	190.51576	18.68510	0.2340798	0.17930999	3.1145817	20	12 13.2	19.9
329634 2003 SL_{86}	15.8	X	346.70406	173.39606	224.44809	17.05368	0.1918788	0.17851308	3.1238441	20	11 28.5	19.2
329635 2003 SP_{89}	15.8	X	128.36992	96.94484	245.12219	9.41916	0.1377989	0.19584669	2.9366931	20	—	—
329636 2003 SE_{104}	17.6	X	80.79939	238.30550	66.68800	5.57312	0.1721695	0.30247667	2.1979010	20	12 31.7	20.9
329637 2003 SV_{126}	16.5	X	174.82664	56.17688	237.00472	6.70162	0.2758224	0.19886931	2.9068606	20	—	—
329638 2003 SX_{135}	16.0	X	328.75153	203.01238	209.23565	6.95656	0.3217357	0.17913607	3.1165973	20	11 11.2	18.2
329639 2003 SZ_{152}	15.9	X	36.29507	253.30265	110.79506	7.06376	0.1393056	0.18359164	3.0659668	20	12 26.4	20.2
329640 2003 SZ_{162}	15.5	X	91.78919	167.36051	192.78137	10.20301	0.1137235	0.19000496	2.9965815	20	—	—
329641 2003 SV_{163}	16.2	X	65.58713	334.22034	52.10842	3.85792	0.1132780	0.19205250	2.9752450	20	—	—
329642 2003 SN_{171}	16.1	X	83.76965	307.46578	58.94508	5.49219	0.1835056	0.19116899	2.9844050	20	—	—
329643 2003 ST_{174}	16.6	X	120.59913	190.77919	173.24842	2.58390	0.2018132	0.19760966	2.9192005	20	1 21.3	21.0
329644 2003 SN_{177}	17.6	X	299.32015	248.46219	147.78410	3.39418	0.1890318	0.28879394	2.2667868	20	9 17.4	19.3
329645 2003 SK_{178}	17.0	X	144.60252	32.14839	255.35567	3.77895	0.1396517	0.30849176	2.1692370	20	—	—
329646 2003 SG_{191}	15.3	X	52.46577	316.19755	18.12888	10.59190	0.1016418	0.18153364	3.0890953	20	12 2.4	19.8
329647 2003 SJ_{192}	16.0	X	9.02345	350.60340	9.92912	10.78588	0.2157757	0.17571226	3.1569522	20	11 18.8	19.8
329648 2003 SB_{218}	16.1	X	39.36720	286.88597	49.11296	10.44440	0.1150487	0.17584595	3.1553519	20	11 20.4	20.3
329649 2003 SH_{242}	18.0	X	112.70589	102.33733	327.87265	0.75976	0.1625221	0.26111896	2.4242484	20	3 23.2	21.0
329650 2003 SD_{249}	15.5	X	40.05646	174.53070	202.42099	14.91455	0.1923230	0.18395932	3.0618801	20	—	—
329651 2003 SY_{281}	15.8	X	280.32067	252.87005	198.52640	22.83501	0.1286513	0.17582856	3.1555599	20	10 16.3	20.0
329652 2003 SZ_{283}	16.2	X	111.68580	153.54151	211.53113	14.43234	0.1990742	0.19692019	2.9260106	20	1 10.2	20.7
329653 2003 SJ_{285}	15.8	X	58.14715	117.23420	258.69809	8.34961	0.0608700	0.18966117	3.0002015	20	—	—
329654 2003 SD_{319}	15.7	X	344.16215	6.34722	41.33765	10.75739	0.0987412	0.17902420	3.1178955	20	11 28.9	19.6
329655 2003 SG_{322}	18.1	X	104.96030	277.21900	50.62629	4.72596	0.2165907	0.30793081	2.1718706	20	—	—
329656 2003 SO_{328}	16.9	X	326.62938	2.23311	60.12158	5.51359	0.1130071	0.29704997	2.2245886	20	12 31.9	18.9
329657 2003 SA_{349}	16.2	X	181.40737	87.39924	181.19177	12.42081	0.1006773	0.19315492	2.9639136	20	—	—
329658 2003 SG_{365}	16.3	X	21.45969	190.62745	190.25282	9.91542	0.0742123	0.18479068	3.0526898	20	12 19.0	20.5
329659 2003 SZ_{383}	18.1	X	319.53302	319.29388	69.34305	2.26317	0.0279127	0.29230722	2.2485869	20	10 25.1	20.5
329660 2003 SD_{397}	16.1	X	48.28894	227.75397	137.06877	9.93985	0.1408782	0.18335117	3.0686470	20	—	—
329661 2003 ST_{397}	18.0	X	292.33280	326.02182	113.39457	7.67432	0.0680530	0.29328966	2.2435627	20	11 25.3	20.4
329662 2003 SY_{399}	16.6	X	104.70609	229.45461	81.27853	12.88265	0.0724561	0.18331277	3.0690755	20	12 30.5	21.2
329663 2003 SE_{411}	16.6	X	125.81106	100.80364	208.00647	2.35767	0.0812231	0.19081768	2.9880669	20	—	—
329664 2003 TZ_{12}	15.4	X	11.79382	159.76756	228.61638	18.54423	0.2218519	0.18095286	3.0957015	20	12 30.9	19.5
329665 2003 TJ_{29}	15.5	X	89.75015	271.77686	17.21762	20.64002	0.0669560	0.17893696	3.1189088	20	11 11.4	20.3
329666 2003 TS_{34}	16.0	X	31.63307	165.34245	231.59986	14.36722	0.0602913	0.18523644	3.0477905	20	—	—
329667 2003 TN_{39}	15.9	X	202.50852	317.87491	236.06331	8.82270	0.0352070	0.18078084	3.0976650	20	11 28.2	20.2
329668 2003 TM_{56}	16.1	X	267.87808	90.95414	54.16589	11.44114	0.0255219	0.18328092	3.0694310	20	12 18.6	20.4
329669 2003 UD_8	16.5	X	251.68246	108.30817	238.39577	3.88726	0.5360807	0.22008843	2.7168849	20	3 27.7	22.0
329670 2003 UE_{16}	16.3	X	46.59005	255.12786	122.32591	5.85727	0.2580373	0.18453497	3.0555092	20	—	—
329671 2003 UF_{19}	15.4	X	128.15257	112.04973	220.88464	10.23759	0.1311524	0.19085585	2.9876685	20	—	—
329672 2003 UF_{27}	15.4	X	53.26911	295.27196	69.75225	9.80131	0.1089715	0.18379567	3.0636973	20	—	—
329673 2003 UO_{57}	15.8	X	109.41319	111.92118	222.15366	8.68708	0.1187086	0.19051127	2.9912699	20	—	—
329674 2003 UF_{59}	14.8	X	328.49078	199.67905	237.34033	23.45069	0.1677779	0.17839924	3.1251730	20	12 12.5	18.4
329675 2003 UO_{61}	17.4	X	18.90907	324.55873	56.84341	5.67019	0.1687733	0.30005489	2.2097115	20	—	—
329676 2003 UF_{75}	17.5	X	241.73625	47.76570	335.62153	6.05505	0.1476223	0.27739412	2.3284731	20	6 1.4	20.8
329677 2003 UA_{115}	15.6	X	124.20243	259.21872	40.00457	19.68042	0.0814523	0.18336806	3.0684585	20	—	—
329678 2003 UZ_{125}	15.5	X	79.10090	150.60555	213.37983	15.55718	0.1009312	0.18853941	3.0120901	20	—	—
329679 2003 UC_{140}	17.5	X	334.41427	265.67112	124.20830	7.52740	0.1424724	0.29329528	2.2435341	20	11 30.5	19.5
329680 2003 UB_{153}	17.1	X	333.93433	354.03461	49.85444	7.82636	0.1056966	0.29356309	2.2421694	20	12 14.2	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329681 2003 UD_{153}	16.2	X	79.83957	267.38707	79.49604	2.07548	0.1776354	0.18492412	3.0512211	20	—	—
329682 2003 UA_{154}	15.2	X	96.42882	116.96938	221.99433	9.26103	0.0769205	0.18535089	3.0465357	20	—	—
329683 2003 UM_{157}	16.4	X	76.43184	305.68131	24.17177	6.12717	0.1328993	0.18331117	3.0690933	20	12 29.9	21.1
329684 2003 UC_{162}	15.8	X	101.28285	304.32263	36.32961	10.75486	0.1001741	0.18810507	3.0167249	20	—	—
329685 2003 UV_{166}	15.7	X	322.25241	231.60266	222.45007	9.59957	0.0614237	0.18163929	3.0878973	20	12 25.2	19.9
329686 2003 UB_{197}	15.9	X	227.06866	111.34546	204.58665	14.38074	0.1641027	0.20580301	2.8411984	20	2 21.6	20.7
329687 2003 UM_{197}	15.6	X	139.03377	100.32199	220.53734	9.03524	0.0913655	0.19114357	2.9846695	20	—	—
329688 2003 UB_{200}	16.2	X	84.49376	189.29687	186.32540	3.53339	0.1191590	0.19054176	2.9909508	20	—	—
329689 2003 UG_{200}	15.8	X	13.71182	343.95129	45.20819	9.65681	0.1724698	0.18071638	3.0984016	20	12 30.9	19.8
329690 2003 UQ_{203}	15.4	X	42.70134	146.33401	223.00430	12.64596	0.0348739	0.18103859	3.0947242	20	12 24.3	19.9
329691 2003 UN_{211}	15.2	X	112.55423	282.76050	43.05426	14.11007	0.1372771	0.18586182	3.0409499	20	—	—
329692 2003 UN_{220}	16.0	X	40.40528	143.69841	233.05770	7.91487	0.0902061	0.18218158	3.0817666	20	—	—
329693 2003 UU_{227}	15.3	X	322.17232	217.40372	240.39853	8.74381	0.1036280	0.18039952	3.1020286	20	12 29.3	19.1
329694 2003 UM_{228}	15.6	X	349.88043	12.33418	42.70359	10.45466	0.1074421	0.18106886	3.0943792	20	12 18.8	19.5
329695 2003 UK_{241}	16.4	X	12.07209	323.19383	63.14578	2.78006	0.1783521	0.18012587	3.1051695	20	12 25.5	20.3
329696 2003 UY_{244}	16.9	X	133.12262	302.37003	141.45170	4.06089	0.1259574	0.26533773	2.3984834	20	5 1.3	20.3
329697 2003 US_{258}	16.0	X	150.95505	79.77155	209.93322	8.86680	0.1235105	0.18798231	3.0180381	20	—	—
329698 2003 UN_{266}	15.4	X	123.47444	268.27054	46.41678	5.76396	0.1514557	0.18696823	3.0289411	20	—	—
329699 2003 UO_{268}	17.7	X	49.25926	141.53306	216.56069	4.52815	0.1942058	0.30007748	2.2096006	20	—	—
329700 2003 UQ_{269}	15.7	X	11.01801	164.64443	228.81211	9.31146	0.0894000	0.17913550	3.1166039	20	12 20.5	19.8
329701 2003 UV_{272}	15.7	X	341.88605	332.07369	64.52595	8.41241	0.1322680	0.17524510	3.1625602	20	11 14.1	19.4
329702 2003 UG_{274}	15.5	X	10.34171	158.43351	225.54569	17.49606	0.1770486	0.18022518	3.1040288	20	12 18.4	19.5
329703 2003 UN_{275}	17.1	X	167.64166	265.33617	226.48604	18.83287	0.2729113	0.27454713	2.3445425	20	8 1.2	21.7
329704 2003 UW_{288}	16.1	X	120.57643	81.20683	214.16770	8.34907	0.1163290	0.18397688	3.0616853	20	12 30.0	21.0
329705 2003 UB_{298}	16.8	X	230.68300	342.04177	297.17094	0.94294	0.0099667	0.19813486	2.9140396	20	1 25.0	20.8
329706 2003 UZ_{336}	15.9	X	337.15337	192.27544	232.87404	2.68697	0.1681773	0.18023803	3.1038812	20	12 15.3	19.4
329707 2003 UH_{353}	18.0	X	302.99717	311.95260	100.71942	4.00132	0.0932946	0.29164880	2.2519699	20	11 1.9	20.0
329708 2003 UJ_{355}	18.0	X	244.29291	41.84029	87.89654	5.62003	0.0623644	0.29427633	2.2385450	20	11 21.6	20.4
329709 2003 UF_{380}	16.5	X	44.19977	309.92003	49.71762	5.53357	0.0435630	0.18322812	3.0700207	20	12 16.9	20.9
329710 2003 UM_{385}	16.0	X	171.86985	32.30793	140.40001	6.20830	0.1309661	0.17129486	3.2109965	20	9 26.7	21.2
329711 2003 UD_{386}	16.1	X	177.28657	119.79640	43.14191	16.09655	0.0998333	0.17059827	3.2197314	20	9 26.5	21.3
329712 2003 WV_{5}	15.3	X	350.52395	184.19918	219.67765	6.66181	0.1915100	0.17643550	3.1483190	20	12 12.6	18.8
329713 2003 WO_{7}	18.8	X	126.24608	245.76288	91.23226	7.66598	0.4357626	0.31221338	2.1519642	20	1 6.9	21.7
329714 2003 WW_{22}	17.3	X	104.92911	205.82840	79.80249	3.26334	0.0272314	0.29425110	2.2386730	20	12 23.8	20.1
329715 2003 WJ_{23}	16.0	X	20.73886	161.87255	202.62441	4.86405	0.1640297	0.17611142	3.1521802	20	12 8.2	20.0
329716 2003 WK_{68}	17.0	X	308.57222	345.24632	63.50999	8.82022	0.1131331	0.28771846	2.2724320	20	11 4.7	19.0
329717 2003 WN_{69}	15.8	X	75.79322	126.01528	233.31321	8.12742	0.1035396	0.18258874	3.0771834	20	—	—
329718 2003 WD_{97}	17.8	X	21.81440	254.28744	100.91658	3.90432	0.2001936	0.29494880	2.2351412	20	—	—
329719 2003 WY_{101}	17.7	X	183.58523	25.64049	81.39441	3.32049	0.1612657	0.27507454	2.3415447	20	7 23.6	21.2
329720 2003 WM_{107}	15.1	X	41.84621	126.81755	239.73357	19.06677	0.1457745	0.17828492	3.1265087	20	—	—
329721 2003 WG_{109}	15.4	X	2.26884	168.02028	241.69103	9.57272	0.0616326	0.17952412	3.1121045	20	12 25.3	19.6
329722 2003 WE_{118}	16.9	X	288.01053	135.36256	290.43914	5.58762	0.1915272	0.28620552	2.2804333	20	10 5.3	19.0
329723 2003 WH_{145}	15.8	X	321.39405	355.13979	60.53068	23.57337	0.1540963	0.17295106	3.1904644	20	11 6.8	19.6
329724 2003 WR_{147}	17.5	X	82.84302	174.13943	173.14437	5.61438	0.1893834	0.30263375	2.1971404	20	—	—
329725 2003 WX_{150}	17.1	X	203.97439	349.47698	103.20754	6.31203	0.1571762	0.27610935	2.3356906	20	7 25.2	20.5
329726 2003 WZ_{160}	15.9	X	122.60564	77.79620	239.09285	7.89439	0.1603224	0.18417117	3.0595316	20	—	—
329727 2003 WS_{167}	17.7	X	257.80159	319.50297	137.32014	4.15486	0.0678476	0.28887846	2.2663446	20	10 24.7	20.2
329728 2003 WQ_{170}	15.2	X	83.01036	208.84045	121.69083	12.30739	0.1270289	0.18285685	3.0741748	20	—	—
329729 2003 XM_{3}	17.2	X	214.66003	238.58795	219.00301	6.31454	0.1400880	0.27744705	2.3281769	20	8 10.9	20.6
329730 2003 XP_{13}	15.7	X	72.04921	248.90274	121.24158	6.66124	0.3941617	0.18780781	3.0199073	20	—	—
329731 2003 XZ_{15}	15.5	X	95.91504	244.02930	71.26826	11.30228	0.0694539	0.17762037	3.1343022	20	12 25.0	20.2
329732 2003 XS_{24}	15.7	X	47.23094	97.29648	279.64190	9.11550	0.0377799	0.18077007	3.0977880	20	—	—
329733 2003 YF_{7}	17.2	X	239.69959	158.57131	281.59029	2.31893	0.1347392	0.27698049	2.3307906	20	8 19.6	20.0
329734 2003 YC_{22}	17.2	X	259.83720	11.72353	67.92082	8.06557	0.1334219	0.28321984	2.2964320	20	9 23.7	19.9
329735 2003 YJ_{28}	16.2	X	55.53425	292.24476	80.55520	7.28127	0.3336836	0.18388536	3.0627010	20	—	—
329736 2003 YF_{55}	17.3	X	257.08861	333.18766	91.85328	4.67874	0.1702091	0.28040107	2.3117965	20	8 19.1	20.0
329737 2003 YG_{86}	17.3	X	274.83751	308.51049	106.88220	3.24639	0.2071770	0.28071995	2.3100455	20	8 25.2	19.7
329738 2003 YF_{90}	17.0	X	216.66298	126.32575	336.16321	2.09516	0.0758857	0.27489467	2.3425660	20	8 30.1	19.8
329739 2003 YY_{104}	14.6	X	29.61352	261.10798	117.53503	26.30350	0.2688952	0.17474562	3.1685837	20	—	—
329740 2003 YP_{117}	15.4	X	70.17609	259.72113	89.75308	26.77050	0.2565850	0.17984043	3.1084544	20	—	—
329741 2003 YV_{180}	16.6	X	22.61640	39.82916	50.70169	4.82827	0.1999255	0.24165962	2.5527013	20	—	—
329742 2004 AB_{4}	17.6	X	195.36395	5.80085	86.58787	3.24782	0.1861917	0.27009981	2.3702084	20	7 14.0	21.3
329743 2004 BU_{24}	17.2	X	227.72378	303.80832	138.86055	2.05702	0.1510531	0.27376212	2.3490223	20	8 6.6	20.5
329744 2004 BV_{24}	17.5	X	82.17791	296.82891	268.93666	1.38241	0.1844296	0.26493851	2.4008922	20	8 21.2	20.7
329745 2004 BC_{34}	17.7	X	120.77737	37.12175	98.37472	2.31556	0.1275871	0.26252591	2.4155792	20	6 24.6	21.1
329746 2004 BL_{70}	16.9	X	164.34679	37.22538	109.44239	6.85798	0.0681404	0.27149297	2.3620930	20	8 29.3	20.1
329747 2004 BS_{74}	15.8	X	128.10416	76.97467	140.91892	21.95259	0.2324276	0.27267475	2.3552631	20	10 30.6	20.3
329748 2004 BM_{116}	16.7	X	124.86490	81.90427	101.05283	8.84548	0.0750271	0.27059637	2.3673079	20	9 2.2	20.0
329749 2004 BA_{126}	18.1	X	172.52829	80.66362	41.53367	2.34108	0.0915246	0.26979043	2.3720200	20	8 3.3	21.4
329750 2004 CO_{5}	16.8	X	151.02720	84.85802	74.23968	5.36245	0.0974385	0.26980884	2.3719122	20	8 30.9	20.2
329751 2004 CO_{44}	17.6	X	160.42553	11.20647	100.37097	4.44457	0.1331683	0.26656818	2.3910969	20	7 5.7	21.2
329752 2004 CD_{65}	16.9	X	339.42790	84.56298	59.14732	5.66166	0.1113272	0.23835516	2.5762402	20	—	—
329753 2004 CO_{91}	16.7	X	106.56287	25.76752	152.24739	24.29043	0.1941225	0.26381605	2.4076974	20	8 11.1	20.4
329754 2004 DY_{24}	17.6	X	52.11194	67.23143	354.27877	5.65463	0.1546776	0.29966759	2.2116150	20	—	—
329755 2004 EV_{12}	16.9	X	35.42459	110.88932	123.54796	3.99127	0.1447799	0.25749386	2.4469483	20	7 18.6	19.5
329756 2004 EU_{18}	16.8	X	137.44093	103.04798	30.35224	3.59801	0.0812413	0.26103510	2.4247675	20	7 7.6	20.2
329757 2004 ES_{20}	17.6	X	137.41360	334.60773	162.87240	23.02577	0.0841640	0.38151616	1.8827562	20	7 18.7	20.3
329758 2004 ET_{28}	18.7	X	25.40664	77.91176	162.32016	1.95267	0.1478722	0.25608299	2.4559276	20	7 8.9	21.1
329759 2004 EW_{80}	17.1	X	64.16294	91.70143	132.74369	6.53585	0.0843174	0.26199865	2.4188189	20	8 9.2	19.8
329760 2004 EU_{109}	17.9	X	85.33558	302.82273	221.43850	0.66949	0.1270800	0.25602607	2.4562916	20	6 20.4	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329761 2004 FO_{4}	17.2	X	34.34657	273.24387	336.58692	4.24534	0.1653722	0.25984793	2.4321473	20	8 13.8	19.7
329762 2004 FE_{51}	17.1	X	68.65946	165.98583	48.34168	3.25780	0.1326319	0.26167623	2.4208053	20	8 10.3	20.1
329763 2004 FY_{93}	17.3	X	43.69955	96.84291	136.25653	1.91622	0.1442665	0.25640521	2.4538696	20	7 30.8	19.8
329764 2004 FC_{106}	17.5	X	59.91071	77.41301	99.64411	6.08478	0.1417371	0.25401530	2.4692371	20	6 4.3	20.3
329765 2004 FB_{115}	17.3	X	23.40013	179.29516	45.91057	5.07626	0.1092988	0.25237497	2.4799249	20	6 6.4	19.9
329766 2004 FJ_{157}	17.9	X	110.21955	334.41577	179.12689	0.96781	0.1297083	0.25830746	2.4418075	20	7 7.0	21.4
329767 2004 GS_{57}	17.7	X	71.68201	212.60309	318.40413	1.92405	0.1278121	0.25359042	2.4719944	20	6 10.5	20.5
329768 2004 GZ_{80}	17.7	X	38.03825	228.90730	358.74400	0.90145	0.1332575	0.25632397	2.4543881	20	7 11.3	20.1
329769 2004 HV_{7}	17.0	X	284.44866	73.73193	199.62301	13.24875	0.1571037	0.23959635	2.5673352	20	2 24.3	20.8
329770 2004 JA	17.9	X	101.28203	54.31457	56.91452	29.59771	0.6285388	0.62418134	1.3560078	20	6 16.5	20.2
329771 2004 JA_{11}	16.3	X	358.22210	204.62911	132.50559	8.12628	0.2653377	0.25702295	2.4499362	20	11 5.8	18.5
329772 2004 JQ_{34}	16.7	X	349.52109	150.77352	70.97564	18.04532	0.1615376	0.24227936	2.5483463	20	4 6.7	19.7
329773 2004 JM_{38}	17.8	X	96.13752	90.35148	71.84490	24.27650	0.0645820	0.37439223	1.9065645	20	6 23.9	19.8
329774 2004 LE	16.7	X	233.03989	185.21881	211.54742	40.38771	0.8368391	0.22898417	2.6460563	20	5 4.5	23.1
329775 2004 LA_{4}	17.7	X	345.01081	141.32403	99.27164	23.97381	0.0655630	0.36535353	1.9378813	20	4 30.7	20.1
329776 2004 LL_{18}	17.0	X	45.98741	298.26087	236.17549	19.56336	0.1409142	0.36600812	1.9355701	20	4 27.8	18.2
329777 2004 LV_{23}	17.0	X	341.49298	163.06866	107.32284	18.53485	0.1262434	0.24567856	2.5247858	20	5 31.1	19.9
329778 2004 MA_{4}	16.5	X	243.84357	15.44622	296.39657	7.57289	0.0926816	0.22966081	2.6408564	20	3 6.9	20.5
329779 2004 MT_{7}	15.9	X	293.46656	236.37537	45.08282	13.44773	0.1857974	0.23385926	2.6091537	20	3 23.1	19.6
329780 2004 NW_{7}	16.4	X	226.57006	221.11962	131.50352	12.69709	0.1935900	0.23079173	2.6322223	20	4 10.9	20.9
329781 2004 NH_{15}	16.7	X	314.86524	335.17812	291.48957	10.70587	0.2278462	0.23684162	2.5872042	20	3 12.7	20.0
329782 2004 NS_{23}	16.5	X	224.05648	223.96201	146.22181	16.95381	0.3267194	0.23078233	2.6322937	20	4 24.2	21.6
329783 2004 NY_{23}	15.6	X	183.37804	215.56020	145.27885	29.26009	0.1557510	0.22374422	2.6872093	20	3 12.9	20.2
329784 2004 NC_{30}	16.7	X	328.97608	96.19122	197.46270	5.67952	0.2250735	0.24552770	2.5258200	20	5 25.0	18.9
329785 2004 NV_{33}	16.3	X	299.27426	209.25414	82.75954	10.87228	0.1910902	0.23666113	2.5885194	20	4 11.8	19.8
329786 2004 PF_{17}	16.9	X	190.71029	183.13198	154.98029	10.15349	0.2054941	0.22058025	2.7128449	20	2 19.5	21.6
329787 2004 PS_{20}	17.5	X	322.77696	94.34173	227.52023	3.32232	0.2317903	0.24220544	2.5488647	20	6 23.5	19.6
329788 2004 PA_{26}	16.7	X	250.16725	200.75789	140.75454	6.52527	0.2303460	0.23271431	2.6177047	20	4 13.0	20.9
329789 2004 PV_{31}	16.2	X	281.50232	276.63969	339.58322	12.21651	0.1459983	0.22621505	2.6676062	20	2 8.5	20.1
329790 2004 PC_{41}	16.7	X	204.92177	255.65362	92.02619	13.97405	0.2104815	0.22688716	2.6623354	20	3 19.6	21.5
329791 2004 PK_{42}	17.1	X	278.38633	70.61950	242.53072	2.63624	0.1918413	0.23458540	2.6037667	20	4 6.6	20.8
329792 2004 PP_{59}	16.4	X	257.12861	165.44758	156.15252	12.16805	0.0837837	0.23170679	2.6252876	20	4 11.3	20.2
329793 2004 PZ_{62}	17.0	X	280.74049	100.69733	186.48540	11.75965	0.1680922	0.23306538	2.6150753	20	3 9.9	20.9
329794 2004 PL_{100}	16.7	X	278.32536	188.70840	136.08438	5.35932	0.3038890	0.23381360	2.6094934	20	4 10.7	20.8
329795 2004 PS_{102}	16.3	X	280.30027	105.00320	186.64334	11.66648	0.1870824	0.22956089	2.6416227	20	3 13.2	20.0
329796 2004 PM_{107}	16.8	X	344.58357	172.26875	186.07769	22.51427	0.0521899	0.37589554	1.9014778	20	11 14.8	18.8
329797 2004 PQ_{107}	17.3	X	306.34600	114.32762	186.68028	7.32429	0.2632325	0.23801459	2.5786971	20	4 17.5	20.4
329798 2004 QR_{2}	16.6	X	149.87482	219.29422	137.80294	9.82959	0.0982346	0.21789158	2.7351160	20	1 29.5	20.7
329799 2004 QY_{3}	16.9	X	290.32845	273.41784	23.92578	5.31473	0.2588189	0.23531714	2.5983661	20	3 24.0	20.4
329800 2004 QL_{6}	16.7	X	296.08992	176.82893	177.00401	4.97908	0.1176738	0.24251834	2.5466719	20	7 8.9	19.8
329801 2004 QS_{6}	16.3	X	131.77228	145.67118	230.23944	8.30980	0.1934952	0.21571621	2.7534733	20	2 9.8	20.7
329802 2004 QX_{20}	14.8	X	227.12284	66.81020	253.15831	30.65955	0.3321793	0.22036075	2.7146461	20	2 8.9	20.5
329803 2004 QF_{21}	17.9	X	253.81630	3.31575	324.88714	3.49253	0.1979858	0.29388065	2.2405539	20	3 26.2	21.2
329804 2004 RZ_{6}	16.7	X	221.83116	268.13826	75.93813	5.82657	0.2280031	0.22665256	2.6641722	20	3 24.3	21.3
329805 2004 RH_{15}	16.5	X	266.21982	148.99693	178.03257	11.85743	0.2055936	0.23205482	2.6226620	20	4 12.2	20.4
329806 2004 RG_{50}	17.0	X	283.53115	145.09387	164.54426	13.63027	0.2669290	0.23350979	2.6117563	20	4 1.5	20.8
329807 2004 RN_{55}	16.4	X	206.66074	89.92703	235.70625	4.03636	0.1108917	0.22128494	2.7070824	20	2 16.5	20.7
329808 2004 RD_{73}	17.4	X	343.05696	160.66180	153.87799	4.06543	0.2606400	0.24356300	2.5393847	20	8 4.7	18.9
329809 2004 RP_{75}	17.0	X	248.33751	205.28837	136.29482	3.02821	0.2194404	0.22954666	2.6417319	20	4 11.3	21.1
329810 2004 RY_{87}	16.1	X	259.33106	194.52032	112.10172	13.18752	0.1913693	0.22828166	2.6514821	20	3 16.2	20.4
329811 2004 RT_{89}	17.3	X	247.73847	92.44248	233.08472	3.67226	0.2599351	0.23011890	2.6373505	20	3 16.4	21.8
329812 2004 RS_{91}	16.7	X	285.89373	59.87058	244.61113	6.63120	0.1962200	0.23385522	2.6091838	20	4 2.1	20.3
329813 2004 RF_{93}	16.4	X	225.25333	167.46073	183.07679	14.21190	0.1251222	0.22884255	2.6471478	20	4 7.2	20.5
329814 2004 RF_{95}	16.5	X	221.44970	149.88633	171.67554	13.28526	0.1840488	0.22533622	2.6745376	20	2 23.7	20.9
329815 2004 RM_{124}	17.4	X	137.14735	167.51363	192.78141	3.35886	0.1067478	0.21387788	2.7692286	20	1 20.6	21.5
329816 2004 RA_{137}	16.5	X	80.22545	215.18534	184.03067	8.56587	0.0730773	0.20851534	2.8165062	20	—	—
329817 2004 RJ_{137}	16.1	X	182.22910	155.68415	191.15271	14.84148	0.2086394	0.22219275	2.6997039	20	2 20.2	20.9
329818 2004 RX_{147}	16.3	X	159.15377	321.30738	41.84912	5.17755	0.1345028	0.21744225	2.7388827	20	2 21.3	20.5
329819 2004 RF_{152}	15.9	X	100.19173	157.15490	211.19697	14.15826	0.1587998	0.20958030	2.8069569	20	—	—
329820 2004 RN_{152}	16.7	X	138.10957	115.04077	239.24066	8.22364	0.1788638	0.21370828	2.7706935	20	1 21.0	21.1
329821 2004 RW_{160}	16.7	X	215.70870	108.89313	191.28663	3.42397	0.0759745	0.21780960	2.7358023	20	1 27.6	20.8
329822 2004 RH_{176}	16.4	X	250.67273	83.07510	211.64825	10.46416	0.1558288	0.22495466	2.6775611	20	2 17.0	20.8
329823 2004 RH_{189}	16.5	X	241.75694	106.83782	236.40863	5.24861	0.2552553	0.22865483	2.6485965	20	4 1.9	20.9
329824 2004 RB_{195}	16.2	X	166.09162	115.84342	218.46394	19.17248	0.2871363	0.21317067	2.7753500	20	1 26.1	21.5
329825 2004 RH_{210}	16.0	X	193.77596	115.88718	243.31101	11.07133	0.1136999	0.22328774	2.6908705	20	3 12.3	20.4
329826 2004 RQ_{224}	16.1	X	196.41618	343.14819	1.34368	5.08083	0.0977571	0.21905661	2.7254098	20	3 3.1	20.1
329827 2004 RX_{242}	16.4	X	158.71223	184.11691	157.47116	5.44931	0.0155912	0.21400425	2.7681383	20	1 12.3	20.2
329828 2004 RV_{261}	16.3	X	203.17734	93.80068	351.30036	14.26601	0.1568653	0.17274299	3.1930258	20	7 12.8	21.6
329829 2004 RE_{292}	16.4	X	251.93679	119.53560	209.07214	10.51207	0.2827638	0.22809667	2.6529155	20	3 21.4	21.1
329830 2004 RX_{321}	16.5	X	169.90064	136.85356	214.09558	7.22238	0.2400354	0.21645972	2.7471644	20	2 17.4	21.4
329831 2004 RT_{324}	16.1	X	216.16995	112.37207	227.94532	11.51080	0.1596143	0.22230620	2.6987853	20	3 10.5	20.8
329832 2004 RO_{326}	16.5	X	244.80872	101.99649	204.69228	8.12860	0.1375698	0.22354050	2.6888417	20	2 28.5	20.8
329833 2004 RE_{341}	15.9	X	190.50806	106.24607	240.91070	13.46826	0.0585015	0.22240614	2.6979768	20	2 21.1	20.1
329834 2004 RY_{346}	16.2	X	140.00648	133.81770	234.19853	11.74684	0.1376844	0.21216864	2.7840813	20	2 2.1	20.6
329835 2004 SY_{10}	16.0	X	255.84809	173.56040	138.80390	15.57794	0.2797114	0.22937756	2.6430300	20	3 10.0	20.6
329836 2004 SJ_{18}	15.9	X	119.89503	291.74239	67.31174	10.01227	0.1749042	0.20882969	2.8136791	20	1 10.7	20.0
329837 2004 SH_{42}	16.5	X	161.56176	121.57468	252.32240	3.67263	0.1230517	0.21940205	2.7225483	20	3 2.4	20.6
329838 2004 SM_{58}	17.2	X	290.39737	76.64237	230.27109	4.14636	0.3697680	0.23322151	2.6139081	20	3 19.5	21.3
329839 2004 TC_{35}	16.8	X	271.52191	148.24200	250.47612	1.59953	0.1945189	0.17417102	3.1755488	20	7 18.6	21.4
329840 2004 TN_{41}	16.1	X	276.87785	237.45287	234.35647	7.62100	0.2312563	0.18531674	3.0469099	20	10 22.3	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329841 2004 TW_{46}	16.3	X	162.58079	136.55379	210.54532	12.43803	0.1261493	0.21167486	2.7884094	20	1 30.4	20.9
329842 2004 TY_{50}	15.8	X	209.58342	110.19093	225.40817	7.88620	0.1694526	0.21800923	2.7341319	20	2 29.3	20.5
329843 2004 TQ_{64}	16.5	X	124.60420	174.39814	189.24799	7.76486	0.1578796	0.20857203	2.8159958	20	1 17.1	20.7
329844 2004 TM_{75}	16.9	X	52.50153	228.43094	168.36013	0.68932	0.0479776	0.19839841	2.9114584	20	—	—
329845 2004 TU_{91}	17.1	X	162.95737	111.03481	229.96296	3.53417	0.0769676	0.21092483	2.7950156	20	1 22.5	21.2
329846 2004 TY_{96}	17.0	X	327.80420	256.41036	194.97128	3.73461	0.1380988	0.19308669	2.9646117	20	—	—
329847 2004 TW_{109}	16.3	X	150.84782	309.73757	46.86477	9.93043	0.2581235	0.21158074	2.7892362	20	2 17.6	21.1
329848 2004 TV_{125}	16.0	X	179.22108	320.69128	38.45310	12.38506	0.1639112	0.21907087	2.7252915	20	3 10.9	20.6
329849 2004 TP_{134}	18.3	X	335.74840	108.20857	273.37766	1.75355	0.1687071	0.31198450	2.1530166	20	11 28.3	19.6
329850 2004 TS_{165}	16.6	X	67.13198	205.89728	197.58796	10.10852	0.1316576	0.20547463	2.8442247	20	—	—
329851 2004 TK_{192}	17.2	X	82.60400	222.71553	158.48246	2.42080	0.0917558	0.20412463	2.8567514	20	—	—
329852 2004 TV_{247}	16.0	X	230.02793	264.39089	88.30071	13.56285	0.2921614	0.22605538	2.6688622	20	4 10.8	21.0
329853 2004 TO_{262}	15.5	X	224.66603	266.35166	43.76663	12.03667	0.1926617	0.21753865	2.7380734	20	2 20.1	20.3
329854 2004 TQ_{290}	16.4	X	266.15413	71.84007	209.36151	12.12447	0.2106491	0.22221956	2.6994867	20	2 10.6	21.0
329855 2004 TD_{308}	15.8	X	182.91672	99.23379	239.91180	11.67416	0.1281836	0.21454906	2.7634501	20	2 8.1	20.4
329856 2004 TX_{356}	15.8	X	221.88628	275.31838	75.06031	13.66523	0.2097585	0.22495955	2.6775223	20	4 5.7	20.5
329857 2004 TY_{368}	16.1	X	290.70552	280.29193	211.70116	8.47867	0.1340375	0.18951129	3.0017832	20	12 24.3	19.8
329858 2004 VS_{23}	15.7	X	217.33432	108.05905	242.69909	11.87117	0.1164259	0.21868835	2.7284686	20	3 26.0	20.1
329859 2004 VK_{25}	16.0	X	61.91168	143.56998	271.05341	5.04188	0.0843949	0.20253873	2.8716444	20	—	—
329860 2004 VH_{29}	15.5	X	155.17248	165.59170	55.17930	20.08955	0.0346037	0.18443102	3.0566572	20	11 9.3	19.9
329861 2004 VK_{82}	15.5	X	10.52106	43.02710	27.56383	10.08242	0.0283333	0.19555538	2.9396088	20	—	—
329862 2004 XW_{9}	16.1	X	0.67261	349.95652	53.88206	4.53989	0.1624059	0.18760767	3.0220547	20	12 30.4	19.7
329863 2004 XQ_{29}	15.8	X	305.51045	40.55495	61.00678	5.33875	0.0832533	0.18621634	3.0370891	20	12 11.7	19.6
329864 2004 XX_{59}	15.4	X	346.43402	315.93291	80.28589	10.56928	0.2836294	0.18247528	3.0784589	20	12 6.4	18.2
329865 2004 XT_{61}	15.7	X	287.15729	12.71354	74.47788	11.88041	0.1418931	0.18094736	3.0957643	20	10 24.7	19.7
329866 2004 XM_{103}	15.9	X	278.47850	23.26048	76.99682	19.29005	0.2918343	0.17936215	3.1139779	20	10 11.6	20.3
329867 2004 XK_{132}	15.7	X	11.85167	310.58729	98.85797	11.46139	0.0726264	0.18848736	3.0126446	20	—	—
329868 2004 XE_{143}	15.6	X	254.81494	14.06667	273.45262	12.42436	0.1317525	0.21091498	2.7951027	20	2 14.3	20.1
329869 2004 XF_{160}	16.2	X	266.08542	22.10425	74.74288	11.47024	0.1930439	0.17525790	3.1624062	20	9 30.3	20.7
329870 2004 YE_{22}	18.3	X	101.38378	358.34236	305.44253	3.07191	0.0818808	0.30654717	2.1784011	20	—	—
329871 2005 AX_{3}	15.5	X	10.11824	331.01211	97.72030	11.54676	0.0831198	0.18825779	3.0150932	20	—	—
329872 2005 AA_{15}	15.5	X	272.81352	335.72464	114.74245	15.71589	0.0958778	0.17232233	3.1982200	20	10 16.0	20.1
329873 2005 AL_{18}	15.1	X	312.40297	319.11826	128.96284	28.66565	0.1648511	0.17858808	3.1229694	20	12 7.1	19.2
329874 2005 AR_{26}	15.8	X	267.18628	349.22377	116.39108	10.48047	0.2104251	0.17429579	3.1740331	20	10 8.6	20.3
329875 2005 AK_{82}	15.4	X	13.41453	247.86653	124.87804	22.31387	0.0435589	0.17667974	3.1454169	20	11 29.4	20.1
329876 2005 BT_{2}	15.9	X	111.20478	202.28854	118.56262	11.11314	0.0990535	0.18500731	3.0503063	20	—	—
329877 2005 BO_{23}	15.7	X	298.25261	328.05727	118.48311	10.69791	0.0637599	0.17405061	3.1770132	20	11 15.0	20.1
329878 2005 BB_{28}	17.5	X	127.97748	176.22653	156.21455	2.40718	0.0641472	0.31696881	2.1303863	20	—	—
329879 2005 CS_{15}	15.1	X	136.63757	114.88336	134.69244	25.69723	0.0687238	0.17281780	3.1921043	20	11 27.3	20.4
329880 2005 CZ_{28}	18.0	X	170.47246	109.08705	112.54250	4.51375	0.1177233	0.29980233	2.2109523	20	12 13.9	21.0
329881 2005 EN_{17}	17.7	X	115.88152	261.31464	352.24630	4.11830	0.1706529	0.29094783	2.2555855	20	11 26.3	21.3
329882 2005 ER_{20}	17.7	X	233.20638	16.24404	141.47525	4.67444	0.0937497	0.29999636	2.2099989	20	12 11.1	20.1
329883 2005 EX_{107}	15.9	X	315.65020	257.65993	141.49055	6.57296	0.1191808	0.16856583	3.2455604	20	10 5.0	19.9
329884 2005 EO_{147}	17.4	X	122.11287	201.35330	70.15177	1.98305	0.1241887	0.29517255	2.2340115	20	12 26.2	20.7
329885 2005 EL_{149}	17.6	X	91.05659	229.68487	48.08117	4.74884	0.1472108	0.28882773	2.2666100	20	12 2.5	20.9
329886 2005 EK_{167}	17.6	X	64.89040	265.43359	350.13858	6.94637	0.1681937	0.28167906	2.3047987	20	10 6.2	20.7
329887 2005 EL_{184}	17.1	X	170.26703	172.47432	19.01793	4.08116	0.1080362	0.29038085	2.2585207	20	11 2.1	20.2
329888 2005 EU_{230}	17.7	X	178.91506	40.98068	152.54620	6.47003	0.0962457	0.29579228	2.2308900	20	11 19.2	20.7
329889 2005 ES_{245}	18.1	X	84.73711	110.19697	175.37517	4.21393	0.0638214	0.29288339	2.2456370	20	12 1.5	21.0
329890 2005 ER_{274}	17.1	X	50.77172	114.01774	110.24160	2.84297	0.0413918	0.27582576	2.3372913	20	7 13.6	19.7
329891 2005 GH_{5}	17.7	X	79.61438	104.20869	139.68676	4.02035	0.0619205	0.28070238	2.3101419	20	9 27.4	20.7
329892 2005 GB_{30}	17.0	X	190.87397	359.92742	126.88279	6.21521	0.1012013	0.28385406	2.2930102	20	9 1.2	20.1
329893 2005 GU_{36}	17.6	X	77.33524	253.16241	30.41580	4.22839	0.1103414	0.28639287	2.2794387	20	11 21.8	20.7
329894 2005 GD_{38}	17.2	X	124.74014	345.25885	221.91122	5.67580	0.1140961	0.28423397	2.2909664	20	10 3.3	20.5
329895 2005 GF_{44}	17.6	X	155.18153	202.30122	336.81402	3.75087	0.2212151	0.28637878	2.2795135	20	9 27.4	21.5
329896 2005 GA_{115}	17.2	X	99.01926	230.22256	27.41578	7.41258	0.0917805	0.28595095	2.2817866	20	11 9.9	20.3
329897 2005 GY_{132}	17.6	X	71.23674	256.28280	48.44946	6.88604	0.1396244	0.28861945	2.2677003	20	12 16.0	20.9
329898 2005 GE_{137}	17.7	X	243.91614	332.70985	165.81965	2.64718	0.0375477	0.29375915	2.2411716	20	12 6.6	20.3
329899 2005 GV_{162}	17.6	X	163.55945	89.31958	97.46672	7.07912	0.1612826	0.28713986	2.2754837	20	10 20.8	21.1
329900 2005 HT_{9}	17.3	X	223.65025	347.70353	137.22559	6.88268	0.0449642	0.28361055	2.2943225	20	10 19.0	20.1
329901 2005 JQ_{1}	16.8	X	78.87198	246.20890	49.84672	8.37899	0.1314945	0.28633738	2.2797332	20	12 11.5	20.1
329902 2005 JS_{47}	17.8	X	153.94303	102.35069	63.32090	3.56819	0.1320056	0.28110554	2.3079326	20	9 12.3	21.2
329903 2005 JC_{85}	17.4	X	95.53623	149.91851	125.49273	3.00343	0.1769363	0.28502088	2.2867478	20	12 5.7	21.0
329904 2005 JW_{89}	18.4	X	83.30382	238.43309	68.18160	3.47337	0.2250961	0.28737163	2.2742600	20	—	—
329905 2005 JC_{100}	17.7	X	90.23186	92.05309	147.57321	6.38232	0.0970266	0.27879398	2.3206721	20	10 9.7	20.8
329906 2005 JM_{107}	17.7	X	89.61350	178.19873	99.97920	2.85290	0.2169028	0.28382987	2.2931404	20	12 5.6	21.4
329907 2005 JZ_{111}	17.9	X	87.16868	26.45986	235.44030	1.41230	0.1769249	0.28164302	2.3049954	20	11 9.9	21.2
329908 2005 JE_{116}	17.4	X	269.60324	2.52437	88.55518	6.60898	0.0393804	0.28664615	2.2780957	20	11 7.2	19.9
329909 2005 JV_{117}	17.1	X	252.39698	288.49504	104.70559	8.07322	0.1603464	0.26916608	2.3756867	20	6 27.2	20.3
329910 2005 JY_{175}	17.2	X	182.91693	321.36401	189.39080	23.29834	0.2194224	0.28497919	2.2869708	20	9 13.9	21.1
329911 2005 JA_{182}	17.7	X	104.30680	242.73096	54.97773	4.48771	0.2473628	0.29213111	2.2494906	20	—	—
329912 2005 LC_{8}	16.9	X	31.83435	271.43285	47.34860	5.92786	0.2490051	0.27374191	2.3491379	20	11 30.8	19.9
329913 2005 LD_{17}	17.6	X	51.87368	247.29898	68.67583	3.36458	0.2449408	0.28076203	2.3098147	20	12 20.0	20.9
329914 2005 LN_{18}	17.9	X	78.55231	62.28232	223.64573	6.64762	0.1262880	0.28256640	2.2999711	20	11 28.1	21.0
329915 2005 MB	17.1	X	196.40710	42.82649	88.63697	41.38382	0.7929287	1.00755411	0.9854255	20	—	—
329916 2005 MX_{7}	16.9	X	340.66118	111.53902	220.75970	6.26733	0.1291965	0.26504967	2.4002209	20	8 29.5	19.1
329917 2005 MG_{37}	17.4	X	43.77529	127.05338	127.02922	7.26804	0.1410936	0.26585542	2.3953687	20	9 2.6	20.1
329918 2005 MN_{41}	17.5	X	32.86341	186.97329	110.21550	5.15872	0.1368296	0.26980021	2.3719628	20	10 18.8	20.3
329919 2005 MM_{51}	14.1	X	309.38101	57.66932	262.63582	8.47292	0.2712925	0.12529807	3.9552427	20	5 18.9	19.2
329920 2005 NP	17.1	X	59.16458	163.16619	118.59068	7.11886	0.2083768	0.27352743	2.3503658	20	11 11.5	20.5

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
329921 2005 NA_{13}	14.8	X	294.28389	238.29296	112.43940	3.98338	0.2462728	0.12494296	3.9627335	20	6 8.9	20.2
329922 2005 NS_{13}	17.2	X	267.95121	218.44169	154.77396	7.94741	0.1917154	0.25401130	2.4692630	20	6 14.7	20.6
329923 2005 NK_{20}	16.4	X	73.48414	73.22649	275.69512	21.25123	0.3108671	0.28164350	2.3049928	20	—	—
329924 2005 NP_{21}	15.3	X	289.87181	168.44102	181.83541	5.24193	0.2803881	0.12366339	3.9900219	20	5 29.4	20.9
329925 2005 NO_{33}	18.3	X	40.49682	327.72003	311.49528	1.65450	0.1920909	0.26972447	2.3724067	20	10 9.9	21.0
329926 2005 NS_{43}	17.2	X	225.44625	182.63410	117.13152	1.93308	0.1576758	0.24062536	2.5600107	20	2 2.0	21.1
329927 2005 NN_{78}	15.2	X	315.71187	184.76288	124.51522	3.73878	0.2429012	0.12444764	3.9732413	20	5 21.0	20.0
329928 2005 NF_{81}	17.2	X	180.09194	14.19517	308.54970	3.47163	0.1485634	0.23461087	2.6035782	20	1 20.5	21.4
329929 2005 NO_{102}	17.4	X	326.97914	175.39304	164.33223	6.29380	0.1211689	0.26331765	2.4107346	20	8 15.1	19.7
329930 2005 NS_{123}	17.5	X	39.81430	327.89284	314.20536	1.76729	0.2154676	0.26906209	2.3762987	20	10 16.5	20.5
329931 2005 OP_{5}	17.9	X	14.46262	151.20837	150.46744	2.52397	0.2098438	0.26645761	2.3917583	20	10 4.9	20.1
329932 2005 OQ_{5}	17.9	X	18.11962	160.07461	133.20310	2.83616	0.2018489	0.26600010	2.3945000	20	9 27.8	20.2
329933 2005 OP_{8}	18.0	X	7.44312	110.21980	222.02812	2.13641	0.2645904	0.26948237	2.3738274	20	11 16.6	20.3
329934 2005 OY_{14}	17.1	X	330.87273	293.03012	32.58889	7.10055	0.1475276	0.26232242	2.4168282	20	8 3.2	19.3
329935 Prévôt	17.3	X	290.43948	120.87807	216.35025	5.72010	0.2318456	0.25684870	2.4510441	20	5 19.0	20.4
329936 2005 OC_{20}	18.2	X	5.43524	171.01799	137.40024	3.29667	0.1998507	0.26546478	2.3977180	20	9 25.8	20.2
329937 2005 PC_{4}	17.4	X	54.32757	158.55877	144.91971	6.34746	0.2811094	0.27495609	2.3422171	20	12 10.3	21.0
329938 2005 PF_{9}	15.3	X	310.67326	194.00216	136.30218	3.50998	0.2941031	0.12438676	3.9745377	20	5 31.0	20.1
329939 2005 PF_{19}	15.5	X	321.35703	115.99608	204.25402	0.91471	0.2235319	0.12596125	3.9413475	20	6 15.2	20.2
329940 2005 QG_{10}	17.5	X	39.98230	40.74503	346.85969	2.49801	0.1890054	0.21434100	2.7652382	20	—	—
329941 2005 QT_{11}	17.4	X	81.07871	183.05788	124.79842	6.39750	0.1780520	0.27980848	2.3150594	20	12 31.2	20.9
329942 2005 QG_{14}	16.7	X	318.45615	182.51118	147.97518	16.81422	0.1379721	0.25995068	2.4315064	20	7 12.5	19.3
329943 2005 QP_{15}	17.6	X	22.17643	81.90216	179.75882	4.68591	0.1597734	0.25971607	2.4329705	20	8 6.4	20.0
329944 2005 QD_{30}	17.8	X	22.14939	73.36587	229.20314	1.44123	0.2181872	0.26621541	2.3932088	20	10 19.7	20.2
329945 2005 QB_{31}	17.2	X	321.17828	286.65675	68.65302	5.75156	0.2257739	0.26303932	2.4124349	20	8 23.9	18.9
329946 2005 QW_{36}	17.5	X	14.32031	9.16862	313.71775	1.83817	0.2326503	0.26694485	2.3888471	20	11 7.3	19.8
329947 2005 QA_{39}	17.5	X	21.04688	37.75570	317.66724	0.53932	0.2014962	0.27213800	2.3583590	20	12 28.9	20.2
329948 2005 QK_{39}	17.1	X	266.30928	274.66372	94.89100	1.57846	0.2305521	0.25431150	2.4673194	20	6 1.6	20.4
329949 2005 QM_{46}	17.8	X	13.17914	176.26419	108.67397	3.75737	0.1745826	0.26149692	2.4219119	20	8 30.9	19.9
329950 2005 QB_{54}	17.6	X	6.38018	166.97312	155.44807	5.23700	0.2065963	0.26672169	2.3901794	20	10 21.8	19.8
329951 2005 QW_{57}	17.2	X	312.35612	296.94186	18.19657	10.78419	0.2598613	0.25707303	2.4496181	20	5 13.2	19.8
329952 2005 QD_{62}	18.0	X	337.19547	242.96329	51.35841	1.09292	0.2010797	0.25717454	2.4489734	20	6 17.7	19.9
329953 2005 QJ_{65}	17.8	X	35.28866	218.33374	63.14477	2.88641	0.2409961	0.26537378	2.3982661	20	10 14.9	20.6
329954 2005 QD_{70}	17.8	X	1.90388	202.18309	117.80444	3.13409	0.2228489	0.26633700	2.3924804	20	10 11.2	19.7
329955 2005 QK_{72}	16.9	X	322.58604	87.62749	211.79646	5.09988	0.1337801	0.25266507	2.4780263	20	6 2.9	19.4
329956 2005 QW_{101}	17.4	X	181.61512	99.61084	218.45871	2.37371	0.1174967	0.23039927	2.6352105	20	1 14.6	21.4
329957 2005 QZ_{108}	17.0	X	159.86271	232.81982	178.48243	14.44426	0.1023158	0.24037617	2.5617796	20	4 17.8	20.9
329958 2005 QX_{123}	15.9	X	226.74612	232.33579	346.41718	13.79413	0.1142614	0.22105252	2.7089796	20	—	—
329959 2005 QG_{143}	17.7	X	313.07558	151.70686	173.95427	2.47001	0.1986648	0.25747319	2.4470793	20	6 15.0	20.0
329960 2005 QN_{143}	17.7	X	244.43300	228.19172	129.00598	1.05141	0.0873448	0.24778378	2.5104648	20	5 8.8	21.2
329961 2005 QS_{151}	17.3	X	353.39423	102.94639	216.88666	5.64211	0.1144639	0.26494999	2.4008228	20	9 4.3	19.8
329962 2005 QE_{158}	17.6	X	327.44265	234.87595	94.99337	4.11190	0.1960914	0.25854636	2.4403031	20	7 25.9	19.4
329963 2005 QH_{158}	17.3	X	309.45224	210.42467	129.73233	5.60183	0.1521328	0.25615836	2.4554459	20	7 7.9	19.9
329964 2005 QZ_{165}	16.7	X	130.96775	32.04435	37.36745	11.26619	0.1507018	0.23376922	2.6098236	20	4 14.1	20.5
329965 2005 RG_{16}	17.2	X	81.31826	111.75179	344.75607	3.16510	0.0938034	0.23485895	2.6017445	20	3 8.5	20.4
329966 2005 RL_{45}	16.4	X	251.81310	348.12055	344.27123	13.58777	0.1754296	0.24147339	2.5540135	20	3 31.6	20.6
329967 2005 SA_{24}	16.2	X	136.54730	176.11161	160.33815	9.72847	0.2770275	0.22329246	2.6908326	20	1 8.7	20.6
329968 2005 SG_{29}	17.1	X	25.11149	46.46775	227.71205	4.94325	0.1736620	0.25859029	2.4400267	20	9 1.1	19.7
329969 2005 SJ_{36}	17.7	X	317.16484	329.94584	3.93256	0.90088	0.1900128	0.25642595	2.4537373	20	7 8.4	19.9
329970 2005 SG_{52}	16.4	X	49.04785	75.86567	33.61140	7.71449	0.0976535	0.22415544	2.6839218	20	2 11.4	19.6
329971 2005 SS_{69}	16.7	X	305.66653	274.64597	76.80839	14.15939	0.2799062	0.25641324	2.4538184	20	6 24.9	19.0
329972 2005 SF_{77}	16.9	X	75.68395	96.71585	179.45915	7.61786	0.2260425	0.27058352	2.3673828	20	11 20.9	20.6
329973 2005 SN_{78}	17.5	X	178.91930	297.67988	94.70661	1.73663	0.0891715	0.23895476	2.5719287	20	4 12.0	21.2
329974 2005 SP_{78}	16.9	X	43.36856	13.21353	180.41757	10.90697	0.0268714	0.24433133	2.5340584	20	5 18.3	20.2
329975 2005 SW_{99}	16.4	X	353.08514	15.30243	219.38353	12.49679	0.0681684	0.24129986	2.5552379	20	4 27.5	19.3
329976 2005 SB_{102}	16.6	X	128.08700	1.03404	307.47189	4.26680	0.0339973	0.21297878	2.7770167	20	—	—
329977 2005 SS_{120}	17.1	X	171.20987	279.23066	3.14415	3.61734	0.0537244	0.21861141	2.7291087	20	—	—
329978 2005 SC_{135}	17.4	X	23.41427	44.20241	14.09390	3.27614	0.0818410	0.21420996	2.7663658	20	—	—
329979 2005 SK_{149}	17.0	X	261.83569	290.92038	134.86467	3.02126	0.1033714	0.18971566	2.9996270	20	8 25.5	21.1
329980 2005 SW_{156}	16.9	X	104.18128	233.54711	184.82920	4.90418	0.1962355	0.22636057	2.6664628	20	3 4.9	20.5
329981 2005 SV_{167}	17.6	X	282.37616	103.48729	184.73294	23.38618	0.0286689	0.37673684	1.8986460	20	3 20.6	19.4
329982 2005 SP_{173}	17.1	X	74.40853	27.67077	340.74948	4.92876	0.1223747	0.21537692	2.7563643	20	—	—
329983 2005 SY_{197}	17.2	X	125.42269	163.16267	228.96058	0.68341	0.1287472	0.23073539	2.6326507	20	2 16.6	20.9
329984 2005 SN_{226}	17.6	X	22.38796	318.47553	307.18722	0.75268	0.1647855	0.25653116	2.4530664	20	8 14.7	20.0
329985 2005 SY_{229}	17.3	X	59.77048	120.80739	335.05666	1.31827	0.0539925	0.22756291	2.6570623	20	2 1.9	20.4
329986 2005 SU_{235}	17.1	X	226.86624	352.03797	349.62164	3.45560	0.1589855	0.23832114	2.5764853	20	3 24.6	21.1
329987 2005 SD_{237}	16.2	X	144.91475	189.45031	214.25574	14.08844	0.0915853	0.23153944	2.6265523	20	3 16.6	20.2
329988 2005 ST_{272}	17.7	X	253.31527	149.06917	198.24442	1.23768	0.1041038	0.24636774	2.5200751	20	5 4.1	21.1
329989 2005 SC_{279}	16.2	X	320.76337	152.06154	30.53411	12.77190	0.0445700	0.22485650	2.6783402	20	1 8.6	20.0
329990 2005 ST_{283}	17.1	X	163.08113	283.81330	144.17435	12.12492	0.0431203	0.23872875	2.5735517	20	5 11.9	20.9
329991 2005 TA_{19}	16.9	X	63.44079	316.25196	196.36910	8.72748	0.0441725	0.24014103	2.5634517	20	4 21.3	20.0
329992 2005 TM_{52}	16.4	X	123.54123	287.21252	105.49617	7.35204	0.0921460	0.22427511	2.6829670	20	2 13.1	20.1
329993 2005 TM_{54}	16.5	X	40.76005	238.57670	88.18867	5.23129	0.2725453	0.27040454	2.3684273	20	12 23.7	19.9
329994 2005 TV_{57}	17.4	X	103.29835	8.58880	53.92664	2.22307	0.0647411	0.22735169	2.6587077	20	2 20.7	21.0
329995 2005 TH_{60}	16.7	X	26.70370	264.24355	204.66214	15.00798	0.1941335	0.22106655	2.7088650	20	—	—
329996 2005 TO_{63}	16.8	X	142.78673	328.02655	354.71602	5.46871	0.0895121	0.22051204	2.7134043	20	—	—
329997 2005 TA_{74}	16.9	X	222.94124	253.69314	104.19834	5.26993	0.1945424	0.23977550	2.5660563	20	4 11.3	21.1
329998 2005 TM_{87}	17.7	X	299.14886	132.85873	169.11168	3.71443	0.1255756	0.24669769	2.5178276	20	4 30.6	20.9
329999 2005 TO_{93}	16.9	X	190.25946	149.16548	214.88977	8.27222	0.1069620	0.23464656	2.6033142	20	3 16.6	21.0
330000 2005 TO_{95}	16.6	X	30.35397	173.68856	286.76813	4.02382	0.1260175	0.22014091	2.7164531	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330001 2005 TA_{117}	16.4	X	53.81766	266.46090	197.52914	21.59371	0.0426457	0.22806051	2.6531959	20	1 28.8	20.3
330002 2005 TV_{119}	17.1	X	124.36478	30.06302	12.70362	6.17898	0.0984627	0.22886951	2.6469400	20	2 27.4	20.8
330003 2005 TC_{131}	16.5	X	33.00898	72.86465	45.56749	8.02388	0.0900369	0.22282221	2.6946172	20	1 27.5	19.7
330004 2005 TG_{136}	16.9	X	47.82185	207.21273	171.10543	4.96247	0.1264576	0.21132990	2.7914429	20	—	—
330005 2005 TD_{147}	17.3	X	243.09215	268.82016	74.87137	4.51662	0.0188695	0.24059699	2.5602119	20	4 28.3	20.7
330006 2005 TS_{165}	16.2	X	349.02185	232.35604	13.81393	5.63879	0.2074744	0.24282673	2.5445152	20	4 25.2	18.3
330007 2005 TY_{170}	16.2	X	152.78331	192.13987	227.65648	12.39707	0.2565819	0.23325861	2.6136310	20	4 27.6	20.7
330008 2005 TS_{190}	17.8	X	249.08995	355.98828	71.37152	1.23169	0.2292761	0.18286811	3.0740486	20	7 25.9	22.5
330009 2005 UA_{19}	17.0	X	117.28686	346.61963	78.32262	3.55687	0.0904203	0.22773562	2.6557187	20	3 17.1	20.6
330010 2005 US_{34}	17.3	X	260.40730	111.65006	215.77550	2.17146	0.1386221	0.23948176	2.5681542	20	4 11.8	20.8
330011 2005 UF_{42}	17.0	X	207.76367	16.35928	8.06169	4.52507	0.1578063	0.24012657	2.5635546	20	4 28.4	21.2
330012 2005 UX_{46}	17.4	X	307.74801	171.10723	128.05676	2.30895	0.2059174	0.24472880	2.5313139	20	4 26.4	20.3
330013 2005 UM_{55}	16.4	X	154.07347	356.99877	35.85010	12.64558	0.1601475	0.22999601	2.6382899	20	3 26.4	20.6
330014 2005 UD_{64}	16.9	X	206.85565	214.29626	168.63114	6.19764	0.1445699	0.23787303	2.5797201	20	4 29.1	21.0
330015 2005 UN_{73}	16.7	X	200.62801	334.54393	46.20326	17.85064	0.2255687	0.23768931	2.5810492	20	4 20.7	21.2
330016 2005 UE_{79}	16.4	X	162.87982	164.26768	212.27934	12.70463	0.1806178	0.22891056	2.6466235	20	3 8.0	20.9
330017 2005 UQ_{83}	16.8	X	26.59036	274.80342	203.15264	1.32311	0.0469154	0.22203062	2.7010180	20	1 14.4	20.1
330018 2005 UU_{92}	16.7	X	327.86926	123.74362	18.34174	7.56461	0.0878944	0.21320478	2.7750539	20	—	—
330019 2005 UC_{98}	17.3	X	249.17861	120.43944	209.35857	11.94087	0.1203164	0.23779880	2.5802569	20	4 3.5	21.1
330020 2005 UP_{100}	17.4	X	186.39760	229.18373	153.68415	4.01015	0.0256642	0.23409185	2.6074251	20	4 7.8	21.0
330021 2005 UC_{106}	16.9	X	81.18407	247.01161	174.78080	3.45554	0.1784452	0.21979284	2.7193203	20	2 5.6	20.1
330022 2005 UM_{108}	17.2	X	271.56230	119.93083	216.55476	13.70962	0.1403449	0.24321291	2.5418210	20	5 7.5	20.6
330023 2005 UW_{116}	16.2	X	242.33830	119.41041	230.47015	13.64630	0.1545354	0.24008925	2.5638202	20	4 18.1	20.2
330024 2005 UV_{122}	16.0	X	346.88374	121.76294	37.89729	13.63418	0.1496309	0.21944757	2.7221718	20	—	—
330025 2005 UT_{125}	16.6	X	316.33603	226.14191	40.86517	5.54349	0.2042290	0.23859458	2.5745165	20	3 27.5	19.6
330026 2005 UV_{129}	16.5	X	318.64519	52.78053	236.62927	4.04682	0.1225709	0.24327063	2.5414190	20	5 13.0	19.2
330027 2005 UF_{142}	16.7	X	255.83802	245.34089	111.35322	7.32822	0.2463071	0.24552012	2.5258719	20	5 5.6	20.7
330028 2005 UW_{157}	16.5	X	191.79900	118.89113	216.96133	11.67856	0.0700846	0.22652483	2.6651736	20	2 10.4	20.8
330029 2005 UH_{172}	16.9	X	146.86930	154.21191	222.26933	5.32026	0.0618620	0.22536671	2.6742964	20	2 12.4	20.7
330030 2005 UQ_{180}	16.7	X	214.39866	154.01716	214.60146	8.22642	0.0594453	0.23550115	2.5970124	20	4 20.6	20.5
330031 2005 UE_{191}	16.1	X	85.18393	45.14552	43.13365	15.21643	0.0716406	0.22566787	2.6719166	20	3 9.7	19.8
330032 2005 UN_{193}	17.6	X	259.46307	262.32532	43.45965	3.45943	0.0797758	0.23749917	2.5824266	20	3 22.5	21.1
330033 2005 UB_{199}	16.5	X	302.59021	216.93673	50.50594	7.80448	0.1247480	0.23652757	2.5894937	20	3 22.8	19.9
330034 2005 UR_{216}	16.2	X	65.93250	205.34912	238.12928	13.39053	0.1636720	0.21842227	2.7306839	20	2 3.2	19.6
330035 2005 UL_{218}	17.3	X	273.27328	295.09499	322.52050	3.68494	0.0485760	0.22830632	2.6512912	20	2 10.2	21.0
330036 2005 UH_{232}	16.4	X	331.50118	111.17653	53.36608	5.68058	0.0523603	0.21851470	2.7299138	20	—	—
330037 2005 UF_{233}	17.2	X	121.07848	273.28988	125.68245	3.53036	0.0625283	0.22426323	2.6830618	20	2 12.7	20.7
330038 2005 UA_{234}	16.8	X	56.01661	14.89320	87.32705	5.71581	0.1130785	0.22182653	2.7026744	20	2 13.1	19.9
330039 2005 UO_{238}	16.7	X	239.27217	277.60115	66.69636	15.51929	0.1490298	0.23811363	2.5779820	20	4 16.9	20.8
330040 2005 UV_{280}	16.4	X	341.03914	289.91133	241.96486	4.03155	0.0519942	0.22053635	2.7132049	20	1 19.1	20.0
330041 2005 UX_{281}	17.5	X	263.92699	229.27473	60.00924	4.59565	0.0432695	0.23034033	2.6356600	20	3 12.9	21.1
330042 2005 UN_{286}	17.0	X	276.42536	213.15724	66.62860	5.94059	0.0921239	0.23472287	2.6027499	20	3 9.9	20.7
330043 2005 UD_{308}	17.3	X	205.73986	6.43402	2.45362	0.87302	0.1386598	0.23572320	2.5953813	20	4 8.7	21.4
330044 2005 UK_{310}	17.0	X	2.24050	228.81844	45.75841	5.49977	0.2014806	0.25435530	2.4670362	20	7 21.6	18.9
330045 2005 UC_{313}	16.8	X	160.59388	3.44367	4.72821	6.17349	0.1035563	0.22680712	2.6629617	20	2 24.9	20.7
330046 2005 UR_{315}	16.6	X	195.43916	164.22005	206.32479	7.65973	0.0861686	0.23390505	2.6088132	20	3 31.5	20.6
330047 2005 UB_{328}	16.1	X	262.45072	91.55304	237.62323	11.45441	0.1167838	0.23824556	2.5770302	20	4 17.4	19.9
330048 2005 UU_{328}	17.3	X	214.67255	288.47433	55.22157	4.29292	0.1128078	0.23492509	2.6012561	20	3 20.1	21.3
330049 2005 UY_{332}	17.5	X	115.82678	243.89623	174.98447	1.85848	0.0738535	0.22759204	2.6568355	20	3 3.0	20.9
330050 2005 UN_{349}	16.7	X	303.24267	265.53698	141.61397	5.51815	0.2247657	0.19193895	2.9764184	20	9 15.6	19.9
330051 2005 UE_{365}	17.1	X	90.33665	264.71199	197.55678	7.75816	0.0208008	0.23000303	2.6382362	20	3 17.1	20.6
330052 2005 UZ_{369}	16.8	X	315.65388	89.38217	68.55970	9.93829	0.1690582	0.21128646	2.7918255	20	—	—
330053 2005 UY_{372}	17.2	X	40.96552	39.47439	34.14955	4.92480	0.0393534	0.21337084	2.7736139	20	—	—
330054 2005 UY_{376}	16.6	X	312.68918	19.54099	239.63738	12.97281	0.2242700	0.23748215	2.5825499	20	2 28.8	20.3
330055 2005 UH_{388}	16.3	X	351.78810	189.88055	45.28308	14.03984	0.1673333	0.24033446	2.5620761	20	4 22.1	18.6
330056 2005 UC_{423}	17.2	X	265.08668	307.98088	38.44325	3.63467	0.1974237	0.24474835	2.5311790	20	5 4.5	20.8
330057 2005 UR_{438}	17.0	X	109.34382	307.63511	99.01845	4.35144	0.1181389	0.22577473	2.6710735	20	2 16.5	20.6
330058 2005 UU_{456}	16.5	X	215.35600	322.44783	49.36241	3.55520	0.1907307	0.23769888	2.5809799	20	4 20.1	20.8
330059 2005 UA_{461}	17.1	X	204.98705	26.47033	287.27834	1.67803	0.0910794	0.22302879	2.6929529	20	2 1.9	21.0
330060 2005 UM_{491}	16.4	X	335.97379	277.54221	52.24787	11.81728	0.2299721	0.26137554	2.4226616	20	8 24.9	18.3
330061 2005 UH_{515}	16.8	X	317.77531	107.62764	134.11106	12.34738	0.1676231	0.23370887	2.6102729	20	3 1.9	20.1
330062 2005 UH_{530}	16.3	X	116.92602	317.50852	89.59594	10.62045	0.0828528	0.22572123	2.6714955	20	2 24.3	20.1
330063 2005 VB_{1}	17.3	X	341.06952	48.46576	238.38444	22.16160	0.0631582	0.38233059	1.8800816	20	6 25.1	19.0
330064 2005 VX_{1}	16.2	X	186.44896	150.01055	214.19735	33.51193	0.2596094	0.23345729	2.6121479	20	3 13.5	21.3
330065 2005 VQ_{5}	16.0	X	312.05311	221.34671	48.53097	14.82486	0.0558131	0.23650236	2.5896778	20	4 19.0	19.3
330066 2005 VX_{25}	17.1	X	280.58095	348.63133	335.52071	4.22158	0.2492484	0.24647657	2.5193333	20	4 14.3	20.7
330067 2005 VP_{32}	16.5	X	85.72586	193.44993	237.65439	11.93923	0.0916686	0.22084755	2.7106555	20	2 6.9	20.3
330068 2005 VS_{38}	17.3	X	256.91827	266.33182	85.75387	6.87025	0.2421195	0.24392008	2.5369058	20	4 30.8	21.4
330069 2005 VM_{53}	17.0	X	189.75764	55.26537	337.82997	6.35341	0.1175375	0.23842593	2.5757303	20	4 21.1	21.0
330070 2005 VG_{56}	16.1	X	313.98459	200.82394	67.36088	13.48350	0.1377630	0.23753894	2.5821383	20	4 10.4	19.4
330071 2005 VK_{73}	16.0	X	32.40054	37.15878	71.70967	14.45293	0.1639954	0.21594949	2.7514899	20	1 14.4	19.0
330072 2005 VK_{75}	16.1	X	299.24167	243.45441	46.13402	9.88503	0.1290698	0.23942709	2.5685451	20	4 14.7	19.3
330073 2005 VP_{85}	17.2	X	40.72994	277.97627	179.88527	4.22679	0.0182780	0.21875683	2.7278991	20	1 8.1	20.9
330074 2005 VD_{95}	16.7	X	115.52540	300.72935	90.24455	5.88728	0.1213293	0.22030091	2.7151376	20	2 5.6	20.4
330075 2005 VG_{109}	17.9	X	203.36566	305.42858	52.62944	3.33910	0.1349817	0.23444625	2.6047968	20	3 25.7	21.9
330076 2005 VU_{109}	16.8	X	273.82472	9.76911	216.58232	4.28960	0.0510818	0.22069972	2.7118658	20	1 3.2	20.6
330077 2005 VZ_{113}	16.8	X	178.84868	267.64203	101.33623	4.56534	0.0464875	0.22991242	2.6389293	20	3 13.7	20.5
330078 2005 VE_{136}	17.2	X	266.11798	219.25021	66.54998	5.01535	0.1078612	0.23054562	2.6340952	20	3 3.4	21.0
330079 2005 WH_{3}	16.2	X	85.84670	214.75530	216.83847	13.41333	0.1808329	0.22098104	2.7095638	20	2 21.2	19.8
330080 2005 WV_{8}	17.1	X	48.55686	125.15088	238.85314	1.06816	0.0779968	0.20360169	2.8616409	20	—	—

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330081 2005 WV_{35}	16.4	X	175.44103	128.90246	239.17205	5.08045	0.0640205	0.22588962	2.6701677	20	3 5.1	20.3
330082 2005 WZ_{53}	18.2	X	76.84604	72.51656	67.79610	23.19369	0.0717288	0.36669981	1.9331353	20	4 30.3	20.3
330083 2005 WL_{57}	17.2	X	201.05392	315.07806	89.55091	24.64211	0.1103212	0.37482509	1.9050964	20	5 25.6	19.8
330084 2005 WA_{70}	17.2	X	191.60006	146.62067	236.49795	3.64796	0.1410007	0.23323315	2.6138211	20	4 12.3	21.2
330085 2005 WE_{76}	17.0	X	280.69254	18.97727	308.71728	1.73239	0.2135531	0.24221652	2.5487870	20	4 25.1	20.5
330086 2005 WZ_{89}	16.1	X	179.94342	290.10420	61.03108	14.73589	0.0928358	0.22609527	2.6685483	20	2 29.4	20.4
330087 2005 WD_{90}	16.3	X	98.81445	141.94816	247.68872	5.23420	0.0685170	0.21639054	2.7477499	20	1 4.8	19.9
330088 2005 WL_{90}	16.7	X	151.96458	336.06188	54.34475	14.09155	0.2474823	0.22852777	2.6495781	20	3 29.5	21.4
330089 2005 WP_{91}	16.2	X	260.04878	269.09011	73.06459	4.95680	0.1473999	0.23960960	2.5672406	20	5 1.1	19.8
330090 2005 WL_{92}	17.2	X	69.99326	350.32727	67.53908	5.37388	0.1037454	0.21541530	2.7560369	20	1 6.0	20.5
330091 2005 WS_{92}	16.7	X	288.07276	235.71823	76.55754	4.94586	0.1889587	0.23953964	2.5677404	20	4 20.3	20.2
330092 2005 WV_{92}	16.4	X	282.07954	227.56978	73.68152	11.68081	0.1255600	0.23447223	2.6046044	20	4 11.7	20.1
330093 2005 WP_{103}	16.4	X	169.69911	311.65316	71.17134	15.79691	0.1369500	0.23027854	2.6361315	20	3 31.9	20.8
330094 2005 WM_{108}	17.0	X	202.68906	265.21450	74.38544	4.00727	0.1139452	0.22928683	2.6437273	20	3 3.6	21.0
330095 2005 WC_{115}	16.4	X	69.37588	340.59645	88.37474	5.83648	0.0543983	0.21327875	2.7744122	20	1 14.6	19.9
330096 2005 WA_{119}	16.9	X	286.41426	25.81248	47.33236	1.57577	0.1488716	0.19188000	2.9770280	20	10 2.2	20.5
330097 2005 WU_{120}	15.9	X	295.03079	2.33618	251.86608	12.09831	0.1226379	0.22796780	2.6539152	20	2 16.3	19.8
330098 2005 WT_{123}	17.1	X	214.80701	265.35472	85.80924	1.10459	0.0200610	0.23528673	2.5985900	20	4 1.1	20.4
330099 2005 WM_{144}	17.0	X	121.80424	190.68668	208.61074	13.65456	0.2481845	0.22335468	2.6903329	20	3 4.1	21.3
330100 2005 WW_{147}	16.8	X	348.12666	23.49906	70.63096	8.68872	0.2302561	0.20443800	2.8538313	20	—	—
330101 2005 WM_{176}	16.7	X	139.59076	60.23266	321.80984	2.30041	0.0704390	0.21875960	2.7278761	20	2 14.8	20.5
330102 2005 WV_{183}	16.2	X	110.02518	11.06750	72.14256	22.63587	0.0403511	0.22582475	2.6706790	20	4 5.7	20.3
330103 2005 WD_{189}	16.6	X	19.56950	333.97439	113.23116	3.12040	0.2014044	0.20966914	2.8061640	20	—	—
330104 2005 WF_{189}	16.6	X	312.43258	5.67058	98.81739	9.01658	0.2301480	0.19918845	2.9037549	20	12 26.6	19.3
330105 2005 WV_{194}	16.3	X	249.56039	142.53998	212.07125	14.68515	0.1529018	0.24146893	2.5540450	20	5 4.3	20.0
330106 2005 WG_{203}	16.6	X	136.22882	308.62636	76.36975	6.26192	0.1307437	0.21971942	2.7199260	20	2 24.3	20.6
330107 2005 XT	16.6	X	206.48863	221.27632	167.15963	7.82301	0.1999052	0.23805588	2.5783989	20	5 4.2	20.9
330108 2005 XT_{6}	16.8	X	262.55321	66.15214	246.64944	4.78111	0.1127999	0.23293519	2.6160496	20	3 28.0	20.6
330109 2005 XZ_{15}	16.4	X	55.76505	349.89996	79.26524	8.41586	0.0782083	0.21440217	2.7647122	20	—	—
330110 2005 XU_{29}	17.0	X	123.28106	35.52145	76.67073	24.27915	0.0697227	0.36564124	1.9368646	20	5 22.9	19.1
330111 2005 XF_{30}	16.5	X	332.90366	62.35263	216.88781	5.78507	0.1923776	0.24380552	2.5377005	20	5 15.2	18.7
330112 2005 XS_{36}	16.2	X	279.24981	51.27688	299.38862	3.44952	0.2690960	0.24365670	2.5387337	20	5 15.9	19.8
330113 2005 XB_{41}	16.9	X	243.86536	90.23930	253.12462	13.76321	0.1402611	0.23886193	2.5725950	20	4 9.9	21.1
330114 2005 XZ_{54}	17.3	X	139.06318	312.98441	56.58573	4.31642	0.0963095	0.22011981	2.7166267	20	2 3.2	21.2
330115 2005 XK_{63}	17.4	X	40.55849	229.60072	289.89049	2.65982	0.1558197	0.22388907	2.6860502	20	4 6.5	20.2
330116 2005 XX_{84}	17.3	X	156.99852	313.05949	106.93742	23.65691	0.0888885	0.36517070	1.9385281	20	4 30.5	20.3
330117 2005 XC_{107}	16.8	X	266.00131	322.58570	146.25437	5.50098	0.1303643	0.18000546	3.1065541	20	10 20.9	21.0
330118 2005 XA_{112}	17.6	X	45.03590	326.46081	120.01498	1.01261	0.0408809	0.21500193	2.7595683	20	1 1.5	21.2
330119 2005 YL	16.6	X	145.37808	114.59422	264.33543	4.71122	0.0388691	0.22010494	2.7167491	20	2 12.1	20.4
330120 2005 YU_{20}	16.6	X	183.48076	254.67425	95.15778	3.65075	0.0963226	0.21978242	2.7194062	20	2 26.0	20.7
330121 2005 YT_{24}	16.1	X	246.51564	151.11920	105.69847	10.07458	0.1075966	0.21056172	2.7982281	20	1 7.5	20.4
330122 2005 YJ_{25}	17.0	X	155.06595	250.92230	131.07688	2.21077	0.1601758	0.22096785	2.7096716	20	3 10.9	21.3
330123 2005 YO_{35}	16.7	X	341.37402	200.03100	270.70309	5.35346	0.0095484	0.20289242	2.8683061	20	—	—
330124 2005 YZ_{44}	16.6	X	77.84470	273.60492	129.76896	4.94664	0.1039104	0.20980363	2.8049646	20	—	—
330125 2005 YP_{48}	16.7	X	41.89418	337.32171	111.84602	4.68606	0.0658693	0.20846911	2.8169226	20	1 2.6	20.0
330126 2005 YQ_{57}	16.9	X	161.21816	251.06439	95.71470	4.50565	0.0973999	0.21490555	2.7603933	20	1 30.4	21.1
330127 2005 YW_{74}	16.2	X	269.39645	102.94145	92.47474	15.83743	0.0945031	0.20431896	2.8549397	20	—	—
330128 2005 YT_{81}	16.5	X	284.13819	76.72108	272.66684	3.47015	0.2561558	0.24146672	2.5540605	20	5 22.7	19.8
330129 2005 YN_{83}	15.9	X	234.99203	181.40789	119.06538	14.27149	0.1293441	0.21706902	2.7420213	20	2 17.1	20.2
330130 2005 YO_{84}	15.3	X	44.29519	240.95041	96.44179	11.70457	0.0525977	0.19172955	2.9785851	20	11 25.9	19.5
330131 2005 YE_{98}	16.0	X	213.77277	342.45168	78.16968	11.12945	0.0767202	0.17469063	3.1692486	20	6 24.9	20.7
330132 2005 YM_{108}	17.0	X	210.60829	236.22615	128.13373	4.37552	0.2380120	0.23096659	2.6308936	20	4 7.2	21.6
330133 2005 YS_{109}	16.5	X	53.00834	325.31337	144.36179	4.23322	0.0486013	0.21517285	2.7581067	20	2 11.5	19.8
330134 2005 YJ_{126}	16.9	X	130.74737	280.93941	72.03017	5.33326	0.0748973	0.20963119	2.8065026	20	1 1.9	20.9
330135 2005 YH_{137}	16.9	X	182.53341	358.45094	340.50170	2.43891	0.0476314	0.21628701	2.7486267	20	2 9.1	20.9
330136 2005 YW_{144}	16.7	X	58.05497	312.46069	108.61940	3.59114	0.0447026	0.20562090	2.8428758	20	—	—
330137 2005 YW_{151}	16.4	X	334.14252	84.73751	76.35448	5.47214	0.0124637	0.20993975	2.8037521	20	1 4.4	20.1
330138 2005 YN_{172}	17.4	X	279.45691	114.52970	236.90206	19.16640	0.1092191	0.37831902	1.8933487	20	6 13.6	19.1
330139 2005 YK_{188}	16.8	X	180.48576	266.37899	109.84519	5.84551	0.1345256	0.22210467	2.7004176	20	3 28.6	21.1
330140 2005 YV_{188}	16.6	X	89.68576	299.45125	104.69759	4.82410	0.0972801	0.20976037	2.8053502	20	1 16.9	20.2
330141 2005 YD_{200}	15.7	X	195.24607	224.06430	105.97322	13.01205	0.0960208	0.21656332	2.7462882	20	2 15.4	20.0
330142 2005 YL_{241}	16.7	X	261.74022	237.99741	345.18994	5.00079	0.0543364	0.20848160	2.8168100	20	—	—
330143 2005 YG_{266}	16.2	X	326.06319	24.04038	125.63143	15.99242	0.0821035	0.20444790	2.8537392	20	—	—
330144 2006 AM_{6}	15.8	X	233.09771	55.23612	95.78277	11.32615	0.2711793	0.18234669	3.0799060	20	10 20.3	20.8
330145 2006 AB_{30}	16.6	X	250.93077	125.15718	150.37203	3.99786	0.0514160	0.21450067	2.7638658	20	2 7.4	20.6
330146 2006 AG_{31}	16.4	X	256.21504	248.78673	92.36413	12.86628	0.1889109	0.23395234	2.6084616	20	4 25.7	20.6
330147 2006 AT_{44}	16.2	X	179.98723	232.02956	111.51059	7.07221	0.0662255	0.21579302	2.7528198	20	2 13.8	20.2
330148 2006 AQ_{69}	15.9	X	243.87082	166.84518	92.01791	10.19597	0.1044687	0.20897956	2.8123336	20	1 7.9	20.2
330149 2006 AC_{77}	16.7	X	2.46212	89.21049	330.65034	5.59190	0.0655002	0.19717328	2.9235061	20	—	—
330150 2006 AD_{80}	15.7	X	219.00263	47.88693	149.75113	19.17703	0.1701357	0.18483946	3.0521527	20	12 9.2	20.7
330151 2006 BP_{5}	15.5	X	252.92391	317.04232	150.25021	10.76284	0.2161721	0.18109011	3.0941372	20	9 20.7	20.0
330152 2006 BY_{22}	16.3	X	251.17268	187.39624	151.05914	9.81118	0.0399149	0.21989765	2.7184561	20	5 2.1	20.2
330153 2006 BX_{29}	16.7	X	55.42530	307.09509	90.23690	3.22250	0.0955295	0.20071521	2.8890110	20	—	—
330154 2006 BA_{35}	17.0	X	1.29870	94.11518	5.49904	1.75503	0.0261813	0.20130622	2.8833537	20	—	—
330155 2006 BY_{35}	16.9	X	133.21393	297.39949	17.52812	1.73083	0.0619925	0.19812949	2.9140922	20	—	—
330156 2006 BR_{38}	16.7	X	229.46790	35.10689	138.05581	2.47366	0.1207126	0.18517569	3.0484570	20	11 24.8	21.2
330157 2006 BJ_{54}	16.1	X	209.79330	84.48894	149.30672	8.25385	0.0480186	0.19161356	2.9797870	20	—	—
330158 2006 BX_{55}	15.7	X	222.38799	285.90651	275.03837	8.22165	0.0664593	0.18985781	2.9981296	20	12 27.4	19.7
330159 2006 BO_{59}	16.2	X	126.85730	287.56323	99.85734	5.09984	0.0778591	0.21310560	2.7759148	20	2 9.5	20.1
330160 2006 BN_{78}	15.9	X	177.43881	69.93061	140.17154	17.29448	0.1818150	0.17917830	3.1161076	20	11 16.5	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330161 2006 BQ_{123}	16.0	X	62.47547	208.09071	150.59701	10.19584	0.0435676	0.18927634	3.0042668	20	—	—
330162 2006 BR_{133}	16.8	X	86.87464	111.39812	351.22164	2.50889	0.0800881	0.21396251	2.7684983	20	3 24.2	20.3
330163 2006 BS_{139}	16.4	X	359.83315	299.02656	155.31378	10.81825	0.0891823	0.19753036	2.9199818	20	—	—
330164 2006 BS_{141}	16.2	X	229.65955	177.64818	109.23722	4.64050	0.0601355	0.21131077	2.7916114	20	1 29.1	20.3
330165 2006 BA_{142}	15.8	X	245.61537	113.66819	323.31975	8.49978	0.0553465	0.17577981	3.1561434	20	8 23.8	20.3
330166 2006 BR_{147}	16.3	X	255.55767	347.63402	167.48290	5.43407	0.1610183	0.18798831	3.0179740	20	11 29.6	20.4
330167 2006 BO_{155}	16.1	X	178.83733	116.67495	122.88478	5.51926	0.1139169	0.18587985	3.0407532	20	12 21.2	20.8
330168 2006 BA_{204}	16.3	X	235.92146	54.52092	131.23660	10.22821	0.0435836	0.19059037	2.9904422	20	12 28.7	20.5
330169 2006 BS_{206}	16.3	X	208.59863	94.44695	143.90440	6.34703	0.0126156	0.19730136	2.9222408	20	—	—
330170 2006 BC_{210}	16.5	X	221.22179	61.09743	119.89308	5.62753	0.1143425	0.18479342	3.0526597	20	11 26.4	21.1
330171 2006 BW_{211}	16.7	X	241.96212	22.78151	126.70903	3.94555	0.2379967	0.18355439	3.0663816	20	10 27.3	21.4
330172 2006 BY_{219}	16.4	X	159.75574	126.26186	275.91040	2.87928	0.1174227	0.22721938	2.6597397	20	4 3.9	20.4
330173 2006 BY_{258}	16.5	X	334.20808	303.94718	133.90545	6.22483	0.2050579	0.19199758	2.9758124	20	—	—
330174 2006 CZ_{8}	16.5	X	176.60721	227.55883	119.73969	2.10434	0.0930994	0.21029882	2.8005596	20	2 15.8	20.7
330175 2006 CY_{14}	15.5	X	111.35646	88.52645	140.86735	19.37953	0.0777679	0.17526099	3.1623690	20	10 6.9	20.5
330176 2006 CD_{40}	15.8	X	187.77321	34.53906	141.23579	10.24959	0.0239030	0.17656186	3.1468168	20	10 24.3	20.5
330177 2006 CJ_{67}	16.4	X	60.54486	219.31525	167.43692	11.34702	0.1236512	0.19706484	2.9245786	20	—	—
330178 2006 DD_{6}	15.8	X	243.62232	146.27682	24.83733	8.39842	0.0478637	0.18802476	3.0175839	20	12 18.5	20.1
330179 2006 DW_{24}	16.2	X	189.85431	112.11212	141.33488	3.75460	0.0279810	0.19134203	2.9826054	20	—	—
330180 2006 DA_{25}	17.0	X	188.32288	162.44112	34.82630	1.19312	0.1798513	0.17907576	3.1172970	20	11 5.8	22.2
330181 2006 DQ_{47}	16.7	X	139.14309	287.42134	330.23243	5.16346	0.1388374	0.18109956	3.0940296	20	12 3.6	21.8
330182 2006 DM_{51}	16.6	X	152.67317	203.44724	115.73777	3.33672	0.0514567	0.20114874	2.8848584	20	—	—
330183 2006 DJ_{53}	16.4	X	168.02484	85.56829	162.25979	8.41172	0.1200802	0.18261404	3.0768992	20	12 19.8	21.3
330184 2006 DF_{56}	15.7	X	265.99586	81.00833	17.19272	8.71840	0.0434715	0.17792648	3.1307063	20	10 16.9	20.1
330185 2006 DV_{64}	16.4	X	233.17682	69.27948	105.07729	4.28464	0.1947926	0.18525218	3.0476177	20	11 21.4	20.9
330186 2006 DD_{76}	16.5	X	190.92697	107.28832	142.07959	6.41669	0.0492090	0.19037084	2.9927408	20	—	—
330187 2006 DW_{76}	16.6	X	318.75722	309.62062	133.52265	3.18424	0.0649966	0.18537752	3.0462439	20	12 8.9	20.4
330188 2006 DC_{78}	16.6	X	149.37737	191.58469	68.62368	1.39711	0.1129161	0.18309396	3.0715202	20	12 16.8	21.5
330189 2006 DE_{78}	16.6	X	144.07729	145.16360	124.37546	2.20077	0.1199969	0.18369331	3.0648354	20	12 22.7	21.5
330190 2006 DH_{78}	17.0	X	263.46380	138.21180	11.35128	1.31936	0.1137771	0.18701137	3.0284753	20	12 8.5	20.9
330191 2006 DC_{83}	16.0	X	232.33590	326.04498	174.23293	11.12485	0.0785281	0.17807987	3.1289082	20	10 25.4	20.6
330192 2006 DH_{87}	16.2	X	81.22674	221.05586	113.01312	2.97054	0.0805497	0.18356809	3.0662290	20	—	—
330193 2006 DO_{87}	15.8	X	115.07567	177.76173	157.39551	10.13102	0.0117057	0.19092346	2.9869630	20	—	—
330194 2006 DD_{90}	16.6	X	272.04630	303.98360	170.99488	10.08690	0.0418758	0.17968861	3.1102050	20	11 17.6	21.0
330195 2006 DD_{115}	16.0	X	224.10940	160.95387	6.85594	4.90855	0.1110142	0.18033267	3.1027952	20	11 10.9	20.6
330196 2006 DA_{173}	16.6	X	111.21318	132.46255	158.24579	9.99237	0.1019368	0.17982156	3.1086718	20	12 15.9	21.6
330197 2006 DQ_{190}	16.5	X	204.00582	88.95089	78.07271	3.26131	0.1063003	0.17534638	3.1613423	20	10 22.1	21.3
330198 2006 EC_{9}	16.3	X	155.08598	122.61972	164.90109	12.69657	0.1126114	0.18744100	3.0238458	20	—	—
330199 2006 ET_{12}	15.7	X	214.09319	328.48535	168.85266	11.71313	0.1074803	0.17432771	3.1736456	20	9 26.7	20.5
330200 2006 EK_{44}	15.4	X	213.39069	86.71857	92.02900	16.82105	0.2018312	0.17848621	3.1241576	20	11 10.4	20.6
330201 2006 FT_{5}	16.8	X	132.69960	80.46519	182.94235	8.19286	0.1827273	0.17550954	3.1593827	20	12 6.2	22.2
330202 2006 FG_{13}	15.8	X	270.35425	286.60118	191.77285	15.41939	0.0611082	0.17725096	3.1386555	20	11 16.2	20.3
330203 2006 FB_{15}	16.4	X	176.93680	72.21626	109.49872	1.31598	0.1335264	0.17133431	3.2105035	20	10 10.6	21.4
330204 2006 FE_{16}	16.3	X	148.88099	238.20940	4.88773	5.16264	0.1375144	0.17620484	3.1510659	20	11 24.3	21.5
330205 2006 FR_{16}	15.6	X	197.82274	108.38885	91.95908	7.46906	0.1422730	0.17855393	3.1233677	20	11 21.7	20.5
330206 2006 FE_{38}	15.5	X	101.92811	300.59681	20.94676	9.72642	0.1145394	0.18284199	3.0743414	20	—	—
330207 2006 FG_{40}	16.6	X	218.60159	113.77421	35.78314	4.74025	0.1438788	0.17615457	3.1516654	20	10 12.3	21.4
330208 2006 FW_{46}	15.7	X	219.17183	97.45047	68.04138	9.08555	0.1479289	0.17922449	3.1155721	20	11 2.2	20.5
330209 2006 FM_{47}	15.4	X	356.21456	351.78454	97.94310	11.25302	0.0986586	0.19248328	2.9708043	20	—	—
330210 2006 FS_{50}	15.5	X	187.52099	126.41423	70.29502	27.97230	0.2263002	0.17706918	3.1408032	20	11 9.8	21.0
330211 2006 GC_{19}	15.6	X	329.90589	247.78132	187.54702	10.64055	0.0128099	0.17796656	3.1302362	20	12 12.4	20.1
330212 2006 GD_{21}	16.3	X	160.34760	103.35920	127.84200	3.02243	0.1559717	0.17357427	3.1828229	20	11 21.9	21.5
330213 2006 GD_{24}	16.6	X	181.73532	65.86889	163.12101	2.69681	0.1240007	0.17753395	3.1353192	20	12 9.7	21.5
330214 2006 GE_{26}	16.1	X	49.16172	163.61337	172.68268	3.53046	0.0431073	0.17213033	3.2005978	20	11 23.5	20.6
330215 2006 GC_{37}	15.2	X	346.32209	334.97018	34.07618	14.48545	0.0254899	0.16847834	3.2466839	20	10 13.9	19.7
330216 2006 GB_{38}	15.2	X	193.05624	106.69802	72.35896	26.69199	0.1990677	0.17258769	3.1949410	20	10 29.6	20.8
330217 2006 GK_{39}	15.1	X	182.11386	136.23110	77.17279	28.42411	0.1553781	0.17681836	3.1437727	20	11 24.5	20.3
330218 2006 HX_{6}	14.9	X	242.43825	358.03562	123.26362	29.67088	0.1409725	0.17529639	3.1619432	20	10 14.3	20.1
330219 2006 HB_{12}	15.9	X	112.73914	187.40583	78.27671	8.80050	0.0072468	0.17126095	3.2114203	20	11 10.8	20.5
330220 2006 HZ_{42}	15.7	X	127.30884	203.17394	43.55437	21.44003	0.0229295	0.16869798	3.2438652	20	11 4.3	20.4
330221 2006 HC_{49}	15.7	X	134.55005	101.86895	195.33291	9.24092	0.1078996	0.18243278	3.0789370	20	—	—
330222 2006 HA_{74}	15.7	X	252.45576	63.06238	62.73786	16.62217	0.0813723	0.17118672	3.2123485	20	11 1.1	20.3
330223 2006 HV_{77}	15.9	X	156.90764	193.27709	23.66228	12.33053	0.0972915	0.17289508	3.1911530	20	10 31.5	20.9
330224 2006 HQ_{115}	15.9	X	238.79956	267.78009	213.21157	13.42002	0.1729615	0.17201701	3.2020034	20	9 21.5	20.8
330225 2006 JL_{26}	15.2	X	119.16066	40.99304	251.90273	12.85002	0.1770156	0.17234955	3.1978833	20	12 26.1	20.6
330226 2006 JU_{26}	15.8	X	95.80124	99.49690	221.24795	12.62544	0.1409325	0.17494075	3.1662271	20	—	—
330227 2006 JC_{49}	15.5	X	126.14569	219.85315	41.20739	9.64697	0.0615378	0.17432001	3.1737391	20	11 21.4	20.3
330228 2006 KV_{3}	15.8	X	145.09719	41.35616	207.60341	11.34951	0.0330099	0.17590432	3.1546538	20	11 28.9	20.5
330229 2006 KZ_{11}	15.8	X	251.22676	351.31799	132.59944	13.88744	0.1631867	0.17408175	3.1766343	20	10 18.8	20.6
330230 2006 KH_{14}	15.6	X	172.61064	133.28486	80.83463	11.02373	0.0440600	0.17275343	3.1928971	20	11 18.3	20.3
330231 2006 KM_{22}	15.8	X	173.76205	61.56898	204.88771	12.74902	0.2418772	0.17703806	3.1411713	20	—	—
330232 2006 KQ_{44}	15.9	X	57.12201	192.38385	163.29573	16.59944	0.2447945	0.17261258	3.1946338	20	—	—
330233 2006 KV_{86}	18.7	X	348.14279	153.82474	220.05725	37.07286	0.3738771	0.51413774	1.5431793	20	—	—
330234 2006 KJ_{91}	15.6	X	49.07717	189.83537	150.22147	11.44442	0.0274125	0.17235074	3.1978686	20	11 27.6	20.3
330235 2006 KM_{92}	15.5	X	35.80230	140.10766	214.47184	9.22677	0.0389314	0.16952587	3.2332954	20	11 27.8	20.0
330236 2006 KG_{120}	15.6	X	206.90397	24.29372	211.10945	15.67375	0.0172168	0.17871214	3.1215240	20	—	—
330237 2006 MA_{10}	17.7	X	237.86453	239.87253	108.74831	2.28926	0.2020472	0.26747648	2.3856807	20	4 9.9	21.5
330238 2006 PC_{42}	17.5	X	92.13831	173.44422	135.41453	7.09556	0.1439945	0.30038053	2.2081142	20	—	—
330239 2006 QN_{12}	17.6	X	116.70048	278.75282	8.63829	7.05083	0.1939967	0.30422319	2.1894809	20	—	—
330240 2006 QQ_{18}	17.5	X	69.41871	191.37635	130.23120	4.40895	0.1822705	0.29862827	2.2167434	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330241 2006 QG_{55}	18.0	X	103.91806	21.16651	297.39275	2.11215	0.1924354	0.30659583	2.1781706	20	—	—
330242 2006 QK_{83}	17.9	X	6.31973	216.00905	159.47637	5.86505	0.1839897	0.29327196	2.2436530	20	—	—
330243 2006 QE_{93}	17.7	X	88.77469	163.52418	170.69880	7.24563	0.2230133	0.30486933	2.1863863	20	—	—
330244 2006 QB_{94}	17.6	X	330.35346	170.99574	127.92417	4.22875	0.1394553	0.27512203	2.3412752	20	6 17.2	19.7
330245 2006 QZ_{99}	17.5	X	43.71865	94.19164	241.79567	2.51081	0.2065884	0.29452928	2.2372631	20	—	—
330246 2006 QA_{126}	17.6	X	52.59466	270.21606	79.34861	4.30155	0.1790474	0.29866626	2.2165555	20	—	—
330247 2006 QT_{183}	16.4	X	92.92456	282.05760	13.96247	11.79657	0.1708136	0.22719585	2.6599233	20	12 16.4	20.9
330248 2006 RO_4	17.6	X	36.34311	201.62981	177.20073	6.88865	0.1335526	0.29754753	2.2221079	20	—	—
330249 2006 RA_{10}	16.8	X	8.99897	166.36990	215.03989	9.08699	0.2041842	0.29218647	2.2492064	20	—	—
330250 2006 RF_{19}	16.5	X	67.32175	295.08227	35.49535	8.22381	0.2784949	0.29704897	2.2245936	20	—	—
330251 2006 RL_{38}	17.7	X	299.72447	111.62887	270.75178	5.25395	0.1549381	0.27891375	2.3200077	20	8 24.8	19.9
330252 2006 RZ_{39}	14.8	X	265.93901	319.80851	47.92748	5.50307	0.3178213	0.12512123	3.9589686	20	5 19.8	21.0
330253 2006 RF_{43}	18.2	X	35.91452	181.86551	154.35640	1.47397	0.1665726	0.29065015	2.2571253	20	12 21.6	21.0
330254 2006 RA_{46}	17.7	X	214.51300	47.19973	34.85425	5.10152	0.1280203	0.27029709	2.3690550	20	7 25.5	21.1
330255 2006 RZ_{52}	17.4	X	227.03153	239.90279	173.07616	2.61060	0.1981180	0.26635412	2.3923778	20	6 21.4	21.0
330256 2006 RX_{89}	17.9	X	92.57770	73.35939	221.37629	2.21860	0.1709132	0.29505395	2.2346101	20	12 27.9	21.2
330257 2006 RX_{93}	17.5	X	98.30577	357.23222	264.78677	1.69666	0.0714273	0.28670490	2.2777845	20	11 14.6	20.6
330258 2006 RL_{102}	17.8	X	93.24474	288.74179	38.66910	5.71091	0.1749372	0.30261801	2.1972166	20	—	—
330259 2006 RL_{118}	17.9	X	131.91808	306.29892	217.18773	0.73427	0.1208359	0.27169305	2.3609332	20	8 13.8	21.3
330260 2006 SB_7	16.9	X	193.73315	249.55578	4.24965	21.47031	0.3942465	0.31171786	2.1542442	20	—	—
330261 2006 SZ_7	16.6	X	240.34697	209.26954	234.73361	5.75882	0.0843862	0.27751428	2.3278008	20	8 31.6	19.6
330262 2006 SN_{14}	18.4	X	87.91710	151.20587	205.49300	6.28157	0.2339831	0.30499465	2.1857873	20	—	—
330263 2006 SU_{22}	18.1	X	139.66196	198.59608	121.81070	6.00926	0.2425243	0.31105188	2.1573180	20	—	—
330264 2006 SR_{55}	17.6	X	48.15873	212.51969	152.96287	6.49025	0.1995832	0.29660689	2.2268035	20	—	—
330265 2006 SJ_{57}	17.3	X	353.47047	162.32378	212.74795	5.44331	0.1455424	0.28752019	2.2734766	20	12 10.4	19.5
330266 2006 SR_{63}	17.6	X	290.41935	256.08652	135.22761	3.03847	0.2171891	0.27715765	2.3297973	20	8 12.4	19.6
330267 2006 SE_{68}	18.0	X	73.00581	161.44419	157.99444	3.57642	0.1946685	0.29656267	2.2270248	20	—	—
330268 2006 SV_{68}	18.2	X	169.45508	316.59913	169.88896	2.76010	0.0635646	0.27327919	2.3517889	20	8 4.8	21.4
330269 2006 SD_{76}	17.2	X	9.98719	303.82436	48.68023	2.96860	0.0883670	0.28620264	2.2804486	20	11 24.6	19.7
330270 2006 SD_{96}	17.6	X	202.81724	257.28811	169.98555	2.49095	0.1685802	0.26336004	2.4104759	20	6 18.6	21.4
330271 2006 SE_{119}	17.1	X	297.68179	285.67660	141.16530	10.20619	0.1671120	0.28595024	2.2817903	20	11 9.7	19.1
330272 2006 SY_{130}	17.9	X	74.56087	128.46307	196.07033	5.42016	0.1992195	0.29588172	2.2304404	20	—	—
330273 2006 SM_{136}	17.2	X	83.79719	222.10194	82.52492	7.86726	0.1568176	0.29791659	2.2202724	20	—	—
330274 2006 SK_{147}	17.8	X	171.35792	243.47558	204.26983	2.82579	0.1707762	0.26208624	2.4182799	20	6 15.4	21.6
330275 2006 SE_{203}	17.9	X	311.64979	241.40996	179.92951	5.54691	0.1203034	0.28817911	2.2700097	20	11 29.6	19.9
330276 2006 SU_{208}	17.4	X	120.51228	266.06279	46.25548	4.65281	0.1219531	0.30375586	2.1917261	20	—	—
330277 2006 SM_{217}	17.5	X	255.12503	295.37311	119.20352	3.31184	0.1485618	0.27360591	2.3499163	20	8 2.5	20.3
330278 2006 SY_{255}	17.9	X	83.04588	72.95720	242.47820	2.66690	0.1365623	0.29567446	2.2314826	20	—	—
330279 2006 SH_{274}	17.8	X	58.68408	324.73106	92.65763	2.86133	0.1857553	0.23406066	2.6076568	20	—	—
330280 2006 SZ_{288}	17.3	X	322.47387	313.23720	63.30957	7.34801	0.1381459	0.28230162	2.3014090	20	10 12.8	19.2
330281 2006 SR_{294}	18.3	X	137.13638	94.93803	200.96462	4.02993	0.1858787	0.30538882	2.1839061	20	—	—
330282 2006 SF_{300}	17.1	X	216.92476	313.06647	119.42839	6.70920	0.2264443	0.26782628	2.3836030	20	7 5.1	20.9
330283 2006 SG_{304}	16.8	X	258.43661	208.85214	245.46189	5.58969	0.0607401	0.28391944	2.2926581	20	10 18.1	19.3
330284 2006 SF_{354}	17.6	X	69.44295	298.91370	48.38830	6.48559	0.2229290	0.29844454	2.2176531	20	—	—
330285 2006 SA_{358}	17.5	X	91.43026	68.13858	20.80374	8.04521	0.1704534	0.24296157	2.5435737	20	3 25.4	20.6
330286 2006 SP_{391}	17.3	X	206.29648	266.12265	201.72957	6.21617	0.0639202	0.27309986	2.3528183	20	8 23.2	20.5
330287 2006 SP_{394}	17.4	X	105.20787	128.31546	38.26609	1.93951	0.1251465	0.26450917	2.4034895	20	7 19.4	20.8
330288 2006 SN_{401}	17.3	X	322.69302	120.76894	223.03291	6.08471	0.1238417	0.27027580	2.3691793	20	8 11.7	19.6
330289 2006 SY_{412}	16.8	X	246.52385	146.02816	279.25946	6.70692	0.0888432	0.27328789	2.3517390	20	8 12.8	19.8
330290 2006 TV_6	17.5	X	212.02553	326.14414	81.49693	5.66869	0.1868291	0.25989375	2.4318614	20	5 31.9	21.2
330291 2006 TT_{16}	17.8	X	249.53217	219.02097	182.74219	0.96325	0.1849167	0.26890361	2.3772323	20	7 2.1	20.9
330292 2006 TQ_{20}	18.0	X	95.79692	273.27407	44.21621	2.27680	0.1941614	0.29751749	2.2222575	20	—	—
330293 2006 TK_{22}	17.8	X	95.26015	331.49971	94.53758	2.35796	0.1896720	0.24042462	2.5614355	20	3 2.9	20.9
330294 2006 TZ_{33}	17.7	X	217.81596	311.40190	110.97938	3.43594	0.1990819	0.26627527	2.3928501	20	6 24.7	21.4
330295 2006 TQ_{38}	17.0	X	255.63603	217.07562	210.87424	6.12682	0.0837310	0.27363362	2.3497577	20	8 30.5	19.8
330296 2006 TQ_{44}	17.7	X	332.90686	319.50193	37.49982	1.95353	0.1734851	0.27769335	2.3268001	20	9 30.3	19.2
330297 2006 TX_{56}	17.6	X	323.23904	248.08195	131.26576	2.79527	0.2282218	0.28038907	2.3118625	20	10 17.4	18.8
330298 2006 TH_{63}	17.9	X	103.90200	145.91088	179.95259	5.14693	0.2234385	0.30270507	2.1967953	20	—	—
330299 2006 TM_{63}	17.4	X	54.33379	120.45102	233.81380	5.99591	0.1901145	0.29635280	2.2280761	20	—	—
330300 2006 TO_{73}	17.5	X	72.54641	215.73174	136.60089	9.13599	0.1776758	0.29906817	2.2145692	20	—	—
330301 2006 TE_{74}	17.3	X	244.61270	338.91783	71.35809	6.28362	0.1277778	0.26939839	2.3743208	20	7 16.8	20.5
330302 2006 TR_{74}	17.2	X	87.06532	298.51049	15.38226	6.99702	0.1746070	0.29567141	2.2314980	20	—	—
330303 2006 TW_{74}	15.2	X	293.91885	10.74518	319.12355	1.62482	0.2543406	0.12384222	3.9861799	20	5 12.3	20.5
330304 2006 TE_{75}	17.2	X	202.78078	25.97641	36.65901	6.12051	0.1226615	0.26289880	2.4132945	20	6 14.1	20.8
330305 2006 TA_{76}	17.8	X	51.74003	266.77582	71.48578	1.51282	0.1764513	0.29282768	2.2459218	20	—	—
330306 2006 TH_{92}	17.2	X	216.29668	247.16328	190.24111	5.99345	0.0700155	0.26824082	2.3811466	20	7 23.8	20.5
330307 2006 TM_{124}	17.6	X	66.67444	236.66318	76.64316	4.40250	0.1640104	0.29028202	2.2590332	20	12 25.3	20.9
330308 2006 TO_{128}	17.6	X	157.28694	112.81382	34.02736	6.52726	0.0657908	0.27280713	2.3545011	20	8 22.1	20.9
330309 2006 UL_4	17.3	X	225.15165	192.53160	280.59128	1.20911	0.0166390	0.27936664	2.3174997	20	10 4.2	20.1
330310 2006 UN_5	17.2	X	29.75018	208.23997	122.24567	6.73025	0.1967261	0.28743869	2.2739063	20	12 10.7	20.0
330311 2006 UV_5	17.3	X	118.29139	17.65660	198.95522	6.26281	0.0845859	0.27760158	2.3273128	20	10 7.7	20.6
330312 2006 UR_{31}	17.6	X	185.48610	77.49722	23.75752	3.68530	0.0871942	0.26596440	2.3947143	20	7 20.6	20.9
330313 2006 UV_{31}	17.6	X	127.28223	251.51043	210.26859	4.67383	0.1466628	0.25334512	2.4729391	20	5 19.9	21.3
330314 2006 UF_{35}	17.9	X	202.84804	26.63587	37.64070	4.91962	0.0183930	0.26413670	2.4057484	20	6 23.6	21.0
330315 2006 UL_{37}	17.6	X	69.69704	245.01428	22.18228	3.10758	0.0736845	0.27836180	2.3230736	20	10 16.4	20.6
330316 2006 UZ_{41}	17.4	X	331.24492	303.87139	39.31171	3.76931	0.0110377	0.27191471	2.3596500	20	9 4.3	20.2
330317 2006 UK_{55}	17.2	X	142.52355	273.31658	224.50014	9.63374	0.1263784	0.26165622	2.4209287	20	7 18.9	21.1
330318 2006 UM_{69}	15.8	X	266.63153	275.62717	79.93073	10.68227	0.1371202	0.19171509	2.9787348	20	5 28.1	20.1
330319 2006 UJ_{87}	17.0	X	51.48918	40.95920	231.04295	5.43269	0.0955906	0.27414891	2.3468124	20	9 29.2	19.8
330320 2006 UX_{90}	17.7	X	63.15828	53.67928	272.11911	1.68497	0.1980442	0.29042407	2.2582966	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330321 2006 UV_{97}	17.9	X	159.04510	257.07253	185.35964	5.32425	0.1457537	0.25625416	2.4548339	20	5 27.8	21.7
330322 2006 UB_{102}	17.3	X	63.02577	252.42085	162.03215	4.76161	0.1914600	0.23233302	2.6205679	20	—	—
330323 2006 UB_{108}	17.2	X	85.00430	236.30883	70.84461	7.76728	0.1950838	0.29144005	2.2530452	20	—	—
330324 2006 US_{120}	17.9	X	301.32199	195.95226	99.09380	2.50036	0.1845770	0.26282365	2.4137544	20	4 13.5	20.6
330325 2006 UP_{121}	17.7	X	133.18686	110.65264	74.52924	2.44697	0.1359980	0.27383425	2.3486098	20	9 15.5	21.2
330326 2006 UK_{163}	17.6	X	80.53330	169.04261	188.33177	6.50573	0.0082062	0.29951285	2.2123767	20	—	—
330327 2006 UZ_{179}	17.0	X	202.42191	309.62151	102.48363	5.82609	0.1248963	0.26010609	2.4305377	20	5 31.8	20.6
330328 2006 UJ_{180}	17.0	X	338.39556	294.73204	82.28869	7.51996	0.2042335	0.28341479	2.2953789	20	11 21.9	18.6
330329 2006 UO_{182}	17.4	X	315.23451	213.81390	159.14410	6.24027	0.2332433	0.27701728	2.3305843	20	9 7.7	18.8
330330 2006 UA_{186}	17.5	X	96.02181	30.87383	292.83765	5.31266	0.2011061	0.30101853	2.2049931	20	—	—
330331 2006 UJ_{186}	17.3	X	17.98551	60.46794	310.93110	4.21560	0.1746828	0.29132692	2.2536284	20	—	—
330332 2006 UZ_{192}	17.0	X	155.03195	17.72062	343.59169	5.96819	0.2533280	0.24338629	2.5406137	20	2 19.8	21.3
330333 2006 UZ_{208}	17.7	X	77.97172	161.17227	164.08907	1.91370	0.1964429	0.29506802	2.2345391	20	—	—
330334 2006 UV_{219}	16.5	X	59.66641	63.11513	212.60193	23.89316	0.2248087	0.28310477	2.2970543	20	11 5.7	19.8
330335 2006 UC_{232}	17.5	X	162.01467	103.01588	256.37927	0.52027	0.1183074	0.24132755	2.5550424	20	2 13.3	21.2
330336 2006 UG_{263}	17.8	X	103.80715	353.65207	145.91335	1.74222	0.1129789	0.25473693	2.4645716	20	6 8.1	21.2
330337 2006 UT_{269}	17.4	X	33.38707	49.32304	264.72618	6.23305	0.0524724	0.27967298	2.3158071	20	10 26.6	20.3
330338 2006 UO_{272}	17.4	X	61.00243	75.65371	53.98845	6.06570	0.1773987	0.24232849	2.5480018	20	4 6.1	20.1
330339 2006 UG_{280}	17.9	X	128.84300	58.46974	55.51912	4.61060	0.1279518	0.25474099	2.4645454	20	6 4.3	21.4
330340 2006 UG_{325}	16.3	X	198.26630	206.83383	232.94285	17.11180	0.1255293	0.18762718	3.0218452	20	6 27.9	21.3
330341 2006 UN_{331}	16.1	X	218.95864	112.92204	307.48191	8.90150	0.1844802	0.26350401	2.4095978	20	6 24.9	19.9
330342 2006 UQ_{331}	17.1	X	178.86573	253.56568	174.53746	12.33709	0.2095420	0.25600928	2.4563990	20	5 29.9	21.5
330343 2006 UE_{360}	17.3	X	60.96145	208.39442	25.79459	10.06526	0.1671133	0.27068221	2.3668073	20	9 6.7	20.4
330344 2006 VJ_{10}	17.4	X	125.95834	267.05186	227.59294	5.84454	0.0892537	0.25869770	2.4393512	20	6 25.2	20.8
330345 2006 VD_{12}	17.2	X	205.79827	335.84067	87.28266	3.24342	0.1878696	0.26035251	2.4290038	20	6 14.9	21.0
330346 2006 VZ_{14}	17.4	X	335.62901	61.48674	2.27414	3.33240	0.0719181	0.21553887	2.7549834	20	12 17.1	20.7
330347 2006 VE_{20}	17.2	X	111.48944	50.09789	239.22383	7.14056	0.2371492	0.29336099	2.2431990	20	—	—
330348 2006 VU_{31}	17.4	X	10.59922	101.05947	267.19442	5.36807	0.1986221	0.28691803	2.2766564	20	—	—
330349 2006 VX_{32}	17.6	X	23.07475	218.17313	261.29046	2.28353	0.1028637	0.30806249	2.1712517	20	—	—
330350 2006 VF_{34}	17.5	X	62.02037	193.63682	201.82565	1.66318	0.2156747	0.22858304	2.6491510	20	—	—
330351 2006 VL_{39}	18.0	X	83.46950	267.99462	278.95204	0.48377	0.1261173	0.26017942	2.4300810	20	7 19.9	21.2
330352 2006 VE_{40}	17.6	X	106.37775	99.78111	217.12650	3.57037	0.2259923	0.29862445	2.2167624	20	—	—
330353 2006 VC_{41}	18.0	X	79.25443	260.58829	61.30585	4.61080	0.2319739	0.29398258	2.2400359	20	—	—
330354 2006 VY_{57}	17.6	X	357.29960	154.61400	209.85378	4.28424	0.1705292	0.28272005	2.2991377	20	12 4.1	19.8
330355 2006 VX_{65}	17.4	X	348.28205	130.44164	232.52086	6.06597	0.1289085	0.27956405	2.3164086	20	11 7.4	19.3
330356 2006 VX_{66}	17.6	X	236.99359	318.33139	82.05688	2.52691	0.1810728	0.26491404	2.4010400	20	6 16.5	21.1
330357 2006 VW_{69}	16.9	X	54.36281	165.90271	76.24054	7.32518	0.0759242	0.26442182	2.4040188	20	8 22.6	19.9
330358 2006 VK_{92}	17.2	X	284.18537	209.57534	193.67583	5.95833	0.0644545	0.27258713	2.3557678	20	9 11.6	19.8
330359 2006 VL_{118}	17.5	X	159.68295	37.92203	50.00203	5.31253	0.0391757	0.25608379	2.4559225	20	5 29.6	20.9
330360 2006 VV_{122}	17.0	X	65.76529	216.03663	271.49402	4.47995	0.1381564	0.24228759	2.5482885	20	3 30.8	20.0
330361 2006 VN_{140}	16.5	X	290.19840	198.65673	69.80399	15.84826	0.0621358	0.24558622	2.5254187	20	3 22.2	20.2
330362 2006 VB_{161}	17.7	X	298.04711	205.15641	193.99428	5.02476	0.1117468	0.28119229	2.3074578	20	9 25.9	19.9
330363 2006 VO_{172}	17.5	X	115.74018	8.40360	134.31584	2.49950	0.1281178	0.25651207	2.4531881	20	6 28.5	21.0
330364 2006 VA_{174}	16.0	X	92.62877	334.69326	133.30441	18.30381	0.0972710	0.23196183	2.6233629	20	4 17.2	19.9
330365 2006 WG_{5}	17.3	X	65.56062	137.91490	111.53022	3.10366	0.0850344	0.27081217	2.3660501	20	9 18.4	20.2
330366 2006 WS_{18}	16.6	X	218.81627	345.45901	101.50046	7.25262	0.0632288	0.26837952	2.3803261	20	8 13.8	19.7
330367 2006 WY_{28}	17.5	X	156.09913	221.37202	232.43834	1.05254	0.1457816	0.25490421	2.4634933	20	6 7.9	21.3
330368 2006 WF_{33}	17.4	X	303.31159	223.89544	104.75859	3.93334	0.2404950	0.26735252	2.3864181	20	5 25.2	19.8
330369 2006 WO_{33}	17.2	X	53.72967	173.94340	78.84933	8.08025	0.0816394	0.26915800	2.3757342	20	9 8.9	20.2
330370 2006 WY_{39}	17.3	X	17.43692	76.03740	204.32445	8.11228	0.2263428	0.26895350	2.3769383	20	9 7.1	19.6
330371 2006 WW_{81}	17.3	X	342.16092	287.97068	77.98435	8.68083	0.1423096	0.27833670	2.3232132	20	11 4.8	19.4
330372 2006 WU_{94}	17.5	X	27.93128	243.69193	96.77196	2.82904	0.1853375	0.28548222	2.2842835	20	12 18.9	20.1
330373 2006 WD_{102}	14.8	X	302.04181	227.33328	110.91993	10.53894	0.2819476	0.12454641	3.9711404	20	5 31.3	20.0
330374 2006 WD_{175}	16.5	X	66.12599	128.65893	81.94100	7.96774	0.1465931	0.25793608	2.4441508	20	8 3.9	19.6
330375 2006 WH_{184}	16.6	X	24.05132	16.53022	98.59589	7.42956	0.2077798	0.22340262	2.6899480	20	1 1.5	19.1
330376 2006 WK_{190}	17.0	X	22.82058	231.96793	175.89161	5.36482	0.2384070	0.22097752	2.7095925	20	—	—
330377 2006 WJ_{194}	16.6	X	15.10695	40.27758	111.77100	5.12823	0.1645206	0.22966104	2.6408547	20	2 6.5	19.1
330378 2006 WJ_{198}	15.9	X	313.08910	279.54563	292.36485	13.56200	0.1181382	0.22746588	2.6578179	20	1 22.0	19.3
330379 2006 XU	17.1	X	250.72150	299.99869	87.66923	10.23060	0.1290460	0.26210961	2.4181361	20	6 21.5	20.1
330380 2006 XJ_{4}	16.6	X	44.84004	233.52688	265.67026	8.43411	0.1513426	0.23840293	2.5758960	20	3 10.2	19.5
330381 2006 XG_{8}	17.1	X	286.52950	290.81937	83.04570	11.05459	0.2335337	0.26748408	2.3856355	20	7 5.1	19.7
330382 2006 XL_{9}	16.9	X	16.25956	287.43339	204.23815	11.04620	0.2484613	0.22906768	2.6454131	20	1 1.1	19.4
330383 2006 XF_{15}	16.8	X	88.79280	29.61982	97.61923	3.60481	0.1562108	0.24395061	2.5366941	20	5 10.1	20.1
330384 2006 XC_{16}	16.7	X	45.65380	198.67678	259.15017	4.55709	0.2630524	0.22976657	2.6400460	20	1 27.3	18.7
330385 2006 XP_{17}	16.4	X	122.30214	26.81069	73.74973	8.43728	0.1319968	0.24428372	2.5343876	20	5 12.3	20.0
330386 2006 XR_{36}	16.9	X	357.03756	105.17964	97.64675	14.40455	0.1254760	0.23703281	2.5858128	20	3 25.0	20.0
330387 2006 XK_{47}	16.7	X	275.17671	315.65891	95.68280	9.29900	0.1563820	0.27124667	2.3635227	20	8 30.4	19.4
330388 2006 XS_{51}	17.2	X	208.41906	265.04416	141.64001	5.46402	0.1154508	0.25751854	2.4467920	20	5 31.8	20.8
330389 2006 XQ_{58}	16.6	X	358.88157	289.09769	305.92134	4.85035	0.1037335	0.24478993	2.5308924	20	5 4.4	19.3
330390 2006 YQ_{1}	15.7	X	288.53110	244.52860	319.29393	16.19966	0.1787190	0.21469731	2.7621779	20	—	—
330391 2006 YL_{4}	16.3	X	2.83324	288.08206	271.93705	6.99743	0.0581597	0.23576774	2.5950544	20	3 22.1	19.5
330392 2006 YP_{6}	15.6	X	330.23367	221.87617	299.13162	14.20870	0.1690307	0.21973574	2.7197913	20	—	—
330393 2006 YJ_{14}	17.2	X	67.57637	1.08810	116.76148	3.79132	0.0761344	0.23408678	2.6074628	20	3 16.6	20.3
330394 2006 YP_{14}	17.7	X	328.13218	279.44975	81.44491	5.58065	0.2453804	0.27525197	2.3405383	20	9 28.5	18.9
330395 2006 YE_{22}	17.7	X	49.78496	203.17849	205.00066	3.70467	0.1453374	0.22668049	2.6639534	20	—	—
330396 2006 YO_{32}	17.1	X	305.41583	303.53472	52.00015	5.08104	0.1156278	0.26185529	2.4197016	20	8 1.5	19.6
330397 2006 YT_{38}	17.4	X	299.12710	293.63749	83.60650	3.86920	0.1978346	0.26558830	2.3969745	20	8 10.6	19.5
330398 2006 YO_{52}	16.8	X	95.94267	90.61095	279.22966	3.98878	0.0597498	0.22045066	2.7139079	20	—	—
330399 2006 YO_{55}	17.0	X	23.63987	6.47676	140.52468	5.87612	0.0855938	0.23120556	2.6290804	20	2 15.9	19.9
330400 2007 AM_{6}	16.7	X	121.50667	70.71935	10.82414	3.07452	0.2181596	0.24038743	2.5616997	20	4 24.2	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330401 2007 AG_{25}	16.9	X	120.94492	187.48031	230.27961	3.17314	0.2451931	0.23784831	2.5798988	20	3 27.2	20.9
330402 2007 BT_{13}	16.2	X	304.35026	263.67733	321.97736	10.64463	0.1163902	0.22691857	2.6620898	20	1 30.7	19.8
330403 2007 BA_{16}	16.9	X	11.20725	23.13619	112.67159	4.91628	0.0210916	0.22537668	2.6742176	20	1 16.7	20.3
330404 2007 BJ_{18}	16.8	X	83.29616	145.14689	329.38134	4.73886	0.1121224	0.23676220	2.5877827	20	4 5.2	20.1
330405 2007 BX_{19}	16.5	X	153.22771	0.16039	30.68112	4.11153	0.2024865	0.23975448	2.5662063	20	3 22.1	20.5
330406 2007 BP_{23}	16.7	X	15.47453	89.31655	114.91108	4.86055	0.0638096	0.23979135	2.5659432	20	4 23.3	19.7
330407 2007 BY_{28}	16.9	X	349.39739	9.98296	196.77126	2.18413	0.0568093	0.23348972	2.6119060	20	3 14.9	20.0
330408 2007 BL_{38}	17.1	X	124.30580	169.31592	228.18858	2.32451	0.2571854	0.23475677	2.6024994	20	3 6.9	21.1
330409 2007 BS_{45}	17.5	X	358.81130	30.48342	127.34913	5.29383	0.1712661	0.22571585	2.6715379	20	1 13.5	20.1
330410 2007 BW_{47}	17.3	X	316.61242	81.32640	103.99061	5.72987	0.0838323	0.22004112	2.7172743	20	—	—
330411 2007 BM_{48}	16.7	X	324.02355	73.92456	107.81153	5.98105	0.0511434	0.22113293	2.7083229	20	1 9.9	20.3
330412 2007 BL_{58}	16.6	X	328.11167	39.38106	133.52891	10.93204	0.2005057	0.21934610	2.7230112	20	—	—
330413 2007 BP_{58}	16.4	X	36.26304	354.89787	155.29016	8.27818	0.1389257	0.23023958	2.6364289	20	3 16.7	19.1
330414 2007 BQ_{63}	17.1	X	354.56471	337.66957	235.08365	2.33240	0.0851168	0.23615060	2.5922488	20	3 28.3	20.1
330415 2007 CT_{7}	17.1	X	55.29915	356.69491	121.79572	3.70771	0.0788280	0.23271557	2.6176953	20	2 27.8	20.2
330416 2007 CX_{13}	17.0	X	337.40310	93.52714	151.34586	12.23765	0.0775104	0.23788165	2.5796577	20	4 20.7	20.2
330417 2007 CE_{15}	16.3	X	269.66359	164.24648	70.44495	17.99026	0.2090878	0.21519198	2.7579433	20	—	—
330418 2007 CD_{18}	17.3	X	330.11769	49.39197	109.31770	3.85898	0.1766731	0.21824861	2.7321323	20	—	—
330419 2007 CX_{25}	16.7	X	59.30948	69.65318	61.53072	6.38829	0.1346451	0.23479562	2.6022123	20	3 31.5	19.7
330420 Tomroman	16.9	X	316.89957	66.01006	111.45807	6.83432	0.1002085	0.21983348	2.7189851	20	—	—
330421 2007 CQ_{26}	16.4	X	322.55810	109.86370	64.82837	12.78280	0.1307254	0.21745519	2.7387740	20	—	—
330422 2007 CH_{27}	16.1	X	112.47140	314.15518	94.09488	14.13900	0.1637424	0.23304248	2.6152467	20	3 3.5	20.0
330423 2007 CN_{39}	16.1	X	292.40945	140.62264	142.67248	12.56769	0.1574599	0.23563714	2.5960132	20	3 25.1	19.7
330424 2007 CR_{46}	15.9	X	287.08313	279.06794	313.70534	10.63937	0.2699747	0.21947247	2.7219659	20	1 2.9	20.2
330425 2007 CH_{47}	15.9	X	304.32898	257.42382	317.67007	8.29125	0.1614863	0.22061378	2.7125701	20	1 12.1	19.6
330426 2007 CC_{52}	16.6	X	147.88462	345.14967	107.31933	8.85197	0.1321077	0.24518812	2.5281515	20	5 29.6	20.5
330427 2007 CL_{56}	16.4	X	356.41937	20.05350	164.13276	10.42737	0.0437040	0.22929124	2.6436933	20	2 25.4	19.7
330428 2007 CM_{61}	16.6	X	3.09451	23.84967	122.36867	12.89270	0.1340105	0.22334789	2.6903873	20	1 10.0	19.7
330429 2007 CJ_{62}	16.8	X	354.94006	277.35769	247.14806	2.46179	0.1255023	0.22475478	2.6791483	20	1 21.2	20.0
330430 2007 DW_{6}	16.7	X	321.54696	300.25420	201.28893	3.89846	0.0151530	0.20951142	2.8075721	20	—	—
330431 2007 DH_{10}	17.0	X	91.60062	288.91007	153.90778	5.79756	0.0313007	0.22553562	2.6729610	20	2 25.9	20.5
330432 2007 DN_{12}	17.0	X	51.58360	4.25847	129.05223	12.86360	0.1595753	0.23103229	2.6303947	20	3 27.0	20.0
330433 2007 DY_{12}	16.0	X	99.73493	40.29738	351.09192	13.23249	0.0647834	0.21547458	2.7555313	20	1 11.5	19.9
330434 2007 DS_{13}	17.0	X	355.63638	27.95061	181.23877	3.56343	0.1134453	0.23641034	2.5903497	20	3 24.1	19.6
330435 2007 DF_{34}	17.1	X	356.52859	153.28674	354.83587	3.09966	0.1220673	0.21925251	2.7237861	20	1 4.5	20.2
330436 2007 DR_{34}	15.9	X	319.48321	44.90209	161.20450	15.35704	0.1093157	0.22090327	2.7101996	20	1 24.9	19.6
330437 2007 DT_{39}	15.9	X	70.81048	326.44935	287.29193	11.25141	0.0982682	0.18860208	3.0114228	20	9 13.3	20.4
330438 2007 DH_{48}	16.2	X	82.39484	348.19194	319.37856	1.78213	0.0616796	0.19473325	2.9478766	20	12 4.2	20.5
330439 2007 DR_{55}	16.8	X	214.69129	263.35721	65.48113	3.20020	0.0674212	0.22645702	2.6657057	20	3 3.4	20.6
330440 Davinadon	16.3	X	283.94949	160.27323	56.92932	3.00784	0.2724250	0.21437251	2.7649672	20	—	—
330441 2007 DH_{76}	17.1	X	284.02218	55.12426	140.56291	5.15513	0.1365983	0.21033631	2.8002269	20	—	—
330442 2007 DC_{87}	17.0	X	273.23201	193.07440	16.66859	3.64952	0.0349166	0.21518146	2.7580331	20	—	—
330443 2007 DF_{92}	17.2	X	335.20318	158.68079	347.90202	4.38480	0.1004866	0.21607774	2.7504011	20	—	—
330444 2007 DP_{96}	16.6	X	84.01863	289.15078	170.76875	21.88679	0.0410917	0.22714114	2.6603505	20	3 9.9	20.1
330445 2007 DQ_{105}	16.9	X	325.22651	13.31299	181.69068	6.66862	0.0228886	0.22120863	2.7077050	20	1 30.5	20.7
330446 2007 DW_{106}	16.9	X	89.30163	243.73846	176.51942	5.23778	0.0413272	0.21977549	2.7194634	20	1 26.0	20.5
330447 2007 DF_{109}	15.4	X	211.78346	183.16652	30.66079	18.36724	0.1972905	0.20174697	2.8791527	20	12 15.9	20.2
330448 2007 DN_{109}	16.8	X	236.59737	286.52213	327.42845	2.81058	0.0485067	0.21571703	2.7534663	20	—	—
330449 2007 EH_{5}	16.6	X	353.52374	108.37103	108.89271	11.01770	0.1108684	0.23491063	2.6013629	20	4 7.6	19.7
330450 2007 EZ_{5}	16.7	X	39.77070	111.70763	343.28051	4.66598	0.0844228	0.21978978	2.7193454	20	1 5.7	19.9
330451 2007 EP_{7}	17.2	X	133.14479	199.89446	179.16530	3.44405	0.0858336	0.22129353	2.7070124	20	2 4.4	21.0
330452 2007 EN_{12}	16.0	X	108.41388	265.88502	169.61004	22.02888	0.0577251	0.23008616	2.6376007	20	3 12.9	19.3
330453 2007 EC_{17}	16.9	X	62.56731	325.66465	125.19848	4.21313	0.0579403	0.21912467	2.7248454	20	2 1.1	20.1
330454 2007 EX_{19}	16.2	X	262.74127	160.55710	165.19698	12.90143	0.1417569	0.23700360	2.5860252	20	4 15.4	20.0
330455 Anbrysse	16.4	X	276.75541	190.11874	132.68870	5.96659	0.0549067	0.24053641	2.5606418	20	5 10.5	19.9
330456 2007 EK_{38}	15.6	X	177.97202	318.67755	160.00328	28.00097	0.2953270	0.17879580	3.1205502	20	7 25.4	21.6
330457 2007 EN_{42}	16.2	X	271.96345	220.99615	5.97548	7.74859	0.1254220	0.21254750	2.7807720	20	—	—
330458 2007 ES_{117}	16.9	X	200.96809	136.43309	176.45382	9.07292	0.1581190	0.21030624	2.8004937	20	1 28.5	21.6
330459 2007 EL_{128}	17.1	X	256.75855	127.48490	174.26566	6.68561	0.1099935	0.22717760	2.6600658	20	3 10.2	21.1
330460 2007 EV_{139}	15.5	X	164.39883	136.83948	9.44209	10.30397	0.1289956	0.17936271	3.1139713	20	8 21.7	20.5
330461 2007 EA_{146}	16.6	X	325.98164	197.91762	131.52823	3.83827	0.1175038	0.24714559	2.5147846	20	7 26.9	19.2
330462 2007 EK_{148}	16.9	X	281.60860	163.07171	112.66978	4.08025	0.0397791	0.22697067	2.6616823	20	3 17.9	20.5
330463 2007 EQ_{153}	16.9	X	330.95386	39.28143	141.84529	7.74316	0.0469834	0.21860330	2.7291762	20	1 18.7	20.5
330464 2007 EJ_{159}	16.8	X	215.57172	174.39331	148.07843	7.62121	0.0736691	0.22859884	2.6490289	20	2 23.7	20.6
330465 2007 EC_{160}	17.0	X	306.70121	30.25378	181.97063	3.58444	0.0205385	0.21934655	2.7230076	20	1 29.8	20.8
330466 2007 EV_{171}	16.6	X	8.71046	320.29323	184.21790	13.58899	0.1356019	0.22078819	2.7111413	20	1 15.7	19.9
330467 2007 EL_{183}	17.0	X	247.38302	184.59937	118.25782	3.61870	0.1367882	0.22592172	2.6699147	20	2 29.8	21.2
330468 2007 EH_{195}	16.7	X	91.81474	250.60001	170.90925	5.16111	0.1014502	0.22155982	2.7048429	20	2 8.4	20.2
330469 2007 EO_{195}	17.1	X	61.43762	255.34459	172.46356	6.44319	0.0105412	0.21435019	2.7651592	20	—	—
330470 2007 EJ_{199}	15.7	X	279.29570	109.47343	74.39603	25.61126	0.1178953	0.21037634	2.7998716	20	—	—
330471 2007 ER_{199}	16.4	X	292.13707	198.59575	37.75574	3.07946	0.1445438	0.21988461	2.7185636	20	1 26.4	20.2
330472 2007 EX_{199}	16.3	X	324.14501	199.51160	355.90137	8.71165	0.0269446	0.22102823	2.7091781	20	2 2.4	19.9
330473 2007 ET_{204}	17.5	X	109.51896	43.58620	19.71288	2.60200	0.0800113	0.22551765	2.6731030	20	3 2.9	20.9
330474 2007 EZ_{218}	16.7	X	141.06876	176.87314	186.13095	6.03055	0.0356886	0.21586474	2.7522101	20	1 18.9	20.6
330475 2007 EL_{219}	17.2	X	192.12588	112.56249	184.10927	4.21453	0.0444824	0.21214231	2.7843117	20	—	—
330476 2007 FH_{6}	17.1	X	164.30533	162.55357	171.90642	6.60101	0.0411678	0.21684739	2.7438892	20	1 12.0	21.0
330477 2007 FZ_{6}	17.4	X	267.64955	93.42238	356.18488	0.36978	0.1646486	0.19066399	2.9896724	20	9 23.4	21.4
330478 2007 FU_{30}	17.0	X	19.12832	259.35567	192.25951	3.85405	0.0728254	0.20887000	2.8133170	20	—	—
330479 2007 FL_{49}	15.4	X	190.06897	188.90456	94.95446	16.45243	0.1155049	0.20340807	2.8634566	20	—	—
330480 2007 GE_{9}	16.4	X	154.85441	323.91100	18.33614	4.25082	0.1094603	0.20960662	2.8067219	20	1 20.5	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330481 2007 GU_{17}	16.4	X	143.70843	50.80965	228.65216	9.79530	0.0260425	0.19308582	2.9646207	20	—	—
330482 2007 GX_{20}	16.1	X	161.55282	194.44916	44.24211	12.83015	0.0425192	0.18744215	3.0238335	20	12 4.6	20.7
330483 2007 GY_{24}	16.2	X	223.68054	308.32274	346.69246	7.15019	0.2026643	0.21272179	2.7792529	20	1 29.1	21.0
330484 2007 GX_{39}	16.0	X	124.38778	288.34217	46.58189	8.83857	0.1432127	0.19739126	2.9213534	20	—	—
330485 2007 GB_{44}	16.7	X	225.32421	71.69086	202.90161	5.39381	0.0270527	0.21076894	2.7963937	20	1 9.4	20.8
330486 2007 GV_{44}	16.5	X	93.58604	103.55404	202.61536	9.09263	0.0788026	0.18565171	3.0432438	20	12 14.9	21.2
330487 2007 GB_{45}	16.7	X	141.86578	131.16072	175.08614	3.29138	0.0327106	0.19671659	2.9280291	20	—	—
330488 2007 GC_{55}	15.8	X	31.44959	314.51375	148.30675	7.58311	0.1250213	0.21230791	2.7828637	20	1 3.7	18.9
330489 2007 GS_{63}	16.6	X	311.54976	56.74098	34.34418	6.18151	0.0141869	0.18868455	3.0105453	20	12 10.1	20.7
330490 2007 GZ_{72}	15.3	X	30.97934	77.72835	194.57416	20.24459	0.0386901	0.17041365	3.2220564	20	8 6.7	20.1
330491 2007 GL_{75}	16.1	X	92.16617	276.35780	66.05819	10.92041	0.0862464	0.19151482	2.9808111	20	—	—
330492 2007 HM_{1}	16.4	X	1.94679	40.33029	200.50719	11.73735	0.1409719	0.23159136	2.6261598	20	5 22.8	19.1
330493 2007 HJ_{14}	16.9	X	249.83129	275.11274	219.42410	6.10161	0.1726890	0.18859397	3.0115092	20	10 25.4	21.2
330494 2007 HO_{16}	16.6	X	227.44900	156.00062	175.32243	13.10657	0.0132287	0.22949678	2.6421146	20	3 23.1	20.0
330495 2007 HO_{24}	16.8	X	190.39718	94.42005	180.26224	4.64372	0.1152339	0.19824455	2.9129647	20	—	—
330496 2007 HL_{56}	15.9	X	77.41698	276.90626	61.28114	10.45377	0.0948757	0.18833975	3.0142185	20	—	—
330497 2007 JS_{3}	16.8	X	215.05978	150.81864	97.28878	10.07273	0.2254816	0.19782382	2.9170933	20	—	—
330498 2007 KY_{1}	15.7	X	279.72154	107.10703	259.29392	10.61904	0.2949182	0.23092202	2.6312320	20	6 3.8	19.3
330499 2007 LT_{7}	16.2	X	102.99464	181.85609	155.50173	14.12660	0.1045375	0.18905013	3.0066628	20	—	—
330500 2007 LX_{9}	16.6	X	112.59094	193.63586	145.33326	12.43418	0.2880916	0.18739548	3.0243356	20	—	—
330501 2007 LE_{13}	16.5	X	193.83867	72.98917	154.90825	11.98315	0.0830076	0.19071658	2.9891227	20	12 26.2	21.2
330502 2007 LK_{13}	16.0	X	143.66093	205.92453	118.82686	14.77909	0.2120420	0.19509817	2.9441996	20	—	—
330503 2007 LH_{17}	16.0	X	127.26897	290.88392	59.56778	6.20787	0.1422957	0.19804042	2.9149660	20	1 5.8	20.2
330504 2007 LL_{17}	16.3	X	171.91532	173.03699	60.36640	10.39526	0.0914385	0.18650330	3.0339729	20	12 7.9	20.9
330505 2007 LT_{17}	15.9	X	59.33692	176.03180	176.24540	17.46434	0.2187432	0.17970065	3.1100661	20	—	—
330506 2007 LX_{18}	15.7	X	175.27743	15.62423	252.44702	12.62274	0.2175535	0.19046276	2.9917778	20	—	—
330507 2007 LE_{26}	15.7	X	140.21136	25.26792	246.57712	8.02150	0.0884151	0.17755824	3.1350333	20	12 20.3	20.5
330508 2007 LV_{28}	15.5	X	121.95646	359.29869	281.09783	13.94437	0.2779671	0.17645625	3.1480722	20	12 19.2	21.1
330509 2007 MX_{1}	16.7	X	177.91448	155.80601	151.42539	13.52887	0.1576540	0.20039252	2.8921116	20	1 4.7	21.5
330510 2007 MR_{7}	15.8	X	144.01377	220.72045	73.83964	7.80762	0.0771766	0.19105062	2.9856376	20	—	—
330511 2007 NJ_{3}	16.1	X	135.22471	126.34972	149.71933	17.63763	0.2329052	0.17784345	3.1316807	20	12 23.6	21.8
330512 2007 NO_{4}	15.2	X	131.12601	67.09711	225.14350	14.26563	0.2403164	0.17657418	3.1466703	20	—	—
330513 2007 RX_{16}	15.4	X	171.76835	63.64466	276.31880	8.94143	0.1142581	0.18883439	3.0089524	20	2 3.0	20.1
330514 2007 RB_{84}	14.7	X	205.14680	259.50276	128.57392	3.99691	0.2784170	0.12476342	3.9665341	20	5 2.4	21.4
330515 2007 RQ_{275}	17.3	X	221.00341	261.04109	118.82434	24.49939	0.0697407	0.36340365	1.9448071	20	5 20.6	20.2
330516 2007 RZ_{302}	14.8	X	211.46768	285.48712	100.03498	4.07813	0.2435118	0.12523637	3.9565416	20	5 4.8	21.3
330517 2007 RC_{311}	15.6	X	67.57296	266.43588	85.36769	13.00533	0.2680916	0.17206099	3.2014577	20	—	—
330518 2007 SH_{5}	17.1	X	316.94878	299.44865	48.99603	6.70228	0.2018908	0.29828058	2.2184658	20	8 10.0	18.6
330519 2007 TC_{49}	18.3	X	344.69945	0.71642	351.52198	2.55636	0.1194749	0.30298304	2.1954515	20	10 19.8	20.0
330520 2007 TV_{84}	15.9	X	134.77213	75.95652	254.34318	14.36843	0.2250682	0.17777695	3.1324615	20	—	—
330521 2007 TC_{109}	18.1	X	15.73643	67.57056	280.04005	2.63058	0.1638813	0.31076423	2.1586490	20	12 15.7	20.5
330522 2007 TO_{127}	15.3	X	226.34541	209.41640	164.98109	3.15545	0.2210719	0.12426089	3.9772212	20	5 4.3	21.6
330523 2007 TJ_{156}	14.5	X	196.76073	158.08443	244.10015	7.94433	0.2099757	0.12289124	4.0067180	20	5 12.0	20.9
330524 2007 TL_{216}	17.5	X	193.71272	194.60537	240.35925	2.06260	0.1386121	0.28203725	2.3028469	20	6 21.3	20.7
330525 2007 TH_{234}	17.2	X	227.29969	91.15236	45.72903	22.51730	0.2227054	0.29846479	2.2175528	20	10 20.3	20.2
330526 2007 TL_{245}	14.7	X	242.05264	278.65176	87.33159	4.06178	0.2871117	0.12690757	3.9217301	20	5 2.7	21.0
330527 2007 TT_{306}	17.1	X	285.64827	175.84151	191.44162	4.13865	0.0933241	0.21593079	2.7516488	20	7 13.9	20.7
330528 2007 UC_{47}	14.4	X	214.52028	307.35323	64.21827	9.97858	0.1825795	0.12366110	3.9900711	20	4 25.2	20.7
330529 2007 VA_{18}	17.5	X	205.40196	246.38025	64.67482	3.10002	0.1881771	0.26531604	2.3986141	20	1 27.1	21.4
330530 2007 VW_{226}	17.1	X	290.31357	350.11845	108.72008	6.36925	0.1577747	0.29935905	2.2131344	20	12 17.3	18.5
330531 2007 VD_{273}	18.0	X	270.84372	190.40827	187.25431	2.61801	0.1924869	0.28951175	2.2630384	20	6 24.9	20.7
330532 2007 WW_{14}	18.3	X	23.13752	138.73265	205.68301	2.24979	0.2011250	0.30727444	2.1749624	20	12 25.9	21.0
330533 2007 XZ_{15}	17.6	X	236.13756	57.19097	57.56408	7.84630	0.1474692	0.29458127	2.2369999	20	10 8.1	20.3
330534 2007 XR_{32}	17.9	X	122.15835	51.24429	86.81836	5.34574	0.1697086	0.26556647	2.3971059	20	7 3.8	21.4
330535 2007 YL_{42}	17.5	X	201.31504	186.31028	310.63685	1.68722	0.1542456	0.28684206	2.2770583	20	9 19.9	20.6
330536 2007 YM_{62}	17.9	X	116.98964	161.17176	132.61823	2.45840	0.0651465	0.30355337	2.1927006	20	—	—
330537 2007 YB_{65}	18.0	X	244.43886	169.04086	276.66531	3.31483	0.1062703	0.28645073	2.2791317	20	9 7.7	20.9
330538 2007 YK_{68}	17.7	X	172.68742	206.78665	57.44419	3.53912	0.1524381	0.30885731	2.1675250	20	—	—
330539 2007 YL_{72}	17.3	X	248.41908	144.32570	351.76945	5.25288	0.0256157	0.29534917	2.2331208	20	12 10.7	19.9
330540 2008 AC_{3}	16.1	X	317.90635	14.95609	124.78484	13.49560	0.1155821	0.23073015	2.6326906	20	—	—
330541 2008 AK_{9}	17.9	X	25.05245	201.50517	179.28022	1.91028	0.0951839	0.30439049	2.1886786	20	—	—
330542 2008 AH_{16}	17.8	X	173.89118	0.89311	170.91454	3.15410	0.1756354	0.28596590	2.2817071	20	10 7.7	21.4
330543 2008 AR_{55}	17.5	X	142.87567	270.89918	276.29725	3.76117	0.1496876	0.28278435	2.2987891	20	9 25.6	21.1
330544 2008 AZ_{63}	18.3	X	188.45096	355.67982	135.67256	4.44932	0.0993957	0.28174756	2.3044251	20	9 3.9	21.4
330545 2008 AH_{65}	17.9	X	117.96575	242.28568	200.46560	2.14135	0.1464136	0.25761465	2.4461834	20	4 13.5	21.1
330546 2008 AC_{70}	17.0	X	283.52390	209.38780	247.70719	6.63240	0.1086817	0.29919474	2.2139446	20	12 3.4	18.9
330547 2008 AK_{72}	17.6	X	290.94846	346.93223	85.09220	6.53074	0.0668740	0.29465616	2.2366208	20	11 12.3	19.8
330548 2008 AC_{89}	18.0	X	238.10912	199.43876	281.37755	2.17629	0.1038771	0.29260163	2.2470784	20	10 21.4	20.5
330549 2008 AY_{95}	17.6	X	115.29134	263.20193	78.72118	4.95925	0.1342435	0.31460259	2.1410551	20	—	—
330550 2008 AW_{99}	18.0	X	184.99937	354.26034	165.40818	5.96679	0.1190837	0.28562350	2.2835302	20	10 7.7	21.3
330551 2008 AF_{105}	17.8	X	231.07748	186.61678	318.00540	4.45737	0.0890637	0.29583468	2.2306768	20	11 16.9	20.5
330552 2008 BV_{9}	17.6	X	179.35120	62.62892	67.21123	3.40965	0.1770695	0.27845595	2.3225499	20	8 19.4	21.2
330553 2008 BN_{15}	18.2	X	262.40499	260.81343	188.26618	1.09155	0.0968605	0.29083179	2.2561855	20	10 14.5	20.6
330554 2008 BN_{17}	15.9	X	206.37178	212.20885	324.05476	8.08553	0.2073461	0.21305037	2.7763946	20	10 27.3	20.6
330555 2008 BA_{19}	17.7	X	247.67829	315.35689	132.20365	5.55695	0.1385780	0.28721965	2.2750622	20	9 13.6	20.3
330556 2008 BX_{25}	17.2	X	334.12710	323.39042	77.95580	5.27328	0.0609258	0.29601918	2.2297499	20	12 7.7	19.2
330557 2008 BE_{30}	17.5	X	316.93939	276.56423	148.25990	6.90488	0.1783918	0.29921608	2.2138393	20	12 23.7	19.1
330558 2008 BH_{37}	17.9	X	88.10552	191.77678	159.92714	2.91365	0.1467257	0.31153419	2.1550908	20	—	—
330559 2008 BQ_{39}	18.0	X	199.50354	59.60409	82.06828	5.68778	0.1087689	0.28647817	2.2789862	20	10 2.9	21.1
330560 2008 BO_{45}	17.0	X	260.36520	41.43592	90.48382	8.19315	0.0352561	0.29638684	2.2279056	20	12 22.2	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330561 2008 CT_5	16.3	X	333.41935	149.23090	337.22771	32.46033	0.1588665	0.23061468	2.6335693	20	—	—
330562 2008 CG_{14}	17.9	X	85.20970	151.11250	19.23987	2.65910	0.0932375	0.26301579	2.4125788	20	6 23.7	20.9
330563 2008 CB_{17}	18.0	X	108.49133	69.47002	125.83028	1.94211	0.1233380	0.27155500	2.3617332	20	8 31.9	21.2
330564 2008 CN_{21}	16.5	X	139.95723	308.95243	170.11719	23.56852	0.2694208	0.26481235	2.4016546	20	7 1.5	21.1
330565 2008 CC_{25}	17.8	X	191.11175	37.53131	87.58411	3.16424	0.1567898	0.27817315	2.3241237	20	8 25.5	21.3
330566 2008 CR_{35}	17.3	X	82.48190	243.12059	338.46718	5.43068	0.1906459	0.27054316	2.3676183	20	9 13.0	20.7
330567 2008 CP_{40}	17.7	X	83.34672	0.59088	200.29453	4.38261	0.1236269	0.26742173	2.3860063	20	8 6.9	20.9
330568 2008 CR_{42}	17.5	X	319.83977	159.93810	244.39255	3.55202	0.0800123	0.28877121	2.2669057	20	11 16.8	19.8
330569 2008 CU_{46}	17.3	X	330.01394	221.12960	187.28463	5.37093	0.1290406	0.29134685	2.2535256	20	12 16.6	19.4
330570 2008 CR_{47}	17.1	X	326.34555	282.68107	122.28629	7.78473	0.1094433	0.29200859	2.2501198	20	12 4.2	19.2
330571 2008 CC_{48}	17.2	X	101.85367	259.59345	261.99185	5.46168	0.2962665	0.26478974	2.4017914	20	7 25.1	21.1
330572 2008 CZ_{49}	17.5	X	196.37387	358.23599	109.17587	3.80352	0.1905030	0.27829399	2.3234509	20	8 4.2	21.1
330573 2008 CN_{65}	15.5	X	198.61911	268.23933	338.27862	23.35485	0.2616661	0.21837134	2.7311085	20	—	—
330574 2008 CZ_{68}	18.2	X	206.32177	94.67669	49.10850	5.93647	0.1099998	0.28861340	2.2677320	20	10 12.8	21.1
330575 2008 CW_{73}	17.9	X	148.96705	6.90688	125.03016	2.79844	0.1618189	0.27205938	2.3588134	20	7 22.2	21.4
330576 2008 CC_{76}	17.0	X	67.65669	123.65561	111.32752	5.36676	0.1923491	0.26679894	2.3897180	20	9 17.3	20.3
330577 2008 CQ_{83}	17.4	X	116.71901	98.88555	127.20083	2.88216	0.1544147	0.27960794	2.3161662	20	10 23.6	20.9
330578 2008 CS_{88}	17.3	X	94.45280	139.69460	75.82490	4.19081	0.1371906	0.27205417	2.3588435	20	9 15.6	20.6
330579 2008 CK_{90}	17.8	X	197.18527	330.68774	153.00509	5.42744	0.1031380	0.28311648	2.2969909	20	9 2.8	20.9
330580 2008 CU_{95}	17.7	X	55.30767	151.63056	116.65082	2.44420	0.0210031	0.27546303	2.3393426	20	9 20.8	20.4
330581 2008 CE_{108}	17.8	X	152.98860	236.87097	268.19998	4.35883	0.1662500	0.27469046	2.3437269	20	8 11.2	21.4
330582 2008 CY_{108}	17.2	X	65.88324	90.28990	184.98586	5.50115	0.1669033	0.27605396	2.3360030	20	11 4.4	20.5
330583 2008 CZ_{120}	16.9	X	148.98989	40.22671	97.07474	7.02959	0.0490882	0.26812595	2.3818267	20	7 26.2	20.1
330584 2008 CP_{123}	17.9	X	192.52019	299.00890	193.30183	1.34453	0.1026952	0.28107019	2.3081260	20	9 8.3	20.9
330585 2008 CQ_{129}	17.1	X	275.91848	146.42393	161.11707	7.60202	0.1387430	0.25539754	2.4603199	20	4 5.1	20.4
330586 2008 CH_{135}	17.3	X	145.62983	65.78676	152.07476	6.13827	0.0696656	0.28803874	2.2707471	20	11 13.5	20.4
330587 2008 CU_{144}	17.4	X	95.91242	295.28929	300.24932	4.55632	0.1961394	0.27595564	2.3365578	20	10 14.2	21.1
330588 2008 CW_{154}	17.4	X	56.19668	219.69145	114.81758	6.48915	0.1350605	0.29111270	2.2547338	20	—	—
330589 2008 CB_{155}	17.5	X	202.78625	26.17096	67.26065	3.90490	0.1402451	0.27376883	2.3489839	20	7 26.5	21.0
330590 2008 CT_{156}	17.5	X	209.85040	10.70132	124.19448	4.07948	0.1158797	0.28348452	2.2950024	20	10 3.6	20.5
330591 2008 CA_{158}	17.4	X	335.14944	163.65099	255.63823	3.25318	0.1100928	0.29791014	2.2203044	20	—	—
330592 2008 CJ_{162}	17.3	X	197.58083	238.78000	257.27741	4.89510	0.0987337	0.28385070	2.2930282	20	9 17.6	20.6
330593 2008 CU_{188}	16.1	X	265.71617	234.29953	335.22010	30.75036	0.2584324	0.22936282	2.6431433	20	—	—
330594 2008 CB_{196}	18.1	X	145.39382	4.75241	167.50132	4.77330	0.1304007	0.27746238	2.3280911	20	9 9.8	21.4
330595 2008 CU_{209}	17.1	X	254.41675	348.14687	96.67364	11.56733	0.1308688	0.28468065	2.2885694	20	9 25.6	20.0
330596 2008 DU_2	17.9	X	229.81272	321.66569	130.45164	5.00926	0.1188180	0.28315356	2.2967904	20	8 28.6	20.9
330597 2008 DO_6	18.1	X	163.54021	18.79306	141.06132	2.92981	0.1351806	0.28088318	2.3091504	20	9 13.1	21.5
330598 2008 DZ_9	17.6	X	12.03728	27.48128	305.98415	2.50003	0.0425918	0.28694029	2.2765387	20	10 23.7	20.2
330599 2008 DY_{15}	17.1	X	99.35065	115.35447	117.12140	7.18533	0.2051584	0.27575481	2.3376921	20	10 19.9	20.9
330600 2008 DR_{17}	17.2	X	123.07600	55.51987	154.48519	6.22813	0.0563370	0.27784434	2.3259570	20	10 5.1	20.3
330601 2008 DG_{19}	17.5	X	89.77721	50.67859	153.54607	5.38508	0.1511412	0.27084838	2.3658392	20	8 24.9	20.7
330602 2008 DL_{32}	17.6	X	251.01982	319.91473	146.92988	5.76338	0.1363056	0.28740013	2.2741097	20	10 17.6	20.2
330603 2008 DS_{32}	17.3	X	61.70139	193.18569	41.86506	3.26365	0.1329118	0.26734333	2.3864728	20	8 30.9	20.2
330604 2008 DJ_{33}	17.8	X	173.38001	93.22992	56.88856	5.13857	0.1165482	0.27973761	2.3154504	20	9 13.1	21.2
330605 2008 DA_{37}	16.9	X	139.87196	58.79989	116.06136	10.57305	0.0652777	0.27536937	2.3398731	20	9 9.5	20.2
330606 2008 DF_{48}	17.1	X	68.93564	197.87369	43.90986	1.95210	0.1494638	0.26911972	2.3759595	20	9 20.7	20.1
330607 2008 DC_{54}	17.7	X	110.28505	143.74182	23.05512	3.41869	0.1854368	0.26752977	2.3853639	20	8 1.6	21.2
330608 2008 DV_{65}	17.4	X	328.59551	184.39757	122.50326	6.58689	0.1336961	0.26001060	2.4311328	20	6 26.3	19.8
330609 2008 DP_{67}	17.1	X	140.30938	4.07478	257.76141	3.94202	0.1093800	0.28891670	2.2661446	20	12 31.2	20.3
330610 2008 DD_{70}	17.2	X	168.42350	83.20813	89.51048	8.50752	0.0693151	0.28343113	2.2952907	20	10 12.7	20.4
330611 2008 DU_{78}	18.0	X	172.13226	26.40161	86.87430	2.18310	0.1392378	0.26998388	2.3708869	20	7 20.4	21.4
330612 2008 DJ_{79}	17.2	X	171.66846	63.73148	87.93835	4.92940	0.0885980	0.27754759	2.3276146	20	9 14.2	20.5
330613 2008 DT_{80}	17.6	X	74.06230	130.30407	95.42813	3.07156	0.1512935	0.26619895	2.3933074	20	9 5.6	20.8
330614 2008 DK_{81}	17.9	X	54.03660	85.85745	179.07148	1.38274	0.1609589	0.26866187	2.3786581	20	10 4.3	20.9
330615 2008 DO_{82}	18.4	X	139.35527	0.56151	124.59457	3.26147	0.1517506	0.26368314	2.4085064	20	7 2.7	21.9
330616 2008 DN_{85}	17.6	X	52.52324	101.82033	113.59351	2.06659	0.1368833	0.25981340	2.4323628	20	7 18.0	20.4
330617 2008 DQ_{88}	17.1	X	266.72672	259.69883	171.77983	5.12186	0.1334124	0.28271898	2.2991435	20	9 17.5	19.7
330618 2008 ET_4	17.3	X	236.34150	33.37859	57.47527	7.09971	0.0959982	0.27901897	2.3194244	20	9 10.6	20.3
330619 2008 EW_7	16.9	X	151.59125	31.13457	117.94016	3.21462	0.1321073	0.27112735	2.3642161	20	8 16.5	20.5
330620 2008 EC_{10}	17.3	X	249.24494	324.89788	130.54419	6.92504	0.1759567	0.28498950	2.2869156	20	9 21.6	20.0
330621 2008 EB_{19}	17.7	X	91.49969	339.48846	204.93546	1.27205	0.1299056	0.26552010	2.3973850	20	7 27.1	20.9
330622 2008 EP_{26}	17.4	X	14.12441	48.31844	202.67214	4.46975	0.1313260	0.25731223	2.4480997	20	7 1.1	19.7
330623 2008 EX_{33}	17.8	X	65.90864	100.47628	162.85624	4.77428	0.2186315	0.27321317	2.3521678	20	10 25.9	21.2
330624 2008 EF_{34}	17.8	X	144.57267	274.51019	242.43002	3.71443	0.1738288	0.27318450	2.3523323	20	8 18.6	21.7
330625 2008 EJ_{39}	16.3	X	43.09712	236.83221	110.77026	5.44333	0.0796917	0.20934493	2.8090605	20	12 13.0	20.1
330626 2008 EW_{54}	17.1	X	77.93580	229.99397	29.02853	6.13557	0.2166087	0.27007295	2.3703655	20	10 29.7	20.6
330627 2008 ED_{74}	16.9	X	84.07840	187.09588	49.24867	4.77582	0.1663064	0.27003625	2.3705803	20	10 4.0	20.3
330628 2008 EW_{77}	17.4	X	32.33525	135.80692	168.36750	6.69172	0.1695871	0.27200407	2.3591331	20	11 1.9	20.2
330629 2008 EJ_{78}	17.6	X	48.61191	127.79466	122.55128	3.07071	0.1659744	0.26361402	2.4089274	20	9 7.5	20.5
330630 2008 EK_{78}	17.8	X	91.17706	55.74725	124.15152	3.15439	0.1638685	0.26152590	2.4217329	20	7 25.1	21.1
330631 2008 ES_{82}	17.1	X	153.26370	249.79777	253.83575	5.64014	0.1367951	0.27189872	2.3597424	20	8 8.3	20.8
330632 2008 EV_{83}	17.6	X	134.32579	168.91563	354.51027	2.29336	0.1403838	0.27017128	2.3697904	20	8 17.9	21.2
330633 2008 EK_{122}	15.7	X	164.47490	94.20330	4.22086	9.79376	0.0423399	0.17960165	3.1112089	20	6 17.8	20.4
330634 Boico	17.6	X	169.09437	240.22222	210.91039	4.44817	0.0714956	0.26128128	2.4232442	20	6 16.4	21.0
330635 2008 EG_{136}	17.8	X	103.63441	185.53694	40.01587	6.46472	0.0618890	0.27336146	2.3513171	20	10 2.4	20.9
330636 2008 EW_{147}	17.2	X	38.24406	135.12471	171.86355	6.76772	0.1235907	0.27538098	2.3398073	20	11 7.2	20.1
330637 2008 EM_{152}	17.8	X	197.53435	272.08394	182.26855	6.04352	0.0930926	0.26705502	2.3881901	20	7 22.5	21.2
330638 2008 EX_{164}	17.3	X	43.92203	35.66901	202.08242	8.85141	0.2241417	0.26289742	2.4133029	20	8 18.6	20.3
330639 2008 FY	17.6	X	49.93286	23.11600	185.26800	8.05333	0.0691073	0.26076583	2.4264365	20	6 22.1	20.6
330640 2008 FX_2	17.9	X	154.88913	354.45590	130.39897	0.29583	0.1465467	0.26867838	2.3785607	20	7 18.1	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330641 2008 FP_{25}	17.9	X	83.35276	74.68905	75.91666	3.04026	0.1613806	0.25365414	2.4715804	20	6 3.8	21.0
330642 2008 FQ_{28}	16.9	X	118.79032	313.06789	207.00442	0.66878	0.1110377	0.18726404	3.0257506	20	7 19.7	21.6
330643 2008 FJ_{37}	16.8	X	137.56281	168.06016	158.37413	5.48218	0.1146407	0.21927653	2.7235872	20	—	—
330644 2008 FB_{39}	17.1	X	282.97890	309.40214	60.25918	6.28752	0.0280409	0.26359937	2.4090167	20	7 29.9	20.1
330645 2008 FF_{40}	17.3	X	71.13210	116.47877	100.77356	2.38426	0.1256094	0.26229975	2.4169675	20	8 15.9	20.4
330646 2008 FL_{40}	17.4	X	16.33613	210.46173	46.78475	5.70312	0.1573830	0.25656117	2.4528751	20	7 20.8	19.7
330647 2008 FU_{52}	17.1	X	15.88676	215.03016	120.79163	2.36000	0.2134003	0.27354685	2.3502546	20	11 27.9	19.5
330648 2008 FB_{56}	16.9	X	22.97753	91.25978	194.50192	2.96474	0.1169565	0.26484729	2.4014434	20	9 8.5	19.3
330649 2008 FX_{60}	17.1	X	344.04895	186.06260	44.74544	11.61352	0.1971648	0.24224238	2.5486056	20	3 29.4	19.6
330650 2008 FG_{78}	18.1	X	135.10406	279.85230	200.06095	4.55659	0.1586337	0.26096541	2.4251992	20	6 21.7	21.8
330651 2008 FA_{85}	18.2	X	142.06302	344.55837	144.38734	2.91969	0.1639914	0.26577387	2.3958587	20	7 11.0	21.8
330652 2008 FB_{89}	17.2	X	351.81335	275.56409	57.29042	1.99576	0.2006522	0.26944603	2.3740408	20	10 5.7	19.0
330653 2008 FV_{109}	17.9	X	114.80159	119.89994	49.52054	4.77431	0.0691407	0.26446741	2.4037425	20	7 29.9	21.2
330654 2008 FA_{113}	18.3	X	342.68010	130.55375	154.75473	4.62012	0.2127984	0.25307814	2.4753292	20	6 15.5	20.2
330655 2008 FH_{113}	17.2	X	331.79408	265.77545	41.44222	7.37459	0.1185447	0.25743755	2.4473051	20	7 5.2	19.7
330656 2008 FW_{125}	17.6	X	55.32599	188.34663	14.50948	1.30488	0.1344863	0.25467017	2.4650023	20	7 3.3	20.3
330657 2008 FL_{128}	17.6	X	154.57939	292.49201	168.04466	4.48059	0.1311697	0.25838012	2.4413497	20	6 14.9	21.3
330658 2008 FG_{132}	17.6	X	202.05832	88.68781	18.15103	2.53972	0.1907095	0.27530350	2.3402463	20	8 9.2	21.1
330659 2008 GG_{2}	22.9	X	26.10223	0.55506	198.69585	13.01571	0.2776228	0.49294195	1.5871045	20	5 2.6	20.8
330660 2008 GS_{60}	16.5	X	220.95145	239.75784	41.55250	16.39376	0.2703902	0.22254875	2.6968240	20	1 8.9	21.6
330661 2008 GW_{70}	17.0	X	12.58734	336.21362	331.80301	3.54701	0.2372797	0.26945957	2.3739614	20	10 13.9	19.2
330662 2008 GC_{73}	17.0	X	216.86184	120.07230	175.86320	4.07217	0.1991740	0.22846400	2.6500711	20	1 20.9	21.6
330663 2008 GS_{73}	17.6	X	302.41752	294.94320	92.18471	7.31452	0.1202759	0.27343737	2.3508818	20	9 18.2	20.0
330664 2008 GC_{83}	16.8	X	13.84515	144.58332	166.51006	6.43554	0.1101017	0.26770398	2.3843289	20	10 2.3	19.2
330665 2008 GR_{87}	16.6	X	174.65949	213.54665	41.19712	7.88452	0.0884720	0.21238897	2.7821556	20	—	—
330666 2008 GQ_{90}	17.7	X	66.27140	313.00784	169.79519	3.31423	0.1181430	0.24363675	2.5388723	20	3 24.9	20.4
330667 2008 GL_{95}	16.9	X	355.91576	294.92042	39.44011	6.69744	0.1976060	0.27003252	2.3706021	20	10 17.5	18.9
330668 2008 GZ_{98}	17.3	X	97.10487	321.92932	201.68979	8.22057	0.1262837	0.25862002	2.4398397	20	7 3.6	20.8
330669 2008 GE_{101}	17.6	X	298.91705	248.56038	44.80670	7.28974	0.2083272	0.24247609	2.5469677	20	4 6.4	20.8
330670 2008 GP_{122}	17.6	X	72.02593	111.33876	84.98121	2.62568	0.1258214	0.25796518	2.4439669	20	7 17.7	20.7
330671 2008 GV_{130}	17.1	X	273.58831	159.12556	139.78663	7.17934	0.2545373	0.23454499	2.6040657	20	3 9.9	21.2
330672 2008 GE_{132}	16.8	X	248.15742	322.33164	92.25620	8.27405	0.0988510	0.26380272	2.4077785	20	8 1.2	19.9
330673 2008 GM_{137}	17.0	X	163.79520	305.19341	83.69569	6.40251	0.0573059	0.23840273	2.5758974	20	3 22.8	20.7
330674 2008 GN_{143}	17.1	X	69.47058	106.53783	59.66090	11.92904	0.1858699	0.25321718	2.4744229	20	6 9.2	20.2
330675 2008 HK_{4}	16.6	X	347.01786	350.12546	224.14016	12.12715	0.1846392	0.24044491	2.5612914	20	3 1.5	19.6
330676 2008 HV_{5}	18.0	X	95.09862	30.57791	155.38465	2.80907	0.1352693	0.26222139	2.4174489	20	8 3.1	21.3
330677 2008 HX_{5}	17.3	X	12.89749	165.86521	94.53537	2.47984	0.1557513	0.25630581	2.4545040	20	7 16.9	19.5
330678 2008 HY_{17}	17.2	X	303.47820	51.17772	134.64507	8.49336	0.1626679	0.22598953	2.6693806	20	—	—
330679 2008 HF_{23}	17.2	X	158.64700	181.12904	100.05816	1.89289	0.0339173	0.21525779	2.7573811	20	—	—
330680 2008 HV_{25}	17.1	X	116.58602	17.50676	117.80035	7.40912	0.0513279	0.25114327	2.4880266	20	6 10.9	20.4
330681 2008 HF_{37}	16.5	X	333.25336	5.40772	235.66619	6.16883	0.1017655	0.24129994	2.5552373	20	3 29.5	19.6
330682 2008 HG_{38}	16.5	X	315.50275	1.77105	229.62674	16.72605	0.2288022	0.23390460	2.6088165	20	1 27.4	20.4
330683 2008 HE_{39}	17.7	X	33.78741	25.87316	231.17813	1.65156	0.1699008	0.26178649	2.4201256	20	8 23.2	20.2
330684 2008 HJ_{46}	17.4	X	76.02028	73.84822	126.76487	3.23454	0.1388834	0.25711122	2.4493755	20	7 30.9	20.4
330685 2008 HM_{56}	17.9	X	17.60578	159.09454	114.70357	2.39604	0.1641194	0.25986629	2.4320327	20	8 19.3	20.0
330686 2008 HF_{61}	16.9	X	53.59740	338.20783	177.20408	12.75892	0.0895173	0.24271138	2.5453214	20	4 17.7	19.9
330687 2008 HD_{67}	16.8	X	24.20140	354.98461	182.17567	12.44823	0.2033515	0.24139844	2.5545422	20	4 3.2	18.7
330688 2008 HR_{69}	16.3	X	9.37881	218.51553	103.14269	3.05359	0.1647860	0.17924587	3.1153244	20	9 28.6	19.8
330689 2008 JP_{1}	18.3	X	22.83575	260.78346	356.52572	1.91660	0.1835728	0.25838354	2.4413281	20	8 6.5	20.6
330690 2008 JX_{2}	16.9	X	354.54006	134.68749	140.88204	6.00368	0.2085916	0.25447950	2.4662335	20	6 30.8	18.6
330691 2008 JT_{11}	16.6	X	256.07107	187.73446	74.75392	6.91106	0.0199983	0.22770455	2.6559603	20	1 31.6	20.3
330692 2008 JG_{23}	17.3	X	358.21936	169.50613	67.99605	7.61823	0.1066756	0.24587378	2.5234493	20	5 10.3	20.0
330693 2008 JL_{28}	16.6	X	59.67655	331.63270	206.29306	11.23929	0.0438100	0.24613824	2.5216414	20	5 21.2	19.8
330694 2008 JP_{28}	17.3	X	73.49778	161.51559	187.59783	5.67447	0.1508517	0.28418281	2.2912414	20	—	—
330695 2008 KF_{2}	16.8	X	353.67553	87.20845	74.36568	27.09672	0.2791544	0.23296939	2.6157936	20	—	—
330696 2008 KC_{9}	17.0	X	74.20519	34.48654	99.67103	3.04087	0.1383362	0.24325957	2.5414960	20	4 26.3	20.0
330697 2008 KZ_{11}	16.1	X	284.56281	216.88552	137.75605	13.82857	0.3091522	0.24438653	2.5336767	20	5 26.7	19.8
330698 2008 KT_{12}	16.5	X	219.07915	110.05232	223.10205	11.04366	0.1907588	0.23161886	2.6259519	20	3 3.0	21.0
330699 2008 KU_{13}	16.2	X	346.46203	104.09009	108.29294	15.98624	0.1042690	0.23807516	2.5782597	20	3 21.4	19.5
330700 2008 KZ_{17}	17.3	X	48.44696	10.03802	160.82055	4.35127	0.1539216	0.24531314	2.5272925	20	5 9.4	20.0
330701 2008 KA_{30}	16.3	X	25.05428	66.82584	132.67972	14.97492	0.0795537	0.24331529	2.5411079	20	5 6.9	19.6
330702 2008 LW_{4}	16.1	X	266.68039	327.01270	263.90402	4.09797	0.0143535	0.21284849	2.7781498	20	1 6.2	19.9
330703 2008 LR_{10}	16.6	X	13.00892	129.64079	89.79712	5.77275	0.1002131	0.24467616	2.5316769	20	5 11.1	19.2
330704 2008 LX_{13}	16.2	X	243.89813	200.83138	106.94985	10.52376	0.2471213	0.22355895	2.6886938	20	2 27.3	20.9
330705 2008 LR_{15}	17.1	X	260.88374	212.90965	105.88996	3.95143	0.0973000	0.23853786	2.5749246	20	4 8.6	20.7
330706 2008 MY	16.4	X	288.72261	223.72020	79.08446	18.88249	0.2465257	0.23420143	2.6066118	20	4 9.7	20.5
330707 2008 NC_{5}	16.3	X	257.37846	201.56461	74.37300	11.16194	0.2317520	0.22095307	2.7097924	20	2 1.6	20.9
330708 2008 OS	16.2	X	238.63104	186.22961	127.48743	15.30996	0.2503280	0.22313627	2.6920881	20	2 29.5	20.9
330709 2008 OV_{7}	16.2	X	185.99501	207.13767	140.47427	12.97075	0.0754638	0.21823322	2.7322607	20	2 25.0	20.2
330710 2008 OD_{11}	16.6	X	301.68553	28.54710	246.26131	3.74704	0.2598695	0.23115716	2.6294474	20	3 5.6	20.2
330711 2008 OM_{14}	16.3	X	210.53119	4.84659	293.49859	7.45259	0.0802184	0.21348778	2.7726010	20	1 21.2	20.6
330712 2008 PR_{1}	16.6	X	154.51866	124.91471	172.94162	10.76681	0.0748571	0.19656523	2.9295321	20	—	—
330713 2008 PC_{8}	16.2	X	240.43479	6.59795	267.27603	7.52815	0.1723888	0.21475123	2.7617155	20	1 16.7	20.7
330714 2008 PB_{10}	15.9	X	134.02259	183.74982	168.43471	15.58557	0.1435736	0.20352384	2.8623706	20	1 12.8	20.4
330715 2008 PO_{14}	16.6	X	187.34209	172.48986	153.26031	5.62726	0.1072532	0.20955804	2.8071557	20	1 31.4	21.1
330716 2008 PS_{20}	15.7	X	112.65130	260.29162	127.57247	15.55503	0.1620489	0.20392314	2.8586328	20	2 5.2	19.7
330717 2008 PZ_{20}	16.1	X	229.07614	262.83013	49.71213	14.04823	0.2454115	0.21761421	2.7374396	20	2 25.8	21.1
330718 2008 QT_{4}	16.4	X	191.75021	157.28449	169.52529	12.37657	0.1072659	0.21278250	2.7787242	20	2 4.4	20.8
330719 2008 QH_{6}	15.5	X	223.20873	329.16340	197.83980	15.55468	0.0489640	0.18002122	3.1063728	20	11 19.3	20.1
330720 2008 QR_{23}	16.3	X	86.20878	60.93738	292.94238	6.16278	0.1161310	0.18657944	3.0331475	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330721 2008 QZ_{25}	16.2	X	43.82332	211.40666	150.99091	8.15906	0.2079942	0.18329495	3.0692744	20	—	—
330722 2008 QT_{34}	16.3	X	228.12721	153.42972	170.43426	16.61883	0.1963430	0.21933084	2.7231376	20	3 3.6	20.8
330723 2008 QX_{43}	15.5	X	118.79482	271.27096	66.91014	11.39912	0.1473226	0.19524891	2.9426841	20	—	—
330724 2008 QZ_{46}	16.9	X	87.60075	353.87575	327.53629	4.73443	0.2083667	0.18441115	3.0568767	20	—	—
330725 2008 RM_{22}	15.8	X	19.87858	262.15711	136.96138	9.70173	0.1517727	0.18262551	3.0767704	20	—	—
330726 2008 RE_{47}	16.5	X	100.89051	135.57044	176.84030	4.30205	0.1670058	0.18233241	3.0800668	20	—	—
330727 2008 RO_{74}	16.7	X	71.95596	276.56121	68.29323	1.47531	0.1616050	0.18411888	3.0601108	20	—	—
330728 2008 RA_{91}	15.8	X	255.34805	312.35841	159.64450	19.50434	0.1362320	0.17195300	3.2027980	20	10 10.7	20.5
330729 2008 RP_{95}	16.1	X	136.52047	133.23841	170.91334	10.28552	0.1239559	0.19278770	2.9676761	20	—	—
330730 2008 RK_{103}	15.7	X	27.03593	166.79294	207.64809	12.71282	0.1225252	0.17705592	3.1409600	20	12 22.2	20.1
330731 2008 RV_{112}	16.3	X	123.61176	77.68433	216.37006	8.70116	0.0444670	0.18167261	3.0875198	20	12 28.5	20.9
330732 2008 RH_{119}	16.0	X	164.98897	33.34389	204.98101	11.09589	0.0452871	0.17747473	3.1360168	20	12 7.9	20.7
330733 2008 RA_{137}	15.7	X	43.15848	356.40707	329.05282	4.73193	0.1147610	0.17002216	3.2270005	20	11 10.1	20.2
330734 2008 RE_{140}	17.1	X	295.56461	206.20160	156.83739	9.35412	0.1737099	0.23840425	2.5758865	20	7 11.9	20.1
330735 2008 SB_{16}	16.5	X	156.16953	46.11358	232.63445	4.30123	0.1156216	0.18727632	3.0256183	20	—	—
330736 2008 SQ_{21}	16.5	X	120.15434	156.16001	155.83580	9.83457	0.0180885	0.18962507	3.0005823	20	—	—
330737 2008 SS_{25}	16.5	X	88.67291	153.53416	171.33397	11.16129	0.1024055	0.18196010	3.0842668	20	—	—
330738 2008 SS_{29}	16.5	X	80.99252	106.03997	219.75903	3.79871	0.1210876	0.17910969	3.1169033	20	12 27.1	21.1
330739 2008 SX_{30}	15.4	X	323.79411	170.96918	234.01570	10.08977	0.0832296	0.16769561	3.2567788	20	10 22.9	19.6
330740 2008 SN_{31}	15.6	X	351.24676	182.49102	217.21302	12.76414	0.1019739	0.17243078	3.1968789	20	11 30.1	19.7
330741 2008 ST_{34}	16.5	X	100.90757	98.20996	197.54665	4.74216	0.1224862	0.17681770	3.1437805	20	12 12.1	21.4
330742 2008 SH_{65}	15.5	X	89.16455	87.18155	216.58894	9.87652	0.0510276	0.17097872	3.2149533	20	12 1.8	20.2
330743 2008 SV_{86}	16.0	X	180.12805	331.15428	236.03854	7.90736	0.0222525	0.17323488	3.1869787	20	11 17.9	20.4
330744 2008 SZ_{91}	16.2	X	191.65498	197.19773	199.02038	11.53407	0.1505676	0.21771556	2.7365900	20	5 1.2	20.6
330745 2008 SW_{113}	16.0	X	74.93073	277.66970	41.85812	9.92626	0.0723777	0.17499639	3.1655560	20	12 6.1	20.7
330746 2008 SC_{114}	16.1	X	100.01707	129.95432	175.10057	11.37012	0.0670342	0.17724550	3.1387199	20	12 17.9	20.9
330747 2008 SX_{121}	16.1	X	129.73009	72.05493	209.68185	11.77020	0.0914238	0.17740743	3.1368098	20	12 21.2	21.1
330748 2008 SE_{124}	16.2	X	112.46316	94.87668	214.75309	8.80474	0.0870592	0.18000261	3.1065870	20	—	—
330749 2008 SO_{131}	15.4	X	329.12984	87.95428	18.29849	9.60868	0.0662267	0.17794579	3.1304798	20	—	—
330750 2008 SD_{135}	16.0	X	80.10669	105.76402	226.63152	9.63177	0.1140038	0.17949892	3.1123958	20	—	—
330751 2008 SV_{145}	15.0	X	159.71048	325.61992	245.42694	9.69789	0.0827907	0.17077804	3.2174714	20	10 27.4	20.1
330752 2008 SO_{147}	16.3	X	109.49449	43.46683	240.62352	7.93227	0.0470682	0.17620548	3.1510583	20	12 1.4	20.9
330753 2008 ST_{148}	15.7	X	353.78676	199.61113	184.43171	18.62961	0.2384076	0.16993009	3.2281659	20	11 27.4	19.5
330754 2008 SO_{149}	15.4	X	136.96626	71.04729	247.18938	10.01787	0.0560642	0.19307987	2.9646816	20	—	—
330755 2008 SA_{171}	15.9	X	289.97974	223.60993	200.34274	10.75040	0.0255177	0.16750234	3.2592835	20	10 5.7	20.5
330756 2008 SO_{178}	15.7	X	53.32668	174.64206	166.23283	11.78401	0.0821220	0.17924293	3.1153585	20	12 11.3	20.3
330757 2008 SE_{199}	15.7	X	272.15549	281.36168	245.48425	9.10931	0.0390710	0.19167802	2.9791190	20	—	—
330758 2008 SR_{199}	16.7	X	225.78766	121.83034	219.58737	6.87876	0.1125307	0.21426873	2.7658599	20	3 26.1	21.0
330759 2008 SO_{218}	12.8	X	162.59061	354.53413	348.46391	170.33459	0.5632124	0.04260213	8.1192358	20	3 22.0	23.7
330760 2008 SQ_{253}	16.2	X	292.69272	187.48135	135.34669	15.23844	0.2480967	0.22906499	2.6454338	20	5 6.1	20.0
330761 2008 SR_{256}	15.5	X	149.96148	253.04594	10.89730	16.64661	0.2813172	0.18310284	3.0714208	20	12 18.8	21.3
330762 2008 SZ_{256}	15.5	X	85.20485	221.40148	149.49016	11.44674	0.0972676	0.18913520	3.0057612	20	—	—
330763 2008 SW_{259}	16.4	X	224.09239	126.60979	247.93637	5.24363	0.0375436	0.22056034	2.7130082	20	5 11.9	20.0
330764 2008 SR_{264}	15.6	X	339.46000	302.99387	47.98944	10.37377	0.0468475	0.15489213	3.4338645	20	9 13.3	20.3
330765 2008 SD_{269}	15.9	X	266.28944	220.89581	70.90766	19.07575	0.3331496	0.21816189	2.7328562	20	2 25.2	21.0
330766 2008 SL_{272}	16.9	X	264.21925	54.76140	235.82148	3.58876	0.0805900	0.20919796	2.8103760	20	3 8.2	21.0
330767 2008 ST_{273}	16.6	X	155.67879	102.74035	176.15920	1.10312	0.1146038	0.18826248	3.0150432	20	—	—
330768 2008 SE_{274}	16.3	X	149.24775	141.30232	174.84514	6.40289	0.1282502	0.19429006	2.9523578	20	—	—
330769 2008 SE_{296}	16.2	X	149.47089	270.39925	71.88026	16.02051	0.2544163	0.20019065	2.8940555	20	1 30.5	21.3
330770 2008 SU_{300}	16.1	X	62.99226	285.43377	71.80530	6.24971	0.1522853	0.18244513	3.0787980	20	—	—
330771 2008 SJ_{301}	15.6	X	13.06875	3.88147	49.41994	12.31909	0.1390151	0.17944455	3.1130245	20	—	—
330772 2008 TW_{1}	15.9	X	91.61605	190.89678	114.94428	6.90424	0.1482771	0.17705005	3.1410295	20	12 17.1	20.8
330773 2008 TR_{3}	15.6	X	25.34123	141.69955	226.18111	4.32410	0.1285131	0.17378789	3.1802142	20	12 12.9	19.8
330774 2008 TA_{6}	16.5	X	221.86396	171.72747	201.87145	12.58376	0.1653204	0.22040526	2.7142806	20	4 30.5	20.9
330775 2008 TL_{6}	15.5	X	52.32006	291.57365	38.26503	26.66901	0.2363493	0.17194305	3.2029216	20	12 8.6	20.5
330776 2008 TH_{31}	16.4	X	96.05592	248.61789	63.53394	1.97772	0.1497325	0.17821941	3.1272748	20	12 28.4	21.2
330777 2008 TB_{37}	15.5	X	25.84614	304.38853	51.98932	16.57269	0.2596272	0.17228739	3.1986524	20	12 16.2	19.8
330778 2008 TH_{44}	16.5	X	102.42969	268.26583	22.45630	1.63797	0.1873880	0.17268421	3.1937503	20	12 11.1	21.7
330779 2008 TV_{48}	16.7	X	55.22610	161.53383	207.46131	1.48578	0.1015989	0.18589940	3.0405401	20	—	—
330780 2008 TZ_{54}	15.3	X	107.37829	260.96480	207.11889	12.25419	0.2021721	0.12473050	3.9672321	20	5 15.5	21.3
330781 2008 TW_{61}	15.6	X	60.00600	314.81619	20.64039	10.02027	0.1051888	0.17403127	3.1772485	20	12 12.1	20.3
330782 2008 TE_{101}	16.6	X	198.23674	51.44632	211.83287	5.01048	0.1852789	0.19238330	2.9718335	20	—	—
330783 2008 TZ_{105}	16.2	X	117.32596	91.69471	175.38748	8.45224	0.0484025	0.17279553	3.1923786	20	11 20.9	21.0
330784 2008 TH_{122}	16.2	X	75.83918	116.48517	228.78047	8.59826	0.1467986	0.18105587	3.0945272	20	—	—
330785 2008 TE_{162}	14.8	X	51.29271	259.97302	104.88882	27.86300	0.1582925	0.17609744	3.1523471	20	—	—
330786 2008 TO_{177}	15.6	X	37.57614	295.25957	83.73025	13.85607	0.1461727	0.17770537	3.1333027	20	—	—
330787 2008 UX_{43}	16.8	X	127.74630	92.71841	227.33805	0.96196	0.1956896	0.18891890	3.0080551	20	—	—
330788 2008 UK_{75}	14.9	X	156.18034	132.02298	296.36413	3.69707	0.1481539	0.12343504	3.9949413	20	5 7.6	21.2
330789 2008 UN_{117}	15.5	X	84.41386	122.25566	235.58111	16.20095	0.2475191	0.18393078	3.0621969	20	—	—
330790 2008 UV_{130}	16.2	X	67.79881	82.92637	240.79975	3.89780	0.1428180	0.17117727	3.2124668	20	12 12.2	20.9
330791 2008 UQ_{136}	15.5	X	71.27453	278.05875	45.30915	6.34528	0.1482651	0.17176800	3.2050972	20	12 15.6	20.4
330792 2008 UO_{160}	15.9	X	123.37992	267.66561	56.53667	13.49282	0.2613687	0.18293479	3.0733016	20	—	—
330793 2008 UR_{174}	15.9	X	113.90001	59.27465	250.41624	12.27533	0.1607997	0.18302898	3.0722471	20	—	—
330794 2008 UW_{180}	15.6	X	214.77866	5.02032	248.70402	9.89948	0.0911833	0.18323207	3.0699765	20	—	—
330795 2008 UQ_{202}	15.2	X	105.41127	78.42494	227.42898	9.54711	0.0664238	0.17731799	3.1378644	20	12 23.4	20.0
330796 2008 UK_{205}	15.0	X	52.80051	290.19351	90.00676	27.33293	0.2337024	0.18020958	3.1042079	20	—	—
330797 2008 UA_{255}	15.4	X	59.71904	253.26611	71.14728	15.13703	0.1271514	0.17245330	3.1966007	20	12 2.5	20.0
330798 2008 UM_{255}	15.0	X	134.57474	211.70957	88.75279	12.11837	0.1229964	0.18417849	3.0594506	20	—	—
330799 2008 UE_{283}	15.9	X	95.45936	169.67119	132.19766	2.28989	0.1411923	0.17345941	3.1842279	20	12 14.7	20.9
330800 2008 UL_{307}	15.5	X	54.91498	291.89075	88.20269	14.25934	0.2302209	0.18133155	3.0913900	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330801 2008 UZ_{312}	15.6	X	104.23569	235.89435	51.76484	18.07500	0.1165403	0.17190729	3.2033657	20	12 2.3	20.6
330802 2008 UV_{313}	15.6	X	29.37118	121.30041	239.85586	11.88565	0.1272506	0.17120026	3.2121792	20	12 9.1	19.8
330803 2008 UF_{331}	15.6	X	150.84893	33.09445	221.99241	16.95546	0.1809353	0.17739495	3.1369569	20	12 10.3	21.0
330804 2008 UU_{334}	16.3	X	119.57501	148.90815	159.81754	2.24418	0.1869552	0.18034927	3.1026048	20	—	—
330805 2008 UV_{344}	16.2	X	166.36338	270.24244	68.53414	9.45805	0.3224024	0.19848873	2.9105752	20	2 11.7	21.6
330806 2008 UW_{345}	15.9	X	295.83409	215.03852	140.00941	19.90414	0.3123129	0.23522464	2.5990472	20	6 11.0	19.5
330807 2008 UD_{361}	15.2	X	17.76952	229.34869	263.86262	15.03319	0.1275407	0.19316164	2.9638448	20	1 21.3	18.9
330808 2008 UU_{370}	16.4	X	11.37790	242.58567	268.32512	7.44229	0.0869057	0.26536710	2.3983064	20	1 23.5	18.9
330809 2008 VK_{14}	19.2	X	40.06842	30.00749	308.17429	6.91001	0.5056237	0.51475717	1.5419411	20	—	—
330810 2008 VO_{21}	16.0	X	115.73583	264.70749	69.12176	9.85534	0.1358396	0.18334805	3.0686817	20	—	—
330811 2008 VK_{27}	15.6	X	133.26844	11.34941	244.11084	5.27017	0.0850600	0.17170604	3.2058682	20	11 23.6	20.5
330812 2008 VX_{34}	15.8	X	39.84324	215.47065	152.44007	5.04556	0.1774891	0.17087809	3.2162154	20	—	—
330813 2008 VZ_{49}	15.4	X	293.92070	342.92023	14.77811	10.20503	0.1002549	0.14707746	3.5544463	20	7 10.6	20.4
330814 2008 VK_{53}	14.9	X	95.59179	254.09419	58.57092	27.17284	0.2152436	0.17858335	3.1230246	20	12 30.8	20.4
330815 2008 VU_{65}	15.3	X	77.93873	251.36150	63.53054	22.63275	0.1107898	0.16914125	3.2381953	20	12 6.7	20.2
330816 2008 VG_{75}	15.6	X	80.67274	259.66053	75.12021	15.32882	0.2479813	0.18045835	3.1013543	20	—	—
330817 2008 WH	15.8	X	67.26919	275.68691	62.98541	12.68538	0.1650437	0.17447277	3.1718863	20	—	—
330818 2008 WN_{15}	15.8	X	75.80431	118.89002	215.99883	10.50642	0.1329103	0.17649862	3.1475684	20	12 31.9	20.7
330819 2008 WA_{22}	16.1	X	169.63323	90.02442	238.60006	15.86685	0.0380976	0.19205669	2.9752017	20	1 11.9	20.7
330820 2008 WH_{62}	15.3	X	90.18845	107.47017	243.77638	20.53845	0.2100751	0.17896734	3.1185558	20	—	—
330821 2008 WS_{76}	15.4	X	53.71966	259.95987	90.52707	6.38171	0.1720892	0.17084385	3.2166452	20	12 31.7	20.0
330822 2008 WA_{91}	15.4	X	145.32792	215.73490	206.29549	10.03648	0.2671354	0.12412289	3.9801684	20	4 29.0	22.0
330823 2008 WM_{97}	15.5	X	33.38039	297.31812	75.88208	19.95856	0.1407632	0.17331384	3.1860106	20	12 30.3	19.9
330824 2008 WZ_{136}	14.9	X	139.68187	52.27932	279.48871	17.04132	0.0786986	0.17909576	3.1170649	20	—	—
330825 2008 XE_{3}	16.3	X	299.58353	44.43848	315.21581	7.47618	0.5506944	0.23412679	2.6071658	20	5 9.0	20.4
330826 2009 BV_{59}	17.9	X	340.34869	326.57533	232.97444	2.42770	0.1075247	0.27268628	2.3551967	20	2 7.4	20.5
330827 2009 DM_{33}	18.0	X	165.75529	285.28145	167.09480	22.00070	0.1289735	0.37386830	1.9083453	20	6 19.0	21.1
330828 2009 EQ_{3}	17.7	X	156.63293	291.33012	170.19932	22.74647	0.1251062	0.37765788	1.8955577	20	6 21.5	20.8
330829 2009 FY	17.4	X	303.74002	158.12587	173.30274	23.03742	0.0612492	0.37465404	1.9056762	20	7 4.1	19.7
330830 2009 FC_{15}	17.7	X	340.84625	249.91355	324.06055	0.91747	0.1334550	0.26846593	2.3798153	20	2 26.8	20.1
330831 2009 FS_{29}	17.8	X	94.61965	117.75908	2.59659	6.11626	0.1718813	0.27624375	2.3349329	20	5 6.6	20.8
330832 2009 FG_{30}	17.6	X	161.37696	233.24320	193.64234	21.61176	0.1201622	0.36449161	1.9409351	20	5 6.9	20.2
330833 2009 FG_{67}	16.4	X	301.41402	75.12576	34.68631	14.93804	0.0654778	0.22996121	2.6385561	20	12 30.7	19.9
330834 2009 HS_{36}	17.0	X	89.28448	259.07111	211.14255	21.29191	0.0990953	0.35482501	1.9760286	20	3 24.5	19.0
330835 2009 HC_{42}	17.1	X	66.94168	55.89925	67.77409	7.34227	0.0652779	0.26217466	2.4177362	20	3 21.7	20.0
330836 Orius	9.9	X	47.83547	141.32713	50.37275	17.86134	0.4188247	0.00983746	21.5715244	20	7 10.7	22.6
330837 2009 MQ_{2}	17.5	X	339.57285	243.13528	117.68347	6.77483	0.2237800	0.27695283	2.3309458	20	10 31.3	19.1
330838 2009 ND	16.0	X	316.44610	113.91569	222.55733	21.19554	0.2674410	0.26172545	2.4205018	20	6 23.8	18.5
330839 2009 OS_{4}	16.6	X	291.11314	86.86927	246.43726	5.85728	0.1148318	0.25860234	2.4399509	20	6 2.8	19.3
330840 2009 OW_{4}	16.0	X	298.59036	100.41603	242.74470	11.13464	0.2835963	0.25836372	2.4414530	20	5 30.5	18.8
330841 2009 OE_{8}	16.8	X	183.22137	166.97019	161.28855	14.91296	0.2638418	0.23075282	2.6325182	20	2 1.9	21.5
330842 2009 OR_{8}	18.1	X	100.68847	110.76902	195.57913	5.18930	0.1969726	0.29733809	2.2231513	20	—	—
330843 2009 OC_{20}	17.4	X	60.39622	68.36472	260.12516	3.55936	0.2580275	0.28892534	2.2660994	20	—	—
330844 2009 OR_{22}	17.8	X	150.71064	176.97526	110.69777	3.60985	0.1812491	0.30703653	2.1760858	20	—	—
330845 2009 PD_{3}	17.0	X	316.74230	85.56427	249.36703	5.62029	0.1385802	0.26564023	2.3966621	20	7 15.8	19.3
330846 2009 PX_{3}	16.9	X	332.58153	45.02043	271.24832	5.01068	0.1165827	0.26483221	2.4015346	20	7 20.4	19.0
330847 2009 PZ_{4}	17.0	X	286.60000	191.91421	169.63772	4.31395	0.1834932	0.26061964	2.4273438	20	6 25.3	19.8
330848 2009 PT_{5}	17.3	X	96.06429	334.47236	332.28240	4.51392	0.2655611	0.29427308	2.2385615	20	—	—
330849 2009 PO_{8}	17.3	X	347.80669	218.52352	137.81505	3.21410	0.2155009	0.27417143	2.3466839	20	11 8.2	19.0
330850 2009 PB_{12}	17.1	X	276.11805	164.75330	194.52636	2.11587	0.2073081	0.25717753	2.4489544	20	6 3.2	20.2
330851 2009 PP_{12}	16.0	X	342.44937	242.46633	149.67584	10.70570	0.1530464	0.18752024	3.0229940	20	11 16.4	19.6
330852 2009 PE_{15}	16.0	X	349.06389	58.16247	282.54498	2.87430	0.2406580	0.17977517	3.1092066	20	9 16.6	19.0
330853 2009 PR_{15}	16.0	X	13.65420	7.11104	177.59446	15.69408	0.0687540	0.23543348	2.5975101	20	3 22.3	18.8
330854 2009 PJ_{19}	17.8	X	94.90308	112.66353	148.83936	6.47316	0.1769098	0.28293598	2.2979677	20	11 18.9	21.4
330855 2009 QH_{1}	17.6	X	351.78430	141.50545	203.91812	7.10773	0.2341677	0.27412068	2.3469735	20	11 1.9	19.2
330856 Ernsthelene	17.2	X	290.26418	168.78248	187.13615	6.24829	0.1594246	0.25992829	2.4316460	20	6 26.7	20.1
330857 2009 QN_{19}	17.2	X	2.57765	190.53635	145.56265	8.33447	0.2247741	0.27404572	2.3474014	20	11 10.8	19.5
330858 2009 QP_{23}	17.0	X	297.21462	297.58434	84.16146	2.87817	0.2405071	0.26545979	2.3977481	20	8 5.5	19.1
330859 2009 QP_{29}	16.6	X	145.73525	182.39015	204.43002	8.40309	0.3175630	0.22605798	2.6688417	20	3 16.7	21.3
330860 2009 QN_{30}	16.3	X	272.89923	136.61098	223.48271	14.98897	0.1002924	0.25604376	2.4561785	20	6 15.9	19.6
330861 2009 QM_{31}	17.4	X	317.77460	211.82660	126.45051	1.29167	0.2363774	0.26269745	2.4145275	20	7 9.9	19.4
330862 2009 QZ_{33}	17.8	X	190.73119	147.70628	128.93373	3.60458	0.0941068	0.31015087	2.1614941	20	—	—
330863 2009 QT_{41}	17.5	X	4.84468	201.50852	125.54420	3.99148	0.1667052	0.27226194	2.3576433	20	10 20.8	19.7
330864 2009 QK_{42}	15.5	X	284.22355	50.55211	350.80264	26.50245	0.0771803	0.17682908	3.1436457	20	8 31.9	19.8
330865 2009 QE_{46}	16.0	X	333.34735	181.11710	161.37233	13.22320	0.2017319	0.17570689	3.1570165	20	8 13.3	19.4
330866 2009 QJ_{47}	18.6	X	60.66863	266.85573	66.97304	4.59525	0.2509345	0.28890364	2.2662129	20	—	—
330867 2009 QB_{48}	17.0	X	339.26154	176.98295	154.64497	8.62053	0.2420472	0.26608019	2.3940195	20	8 31.7	18.0
330868 2009 QO_{51}	17.6	X	286.86045	358.96839	326.56414	2.89077	0.1608672	0.25277511	2.4773071	20	5 7.5	20.8
330869 2009 QR_{51}	17.8	X	0.99641	128.49631	203.99437	1.02397	0.2039970	0.27246368	2.3564794	20	10 25.7	19.8
330870 2009 QT_{61}	17.3	X	285.69094	308.41025	56.40996	2.10073	0.1849893	0.25926582	2.4357864	20	6 28.5	20.2
330871 2009 RF	17.6	X	330.63158	84.29805	225.98970	0.73612	0.1848865	0.26202682	2.4186455	20	6 30.9	19.3
330872 2009 RF_{1}	16.6	X	0.11904	32.76804	279.94367	5.91122	0.1825036	0.26818964	2.3814496	20	9 13.6	18.7
330873 2009 RQ_{1}	17.3	X	334.99562	143.09056	194.14879	1.67766	0.2223388	0.26588584	2.3951860	20	8 27.6	18.8
330874 2009 RV_{9}	17.7	X	327.31099	349.28012	350.20361	1.62775	0.1829114	0.26298737	2.4127526	20	8 12.9	19.4
330875 2009 RY_{9}	16.5	X	255.37375	4.90649	190.25510	10.90130	0.0451174	0.20560045	2.8430643	20	—	—
330876 2009 RR_{17}	16.8	X	184.16256	166.63848	180.59445	9.82215	0.0175441	0.22505827	2.6767393	20	2 16.5	20.6
330877 2009 RF_{22}	17.1	X	223.18956	94.11071	272.31956	4.31698	0.1585818	0.24637414	2.5200315	20	4 19.5	21.2
330878 2009 RL_{26}	17.2	X	9.42512	314.20268	19.51282	7.53652	0.1822213	0.27422681	2.3463679	20	11 7.1	19.5
330879 2009 RX_{28}	17.5	X	355.04631	154.85252	179.66545	5.01941	0.1479530	0.27147841	2.3621775	20	10 8.9	19.4
330880 2009 RV_{30}	17.6	X	59.33197	100.48665	213.79044	4.73069	0.1796258	0.28166387	2.3048816	20	12 18.8	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330881 2009 RL_{33}	16.6	X	197.23177	352.29110	2.64309	3.25873	0.3278523	0.23246451	2.6195796	20	3 15.2	21.4
330882 2009 RJ_{34}	16.6	X	169.37005	312.49082	18.08082	5.91879	0.0692371	0.21615528	2.7497433	20	1 17.8	20.7
330883 2009 RH_{35}	16.4	X	342.87107	43.35144	202.31094	8.45431	0.1177263	0.23919898	2.5701778	20	4 23.0	19.0
330884 2009 RG_{40}	16.6	X	316.29628	256.46467	333.77743	9.80254	0.1019502	0.23106157	2.6301725	20	2 22.0	19.7
330885 2009 RG_{48}	17.0	X	98.46121	220.98756	197.92090	1.54364	0.0839523	0.21949412	2.7217869	20	2 12.1	20.4
330886 2009 RW_{49}	17.1	X	315.06039	240.46064	200.67402	3.43535	0.1186611	0.18636809	3.0354402	20	11 29.6	20.6
330887 2009 RZ_{50}	15.8	X	275.66310	217.36650	20.31748	15.19261	0.0854059	0.21998984	2.7176966	20	1 20.1	20.0
330888 2009 RL_{54}	17.0	X	268.14094	256.16788	48.59589	5.00414	0.0563990	0.23453650	2.6041286	20	4 4.4	20.4
330889 2009 RO_{55}	16.1	X	176.19719	272.27865	54.39139	4.52823	0.0491363	0.21652191	2.7466384	20	1 18.5	20.1
330890 2009 RM_{61}	16.8	X	208.16811	256.36801	131.17619	7.76273	0.2314475	0.24517094	2.5282696	20	5 4.2	21.2
330891 2009 RY_{70}	18.1	X	24.92266	120.10172	160.99259	1.45164	0.1732548	0.26599068	2.3945566	20	9 15.4	20.5
330892 2009 RF_{74}	17.1	X	20.82653	25.11742	44.00613	6.34690	0.0245726	0.20062001	2.8899249	20	—	—
330893 2009 SW_{7}	17.3	X	278.36632	125.65998	236.16957	5.76244	0.1300468	0.25710810	2.4493953	20	6 22.1	20.2
330894 2009 SS_{17}	16.0	X	68.36851	110.33190	297.32503	4.33381	0.0694373	0.21133423	2.7914047	20	—	—
330895 2009 SZ_{18}	17.2	X	12.58795	354.84611	186.50136	4.29913	0.1283934	0.23329360	2.6133696	20	3 14.1	19.7
330896 2009 SX_{22}	17.6	X	114.76210	42.97698	242.75214	3.88849	0.1515432	0.29527009	2.2335195	20	—	—
330897 2009 SV_{30}	17.6	X	236.64724	342.80842	180.05052	8.04016	0.0468422	0.28275354	2.2989561	20	12 24.8	20.5
330898 2009 SA_{34}	16.8	X	173.31299	21.61196	346.80654	5.20026	0.0812498	0.22692245	2.6620594	20	3 6.5	20.7
330899 2009 SX_{38}	17.1	X	247.94091	332.16304	352.32960	2.47267	0.2018682	0.23892165	2.5721663	20	3 20.3	21.3
330900 2009 SS_{43}	17.1	X	262.09474	285.88407	314.77313	3.37535	0.0159846	0.21511714	2.7585829	20	1 12.6	20.7
330901 2009 SH_{53}	16.3	X	59.34614	216.69476	214.50450	8.78650	0.1035815	0.21393110	2.7687693	20	1 5.6	19.7
330902 2009 SR_{56}	17.2	X	314.48985	86.63225	250.34325	5.45360	0.1268316	0.25705351	2.4497420	20	7 15.4	19.7
330903 2009 SG_{66}	17.4	X	158.72809	238.50187	111.32235	3.25332	0.0799610	0.21856571	2.7294891	20	1 29.0	21.4
330904 2009 SR_{66}	17.0	X	122.77290	209.37749	160.54704	3.91191	0.1056017	0.21384445	2.7695171	20	1 16.0	20.8
330905 2009 SE_{67}	16.4	X	29.99998	20.99862	25.20435	3.31572	0.0218478	0.19230128	2.9726785	20	—	—
330906 2009 SX_{73}	17.5	X	340.73792	165.11537	143.57673	4.92632	0.1463132	0.25747347	2.4470775	20	7 23.7	19.6
330907 2009 SP_{74}	16.6	X	54.03835	277.41122	102.06409	4.24684	0.1387567	0.19818850	2.9135138	20	—	—
330908 2009 SX_{74}	16.7	X	97.42015	275.55600	126.95830	4.50100	0.0988458	0.21397265	2.7684108	20	1 24.5	20.2
330909 2009 SC_{75}	17.6	X	230.09800	227.97096	105.02727	3.99167	0.1468023	0.23440625	2.6050931	20	3 20.4	21.7
330910 2009 SD_{77}	16.3	X	224.16191	25.03734	134.09220	5.98178	0.0783434	0.18215977	3.0820126	20	11 8.4	20.8
330911 2009 SG_{88}	16.9	X	164.96337	303.67117	55.43095	7.77050	0.0586725	0.22202061	2.7010991	20	2 17.3	20.9
330912 2009 SQ_{92}	16.1	X	289.44260	50.06796	36.43510	10.08137	0.0692996	0.17757637	3.1348199	20	10 30.4	20.1
330913 2009 SX_{92}	16.2	X	59.86218	236.68814	83.61885	2.23164	0.1810915	0.19114726	2.9846311	20	12 8.4	20.5
330914 2009 SW_{96}	16.1	X	308.71447	254.39338	224.09619	10.76600	0.0431128	0.18810544	3.0167210	20	—	—
330915 2009 SN_{102}	16.1	X	111.34010	336.40805	45.51673	13.00084	0.2844720	0.21276413	2.7788842	20	2 16.7	20.5
330916 2009 SS_{102}	16.7	X	118.48449	295.28997	83.99506	4.30595	0.1014768	0.21554098	2.7549654	20	1 22.8	20.4
330917 2009 SH_{104}	15.4	X	270.02011	309.23925	25.86811	13.92068	0.2125814	0.24048481	2.5610081	20	4 22.5	19.0
330918 2009 SA_{108}	15.3	X	305.90618	227.56037	212.72025	18.31252	0.1687465	0.17966262	3.1105049	20	11 7.8	18.8
330919 2009 SC_{108}	16.2	X	297.74946	227.53176	211.00311	11.31710	0.0798055	0.17819615	3.1275470	20	10 31.5	20.2
330920 2009 SY_{125}	16.2	X	91.53688	253.72731	209.32362	13.29252	0.0233322	0.22947622	2.6422724	20	3 18.6	19.9
330921 2009 SP_{131}	17.6	X	7.64748	143.90701	153.40316	3.38444	0.1761374	0.26285669	2.4135522	20	9 7.4	19.8
330922 2009 SY_{132}	17.2	X	206.03324	280.05019	54.22995	4.34349	0.1039419	0.22840510	2.6505267	20	2 29.7	21.3
330923 2009 SV_{137}	16.6	X	229.60433	220.95916	24.30243	7.69279	0.1090967	0.21011651	2.8021794	20	—	—
330924 2009 SL_{154}	17.1	X	178.02008	143.24183	181.84962	5.63262	0.0316680	0.21897829	2.7260595	20	1 15.2	21.0
330925 2009 SW_{161}	17.5	X	35.39178	13.18843	297.46876	3.40413	0.1561094	0.27791989	2.3255355	20	11 10.9	20.3
330926 2009 SD_{177}	16.5	X	264.29062	41.97390	205.16831	9.35394	0.1328037	0.22469730	2.6796052	20	1 8.1	20.8
330927 2009 SG_{187}	15.8	X	241.34296	97.10967	51.07236	10.02539	0.0646211	0.18436431	3.0573945	20	11 15.2	20.2
330928 2009 SB_{188}	17.1	X	143.64030	257.45939	73.89401	5.94752	0.0519973	0.20951327	2.8075556	20	—	—
330929 2009 SU_{191}	17.5	X	65.58601	303.58642	0.77948	6.67398	0.1414599	0.28676868	2.2774468	20	12 8.9	20.7
330930 2009 SL_{201}	17.0	X	26.85220	355.38112	96.71784	1.63638	0.0381988	0.20935096	2.8090065	20	—	—
330931 2009 SH_{202}	18.0	X	342.37332	280.17743	55.85846	2.70761	0.2179805	0.26610627	2.3938631	20	9 18.5	19.4
330932 2009 SG_{213}	16.7	X	15.35169	260.09581	30.76236	6.61201	0.1498320	0.26214702	2.4179061	20	9 11.3	19.1
330933 2009 SS_{213}	18.0	X	45.72605	101.97373	181.32321	1.22509	0.1823754	0.27011677	2.3701091	20	10 22.2	20.9
330934 Natevanwey	17.1	X	199.36731	132.40267	206.63386	2.20549	0.1297536	0.22615904	2.6680466	20	2 26.2	21.3
330935 2009 SQ_{229}	16.4	X	149.44679	25.45299	336.47377	5.00035	0.0430737	0.22231226	2.6987362	20	1 29.7	20.2
330936 2009 SB_{230}	16.8	X	147.88459	191.79935	190.22283	13.04219	0.1485867	0.22716376	2.6601738	20	2 28.5	21.0
330937 2009 SF_{231}	16.4	X	59.59389	220.42581	193.10187	8.41807	0.1828834	0.20908797	2.8113615	20	—	—
330938 2009 SP_{233}	17.4	X	307.96495	155.86518	199.57243	5.38319	0.1719826	0.26386119	2.4074228	20	7 25.4	19.8
330939 2009 SP_{234}	16.1	X	116.14908	335.24551	93.89793	14.09766	0.0965280	0.22504820	2.6768191	20	3 28.0	20.1
330940 2009 SW_{236}	17.0	X	298.01107	290.92867	90.28644	9.44412	0.2125824	0.26438895	2.4042180	20	8 13.6	19.3
330941 2009 SY_{238}	16.8	X	157.10240	270.03518	149.16358	11.58542	0.1564080	0.23214010	2.6220196	20	4 30.1	21.1
330942 2009 SL_{244}	17.1	X	175.27979	220.31160	130.97973	3.68409	0.0661512	0.22222398	2.6994509	20	2 16.5	21.0
330943 2009 SC_{267}	15.2	X	155.90307	212.65117	23.67193	21.98326	0.0492076	0.18562268	3.0435610	20	11 20.5	20.0
330944 2009 SY_{274}	16.4	X	58.92560	235.84566	63.76903	2.21104	0.1657014	0.18548389	3.0450791	20	11 9.9	20.7
330945 2009 SX_{276}	17.2	X	69.98313	256.72308	30.34936	5.65164	0.2265341	0.28030733	2.3123119	20	11 28.3	20.7
330946 2009 SC_{278}	17.6	X	184.55986	208.47060	158.53532	4.42354	0.1245808	0.23130060	2.6283602	20	3 18.1	21.7
330947 2009 SG_{279}	17.0	X	5.31526	100.56906	164.25148	6.18087	0.1048225	0.25305572	2.4754754	20	7 3.2	19.6
330948 2009 SH_{283}	16.2	X	312.77649	335.76855	83.58751	4.33326	0.2233462	0.18080993	3.0973328	20	10 20.0	19.3
330949 2009 SG_{286}	16.3	X	295.11054	43.67681	73.05927	6.65233	0.1578052	0.18906661	3.0064881	20	12 9.8	19.6
330950 2009 SR_{293}	17.3	X	184.97813	7.03691	18.94845	1.42476	0.1258317	0.23345861	2.6121380	20	4 10.3	21.4
330951 2009 SW_{293}	17.4	X	143.86578	305.99106	68.34013	6.20597	0.0925264	0.22067755	2.7120474	20	2 14.9	21.4
330952 2009 SD_{306}	17.9	X	343.53798	287.33314	24.09666	2.51146	0.2067370	0.26262554	2.4149681	20	8 6.4	19.5
330953 2009 SL_{329}	16.8	X	183.94965	306.72107	53.01077	12.84826	0.1989687	0.22966451	2.6408280	20	3 16.6	21.4
330954 2009 SW_{329}	17.0	X	41.18116	235.06363	74.43775	3.77736	0.2259779	0.27683723	2.3315947	20	11 27.9	19.9
330955 2009 SF_{338}	16.6	X	148.69481	279.98895	97.01055	5.40277	0.1246059	0.22189902	2.7020858	20	2 26.0	20.7
330956 2009 SO_{339}	16.1	X	61.93530	316.64624	66.99975	11.74571	0.0774764	0.19324859	2.9629557	20	—	—
330957 2009 SF_{340}	17.2	X	45.72033	308.74700	107.84455	3.20075	0.0673509	0.20512831	2.8474251	20	—	—
330958 2009 SK_{341}	17.2	X	287.77029	37.74734	240.63523	6.68622	0.1661882	0.23809515	2.5781154	20	3 4.7	20.9
330959 2009 SA_{344}	17.1	X	167.75688	228.09765	150.85564	6.77827	0.1288420	0.22724490	2.6595406	20	3 17.6	21.2
330960 2009 SP_{344}	17.2	X	154.69482	219.68755	144.00282	2.39202	0.0912627	0.22130004	2.7069592	20	2 10.9	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
330961 2009 SR_{344}	17.4	X	93.41593	259.80170	177.94927	5.11792	0.0935138	0.22144250	2.7057982	20	3 1.6	21.0
330962 2009 SV_{345}	16.4	X	354.46570	46.48906	186.57330	5.56046	0.2106517	0.23965072	2.5669469	20	4 19.7	18.5
330963 2009 SX_{345}	17.4	X	260.42870	133.52270	213.01401	14.37681	0.1715754	0.24529197	2.5274379	20	5 3.4	20.9
330964 2009 SF_{346}	17.6	X	178.62364	262.31190	107.33433	3.01899	0.0916154	0.23083599	2.6318858	20	3 15.2	21.5
330965 2009 SL_{347}	15.9	X	49.73193	1.32584	52.54544	10.16000	0.1269987	0.20484657	2.8500354	20	—	—
330966 2009 SB_{349}	17.1	X	173.67055	298.68032	31.10751	2.07028	0.0640190	0.21579909	2.7527682	20	1 20.3	21.2
330967 2009 SK_{349}	16.3	X	4.01813	78.64652	43.70171	6.97081	0.0694187	0.21115888	2.7929499	20	—	—
330968 2009 SX_{353}	16.5	X	263.52692	317.79700	19.87026	0.71574	0.2160184	0.23796244	2.5790738	20	4 19.6	20.5
330969 2009 SM_{357}	16.7	X	149.63194	158.17938	228.62183	4.33548	0.0203128	0.22421969	2.6834090	20	2 24.5	20.4
330970 2009 SP_{357}	16.7	X	201.69754	225.57295	155.53649	13.75890	0.1786937	0.23532433	2.5983132	20	4 23.5	21.2
330971 2009 SB_{358}	16.6	X	180.73385	114.82629	225.66091	2.65958	0.0879396	0.21779964	2.7358857	20	2 9.3	20.8
330972 2009 TC_{1}	17.8	X	336.54994	119.55552	199.69559	0.65826	0.1970168	0.26080331	2.4262040	20	7 30.4	19.3
330973 2009 TH_{1}	16.1	X	309.18869	29.41902	45.85607	14.02295	0.0268382	0.18498892	3.0505085	20	11 16.1	20.3
330974 2009 TR_{1}	17.3	X	315.61196	141.62014	213.37482	12.96244	0.1400436	0.26391030	2.4071241	20	8 10.0	19.9
330975 2009 TL_{6}	15.3	X	315.60598	51.84908	27.11233	18.48304	0.1099408	0.18173444	3.0868194	20	11 21.4	19.3
330976 2009 TY_{10}	16.2	X	249.15428	123.99574	198.42959	10.18061	0.0624465	0.23378202	2.6097284	20	4 1.1	19.7
330977 2009 TY_{11}	15.7	X	296.31071	21.44359	64.45503	13.82825	0.1395914	0.17917264	3.1161732	20	11 4.4	19.6
330978 2009 TR_{13}	16.1	X	195.11178	172.83580	219.50242	13.66455	0.2625873	0.23353657	2.6115567	20	4 26.5	20.7
330979 2009 TV_{15}	15.6	X	273.14455	328.77027	118.83915	8.68978	0.1265443	0.17575277	3.1564671	20	10 5.7	19.9
330980 2009 TD_{21}	16.4	X	114.04753	299.71567	101.38523	6.24740	0.0571168	0.21901981	2.7257150	20	2 7.4	20.1
330981 2009 TQ_{22}	16.2	X	66.17192	217.48991	204.59206	5.75593	0.0610315	0.20938752	2.8086795	20	1 1.8	19.9
330982 2009 TX_{26}	16.1	X	174.61753	287.17530	70.83379	11.67143	0.2156594	0.22597592	2.6694878	20	3 7.1	20.8
330983 2009 TV_{35}	17.4	X	23.72889	55.84924	258.72021	1.34877	0.2220303	0.27281740	2.3544421	20	11 10.4	19.9
330984 2009 TH_{41}	16.2	X	159.63753	356.83913	15.53693	8.83068	0.1206830	0.22348486	2.6892879	20	3 2.9	20.3
330985 2009 TB_{46}	16.2	X	275.57506	193.21359	69.96036	15.12067	0.1516556	0.22114365	2.7082353	20	2 13.5	20.5
330986 2009 TQ_{47}	16.4	X	131.98627	296.89933	97.21158	6.04859	0.1234740	0.22112289	2.7084048	20	2 29.7	20.4
330987 2009 UH_{11}	17.3	X	101.94130	259.96786	134.85160	5.04040	0.0858776	0.21510638	2.7586749	20	1 18.4	21.0
330988 2009 UT_{12}	16.1	X	311.75754	22.44678	33.43165	7.11028	0.0754837	0.18316212	3.0707581	20	10 24.4	20.0
330989 2009 UX_{24}	16.0	X	252.21336	239.57072	229.03489	3.91410	0.1321130	0.17247226	3.1963663	20	9 28.4	20.5
330990 2009 UY_{24}	16.1	X	191.77855	275.42563	39.83266	13.91117	0.1120410	0.21645589	2.7471968	20	1 27.2	20.6
330991 2009 UU_{25}	16.4	X	326.99961	62.76377	208.50489	28.16192	0.1129540	0.24183456	2.5514700	20	5 2.9	19.3
330992 2009 UM_{27}	15.9	X	213.96912	311.19583	53.68036	18.68151	0.1879166	0.23332820	2.6131112	20	4 16.4	20.4
330993 2009 UF_{28}	17.1	X	216.26950	179.24486	185.92724	2.79802	0.1781242	0.23476994	2.6024021	20	4 13.1	21.2
330994 2009 UH_{28}	15.8	X	326.11812	242.57754	33.12608	14.67471	0.1670800	0.24198752	2.5503947	20	4 28.4	18.5
330995 2009 UH_{32}	16.0	X	333.26609	228.80472	225.14222	6.84363	0.0968524	0.18962173	3.0006176	20	—	—
330996 2009 UT_{33}	17.0	X	69.33629	65.61766	55.32533	8.96907	0.0837865	0.22011131	2.7166967	20	3 28.5	20.5
330997 2009 UJ_{35}	17.1	X	232.85826	157.57112	192.45426	1.38904	0.1839578	0.23457161	2.6038687	20	4 8.8	21.3
330998 2009 UC_{37}	17.0	X	265.84287	282.75317	47.28650	3.90804	0.1196078	0.24045302	2.5612338	20	4 24.7	20.4
330999 2009 UJ_{46}	16.1	X	205.85684	293.37960	45.24232	7.33174	0.0884091	0.22373207	2.6873066	20	3 7.8	20.2
331000 2009 UV_{46}	15.6	X	346.73799	37.88175	48.13588	11.06535	0.0947621	0.19051356	2.9912460	20	—	—
331001 2009 US_{57}	16.6	X	331.26560	174.06448	279.19207	1.59822	0.0691066	0.19036911	2.9927588	20	—	—
331002 2009 UN_{69}	17.3	X	235.88102	169.69684	179.54852	4.70927	0.1680917	0.23962711	2.5671155	20	4 12.2	21.2
331003 2009 UA_{70}	16.5	X	145.70103	337.33357	51.17952	15.40788	0.0634639	0.22410148	2.6843526	20	3 8.4	20.6
331004 2009 US_{73}	16.7	X	79.75004	332.66924	43.34018	2.64427	0.0801647	0.20264433	2.8706467	20	—	—
331005 2009 UU_{81}	15.8	X	331.61787	31.48186	32.75649	7.96025	0.0656473	0.18486905	3.0518270	20	12 1.9	19.8
331006 2009 UA_{83}	15.9	X	221.76643	50.28170	224.20940	14.09179	0.1411371	0.21081866	2.7959539	20	1 1.7	20.7
331007 2009 UU_{86}	15.9	X	247.55586	294.92559	35.33865	13.99082	0.1247791	0.23373209	2.6101000	20	4 6.7	19.8
331008 2009 UO_{88}	15.9	X	170.62373	320.26823	66.24531	9.82199	0.1281117	0.22579028	2.6709508	20	4 2.3	20.2
331009 2009 UG_{91}	16.2	X	319.03429	333.98216	89.73812	6.06485	0.1168926	0.18165251	3.0877475	20	11 13.5	19.9
331010 2009 UM_{91}	16.8	X	175.40000	197.16580	162.96674	5.39079	0.1653120	0.22415254	2.6839450	20	3 2.5	20.9
331011 Peccioli	16.4	X	276.38776	107.68048	195.37611	8.44465	0.1145709	0.23623131	2.5916583	20	4 2.3	19.8
331012 2009 UL_{100}	16.0	X	284.59002	35.33822	80.08161	6.32863	0.1109510	0.18174540	3.0866953	20	11 25.4	20.0
331013 2009 UJ_{104}	16.1	X	250.15216	284.26309	200.76559	14.58552	0.0592467	0.17988314	3.1079623	20	10 29.8	20.4
331014 2009 UN_{120}	16.3	X	248.50882	83.76394	33.81525	10.01116	0.0968195	0.17872842	3.1213344	20	10 13.7	20.7
331015 2009 UW_{132}	16.2	X	25.06564	252.13668	169.64204	6.19262	0.0862026	0.19676277	2.9275710	20	—	—
331016 2009 UW_{134}	16.1	X	245.51705	85.58352	50.77098	3.85257	0.0643533	0.17601648	3.1533136	20	11 4.7	20.6
331017 2009 UF_{136}	15.9	X	81.51189	186.12931	224.20229	14.57621	0.1247323	0.20645754	2.8351903	20	1 13.9	19.8
331018 2009 UO_{136}	16.2	X	92.82543	322.20543	80.67380	5.83459	0.0961866	0.21056961	2.7981581	20	1 19.9	19.9
331019 2009 UT_{136}	16.2	X	60.21147	190.60644	207.64101	10.28943	0.1518824	0.19976227	2.8981915	20	—	—
331020 2009 UP_{139}	14.8	X	290.90466	336.85120	96.69752	29.17731	0.1574742	0.17307948	3.1888860	20	10 21.3	19.5
331021 2009 UY_{143}	17.0	X	136.60975	273.22367	102.88554	1.84996	0.0863439	0.21433995	2.7652472	20	2 6.9	20.9
331022 2009 UV_{146}	16.3	X	218.01736	315.19477	229.97736	3.15975	0.1116705	0.18056151	3.1001730	20	11 26.4	21.0
331023 2009 UG_{150}	17.0	X	24.58227	166.25100	151.62687	5.19726	0.1760347	0.27547171	2.3392935	20	11 11.4	19.7
331024 2009 UP_{151}	17.0	X	225.60861	270.50942	97.56893	4.60915	0.1873744	0.23890117	2.5723133	20	4 26.0	21.1
331025 2009 VG_{4}	16.5	X	170.17897	51.03026	269.13711	4.32747	0.1273560	0.21120247	2.7925656	20	1 9.4	20.9
331026 2009 VM_{7}	16.0	X	356.87751	187.16532	237.30519	6.09254	0.1531855	0.18890983	3.0081513	20	—	—
331027 2009 VH_{8}	15.4	X	267.90600	244.87456	233.48421	8.05477	0.0257077	0.17796340	3.1302733	20	11 15.9	19.8
331028 2009 VJ_{8}	16.9	X	243.93593	16.90338	233.42951	7.98048	0.1076803	0.21195233	2.7859752	20	—	—
331029 2009 VC_{28}	16.0	X	71.97873	137.09515	228.85481	9.57562	0.0615011	0.19507504	2.9444323	20	—	—
331030 2009 VD_{28}	15.8	X	61.66779	309.28168	53.96987	11.35654	0.1252574	0.19298100	2.9656940	20	—	—
331031 2009 VN_{37}	15.3	X	208.11404	318.63196	250.02561	7.94431	0.0881071	0.18535499	3.0464908	20	12 16.8	19.9
331032 2009 VM_{40}	16.6	X	261.00994	1.85263	339.41930	3.06802	0.2321897	0.24080482	2.5587387	20	4 18.7	20.6
331033 2009 VR_{41}	15.8	X	278.07109	245.41269	225.80116	16.34700	0.1744990	0.17636129	3.1492021	20	10 30.6	19.8
331034 2009 VV_{47}	16.4	X	67.05204	207.09209	175.69836	3.72121	0.0792660	0.19680703	2.9271321	20	—	—
331035 2009 VF_{48}	16.4	X	296.93628	231.57876	186.07003	4.60226	0.1380512	0.17110277	3.2133992	20	9 25.2	20.5
331036 2009 VX_{49}	16.6	X	159.91804	272.30787	64.17208	7.06006	0.1324381	0.21276431	2.7788826	20	1 20.4	21.0
331037 2009 VM_{50}	15.3	X	17.21388	202.68393	232.13454	10.24053	0.1061455	0.19297941	2.9657104	20	—	—
331038 2009 VN_{50}	16.4	X	256.43344	249.99266	98.75508	5.73397	0.2276928	0.23987479	2.5653481	20	4 27.7	20.4
331039 2009 VG_{53}	17.0	X	253.77982	357.26499	244.64664	3.02308	0.0528596	0.21146101	2.7902889	20	1 1.0	21.1
331040 2009 VC_{56}	16.6	X	198.91251	265.81466	46.51459	5.67009	0.1581037	0.22005457	2.7171636	20	1 28.4	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331041 2009 VE_{60}	16.2	X	148.25019	305.59408	95.41271	10.81197	0.2748622	0.22221544	2.6995201	20	4 8.9	21.0
331042 2009 VG_{61}	15.7	X	231.99857	135.72812	48.92234	9.44495	0.0690322	0.18503872	3.0499612	20	12 16.9	20.2
331043 2009 VX_{61}	16.0	X	177.20129	157.31474	62.46001	12.18025	0.0474296	0.18042582	3.1017272	20	11 29.0	20.4
331044 2009 VQ_{72}	16.3	X	165.77900	306.26767	76.32227	12.31605	0.1687708	0.22611603	2.6683849	20	3 27.7	20.8
331045 2009 VZ_{73}	16.7	X	282.17341	259.43602	38.04017	4.11111	0.0965446	0.23619373	2.5919332	20	4 6.0	20.1
331046 2009 VE_{77}	15.6	X	344.06331	286.95699	130.79763	9.21780	0.1290355	0.18328904	3.0693404	20	12 17.0	19.3
331047 2009 VQ_{86}	16.0	X	31.66662	183.86751	231.96309	9.67752	0.1016938	0.19331358	2.9622916	20	—	—
331048 2009 VD_{93}	15.5	X	281.05957	47.25909	65.27094	17.43541	0.0936859	0.18068180	3.0987968	20	11 19.4	19.5
331049 2009 VV_{100}	15.9	X	255.81276	75.87874	72.20493	11.68411	0.0375545	0.18022061	3.1040812	20	12 5.7	20.3
331050 2009 VH_{107}	13.4	X	327.84534	356.82455	46.75658	8.11608	0.0901126	0.08478447	5.1316677	20	10 13.8	19.8
331051 2009 VQ_{108}	16.1	X	216.37405	233.49503	85.35891	6.29942	0.0169407	0.22057712	2.7128706	20	2 25.2	19.9
331052 2009 VF_{110}	15.5	X	325.74424	304.17545	92.23360	8.33160	0.1405128	0.17349697	3.1837683	20	10 19.9	19.3
331053 2009 VQ_{113}	16.6	X	16.35242	32.51796	52.30123	7.18004	0.0267023	0.19955460	2.9002018	20	—	—
331054 2009 VO_{115}	15.3	X	305.99196	340.22571	95.62147	11.29762	0.0129246	0.17870865	3.1215646	20	11 16.2	19.8
331055 2009 WJ	17.3	X	79.65405	109.05321	248.27064	5.87181	0.1339189	0.28882014	2.2666496	20	—	—
331056 2009 WX	16.1	X	74.91159	288.38810	97.16453	6.78142	0.0860642	0.20021228	2.8938471	20	—	—
331057 2009 WR_{2}	17.2	X	162.26613	262.12611	90.39106	3.28482	0.0989981	0.21844714	2.7304767	20	2 7.3	21.3
331058 2009 WC_{7}	15.9	X	40.30994	314.69651	60.91592	16.17768	0.0414151	0.18959265	3.0009244	20	—	—
331059 2009 WX_{8}	15.6	X	245.60639	278.12291	228.21421	17.20869	0.1710201	0.17808239	3.1288787	20	11 1.9	20.1
331060 2009 WY_{11}	16.3	X	26.12062	28.78503	52.09846	6.88171	0.0430617	0.20323723	2.8650610	20	—	—
331061 2009 WY_{13}	17.4	X	251.65488	176.48600	155.98168	3.70703	0.1179590	0.23513267	2.5997249	20	4 12.6	21.1
331062 2009 WA_{16}	16.4	X	226.89696	251.95544	94.11405	4.40142	0.1208331	0.23015775	2.6370538	20	4 4.6	20.4
331063 2009 WD_{22}	16.7	X	187.36452	264.41497	83.96615	12.43066	0.1680440	0.22277566	2.6949925	20	3 4.8	21.3
331064 2009 WW_{24}	16.2	X	211.25654	272.18224	79.37316	13.77352	0.0782836	0.22612737	2.6682958	20	4 2.8	20.4
331065 2009 WV_{27}	16.8	X	62.15773	336.41660	52.64938	2.67439	0.0765013	0.19669772	2.9282163	20	—	—
331066 2009 WX_{27}	17.0	X	202.63184	298.73752	56.51490	2.36410	0.1871576	0.22820444	2.6520802	20	3 21.1	21.5
331067 2009 WP_{38}	16.0	X	35.68053	290.68446	60.80096	10.03458	0.0725131	0.17928381	3.1148849	20	11 29.6	20.2
331068 2009 WZ_{44}	15.9	X	175.10280	143.51873	62.98301	17.60514	0.1706534	0.17437002	3.1731322	20	11 8.2	21.1
331069 2009 WD_{50}	15.0	X	211.70671	322.84200	289.99988	15.82520	0.0876543	0.17785880	3.1315004	20	—	—
331070 2009 WK_{51}	15.9	X	54.37787	282.93838	69.82182	11.61911	0.1287969	0.18406576	3.0606996	20	—	—
331071 2009 WO_{52}	16.4	X	65.02884	275.69847	126.14238	7.81893	0.1385630	0.20196138	2.8771146	20	—	—
331072 2009 WY_{58}	17.1	X	224.54649	175.32275	146.09884	2.21508	0.0883444	0.22400647	2.6851116	20	3 2.8	20.9
331073 2009 WU_{64}	16.2	X	306.24521	250.66584	203.70392	8.22209	0.0722700	0.18077409	3.0977421	20	12 3.8	20.3
331074 2009 WF_{66}	16.8	X	287.05894	12.82396	176.67432	1.95986	0.0081834	0.20390526	2.8588000	20	—	—
331075 2009 WV_{70}	16.5	X	6.41565	197.58393	204.53237	3.19762	0.1465861	0.18579924	3.0416326	20	—	—
331076 2009 WE_{72}	16.4	X	123.62929	70.05694	222.63132	9.40620	0.0796825	0.18840943	3.0134752	20	12 29.4	21.1
331077 2009 WA_{73}	16.0	X	30.46077	172.11906	221.65586	9.20714	0.0840404	0.18941607	3.0027891	20	—	—
331078 2009 WD_{93}	15.7	X	218.31761	144.05953	68.10606	10.79346	0.0489797	0.19047713	2.9916273	20	—	—
331079 2009 WO_{94}	16.5	X	336.45810	323.49309	103.57247	5.71248	0.1779463	0.18608128	3.0385584	20	12 19.3	19.6
331080 2009 WH_{99}	16.5	X	42.30124	35.61110	15.08835	3.08747	0.1103701	0.19808024	2.9145753	20	—	—
331081 2009 WW_{100}	16.7	X	166.64757	239.85913	85.42523	4.87225	0.0969067	0.20910702	2.8111907	20	1 10.6	21.0
331082 2009 WZ_{103}	16.1	X	232.58983	283.12562	222.78260	9.62209	0.0249315	0.17587200	3.1550403	20	11 5.9	20.6
331083 2009 WM_{107}	16.2	X	13.25313	328.53835	60.52709	11.46188	0.0902843	0.18662737	3.0326282	20	12 20.0	20.2
331084 2009 WS_{112}	17.2	X	59.19546	87.35898	227.91935	4.26299	0.1850077	0.27414657	2.3468257	20	12 18.9	20.5
331085 2009 WC_{138}	16.9	X	180.59785	118.09001	213.86957	5.00836	0.0740187	0.21430804	2.7655217	20	1 29.0	21.1
331086 2009 WH_{141}	16.2	X	63.03284	278.33639	108.27909	6.88095	0.0718752	0.19733356	2.9219229	20	—	—
331087 2009 WJ_{150}	16.8	X	168.24689	168.17294	165.52601	4.81224	0.0713047	0.21163252	2.7887813	20	1 19.0	21.0
331088 2009 WD_{167}	15.7	X	9.98795	311.51878	89.44016	11.26445	0.0240629	0.17964327	3.1107283	20	12 21.4	19.9
331089 2009 WR_{167}	16.4	X	144.14928	201.22456	68.51755	10.84193	0.0743962	0.18668970	3.0319530	20	12 23.4	21.1
331090 2009 WO_{171}	16.5	X	248.94003	322.90680	13.38118	4.96784	0.1937857	0.23650673	2.5896459	20	4 5.7	20.5
331091 2009 WT_{179}	16.2	X	86.52421	324.79029	27.53728	5.69882	0.0694353	0.19238968	2.9717677	20	—	—
331092 2009 WN_{181}	15.9	X	184.65388	170.11569	76.10903	11.49469	0.0351804	0.19035123	2.9929463	20	—	—
331093 2009 WA_{182}	15.6	X	329.73928	9.26331	62.06455	20.15538	0.1330410	0.17963277	3.1108495	20	12 6.9	19.4
331094 2009 WW_{185}	16.6	X	260.02211	37.98494	234.39116	5.54538	0.0135998	0.21905765	2.7254012	20	2 15.5	20.4
331095 2009 WK_{188}	16.1	X	117.80253	217.04656	36.04801	5.12380	0.0434859	0.17637433	3.1490469	20	11 3.3	20.7
331096 2009 WY_{192}	16.2	X	71.90824	273.43742	49.21383	11.55428	0.0880093	0.18475313	3.0531034	20	12 10.4	20.7
331097 2009 WS_{193}	16.0	X	213.45013	160.55206	53.55828	9.98489	0.0519658	0.19003366	2.9962797	20	—	—
331098 2009 WV_{193}	16.3	X	67.05739	329.90804	48.93310	4.03268	0.1145567	0.19683921	2.9268130	20	—	—
331099 2009 WS_{198}	15.9	X	53.16238	255.84954	102.39517	11.53709	0.1254131	0.18685343	3.0301816	20	—	—
331100 2009 WW_{220}	17.2	X	74.03092	221.86145	212.00983	4.39144	0.0616836	0.21124545	2.7921869	20	1 26.6	20.8
331101 2009 WM_{234}	16.1	X	276.24898	272.68087	212.17395	12.08024	0.1030566	0.18475279	3.0531071	20	11 27.2	20.1
331102 2009 WF_{236}	15.7	X	330.20870	47.15529	54.78678	10.19448	0.0125308	0.19062178	2.9901136	20	—	—
331103 2009 WT_{255}	15.6	X	211.27851	77.76205	80.80910	11.33745	0.0470157	0.16996400	3.2277367	20	10 27.9	20.4
331104 2009 XC_{1}	15.6	X	30.10459	350.64549	77.15883	15.81078	0.1692647	0.19311529	2.9643190	20	—	—
331105 Giselher	17.4	X	4.53469	131.14057	263.25455	2.86684	0.1285530	0.27480811	2.3430579	20	—	—
331106 2010 AN_{66}	15.7	X	180.07068	155.90101	147.99572	9.07370	0.0983117	0.18396120	3.0618592	20	1 2.1	20.5
331107 2010 BS_{118}	13.1	X	335.55357	300.98924	92.02399	24.34068	0.0564332	0.08355639	5.1818274	20	10 23.3	20.0
331108 2010 DJ_{51}	15.7	X	309.67422	254.84858	170.71773	17.30535	0.1542136	0.17419007	3.1753172	20	10 28.9	19.7
331109 2010 NR_{69}	16.7	X	291.31910	310.35628	4.97726	11.57196	0.2345708	0.27473183	2.3434916	20	4 14.9	19.7
331110 2010 OK_{89}	17.1	X	141.00187	22.06517	347.45630	8.42192	0.1760466	0.24023009	2.5628181	20	2 11.9	20.9
331111 2010 RT_{52}	17.7	X	137.59666	251.48906	184.02349	22.93475	0.1313051	0.35827074	1.9633384	20	4 22.5	20.2
331112 2010 RY_{62}	18.0	X	298.71650	201.65972	169.07164	3.33168	0.1209302	0.29201243	2.2501000	20	8 13.3	20.0
331113 2010 RQ_{124}	16.4	X	129.80862	232.34251	41.54879	3.95176	0.0575150	0.21497621	2.7597883	20	12 19.6	20.4
331114 2010 RD_{156}	17.1	X	258.48245	264.89334	47.78853	7.32406	0.1096687	0.26260137	2.4151163	20	3 26.6	20.5
331115 2010 ST_{31}	17.5	X	287.96279	241.49098	102.56096	2.97087	0.1155703	0.28039874	2.3118093	20	6 14.0	20.0
331116 2010 TE_{116}	16.7	X	148.59963	133.74558	24.80778	24.54092	0.1456205	0.27803945	2.3248687	20	9 9.3	20.7
331117 2010 TY_{180}	17.7	X	222.60301	240.23936	220.66329	6.83359	0.0895864	0.28596801	2.2816958	20	8 31.9	20.7
331118 2010 UE_{53}	17.6	X	211.54458	104.40261	230.07222	18.76162	0.0959336	0.35269127	1.9839904	20	2 12.2	20.7
331119 2010 UJ_{62}	17.6	X	187.67675	250.06465	262.93450	6.28333	0.1393517	0.28711164	2.2756328	20	9 25.4	21.1
331120 2010 UJ_{75}	17.2	X	228.82241	263.13556	202.86995	5.11848	0.1788364	0.28202715	2.3029019	20	9 4.7	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331121 2010 UB_{76}	16.8	X	168.37836	350.90304	319.14596	4.53772	0.0467448	0.22414854	2.6839769	20	—	—
331122 2010 UJ_{82}	17.4	X	353.16007	143.49695	178.58112	3.02859	0.1109574	0.28790934	2.2714275	20	9 14.1	19.4
331123 2010 UJ_{106}	16.4	X	92.47636	257.49085	75.89447	9.53775	0.1785496	0.21644409	2.7472967	20	—	—
331124 2010 VD_{13}	16.4	X	85.28415	32.65090	53.55223	12.32034	0.1513241	0.23701497	2.5859425	20	3 16.3	19.8
331125 2010 VX_{30}	17.0	X	55.69746	54.85340	10.67320	13.17697	0.2607524	0.22556525	2.6727269	20	1 8.2	19.5
331126 2010 VV_{36}	16.8	X	34.51810	35.96326	57.66248	8.46612	0.2580434	0.22450039	2.6811718	20	—	—
331127 2010 VG_{46}	17.2	X	286.69928	152.48958	344.37424	2.08100	0.1190288	0.21078627	2.7962404	20	—	—
331128 2010 VV_{47}	17.6	X	146.69098	158.74188	357.32765	1.96957	0.0907618	0.27132491	2.3630683	20	8 19.7	20.7
331129 2010 VB_{48}	17.3	X	101.08335	27.67335	50.05383	5.72234	0.2481357	0.23803872	2.5785228	20	4 4.1	20.9
331130 2010 VF_{55}	16.1	X	331.30806	113.88292	58.38778	13.70948	0.2002775	0.22667460	2.6639995	20	—	—
331131 2010 VB_{69}	16.2	X	293.48481	241.17280	136.43972	5.02939	0.1268078	0.17742727	3.1365759	20	7 31.9	20.1
331132 2010 VJ_{82}	17.3	X	212.82312	313.35944	115.11032	2.39026	0.1612733	0.27065650	2.3669572	20	6 30.7	20.6
331133 2010 VR_{85}	17.4	X	164.95821	349.65804	243.54315	5.08380	0.1180726	0.30179468	2.2012110	20	12 22.9	20.4
331134 2010 VQ_{91}	17.5	X	295.11668	116.11372	260.43375	3.58800	0.0910547	0.27938368	2.3174055	20	8 17.4	20.0
331135 2010 VA_{104}	17.1	X	284.65982	273.44661	194.20949	1.44096	0.0357605	0.19705264	2.9246992	20	11 27.4	20.8
331136 2010 VA_{113}	17.6	X	348.61155	349.47858	75.98180	5.74130	0.0566625	0.30877818	2.1678954	20	—	—
331137 2010 VR_{119}	17.5	X	215.29701	19.61198	84.47843	3.76860	0.0787375	0.27938276	2.3174106	20	9 1.7	20.5
331138 2010 VD_{133}	16.4	X	65.33050	33.45159	56.88033	14.52392	0.2219778	0.23169660	2.6253645	20	3 3.8	19.5
331139 2010 VE_{160}	17.0	X	325.72879	247.83673	97.01798	23.79771	0.1472582	0.38532093	1.8703418	20	10 11.9	18.9
331140 2010 VL_{165}	17.4	X	184.22237	254.54329	263.96513	4.81770	0.0325659	0.28523337	2.2856119	20	10 9.1	20.3
331141 2010 VS_{165}	17.3	X	230.73712	277.88848	239.61387	6.93112	0.1176264	0.29929505	2.2134499	20	12 2.5	19.7
331142 2010 VH_{174}	15.9	X	112.25952	259.93533	111.06988	14.58031	0.1459075	0.22798277	2.6537990	20	1 8.4	19.4
331143 2010 VR_{187}	18.6	X	336.40423	311.36456	105.16191	4.64004	0.1176334	0.30447041	2.1882956	20	—	—
331144 2010 VR_{193}	16.8	X	155.17985	212.63150	147.47500	4.35012	0.2637830	0.24187413	2.5511917	20	2 18.7	21.1
331145 2010 VJ_{201}	17.3	X	242.56831	268.37370	68.08868	23.21688	0.0730307	0.35912858	1.9602106	20	4 16.7	20.1
331146 2010 WJ_{36}	17.4	X	159.80477	291.57968	226.29205	4.21833	0.1335159	0.27543766	2.3394863	20	9 3.4	21.0
331147 2010 WS_{45}	16.6	X	164.09770	121.28634	71.34355	2.52983	0.0892069	0.18346761	3.0673485	20	10 14.3	21.3
331148 2010 WT_{55}	16.4	X	357.91218	109.35446	102.33158	14.71114	0.1081374	0.23619817	2.5919007	20	4 9.9	19.6
331149 2010 WS_{57}	16.4	X	16.05883	4.54620	354.05521	5.23139	0.0813386	0.19592843	2.9358763	20	11 16.3	20.4
331150 2010 WJ_{59}	17.1	X	43.40487	92.31550	31.62224	2.35305	0.0741711	0.23214330	2.6219955	20	2 16.4	20.1
331151 2010 WO_{68}	17.3	X	208.02698	208.77155	269.61709	6.08112	0.0420099	0.27992520	2.3144158	20	9 11.4	20.3
331152 2010 XC_{18}	16.8	X	43.89051	336.73959	127.86133	5.78507	0.1331402	0.22218905	2.6997338	20	1 26.3	19.6
331153 2010 XU_{21}	17.2	X	96.25696	5.40353	78.62816	8.58637	0.1678825	0.23689977	2.5867808	20	3 28.8	20.7
331154 2010 XL_{25}	16.4	X	345.69077	314.06138	222.71750	12.61215	0.2012622	0.22421435	2.6834517	20	1 9.8	19.7
331155 2010 XL_{32}	15.9	X	301.74559	346.45029	50.10141	14.76676	0.1640775	0.18421817	3.0590113	20	9 12.9	19.8
331156 2010 XL_{40}	16.8	X	92.22387	334.39637	122.88767	4.95978	0.2151423	0.23908649	2.5709839	20	4 14.7	20.2
331157 2010 XA_{42}	16.2	X	212.48070	74.61363	94.07615	9.84082	0.1164228	0.18134636	3.0912217	20	11 4.1	21.0
331158 2010 XT_{42}	16.8	X	123.73447	335.74403	106.50957	9.21829	0.1733128	0.23839193	2.5759752	20	4 27.5	20.8
331159 2010 XL_{43}	17.2	X	207.20677	309.82452	128.59616	5.93544	0.0883113	0.26796029	2.3828083	20	7 13.5	20.4
331160 2010 XL_{50}	18.1	X	211.55822	16.43878	51.72270	1.49673	0.1752819	0.26827593	2.3809389	20	6 28.0	21.8
331161 2010 XG_{52}	16.7	X	70.62609	235.16356	218.77094	10.13101	0.0977203	0.23254004	2.6190124	20	2 15.1	20.1
331162 2010 XB_{58}	16.3	X	37.33584	103.59626	68.16143	6.17433	0.1424633	0.24144222	2.5542333	20	4 19.5	18.9
331163 2010 XR_{58}	16.8	X	110.44732	257.58449	192.77060	10.34830	0.2352001	0.24151963	2.5536876	20	4 28.1	20.6
331164 2010 XJ_{66}	17.7	X	359.33375	297.02399	108.25938	5.61042	0.0904087	0.29973849	2.2112663	20	—	—
331165 2010 YQ_{3}	15.7	X	266.86247	359.65027	106.53275	18.62275	0.1710296	0.18058062	3.0999543	20	10 20.2	20.3
331166 2010 YX_{4}	15.7	X	284.82357	299.87843	103.54373	12.87499	0.0922485	0.17776630	3.1325866	20	8 31.8	20.0
331167 2011 AA_{3}	15.3	X	205.94892	17.02843	143.36627	28.40493	0.1291813	0.17359382	3.1825840	20	10 20.2	20.7
331168 2011 AO_{13}	15.9	X	242.72409	58.20002	67.74272	13.03234	0.1766485	0.18007197	3.1057892	20	10 11.4	20.6
331169 2011 AS_{13}	17.1	X	266.16627	296.96521	69.33186	6.01726	0.1235015	0.26024375	2.4296805	20	6 12.3	20.1
331170 2011 AK_{16}	15.8	X	227.31682	37.76910	105.05442	6.62007	0.1425989	0.17658530	3.1465382	20	10 15.8	20.6
331171 2011 AP_{18}	15.7	X	158.27990	163.93789	85.03967	6.89748	0.2283865	0.18161461	3.0881771	20	12 9.6	21.0
331172 2011 AS_{19}	16.9	X	22.96805	328.77586	108.64862	3.27563	0.0780467	0.20705963	2.8296915	20	—	—
331173 2011 AZ_{19}	15.8	X	210.91178	85.81118	72.17152	10.52458	0.1990132	0.17531761	3.1616880	20	10 13.8	21.0
331174 2011 AE_{25}	17.2	X	47.72699	304.10877	132.44447	4.19228	0.1779451	0.21698981	2.7426885	20	—	—
331175 2011 AL_{26}	17.0	X	185.03508	344.64764	80.38887	7.53167	0.1201423	0.25113941	2.4880521	20	5 30.5	20.9
331176 2011 AU_{28}	16.8	X	105.70302	296.93332	132.54360	6.16426	0.1596623	0.22966275	2.6408415	20	3 18.5	20.4
331177 2011 AR_{31}	17.1	X	320.88534	253.97908	84.21366	5.06306	0.0849573	0.26580234	2.3956876	20	8 6.4	19.6
331178 2011 AL_{33}	16.1	X	302.28270	141.86669	102.77280	14.88230	0.0992836	0.22799053	2.6537388	20	2 27.4	19.8
331179 2011 AC_{35}	17.4	X	347.87125	331.93613	48.62570	5.54099	0.2202133	0.29199904	2.2501688	20	12 22.2	19.3
331180 2011 AG_{35}	16.4	X	21.42259	67.90365	94.95142	13.80586	0.1095588	0.22765579	2.6563395	20	3 12.7	19.7
331181 2011 AG_{40}	16.1	X	178.40161	37.81252	156.56730	9.98619	0.0534867	0.17725847	3.1385669	20	11 2.6	20.9
331182 2011 AC_{45}	16.5	X	219.70478	359.43152	307.48162	4.14464	0.0389715	0.22146213	2.7056383	20	2 10.2	20.4
331183 2011 AT_{45}	16.4	X	253.94528	16.98597	137.66647	2.67737	0.1075400	0.18494598	3.0509807	20	12 3.3	20.6
331184 2011 AS_{46}	16.3	X	121.72674	228.77049	145.67949	10.37923	0.1012202	0.21436122	2.7650643	20	1 19.5	20.3
331185 2011 AE_{48}	16.4	X	72.26178	34.88957	57.16781	7.09975	0.0654981	0.22508511	2.6765265	20	2 19.7	19.9
331186 2011 AC_{53}	16.2	X	264.03900	227.43710	92.54337	6.50038	0.1342178	0.23692342	2.5866086	20	4 10.6	20.0
331187 2011 AU_{56}	16.5	X	106.11388	320.92359	129.64112	34.19786	0.2516430	0.23440373	2.6051118	20	5 8.5	21.3
331188 2011 AY_{58}	17.0	X	25.68697	75.88100	121.75336	2.08638	0.0127112	0.24035255	2.5619475	20	4 26.2	20.2
331189 2011 AZ_{58}	16.2	X	158.07849	113.04269	120.94631	6.28250	0.1041359	0.18146061	3.0899241	20	11 25.9	21.1
331190 2011 AC_{60}	16.5	X	209.99634	325.99534	124.84447	7.82780	0.0803548	0.26457107	2.4031146	20	8 4.2	19.7
331191 2011 AZ_{60}	16.3	X	312.71477	352.90133	108.38622	9.09068	0.0899173	0.19266044	2.9689828	20	12 24.2	20.0
331192 2011 AD_{61}	16.7	X	225.29320	73.51608	103.42949	6.58340	0.1660993	0.18363225	3.0655148	20	11 20.0	21.3
331193 2011 AO_{61}	16.8	X	149.45772	248.48063	113.37073	6.88284	0.0571105	0.22206857	2.7007102	20	1 30.9	20.7
331194 2011 AP_{62}	15.7	X	11.39195	231.61452	86.70832	12.07753	0.1052354	0.16932085	3.2359050	20	9 24.7	20.0
331195 2011 AJ_{68}	16.2	X	45.77352	251.58469	139.42457	12.88829	0.0619304	0.19528660	2.9423054	20	—	—
331196 2011 AX_{70}	17.4	X	310.63945	303.94112	104.26753	6.23373	0.1171855	0.28507102	2.2864796	20	11 7.8	19.4
331197 2011 AP_{72}	16.7	X	49.54514	359.25714	138.95028	14.58352	0.1066870	0.23017345	2.6369338	20	3 23.2	19.9
331198 2011 BY_{4}	16.1	X	274.86419	329.17262	283.90896	7.81303	0.1426562	0.22083442	2.7107629	20	1 26.1	20.1
331199 2011 BO_{6}	17.2	X	283.02360	194.76810	36.73490	1.70041	0.0421821	0.21963453	2.7206268	20	1 22.8	20.8
331200 2011 BN_{16}	16.5	X	248.15841	184.64006	111.54263	4.76214	0.0659467	0.22591360	2.6699787	20	2 29.0	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331201 2011 BX_{19}	16.1	X	310.52174	320.09703	103.81255	4.29058	0.1710795	0.17869648	3.1217063	20	10 26.2	19.7
331202 2011 BZ_{20}	17.1	X	5.09279	43.74381	124.05275	4.30674	0.0349844	0.22556711	2.6727122	20	2 18.6	20.5
331203 2011 BG_{22}	15.8	X	323.23533	272.72412	268.20691	6.26416	0.0675662	0.21318895	2.7751913	20	1 6.6	19.4
331204 2011 BT_{28}	15.5	X	5.70617	268.93598	104.08233	10.41936	0.0334258	0.18118074	3.0931052	20	11 16.5	19.9
331205 2011 BR_{31}	16.6	X	305.60414	170.23399	106.36536	6.22122	0.1717426	0.23471749	2.6027897	20	3 31.7	20.0
331206 2011 BU_{33}	16.8	X	308.07712	75.21289	127.70944	4.37598	0.0323882	0.21495525	2.7599678	20	1 19.7	20.6
331207 2011 BM_{34}	16.4	X	287.87222	183.15792	153.50701	8.09697	0.1615926	0.24483947	2.5305510	20	5 27.8	19.7
331208 2011 BW_{34}	16.4	X	163.19750	240.02845	132.31771	6.85700	0.0309916	0.22430000	2.6827685	20	2 26.9	20.1
331209 2011 BC_{35}	16.0	X	309.00048	291.37301	137.55928	6.21348	0.1271430	0.18143958	3.0901628	20	11 4.1	19.8
331210 2011 BQ_{36}	16.2	X	293.42370	324.33775	141.29468	9.98261	0.1107261	0.18505110	3.0498251	20	11 28.9	20.1
331211 2011 BX_{36}	16.0	X	192.55551	51.47559	137.57020	18.94823	0.1349927	0.17491367	3.1665539	20	11 8.7	21.3
331212 2011 BK_{37}	15.9	X	196.30692	47.53697	142.08374	11.19705	0.1681170	0.17543274	3.1603047	20	11 7.9	21.1
331213 2011 BY_{37}	15.2	X	79.57798	144.47538	162.74766	16.03193	0.0296556	0.17078486	3.2173858	20	11 25.2	20.1
331214 2011 BC_{39}	15.7	X	1.92181	235.64572	169.03047	11.04679	0.0344616	0.17907189	3.1173419	20	12 17.2	20.1
331215 2011 BA_{40}	15.8	X	248.55310	77.35523	73.16312	11.81268	0.0294489	0.18239305	3.0793841	20	12 1.7	20.0
331216 2011 BU_{45}	15.4	X	243.21037	13.36685	123.06725	14.78645	0.0908932	0.17586541	3.1551192	20	11 4.2	20.2
331217 2011 BK_{47}	17.2	X	254.38339	127.70027	203.26783	4.83274	0.1434641	0.23840114	2.5759089	20	4 9.3	21.1
331218 2011 BM_{48}	16.3	X	290.36080	312.50566	189.10852	5.03175	0.0952989	0.19152670	2.9806878	20	—	—
331219 2011 BP_{50}	17.8	X	155.57188	19.54719	253.06938	3.44164	0.1504608	0.29258498	2.2471637	20	—	—
331220 2011 BN_{60}	15.9	X	256.31920	67.52640	68.87047	6.30517	0.0982709	0.18115860	3.0933573	20	11 14.8	20.2
331221 2011 BT_{61}	17.0	X	29.07147	193.75756	98.70930	8.31279	0.1673076	0.26748931	2.3856044	20	10 13.0	19.8
331222 2011 BW_{63}	16.3	X	186.38713	218.81870	135.81097	17.46923	0.0368906	0.22172341	2.7035123	20	3 5.3	20.2
331223 2011 BH_{68}	16.3	X	195.85402	105.23286	73.59676	3.43752	0.0880170	0.17699648	3.1416632	20	10 29.2	20.9
331224 2011 BJ_{68}	16.8	X	183.21562	203.38924	72.12504	3.33885	0.0168658	0.20331805	2.8643017	20	—	—
331225 2011 BD_{74}	17.0	X	109.10773	166.48097	231.03049	3.06005	0.1023416	0.21341753	2.7732093	20	2 1.7	20.7
331226 2011 BJ_{74}	16.6	X	152.08074	170.70437	198.03057	6.49586	0.0891748	0.21587527	2.7521206	20	2 12.8	20.7
331227 2011 BQ_{78}	16.8	X	24.67318	211.30352	110.99658	8.12751	0.1328938	0.27694618	2.3309831	20	11 12.2	19.6
331228 2011 BS_{78}	16.9	X	18.54050	269.44520	211.25794	2.36090	0.1390237	0.21406183	2.7676419	20	1 4.2	19.8
331229 2011 BX_{79}	16.6	X	108.71678	265.72576	130.58290	4.72649	0.0862804	0.21940386	2.7225334	20	1 28.5	20.2
331230 2011 BR_{81}	16.4	X	313.04815	121.77002	155.95658	11.57787	0.0581836	0.23870591	2.5737159	20	5 1.1	19.8
331231 2011 BO_{82}	16.7	X	339.39065	60.04022	83.60038	6.12720	0.1054017	0.21023973	2.8010843	20	—	—
331232 2011 BT_{83}	16.4	X	236.48426	121.26690	173.50025	11.54040	0.0533931	0.21903038	2.7256274	20	2 12.4	20.4
331233 2011 BM_{85}	15.6	X	217.94920	357.53092	153.79533	13.89960	0.1726091	0.17377835	3.1803307	20	10 13.5	20.7
331234 2011 BO_{85}	15.7	X	282.94747	356.17223	107.09411	10.42378	0.1033056	0.18176661	3.0864552	20	11 11.9	19.8
331235 2011 BE_{88}	16.5	X	76.24416	307.22464	61.71522	2.94569	0.0771092	0.20119249	2.8844402	20	—	—
331236 2011 BK_{90}	16.6	X	283.02600	150.45181	114.96434	12.41990	0.1495482	0.22832234	2.6511672	20	2 20.9	20.5
331237 2011 BR_{95}	16.7	X	303.62798	146.63096	71.86889	4.62880	0.1370034	0.21785939	2.7353854	20	1 18.9	20.5
331238 2011 BH_{98}	16.7	X	235.12554	197.20306	75.97481	5.56364	0.0450140	0.21610861	2.7501392	20	1 18.9	20.7
331239 2011 BK_{98}	16.6	X	277.60508	192.81811	71.34146	4.93755	0.0980212	0.22478075	2.6789420	20	2 19.8	20.5
331240 2011 BU_{102}	17.0	X	187.99577	295.15519	124.44397	4.70597	0.1339583	0.24723454	2.5141815	20	5 26.9	20.9
331241 2011 BD_{103}	16.5	X	132.17729	20.15058	8.81936	6.19835	0.0338495	0.22016850	2.7162262	20	2 12.1	20.2
331242 2011 BN_{116}	16.9	X	348.02109	186.04350	125.02139	8.90301	0.1116471	0.26236017	2.4165964	20	8 13.9	19.1
331243 2011 BA_{119}	17.1	X	305.30245	253.66866	109.39389	6.88214	0.1625635	0.26782307	2.3836220	20	8 6.2	19.3
331244 2011 BM_{121}	16.7	X	262.47952	169.60505	142.23265	4.46516	0.0916989	0.23349429	2.6118719	20	4 2.1	20.3
331245 2011 BV_{122}	16.6	X	185.38728	261.46778	120.79329	5.20255	0.0783602	0.23455562	2.6039870	20	4 7.9	20.5
331246 2011 BF_{132}	16.6	X	166.01686	166.16409	162.09249	4.96446	0.2203951	0.21020631	2.8013812	20	1 20.7	21.4
331247 2011 BN_{149}	16.9	X	229.58611	232.45078	42.43931	4.91446	0.0582950	0.21471119	2.7620589	20	1 14.6	20.9
331248 2011 CW	16.5	X	199.54611	274.13666	120.59488	13.70950	0.2206509	0.24492769	2.5299433	20	5 8.7	21.1
331249 2011 CX_{1}	15.7	X	307.39891	155.37683	301.50960	8.80762	0.0253127	0.18239441	3.0793687	20	12 10.4	20.0
331250 2011 CA_{2}	15.8	X	267.32327	304.08863	151.30210	5.71505	0.2614556	0.17644756	3.1481755	20	9 14.8	20.2
331251 2011 CB_{2}	15.0	X	202.31247	63.28096	132.44311	14.81256	0.1111265	0.17790638	3.1309421	20	11 25.8	20.0
331252 2011 CE_{2}	16.2	X	85.09695	342.53993	116.02156	9.17195	0.0165245	0.22484506	2.6784311	20	3 10.1	19.8
331253 2011 CH_{4}	15.5	X	293.49485	343.24437	116.53421	12.39900	0.0932092	0.18180307	3.0860425	20	11 23.7	19.6
331254 2011 CF_{17}	15.9	X	304.03595	295.05596	128.90112	9.36690	0.0634700	0.17504240	3.1650011	20	10 26.6	20.2
331255 2011 CX_{21}	16.9	X	152.56871	319.89907	83.31008	4.75897	0.0729467	0.23368122	2.6104788	20	3 28.8	20.7
331256 2011 CN_{27}	16.6	X	74.05283	328.09577	102.89355	5.70295	0.0536468	0.21406666	2.7676003	20	1 23.4	20.0
331257 2011 CR_{35}	16.7	X	286.98845	317.82666	334.78246	3.68605	0.1023198	0.23522384	2.5990532	20	4 2.7	20.1
331258 2011 CL_{39}	16.0	X	61.59515	308.40357	123.72414	16.77648	0.2528044	0.21454019	2.7635264	20	1 30.6	18.7
331259 2011 CB_{40}	16.3	X	244.78751	36.20347	120.48916	16.83422	0.1126648	0.18222271	3.0813028	20	11 27.3	20.9
331260 2011 CL_{42}	16.4	X	121.02258	178.30837	209.84365	5.76400	0.0550116	0.21450002	2.7638713	20	1 28.2	20.3
331261 2011 CA_{43}	15.9	X	237.59806	1.65008	149.48979	10.16011	0.0384282	0.17985219	3.1083188	20	11 19.9	20.4
331262 2011 CC_{45}	15.4	X	158.56184	63.00948	163.90131	12.20239	0.0334399	0.17729096	3.1381834	20	11 20.0	20.2
331263 2011 CK_{47}	17.0	X	203.22508	25.97211	294.40890	3.90210	0.1059453	0.21912172	2.7248699	20	2 8.2	21.3
331264 2011 CK_{57}	16.8	X	316.70051	293.37826	148.25854	3.17405	0.0780735	0.18323938	3.0698949	20	12 3.4	20.7
331265 2011 CS_{60}	17.3	X	104.11362	226.89983	160.25861	2.99184	0.1167874	0.21176336	2.7876324	20	1 16.5	21.0
331266 2011 CH_{61}	16.9	X	310.54924	139.76084	160.12997	4.70724	0.1555775	0.24107600	2.5568194	20	5 11.3	19.8
331267 2011 CD_{70}	15.4	X	205.13584	134.93420	88.80735	12.93527	0.1371058	0.18693503	3.0292998	20	12 26.5	20.1
331268 2011 CN_{70}	16.1	X	323.87694	317.54360	117.82591	12.24723	0.0219382	0.18320904	3.0702338	20	12 7.6	20.4
331269 2011 CZ_{70}	15.4	X	76.31722	228.35485	149.70325	10.19325	0.0649354	0.19202450	2.9755343	20	—	—
331270 2011 CW_{71}	16.8	X	177.04218	264.48519	82.16149	7.20484	0.0719160	0.21865640	2.7287343	20	2 15.6	20.9
331271 2011 CD_{75}	15.9	X	348.44407	280.02543	175.85361	16.75849	0.1637466	0.19776550	2.9176668	20	—	—
331272 2011 CB_{78}	16.4	X	258.23623	280.51220	217.26708	4.22796	0.1079214	0.18002998	3.1062721	20	11 16.9	20.7
331273 2011 CM_{83}	17.2	X	227.03500	156.91860	176.54770	3.49917	0.0823872	0.22742692	2.6581214	20	3 20.3	21.2
331274 2011 CG_{88}	16.3	X	327.84329	282.18466	151.43900	8.76301	0.1700729	0.18526895	3.0474338	20	12 11.9	19.7
331275 2011 CT_{88}	15.6	X	84.57003	310.40274	173.36951	11.70114	0.2248470	0.12528185	3.9555840	20	5 14.6	21.4
331276 2011 CO_{90}	15.9	X	123.44701	325.86458	306.83782	4.48996	0.1116987	0.17520124	3.1630880	20	12 5.3	20.9
331277 2011 CV_{90}	16.1	X	140.93704	86.21598	181.91168	9.90293	0.2010622	0.17641224	3.1485958	20	12 17.6	21.6
331278 2011 CY_{93}	16.8	X	218.73503	145.61669	160.55841	8.19985	0.2105018	0.21459542	2.7630521	20	2 4.1	21.5
331279 2011 DO_{4}	15.7	X	285.81132	75.16730	150.91554	11.64798	0.1843465	0.20477839	2.8506679	20	1 3.5	20.1
331280 2011 DV_{15}	15.2	X	99.75390	306.06597	154.52881	11.77221	0.2132996	0.12458462	3.9703284	20	5 3.1	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331281 2011 DS_{19}	15.6	X	240.71156	335.51712	159.64324	18.05238	0.1796644	0.17597666	3.1537893	20	10 17.1	20.5
331282 2011 DE_{25}	16.9	X	216.37021	166.21729	144.98378	5.51787	0.0381900	0.22199207	2.7013306	20	2 11.9	20.5
331283 2011 DQ_{25}	16.5	X	230.51682	25.16006	146.09979	14.08632	0.1148010	0.18003474	3.1062173	20	11 26.3	21.3
331284 2011 DH_{26}	16.1	X	26.00369	239.26065	145.40219	11.45257	0.0552497	0.18587717	3.0407824	20	12 27.5	20.4
331285 2011 DN_{27}	16.3	X	40.27253	277.29795	145.81789	8.76151	0.0439525	0.20105184	2.8857853	20	—	—
331286 2011 DJ_{29}	16.9	X	178.09774	110.41571	153.18369	9.04510	0.0482234	0.19169636	2.9789289	20	—	—
331287 2011 DC_{30}	16.5	X	158.32064	123.57176	151.29873	11.31298	0.2838581	0.18141607	3.0904297	20	—	—
331288 2011 DJ_{40}	15.9	X	67.61085	172.03192	168.32217	9.48927	0.1001282	0.17567593	3.1573875	20	12 27.0	20.6
331289 2011 DJ_{43}	16.5	X	346.94262	220.71420	187.11889	4.70791	0.1658830	0.18156283	3.0887641	20	12 11.0	20.0
331290 2011 DE_{49}	16.2	X	317.86883	18.09900	175.69332	7.24330	0.0127133	0.21371841	2.7706059	20	1 22.3	20.0
331291 2011 EN_{1}	16.6	X	266.53330	95.59623	164.20801	5.86667	0.0240719	0.21802334	2.7340140	20	2 8.3	20.4
331292 2011 ED_{6}	16.8	X	221.93651	227.75601	94.26472	5.59244	0.1006716	0.22336505	2.6902496	20	3 2.5	20.9
331293 2011 EN_{6}	17.4	X	173.08815	317.66075	277.95546	5.52683	0.1053865	0.28592379	2.2819311	20	—	—
331294 2011 EH_{7}	16.0	X	5.38915	234.16758	156.11967	15.59992	0.0009916	0.18062936	3.0993966	20	12 3.8	20.7
331295 2011 EN_{8}	16.9	X	114.24470	284.05855	110.36538	3.68180	0.1917290	0.22051765	2.7133583	20	2 17.4	20.7
331296 2011 ET_{14}	17.9	X	268.53345	151.63901	348.32114	3.09497	0.1204316	0.28683235	2.2771097	20	—	—
331297 2011 EM_{19}	15.5	X	165.88774	92.05520	142.04371	15.75566	0.0287992	0.17819638	3.1275443	20	12 7.1	20.3
331298 2011 EN_{19}	15.9	X	21.81144	252.35721	137.59846	11.64444	0.1010118	0.18612628	3.0380686	20	—	—
331299 2011 EM_{20}	16.4	X	16.48485	274.28777	122.59787	10.20942	0.0123597	0.18657921	3.0331500	20	12 25.3	20.7
331300 2011 EN_{20}	16.7	X	144.48356	280.29869	103.15421	5.04533	0.1574140	0.22479724	2.6788110	20	3 3.3	20.8
331301 2011 EW_{26}	16.3	X	124.16984	237.63668	147.00657	5.01332	0.1185425	0.20906833	2.8115375	20	2 7.3	20.3
331302 2011 EX_{35}	17.5	X	118.40204	50.15075	223.33126	2.42775	0.1845299	0.27324043	2.3520113	20	12 21.1	21.2
331303 2011 EP_{42}	15.1	X	55.77375	175.02306	166.10803	27.83538	0.1392196	0.17080524	3.2171298	20	12 20.8	20.3
331304 2011 EA_{50}	15.6	X	51.23059	335.89861	59.16381	9.77583	0.0504318	0.19069811	2.9893158	20	—	—
331305 2011 ES_{50}	15.4	X	201.45472	131.58677	90.42858	11.36453	0.0197262	0.18156916	3.0886924	20	—	—
331306 2011 EQ_{58}	15.8	X	7.51744	306.24201	100.05111	10.92315	0.0693475	0.18208287	3.0828802	20	12 30.3	19.8
331307 2011 EN_{59}	15.7	X	0.65903	262.77857	119.12920	11.40110	0.0257066	0.17095859	3.2152057	20	11 18.5	20.3
331308 2011 EM_{64}	15.9	X	283.74449	325.47497	129.61091	6.07134	0.1382169	0.17413979	3.1759284	20	10 26.5	20.1
331309 2011 EB_{76}	15.6	X	282.18636	324.90433	146.06005	13.64448	0.1113190	0.17678726	3.1441415	20	11 18.6	19.9
331310 2011 FB_{1}	17.2	X	190.72529	16.51826	140.37676	6.93849	0.0651962	0.26772233	2.3842200	20	10 14.3	20.5
331311 2011 FP_{37}	15.2	X	182.18979	41.07462	213.92666	16.14637	0.1778308	0.17600861	3.1534076	20	—	—
331312 2011 FK_{86}	17.3	X	161.90797	213.50334	69.17126	6.21653	0.1185255	0.28949235	2.2631395	20	—	—
331313 2011 FJ_{105}	16.0	X	24.74871	244.60178	153.38642	10.47294	0.0780020	0.18381230	3.0635126	20	—	—
331314 2011 FF_{151}	15.5	X	197.71497	65.26764	190.13675	26.53509	0.1289990	0.17851259	3.1238499	20	—	—
331315 2011 GC_{32}	15.7	X	305.92779	303.03512	225.02582	8.55111	0.1320559	0.18903546	3.0068184	20	—	—
331316 2011 GP_{36}	15.6	X	32.48015	185.80223	202.91523	9.34798	0.0062737	0.18486185	3.0519063	20	—	—
331317 2011 GA_{40}	15.3	X	4.66993	304.82914	133.43315	10.22978	0.0304124	0.18874551	3.0098970	20	—	—
331318 2011 QB_{58}	16.2	X	26.24978	1.28328	293.95165	7.00394	0.0324518	0.21830566	2.7316563	20	9 5.5	19.9
331319 2011 SD_{190}	17.3	X	63.56703	212.32563	238.79507	5.41658	0.0406370	0.26536051	2.3983461	20	1 22.3	20.1
331320 2011 UE_{87}	16.7	X	180.90033	293.60440	326.16538	5.33784	0.1084040	0.25279230	2.4771947	20	—	—
331321 2011 UN_{311}	16.8	X	348.77246	307.69900	15.18431	1.89665	0.0682627	0.20356343	2.8619994	20	8 23.1	20.2
331322 2011 WW_{115}	16.4	X	315.61043	206.76493	104.33335	3.40661	0.2087569	0.18921454	3.0049209	20	5 27.2	19.9
331323 2011 WE_{118}	15.9	X	16.37874	79.47497	207.71462	6.96274	0.0430503	0.19684800	2.9267258	20	8 10.9	19.8
331324 2011 YE_{23}	17.0	X	325.85732	132.67598	54.89485	3.97606	0.1725074	0.24256557	2.5463413	20	—	—
331325 2011 YK_{30}	15.7	X	48.53170	335.92078	307.66536	11.49066	0.1017283	0.18699599	3.0286414	20	9 23.1	20.0
331326 2011 YA_{35}	17.1	X	311.93375	157.27132	310.85628	7.06781	0.1694828	0.21817036	2.7327855	20	—	—
331327 2011 YZ_{44}	17.8	X	202.51600	259.68741	136.12527	4.68513	0.1315631	0.27978964	2.3151633	20	5 10.7	21.3
331328 2011 YT_{59}	17.7	X	329.60786	73.89988	121.32950	4.02850	0.0919460	0.24719558	2.5144456	20	1 24.4	20.6
331329 2012 BU_{10}	15.6	X	150.95046	65.72253	151.32605	16.64565	0.0892290	0.18639905	3.0351041	20	11 3.5	20.5
331330 2012 BH_{15}	15.0	X	94.40222	288.07067	300.46647	10.61628	0.1464586	0.17604397	3.1529853	20	9 14.3	20.0
331331 2012 BC_{17}	16.6	X	339.57939	248.31009	334.92624	4.03523	0.1512944	0.25367096	2.4714712	20	3 8.3	19.2
331332 2012 BD_{20}	15.8	X	184.33648	216.79706	261.70683	10.63642	0.1684275	0.18020941	3.1042099	20	7 29.9	21.1
331333 2012 BS_{22}	15.3	X	187.35154	17.08546	123.47710	14.26036	0.0463798	0.18233151	3.0800769	20	9 9.9	19.9
331334 2012 BA_{23}	17.2	X	33.93754	209.50424	326.63125	1.81265	0.1391956	0.26179343	2.4200828	20	4 13.8	19.3
331335 2012 BC_{34}	16.4	X	79.05689	185.28297	211.19430	6.17832	0.2692824	0.24106066	2.5569279	20	1 8.4	19.0
331336 2012 BL_{47}	16.6	X	199.67068	158.82386	143.69764	12.43317	0.0528758	0.23464991	2.6032894	20	1 11.1	20.5
331337 2012 BY_{52}	17.4	X	132.10817	190.45538	319.68768	6.40697	0.1639097	0.28203430	2.3028630	20	7 31.0	20.7
331338 2012 BT_{53}	17.3	X	81.87398	75.96807	2.65421	1.69248	0.1079502	0.24570400	2.5246116	20	2 15.5	20.2
331339 2012 BG_{75}	17.2	X	139.83703	148.51590	308.94653	6.34156	0.0620370	0.27572335	2.3378700	20	5 17.7	20.4
331340 2012 BW_{75}	17.3	X	157.79559	267.27676	94.54769	2.54367	0.2018906	0.25607000	2.4560107	20	2 18.2	21.2
331341 2012 BL_{102}	16.1	X	137.74498	263.30370	310.20692	8.90213	0.0710341	0.19209020	2.9748558	20	10 7.8	20.8
331342 2012 BJ_{112}	17.1	X	112.70743	87.20364	318.56355	9.60885	0.0838552	0.24447918	2.5330366	20	2 10.5	20.5
331343 2012 BB_{113}	16.6	X	224.82178	341.55950	266.07427	2.05206	0.0776663	0.22265727	2.6959477	20	—	—
331344 2012 BC_{113}	17.0	X	236.62235	6.79101	218.67177	1.53595	0.0755429	0.21945827	2.7220833	20	—	—
331345 2012 BX_{119}	16.3	X	140.15463	110.04165	146.85220	2.08432	0.1376903	0.19815719	2.9138207	20	12 7.5	20.9
331346 2012 BT_{126}	17.8	X	158.21941	114.93790	352.11913	6.75040	0.1359709	0.27796707	2.3252723	20	6 28.3	21.4
331347 2012 CR_{5}	15.7	X	43.41849	311.97749	7.47996	11.17013	0.0364821	0.19208399	2.9749199	20	10 26.3	19.9
331348 2012 CO_{12}	17.8	X	66.35441	111.33874	91.59434	2.26444	0.1227713	0.27439765	2.3453939	20	7 19.7	20.6
331349 2012 CP_{14}	16.9	X	40.24247	275.94325	107.18464	0.40759	0.0841126	0.21339078	2.7734411	20	—	—
331350 2012 CE_{15}	17.2	X	171.32347	307.50309	137.89435	6.10648	0.0940689	0.27703085	2.3305082	20	6 12.3	20.5
331351 2012 CV_{33}	17.2	X	292.92230	166.31880	162.82387	7.07849	0.1408235	0.27516906	2.3410085	20	5 27.6	20.0
331352 2012 CW_{33}	16.1	X	205.68313	176.94613	334.38455	6.44763	0.0853977	0.18563268	3.0434518	20	10 4.8	20.7
331353 2012 CN_{40}	17.9	X	95.41004	91.00366	14.68181	1.46997	0.1404006	0.25891288	2.4379995	20	4 14.9	20.9
331354 2012 CE_{46}	15.4	X	9.40892	355.45647	337.25840	8.89831	0.0539848	0.17868486	3.1218417	20	9 27.6	19.7
331355 2012 CL_{47}	16.0	X	298.87767	35.91454	16.37216	9.91634	0.0575784	0.18424924	3.0586673	20	10 3.6	20.0
331356 2012 CO_{52}	16.1	X	82.54364	186.68695	158.50902	14.50315	0.0889725	0.21200785	2.7854889	20	—	—
331357 2012 CV_{52}	17.3	X	81.54877	119.97810	104.24166	2.28949	0.1209311	0.28557708	2.2837777	20	9 10.7	20.1
331358 2012 CZ_{53}	17.4	X	85.97321	349.76476	123.38397	3.76900	0.1362257	0.25770432	2.4456159	20	4 13.7	20.3
331359 2012 DC_{6}	15.2	X	116.24369	160.49036	82.21513	10.57879	0.0763383	0.17999160	3.1067136	20	10 27.4	20.0
331360 2012 DA_{15}	17.6	X	42.39304	150.52664	338.58188	9.50554	0.1153300	0.24679388	2.5171734	20	2 21.7	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331361 2012 DY_{17}	16.4	X	61.53107	273.63476	341.78852	23.18759	0.1770670	0.28064840	2.3104381	20	9 25.9	19.7
331362 2012 DF_{24}	17.7	X	84.52843	296.56491	346.59454	4.63982	0.1517928	0.29722833	2.2236986	20	12 4.4	21.0
331363 2012 DE_{26}	17.0	X	226.37599	305.07980	179.18208	0.38837	0.1061834	0.18381597	3.0634718	20	9 24.2	21.5
331364 2012 DK_{27}	15.4	X	94.35091	105.13843	176.14845	22.14282	0.0845003	0.18239374	3.0793763	20	11 19.2	20.3
331365 2012 DM_{34}	16.9	X	47.44788	265.52395	323.93505	4.24623	0.0481600	0.27244998	2.3565584	20	7 17.7	19.6
331366 2012 DN_{34}	17.5	X	1.51919	347.84549	256.20376	1.69003	0.1580625	0.25774144	2.4453811	20	5 24.9	19.4
331367 2012 DG_{38}	15.6	X	228.12203	119.86600	336.52264	10.63891	0.0796437	0.17801209	3.1297025	20	8 25.5	20.2
331368 2012 DJ_{44}	15.9	X	120.82123	247.55180	20.86593	15.02869	0.2260024	0.18122999	3.0925449	20	11 30.7	21.4
331369 2012 DJ_{48}	16.2	X	228.29580	322.66385	165.75991	12.35000	0.0904355	0.18528637	3.0472428	20	10 5.7	20.7
331370 2012 DX_{49}	17.1	X	42.93718	272.37863	163.06533	5.68615	0.0755857	0.22178242	2.7030328	20	—	—
331371 2012 DR_{53}	15.8	X	88.64207	156.86687	153.71173	10.82723	0.0668373	0.18859091	3.0115417	20	12 15.1	20.4
331372 2012 DZ_{57}	16.5	X	125.99228	83.35217	148.36229	6.01148	0.0993096	0.17686108	3.1432664	20	10 23.3	21.4
331373 2012 DY_{58}	16.2	X	134.83051	129.06937	102.29189	2.55557	0.1361178	0.17554512	3.1589558	20	10 31.4	21.2
331374 2012 DG_{72}	17.0	X	71.17773	79.04960	108.70092	7.00175	0.0687421	0.26985154	2.3716619	20	6 24.9	19.8
331375 2012 DC_{74}	16.7	X	270.41664	25.00049	180.24013	14.39976	0.0667619	0.21777351	2.7361045	20	—	—
331376 2012 DT_{79}	15.9	X	200.36424	135.52299	18.32958	14.30313	0.2154993	0.18180715	3.0859964	20	9 27.4	21.1
331377 2012 DO_{83}	17.8	X	82.41323	40.84277	162.40172	1.26131	0.1440579	0.27466071	2.3438961	20	8 13.9	20.8
331378 2012 DC_{87}	17.4	X	130.79440	225.94230	357.80485	6.31963	0.0832402	0.29470676	2.2363648	20	11 1.2	20.5
331379 2012 DX_{87}	16.7	X	276.68925	241.41215	348.74133	2.45425	0.1375881	0.22581786	2.6707333	20	1 1.4	20.8
331380 2012 DS_{88}	18.0	X	125.48501	41.34447	176.21491	6.45143	0.1894350	0.28887227	2.2663769	20	10 23.2	21.6
331381 2012 EE_{2}	17.5	X	46.28930	359.32289	216.94142	1.79055	0.1431303	0.26620780	2.3932544	20	7 10.1	19.9
331382 2012 ES_{2}	17.0	X	349.38907	282.75196	336.02237	1.90860	0.1951781	0.26107193	2.4245395	20	5 18.1	18.9
331383 2012 EE_{9}	16.4	X	306.97210	122.55839	94.31128	4.47117	0.0911873	0.23250223	2.6192963	20	1 25.2	19.8
331384 2012 EK_{12}	16.6	X	338.52327	258.31005	236.31257	3.01482	0.1767402	0.22186012	2.7024016	20	—	—
331385 2012 ES_{12}	17.7	X	97.43309	292.21308	210.51892	2.40718	0.0399558	0.26376823	2.4079884	20	5 24.1	20.6
331386 2012 EU_{12}	17.3	X	51.95730	39.63951	196.76565	3.44537	0.0597730	0.27692251	2.3311160	20	8 4.4	20.0
331387 2012 FV_{3}	16.2	X	231.09948	330.76610	271.79394	5.04015	0.0880300	0.21830225	2.7316848	20	—	—
331388 2012 FD_{11}	16.6	X	329.02055	242.72156	320.10040	2.59425	0.1496540	0.23377995	2.6097438	20	1 27.5	19.7
331389 2012 FJ_{13}	16.8	X	283.30461	25.03679	182.14431	2.69732	0.0234165	0.22433519	2.6824880	20	—	—
331390 2012 FC_{14}	17.6	X	76.81627	66.26503	181.28228	1.95876	0.1971658	0.28521335	2.2857189	20	10 14.9	20.9
331391 2012 FM_{15}	17.3	X	123.82668	195.37849	58.30238	5.45933	0.2056727	0.30000059	2.2099781	20	12 5.7	21.0
331392 2012 FV_{18}	16.3	X	238.64934	94.01021	13.73523	3.36523	0.0936765	0.18055326	3.1002674	20	9 19.5	20.6
331393 2012 FJ_{19}	17.9	X	102.83382	130.40099	140.44227	4.00281	0.1136323	0.30157410	2.2022842	20	12 7.4	20.9
331394 2012 FH_{22}	17.1	X	341.03064	10.23201	137.95970	4.17555	0.1221360	0.22525470	2.6751829	20	—	—
331395 2012 FR_{26}	18.1	X	164.33974	211.59476	17.45680	2.50235	0.1356920	0.30763751	2.1732509	20	12 16.6	21.2
331396 2012 FS_{28}	16.4	X	359.67130	61.69999	20.34548	5.77255	0.0219818	0.20942087	2.8083813	20	—	—
331397 2012 FP_{31}	15.4	X	195.17587	13.35583	147.53726	14.51813	0.1252591	0.17892442	3.1190546	20	10 7.8	20.4
331398 2012 FH_{32}	15.8	X	87.94268	24.89084	19.11068	32.15213	0.2712481	0.22976193	2.6400815	20	2 27.2	19.8
331399 2012 FJ_{32}	15.8	X	262.66017	61.47154	43.29048	11.47885	0.0653010	0.18283581	3.0744107	20	10 21.2	20.0
331400 2012 FH_{34}	16.4	X	138.28568	212.41314	67.44140	6.73558	0.0354723	0.19603954	2.9347669	20	12 31.8	20.7
331401 2012 FU_{39}	16.7	X	137.74715	261.45001	250.57928	4.72479	0.0688036	0.27692253	2.3311159	20	7 31.9	19.8
331402 2012 FY_{39}	17.2	X	67.72953	323.13160	274.90319	5.19009	0.2254079	0.27528319	2.3403613	20	9 21.2	20.5
331403 2012 FH_{41}	17.0	X	14.12991	347.62941	162.09385	6.37180	0.2664278	0.23619635	2.5919140	20	1 19.9	19.0
331404 2012 FD_{43}	16.3	X	315.99462	108.07608	79.00063	12.56184	0.1318399	0.22490836	2.6779285	20	—	—
331405 2012 FJ_{43}	16.8	X	174.09619	157.05178	190.96922	1.67585	0.0936996	0.22792432	2.6542527	20	2 11.3	20.6
331406 2012 FX_{43}	15.6	X	204.84303	209.57505	78.08456	15.16426	0.0345558	0.21902698	2.7256556	20	—	—
331407 2012 FW_{44}	16.9	X	352.55358	59.61194	95.11309	2.79927	0.1345566	0.23047297	2.6346487	20	1 2.4	19.6
331408 2012 FX_{44}	17.3	X	94.32875	237.41194	172.16218	24.70873	0.0974987	0.35140244	1.9888386	20	—	—
331409 2012 FQ_{47}	16.3	X	248.64314	261.37243	13.95235	12.12336	0.2474786	0.22653025	2.6651311	20	1 24.6	21.0
331410 2012 FM_{49}	15.9	X	75.64194	115.96744	163.15428	9.84918	0.0698936	0.17525540	3.1624362	20	10 23.4	20.5
331411 2012 FN_{56}	17.5	X	89.41332	55.82848	169.69176	5.42984	0.1259768	0.28248045	2.3004376	20	9 21.4	20.5
331412 2012 FD_{57}	16.5	X	331.83913	202.60503	86.79408	7.07944	0.0795095	0.26171476	2.4205677	20	6 10.5	18.9
331413 2012 FN_{59}	17.6	X	146.36122	92.50428	68.84675	3.52985	0.0995101	0.28524611	2.2855439	20	8 29.5	20.8
331414 2012 FV_{59}	15.9	X	261.86991	287.02550	150.79726	9.84117	0.1064612	0.17959121	3.1113294	20	9 8.9	20.1
331415 2012 FE_{62}	15.5	X	264.85910	323.41007	194.47051	9.26934	0.0414744	0.19226715	2.9730302	20	12 30.7	19.7
331416 2012 FW_{64}	18.1	X	110.24759	347.26099	149.23721	2.68125	0.1581180	0.26605352	2.3941795	20	6 17.5	21.5
331417 2012 FG_{67}	16.3	X	179.14473	119.37412	142.25270	7.94950	0.0313957	0.20554883	2.8435402	20	—	—
331418 2012 FD_{68}	15.8	X	123.36488	161.87436	67.71389	5.93722	0.1153397	0.17437358	3.1730890	20	10 18.7	20.7
331419 2012 FO_{69}	16.3	X	301.61945	309.04162	136.49825	4.56957	0.1109303	0.19289061	2.9666204	20	11 17.1	19.9
331420 2012 FQ_{72}	16.6	X	37.91285	156.14762	346.01514	5.94005	0.1401427	0.24048783	2.5609867	20	3 5.3	19.0
331421 2012 FW_{72}	16.2	X	271.93218	19.61085	196.25520	11.79399	0.1474654	0.21717674	2.7411145	20	—	—
331422 2012 FF_{73}	17.0	X	333.12377	177.82679	14.57994	0.85585	0.1366326	0.23079748	2.6321785	20	1 22.4	19.9
331423 2012 FZ_{76}	18.0	X	93.73027	295.97357	11.10335	2.38131	0.0843538	0.31087052	2.1581569	20	—	—
331424 2012 FK_{78}	15.8	X	318.29745	2.98902	215.28320	11.33144	0.1120780	0.23006923	2.6377301	20	2 3.6	19.4
331425 2012 GC_{1}	14.5	X	167.48234	314.21866	251.57822	22.24880	0.1829958	0.17799380	3.1299169	20	10 26.1	20.0
331426 2012 GE_{1}	16.4	X	266.46847	188.52582	28.56582	6.94453	0.1601107	0.21501412	2.7594640	20	—	—
331427 2012 GL_{2}	17.3	X	21.73568	37.37605	197.33176	10.63928	0.1816415	0.25731523	2.4480806	20	6 26.3	19.7
331428 2012 GL_{5}	16.8	X	309.66573	40.29513	177.26786	2.52294	0.1423513	0.23043406	2.6349453	20	1 21.2	20.4
331429 2012 GO_{12}	16.5	X	318.62672	43.15607	174.46743	13.92338	0.1974240	0.23064530	2.6333362	20	1 23.0	20.1
331430 2012 GP_{12}	17.9	X	89.42151	118.86053	121.53867	1.63164	0.1887039	0.27997950	2.3141165	20	10 17.3	21.4
331431 2012 GU_{12}	15.5	X	178.97705	229.90357	105.48173	14.88819	0.0621631	0.21707687	2.7419551	20	2 2.5	19.6
331432 2012 GW_{13}	15.6	X	72.50494	232.32563	128.99036	12.90390	0.1598792	0.18684559	3.0302664	20	—	—
331433 2012 GK_{15}	16.1	X	56.23317	36.34521	21.34888	6.95519	0.0059847	0.21265383	2.7798449	20	—	—
331434 2012 GJ_{16}	16.8	X	271.59125	279.30180	344.03479	6.50199	0.1381675	0.22697468	2.6616510	20	2 6.3	20.7
331435 2012 GC_{17}	16.9	X	13.08175	175.88317	129.65211	9.45633	0.2012122	0.27092243	2.3654081	20	10 11.7	19.3
331436 2012 GO_{17}	15.2	X	86.35229	188.58319	121.17747	14.21680	0.0562485	0.17721928	3.1390295	20	12 9.3	19.9
331437 2012 GR_{20}	16.4	X	265.66733	197.42106	108.03224	10.73170	0.1156994	0.23661691	2.5888419	20	3 29.2	20.3
331438 2012 GA_{21}	17.7	X	141.66718	145.32004	75.08228	0.31597	0.1018403	0.29353711	2.2423017	20	11 10.6	20.7
331439 2012 GC_{21}	15.8	X	93.13171	164.55259	138.72262	10.64762	0.0544873	0.18059483	3.0997917	20	12 9.1	20.5
331440 2012 GT_{22}	15.8	X	177.00924	62.61945	156.19976	11.31138	0.0337499	0.18103386	3.0947781	20	12 1.1	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331441 2012 GX_{22}	15.9	X	275.35257	335.45175	176.59511	15.17642	0.0470732	0.19256542	2.9699594	20	—	—
331442 2012 GZ_{22}	15.6	X	69.49134	219.90308	109.92509	11.86148	0.2391105	0.17092975	3.2155673	20	12 31.1	20.6
331443 2012 HU_{1}	15.3	X	34.89437	237.73215	124.04766	11.47436	0.0206327	0.18153741	3.0890525	20	12 6.9	19.8
331444 2012 HO_{3}	16.4	X	128.37165	163.49200	117.29591	3.62054	0.0946586	0.18230925	3.0803276	20	12 20.5	21.1
331445 2012 HD_{6}	15.5	X	185.46019	136.94416	91.21690	16.22471	0.0506832	0.18752749	3.0229160	20	12 19.7	19.8
331446 2012 HN_{6}	16.3	X	271.45016	46.56773	199.50870	16.83195	0.2144206	0.21692057	2.7432721	20	1 6.6	21.1
331447 2012 HG_{7}	17.0	X	19.76641	168.62838	141.85791	7.21036	0.1560293	0.27294303	2.3537195	20	10 21.8	19.6
331448 2012 HX_{7}	15.4	X	158.81470	18.56746	213.52493	27.54000	0.1447382	0.17601632	3.1533155	20	11 21.4	20.7
331449 2012 HM_{9}	15.9	X	177.35934	106.01654	135.14890	11.73772	0.0787814	0.18737700	3.0245344	20	12 24.6	20.6
331450 2012 HC_{16}	15.6	X	314.63689	339.28805	160.71076	15.30970	0.0928256	0.20306315	2.8666981	20	—	—
331451 2012 HM_{16}	15.2	X	114.22524	122.58030	155.06624	9.23075	0.2071634	0.17468271	3.1693444	20	12 8.7	20.6
331452 2012 HF_{18}	16.1	X	227.55761	332.84025	196.37733	17.14777	0.0622713	0.17897847	3.1184266	20	11 24.9	20.8
331453 2012 HF_{20}	15.1	X	92.71240	188.37024	111.21170	14.83180	0.1269526	0.17538314	3.1609005	20	12 10.3	20.1
331454 2012 HF_{23}	15.7	X	331.94155	301.13917	94.65820	10.39699	0.0653725	0.17586321	3.1551455	20	10 31.3	19.9
331455 2012 HJ_{23}	15.7	X	45.75807	239.52617	127.89259	10.92421	0.1125265	0.18751582	3.0230415	20	—	—
331456 2012 HK_{24}	16.0	X	169.18356	173.71569	148.35019	9.78045	0.1477393	0.21008670	2.8024444	20	1 11.9	20.6
331457 2012 HN_{26}	17.1	X	227.45641	189.14941	95.09098	2.80782	0.1173277	0.21765962	2.7370588	20	1 20.4	21.4
331458 2012 HW_{26}	16.9	X	169.55840	130.57129	177.53007	4.18224	0.0694644	0.20667623	2.8331900	20	—	—
331459 2012 HW_{27}	15.6	X	154.30414	79.03972	193.42214	9.32302	0.0468865	0.19000523	2.9965786	20	—	—
331460 2012 HA_{28}	16.6	X	333.79816	55.29782	118.73379	4.47349	0.0388555	0.21977998	2.7194263	20	1 14.8	20.0
331461 2012 HZ_{29}	16.3	X	161.49395	29.73148	197.58725	10.56904	0.0183098	0.17858584	3.1229956	20	11 22.9	20.9
331462 2012 HA_{30}	16.9	X	83.95840	331.20779	145.70386	3.47427	0.0706590	0.23982164	2.5657272	20	4 6.3	20.1
331463 2012 HF_{30}	16.0	X	271.18601	82.06260	62.14841	11.95145	0.0297061	0.18868274	3.0105645	20	12 22.7	20.2
331464 2012 HB_{32}	17.6	X	115.28299	170.25299	104.47852	1.06831	0.1359012	0.29904150	2.2147009	20	12 24.3	20.9
331465 2012 HG_{34}	15.5	X	111.75413	241.88216	85.68124	10.48543	0.1087723	0.18941161	3.0028363	20	—	—
331466 2012 HR_{34}	16.7	X	1.01065	1.90565	200.14265	14.81805	0.0995885	0.24126804	2.5554625	20	3 21.6	19.7
331467 2012 HY_{36}	17.2	X	56.82630	212.33475	102.53716	7.44994	0.1229876	0.29017036	2.2596127	20	12 12.8	20.2
331468 2012 JB	15.7	X	169.57039	158.11398	52.79634	15.48425	0.1367994	0.17565494	3.1576390	20	11 7.8	20.7
331469 6006 $P–L$	17.5	X	29.95747	171.90587	203.39306	5.65652	0.1736901	0.29909891	2.2144175	20	—	—
331470 3171 $T–3$	17.9	X	354.35496	142.80304	199.84989	4.05324	0.2183394	0.27551426	2.3390526	20	10 31.8	19.6
331471 1984 QY_{1}	15.6	X	14.37618	337.04618	142.33492	14.26322	0.8944778	0.24969968	2.4976068	20	6 8.7	15.7
331472 1993 BB_{9}	15.8	X	206.89501	230.70339	120.87570	15.37876	0.1248683	0.22447508	2.6813734	20	3 26.6	20.2
331473 1993 TP_{5}	16.7	X	259.87060	132.63684	257.57011	3.00562	0.2110423	0.21192352	2.7862278	20	6 23.4	20.7
331474 1994 PO_{14}	16.6	X	24.30835	49.12036	309.08055	5.14674	0.2602114	0.27172792	2.3607312	20	—	—
331475 1995 SZ_{13}	18.3	X	68.73438	354.41106	356.14237	12.28982	0.0976959	0.24666420	2.5180555	20	—	—
331476 1995 US_{17}	16.6	X	292.55911	118.17850	216.89780	4.40937	0.2880340	0.23070990	2.6328446	20	5 10.3	20.2
331477 1996 TO_{24}	16.1	X	319.73859	47.56893	212.33570	13.58498	0.1277133	0.23267354	2.6180105	20	3 31.8	19.5
331478 1997 TR_{19}	16.9	X	339.37202	312.00191	352.34553	2.82043	0.2075324	0.25150044	2.4856705	20	7 10.7	18.6
331479 1997 WS_{11}	17.4	X	335.69866	138.76269	228.44409	2.23928	0.2721072	0.25663382	2.4524121	20	10 23.7	18.6
331480 1997 WP_{15}	16.8	X	29.38811	281.59280	212.81355	4.80253	0.1506966	0.23007433	2.6376911	20	2 6.9	19.5
331481 1998 KH_{12}	16.1	X	193.94863	152.64612	188.32604	12.78562	0.1567795	0.21411074	2.7672204	20	2 23.2	20.7
331482 1998 RM_{23}	17.1	X	331.52589	8.35703	358.99665	4.28105	0.2640192	0.27034062	2.3688006	20	10 14.9	18.2
331483 1998 SY_{49}	14.8	X	291.56271	335.40928	14.34759	0.62354	0.2668467	0.12611994	3.9380408	20	5 31.8	20.0
331484 1998 UX	16.2	X	44.77661	120.74472	254.34399	21.31223	0.2924395	0.27863540	2.3215526	20	—	—
331485 1998 VM_{43}	17.7	X	299.94725	317.16672	92.51234	1.66465	0.1146772	0.26664922	2.3906124	20	10 13.5	20.0
331486 1998 VQ_{56}	16.3	X	240.53308	157.77144	229.02333	12.35838	0.2408302	0.25773254	2.4454374	20	5 27.6	20.2
331487 1998 WA_{30}	16.4	X	54.87095	154.28814	233.74379	10.99128	0.1096964	0.18832023	3.0144268	20	—	—
331488 1998 YT_{33}	17.0	X	5.34303	281.25141	282.86174	4.64196	0.1465501	0.23989038	2.5652370	20	3 29.6	19.7
331489 1999 BA_{31}	15.9	X	92.87219	279.41328	114.44379	10.66420	0.1023674	0.18674972	3.0313034	20	1 13.1	19.8
331490 1999 GB_{16}	16.1	X	54.01583	325.80869	195.98485	13.56096	0.1297913	0.23658457	2.5890778	20	5 2.8	19.1
331491 1999 NK_{32}	16.6	X	293.44888	201.78795	124.15967	8.91893	0.3194107	0.22956489	2.6415920	20	4 28.3	20.4
331492 1999 RG_{168}	16.2	X	181.18642	248.07173	162.51365	9.18953	0.1947245	0.22017654	2.7161600	20	5 10.9	20.9
331493 1999 RU_{199}	15.8	X	264.73245	76.96104	248.30625	10.07469	0.2028573	0.22308639	2.6924894	20	4 3.9	20.0
331494 1999 RN_{205}	15.9	X	171.04338	120.97335	286.66153	10.34646	0.1721675	0.21737636	2.7394361	20	4 21.6	20.6
331495 1999 RY_{221}	17.4	X	124.72803	53.57547	278.77632	4.23152	0.2592506	0.29971050	2.2114039	20	—	—
331496 1999 RN_{238}	15.9	X	172.28799	92.38769	252.37717	11.69224	0.2263676	0.21150041	2.7899424	20	2 9.8	20.9
331497 1999 TK_{76}	18.0	X	99.92940	291.60802	25.60445	2.85852	0.1849570	0.29237484	2.2482403	20	—	—
331498 1999 TX_{123}	16.4	X	219.15154	189.92240	199.71229	12.56526	0.2339290	0.22106363	2.7088888	20	5 14.4	21.1
331499 1999 TR_{170}	15.7	X	232.86543	78.71915	203.81021	12.61027	0.1891919	0.21115817	2.7929562	20	1 18.3	20.6
331500 1999 TH_{232}	16.0	X	182.39880	282.31234	139.22703	10.66448	0.3351099	0.21836852	2.7311321	20	5 25.4	21.3
331501 1999 TS_{272}	15.4	X	196.05938	77.67076	253.73771	11.09387	0.1803868	0.21249946	2.7811911	20	2 11.9	20.2
331502 1999 TH_{307}	16.1	X	191.77339	130.84984	210.81602	11.95193	0.1536989	0.21252206	2.7809939	20	2 20.8	20.9
331503 1999 TF_{315}	16.5	X	274.06246	116.69007	189.45734	8.74410	0.0731601	0.21937504	2.7227718	20	4 11.4	20.1
331504 1999 UJ_{16}	16.3	X	188.56422	141.67339	220.98391	13.30971	0.2151708	0.21390611	2.7689849	20	3 14.6	21.2
331505 1999 UN_{36}	17.0	X	220.98438	75.78575	237.61877	2.21589	0.1978587	0.21585688	2.7522769	20	2 14.5	21.6
331506 1999 VC_{12}	16.2	X	258.34801	110.06463	268.88870	4.85754	0.4052346	0.22476007	2.6791063	20	5 17.3	20.9
331507 1999 XQ_{117}	15.7	X	199.04433	125.87439	265.75727	7.82918	0.2020755	0.21687763	2.7436342	20	4 28.2	20.5
331508 1999 XC_{261}	15.8	X	96.40833	130.82717	258.74930	11.32593	0.1162683	0.20013844	2.8945588	20	1 10.3	19.8
331509 1999 YA	18.2	X	195.42039	265.55982	106.17481	38.24243	0.3391967	0.45395429	1.6767229	20	4 14.3	22.1
331510 2000 AE_{6}	17.5	X	225.90443	279.62211	119.66237	11.89382	0.5522737	0.22005608	2.7171511	20	5 18.4	23.3
331511 2000 AU_{223}	15.7	X	216.97932	77.18112	127.22837	22.91540	0.0580937	0.18371195	3.0646281	20	12 26.9	20.4
331512 2000 BP_{41}	17.4	X	67.73606	70.90907	129.86285	6.05188	0.1482171	0.25839038	2.4412850	20	7 21.1	20.3
331513 2000 CU_{19}	15.8	X	285.39712	334.59299	144.47568	21.47509	0.2613380	0.18356670	3.0662445	20	11 17.2	19.8
331514 2000 DO_{78}	16.9	X	351.72487	180.50105	345.19460	13.15972	0.1234887	0.24206382	2.5498588	20	1 18.5	20.0
331515 2000 DS_{95}	15.5	X	287.99410	341.54912	143.95588	19.43502	0.1319278	0.18222329	3.0812963	20	12 13.4	19.7
331516 2000 EA_{147}	15.5	X	236.93379	17.76134	141.20227	24.54942	0.1667990	0.17742282	3.1366283	20	11 15.8	20.6
331517 2000 FW_{4}	16.6	X	163.21534	94.52405	188.62149	4.54510	0.0999660	0.17890780	3.1192477	20	—	—
331518 2000 JE_{31}	16.1	X	56.36106	349.82589	237.06611	10.43195	0.1628429	0.25290048	2.4764883	20	8 8.5	19.5
331519 2000 NJ_{19}	17.0	X	282.85504	61.49630	283.65917	2.26524	0.3240703	0.24021976	2.5628916	20	5 5.5	20.7
331520 2000 QV_{32}	16.6	X	239.77923	287.57129	85.19783	4.69567	0.3009999	0.23563075	2.5960601	20	5 5.7	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331521 2000 QY_{40}	17.7	X	218.83584	44.96752	307.07626	2.34176	0.2939492	0.28129888	2.3068749	20	3 22.7	21.7
331522 2000 QD_{70}	17.0	X	311.65286	161.01451	167.43649	12.47787	0.3743822	0.24214341	2.5493000	20	5 17.1	20.0
331523 2000 QE_{202}	16.4	X	232.53283	215.53603	146.49538	10.57972	0.2235084	0.23388734	2.6089449	20	4 24.5	20.9
331524 2000 RJ	16.1	X	311.10146	88.18622	230.47694	10.78524	0.2728076	0.24217061	2.5491091	20	5 17.8	18.8
331525 2000 RM_{103}	16.5	X	284.70665	168.04355	218.18255	15.11138	0.2237674	0.24149242	2.5538793	20	7 15.9	20.0
331526 2000 SF_{5}	16.8	X	230.20874	155.17852	189.88614	24.55013	0.2529242	0.28198984	2.3031050	20	3 24.5	20.6
331527 2000 SM_{21}	16.4	X	251.79169	187.56364	182.47066	16.78823	0.2444644	0.23603863	2.5930685	20	5 18.7	20.7
331528 2000 SY_{95}	17.2	X	253.70361	120.04336	215.85397	4.41670	0.2788730	0.23387175	2.6090609	20	4 1.7	21.4
331529 2000 SR_{126}	16.0	X	185.02145	209.51913	190.94113	14.41396	0.2617810	0.22712336	2.6604893	20	5 1.1	20.8
331530 2000 SM_{135}	16.1	X	162.06789	215.42894	214.55287	12.51332	0.2241135	0.22888112	2.6468505	20	5 17.6	20.6
331531 2000 SO_{143}	16.3	X	189.13562	153.94490	227.57413	9.49030	0.1004061	0.22880274	2.6474549	20	4 6.9	20.4
331532 2000 SJ_{192}	16.8	X	316.04427	238.60285	77.93184	6.42315	0.2949209	0.24000114	2.5644477	20	5 20.4	19.4
331533 2000 SG_{204}	16.6	X	210.55401	349.13064	11.49203	2.19334	0.1541580	0.22869477	2.6482881	20	4 3.0	20.7
331534 2000 SC_{254}	16.7	X	276.62573	171.67183	154.90106	5.91852	0.2712998	0.23581572	2.5947023	20	4 14.7	20.6
331535 2000 SN_{273}	16.5	X	218.26303	156.99136	204.29156	15.32331	0.1590828	0.22946133	2.6423867	20	4 10.5	20.8
331536 2000 SC_{284}	16.7	X	242.87317	119.17346	222.91663	13.21421	0.1716447	0.23241659	2.6199397	20	4 7.3	20.9
331537 2000 SR_{314}	16.0	X	300.95945	107.28327	262.88115	13.97356	0.1549209	0.24280837	2.5446435	20	7 31.1	19.0
331538 2000 SO_{340}	16.8	X	254.38683	199.99273	136.84026	4.62975	0.1953553	0.23434575	2.6055415	20	4 13.8	20.8
331539 2000 SX_{348}	16.7	X	238.41422	225.50988	126.77920	10.38818	0.2324525	0.23278306	2.6171893	20	4 17.8	21.2
331540 2000 SC_{349}	16.0	X	264.08863	199.39655	155.09315	19.11261	0.2194368	0.23636358	2.5906914	20	5 16.7	20.2
331541 2000 TQ_{20}	16.1	X	236.46136	279.88830	56.03401	12.90732	0.2045714	0.23023355	2.6364749	20	3 30.7	20.6
331542 2000 TZ_{34}	17.0	X	209.81755	331.59636	40.48517	3.49625	0.2051460	0.22947261	2.6423001	20	4 15.4	21.4
331543 2000 TT_{36}	16.5	X	219.94368	307.38626	42.34919	12.48926	0.1961283	0.22832891	2.6511163	20	4 1.1	21.0
331544 2000 TG_{54}	16.7	X	255.50956	156.23705	205.20712	14.66950	0.1881881	0.23411288	2.6072690	20	5 16.4	20.7
331545 2000 UE_{59}	16.8	X	179.48322	130.80923	242.40289	6.47013	0.2118718	0.22479963	2.6787920	20	3 20.2	21.5
331546 2000 UG_{68}	15.7	X	275.54165	63.37417	252.20845	14.63181	0.1910492	0.23143242	2.6273620	20	4 2.3	19.8
331547 2000 VL_{39}	17.0	X	306.46337	94.25893	247.88646	3.35482	0.2943088	0.24043842	2.5613375	20	6 9.3	19.8
331548 2000 VO_{47}	15.2	X	255.86563	105.35913	281.42197	27.33345	0.3789601	0.23187421	2.6240237	20	5 28.6	20.0
331549 2000 WG_{18}	17.4	X	235.48114	307.90293	79.39111	6.14904	0.2109138	0.28235166	2.3011371	20	5 26.1	20.9
331550 2000 WP_{53}	17.6	X	349.08952	337.16070	65.79295	4.92201	0.1061159	0.29924196	2.2137117	20	—	—
331551 2000 WL_{54}	16.1	X	182.58717	271.20018	284.39667	22.98336	0.3168574	0.28675585	2.2775147	20	10 29.3	20.6
331552 2000 WH_{65}	16.3	X	190.25736	202.67105	212.77350	15.15187	0.1326819	0.23153758	2.6265664	20	5 23.6	20.5
331553 2000 WZ_{71}	16.3	X	277.76498	129.69436	255.65130	11.17611	0.2507938	0.23811151	2.5779973	20	7 2.9	19.7
331554 2000 WH_{160}	16.6	X	207.27291	153.76289	218.81643	13.39903	0.2801926	0.22722936	2.6596619	20	4 10.4	21.6
331555 2000 XA_{2}	16.6	X	159.06916	235.18801	256.58880	24.45189	0.0549296	0.38594981	1.8683095	20	7 28.3	19.3
331556 2000 XE_{54}	17.5	X	347.01160	330.49311	89.54314	5.36637	0.0846612	0.30024717	2.2087680	20	—	—
331557 2000 YZ_{14}	16.1	X	278.48470	112.44226	255.81216	28.24928	0.3151225	0.23636515	2.5906799	20	6 2.3	19.7
331558 2001 BJ_{6}	15.0	X	305.40729	98.19661	273.90355	16.38062	0.3131158	0.23707051	2.5855386	20	7 16.6	17.6
331559 2001 DV_{24}	16.2	X	47.89679	134.74811	359.15515	7.76461	0.1735674	0.21009157	2.8024011	20	3 20.1	19.3
331560 2001 HB_{40}	18.0	X	102.87850	34.40839	209.22913	11.24503	0.1882212	0.27560794	2.3385226	20	11 2.1	21.6
331561 2001 KO_{19}	17.2	X	81.64417	151.51676	76.55649	5.96738	0.2508325	0.26960712	2.3730951	20	9 30.9	20.9
331562 2001 MS_{7}	15.7	X	177.06305	93.51213	204.09419	15.80460	0.2996739	0.18422268	3.0589613	20	—	—
331563 2001 OJ_{18}	15.2	X	101.30286	102.58655	283.28655	16.33545	0.2290957	0.18052763	3.1005608	20	1 28.9	19.7
331564 2001 OF_{27}	16.5	X	15.88579	34.11586	234.08267	15.40504	0.1208140	0.25905157	2.4371293	20	7 24.9	19.4
331565 2001 OU_{31}	15.5	X	135.24975	90.65550	226.78140	18.83587	0.3836604	0.17481686	3.1677229	20	—	—
331566 2001 PY_{9}	16.8	X	54.76266	57.21440	260.57307	3.37212	0.2303048	0.27022186	2.3694946	20	12 21.5	20.3
331567 2001 PR_{57}	15.9	X	126.03412	176.17006	152.49021	19.57611	0.2132946	0.17499306	3.1655961	20	—	—
331568 2001 QE_{37}	15.4	X	102.28351	195.49308	133.51125	18.06815	0.1920134	0.17305737	3.1891576	20	—	—
331569 2001 QO_{52}	16.9	X	280.42312	202.89794	173.75444	2.56682	0.2010340	0.25427149	2.4675782	20	7 4.3	19.8
331570 2001 QS_{67}	16.3	X	358.12955	53.47269	303.58367	7.75424	0.1785248	0.26573638	2.3960840	20	11 17.7	18.7
331571 2001 QH_{92}	16.0	X	95.45459	267.11659	100.25387	8.35422	0.2416238	0.17509671	3.1643467	20	1 6.4	20.3
331572 2001 QC_{168}	17.0	X	78.19073	246.17298	79.82353	6.78610	0.1234016	0.27343073	2.3509199	20	—	—
331573 2001 QL_{197}	16.2	X	348.72106	98.31331	253.93074	13.60164	0.1634304	0.25958692	2.4337774	20	10 16.4	18.8
331574 2001 QW_{226}	16.9	X	11.44111	69.71833	266.80293	5.39295	0.1678836	0.26368759	2.4084793	20	11 9.8	19.4
331575 2001 QV_{228}	16.7	X	336.46988	103.56009	260.31230	7.02706	0.1071426	0.26198100	2.4189275	20	10 7.4	19.4
331576 2001 QR_{264}	15.4	X	100.85032	51.85859	295.07851	15.09939	0.2432397	0.17295540	3.1904110	20	—	—
331577 2001 QR_{275}	15.2	X	101.49680	184.22662	140.06055	25.08778	0.1909769	0.17079416	3.2172690	20	—	—
331578 2001 RS_{65}	15.3	X	80.78412	110.59611	243.69420	6.84437	0.1492520	0.16916324	3.2379146	20	—	—
331579 2001 RD_{72}	15.3	X	104.43656	125.93270	212.70295	12.91638	0.2739302	0.17091905	3.2157015	20	—	—
331580 2001 RP_{90}	17.6	X	7.05762	234.54236	110.05080	3.25443	0.2323724	0.26354584	2.4093428	20	11 26.8	20.1
331581 2001 SO_{13}	17.2	X	32.14868	149.42784	167.80563	2.59672	0.2285963	0.26478862	2.4017981	20	11 25.4	20.3
331582 2001 SD_{80}	17.7	X	330.23009	147.48889	185.23238	4.71236	0.2005989	0.25847758	2.4407359	20	8 4.3	19.6
331583 2001 SV_{119}	16.1	X	49.52847	331.65262	321.10355	7.00455	0.1255739	0.21078448	2.7962562	20	10 16.3	20.0
331584 2001 SE_{143}	17.2	X	32.04139	66.58564	290.62151	2.78747	0.1652420	0.26811891	2.3818683	20	—	—
331585 2001 SP_{143}	16.9	X	330.74279	165.18231	187.36433	10.37615	0.2490514	0.25881212	2.4386322	20	9 8.0	18.2
331586 2001 SU_{206}	16.2	X	114.98901	312.02117	7.08661	5.07915	0.1280431	0.17024085	3.2242363	20	—	—
331587 2001 TW	15.6	X	144.73779	281.19776	58.07728	22.35670	0.4966656	0.17920345	3.1158161	20	2 14.0	22.0
331588 2001 TZ_{22}	15.8	X	84.15819	195.15650	195.83725	18.45452	0.2069435	0.17266764	3.1939546	20	1 12.5	20.3
331589 2001 TN_{103}	17.3	X	254.39194	126.08730	224.65949	20.60362	0.0825984	0.34961934	1.9955950	20	5 10.1	19.5
331590 2001 TY_{132}	16.9	X	45.90439	8.27812	291.89883	4.49857	0.2134631	0.26350156	2.4096128	20	11 15.5	20.3
331591 2001 TY_{170}	15.2	X	101.74698	102.15176	229.42150	7.98271	0.1876698	0.16932633	3.2358351	20	—	—
331592 2001 TQ_{248}	16.8	X	21.97698	239.18580	50.06273	2.49520	0.0762969	0.20408661	2.8571062	20	8 30.1	20.3
331593 2001 UJ_{97}	16.5	X	114.49757	294.39773	200.76625	14.52511	0.0923015	0.24258443	2.5462093	20	6 12.3	20.3
331594 2001 UL_{106}	16.2	X	42.55232	335.40506	206.41644	13.43893	0.0330797	0.23908000	2.5710304	20	4 30.0	19.4
331595 2001 UF_{208}	18.0	X	359.34540	30.92937	308.61756	1.82252	0.1948096	0.26091284	2.4255249	20	10 27.2	20.3
331596 2001 UT_{221}	17.0	X	284.95052	281.18327	104.63763	0.96203	0.1278228	0.25143702	2.4860884	20	8 6.9	19.9
331597 2001 VG_{12}	15.4	X	132.03990	87.97290	250.90995	22.55700	0.4246122	0.17450129	3.1715407	20	1 19.3	21.3
331598 2001 VR_{20}	16.8	X	198.42058	167.24381	229.72923	5.72482	0.1554132	0.24038623	2.5617082	20	5 6.5	20.9
331599 2001 VW_{80}	15.7	X	99.60392	221.47611	245.79974	21.24526	0.0592208	0.23459235	2.6037153	20	4 6.1	19.6
331600 2001 VH_{89}	16.0	X	25.06104	32.34705	257.34001	14.00745	0.1319125	0.25474943	2.4644910	20	9 10.6	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331601 2001 WL_{17}	17.3	X	341.98406	69.72660	288.02799	1.18389	0.2233733	0.25880567	2.4386727	20	10 20.5	18.9
331602 2001 WZ_{46}	17.2	X	7.40068	103.40105	230.27792	5.39919	0.2547346	0.25887053	2.4382654	20	11 13.5	19.5
331603 2001 WM_{51}	15.7	X	140.47627	102.61687	224.31130	24.80540	0.2155910	0.17277609	3.1926180	20	—	—
331604 2001 WD_{98}	16.8	X	81.07494	234.49588	238.08218	8.32424	0.1408686	0.23231180	2.6207275	20	4 3.7	20.1
331605 2001 XB_{5}	16.3	X	109.28333	340.39609	101.56706	13.19027	0.2395735	0.22870523	2.6482074	20	4 22.3	20.5
331606 2001 XB_{19}	16.1	X	122.32978	29.70727	45.83278	8.83693	0.1380795	0.23019148	2.6367962	20	4 11.8	19.9
331607 2001 XA_{96}	16.4	X	234.54025	104.32526	262.50374	5.42723	0.1175633	0.23990478	2.5651343	20	5 5.6	20.2
331608 2001 XA_{112}	16.2	X	94.03772	212.48200	235.71771	13.10764	0.1771847	0.22808617	2.6529969	20	3 24.0	19.9
331609 2001 XN_{216}	16.2	X	177.52713	210.42422	247.14016	9.91243	0.1615535	0.24115795	2.5562402	20	7 2.3	20.3
331610 2001 XK_{245}	16.2	X	285.96151	69.27370	251.87454	26.88103	0.0919715	0.24165246	2.5527517	20	5 12.2	19.6
331611 2001 XJ_{250}	15.8	X	205.76274	134.30455	258.92780	11.10968	0.1692112	0.23823313	2.5771198	20	5 6.9	20.1
331612 2001 YD_{24}	16.8	X	304.08545	358.91828	20.35186	3.81693	0.1925318	0.25287152	2.4766773	20	8 23.5	19.0
331613 2001 YB_{88}	16.8	X	20.91073	28.01449	97.78023	8.77807	0.2283808	0.21929592	2.7234267	20	1 10.5	19.1
331614 2001 YA_{137}	15.7	X	37.07737	80.57464	279.58994	20.89797	0.3158409	0.26661444	2.3908203	20	—	—
331615 2002 AQ_{38}	16.7	X	218.62421	269.99281	118.17612	12.94253	0.2887188	0.24011993	2.5636018	20	5 12.5	21.5
331616 2002 AP_{39}	16.0	X	167.36403	320.13419	128.46720	22.76014	0.0448554	0.23501289	2.6006082	20	6 14.1	20.0
331617 2002 AZ_{68}	16.8	X	147.69024	187.90215	184.42555	6.16632	0.0439543	0.21867825	2.7285526	20	2 7.7	20.7
331618 2002 AL_{82}	16.3	X	132.24934	181.63656	253.01124	13.29847	0.1367062	0.23200299	2.6230525	20	4 15.4	20.4
331619 2002 AO_{84}	16.5	X	213.40918	287.93629	146.47683	7.92838	0.1875736	0.24224090	2.5486160	20	7 5.9	20.6
331620 2002 AY_{102}	16.7	X	252.26412	348.00707	45.08201	2.65512	0.1707226	0.24160964	2.5530533	20	6 24.6	20.3
331621 2002 CT_{5}	16.3	X	344.83415	15.71882	137.53591	14.99981	0.1166482	0.21472583	2.7619333	20	—	—
331622 2002 CL_{36}	16.4	X	341.58495	195.05448	319.57035	8.82891	0.0930168	0.21498124	2.7597454	20	—	—
331623 2002 CS_{130}	16.2	X	68.17700	319.57989	152.51942	22.35947	0.0432244	0.22026617	2.7154232	20	3 6.9	19.7
331624 2002 CR_{232}	16.1	X	352.64420	318.15502	335.02940	9.37679	0.0836233	0.23449443	2.6044400	20	7 23.7	19.1
331625 2002 CE_{272}	15.9	X	85.98953	281.52952	238.09182	10.53587	0.2027410	0.22986686	2.6392780	20	6 24.4	19.7
331626 2002 DM_{5}	17.1	X	333.68069	318.04333	193.15142	8.80974	0.2555557	0.21244893	2.7816321	20	—	—
331627 2002 EM_{62}	15.9	X	255.67090	75.41857	183.88484	14.20561	0.0406581	0.21330271	2.7742045	20	1 22.8	20.1
331628 2002 FU_{4}	16.4	X	5.31999	15.86920	127.44611	16.57555	0.1896149	0.21529191	2.7570897	20	1 6.6	19.3
331629 2002 GD_{28}	16.3	X	45.13710	191.51857	357.91000	6.79666	0.1246265	0.17270951	3.1934385	20	5 24.1	20.4
331630 2002 GB_{59}	17.6	X	343.16110	171.16776	10.71810	1.39698	0.1301990	0.26659747	2.3909218	20	1 17.3	20.2
331631 2002 GS_{70}	15.8	X	258.91936	41.18182	194.92152	15.07489	0.0955988	0.20518108	2.8469369	20	—	—
331632 2002 GE_{117}	17.2	X	313.16602	114.84120	106.86203	5.06523	0.1288024	0.26669408	2.3903443	20	1 28.2	20.1
331633 2002 GQ_{124}	16.0	X	108.64606	201.15485	202.78750	15.30690	0.1391139	0.21086792	2.7955185	20	2 11.4	20.1
331634 2002 GW_{180}	16.3	X	224.59144	9.20115	66.08177	6.69980	0.2987992	0.23838074	2.5760558	20	7 9.6	20.8
331635 2002 GC_{184}	17.0	X	280.64806	90.71950	178.92356	4.08078	0.0586645	0.21433195	2.7653160	20	3 5.1	20.7
331636 2002 JK_{7}	16.9	X	58.23644	80.47734	152.69519	6.05656	0.1513519	0.22810140	2.6528789	20	8 19.9	20.1
331637 2002 JZ_{108}	17.4	X	17.41515	231.48435	102.28628	27.85719	0.0773512	0.39846404	1.8289842	20	12 13.2	19.3
331638 2002 JP_{123}	16.3	X	288.31694	83.54792	81.38129	15.25239	0.2609950	0.20240906	2.8728708	20	—	—
331639 2002 NS_{3}	15.7	X	122.55709	104.35104	233.38070	16.44050	0.1727306	0.18665550	3.0323234	20	—	—
331640 2002 ND_{5}	16.1	X	43.79457	256.03314	122.29648	12.34730	0.1996944	0.18130570	3.0916838	20	—	—
331641 2002 NW_{35}	15.2	X	126.42880	21.39012	278.02170	12.09048	0.1076570	0.18306852	3.0718047	20	—	—
331642 2002 NQ_{36}	15.5	X	94.04975	77.54548	254.48054	8.72603	0.1413965	0.18283718	3.0743953	20	—	—
331643 2002 NQ_{39}	18.5	X	99.95487	134.80423	176.93579	6.81666	0.2214216	0.29184663	2.2509521	20	—	—
331644 2002 NN_{58}	17.8	X	46.88518	136.88283	212.03519	4.69182	0.2291503	0.28767825	2.2726438	20	—	—
331645 2002 NX_{68}	18.0	X	79.06819	176.33938	145.47537	5.84819	0.1873586	0.28999905	2.2605025	20	—	—
331646 2002 NU_{72}	15.6	X	76.84440	83.89637	276.90914	9.70233	0.0711088	0.18564216	3.0433482	20	—	—
331647 2002 NF_{79}	16.0	X	270.10445	18.58770	325.73882	5.53544	0.0246260	0.21387199	2.7692794	20	6 1.6	19.8
331648 2002 OQ_{31}	15.7	X	134.81291	135.43254	122.76989	27.94823	0.1031286	0.18016980	3.1046648	20	12 7.2	21.0
331649 2002 OJ_{32}	15.8	X	130.11136	168.10231	174.14430	11.59312	0.1340505	0.18970562	2.9997328	20	—	—
331650 2002 OJ_{34}	16.6	X	153.55355	64.74189	222.32838	3.58148	0.1622015	0.18550075	3.0448947	20	—	—
331651 2002 PX_{2}	17.3	X	321.33156	156.60704	233.40229	9.22883	0.2165391	0.27770890	2.3267132	20	10 26.5	18.8
331652 2002 PN_{5}	15.8	X	92.24313	88.88319	265.28260	8.97012	0.1566712	0.18349841	3.0670052	20	—	—
331653 2002 PB_{9}	17.1	X	340.00555	186.38132	171.08127	5.63825	0.1837384	0.22308599	2.6924926	20	10 2.7	19.5
331654 2002 PK_{16}	16.7	X	343.93896	174.04618	130.54391	12.21129	0.1418109	0.21848864	2.7301310	20	7 19.9	19.7
331655 2002 PR_{25}	16.1	X	173.91087	123.97171	151.57155	12.17047	0.0790025	0.18707874	3.0277483	20	—	—
331656 2002 PP_{30}	16.4	X	146.14751	128.59711	179.07767	5.87986	0.2158576	0.18675033	3.0312968	20	—	—
331657 2002 PF_{33}	18.0	X	92.27275	137.39871	159.16504	5.63173	0.1766453	0.28957554	2.2627060	20	12 29.1	21.5
331658 2002 PC_{39}	15.8	X	109.19492	29.09456	293.22385	8.69934	0.1029334	0.18288938	3.0738102	20	—	—
331659 2002 PH_{90}	15.4	X	80.62735	94.46235	242.90401	10.57737	0.2615309	0.17893880	3.1188874	20	—	—
331660 2002 PS_{101}	18.0	X	85.82235	76.37965	236.36925	5.64921	0.2381196	0.28955207	2.2628283	20	—	—
331661 2002 PG_{102}	16.6	X	151.01756	120.27335	204.59320	6.78848	0.2668567	0.18946218	3.0023019	20	1 9.9	21.8
331662 2002 PT_{103}	15.6	X	51.18882	172.58049	192.33357	11.15863	0.1065870	0.17943572	3.1131266	20	—	—
331663 2002 PN_{105}	17.0	X	11.39279	156.45379	209.21919	6.12380	0.1658014	0.28281829	2.2986052	20	12 26.5	19.7
331664 2002 PC_{106}	16.1	X	144.52280	114.92621	251.51361	9.36882	0.1398236	0.19345091	2.9608894	20	2 7.8	20.8
331665 2002 PB_{137}	15.7	X	81.16714	214.62873	148.61079	22.46634	0.0840779	0.18405775	3.0607884	20	—	—
331666 2002 PR_{138}	15.7	X	106.59777	182.20992	186.89761	16.40053	0.2046278	0.18592213	3.0402922	20	1 12.4	20.3
331667 2002 PP_{162}	17.2	X	126.88313	124.27661	125.65850	8.32346	0.1729023	0.28821604	2.2698158	20	12 3.6	20.9
331668 2002 PK_{167}	15.8	X	52.05707	251.33624	136.72251	12.44877	0.0890978	0.18206436	3.0830892	20	—	—
331669 2002 PL_{168}	16.4	X	40.18783	239.32193	144.48865	10.55255	0.1107153	0.17976122	3.1093674	20	—	—
331670 2002 PF_{178}	17.4	X	67.24310	27.70342	252.79014	6.43505	0.1044166	0.28201658	2.3029594	20	11 3.9	20.5
331671 2002 PO_{181}	16.0	X	155.88235	340.45135	263.14269	11.28265	0.0213830	0.17671315	3.1450204	20	12 4.1	20.6
331672 2002 PF_{184}	16.3	X	146.93831	282.15144	28.28578	4.77673	0.2435111	0.18757098	3.0224488	20	—	—
331673 2002 PS_{184}	17.5	X	106.82287	317.63169	352.75001	4.73167	0.0870348	0.29134923	2.2535133	20	—	—
331674 2002 PU_{188}	15.9	X	246.34727	271.94164	320.19760	9.46704	0.0251031	0.19125957	2.9834626	20	—	—
331675 2002 PB_{194}	16.7	X	299.49985	249.58324	180.63613	21.91308	0.0392255	0.22658468	2.6647043	20	11 9.2	20.4
331676 2002 PA_{195}	17.5	X	108.75285	136.89988	132.35346	7.94408	0.1417162	0.28828570	2.2694501	20	12 10.1	21.0
331677 2002 PS_{199}	16.1	X	233.65084	354.05364	159.74283	10.75809	0.1011167	0.17802585	3.1295412	20	11 9.9	20.8
331678 2002 QC_{10}	17.7	X	103.56066	16.75243	293.97963	4.83320	0.1854156	0.28989963	2.2610193	20	—	—
331679 2002 QG_{13}	16.2	X	51.67355	185.18215	172.44620	11.96169	0.1023462	0.17784686	3.1316406	20	12 29.9	20.9
331680 2002 QY_{24}	15.1	X	53.32583	158.83501	235.62413	22.89258	0.3600653	0.17889325	3.1194169	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331681 2002 QY_{65}	18.2	X	99.92063	310.79484	329.47308	3.59139	0.2409030	0.28803647	2.2707591	20	12 17.9	21.9
331682 2002 QK_{77}	18.0	X	105.01763	242.17035	29.97798	3.22668	0.2181986	0.28804018	2.2707396	20	12 11.2	21.7
331683 2002 QF_{79}	16.8	X	14.23078	141.14788	105.97071	3.82559	0.0594957	0.21302947	2.7765762	20	6 18.8	20.3
331684 2002 QJ_{90}	15.9	X	149.16600	175.00248	141.72312	16.61688	0.0583176	0.18610508	3.0382994	20	—	—
331685 2002 QB_{92}	18.5	X	59.97814	69.69001	228.92668	2.73473	0.2238809	0.28213844	2.3022963	20	12 4.4	21.9
331686 2002 QR_{101}	15.9	X	41.05560	104.67448	275.03508	6.51214	0.0544534	0.17976512	3.1093225	20	—	—
331687 2002 QF_{104}	17.9	X	103.68997	105.78216	177.56702	8.95726	0.1491351	0.28783031	2.2718433	20	12 22.1	21.5
331688 2002 QB_{112}	16.0	X	56.00307	255.60096	165.44167	14.22195	0.1743254	0.18634945	3.0356426	20	1 1.4	19.8
331689 2002 QX_{116}	17.7	X	348.10967	246.27165	137.41621	6.82655	0.0949504	0.28211562	2.3024204	20	12 5.8	20.2
331690 2002 QS_{119}	17.2	X	142.33399	62.27394	149.23394	23.09868	0.1594905	0.28351350	2.2948460	20	11 4.3	21.3
331691 2002 QB_{122}	16.5	X	123.10873	133.16508	194.65169	7.36832	0.1360342	0.18460341	3.0547540	20	—	—
331692 2002 QK_{127}	15.7	X	36.22947	269.93348	129.58358	11.21854	0.0817764	0.18202334	3.0835524	20	—	—
331693 2002 QR_{130}	15.9	X	14.14675	267.17140	132.22997	9.00148	0.0326698	0.17908737	3.1171623	20	12 25.7	20.3
331694 2002 QR_{141}	15.7	X	1.99760	135.14403	263.43849	9.79955	0.0691608	0.17538897	3.1608304	20	12 11.6	19.8
331695 2002 QQ_{142}	15.9	X	17.61257	103.31727	272.42421	8.06569	0.0741175	0.17394768	3.1782664	20	12 4.8	20.2
331696 2002 QA_{148}	17.5	X	99.72506	356.44077	268.67939	5.51653	0.1491894	0.28512317	2.2862008	20	11 24.4	21.0
331697 2002 RX_{4}	15.4	X	25.91416	165.83370	278.91634	11.98362	0.0479847	0.18516128	3.0486152	20	—	—
331698 2002 RS_{44}	16.0	X	127.06477	316.94349	57.10039	2.36389	0.1860955	0.18987213	2.9979788	20	2 9.2	20.6
331699 2002 RT_{45}	17.2	X	347.67667	312.79183	48.24197	1.98739	0.2999348	0.27728392	2.3290900	20	11 30.2	18.6
331700 2002 RO_{46}	17.7	X	32.16767	218.47948	135.42363	3.52069	0.2461094	0.28361260	2.2943114	20	—	—
331701 2002 RC_{55}	16.9	X	49.21832	116.79660	212.57859	6.32810	0.1505933	0.28296284	2.2978223	20	12 23.9	20.1
331702 2002 RJ_{69}	15.9	X	129.98587	161.20303	168.32104	10.66819	0.1721336	0.18468319	3.0538742	20	—	—
331703 2002 RB_{71}	16.5	X	152.96427	28.49642	272.05145	6.14184	0.3557625	0.18626963	3.0365098	20	—	—
331704 2002 RV_{72}	16.2	X	172.34609	140.54235	172.13825	6.32721	0.1463829	0.18985651	2.9981433	20	1 6.4	21.0
331705 2002 RV_{89}	17.5	X	305.28971	200.49846	178.99873	2.14106	0.2089150	0.27250820	2.3562227	20	8 25.3	19.3
331706 2002 RN_{92}	16.3	X	166.66241	152.91704	170.57563	8.66091	0.2778278	0.18950505	3.0018491	20	1 20.3	21.7
331707 2002 RK_{105}	16.9	X	332.64437	354.48117	17.52703	5.54751	0.2398472	0.27389677	2.3482524	20	10 26.9	18.3
331708 2002 RU_{143}	17.7	X	54.12704	118.61910	201.89397	6.65333	0.1350942	0.28270355	2.2992271	20	12 16.5	20.9
331709 2002 RC_{151}	15.8	X	40.38550	79.33392	281.21325	7.88595	0.0653061	0.17552930	3.1591456	20	12 14.9	20.2
331710 2002 RK_{185}	15.7	X	129.86617	85.65901	270.20420	7.65929	0.0955783	0.18711313	3.0273772	20	1 10.1	20.2
331711 2002 RF_{186}	15.3	X	70.71905	178.15044	202.36982	18.11774	0.2559471	0.18090301	3.0962702	20	—	—
331712 2002 RY_{201}	15.5	X	100.71663	221.80523	128.35417	11.05744	0.1893039	0.18242649	3.0790078	20	—	—
331713 2002 RF_{240}	17.8	X	43.95171	70.08747	311.05904	3.81084	0.1559689	0.28901084	2.2656524	20	—	—
331714 2002 RS_{253}	16.7	X	98.39007	61.49547	187.65941	11.59579	0.0339579	0.22251185	2.6971221	20	10 14.9	20.4
331715 2002 RF_{255}	16.5	X	140.13218	311.64413	43.12382	2.47584	0.1771430	0.19035627	2.9928935	20	1 29.2	21.2
331716 2002 RU_{255}	15.8	X	163.30614	82.07871	185.13313	20.45593	0.1461242	0.18377758	3.0638984	20	—	—
331717 2002 RV_{280}	15.9	X	305.96481	22.06253	141.40644	10.65968	0.0326739	0.18764014	3.0217060	20	—	—
331718 2002 RM_{287}	16.9	X	35.07692	118.18921	170.03947	9.23991	0.0841419	0.21981976	2.7190983	20	9 19.8	20.2
331719 2002 SS_{55}	17.4	X	357.83447	266.42997	106.65808	3.33825	0.2604500	0.27876457	2.3208354	20	12 31.3	19.6
331720 2002 SC_{59}	15.7	X	67.93132	280.19328	69.98536	6.28861	0.1650216	0.17605831	3.1528141	20	—	—
331721 2002 SJ_{73}	16.1	X	26.22095	240.13076	133.15128	9.12052	0.0408717	0.17520568	3.1630345	20	12 10.4	20.5
331722 2002 TR_{10}	16.8	X	272.29331	258.02587	179.37400	21.32651	0.3312544	0.27140514	2.3626026	20	8 26.1	19.8
331723 2002 TG_{71}	15.5	X	24.39191	175.18953	280.28327	9.81234	0.0764508	0.18191887	3.0847328	20	—	—
331724 2002 TB_{73}	16.7	X	255.16466	103.16945	299.41074	5.51873	0.1207373	0.26516965	2.3994968	20	7 19.9	19.9
331725 2002 TO_{86}	15.4	X	71.44571	228.31586	158.71673	11.07218	0.1343735	0.18149387	3.0895466	20	—	—
331726 2002 TU_{90}	17.0	X	22.94020	128.50560	217.38974	8.57775	0.2160816	0.27926591	2.3180569	20	12 22.3	20.0
331727 2002 TC_{99}	16.7	X	147.94994	101.75914	9.26575	6.44215	0.1195660	0.25874698	2.4390415	20	6 20.9	20.4
331728 2002 TP_{103}	15.6	X	355.68868	238.89649	204.84453	15.70039	0.0692323	0.17646866	3.1479246	20	—	—
331729 2002 TW_{112}	15.4	X	153.30314	73.80258	190.75282	16.32672	0.1986769	0.17784480	3.1316647	20	12 22.5	21.0
331730 2002 TM_{123}	15.4	X	83.89425	93.49867	250.66667	9.43579	0.1309445	0.17811067	3.1285476	20	—	—
331731 2002 TW_{126}	17.7	X	8.43757	265.75533	100.76492	4.41074	0.2252961	0.28090697	2.3090200	20	—	—
331732 2002 TJ_{128}	15.6	X	148.03413	26.15014	295.80880	8.85333	0.0830083	0.18408879	3.0604443	20	—	—
331733 2002 TS_{138}	15.9	X	146.69839	212.94740	259.62987	8.13763	0.2033284	0.25559828	2.4590315	20	6 25.5	19.9
331734 2002 TS_{158}	15.4	X	36.34338	226.11561	159.02580	16.78009	0.2569237	0.17442077	3.1725167	20	—	—
331735 2002 TE_{169}	15.5	X	343.72640	167.23636	244.88021	14.37295	0.1435856	0.17091670	3.2157310	20	12 5.5	19.3
331736 2002 TE_{185}	15.3	X	98.28678	136.18200	205.40506	9.23960	0.1618935	0.17980074	3.1089117	20	—	—
331737 2002 TV_{217}	17.6	X	134.75517	190.63992	92.95033	3.31215	0.2175141	0.28616371	2.2806554	20	—	—
331738 2002 TL_{218}	16.9	X	93.30305	44.23530	277.36740	7.23298	0.1726563	0.28855165	2.2680555	20	—	—
331739 2002 TC_{263}	15.8	X	122.63488	217.38051	141.96785	2.77802	0.1804681	0.18450944	3.0557911	20	1 17.4	20.3
331740 2002 TJ_{274}	15.9	X	55.78398	125.55636	228.26482	10.03397	0.2789898	0.17335128	3.1855519	20	—	—
331741 2002 TZ_{278}	15.2	X	87.93871	81.19633	300.98077	8.78491	0.1092947	0.18092298	3.0960424	20	—	—
331742 2002 TE_{279}	16.7	X	257.12563	159.54492	232.66936	11.62793	0.1866442	0.26400121	2.4065715	20	6 26.5	20.1
331743 2002 TT_{293}	16.2	X	96.16439	108.53962	251.74294	4.30078	0.3326524	0.18183459	3.0856859	20	1 9.8	20.5
331744 2002 TP_{308}	17.7	X	143.19011	178.29138	122.10695	5.58691	0.1806677	0.29227470	2.2487537	20	—	—
331745 2002 TW_{347}	17.6	X	33.19560	176.96135	109.95431	7.82749	0.1133723	0.27113746	2.3641573	20	10 2.6	20.4
331746 2002 TN_{352}	18.4	X	114.99744	69.70831	225.86307	4.28461	0.1838996	0.29008325	2.2600651	20	—	—
331747 2002 TJ_{383}	16.0	X	52.97646	266.59471	80.13116	20.40258	0.1601263	0.17018849	3.2248975	20	12 24.0	20.7
331748 2002 UE_{22}	15.2	X	26.55190	164.90932	226.09958	27.23620	0.1726453	0.17072312	3.2181614	20	—	—
331749 2002 UM_{41}	17.0	X	357.47459	328.57844	70.26308	6.82354	0.1677597	0.27926305	2.3180727	20	—	—
331750 2002 VX_{13}	17.6	X	262.47034	126.64808	247.97011	19.90528	0.0899701	0.37341030	1.9099054	20	6 26.2	19.5
331751 2002 VN_{21}	17.1	X	349.44990	7.99914	352.18764	5.90208	0.2602367	0.27531979	2.3401540	20	11 22.6	19.0
331752 2002 VY_{66}	17.7	X	45.57411	70.50716	308.57911	2.84200	0.2601379	0.28486985	2.2875560	20	—	—
331753 2002 VL_{120}	15.2	X	105.00117	63.50451	289.25081	9.64963	0.0773194	0.17624520	3.1505849	20	—	—
331754 2002 VO_{136}	17.2	X	53.98481	106.65793	239.49082	8.58882	0.1801631	0.28163190	2.3050560	20	—	—
331755 2002 VY_{144}	17.9	X	337.45950	154.50631	193.25491	0.81036	0.1920254	0.27061349	2.3672080	20	9 23.7	19.5
331756 2002 VF_{148}	16.3	X	3.82947	252.94723	233.15203	6.08038	0.0633358	0.17844904	3.1245915	20	—	—
331757 2002 WH_{6}	14.7	X	40.12461	158.47955	240.18823	27.21061	0.2345986	0.17417312	3.1755232	20	—	—
331758 2002 XH_{9}	17.1	X	289.14946	296.20367	80.20769	5.18478	0.1375125	0.26447589	2.4036911	20	7 31.8	19.6
331759 2002 XA_{19}	16.2	X	32.10354	100.81851	240.02182	22.90254	0.1959210	0.27898420	2.3196171	20	12 21.6	19.5
331760 2002 XR_{24}	17.6	X	307.59200	24.56146	27.85405	1.77043	0.1646347	0.27090259	2.3655235	20	10 29.6	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331761 2002 XS_{32}	15.0	X	88.74467	123.72863	273.87591	15.34153	0.2333698	0.17927124	3.1150304	20	1 28.2	19.3
331762 2002 XR_{49}	18.0	X	159.95663	163.43643	253.44328	19.12379	0.1098532	0.36097230	1.9535302	20	4 11.5	20.8
331763 2002 XG_{81}	16.3	X	121.93722	78.26682	24.34930	5.07266	0.1746993	0.24478215	2.5309460	20	5 16.8	20.1
331764 2002 XW_{98}	17.1	X	247.22729	284.77754	123.62375	2.45672	0.1277693	0.26116743	2.4239484	20	7 16.1	20.3
331765 2002 XS_{119}	16.0	X	107.33928	257.89352	117.47596	9.67129	0.2385637	0.18123989	3.0924322	20	1 28.3	20.5
331766 2002 YO_{5}	15.3	X	59.75773	255.45784	247.55055	26.05141	0.2542061	0.23723973	2.5843090	20	5 2.8	18.4
331767 2002 YJ_{23}	16.6	X	327.82064	285.88825	113.42707	7.33854	0.0986661	0.27004526	2.3705276	20	11 21.2	19.0
331768 2003 BC_{3}	16.7	X	7.28989	62.66805	125.56677	30.57988	0.3130862	0.23304365	2.6152379	20	3 8.6	18.9
331769 2003 BQ_{35}	19.7	X	181.25462	223.96773	136.99212	8.48294	0.2452361	0.57915251	1.4254131	20	2 8.4	20.3
331770 2003 BP_{53}	17.2	X	198.98667	161.87801	339.80512	3.52215	0.1008396	0.25947337	2.4344874	20	9 25.3	20.7
331771 2003 CY_{21}	16.5	X	96.20274	250.37875	222.54035	5.46213	0.2240769	0.24029381	2.5623650	20	5 9.2	20.1
331772 2003 DO_{12}	16.6	X	106.36834	300.79447	167.32358	17.10376	0.1240281	0.23852270	2.5750336	20	5 5.3	20.4
331773 2003 EU_{15}	16.8	X	34.94346	121.45871	35.48886	5.26156	0.1748765	0.23507728	2.6001333	20	3 26.7	19.2
331774 2003 EQ_{38}	15.8	X	322.11426	330.04244	264.48781	10.04296	0.1644427	0.23076430	2.6324308	20	2 21.1	19.2
331775 2003 ES_{39}	16.4	X	49.69648	39.42849	105.38294	14.10814	0.1959837	0.23427730	2.6060490	20	4 17.0	19.4
331776 2003 EE_{53}	17.3	X	19.45849	66.89982	81.32812	7.15563	0.2764677	0.23073047	2.6326882	20	2 6.9	19.1
331777 2003 EF_{59}	15.8	X	347.69189	289.78174	314.44749	28.12604	0.3456434	0.23286867	2.6165478	20	3 9.7	18.7
331778 2003 EN_{59}	16.1	X	321.20327	30.90292	172.05625	10.08081	0.3155095	0.22459773	2.6803971	20	—	—
331779 2003 FY_{29}	16.8	X	21.10893	37.43886	137.27226	8.42975	0.1481201	0.23249432	2.6193557	20	3 24.9	19.4
331780 2003 FT_{33}	16.9	X	339.87863	235.89470	29.61270	5.05333	0.1483076	0.23613378	2.5923719	20	5 12.6	19.4
331781 2003 FQ_{131}	16.2	X	26.20730	340.96978	178.21451	13.86030	0.1892322	0.22699013	2.6615302	20	3 10.5	18.7
331782 2003 GQ_{43}	16.0	X	314.82357	172.15060	108.08694	13.77380	0.1653251	0.23139418	2.6276515	20	4 24.8	19.4
331783 2003 GB_{44}	16.3	X	299.65708	133.38828	139.38854	13.66018	0.2428181	0.22643278	2.6658959	20	3 7.8	20.0
331784 2003 GB_{56}	16.6	X	326.24806	61.35788	178.78532	10.41874	0.0101668	0.22898568	2.6460446	20	4 2.5	20.0
331785 2003 HL_{15}	16.4	X	356.71319	277.14504	239.74169	25.40516	0.4315955	0.22629344	2.6669901	20	—	—
331786 2003 HK_{30}	15.9	X	10.35081	306.80400	232.25048	12.27503	0.1047015	0.22694749	2.6618636	20	3 3.1	19.2
331787 2003 JU_{8}	16.2	X	285.27691	72.23819	185.71186	10.81261	0.1084215	0.22313198	2.6921226	20	2 15.3	20.1
331788 2003 JC_{14}	16.4	X	309.58512	58.29877	188.12290	13.09291	0.2203727	0.22507807	2.6765822	20	2 13.7	20.1
331789 2003 KO_{14}	16.3	X	331.33284	130.94214	114.45112	13.66095	0.1343516	0.22719285	2.6599468	20	4 8.3	19.7
331790 2003 KE_{20}	15.6	X	320.46991	95.12758	232.51512	15.47271	0.2747501	0.23477761	2.6023454	20	6 18.4	18.1
331791 2003 LP_{5}	16.3	X	171.04245	307.09619	46.20432	6.94320	0.0451923	0.22142213	2.7059641	20	2 15.7	20.2
331792 2003 MT_{2}	15.9	X	321.47616	304.61038	305.10521	27.90716	0.5331782	0.22373670	2.6872696	20	1 22.9	19.7
331793 2003 MV_{4}	16.1	X	261.05027	44.87405	269.77094	13.19509	0.2055919	0.21992698	2.7182144	20	3 14.6	20.7
331794 2003 MG_{6}	15.8	X	254.62786	55.33284	260.56243	7.50080	0.2420578	0.21856320	2.7295100	20	3 10.4	20.5
331795 2003 MU_{9}	16.0	X	292.08538	186.58979	118.74211	16.21753	0.2013445	0.22826593	2.6516039	20	4 21.1	19.9
331796 2003 OJ_{3}	15.5	X	214.44560	84.27355	274.26985	13.35003	0.1349930	0.21585244	2.7523146	20	3 29.9	20.2
331797 2003 ON_{17}	17.4	X	199.96529	343.29843	2.02561	2.22061	0.2514558	0.27063152	2.3671029	20	3 3.6	21.3
331798 2003 QP_{48}	17.4	X	186.64211	328.04491	353.55370	1.61261	0.2154749	0.26416574	2.4055722	20	1 24.7	21.3
331799 2003 QS_{58}	16.4	X	247.36297	215.34073	73.18298	3.42508	0.2379550	0.21151502	2.7898139	20	2 7.2	21.1
331800 2003 QR_{80}	16.5	X	203.85541	3.27540	6.36628	1.62885	0.2515028	0.21238652	2.7821769	20	4 6.8	21.4
331801 2003 QJ_{107}	16.9	X	247.64459	250.86048	65.10981	7.16620	0.2422766	0.27344599	2.3508324	20	3 8.3	20.8
331802 2003 QA_{120}	15.9	X	215.34470	35.68648	298.55766	7.74535	0.1108765	0.20986273	2.8044379	20	3 5.8	20.4
331803 2003 RS_{15}	15.8	X	256.97352	16.16146	291.00254	8.29602	0.1542972	0.21607774	2.7504011	20	3 9.7	20.2
331804 2003 RY_{15}	17.7	X	60.18426	180.75750	186.52980	3.47696	0.1680657	0.30674306	2.1774735	20	—	—
331805 2003 SS_{10}	16.7	X	244.43529	338.45760	350.27865	4.70932	0.1612851	0.21318366	2.7752372	20	3 26.5	21.0
331806 2003 SA_{15}	15.1	X	6.40169	155.14745	172.81835	23.17094	0.1038864	0.17403466	3.1772073	20	9 24.2	19.0
331807 2003 SQ_{20}	16.5	X	222.07101	341.52058	348.81504	4.62288	0.1574785	0.21131852	2.7915432	20	3 8.9	21.0
331808 2003 SJ_{52}	16.2	X	60.29634	269.94182	117.35998	2.74498	0.1170655	0.18973712	2.9994008	20	—	—
331809 2003 SQ_{71}	16.7	X	220.73699	42.79917	302.33412	6.93905	0.2406726	0.21256517	2.7806179	20	3 18.8	21.7
331810 2003 SZ_{93}	15.9	X	149.69083	179.25787	203.95946	13.33827	0.1516735	0.20270181	2.8701040	20	3 4.3	20.5
331811 2003 SU_{99}	15.9	X	275.51356	116.40622	208.08144	13.78932	0.4128798	0.21953973	2.7214099	20	3 24.2	20.6
331812 2003 SH_{182}	15.9	X	59.96599	118.20183	256.14101	7.24283	0.0476234	0.18852903	3.0122006	20	—	—
331813 2003 SL_{191}	15.8	X	179.20210	110.40368	218.76689	10.90539	0.1258204	0.20265795	2.8705180	20	1 26.5	20.5
331814 2003 SH_{195}	16.2	X	134.82788	121.98504	218.20872	10.58897	0.1345997	0.19470862	2.9481253	20	—	—
331815 2003 SF_{249}	16.0	X	76.64614	221.13566	171.79393	2.86419	0.2404110	0.19198480	2.9759444	20	1 7.7	19.5
331816 2003 SJ_{282}	16.0	X	42.68888	60.21606	4.63967	8.48824	0.2013974	0.19094437	2.9867450	20	—	—
331817 2003 SV_{286}	17.0	X	140.63200	81.03111	272.91381	1.34317	0.1739666	0.19934043	2.9022788	20	1 26.3	21.4
331818 2003 SR_{292}	15.7	X	358.92154	130.94809	274.37494	6.95866	0.1069652	0.18195742	3.0842971	20	12 21.2	19.5
331819 2003 SG_{306}	15.2	X	47.30625	126.94744	249.24080	8.81312	0.1161640	0.18352660	3.0666912	20	—	—
331820 2003 SE_{325}	16.8	X	233.61882	35.29230	283.89008	3.27009	0.1970024	0.21188084	2.7866019	20	3 2.4	21.3
331821 2003 SM_{377}	17.6	X	203.20341	116.80944	137.74835	1.77969	0.1517560	0.25472090	2.4646750	20	—	—
331822 2003 SN_{392}	17.5	X	4.71663	263.93320	133.57320	5.00895	0.0097238	0.30026263	2.2086922	20	—	—
331823 2003 SU_{404}	16.3	X	309.18429	12.32268	58.18260	12.37529	0.1274588	0.17638314	3.1489421	20	11 4.6	20.2
331824 2003 SU_{424}	16.7	X	88.13210	246.30843	185.91886	1.76398	0.0480562	0.20308970	2.8664483	20	2 12.7	20.4
331825 2003 TC_{8}	15.9	X	219.19987	336.27887	305.25219	8.80226	0.0602321	0.19801482	2.9152172	20	1 13.5	20.1
331826 2003 TW_{12}	15.6	X	162.53291	83.61658	222.39606	8.65562	0.0477722	0.19511223	2.9440582	20	—	—
331827 2003 TD_{17}	16.2	X	223.74774	63.48986	208.37256	12.91958	0.1105908	0.20047339	2.8913337	20	1 2.8	20.9
331828 2003 TB_{39}	16.1	X	187.47356	6.43476	246.21118	7.79813	0.2451488	0.19177813	2.9780821	20	—	—
331829 2003 TX_{42}	16.2	X	90.41614	138.95455	224.68117	7.32903	0.1058769	0.18874851	3.0098650	20	—	—
331830 2003 UO	15.9	X	245.65840	85.54995	236.19766	17.26808	0.2974988	0.21199282	2.7856205	20	3 3.8	21.1
331831 2003 UF_{2}	16.2	X	317.97906	113.95286	340.53949	3.52155	0.0409709	0.18238145	3.0795146	20	12 20.9	20.3
331832 2003 UT_{28}	17.4	X	5.26660	209.17666	197.77056	7.53880	0.0467122	0.30102829	2.2049454	20	—	—
331833 2003 UD_{30}	15.7	X	347.93983	233.27453	204.92594	10.80851	0.0627443	0.18462458	3.0545205	20	—	—
331834 2003 UC_{47}	15.9	X	227.25677	220.92824	145.36003	9.82786	0.3061644	0.21279142	2.7786466	20	4 21.3	21.0
331835 2003 UN_{56}	15.6	X	1.76096	208.05153	222.34799	16.48318	0.2351156	0.18192385	3.0846765	20	—	—
331836 2003 UQ_{72}	16.3	X	26.79381	219.64617	221.58891	8.83720	0.0603340	0.18878457	3.0094817	20	—	—
331837 2003 UL_{92}	15.5	X	76.24663	130.63972	247.87181	8.75413	0.1154214	0.18905055	3.0066584	20	—	—
331838 2003 UJ_{95}	15.7	X	92.71864	317.93668	61.83194	7.19783	0.2258991	0.19241233	2.9715345	20	1 13.3	19.6
331839 2003 UB_{135}	15.9	X	30.74082	199.05393	212.21454	10.52183	0.1024013	0.18644380	3.0346184	20	—	—
331840 2003 UA_{156}	18.0	X	183.35284	81.46705	136.62591	5.38994	0.0442977	0.29985077	2.2107142	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331841 2003 UO_{166}	16.2	X	238.31273	312.95454	217.99232	9.88153	0.0239941	0.17965309	3.1106150	20	12 13.7	20.7
331842 2003 UM_{196}	15.2	X	357.62800	194.97499	221.41333	21.47179	0.0499807	0.18102719	3.0948541	20	12 24.3	19.7
331843 2003 UM_{203}	17.5	X	131.70330	78.54200	232.21718	4.18085	0.1587690	0.30720803	2.1752758	20	—	—
331844 2003 UT_{216}	15.6	X	321.38793	218.01841	220.19587	16.65463	0.1944247	0.17783631	3.1317645	20	12 1.7	19.0
331845 2003 US_{227}	15.5	X	175.83915	51.09265	239.43699	10.98077	0.1849317	0.19239397	2.9717236	20	—	—
331846 2003 UJ_{232}	15.7	X	343.09433	36.22287	18.23081	10.78479	0.0443278	0.17910516	3.1169558	20	12 2.6	20.0
331847 2003 UV_{259}	15.4	X	83.33077	137.36740	246.28033	21.81937	0.2249936	0.18865898	3.0108172	20	1 1.1	19.4
331848 2003 UB_{262}	17.5	X	63.50663	136.52761	243.48588	5.04286	0.2700337	0.30500420	2.1857417	20	—	—
331849 2003 UG_{275}	15.3	X	38.73467	152.98829	236.87774	9.09065	0.0921136	0.18325044	3.0697714	20	—	—
331850 2003 UH_{280}	16.5	X	197.38222	271.88215	217.48363	21.91582	0.2166231	0.27917759	2.3185458	20	8 24.5	20.7
331851 2003 UR_{283}	15.3	X	76.43002	120.85481	242.38963	9.49248	0.1065296	0.18559137	3.0439034	20	—	—
331852 2003 US_{336}	16.5	X	283.25453	301.66986	183.62816	9.14573	0.1175001	0.18282942	3.0744823	20	12 5.7	20.6
331853 2003 US_{342}	15.8	X	102.69344	306.21803	15.07048	8.89948	0.0331547	0.18585554	3.0410183	20	—	—
331854 2003 VH_5	15.5	X	0.06498	129.90328	246.85157	8.15142	0.0740002	0.17388802	3.1789933	20	11 11.6	19.6
331855 2003 VT_8	16.0	X	71.62625	315.71151	39.38327	9.12305	0.1210957	0.18470681	3.0536138	20	—	—
331856 2003 WC_4	16.1	X	114.58778	159.05597	232.88783	8.70411	0.0915365	0.19433944	2.9518577	20	1 31.7	20.5
331857 2003 WN_7	15.2	X	204.04351	280.17390	106.81745	30.49270	0.4049431	0.21112461	2.7932521	20	5 8.3	21.2
331858 2003 WG_{69}	17.3	X	83.07238	109.69333	227.83117	3.73263	0.1894005	0.30111662	2.2045142	20	—	—
331859 2003 WZ_{107}	15.7	X	86.43662	124.45040	240.60679	9.51384	0.1229055	0.18968520	2.9999482	20	—	—
331860 2003 WQ_{144}	17.3	X	314.68063	240.41138	243.58429	6.06823	0.0743226	0.30067875	2.2066539	20	—	—
331861 2003 WK_{148}	16.1	X	17.54443	285.62226	109.10026	6.31198	0.1468053	0.17965972	3.1105385	20	—	—
331862 2003 WZ_{178}	16.1	X	160.22905	54.88891	226.97639	8.66953	0.0358815	0.18510395	3.0492446	20	—	—
331863 2003 XV_{17}	14.9	X	17.18108	290.51889	126.66209	22.85155	0.1487941	0.17967111	3.1104070	20	—	—
331864 2003 YW_{54}	17.7	X	219.64209	22.90259	80.32873	2.92959	0.1624218	0.27896863	2.3197035	20	8 26.1	21.0
331865 2003 YZ_{55}	15.0	X	23.18562	312.46266	85.21456	21.16656	0.1346103	0.17834936	3.1257556	20	—	—
331866 2003 YR_{79}	15.6	X	30.32199	115.84505	297.30552	8.13703	0.1058587	0.17806920	3.1290332	20	—	—
331867 2003 YE_{93}	15.8	X	49.34123	295.27267	77.95559	10.59888	0.1758502	0.18063758	3.0993026	20	—	—
331868 2003 YA_{111}	15.5	X	39.86172	110.42754	283.74557	8.20253	0.0667844	0.17463525	3.1699185	20	—	—
331869 2003 YZ_{162}	15.3	X	63.47347	299.45618	76.59071	17.23402	0.2457509	0.18172634	3.0869111	20	—	—
331870 2003 YR_{168}	17.5	X	211.26284	132.82942	305.55626	5.56692	0.1800429	0.27333515	2.3514679	20	7 11.6	20.9
331871 2003 YL_{182}	17.8	X	275.74119	277.08116	171.89529	5.66265	0.1432338	0.28697309	2.2763652	20	10 30.9	19.8
331872 2004 BU_7	15.0	X	133.48285	16.97322	308.78834	13.47337	0.1564331	0.17988977	3.1078859	20	—	—
331873 2004 BP_{140}	15.4	X	74.96324	233.29496	126.14627	18.48958	0.1404573	0.17438442	3.1729575	20	—	—
331874 2004 BA_{141}	18.4	X	147.15179	8.85470	122.05853	3.30929	0.1420111	0.26620389	2.3932778	20	7 18.0	22.1
331875 2004 BZ_{144}	17.2	X	129.12813	57.22391	127.89254	8.49336	0.0456483	0.27164908	2.3611879	20	9 7.5	20.4
331876 2004 CL	20.5	X	120.31916	274.64404	109.42037	13.30591	0.5361158	0.67689658	1.2846589	20	—	—
331877 2004 CV_5	17.3	X	300.78651	81.08294	21.90593	6.26429	0.0324958	0.28649189	2.2789134	20	—	—
331878 2004 CD_{15}	16.8	X	188.08987	338.90084	133.04938	6.94084	0.0715255	0.26818938	2.3814511	20	8 7.4	20.1
331879 2004 CY_{62}	15.3	X	62.11268	254.35914	122.06943	14.98882	0.0433871	0.17280568	3.1922535	20	—	—
331880 2004 CK_{70}	17.5	X	331.97522	333.52985	124.56846	6.26638	0.0740343	0.29154541	2.2525023	20	—	—
331881 2004 CB_{87}	17.4	X	32.27854	339.22714	60.70054	2.99838	0.2338210	0.23569855	2.5955622	20	—	—
331882 2004 CR_{120}	15.0	X	35.12566	171.68275	158.30272	15.37762	0.1258817	0.15576822	3.4209769	20	11 9.5	19.8
331883 2004 DQ_{35}	16.3	X	267.45952	259.10656	293.31847	6.10169	0.0337730	0.23265798	2.6181272	20	—	—
331884 2004 ED_3	16.1	X	211.64076	142.37115	28.93530	14.21757	0.1361450	0.21905812	2.7253972	20	11 4.9	20.3
331885 2004 ET_6	17.5	X	86.15954	60.90207	191.04487	4.97799	0.1034559	0.26880480	2.3778148	20	10 18.7	20.6
331886 2004 EF_{23}	17.0	X	74.21591	52.55106	168.79261	9.42890	0.1737903	0.26101017	2.4249219	20	8 31.0	20.2
331887 2004 EL_{67}	17.5	X	90.43640	10.70195	177.48194	1.29433	0.1345974	0.26031953	2.4292090	20	7 31.4	20.6
331888 2004 EN_{95}	17.2	X	101.94778	313.91099	254.07834	3.40427	0.1814497	0.26213169	2.4180004	20	9 12.4	20.9
331889 2004 FN_{141}	16.4	X	320.37606	193.58897	12.18711	12.08141	0.1201377	0.23787548	2.5797024	20	1 27.1	19.9
331890 2004 GO_2	16.2	X	21.35239	42.22624	66.03535	25.89299	0.2401971	0.23834850	2.5762881	20	—	—
331891 2004 GT_{27}	16.8	X	35.94637	109.09789	155.90601	12.92567	0.2201694	0.25564925	2.4587047	20	9 18.1	19.6
331892 2004 JL_{12}	16.5	X	324.97209	110.59457	124.16842	12.36230	0.2245602	0.24017771	2.5631907	20	2 22.2	19.5
331893 2004 JW_{49}	17.0	X	37.82212	43.89542	242.28036	7.83181	0.0276124	0.26089358	2.4256444	20	9 14.4	20.2
331894 2004 LZ	16.6	X	252.84099	109.59897	182.86389	12.81293	0.2714719	0.23242682	2.6198628	20	2 8.6	21.3
331895 2004 NW	16.6	X	257.66228	191.35874	132.23565	6.36061	0.2037397	0.23397468	2.6082956	20	3 31.3	20.7
331896 2004 NM_{24}	16.2	X	253.51115	278.51466	50.64660	13.38099	0.1911067	0.23229833	2.6208288	20	4 6.9	20.4
331897 2004 PD_{38}	16.3	X	231.76061	210.03263	152.54649	13.45916	0.1983667	0.23056147	2.6339745	20	4 26.7	20.8
331898 2004 PP_{42}	16.9	X	233.67926	206.92010	161.05801	6.61383	0.3519925	0.23165054	2.6257125	20	4 23.3	21.7
331899 2004 PP_{51}	16.6	X	264.45991	187.43659	131.86720	13.41641	0.1937524	0.23207637	2.6224996	20	4 5.5	20.8
331900 2004 PS_{58}	17.1	X	321.38533	138.72931	166.93456	5.18371	0.1565870	0.24029420	2.5623622	20	6 7.2	19.9
331901 2004 PF_{60}	16.6	X	191.92557	233.78931	137.70415	11.36602	0.2146770	0.22502403	2.6770108	20	4 3.7	21.3
331902 2004 PV_{86}	16.7	X	308.09808	240.38812	79.35269	3.48782	0.1782176	0.23859262	2.5745305	20	5 30.9	19.7
331903 2004 PA_{114}	16.0	X	269.37675	179.90086	153.10059	14.01718	0.1793883	0.23138627	2.6277113	20	4 29.3	20.0
331904 2004 RZ_1	17.5	X	309.16265	59.00253	234.89898	19.66836	0.0492704	0.35902888	1.9605735	20	5 11.5	18.9
331905 2004 RT_7	16.7	X	234.21808	255.82098	100.67264	14.21858	0.3095848	0.22856036	2.6493262	20	4 17.4	21.7
331906 2004 RR_{10}	16.7	X	232.66250	306.35336	40.71013	3.72251	0.1574623	0.22958768	2.6414171	20	4 7.7	20.8
331907 2004 RH_{18}	16.9	X	274.50875	223.85219	111.09912	7.29910	0.3314027	0.23489189	2.6015013	20	4 17.8	21.1
331908 2004 RG_{33}	16.5	X	320.71195	196.13923	102.61403	3.98166	0.1528080	0.23795709	2.5791125	20	5 26.9	19.2
331909 2004 RT_{53}	16.6	X	293.94645	169.35070	128.71481	4.03869	0.2291797	0.23325113	2.6136868	20	4 3.3	20.1
331910 2004 RL_{58}	16.2	X	236.27550	312.73856	21.03433	6.57989	0.1798299	0.22678752	2.6631152	20	3 24.8	20.4
331911 2004 RS_{68}	16.0	X	200.19431	330.27966	8.83674	11.61837	0.1663357	0.22065449	2.7122364	20	3 2.7	20.5
331912 2004 RY_{123}	16.0	X	330.10020	13.00530	277.40589	13.57056	0.1178688	0.23707931	2.5854746	20	6 4.5	18.9
331913 2004 RO_{159}	16.0	X	184.29095	86.83793	274.89213	8.14449	0.1681750	0.22058414	2.7128130	20	3 8.4	20.6
331914 2004 RH_{167}	16.6	X	279.31763	273.79365	33.16284	7.91057	0.2293929	0.23219234	2.6216263	20	3 29.2	20.5
331915 2004 RW_{168}	16.3	X	174.27302	154.37332	219.62309	5.81966	0.0636010	0.22303786	2.6928799	20	3 11.8	20.4
331916 2004 RA_{170}	16.3	X	203.84157	91.30548	239.94847	7.87381	0.1220359	0.22047179	2.7137346	20	2 18.8	20.8
331917 2004 RU_{183}	16.3	X	261.34141	142.40005	181.14324	32.36353	0.2480919	0.23034006	2.6356621	20	3 28.6	20.5
331918 2004 RV_{192}	16.3	X	254.92827	129.40786	212.66007	12.92341	0.2837201	0.23047073	2.6346658	20	4 9.9	20.8
331919 2004 RU_{194}	17.0	X	277.85294	138.65887	196.29403	10.83477	0.2948947	0.23417575	2.6068023	20	4 22.8	20.8
331920 2004 RH_{199}	15.7	X	257.56720	112.27616	245.80707	11.41485	0.1853795	0.22998438	2.6383789	20	5 12.9	19.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
331921 2004 RQ_{201}	15.9	X	100.49149	211.59918	203.86949	7.43500	0.2518056	0.21079785	2.7961380	20	3 4.9	19.9
331922 2004 RA_{214}	16.8	X	277.22422	85.02942	264.24596	12.07105	0.2049775	0.23417679	2.6067946	20	5 21.3	20.3
331923 2004 RD_{240}	16.6	X	195.08884	136.03944	223.89416	1.36583	0.0960710	0.22315726	2.6919193	20	3 18.9	20.7
331924 2004 RC_{272}	17.4	X	281.92350	141.33844	158.86970	3.15927	0.1818930	0.23122704	2.6289176	20	3 28.4	21.1
331925 2004 RP_{309}	16.9	X	295.68792	111.83924	239.34353	6.23334	0.2212986	0.23812211	2.5779208	20	6 17.3	19.9
331926 2004 RQ_{327}	16.0	X	160.57648	146.52545	237.77603	10.16347	0.0683271	0.22067789	2.7120446	20	3 7.5	20.2
331927 2004 RU_{327}	16.1	X	267.36232	84.46255	266.89053	15.59663	0.1413267	0.23218254	2.6217001	20	5 20.9	20.0
331928 2004 SH_{17}	17.1	X	253.44572	186.85032	150.13034	15.16353	0.2552117	0.23048841	2.6345310	20	4 10.1	21.6
331929 2004 SE_{25}	16.9	X	284.47881	154.03722	171.27166	13.40350	0.2336635	0.23376079	2.6098864	20	4 28.1	20.7
331930 2004 SN_{41}	16.2	X	218.34579	292.65291	38.14139	5.93709	0.1823072	0.22091925	2.7100690	20	3 7.2	20.7
331931 2004 SW_{41}	16.6	X	158.74872	175.80721	213.58785	9.37290	0.1828584	0.22070012	2.7118625	20	3 21.9	21.2
331932 2004 SW_{51}	16.4	X	237.04481	184.96524	177.25343	8.67288	0.3378820	0.22782489	2.6550249	20	4 19.3	21.3
331933 2004 TV_{14}	17.6	X	253.48569	205.79295	229.43729	19.98176	0.0881841	0.36526124	1.9382077	20	9 16.2	20.0
331934 2004 TN_{25}	16.2	X	292.68184	67.10737	197.60750	12.46838	0.1395704	0.22412560	2.6841600	20	2 27.7	20.1
331935 2004 TJ_{34}	17.1	X	313.99020	288.63591	339.47776	1.43705	0.0381949	0.22482295	2.6786067	20	4 18.2	20.6
331936 2004 TY_{37}	16.6	X	264.30108	75.70978	201.72585	13.21790	0.1833049	0.22034335	2.7147890	20	2 7.2	21.1
331937 2004 TD_{42}	16.3	X	102.22527	172.69118	230.52303	7.41627	0.1157096	0.20888989	2.8131384	20	2 1.2	20.2
331938 2004 TW_{52}	16.6	X	279.14880	115.02614	213.93120	12.07125	0.2949647	0.23152862	2.6266342	20	4 14.9	20.5
331939 2004 TS_{66}	15.8	X	312.70551	28.26401	39.65986	19.93588	0.3024917	0.18556669	3.0441732	20	10 25.1	18.4
331940 2004 TK_{119}	17.1	X	247.20456	207.89740	129.61546	7.76629	0.2726842	0.22907961	2.6453213	20	4 3.1	21.6
331941 2004 TB_{123}	17.2	X	231.22323	235.73027	108.94561	2.58466	0.2305279	0.22618820	2.6678173	20	3 30.7	21.8
331942 2004 TM_{164}	16.3	X	157.93449	303.40134	54.80078	5.90905	0.1670872	0.21242317	2.7818569	20	2 17.3	20.8
331943 2004 TP_{166}	16.9	X	25.15087	289.14431	197.82875	3.46710	0.0138915	0.21409812	2.7673291	20	1 24.9	20.6
331944 2004 TZ_{203}	16.7	X	203.43443	115.65542	229.02868	12.11609	0.2330494	0.21808972	2.7334592	20	3 3.8	21.7
331945 2004 TQ_{230}	16.9	X	166.15222	250.75272	59.06138	2.95031	0.0483481	0.20617833	2.8377494	20	—	—
331946 2004 TH_{243}	16.1	X	211.31508	139.07042	228.22633	13.04704	0.1796353	0.22619216	2.6677862	20	4 9.0	20.7
331947 2004 TS_{256}	16.4	X	234.59654	317.06772	355.95995	4.60629	0.1534854	0.22010959	2.7167108	20	2 28.8	20.8
331948 2004 TB_{274}	16.4	X	197.89942	271.55001	34.39260	9.34001	0.1270471	0.20938802	2.8086751	20	1 21.4	21.0
331949 2004 TN_{299}	15.4	X	232.73667	94.96671	267.73290	13.59604	0.1247229	0.22465182	2.6799668	20	4 25.7	19.7
331950 2004 TH_{328}	15.6	X	90.36185	178.72883	131.27496	11.14357	0.0401614	0.19339878	2.9614216	20	12 14.9	20.0
331951 2004 TB_{343}	15.7	X	258.65038	51.23089	220.27888	15.61690	0.1461794	0.21389898	2.7690465	20	1 28.5	20.4
331952 2004 TB_{356}	15.9	X	170.86037	230.13515	151.29351	15.78323	0.2974851	0.21763576	2.7372589	20	4 1.4	21.0
331953 2004 TM_{369}	16.0	X	332.18260	350.29994	242.85835	8.17049	0.0310624	0.21807925	2.7335466	20	3 26.5	19.7
331954 2004 UM_{3}	15.9	X	202.31431	332.42276	349.05962	9.16993	0.1387206	0.21655449	2.7463629	20	2 11.8	20.3
331955 2004 VB_{5}	16.1	X	232.48080	154.78624	236.58258	11.94093	0.1764384	0.22894644	2.6463470	20	5 31.3	20.1
331956 2004 VS_{10}	15.5	X	337.65328	87.83454	268.97181	14.58347	0.2557325	0.18049130	3.1009769	20	9 4.0	18.8
331957 2004 VZ_{36}	16.5	X	354.92610	52.71340	40.22048	2.25364	0.0865963	0.19576916	2.9374684	20	—	—
331958 2004 VD_{39}	17.6	X	283.66449	31.73292	225.79107	2.95516	0.0579554	0.27644509	2.3337990	20	2 13.8	20.5
331959 2004 VG_{75}	15.9	X	223.16270	224.09731	109.33315	13.92201	0.2168478	0.21955343	2.7212967	20	3 16.1	20.7
331960 2004 VV_{84}	15.9	X	188.63274	87.33046	246.41732	11.40966	0.1433978	0.21065267	2.7974225	20	2 7.9	20.7
331961 2004 XQ_{28}	15.3	X	11.28915	311.05330	122.86537	10.85938	0.0695288	0.18795138	3.0183693	20	—	—
331962 2004 XA_{34}	16.0	X	272.87096	47.79443	82.72783	10.65169	0.1692433	0.18292667	3.0733925	20	11 20.9	19.9
331963 2004 XK_{35}	17.6	X	300.19583	64.05262	263.86199	31.47722	0.4169071	0.36128811	1.9523916	20	4 1.2	21.0
331964 2004 XD_{37}	15.7	X	297.23418	65.66201	82.86844	9.89556	0.0373399	0.19089163	2.9872951	20	—	—
331965 2004 XK_{41}	16.4	X	290.94387	16.23335	98.53814	8.89876	0.1469921	0.18150406	3.0894309	20	11 30.7	20.1
331966 2004 XA_{57}	16.1	X	211.50881	190.08037	272.17059	13.14858	0.0397584	0.22977691	2.6399668	20	8 16.3	20.0
331967 2004 XM_{70}	16.1	X	100.46270	137.80986	254.93085	14.28190	0.1444255	0.20498497	2.8487524	20	1 20.5	20.2
331968 2004 XY_{82}	16.4	X	199.28979	258.95161	80.50317	13.07710	0.3063765	0.21465793	2.7625157	20	3 5.5	21.7
331969 2004 XS_{118}	16.1	X	224.88452	67.84130	281.86789	8.11864	0.1811658	0.21539158	2.7562391	20	3 29.0	20.8
331970 2004 YU_{7}	17.1	X	240.36931	230.63522	117.33434	2.86893	0.3554003	0.22658726	2.6646841	20	4 3.6	21.9
331971 2005 AR_{63}	15.8	X	196.62320	298.99952	264.34221	8.57377	0.0577910	0.17827731	3.1265976	20	11 29.6	20.3
331972 2005 AH_{66}	16.6	X	261.88502	359.58892	140.00086	4.16034	0.0737056	0.17791590	3.1308304	20	11 28.6	20.8
331973 2005 AG_{77}	15.9	X	298.01875	17.84037	85.76742	6.21409	0.1049057	0.17734804	3.1375100	20	11 29.9	19.7
331974 2005 CP_{28}	16.1	X	49.83277	255.84487	135.43791	16.45259	0.1692917	0.18521416	3.0480348	20	—	—
331975 2005 CT_{39}	15.6	X	350.27395	278.77874	144.68719	13.45021	0.0977689	0.17728894	3.1382072	20	12 28.9	19.7
331976 2005 CU_{64}	17.7	X	174.85757	159.70776	353.82851	4.15980	0.0953481	0.29067024	2.2570214	20	9 18.8	20.5
331977 2005 CO_{78}	15.4	X	256.40465	255.85098	292.23825	13.23895	0.1161739	0.18119854	3.0929027	20	—	—
331978 2005 CZ_{80}	15.7	X	204.98157	17.36911	165.22860	19.19956	0.0998724	0.17080212	3.2171691	20	11 13.1	20.9
331979 2005 CB_{81}	15.5	X	305.14217	345.62280	112.47755	15.58624	0.1497799	0.17636641	3.1491412	20	12 2.9	19.4
331980 2005 EK_{9}	15.4	X	3.45943	187.84233	299.25839	8.80285	0.0562172	0.18887335	3.0085386	20	—	—
331981 2005 EG_{19}	17.5	X	143.14384	237.76790	355.57321	6.50760	0.0961816	0.29364401	2.2417574	20	11 27.6	20.7
331982 2005 EJ_{38}	15.0	X	231.74883	278.68705	274.98350	27.05527	0.2172696	0.17476306	3.1683729	20	12 8.3	19.9
331983 2005 EA_{42}	16.0	X	330.65263	187.35493	311.49876	2.55446	0.0255892	0.18846665	3.0128652	20	—	—
331984 2005 EM_{76}	17.5	X	138.45685	139.27863	175.22797	6.99381	0.2588850	0.30526308	2.1845057	20	—	—
331985 2005 EH_{152}	17.5	X	320.60661	294.29705	163.01353	6.21377	0.0883875	0.30265104	2.1970567	20	—	—
331986 2005 EA_{210}	15.7	X	154.42084	110.73279	177.57340	25.36107	0.2164617	0.17257189	3.1951360	20	—	—
331987 2005 EF_{244}	18.1	X	90.88245	60.45194	246.65869	0.96338	0.0740251	0.29834420	2.2181504	20	—	—
331988 2005 EC_{262}	16.0	X	140.58637	77.26841	304.57985	8.11233	0.1176525	0.19915586	2.9040716	20	2 20.9	20.5
331989 2005 EC_{292}	17.1	X	214.14928	13.98459	134.80423	6.30822	0.1655990	0.29290215	2.2455411	20	10 23.6	20.1
331990 2005 FD	19.6	X	157.20670	270.94661	13.35889	11.32865	0.3940847	0.55822708	1.4608158	20	—	—
331991 2005 FD_{3}	16.2	X	127.46648	120.55140	111.33962	39.60128	0.2850130	0.28461786	2.2889060	20	11 27.1	21.1
331992 Chasseral	17.6	X	145.02736	202.35508	18.89137	6.47507	0.1130405	0.28987314	2.2611571	20	11 12.9	20.9
331993 2005 GY_{21}	16.7	X	149.86100	116.29417	129.69704	7.46938	0.0567031	0.29453580	2.2372301	20	12 25.9	19.7
331994 2005 GB_{50}	17.0	X	29.82688	150.55368	132.49319	0.80565	0.0375689	0.21437173	2.7649739	20	8 28.7	20.7
331995 2005 GU_{144}	17.0	X	157.50160	308.98694	299.71031	6.69760	0.1625356	0.29443887	2.2377211	20	12 30.5	20.2
331996 2005 GJ_{173}	16.4	X	185.52437	173.94277	43.18843	13.37088	0.1959852	0.23028556	2.6360779	20	12 1.4	20.7
331997 2005 GZ_{174}	18.2	X	141.62619	101.04597	129.57720	2.63242	0.1089755	0.28938028	2.2637237	20	11 23.6	21.4
331998 2005 GA_{217}	15.9	X	114.39157	155.62168	190.83158	10.52147	0.1052659	0.17675574	3.1445152	20	—	—
331999 2005 HA_{8}	19.2	X	176.80649	173.37004	102.14658	13.39322	0.2860653	0.42922510	1.7405212	20	—	—
332000 2005 JK_{69}	15.6	X	150.54607	101.12524	146.09147	16.23982	0.0843653	0.15888019	3.3761589	20	12 2.1	21.1