Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148001 1997 EX_{49}	16.4	X	291.40823	335.71834	185.72274	4.04114	0.1113969	0.28746884	2.2737473	20	—	—
148002 1997 GF_{2}	16.7	X	24.08536	357.73254	2.88043	2.48081	0.1828964	0.27866337	2.3213972	20	—	—
148003 1997 GN_{20}	16.7	X	294.53898	99.00192	31.84961	4.52015	0.0902583	0.28382366	2.2931738	20	—	—
148004 1997 GP_{22}	15.6	X	223.25263	214.10939	30.93333	25.78292	0.1932685	0.28440302	2.2900585	20	—	—
148005 1997 GF_{30}	15.7	X	76.86961	53.57744	168.31303	0.31408	0.1481057	0.18337034	3.0684331	20	8 23.9	20.1
148006 1997 HY_{11}	15.9	X	343.58137	301.75479	38.42546	5.57743	0.2152342	0.26553729	2.3972815	20	9 29.4	17.4
148007 1997 JL_{12}	16.1	X	76.53234	118.83593	63.55497	3.25754	0.1941738	0.26201020	2.4187478	20	7 15.3	19.2
148008 1997 JS_{17}	16.7	X	228.49863	66.47248	173.02235	3.35683	0.1740298	0.28391243	2.2926958	20	—	—
148009 1997 NW	14.6	X	29.28019	115.29232	123.39219	26.49791	0.2534197	0.17357172	3.1828542	20	7 23.1	18.0
148010 1997 SK_{31}	16.2	X	83.70373	105.77998	351.74278	2.91134	0.1772081	0.23761259	2.5816047	20	3 25.7	19.3
148011 1997 TE_{9}	16.1	X	342.00909	145.87631	223.69200	4.72433	0.0665559	0.21380704	2.7698402	20	10 15.1	19.5
148012 1997 TT_{18}	15.4	X	146.89024	10.67724	340.48681	13.18349	0.1742293	0.23575226	2.5951680	20	1 28.2	19.4
148013 1997 US_{20}	16.5	X	171.54261	84.39576	350.98194	4.64230	0.2096429	0.24258460	2.5462081	20	5 30.0	20.9
148014 1997 VX_{1}	15.4	X	334.67263	329.98079	52.88685	15.21712	0.1645026	0.21303949	2.7764891	20	10 28.1	18.2
148015 1997 WW_{5}	16.0	X	166.84129	249.58438	112.04764	1.84311	0.1680176	0.23438810	2.6052277	20	2 25.5	20.1
148016 1997 WR_{24}	16.7	X	118.92659	188.04072	228.09974	4.28695	0.0848178	0.23439670	2.6051639	20	3 2.4	20.2
148017 1997 WU_{30}	15.8	X	308.79196	0.06640	49.73195	9.51721	0.2819386	0.21193372	2.7861384	20	10 1.5	18.2
148018 1997 YQ_{15}	15.5	X	246.77115	294.29210	295.95970	7.97307	0.1494039	0.21880531	2.7274962	20	—	—
148019 1997 YW_{19}	14.6	X	301.15983	242.37512	259.35772	22.23775	0.3264073	0.21664472	2.7456002	20	—	—
148020 1998 AW_{3}	16.3	X	285.40883	93.31092	102.05043	3.70684	0.1357719	0.21955090	2.7213176	20	—	—
148021 1998 CT	16.4	X	47.48100	291.22864	94.58025	8.07835	0.2672048	0.21888545	2.7268304	20	—	—
148022 1998 CH_{4}	15.1	X	337.63136	25.67012	169.50641	5.26407	0.0738036	0.17861242	3.1226858	20	2 17.2	19.2
148023 1998 DY_{1}	15.4	X	256.13969	67.56100	121.23503	14.02240	0.0762675	0.21303646	2.7765154	20	—	—
148024 1998 DX_{18}	16.1	X	274.13525	171.55374	8.02459	2.64148	0.0588711	0.21360914	2.7715507	20	—	—
148025 1998 DT_{37}	16.0	X	109.18722	19.82620	317.68249	5.47779	0.0596630	0.21484800	2.7608862	20	—	—
148026 1998 DZ_{37}	15.3	X	7.23150	50.27437	161.94684	13.26137	0.2658168	0.18084669	3.0969131	20	4 27.2	18.2
148027 1998 EH_{9}	15.1	X	225.59111	121.83227	138.98699	32.83680	0.2582211	0.21096609	2.7946512	20	—	—
148028 1998 EY_{12}	14.7	X	265.79964	55.05821	3.45318	11.86428	0.0407310	0.19655932	2.9295907	20	9 3.3	18.7
148029 1998 FQ_{7}	16.3	X	126.65137	260.06323	38.80845	2.44161	0.0690256	0.20900013	2.8121491	20	—	—
148030 1998 FF_{13}	14.9	X	327.49300	237.71568	342.26325	11.26317	0.2171602	0.22227336	2.6990511	20	2 10.6	18.2
148031 1998 FG_{101}	14.9	X	331.87822	36.01005	195.28660	26.04930	0.2209680	0.17764883	3.1339674	20	3 3.9	18.9
148032 1998 FQ_{142}	15.6	X	308.21917	196.92097	308.97654	3.35772	0.1436049	0.21169027	2.7882740	20	—	—
148033 1998 MF_{41}	16.4	X	191.27051	8.74759	292.77873	8.36546	0.2023220	0.29502549	2.2347538	20	—	—
148034 1998 QQ_{25}	16.6	X	345.62380	338.19122	20.62560	2.00665	0.2686592	0.27186764	2.3599223	20	11 12.9	18.1
148035 1998 QY_{44}	15.9	X	128.93690	152.57876	218.02821	4.25389	0.2083630	0.24512459	2.5285883	20	1 31.6	19.7
148036 1998 RE_{42}	16.2	X	22.75056	17.24552	330.75245	7.30359	0.1310897	0.27480603	2.3430697	20	12 10.3	19.1
148037 1998 RG_{43}	16.3	X	330.34087	55.09437	267.56697	1.64785	0.1976540	0.26600459	2.3944731	20	7 20.6	17.8
148038 1998 RV_{46}	16.4	X	41.05432	32.81744	306.25034	4.28674	0.2313353	0.27643739	2.3338424	20	—	—
148039 1998 RL_{52}	16.2	X	25.37642	299.89993	49.61248	4.43646	0.2513090	0.27540113	2.3396931	20	—	—
148040 1998 RH_{53}	17.3	X	269.79908	35.44465	351.30211	1.94735	0.1996658	0.26348000	2.4097442	20	7 4.9	20.3
148041 1998 RN_{59}	16.8	X	8.44097	99.02793	241.79383	2.13013	0.2195405	0.27215251	2.3582752	20	11 23.3	19.1
148042 1998 RP_{79}	14.7	X	305.69457	173.39455	21.36592	15.41026	0.0449245	0.24408431	2.5357678	20	—	—
148043 1998 SF_{25}	16.2	X	277.88959	322.37903	68.26908	5.71827	0.1935403	0.26350135	2.4096141	20	7 24.5	19.0
148044 1998 SL_{34}	16.0	X	122.27432	343.65741	20.08099	14.45153	0.2009601	0.24303465	2.5430638	20	1 20.8	19.8
148045 1998 SX_{64}	16.4	X	349.10399	295.59377	76.99982	4.07844	0.1967564	0.27104892	2.3646721	20	11 30.9	18.3
148046 1998 SF_{70}	15.6	X	6.45021	247.93597	143.55327	12.48371	0.1885109	0.27640453	2.3340274	20	—	—
148047 1998 SN_{72}	16.0	X	280.29452	338.96437	44.83555	3.96630	0.1941569	0.26309543	2.4120919	20	7 17.6	18.8
148048 1998 ST_{87}	16.2	X	297.21251	178.88854	208.54647	6.05092	0.1178092	0.26678249	2.3898162	20	8 31.5	18.7
148049 1998 SU_{91}	16.1	X	234.26573	322.76868	329.77640	4.17978	0.1980116	0.29552345	2.2322427	20	1 25.4	19.6
148050 1998 SG_{103}	16.7	X	270.67136	257.77794	167.96027	5.79640	0.2036639	0.26653841	2.3912749	20	8 30.7	19.2
148051 1998 SF_{118}	16.3	X	139.67472	151.81500	209.48862	5.60753	0.1255628	0.24367179	2.5386288	20	1 21.8	20.1
148052 1998 SU_{119}	15.7	X	95.07829	10.78157	21.28951	14.94972	0.2172685	0.24117628	2.5561107	20	1 26.5	19.1
148053 1998 SU_{130}	16.5	X	59.51106	79.72829	249.89031	1.60036	0.1910561	0.27636248	2.3342641	20	—	—
148054 1998 SB_{137}	16.7	X	1.20191	246.98956	98.86366	4.50463	0.2478669	0.27119625	2.3638156	20	11 23.7	18.8
148055 1998 SF_{139}	16.3	X	58.43490	44.34931	279.00269	2.87503	0.2435371	0.27595374	2.3365686	20	—	—
148056 1998 SF_{152}	16.8	X	333.45723	350.26134	26.89929	1.56942	0.1978837	0.27033622	2.3688263	20	11 2.8	18.4
148057 1998 ST_{154}	16.6	X	46.24552	359.90438	334.26667	3.72176	0.2334634	0.27583151	2.3372588	20	—	—
148058 1998 SX_{167}	16.9	X	271.94934	304.66163	66.60754	3.08736	0.2520909	0.26182852	2.4198666	20	6 7.4	20.2
148059 1998 SN_{168}	16.7	X	70.50162	266.33162	63.13367	3.60466	0.2506070	0.28027849	2.3124705	20	—	—
148060 1998 TO_{11}	15.3	X	292.35437	328.55189	19.40103	2.34676	0.2840127	0.12474938	3.9668319	20	5 27.9	20.8
148061 1998 TB_{28}	17.4	X	271.85734	68.17718	17.13140	2.53325	0.1511122	0.26995620	2.3710489	20	10 10.9	19.7
148062 1998 UB_{5}	16.9	X	265.80897	328.48659	90.46803	2.87247	0.1456273	0.26432236	2.4046218	20	8 24.8	19.7
148063 1998 UA_{20}	16.6	X	294.94024	336.54631	55.08258	1.56449	0.1831173	0.26487295	2.4012883	20	8 26.9	18.9
148064 1998 UW_{24}	16.7	X	13.89752	164.03810	193.15612	1.62683	0.2734300	0.27289096	2.3540189	20	—	—
148065 1998 UH_{29}	16.1	X	319.11808	231.83820	132.87639	5.64577	0.2250384	0.26566668	2.3965031	20	9 2.8	17.6
148066 1998 VL_{17}	16.3	X	311.86392	327.54338	45.21424	3.32499	0.1924290	0.26553920	2.3972700	20	9 2.2	18.1
148067 1998 VN_{20}	15.9	X	76.52018	5.22514	56.51078	5.17026	0.1285231	0.24014615	2.5634152	20	1 19.9	18.8
148068 1998 VE_{21}	16.5	X	293.33406	332.75821	34.42495	4.56163	0.2196793	0.26271133	2.4144424	20	7 9.5	19.2
148069 1998 VP_{43}	16.4	X	87.99712	184.56673	56.72524	6.18756	0.0749839	0.26429216	2.4048050	20	10 4.9	19.6
148070 1998 VY_{49}	16.5	X	52.66906	32.59620	39.21245	4.38764	0.2533308	0.23731579	2.5837568	20	1 2.7	18.3
148071 1998 VU_{56}	16.3	X	330.64910	251.22186	123.55363	3.19760	0.2239801	0.26763697	2.3847269	20	10 25.5	17.8
148072 1998 WR_{16}	16.0	X	131.68522	315.71982	62.58816	3.29177	0.1754996	0.24212493	2.5494297	20	2 12.4	19.6
148073 1998 WU_{29}	15.7	X	108.06164	13.48690	103.30062	23.24377	0.0902992	0.24436199	2.5338464	20	5 19.0	19.6
148074 1998 WR_{32}	16.7	X	280.56051	339.33676	67.07755	4.32075	0.1652463	0.26354015	2.4093775	20	8 27.7	19.4
148075 1998 WB_{37}	16.7	X	250.46753	20.85531	50.09904	2.97743	0.1487672	0.26252805	2.4155660	20	8 19.6	19.7
148076 1998 XJ_{1}	16.9	X	237.43214	309.39569	127.45671	1.57731	0.1817054	0.26060916	2.4274089	20	8 5.2	20.3
148077 1998 XJ_{10}	16.5	X	354.21104	254.49334	78.60696	4.68552	0.2658263	0.26710757	2.3878768	20	10 22.9	18.1
148078 1998 XS_{10}	15.6	X	81.89487	305.71853	121.43521	5.08623	0.2246446	0.23588847	2.5941689	20	2 20.5	18.6
148079 1999 AZ_{13}	16.3	X	153.56554	10.28403	82.54126	1.00665	0.0683640	0.24736623	2.5132891	20	5 30.9	19.9
148080 1999 AQ_{17}	15.6	X	151.33471	112.74939	132.33492	11.33130	0.1118245	0.21742064	2.7390641	20	12 8.9	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148081 Sunjiadong	15.7	X	183.14669	5.35097	110.06817	9.67623	0.1294513	0.25133453	2.4867642	20	8 3.3	19.4
148082 1999 BH_{15}	15.4	X	324.45403	267.51538	303.29885	12.69431	0.1351556	0.23385728	2.6091685	20	2 1.4	18.5
148083 1999 CZ_{11}	16.3	X	87.09657	118.05037	313.08603	18.85054	0.1071830	0.37283351	1.9118747	20	1 20.3	17.6
148084 1999 CN_{24}	15.8	X	46.74537	59.56485	9.97783	5.79552	0.2074558	0.23154836	2.6264849	20	—	—
148085 1999 CW_{46}	16.1	X	64.97497	48.54325	131.16148	7.27741	0.2175462	0.24219403	2.5489448	20	6 28.0	19.3
148086 1999 CC_{92}	15.9	X	67.59627	124.23220	14.55362	4.62800	0.1580557	0.24010254	2.5637256	20	4 23.8	18.8
148087 1999 CS_{94}	15.9	X	98.56025	21.09305	59.44931	5.62163	0.1885341	0.23846134	2.5754753	20	3 27.9	19.3
148088 1999 CE_{100}	15.9	X	109.48380	335.15608	140.34417	12.90894	0.2122102	0.24237505	2.5476755	20	5 28.8	20.0
148089 1999 CB_{114}	15.4	X	290.13607	357.94779	305.60228	11.42796	0.0923108	0.24150525	2.5537889	20	4 18.1	19.1
148090 1999 CQ_{120}	16.0	X	87.60847	156.39286	356.54636	17.76920	0.1444835	0.24525244	2.5277095	20	6 6.9	19.8
148091 1999 CC_{153}	16.0	X	304.91764	303.69392	340.64568	2.91179	0.1121230	0.24166751	2.5526457	20	4 14.6	19.1
148092 1999 FW_{13}	16.4	X	123.65201	49.87093	3.09639	3.73060	0.0793016	0.23374563	2.6099992	20	3 6.0	19.9
148093 1999 FZ_{33}	15.3	X	9.47080	131.22627	79.49745	3.23866	0.3034232	0.18767702	3.0213102	20	4 28.1	17.5
148094 1999 GP_{6}	16.7	X	247.74038	66.66736	123.98727	24.31972	0.0423706	0.35872078	1.9616959	20	—	—
148095 1999 JF_{10}	15.5	X	9.63354	125.41414	87.45858	11.87869	0.1366696	0.23407016	2.6075863	20	4 29.9	18.3
148096 1999 JF_{90}	16.0	X	17.40522	20.91541	172.78433	13.81806	0.1945726	0.23366228	2.6106199	20	4 15.9	18.3
148097 1999 JM_{138}	15.1	X	285.58995	88.62661	181.81556	15.63885	0.1478406	0.18144389	3.0901139	20	3 2.0	19.6
148098 1999 KR	15.3	X	229.72060	27.41718	174.96656	8.68959	0.0757016	0.21444489	2.7643451	20	—	—
148099 1999 LN_{3}	17.2	X	128.31537	164.55416	107.70392	6.91389	0.1900630	0.29814620	2.2191323	20	—	—
148100 1999 NM_{10}	15.3	X	2.20785	181.63307	127.79988	7.74964	0.2411874	0.18906164	3.0065408	20	9 8.5	18.2
148101 1999 RD_{33}	14.9	X	29.38587	356.84654	325.87427	9.91090	0.0674080	0.19233321	2.9723495	20	10 14.3	19.1
148102 1999 RW_{47}	14.5	X	216.67558	248.42320	131.24960	25.92335	0.2560264	0.17594497	3.1541679	20	5 8.4	20.4
148103 1999 RO_{57}	16.4	X	178.42171	337.44087	16.90270	3.09994	0.2215906	0.31028855	2.1608546	20	2 23.6	19.7
148104 1999 RX_{68}	15.4	X	321.01230	194.64032	124.95932	5.72684	0.2753413	0.18354968	3.0664341	20	6 7.8	18.7
148105 1999 RU_{102}	14.7	X	244.56919	149.40847	238.59954	9.62140	0.1092578	0.17942182	3.1132874	20	6 15.2	19.3
148106 1999 RV_{102}	14.8	X	311.72273	57.51918	279.24297	7.71298	0.2544838	0.18313821	3.0710254	20	6 17.0	18.4
148107 1999 RR_{144}	14.6	X	257.86022	167.35092	218.04767	9.14808	0.0982552	0.18103487	3.0947665	20	6 28.2	19.2
148108 1999 RJ_{164}	14.6	X	205.88151	198.90920	174.87200	7.38386	0.1656903	0.17245405	3.1965913	20	4 18.4	19.9
148109 1999 RC_{167}	16.7	X	165.52399	338.19171	43.45877	5.06775	0.1887095	0.31057809	2.1595114	20	3 17.2	19.9
148110 1999 RQ_{200}	14.6	X	209.48763	80.54346	338.94934	25.97421	0.0928738	0.17661293	3.1462101	20	6 20.1	19.9
148111 1999 RF_{209}	16.3	X	42.94659	83.82327	250.34851	4.52845	0.1902200	0.28852901	2.2681741	20	12 29.3	19.3
148112 1999 RA_{216}	7.1	X	91.64795	89.81195	192.08723	0.79581	0.0431810	0.00337252	44.0385388	20	10 12.1	23.5
148113 1999 RW_{252}	15.0	X	58.52160	339.91447	323.38275	9.44449	0.0848822	0.19154910	2.9804555	20	10 30.7	19.3
148114 1999 SM_{12}	14.7	X	285.50273	209.61835	153.11832	18.29299	0.2457433	0.17930680	3.1146186	20	6 15.3	19.4
148115 1999 TA_{25}	17.2	X	75.41398	44.52190	353.90694	3.41389	0.1745574	0.29929339	2.2134581	20	—	—
148116 1999 TD_{30}	16.4	X	116.50264	81.43601	337.31506	1.65722	0.1489694	0.30666231	2.1778558	20	3 5.9	18.8
148117 1999 TX_{52}	15.3	X	338.42188	165.97656	149.89398	2.98285	0.1961920	0.18646953	3.0343392	20	7 19.5	18.5
148118 1999 TQ_{65}	15.9	X	43.17881	199.34685	0.28793	1.47316	0.0342895	0.17572181	3.1568378	20	5 25.3	20.1
148119 1999 TV_{81}	17.9	X	157.27120	336.61073	31.54268	1.93308	0.1510595	0.30688002	2.1768256	20	2 16.0	20.8
148120 1999 TK_{85}	16.1	X	77.56201	200.02929	206.95024	4.85611	0.1821449	0.29786356	2.2205359	20	—	—
148121 1999 TL_{100}	16.8	X	95.30467	260.06584	102.84111	5.08236	0.1778185	0.29837301	2.2180076	20	—	—
148122 1999 TC_{140}	17.0	X	47.75538	20.05755	19.70711	3.27361	0.1026167	0.29421988	2.2388313	20	—	—
148123 1999 TF_{161}	17.2	X	207.52471	347.00559	331.49986	3.09398	0.1559977	0.30840277	2.1696543	20	2 1.7	20.2
148124 1999 TK_{165}	14.9	X	323.64420	342.69386	339.48113	9.51101	0.0984899	0.18018099	3.1045362	20	7 10.5	18.9
148125 1999 TV_{166}	15.2	X	158.68294	93.76686	335.64025	7.27210	0.1897702	0.16923272	3.2370283	20	5 10.5	20.7
148126 1999 TM_{185}	16.8	X	24.85652	99.89538	313.31095	5.61037	0.1508930	0.29300967	2.2449918	20	—	—
148127 1999 TM_{186}	14.6	X	19.75760	334.21909	323.15844	8.98803	0.0728228	0.18300876	3.0724734	20	8 31.5	18.5
148128 1999 TM_{191}	16.4	X	51.43941	89.23404	319.08891	5.86699	0.1527146	0.29539436	2.2328930	20	—	—
148129 1999 TK_{192}	16.9	X	146.35416	34.94023	314.86955	6.15212	0.1006671	0.30148482	2.2027189	20	1 4.2	19.5
148130 1999 TB_{203}	14.7	X	154.59993	214.40811	0.52249	13.00123	0.1365505	0.19152488	2.9807068	20	10 27.1	19.7
148131 1999 TO_{250}	14.6	X	54.77681	283.99818	338.59874	10.95834	0.0318515	0.18398977	3.0615423	20	8 31.1	18.7
148132 1999 TW_{256}	14.9	X	297.21266	283.97980	35.86105	5.68848	0.1481526	0.17748510	3.1358945	20	5 18.6	19.1
148133 1999 TO_{258}	15.4	X	279.96892	8.87259	3.54611	4.95931	0.1094911	0.17957617	3.1115032	20	7 9.9	19.8
148134 1999 TQ_{270}	16.5	X	62.97357	86.82381	324.43509	6.21724	0.1041305	0.29825432	2.2185960	20	—	—
148135 1999 TY_{272}	16.4	X	157.50262	10.04153	356.96890	7.11896	0.1670449	0.30530010	2.1843292	20	2 17.6	19.5
148136 1999 TX_{287}	16.8	X	169.96345	176.79251	185.29120	3.16052	0.0470358	0.30610740	2.1804870	20	2 10.7	19.6
148137 1999 TP_{311}	15.6	X	312.04251	234.31838	127.80820	1.69944	0.1940703	0.18353438	3.0666045	20	8 1.6	18.9
148138 1999 TW_{312}	14.2	X	353.33592	342.51177	323.33558	22.68575	0.1173834	0.18065997	3.0990465	20	8 7.4	17.9
148139 1999 VT_{55}	17.1	X	76.55091	297.47862	92.58091	0.83245	0.1354616	0.29679267	2.2258742	20	—	—
148140 1999 VH_{106}	14.9	X	304.47567	70.55678	241.46444	9.21150	0.0259211	0.17077008	3.2175714	20	6 5.5	19.3
148141 1999 VC_{113}	16.8	X	353.99825	119.83599	56.28662	6.04273	0.0870102	0.30079480	2.2060863	20	1 27.3	19.0
148142 1999 VY_{134}	15.4	X	292.14592	281.77338	36.57641	1.74459	0.1719886	0.17360912	3.1823970	20	5 6.9	19.7
148143 1999 VN_{142}	17.8	X	74.74361	236.82784	175.60683	2.14969	0.1656213	0.29755454	2.2220730	20	—	—
148144 1999 VS_{146}	17.8	X	227.20845	281.93984	159.41895	1.36413	0.1579044	0.27279245	2.3545856	20	8 3.1	21.0
148145 1999 VW_{165}	17.0	X	15.76980	6.86097	29.31787	4.09080	0.0913769	0.28807256	2.2705694	20	—	—
148146 1999 VB_{169}	16.7	X	320.21749	20.63513	52.34890	6.62273	0.1385466	0.28390669	2.2927267	20	—	—
148147 1999 XZ_{28}	17.2	X	262.61559	339.70122	81.60971	8.06616	0.1721932	0.27494436	2.3422838	20	8 22.6	20.1
148148 1999 XE_{50}	16.8	X	5.47919	345.97665	69.80754	7.17571	0.1629608	0.28838727	2.2689173	20	—	—
148149 1999 XU_{52}	16.4	X	323.71681	30.34316	63.09216	6.96953	0.1259852	0.28643964	2.2791906	20	—	—
148150 1999 XK_{79}	17.1	X	300.40088	317.45691	78.00825	2.99901	0.2052786	0.27716217	2.3297719	20	9 14.3	18.8
148151 1999 XE_{119}	16.9	X	264.11843	350.60994	24.54120	5.13989	0.2134058	0.27174044	2.3606587	20	6 8.3	20.2
148152 1999 XC_{131}	16.4	X	280.56167	197.82576	322.41583	7.85861	0.0527209	0.28877869	2.2668666	20	—	—
148153 1999 XZ_{131}	16.4	X	290.95403	78.82022	36.22319	5.94556	0.2040334	0.28255615	2.3000267	20	—	—
148154 1999 XA_{134}	15.7	X	279.56573	124.42877	328.19047	7.94171	0.1280967	0.27772322	2.3266332	20	11 6.2	18.3
148155 1999 XL_{135}	16.5	X	56.39317	263.67679	104.02045	7.24362	0.1695899	0.28915616	2.2648933	20	—	—
148156 1999 XP_{141}	14.9	X	47.68987	141.94151	298.75373	24.77405	0.2436634	0.29300096	2.2450362	20	—	—
148157 1999 XV_{142}	15.3	X	240.26577	234.25708	288.09301	23.35086	0.2007053	0.28041486	2.3117208	20	12 5.1	18.4
148158 1999 XB_{153}	16.2	X	86.23443	153.38612	226.47067	4.46572	0.1781165	0.29489314	2.2354224	20	—	—
148159 1999 XC_{153}	16.9	X	28.68292	147.05964	235.29298	4.73357	0.2053999	0.28738553	2.2741867	20	—	—
148160 1999 XQ_{160}	16.2	X	22.29122	197.20714	242.03796	4.29221	0.1109168	0.29031429	2.2588659	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148161 1999 XH_{172}	17.1	X	335.13312	55.46894	358.04836	2.46915	0.2358943	0.28219301	2.3019994	20	—	—
148162 1999 XC_{186}	16.5	X	38.78671	57.97120	346.80883	6.88235	0.0953745	0.29056742	2.2575538	20	—	—
148163 1999 XV_{194}	15.6	X	76.13186	335.85222	25.20117	6.11438	0.1960793	0.29010408	2.2599569	20	—	—
148164 1999 XW_{194}	16.5	X	329.20185	117.49006	329.08319	6.04824	0.1347774	0.28465740	2.2886940	20	—	—
148165 1999 XK_{228}	16.8	X	11.93690	352.57855	89.85552	6.00965	0.1156739	0.28856001	2.2680117	20	—	—
148166 1999 XN_{229}	16.9	X	68.70568	18.27088	22.43194	5.69644	0.1885550	0.29606732	2.2295082	20	—	—
148167 1999 XU_{251}	15.1	X	299.40693	149.63059	160.59559	2.21395	0.1719580	0.17187001	3.2038289	20	5 7.3	19.4
148168 1999 XH_{252}	16.4	X	49.99693	120.82949	273.34226	3.41098	0.1838168	0.28924129	2.2644489	20	—	—
148169 1999 XQ_{257}	16.5	X	345.80993	236.60353	254.94429	6.82482	0.0566863	0.29315517	2.2442488	20	—	—
148170 1999 YE_{1}	15.1	X	322.34098	124.83613	292.49655	23.52815	0.1818776	0.28276955	2.2988694	20	12 19.1	17.1
148171 1999 YC_{3}	15.5	X	22.10055	72.91035	336.28651	21.28209	0.2639093	0.28846568	2.2685061	20	—	—
148172 1999 YZ_{25}	16.1	X	109.10943	225.03642	186.73025	4.57950	0.0459808	0.29690437	2.2253158	20	1 29.4	18.7
148173 2000 AT	16.0	X	14.08735	7.33763	276.77900	1.74993	0.1815954	0.26339122	2.4102857	20	8 30.2	18.0
148174 2000 AC_{36}	16.4	X	295.21736	144.80403	285.19950	6.61858	0.0891710	0.27760649	2.3272854	20	11 5.9	19.0
148175 2000 AE_{36}	16.4	X	64.74419	273.94686	98.02784	5.78832	0.1611452	0.28876748	2.2669252	20	—	—
148176 2000 AL_{46}	17.0	X	287.29267	333.57373	108.99616	2.05925	0.1593835	0.27827793	2.3235403	20	11 6.8	19.1
148177 2000 AR_{62}	16.7	X	331.66724	164.28913	328.20900	4.78476	0.1506779	0.28714852	2.2754379	20	—	—
148178 2000 AO_{73}	16.2	X	48.70850	241.38585	136.62813	4.16247	0.1805642	0.28917624	2.2647885	20	—	—
148179 2000 AY_{79}	16.8	X	322.56660	147.56706	265.21454	3.77996	0.2079089	0.28029607	2.3123738	20	12 10.6	18.1
148180 2000 AD_{114}	16.8	X	332.48839	309.81978	139.97717	7.48542	0.1789544	0.28447750	2.2896588	20	—	—
148181 2000 AQ_{122}	16.4	X	27.00861	164.34931	255.23972	6.89317	0.0654065	0.28721142	2.2751057	20	—	—
148182 2000 AF_{161}	15.9	X	261.33440	112.96305	354.34128	5.79791	0.1774762	0.27593492	2.3366748	20	10 20.4	18.3
148183 2000 AG_{208}	15.2	X	271.11167	260.65538	89.26287	5.73195	0.1725057	0.17276017	3.1928141	20	5 21.7	19.8
148184 2000 AH_{212}	16.5	X	355.09174	43.61161	320.91514	6.69557	0.1286823	0.27227514	2.3575671	20	11 17.7	19.0
148185 2000 AT_{223}	17.1	X	13.50345	260.82739	133.67387	1.13827	0.2311357	0.28346295	2.2951189	20	—	—
148186 2000 BG	17.3	X	169.07847	353.41044	85.65380	2.46803	0.1452511	0.26084419	2.4259505	20	6 1.5	20.9
148187 2000 BP_{18}	16.4	X	208.54778	179.00687	331.69937	2.47419	0.1202025	0.27341175	2.3510287	20	10 18.1	19.4
148188 2000 BF_{20}	16.5	X	59.91075	74.90456	309.60374	6.85954	0.1224408	0.28608453	2.2810762	20	—	—
148189 2000 BE_{22}	16.7	X	154.05434	174.98761	314.38694	1.51711	0.1473400	0.26237779	2.4164882	20	7 23.1	20.3
148190 2000 BT_{23}	16.1	X	26.32524	343.97271	56.66737	5.16298	0.1699409	0.28595404	2.2817701	20	—	—
148191 2000 BK_{24}	16.4	X	351.09937	46.06379	52.19710	8.05354	0.0609242	0.28556433	2.2838456	20	—	—
148192 2000 BQ_{34}	15.7	X	1.28711	60.50885	351.89658	7.43681	0.1434663	0.28170266	2.3046700	20	—	—
148193 2000 BQ_{45}	17.5	X	173.69230	240.73930	340.13242	1.17369	0.1372746	0.27482660	2.3429528	20	12 8.9	20.8
148194 2000 BD_{46}	16.5	X	18.12254	227.26162	137.79996	6.13485	0.0759246	0.27661474	2.3328447	20	12 19.8	19.3
148195 2000 CG_{7}	16.7	X	243.12505	64.31033	120.39196	5.07541	0.0643020	0.28152711	2.3056280	20	—	—
148196 2000 CR_{37}	16.8	X	264.94800	321.88567	126.23666	6.57318	0.1962480	0.27449617	2.3448327	20	9 29.9	19.3
148197 2000 CQ_{38}	16.3	X	166.75634	118.36152	121.56044	5.54240	0.1771425	0.27723078	2.3293875	20	12 23.6	19.9
148198 2000 CR_{38}	16.6	X	329.66723	134.09267	316.74149	6.03825	0.1231803	0.28271936	2.2991414	20	—	—
148199 2000 CE_{40}	16.4	X	200.42835	315.57721	266.08237	5.23254	0.2665610	0.27742034	2.3283263	20	12 24.3	19.9
148200 2000 CH_{69}	16.7	X	266.37929	140.19264	316.46038	2.46693	0.1383989	0.27452918	2.3446447	20	10 20.1	19.1
148201 2000 CD_{80}	16.5	X	37.80299	23.54385	341.86816	4.24968	0.1266428	0.27680976	2.3317489	20	—	—
148202 2000 CN_{80}	15.7	X	333.53797	239.42428	141.41772	26.00005	0.2431573	0.27463326	2.3440523	20	11 26.5	18.2
148203 2000 CW_{88}	15.7	X	333.91223	63.72105	122.50741	8.16777	0.2209085	0.24182943	2.5515061	20	—	—
148204 2000 CN_{90}	16.6	X	278.82894	154.14458	322.86215	1.87711	0.1495706	0.27774724	2.3264991	20	12 12.7	18.6
148205 2000 CZ_{93}	16.6	X	258.95595	317.10938	147.04330	5.14422	0.1825926	0.27364049	2.3497184	20	10 14.9	19.2
148206 2000 CL_{97}	16.5	X	9.59562	93.55785	340.56333	5.80910	0.1408795	0.28449409	2.2895698	20	—	—
148207 2000 CM_{100}	16.8	X	187.03270	89.97413	131.71161	3.22579	0.1224659	0.27732341	2.3288688	20	12 26.5	20.1
148208 2000 CD_{101}	16.7	X	323.23682	158.64511	313.33364	3.84195	0.0682433	0.28442241	2.2899544	20	—	—
148209 2000 CR_{105}	6.3	X	6.30944	316.37178	128.37234	22.82060	0.7953956	0.00031173	215.4199103	20	2 27.1	24.3
148210 2000 CR_{111}	16.9	X	289.01844	64.58691	35.17926	2.82348	0.1820875	0.27752268	2.3277539	20	12 3.7	18.7
148211 2000 CO_{116}	15.5	X	81.16531	99.32304	120.40691	11.63460	0.2090660	0.26040026	2.4287069	20	9 15.1	19.2
148212 2000 CR_{140}	16.7	X	247.08596	83.01168	133.01004	2.77177	0.0842371	0.28642908	2.2792466	20	—	—
148213 2000 DU_{2}	17.3	X	324.39140	290.34322	151.58748	2.94918	0.1654075	0.28078001	2.3097161	20	—	—
148214 2000 DA_{21}	16.5	X	282.26926	115.31646	326.06727	3.68668	0.1287470	0.27437187	2.3455408	20	10 26.1	18.9
148215 2000 DE_{28}	16.3	X	250.79751	54.32994	145.45036	2.48319	0.0669807	0.23429200	2.6059400	20	—	—
148216 2000 DM_{30}	16.0	X	175.04224	315.81782	319.28163	6.24028	0.2084311	0.28035016	2.3120764	20	—	—
148217 2000 DB_{33}	17.5	X	213.16834	15.61882	167.77169	5.02518	0.1745559	0.27491989	2.3424227	20	11 30.8	20.7
148218 2000 DM_{37}	16.1	X	226.57550	83.73397	134.21071	3.55937	0.1260228	0.23214223	2.6220036	20	—	—
148219 2000 DP_{41}	16.5	X	192.27064	347.68061	150.99082	5.63636	0.1721863	0.26781012	2.3836989	20	9 10.9	20.0
148220 2000 DB_{47}	17.1	X	198.56970	262.35607	305.08816	1.57525	0.1635997	0.27491043	2.3424765	20	12 15.7	20.4
148221 2000 DO_{51}	16.5	X	345.54332	31.23402	144.42889	4.68690	0.2051141	0.24302280	2.5431464	20	1 5.5	19.2
148222 2000 DP_{53}	16.4	X	254.99004	145.97208	328.12709	8.39592	0.0489431	0.27220374	2.3579793	20	11 7.2	19.3
148223 2000 DQ_{60}	16.7	X	263.81688	106.53590	58.06657	1.31523	0.1536427	0.27936014	2.3175357	20	—	—
148224 2000 DV_{61}	16.2	X	195.30970	241.28152	355.80578	4.31986	0.0919624	0.27829080	2.3234686	20	—	—
148225 2000 DB_{78}	16.3	X	257.03197	98.57066	342.39659	6.71257	0.1035588	0.26811927	2.3818662	20	9 17.6	19.3
148226 2000 DO_{84}	16.5	X	265.14116	199.42245	321.50193	5.30057	0.0983478	0.28100389	2.3084891	20	—	—
148227 2000 DP_{99}	14.0	X	218.62901	80.23665	69.41064	6.08271	0.1597514	0.12629126	3.9344787	20	10 6.6	20.1
148228 2000 DP_{101}	16.3	X	297.63857	92.52136	20.40665	7.26855	0.0991447	0.27846665	2.3224904	20	—	—
148229 2000 DN_{102}	16.6	X	165.78828	71.38695	76.01147	4.54628	0.0869809	0.26421977	2.4052442	20	8 30.9	20.0
148230 2000 DF_{106}	16.7	X	254.60264	96.04018	81.10873	4.73840	0.1850760	0.27895142	2.3197989	20	—	—
148231 2000 DG_{108}	16.6	X	150.94799	101.28859	82.02708	3.04432	0.1554783	0.26678177	2.3898205	20	9 30.2	20.2
148232 2000 DU_{109}	17.0	X	174.55978	56.57784	155.91804	2.88114	0.1510354	0.27202063	2.3590374	20	11 28.5	20.4
148233 2000 DV_{109}	16.6	X	147.84874	267.96831	348.47918	4.59102	0.1972524	0.27273923	2.3548919	20	12 25.2	20.5
148234 2000 EW_{5}	14.7	X	227.95674	331.86731	170.08945	2.90074	0.1522115	0.12440008	3.9742538	20	10 4.9	20.7
148235 2000 EC_{6}	17.1	X	199.30840	134.75753	14.87507	1.71285	0.1361044	0.26787859	2.3832927	20	10 4.7	20.5
148236 2000 EC_{9}	16.5	X	250.60298	78.07695	358.53793	1.80460	0.0972354	0.26783937	2.3835254	20	9 4.5	19.4
148237 2000 EX_{9}	17.2	X	158.21747	43.51948	170.67574	0.39003	0.1607003	0.26975207	2.3722449	20	11 13.6	20.9
148238 2000 EA_{19}	16.2	X	250.83111	66.77917	3.82888	7.35396	0.1110122	0.26667427	2.3904627	20	8 26.9	19.2
148239 2000 EH_{28}	15.9	X	250.54071	121.25594	112.26607	12.24582	0.2279503	0.23548221	2.5971517	20	—	—
148240 2000 EA_{41}	15.8	X	256.06552	194.58400	5.03352	5.26371	0.1731122	0.27994244	2.3143207	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148241 2000 EP_{42}	16.6	X	208.77370	356.61181	151.63702	3.37921	0.1567876	0.26911484	2.3759882	20	10 12.5	19.9
148242 2000 EN_{58}	16.6	X	156.44303	189.79229	359.81173	5.04749	0.1054816	0.26611018	2.3938397	20	10 11.8	20.1
148243 2000 EX_{58}	16.6	X	256.11347	30.51088	169.23318	9.74582	0.1693802	0.23397987	2.6082570	20	—	—
148244 2000 EW_{63}	16.8	X	238.55309	107.63241	22.06013	3.67887	0.1448090	0.27119812	2.3638048	20	10 24.3	19.7
148245 2000 EG_{70}	16.6	X	173.12544	64.18995	93.07740	2.13619	0.1215321	0.26481469	2.4016405	20	9 18.7	20.0
148246 2000 EK_{109}	15.6	X	227.93215	213.06160	322.54248	13.13179	0.1099509	0.22743082	2.6580910	20	12 4.6	19.5
148247 2000 EA_{124}	16.6	X	164.93191	87.91899	125.50928	3.58988	0.1470605	0.27062504	2.3671407	20	11 20.6	20.1
148248 2000 EJ_{124}	14.8	X	148.60854	255.84638	132.78727	3.49463	0.0879601	0.24577916	2.5240969	20	3 4.3	18.2
148249 2000 EO_{125}	16.7	X	188.69895	168.02633	45.56296	3.12350	0.1524556	0.27359724	2.3499660	20	12 13.7	20.1
148250 2000 EC_{127}	16.4	X	119.15313	95.46125	143.65862	7.39178	0.0852231	0.26762032	2.3848258	20	11 8.5	19.9
148251 2000 EA_{145}	16.3	X	79.74551	267.20322	338.87932	6.54154	0.1700168	0.26101578	2.4248872	20	10 7.0	19.9
148252 2000 ER_{162}	16.2	X	301.45744	121.95249	336.72147	6.75156	0.0619262	0.27584255	2.3371964	20	12 31.5	18.8
148253 2000 EC_{178}	16.2	X	58.28416	311.71482	346.24002	3.79963	0.1126557	0.27074722	2.3664285	20	11 15.0	19.4
148254 2000 EL_{198}	16.6	X	209.23143	308.27001	248.78919	4.05863	0.1733502	0.27425221	2.3462230	20	12 13.1	19.7
148255 2000 EF_{201}	17.0	X	175.44390	133.39958	69.31869	3.16797	0.1373231	0.27004474	2.3705306	20	11 17.4	20.3
148256 2000 FL_{16}	15.8	X	48.58739	340.42424	148.34666	8.38093	0.1284155	0.24538199	2.5268197	20	3 5.0	18.3
148257 2000 FS_{17}	16.2	X	192.66167	88.64610	151.32880	11.99858	0.2501439	0.22628140	2.6670847	20	12 31.3	20.7
148258 2000 FQ_{20}	16.5	X	127.61849	99.73292	123.62964	5.46947	0.1855766	0.26528928	2.3987754	20	10 30.1	20.4
148259 2000 FB_{22}	16.0	X	122.39840	172.09088	72.95765	6.32153	0.1936675	0.26657605	2.3910499	20	11 19.7	19.8
148260 2000 FA_{24}	15.9	X	293.31679	94.35225	105.29374	12.85082	0.1134799	0.23607535	2.5927996	20	—	—
148261 2000 FV_{31}	15.6	X	169.38422	139.64800	88.32547	9.11510	0.2359310	0.22289715	2.6940131	20	11 30.2	20.2
148262 2000 FT_{33}	16.6	X	69.96998	159.68794	51.33918	2.81611	0.1263470	0.25636956	2.4540971	20	8 5.6	19.7
148263 2000 FM_{34}	15.7	X	217.88785	114.63622	101.97414	10.66470	0.2310930	0.22779228	2.6552783	20	12 29.3	19.5
148264 2000 FS_{34}	16.0	X	206.62671	77.10013	17.37677	15.17220	0.0854668	0.26061014	2.4274028	20	8 11.3	19.7
148265 2000 FQ_{37}	16.1	X	127.67863	112.53182	141.02309	5.80897	0.1806662	0.26756741	2.3851402	20	12 4.9	20.1
148266 2000 FQ_{39}	16.4	X	136.62956	73.83551	79.96264	3.36963	0.1324653	0.25836342	2.4414549	20	8 6.8	20.1
148267 2000 FH_{43}	16.1	X	258.90439	71.75526	138.68824	6.16531	0.0763638	0.28212376	2.3023761	20	—	—
148268 2000 FN_{57}	16.6	X	244.54051	23.49596	105.51131	2.90493	0.1706729	0.27225699	2.3576719	20	10 29.4	19.3
148269 2000 FX_{66}	17.5	X	182.39872	207.88150	353.82788	1.76974	0.1654038	0.27119900	2.3637997	20	11 20.3	21.0
148270 2000 GM_{6}	16.9	X	227.64276	324.71702	178.23789	3.49169	0.1540546	0.27053082	2.3676903	20	10 27.8	20.1
148271 2000 GF_{20}	17.1	X	159.26134	306.83866	265.67406	0.46487	0.1121428	0.26819046	2.3814447	20	11 14.1	20.6
148272 2000 GL_{29}	16.2	X	227.57511	274.70326	205.86621	6.00524	0.0872840	0.26648390	2.3916010	20	10 4.8	19.3
148273 2000 GB_{37}	15.7	X	254.79610	359.01976	30.07732	2.84768	0.2156690	0.25714253	2.4491766	20	6 16.5	19.2
148274 2000 GS_{39}	17.1	X	187.29112	99.77411	28.60772	2.55353	0.1728149	0.26290132	2.4132790	20	8 23.5	20.8
148275 2000 GB_{49}	16.3	X	211.40995	158.20847	14.39742	2.94983	0.1322067	0.27031674	2.3689402	20	11 17.7	19.3
148276 2000 GL_{56}	16.5	X	106.46043	85.31983	160.36573	1.26746	0.1523489	0.26328060	2.4109608	20	11 4.1	20.2
148277 2000 GV_{58}	16.7	X	113.86177	172.92502	29.12873	3.70230	0.1245764	0.25978692	2.4325281	20	9 15.4	20.3
148278 2000 GW_{83}	16.6	X	294.99942	71.39239	120.26075	5.07877	0.1292047	0.23664963	2.5886033	20	—	—
148279 2000 GF_{87}	15.9	X	154.67379	144.49508	60.91929	7.34550	0.1553065	0.26635918	2.3923476	20	10 31.4	19.6
148280 2000 GG_{93}	15.4	X	177.10393	77.32462	151.17511	12.10263	0.1584618	0.22277017	2.6950368	20	12 11.9	19.9
148281 2000 GT_{97}	16.7	X	138.26672	98.75284	146.51792	4.49091	0.1896563	0.26795974	2.3828115	20	12 3.7	20.6
148282 2000 GO_{107}	16.2	X	174.27573	112.44119	111.44817	3.40926	0.1524460	0.27010516	2.3701771	20	12 11.6	19.7
148283 2000 GM_{134}	15.9	X	328.43362	31.91049	168.47240	13.36003	0.1177102	0.24061260	2.5601012	20	1 24.9	19.2
148284 2000 GX_{157}	16.6	X	347.87931	44.20585	130.61845	5.85896	0.1733503	0.24195309	2.5506367	20	1 13.5	19.2
148285 2000 GC_{158}	16.7	X	181.31118	82.22463	81.06117	3.09830	0.1619961	0.26699715	2.3885352	20	10 3.4	20.3
148286 2000 GN_{164}	16.7	X	257.83440	267.56714	205.37510	4.10531	0.1849177	0.27227165	2.3575872	20	10 23.0	19.2
148287 2000 GD_{172}	16.5	X	230.09185	235.77457	298.96595	2.06858	0.1058765	0.27359697	2.3499675	20	12 20.1	19.2
148288 2000 GE_{172}	16.8	X	49.59558	314.73132	306.68206	2.43127	0.1895895	0.25729770	2.4481918	20	9 24.8	19.9
148289 2000 GO_{173}	16.6	X	178.59412	170.77368	341.50114	5.31303	0.1770916	0.26461918	2.4028233	20	9 13.4	20.4
148290 2000 HV_{2}	15.7	X	139.01325	314.92581	75.51541	4.99118	0.1783763	0.23942092	2.5685892	20	3 7.7	19.6
148291 2000 HJ_{25}	16.1	X	171.49146	323.69401	226.95532	4.19384	0.1790286	0.26633017	2.3925213	20	10 25.6	19.9
148292 2000 HB_{27}	16.2	X	63.98383	161.01697	94.26402	6.85361	0.1834287	0.25741897	2.4474229	20	10 8.8	19.7
148293 2000 HM_{27}	15.7	X	280.56421	99.40745	115.05336	14.03674	0.1069382	0.23632521	2.5909717	20	—	—
148294 2000 HQ_{34}	16.2	X	231.01362	109.61327	20.99786	3.57718	0.1372995	0.26756038	2.3851820	20	10 16.3	19.4
148295 2000 HU_{51}	16.6	X	78.11543	67.62917	151.51120	0.37567	0.1607236	0.25518879	2.4616614	20	8 31.1	19.8
148296 2000 HG_{67}	16.1	X	307.30478	54.08771	136.94193	13.83134	0.1314415	0.23563620	2.5960201	20	—	—
148297 2000 HH_{72}	16.8	X	120.27364	102.98734	89.95934	2.42343	0.1366691	0.25944936	2.4346376	20	9 10.9	20.4
148298 2000 HX_{74}	16.2	X	171.98020	24.30774	130.74209	3.96431	0.1280317	0.26192915	2.4192467	20	9 14.2	19.8
148299 2000 HM_{77}	15.7	X	280.27920	162.56221	57.42089	19.28229	0.1523402	0.23748093	2.5825588	20	—	—
148300 2000 HO_{97}	16.4	X	188.98620	82.02005	40.47619	2.93680	0.1490839	0.25960204	2.4336829	20	8 18.8	20.2
148301 2000 JJ_{2}	16.0	X	255.27833	95.70989	82.43303	23.09259	0.2619138	0.27633568	2.3344150	20	—	—
148302 2000 JR_{62}	16.0	X	232.29926	121.33538	13.84648	11.45230	0.1977741	0.26913250	2.3758843	20	10 14.6	19.2
148303 2000 KQ_{14}	16.5	X	163.99722	281.75679	251.01197	4.02706	0.1593966	0.26188668	2.4195082	20	9 24.8	20.4
148304 2000 KF_{41}	16.4	X	326.58777	44.26471	116.43383	4.23426	0.1714291	0.23697369	2.5862428	20	—	—
148305 2000 KD_{55}	15.7	X	59.49199	145.88858	98.03653	7.14258	0.1123298	0.25427129	2.4675796	20	9 6.2	18.9
148306 2000 KR_{68}	16.5	X	169.45551	220.10807	117.32265	7.78940	0.1495420	0.23134800	2.6280012	20	1 28.8	20.6
148307 2000 LR_{33}	15.2	X	194.16206	123.60326	102.68967	15.01907	0.1252953	0.22116022	2.7081000	20	12 27.2	19.1
148308 2000 LF_{36}	15.8	X	348.82025	325.66329	263.19858	4.12342	0.1797682	0.24353264	2.5395958	20	3 30.2	18.3
148309 2000 NA_{4}	16.3	X	4.47994	131.97263	235.60679	3.26079	0.2914908	0.20397796	2.8581206	20	12 14.2	19.3
148310 2000 NN_{4}	15.9	X	281.57851	122.62087	162.81862	4.04763	0.1288399	0.23569710	2.5955728	20	3 15.5	19.4
148311 2000 NE_{22}	15.7	X	173.86191	16.31983	291.55886	14.80217	0.2279371	0.22327035	2.6910102	20	1 3.8	20.1
148312 2000 OP_{1}	15.0	X	273.78629	339.19233	312.51816	13.51214	0.2652538	0.23574504	2.5952210	20	2 24.2	19.2
148313 2000 OZ_{22}	14.5	X	206.09275	14.79294	308.26766	16.33665	0.2735302	0.22930800	2.6435645	20	2 11.1	19.3
148314 2000 OH_{52}	16.0	X	287.91787	133.35147	168.34803	1.80573	0.1833767	0.23792116	2.5793722	20	4 5.5	19.4
148315 2000 PU_{6}	16.2	X	283.03629	233.28083	269.49648	17.29091	0.0767678	0.36202429	1.9497439	20	—	—
148316 2000 PL_{18}	16.6	X	75.99488	93.74347	320.03505	17.61542	0.1215639	0.37046424	1.9200175	20	—	—
148317 2000 QX_{12}	15.7	X	96.70976	228.24377	136.26838	10.32779	0.1465478	0.21705406	2.7421472	20	—	—
148318 2000 QK_{13}	15.3	X	37.11956	253.24525	150.43581	13.03555	0.1469985	0.21318509	2.7752248	20	—	—
148319 2000 QO_{32}	15.2	X	225.33861	136.59672	108.62448	10.68135	0.1131100	0.21993417	2.7181551	20	—	—
148320 2000 QV_{47}	15.8	X	150.04255	322.70802	338.20174	5.58398	0.0410869	0.21584869	2.7523465	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148321 2000 QV_{52}	16.0	X	303.57372	134.86707	139.47303	4.95326	0.1801723	0.23522875	2.5990169	20	3 22.7	19.2
148322 2000 QT_{57}	15.5	X	45.70823	21.21124	347.83572	8.89194	0.1711525	0.20986433	2.8044237	20	—	—
148323 2000 QP_{64}	15.6	X	295.86753	294.36551	119.39381	9.64633	0.2709485	0.19566578	2.9385030	20	9 5.8	19.0
148324 2000 QH_{81}	16.1	X	272.72721	106.49733	174.20704	3.34460	0.2115661	0.23180734	2.6245283	20	2 18.4	20.2
148325 2000 QB_{83}	15.9	X	198.75747	67.86749	314.24756	1.13400	0.2564264	0.17994593	3.1072392	20	4 18.4	21.4
148326 2000 QA_{95}	15.7	X	97.96962	353.63445	345.38376	15.05105	0.0466898	0.21260752	2.7802487	20	—	—
148327 2000 QD_{99}	15.6	X	198.22442	178.18557	128.87603	6.08623	0.1661619	0.22245742	2.6975621	20	1 19.7	20.1
148328 2000 QQ_{106}	15.7	X	285.75562	155.72230	126.67884	4.30871	0.2525696	0.23457238	2.6038630	20	3 1.2	19.7
148329 2000 QO_{107}	14.9	X	8.92592	108.30401	342.95397	25.00376	0.2455624	0.21260040	2.7803107	20	—	—
148330 2000 QG_{111}	15.6	X	121.30440	356.81893	325.61399	7.02122	0.0729204	0.21387276	2.7692728	20	—	—
148331 2000 QO_{125}	15.7	X	299.87557	309.98821	328.92970	15.10740	0.1564179	0.23406915	2.6075937	20	3 19.6	19.4
148332 2000 QY_{134}	15.0	X	314.87361	73.89026	345.39574	14.40328	0.2501515	0.20185886	2.8780887	20	10 19.5	17.8
148333 2000 QA_{149}	15.6	X	30.14527	2.21348	347.44328	4.85496	0.1913291	0.20332636	2.8642236	20	12 13.1	19.4
148334 2000 QB_{158}	15.2	X	269.21455	83.33573	314.91690	20.46214	0.2051467	0.19189497	2.9768731	20	7 18.4	19.6
148335 2000 QJ_{159}	15.5	X	316.42648	120.54341	172.04900	17.01379	0.2412096	0.19170767	2.9788118	20	5 1.1	19.3
148336 2000 QP_{166}	15.7	X	153.71075	353.79381	313.02013	8.94339	0.1519050	0.21706155	2.7420842	20	—	—
148337 2000 QM_{167}	15.5	X	81.24398	33.93448	321.38976	8.41716	0.1757040	0.21187842	2.7866231	20	—	—
148338 2000 QQ_{167}	16.0	X	63.71855	48.16645	322.70295	8.79532	0.1905101	0.21087562	2.7954504	20	—	—
148339 2000 QG_{182}	15.7	X	106.65342	17.38542	299.48049	8.30753	0.1569752	0.21308876	2.7760611	20	—	—
148340 2000 QN_{202}	15.7	X	5.50818	261.84680	357.28083	10.38246	0.2807584	0.24286338	2.5442592	20	7 11.3	17.5
148341 2000 QF_{203}	15.5	X	180.55674	260.24903	63.16984	2.35150	0.1689302	0.22262622	2.6961983	20	1 24.5	19.8
148342 2000 QJ_{242}	16.1	X	103.80476	348.45929	345.50034	5.25310	0.0638791	0.21185455	2.7868324	20	—	—
148343 2000 RK_{5}	16.2	X	66.72730	350.87238	3.16187	18.81395	0.0957345	0.35763435	1.9656668	20	—	—
148344 2000 RW_{18}	14.7	X	170.28620	84.50147	326.24923	14.58401	0.2718807	0.17827366	3.1266403	20	4 25.7	20.5
148345 2000 RC_{19}	15.1	X	151.75386	1.87966	315.91591	11.75635	0.1206131	0.21706276	2.7420740	20	—	—
148346 2000 RL_{23}	15.2	X	198.95571	204.98257	196.15999	13.52593	0.2366083	0.18088224	3.0965072	20	5 13.0	20.6
148347 2000 RC_{24}	14.8	X	192.22035	81.45628	348.08862	8.15928	0.2444738	0.18168894	3.0873347	20	6 7.9	20.3
148348 2000 RL_{24}	15.4	X	211.78223	335.71643	319.51714	12.63686	0.1224350	0.22320900	2.6915033	20	1 19.4	19.7
148349 2000 RF_{29}	16.0	X	52.16352	46.38357	288.88755	6.84160	0.2638416	0.20522694	2.8465128	20	12 30.9	20.3
148350 2000 RN_{34}	15.7	X	226.71094	62.21681	323.99938	9.11006	0.2963655	0.18290172	3.0736720	20	5 8.8	21.3
148351 2000 RH_{43}	14.0	X	143.27849	75.60798	356.64941	25.28980	0.2699792	0.17445714	3.1720757	20	4 26.4	19.8
148352 2000 RH_{45}	15.2	X	263.82701	315.45805	332.86700	12.52010	0.1647757	0.22706297	2.6609610	20	2 24.4	19.2
148353 2000 RE_{100}	15.5	X	345.98141	5.49195	3.23592	6.71727	0.1168846	0.20051145	2.8909679	20	10 18.8	18.8
148354 2000 RV_{101}	14.7	X	329.92265	136.14673	284.57185	10.78180	0.1500836	0.20145430	2.8819406	20	12 2.2	17.9
148355 2000 RA_{102}	14.4	X	180.72502	53.67906	323.38661	15.42479	0.1456424	0.17595318	3.1540699	20	3 23.1	19.7
148356 2000 SE_{9}	16.5	X	289.34337	256.31302	192.81897	22.48427	0.1156499	0.35229208	1.9854889	20	12 21.8	18.7
148357 2000 ST_{17}	15.7	X	326.55731	39.32881	328.49434	4.42021	0.1533252	0.19583871	2.9367729	20	9 11.6	18.8
148358 2000 SY_{18}	15.9	X	266.65592	319.68578	301.92920	4.24887	0.2280061	0.22727237	2.6593262	20	1 20.8	20.3
148359 2000 SM_{20}	14.9	X	281.41533	56.87010	315.11361	11.64631	0.0737520	0.18743827	3.0238753	20	7 17.8	19.1
148360 2000 SJ_{27}	15.2	X	189.95239	104.74454	330.94404	6.25847	0.1950576	0.18356630	3.0662490	20	6 15.3	20.4
148361 2000 SG_{36}	15.6	X	201.04368	341.17072	70.47332	4.69730	0.2750174	0.18154823	3.0889297	20	5 24.6	21.0
148362 2000 SG_{46}	15.0	X	298.04842	61.13965	295.87963	14.50836	0.2003501	0.18881221	3.0091881	20	7 2.1	18.7
148363 2000 SX_{90}	14.8	X	193.47159	97.35160	277.96818	14.60692	0.2604179	0.17799887	3.1298574	20	3 31.5	20.7
148364 2000 SN_{91}	15.2	X	84.24976	53.53696	279.25210	10.80693	0.1445289	0.21006077	2.8026750	20	—	—
148365 2000 SP_{94}	15.4	X	236.22135	295.72949	333.84615	10.60745	0.1761648	0.22328279	2.6909103	20	1 9.8	20.0
148366 2000 SM_{100}	15.3	X	210.41620	92.23755	314.74131	11.35290	0.1657697	0.18145918	3.0899403	20	5 28.9	20.5
148367 2000 SS_{101}	16.1	X	349.35451	12.80493	21.43890	2.13660	0.0726097	0.20284364	2.8687660	20	11 25.5	19.8
148368 2000 SO_{105}	15.9	X	169.93966	306.13169	1.23518	2.18543	0.1473338	0.21751253	2.7382927	20	—	—
148369 2000 SW_{108}	15.8	X	171.97767	141.36790	168.49006	2.84170	0.1736369	0.21761431	2.7374388	20	1 1.2	20.3
148370 2000 SE_{119}	15.0	X	204.52960	62.31515	32.23085	10.72469	0.0867084	0.18662669	3.0326354	20	7 31.1	19.7
148371 2000 SU_{129}	14.3	X	190.27310	111.50479	284.49666	21.30210	0.2859811	0.18077915	3.0976843	20	4 21.8	20.2
148372 2000 ST_{137}	15.4	X	311.23368	66.40383	305.26786	11.24237	0.1885841	0.19251430	2.9704851	20	8 13.5	18.7
148373 2000 SP_{165}	15.0	X	204.49639	166.99310	243.06779	9.07683	0.2782926	0.18150130	3.0894622	20	5 24.9	20.4
148374 2000 SW_{174}	15.2	X	146.30504	4.71336	291.11752	6.98477	0.3125268	0.21358931	2.7717223	20	—	—
148375 2000 SO_{184}	15.6	X	183.55565	242.96306	165.18447	9.03584	0.2221518	0.17961748	3.1110261	20	5 10.5	21.1
148376 2000 SX_{195}	15.6	X	156.19038	212.39533	180.86428	1.03655	0.1902978	0.17546605	3.1599046	20	3 29.4	20.8
148377 2000 SN_{281}	14.9	X	230.21724	185.49933	245.45350	8.93316	0.0343235	0.19151666	2.9807921	20	7 29.8	19.4
148378 2000 SP_{282}	15.1	X	149.48175	157.20958	227.58753	15.30573	0.0850873	0.17337083	3.1853124	20	2 29.6	20.2
148379 2000 SQ_{294}	15.4	X	243.73391	78.92346	305.15631	9.69763	0.1799986	0.18321693	3.0701456	20	5 31.9	20.3
148380 2000 SS_{307}	15.4	X	260.58649	79.42262	332.62286	7.95636	0.0837448	0.18946830	3.0022373	20	8 9.7	19.5
148381 2000 SC_{309}	14.9	X	299.44728	32.15270	354.97000	10.95438	0.1010204	0.19201346	2.9756483	20	8 30.5	18.6
148382 2000 SR_{318}	14.0	X	172.97579	123.55384	284.00447	15.65604	0.1849456	0.17707758	3.1407039	20	4 23.5	19.5
148383 2000 SA_{352}	16.0	X	238.57995	206.06174	53.78288	4.49301	0.0455181	0.21915142	2.7246236	20	1 5.6	19.9
148384 Dalcanton	15.3	X	142.15098	268.04756	137.66430	9.96047	0.0960990	0.17523413	3.1626921	20	3 27.4	20.1
148385 2000 TG_{10}	16.0	X	223.14488	309.11896	141.33892	2.02270	0.2820184	0.18696750	3.0289491	20	7 25.6	21.2
148386 2000 TM_{19}	15.9	X	27.27721	167.46673	163.74900	2.15239	0.1133450	0.19984306	2.8974104	20	11 4.7	19.6
148387 2000 TS_{29}	15.8	X	278.12268	75.01613	334.46202	9.23933	0.1828314	0.19238177	2.9718492	20	8 15.0	19.7
148388 2000 TU_{33}	15.6	X	350.14960	189.25460	120.55708	0.68216	0.1578946	0.19112403	2.9848730	20	8 6.4	18.8
148389 2000 TN_{35}	16.3	X	215.29540	261.94169	189.69730	0.55942	0.3099010	0.18468671	3.0538354	20	7 19.3	21.8
148390 2000 TU_{37}	15.2	X	207.34617	179.55876	138.57625	14.28866	0.1651928	0.22580970	2.6707977	20	2 9.3	19.6
148391 2000 TV_{61}	15.1	X	236.69444	349.71016	79.79121	11.48082	0.1223551	0.18864928	3.0109204	20	7 29.8	19.7
148392 2000 TQ_{68}	15.3	X	341.95944	263.31227	137.94287	17.92796	0.1380713	0.20055416	2.8905574	20	12 1.9	19.0
148393 2000 UV_{12}	15.2	X	175.82038	118.44013	358.44171	15.06261	0.2713547	0.18180450	3.0860264	20	7 27.6	20.9
148394 2000 UU_{23}	14.9	X	214.97473	29.46351	65.57102	12.36708	0.2053291	0.18515457	3.0486888	20	8 1.9	20.1
148395 2000 UL_{38}	15.3	X	212.71398	114.49092	239.96161	3.26618	0.2868121	0.17828895	3.1264616	20	3 26.0	20.9
148396 2000 UJ_{43}	15.1	X	164.78231	305.92946	70.72959	4.35367	0.1694989	0.17117215	3.2125309	20	3 18.8	20.4
148397 2000 UE_{55}	14.8	X	176.81265	243.24724	217.09443	15.14743	0.2129700	0.17876292	3.1209328	20	7 1.8	20.4
148398 2000 UY_{61}	15.4	X	284.21934	185.37653	231.13444	9.28595	0.0882316	0.19313543	2.9641130	20	9 11.3	19.4
148399 2000 UB_{78}	15.1	X	151.33406	87.11474	47.19224	22.89419	0.2094094	0.18026212	3.1036047	20	7 30.3	20.8
148400 2000 UW_{80}	15.4	X	213.62983	332.57160	67.59843	5.33215	0.1741567	0.17916982	3.1162059	20	5 24.8	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148401 2000 UF_{82}	14.8	X	233.40825	37.98441	17.70756	9.90757	0.0787960	0.18294814	3.0731521	20	7 13.3	19.4
148402 2000 UO_{98}	15.2	X	226.62366	31.50425	6.54827	5.08496	0.1621136	0.18117980	3.0931160	20	6 3.0	20.1
148403 2000 UU_{101}	15.6	X	187.97675	97.41667	334.28963	6.15635	0.1256570	0.17961402	3.1110660	20	6 9.6	20.7
148404 2000 VS_{40}	15.5	X	239.91975	76.75085	335.62945	5.12046	0.1616922	0.18508337	3.0494706	20	7 5.8	20.2
148405 2000 VJ_{41}	15.8	X	266.61129	61.59384	3.61174	2.45576	0.1254544	0.19083170	2.9879205	20	8 28.1	19.9
148406 2000 VC_{54}	15.0	X	230.72088	13.62463	19.85236	11.19334	0.0670864	0.18066411	3.0989992	20	6 9.5	19.8
148407 2000 WG_{8}	15.3	X	177.29587	187.82537	264.30961	10.75353	0.2558640	0.17640469	3.1486856	20	6 24.2	20.8
148408 2000 WQ_{13}	15.4	X	234.19180	83.75709	345.95565	6.69605	0.1292836	0.18453978	3.0554561	20	7 25.9	20.0
148409 2000 WF_{20}	16.1	X	242.86478	328.56573	41.54048	0.72742	0.1859364	0.18133656	3.0913330	20	5 14.2	20.9
148410 2000 WN_{24}	15.5	X	195.46985	302.35529	144.03096	7.58026	0.1783339	0.18011112	3.1053391	20	7 3.2	20.7
148411 2000 WR_{25}	15.0	X	229.93929	23.38078	51.27573	11.89955	0.1038881	0.18489079	3.0515878	20	8 1.3	19.7
148412 2000 WD_{47}	15.3	X	250.19168	306.06802	91.24378	10.10160	0.1110748	0.18288425	3.0738678	20	7 3.5	19.7
148413 2000 WY_{62}	14.9	X	171.03441	66.09266	56.58089	10.04526	0.1782988	0.18034527	3.1026506	20	7 28.8	20.2
148414 2000 WU_{70}	15.2	X	243.12310	68.17241	323.43386	5.96128	0.2273215	0.18335161	3.0686420	20	6 5.3	20.2
148415 2000 WK_{73}	14.9	X	51.43501	284.77626	266.79410	9.45455	0.0310178	0.17777600	3.1324727	20	5 25.5	19.2
148416 2000 WQ_{73}	15.8	X	193.28992	127.15007	344.51964	4.52628	0.2552131	0.18297861	3.0728109	20	7 30.6	21.1
148417 2000 WU_{75}	15.3	X	271.04740	32.13111	331.54372	4.67536	0.1235283	0.18305614	3.0719432	20	6 13.8	19.6
148418 2000 WD_{81}	14.7	X	203.16309	65.58114	295.34558	3.92041	0.1811615	0.17368022	3.1815284	20	3 28.3	20.1
148419 2000 WF_{83}	15.2	X	164.30470	352.78331	101.46796	11.60260	0.1089512	0.17626805	3.1503126	20	6 15.1	20.1
148420 2000 WZ_{90}	15.2	X	170.55350	8.12016	60.52402	9.45013	0.1474586	0.17491463	3.1665423	20	5 21.1	20.1
148421 2000 WT_{106}	16.9	X	280.49222	263.06294	317.93392	3.94321	0.0476980	0.31313940	2.1477196	20	—	—
148422 2000 WE_{108}	14.7	X	183.35100	61.15221	33.16477	10.44613	0.0870762	0.18012089	3.1052268	20	7 4.9	19.6
148423 2000 WN_{109}	14.6	X	162.44157	38.80249	58.20119	22.72265	0.1139923	0.17720937	3.1391466	20	6 13.3	19.7
148424 2000 WK_{114}	14.8	X	177.97599	202.14886	270.35821	13.96325	0.1347236	0.17992340	3.1074987	20	7 18.2	19.9
148425 2000 WZ_{114}	14.6	X	155.12575	68.21403	350.09630	4.95183	0.1785167	0.17163383	3.2067674	20	4 24.7	19.9
148426 2000 WB_{126}	15.3	X	290.76508	264.57107	123.26865	10.78999	0.1360797	0.18817737	3.0159522	20	8 11.3	19.1
148427 2000 WX_{132}	14.8	X	170.99018	59.79687	320.87078	9.31727	0.1212436	0.17212727	3.2006358	20	3 21.2	20.0
148428 2000 WV_{160}	14.5	X	123.37333	65.85676	120.22716	10.25913	0.2554930	0.18427311	3.0584032	20	9 6.9	19.8
148429 2000 WM_{165}	15.3	X	245.75531	297.93905	128.67895	9.75334	0.1753658	0.18615001	3.0378105	20	7 27.6	19.9
148430 2000 WZ_{167}	14.4	X	177.28844	304.40451	105.35249	13.05753	0.1888555	0.17652121	3.1472998	20	5 9.6	19.9
148431 2000 WU_{169}	15.8	X	166.21912	82.03034	6.80547	9.49753	0.2583434	0.17688597	3.1429716	20	6 11.6	21.4
148432 2000 WS_{176}	15.7	X	79.96820	249.93682	62.98779	2.95392	0.0471825	0.20041387	2.8919062	20	12 7.6	19.6
148433 2000 XW	16.3	X	212.77548	75.68199	85.42846	24.50018	0.1902902	0.34551945	2.0113503	20	11 19.8	18.9
148434 2000 XN_{3}	14.7	X	238.92419	42.57555	319.21807	11.14394	0.0874450	0.17820741	3.1274153	20	5 5.4	19.6
148435 2000 XJ_{4}	15.2	X	191.53562	84.12836	304.66578	8.95903	0.2489123	0.17573120	3.1567253	20	4 17.6	20.9
148436 2000 XP_{4}	14.8	X	307.96378	354.40735	325.05140	10.29816	0.1205068	0.18215403	3.0820773	20	6 6.8	19.0
148437 2000 XP_{14}	14.6	X	144.58279	54.78332	87.52028	27.06479	0.3312955	0.17600586	3.1534405	20	8 3.5	20.7
148438 2000 XU_{24}	14.7	X	231.72757	88.95115	308.90838	15.51615	0.1688364	0.17972202	3.1098196	20	6 7.9	19.9
148439 2000 XN_{25}	14.9	X	250.27954	46.92745	350.39603	7.77304	0.1488073	0.18127174	3.0920700	20	6 29.5	19.7
148440 2000 XY_{26}	14.3	X	196.43625	2.88817	57.52537	18.18530	0.0708065	0.17563887	3.1578315	20	6 4.3	19.1
148441 2000 XG_{31}	14.8	X	146.66986	55.84945	29.01439	14.57854	0.1673597	0.17245507	3.1965788	20	5 16.8	20.1
148442 2000 XN_{33}	15.0	X	241.27152	74.74371	315.81789	11.39692	0.1920580	0.18003516	3.1062124	20	6 5.4	20.1
148443 2000 XF_{36}	15.0	X	252.99876	62.92467	312.91953	15.02215	0.1398351	0.18185718	3.0854304	20	6 5.2	19.8
148444 2000 XL_{42}	14.9	X	145.49822	85.25410	12.66612	14.59760	0.1880075	0.17277737	3.1926023	20	6 1.5	20.3
148445 2000 XV_{51}	17.1	X	60.20122	5.43678	25.38168	7.55136	0.1886972	0.30733652	2.1746695	20	—	—
148446 2000 XG_{54}	15.1	X	161.99851	6.57667	91.64480	6.13252	0.1323144	0.17448774	3.1717049	20	6 17.8	20.2
148447 2000 YH	14.4	X	126.20362	169.61586	313.28897	25.34022	0.0990260	0.17422294	3.1749178	20	6 11.4	19.6
148448 2000 YB_{1}	14.3	X	132.41653	233.86240	278.64049	14.88527	0.1954592	0.17587191	3.1550414	20	7 26.6	19.6
148449 2000 YQ_{5}	14.6	X	137.37207	195.81421	301.74219	12.89994	0.0851344	0.18141497	3.0904423	20	7 10.3	19.2
148450 2000 YN_{35}	14.3	X	235.11985	295.26608	87.38841	17.31448	0.2302325	0.17869878	3.1216796	20	5 22.1	19.5
148451 2000 YN_{42}	15.0	X	176.80813	277.05713	150.52753	3.78318	0.1628993	0.17287205	3.1914363	20	5 26.5	20.2
148452 2000 YR_{59}	15.2	X	211.73446	207.69359	194.09700	2.18221	0.1906995	0.17575566	3.1564325	20	5 24.5	20.4
148453 2000 YO_{66}	14.4	X	150.69635	248.43076	189.90702	25.26652	0.2560671	0.17171266	3.2057858	20	5 21.3	20.3
148454 2000 YS_{70}	14.6	X	268.44187	260.53242	95.78657	12.85265	0.2103512	0.18128671	3.0918998	20	5 23.4	19.3
148455 2000 YM_{82}	14.9	X	147.33954	233.33686	265.03515	8.17525	0.1820742	0.17722666	3.1389424	20	7 23.2	20.1
148456 2000 YQ_{87}	15.0	X	192.20829	150.17413	281.43810	9.55600	0.2017028	0.17644063	3.1482580	20	6 12.2	20.3
148457 2000 YB_{88}	15.0	X	112.43795	58.96301	118.30805	13.32042	0.0764129	0.17742851	3.1365613	20	7 30.8	19.5
148458 2000 YG_{88}	15.3	X	216.60399	258.77124	165.34096	1.45088	0.1421850	0.17780060	3.1321838	20	6 27.6	20.3
148459 2000 YV_{97}	14.4	X	71.50455	268.07352	303.87908	15.42578	0.0751339	0.17395238	3.1782091	20	7 24.5	18.8
148460 2000 YA_{112}	14.2	X	163.81661	263.63128	312.05865	9.55586	0.1937457	0.18738850	3.0244106	20	11 4.0	19.5
148461 2000 YW_{131}	14.5	X	127.97863	114.17488	113.41993	12.91271	0.0736596	0.18396670	3.0617982	20	10 23.9	19.3
148462 2000 YN_{136}	14.9	X	148.69150	335.40407	147.41946	18.21366	0.1511251	0.17762454	3.1342532	20	7 6.2	20.2
148463 2001 AB_{7}	15.3	X	93.90070	60.93917	117.37874	15.47183	0.1094364	0.17345464	3.1842862	20	7 13.9	19.9
148464 2001 AT_{12}	14.3	X	124.25588	71.13365	145.06318	11.57974	0.1768361	0.18096047	3.0956147	20	10 9.4	19.5
148465 2001 AG_{52}	14.1	X	122.21887	133.03933	50.75653	28.05773	0.1851475	0.17459783	3.1703715	20	9 12.7	19.8
148466 2001 BA_{19}	14.9	X	220.28618	308.15438	102.09248	7.74335	0.2039926	0.17611957	3.1520830	20	6 10.4	20.0
148467 2001 BF_{68}	16.7	X	290.77735	26.69742	86.42881	1.83326	0.1243485	0.29277868	2.2461724	20	—	—
148468 2001 CJ_{10}	14.4	X	125.71695	219.59783	321.80035	15.59859	0.1614300	0.17673138	3.1448041	20	8 23.7	19.4
148469 2001 DL_{28}	16.6	X	179.25379	102.58317	64.63596	3.30288	0.1070580	0.28280645	2.2986694	20	10 11.9	19.7
148470 2001 DR_{42}	16.8	X	174.07302	9.98241	152.13360	7.38548	0.1243168	0.28166225	2.3048905	20	9 28.8	20.1
148471 2001 DY_{55}	17.5	X	79.45312	67.30966	146.55263	1.62236	0.1454375	0.27378386	2.3488980	20	8 25.5	20.6
148472 2001 DQ_{88}	17.1	X	93.70879	96.08388	358.09659	3.86425	0.0755803	0.31159763	2.1547983	20	3 11.9	19.4
148473 2001 EC_{4}	17.0	X	93.26723	43.13793	149.14638	7.62535	0.1389332	0.27233814	2.3572035	20	8 10.9	20.1
148474 2001 ED_{9}	16.6	X	91.65783	103.51164	80.57818	2.17583	0.2020084	0.27068432	2.3667950	20	8 6.5	20.0
148475 2001 EX_{17}	16.7	X	169.79090	3.43288	167.15265	2.49647	0.1535216	0.28046786	2.3114295	20	10 2.4	20.1
148476 2001 FU_{70}	16.5	X	44.91352	80.93884	128.18346	2.75269	0.1464670	0.26522461	2.3991653	20	6 27.6	19.0
148477 2001 FS_{99}	17.1	X	91.37566	146.07733	43.17953	2.92272	0.1590538	0.27044230	2.3682069	20	8 8.6	20.4
148478 2001 FJ_{112}	16.8	X	234.16386	166.47496	85.22661	9.24274	0.0757657	0.29747016	2.2224932	20	—	—
148479 2001 FK_{124}	16.8	X	146.24800	97.67847	74.53173	3.51702	0.1244018	0.27777352	2.3263523	20	9 12.6	20.2
148480 2001 FE_{155}	17.0	X	306.10783	73.69295	139.57880	2.37467	0.2606749	0.30207131	2.1998668	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148481 2001 FL_{161}	16.8	X	259.16104	73.30971	183.82179	2.29396	0.2190024	0.29922776	2.2137817	20	—	—
148482 2001 HC_{21}	16.4	X	300.67734	177.90269	51.73430	1.49078	0.1174187	0.25137535	2.4864950	20	1 26.6	19.6
148483 2001 HU_{54}	16.4	X	342.48867	16.65515	118.68888	4.19676	0.0924174	0.29672082	2.2262334	20	—	—
148484 2001 HK_{60}	15.6	X	18.80508	250.64780	93.25921	20.17907	0.2406722	0.27433457	2.3457534	20	12 17.9	18.3
148485 2001 JW	16.7	X	170.25108	69.82014	196.88697	0.81616	0.1709581	0.23487776	2.6016056	20	—	—
148486 2001 JF_{9}	16.6	X	131.06727	27.40446	268.54606	5.04244	0.1755725	0.28389816	2.2927727	20	—	—
148487 2001 KB_{12}	16.3	X	119.94872	195.79331	82.95370	6.31148	0.1891629	0.27954936	2.3164897	20	12 29.9	19.9
148488 2001 KU_{22}	16.7	X	230.20075	181.62556	71.82232	5.48789	0.0816347	0.29366838	2.2416334	20	—	—
148489 2001 KD_{27}	16.5	X	48.61502	243.60814	61.15720	1.50248	0.2230420	0.27164429	2.3612157	20	11 28.4	19.6
148490 2001 KR_{29}	16.7	X	85.19840	109.30387	194.28150	1.58242	0.2103039	0.27790940	2.3255939	20	12 31.1	20.4
148491 2001 KP_{48}	16.6	X	262.27573	123.16350	127.00110	7.08242	0.1059930	0.29720844	2.2237978	20	1 2.4	19.6
148492 2001 KB_{51}	16.8	X	123.72058	234.38635	65.89486	5.04486	0.1913572	0.28283820	2.2984974	20	—	—
148493 2001 KV_{61}	16.3	X	221.24372	128.26023	165.51582	3.96318	0.1077038	0.24688370	2.5165628	20	1 21.4	20.2
148494 2001 KX_{70}	16.7	X	157.92814	266.84477	21.37317	4.98529	0.1690111	0.28767595	2.2726559	20	—	—
148495 2001 LO_{1}	15.4	X	98.87652	31.68971	286.23245	23.18771	0.1623857	0.27790633	2.3256111	20	—	—
148496 2001 LZ_{7}	16.1	X	36.38691	217.04176	122.40775	7.61556	0.1340229	0.27115778	2.3640392	20	12 17.5	19.1
148497 2001 MM_{10}	16.7	X	110.06702	152.69283	124.49103	7.28066	0.0987088	0.27466441	2.3438750	20	12 16.9	20.2
148498 2001 MU_{10}	16.3	X	350.85885	260.11254	46.70367	2.48464	0.1998755	0.26064451	2.4271894	20	8 17.8	18.1
148499 2001 MD_{15}	16.0	X	307.38479	18.98791	318.25598	6.57353	0.2310892	0.25583171	2.4575355	20	6 15.8	18.5
148500 2001 MP_{15}	15.5	X	192.20431	49.87063	305.31521	4.27446	0.2685416	0.23971615	2.5664798	20	3 9.7	20.2
148501 2001 MF_{18}	16.0	X	25.99669	187.01295	113.13293	7.25143	0.2397395	0.26524782	2.3990253	20	10 29.7	18.8
148502 2001 MM_{18}	16.4	X	16.17590	194.59133	135.65353	4.78205	0.2086285	0.26670035	2.3903069	20	11 18.9	19.0
148503 2001 NQ	15.7	X	51.24008	181.18120	108.34412	16.76753	0.2613417	0.26818291	2.3814894	20	11 21.2	19.4
148504 2001 NG_{18}	15.4	X	228.16820	53.02800	259.68777	7.66137	0.2310863	0.24343416	2.5402806	20	2 13.8	19.9
148505 2001 NQ_{22}	16.4	X	324.09296	174.31313	123.98831	7.80736	0.1035997	0.25251553	2.4790045	20	6 8.6	19.2
148506 2001 OG_{7}	15.5	X	211.74536	46.93735	295.93865	9.97474	0.3096841	0.24165810	2.5527120	20	3 5.5	20.4
148507 2001 OA_{44}	15.9	X	188.83378	15.97280	337.79423	5.28528	0.1831900	0.23781993	2.5801040	20	3 5.6	20.1
148508 2001 OX_{46}	16.3	X	166.18454	149.10648	143.43400	6.11942	0.1756442	0.28416102	2.2913585	20	—	—
148509 2001 ON_{58}	16.1	X	59.78444	24.25307	293.73748	3.68784	0.2067306	0.27082942	2.3659496	20	12 24.5	19.7
148510 2001 OW_{61}	16.0	X	314.24789	30.58685	338.51306	4.60091	0.2300490	0.25999266	2.4312446	20	8 24.9	17.7
148511 2001 OK_{67}	15.8	X	116.22449	219.76773	175.07714	12.00303	0.1972147	0.23127202	2.6285767	20	2 16.9	19.6
148512 2001 OL_{70}	15.3	X	111.07811	62.18292	329.59370	12.50550	0.3020630	0.23020707	2.6366771	20	2 22.2	19.0
148513 2001 OE_{113}	15.0	X	115.19444	303.87052	22.02537	12.94937	0.2859068	0.22723829	2.6595921	20	—	—
148514 2001 PS_{5}	15.9	X	128.57504	37.71214	357.56996	10.88096	0.1850404	0.23514358	2.5996445	20	3 3.5	19.7
148515 2001 PW_{8}	15.8	X	291.94701	23.77332	357.22753	5.11390	0.0551125	0.25732025	2.4480488	20	8 24.0	18.6
148516 2001 PX_{9}	16.2	X	154.33752	119.96318	153.69061	9.78743	0.2037524	0.22795729	2.6539968	20	—	—
148517 2001 PA_{27}	15.8	X	356.09283	195.37447	338.48485	9.18248	0.0113190	0.23783190	2.5800174	20	2 14.5	19.0
148518 2001 PW_{28}	16.4	X	42.65507	22.45384	273.64266	6.35938	0.1010028	0.26428601	2.4048423	20	10 18.5	19.4
148519 2001 PO_{40}	15.5	X	18.37267	132.48246	304.65843	12.18063	0.1394860	0.22347028	2.6894050	20	—	—
148520 2001 PT_{41}	16.1	X	155.37749	105.07036	306.39435	11.57271	0.1658488	0.23983602	2.5656246	20	4 8.9	20.5
148521 2001 PL_{46}	16.3	X	149.77435	278.44579	95.85858	12.45033	0.2381131	0.23560093	2.5962791	20	3 5.9	20.8
148522 2001 PT_{49}	14.8	X	352.08634	195.76727	288.78634	20.98281	0.0427495	0.22598475	2.6694182	20	—	—
148523 2001 PH_{53}	16.4	X	354.90168	33.66644	307.81330	5.57142	0.1037119	0.26403085	2.4063914	20	10 8.1	18.9
148524 2001 PP_{59}	15.9	X	232.09528	231.98814	115.95951	14.63128	0.2259966	0.24412140	2.5355109	20	4 9.3	20.4
148525 2001 QG	16.7	X	316.68041	12.87495	325.02796	0.45143	0.1994262	0.25657496	2.4527872	20	7 12.4	18.6
148526 2001 QV	16.6	X	29.10770	11.20702	300.50990	2.60758	0.1300420	0.26497773	2.4006553	20	10 27.3	19.5
148527 2001 QC_{2}	15.8	X	53.23664	181.64459	214.97949	2.71454	0.2895745	0.22120935	2.7076991	20	—	—
148528 2001 QC_{5}	16.2	X	195.01683	244.90102	144.48320	13.69071	0.1803846	0.24531467	2.5272820	20	4 28.4	20.6
148529 2001 QQ_{5}	16.6	X	339.04418	199.89889	124.35884	2.27745	0.1885704	0.25915459	2.4364834	20	8 15.4	18.4
148530 2001 QP_{19}	15.4	X	128.12228	89.03142	338.05158	16.87175	0.1564638	0.23816659	2.5775998	20	3 30.6	19.5
148531 2001 QZ_{27}	15.5	X	120.99048	15.13528	27.11159	6.05546	0.2806954	0.23087884	2.6315601	20	3 15.4	19.6
148532 2001 QL_{32}	15.1	X	59.14802	180.29330	331.52582	13.71662	0.1388953	0.24456068	2.5324738	20	4 18.4	18.3
148533 2001 QZ_{32}	16.9	X	201.22323	232.66488	125.99617	2.62950	0.2194583	0.24123990	2.5556613	20	3 23.0	21.2
148534 2001 QQ_{39}	16.3	X	292.10914	225.02137	119.62413	4.30105	0.1972046	0.25548526	2.4597567	20	6 7.2	19.2
148535 2001 QB_{58}	16.1	X	41.81797	172.26662	110.77530	4.16447	0.1661161	0.26266669	2.4147160	20	10 14.7	19.1
148536 2001 QG_{83}	15.8	X	103.20878	27.76804	324.35002	8.12085	0.3111005	0.22416054	2.6838811	20	—	—
148537 2001 QJ_{91}	16.4	X	59.58451	4.73586	295.54052	5.98269	0.1219041	0.26907191	2.3762409	20	11 20.5	19.6
148538 2001 QM_{97}	15.6	X	152.68080	41.82567	322.34734	4.73376	0.2618550	0.23301483	2.6154535	20	2 21.6	19.8
148539 2001 QH_{102}	16.5	X	130.06837	136.91696	132.10137	3.20667	0.0739655	0.27610776	2.3356996	20	12 27.7	19.6
148540 2001 QN_{102}	16.0	X	314.56976	208.44785	134.02816	7.00908	0.1495651	0.25889445	2.4381152	20	7 22.3	18.2
148541 2001 QC_{119}	16.0	X	143.80250	171.88142	236.31769	5.36862	0.1595716	0.23847263	2.5753941	20	3 28.4	20.0
148542 2001 QH_{123}	16.1	X	242.87418	265.77969	114.41456	6.80310	0.1042854	0.25144379	2.4860438	20	6 5.5	19.6
148543 2001 QG_{125}	16.4	X	189.92411	10.96423	23.05891	3.82313	0.1946022	0.24425752	2.5345688	20	4 24.4	20.5
148544 2001 QM_{130}	15.5	X	94.44705	83.56145	299.75603	10.36269	0.2224660	0.22845889	2.6501106	20	1 12.4	18.5
148545 2001 QP_{134}	16.1	X	331.88722	15.59288	312.17905	10.24619	0.1653864	0.25551069	2.4595935	20	8 3.7	18.1
148546 2001 QW_{141}	16.6	X	36.97831	341.57789	293.02625	1.52609	0.1880222	0.25967894	2.4332024	20	9 25.8	19.5
148547 2001 QK_{144}	16.3	X	154.54927	200.26926	344.93795	2.49751	0.1097951	0.26248353	2.4158391	20	10 3.9	19.9
148548 2001 QU_{144}	16.1	X	101.65547	87.19401	337.87566	10.15671	0.1163236	0.23426658	2.6061285	20	2 27.6	19.5
148549 2001 QL_{147}	15.2	X	83.99167	350.27248	69.90446	14.45729	0.1571828	0.22696825	2.6617012	20	2 8.9	18.7
148550 2001 QA_{152}	14.6	X	216.15857	57.64826	290.75616	28.83201	0.1311899	0.23826867	2.5768636	20	3 6.1	19.3
148551 2001 QU_{155}	15.4	X	168.78503	42.19131	333.14513	21.53976	0.0442568	0.23969665	2.5666190	20	3 3.1	19.0
148552 2001 QR_{159}	15.9	X	77.38354	44.92751	10.09607	3.42269	0.1758530	0.22991838	2.6388838	20	1 21.0	18.9
148553 2001 QB_{161}	16.1	X	206.32293	7.86345	351.38093	2.78873	0.1554668	0.24334212	2.5409211	20	3 27.2	20.1
148554 2001 QR_{163}	15.9	X	41.60374	50.38028	350.28192	8.82084	0.2753597	0.21866198	2.7286879	20	—	—
148555 2001 QM_{164}	16.3	X	284.03445	239.81942	132.94136	15.10253	0.1418082	0.25675087	2.4516667	20	7 14.7	19.2
148556 2001 QZ_{176}	16.0	X	232.56156	337.25442	171.46133	2.24560	0.1475403	0.26663800	2.3906795	20	11 10.8	18.9
148557 2001 QH_{194}	14.3	X	29.75242	179.25296	312.21074	13.98651	0.1390484	0.23137745	2.6277782	20	2 4.5	16.9
148558 2001 QQ_{194}	14.7	X	316.63100	214.21052	300.98388	12.90982	0.1187714	0.22450544	2.6811317	20	—	—
148559 2001 QW_{203}	16.2	X	98.35420	343.81686	292.29381	9.31352	0.1435195	0.27062089	2.3671648	20	12 3.9	19.9
148560 2001 QP_{204}	16.3	X	288.11325	64.54464	277.60028	6.47105	0.1166893	0.25288637	2.4765804	20	6 10.5	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148561 2001 QO_{215}	15.9	X	265.42209	4.44813	26.59076	2.10088	0.1016482	0.20110584	2.8852687	20	7 17.0	19.9
148562 2001 QJ_{216}	16.3	X	187.20319	313.92496	77.15731	2.87635	0.1698284	0.24245891	2.5470880	20	4 19.8	20.5
148563 2001 QW_{219}	14.9	X	67.95530	89.73380	293.27346	13.54415	0.0932949	0.22035396	2.7147019	20	—	—
148564 2001 QA_{223}	16.2	X	112.30090	70.81462	339.03991	16.59464	0.2065257	0.23529234	2.5985487	20	3 3.8	19.7
148565 2001 QP_{228}	15.8	X	127.23730	80.68681	308.80986	12.98338	0.1109212	0.23455633	2.6039818	20	2 11.1	19.3
148566 2001 QJ_{233}	16.2	X	184.08784	29.85043	342.41281	2.26554	0.2060435	0.23964179	2.5670107	20	3 24.1	20.4
148567 2001 QK_{236}	16.0	X	168.62768	129.77775	162.29778	5.51101	0.2535375	0.28241112	2.3008140	20	—	—
148568 2001 QS_{244}	15.6	X	91.42387	245.04744	165.62998	11.36727	0.1894927	0.22906039	2.6454693	20	2 5.4	18.9
148569 2001 QR_{254}	16.0	X	338.58702	203.24580	121.80472	11.20612	0.1843657	0.25890704	2.4380362	20	8 17.1	17.9
148570 2001 QK_{255}	15.9	X	95.01773	87.29911	312.77813	11.84142	0.1979686	0.23079224	2.6322184	20	1 30.5	19.2
148571 2001 QB_{260}	16.2	X	123.11862	89.82924	310.73900	6.35690	0.1970751	0.23297928	2.6157196	20	3 2.1	20.0
148572 2001 QS_{265}	15.7	X	39.98828	215.82244	140.49467	5.65257	0.0802836	0.22014281	2.7164374	20	12 22.6	19.4
148573 2001 QN_{268}	15.9	X	212.29785	43.47748	296.72753	13.18850	0.1193113	0.23938683	2.5688331	20	3 4.5	20.1
148574 2001 QK_{269}	15.4	X	81.90895	94.08699	326.27288	15.46077	0.1905979	0.22921444	2.6442838	20	2 7.4	18.5
148575 2001 QA_{272}	15.8	X	92.71350	145.07240	300.30756	12.04089	0.0966503	0.23638230	2.5905546	20	3 4.2	19.3
148576 2001 QU_{274}	15.8	X	79.14950	154.81516	110.99710	7.89285	0.2280687	0.21564700	2.7540624	20	11 4.9	20.2
148577 2001 QV_{284}	15.5	X	98.34724	11.27746	88.55641	13.18976	0.1097854	0.23589320	2.5941342	20	4 15.1	19.2
148578 2001 QG_{286}	16.3	X	211.54156	126.04088	237.12768	3.47393	0.2048953	0.24520933	2.5280057	20	4 3.6	20.5
148579 2001 QD_{287}	15.5	X	36.10032	68.20984	326.65389	11.98853	0.1826619	0.22062343	2.7124910	20	—	—
148580 2001 QG_{291}	15.9	X	176.60875	56.05864	309.32444	2.47185	0.2546691	0.23660437	2.5889334	20	3 11.1	20.5
148581 2001 QS_{292}	15.4	X	172.33734	240.18678	126.61178	6.15115	0.2596793	0.23519389	2.5992738	20	3 12.7	19.9
148582 2001 QM_{333}	15.6	X	116.42335	32.24976	50.95949	14.10191	0.1424859	0.23876401	2.5732983	20	4 16.9	19.3
148583 2001 QN_{333}	15.8	X	57.25400	331.76979	89.85175	14.73442	0.2403145	0.22466341	2.6798747	20	—	—
148584 2001 QU_{333}	15.0	X	237.92443	77.83190	320.80419	8.71253	0.0780167	0.19229909	2.9727010	20	6 25.9	19.4
148585 2001 RO_{4}	16.6	X	108.51164	3.62052	268.17512	2.86308	0.2470252	0.27241305	2.3567713	20	12 12.2	20.6
148586 2001 RP_{5}	16.6	X	239.75037	25.76592	312.43348	4.46571	0.1384879	0.24437549	2.5337530	20	4 1.2	20.4
148587 2001 RM_{6}	15.8	X	96.78411	230.37460	189.65419	11.12872	0.1629627	0.23073282	2.6326702	20	2 19.5	19.4
148588 2001 RW_{7}	16.7	X	171.36529	113.36993	265.70626	2.97721	0.2356674	0.23928238	2.5695805	20	3 21.9	21.2
148589 2001 RQ_{11}	15.5	X	85.54005	215.05792	177.38328	5.37540	0.2250666	0.22527655	2.6750099	20	1 10.8	18.7
148590 2001 RQ_{15}	16.3	X	115.54271	274.57683	352.90347	2.99242	0.2245175	0.27221566	2.3579104	20	12 11.7	20.3
148591 2001 RR_{16}	16.5	X	23.56661	202.51742	126.84912	4.38216	0.1750662	0.26484630	2.4014494	20	11 22.4	19.3
148592 2001 RM_{17}	15.4	X	250.05122	7.34830	10.68969	1.84208	0.1212025	0.19643721	2.9308047	20	6 7.5	19.7
148593 2001 RO_{21}	15.6	X	146.34202	76.44449	345.93152	13.25427	0.0753843	0.24267285	2.5455908	20	4 7.3	19.4
148594 2001 RX_{29}	16.5	X	136.78612	68.55758	338.15612	6.87186	0.1980810	0.23679592	2.5875370	20	3 23.3	20.5
148595 2001 RR_{32}	15.9	X	132.50964	125.39786	250.79307	5.41013	0.1140573	0.23485688	2.6017597	20	1 31.9	19.7
148596 2001 RD_{33}	16.2	X	40.71339	163.04279	167.12123	11.47867	0.2764637	0.21624342	2.7489960	20	12 17.6	20.4
148597 2001 RL_{33}	15.8	X	82.78322	98.01196	317.77558	16.14082	0.1890292	0.23132676	2.6281620	20	2 1.5	18.7
148598 2001 RT_{40}	15.8	X	153.53053	221.12994	98.02442	7.20280	0.2210697	0.23025674	2.6362979	20	—	—
148599 2001 RN_{48}	15.7	X	64.69849	60.14408	358.83011	13.32510	0.2173140	0.22492718	2.6777792	20	1 13.7	18.6
148600 2001 RE_{52}	17.0	X	71.82496	92.19063	198.57310	2.24374	0.1671072	0.26749287	2.3855832	20	11 28.2	20.3
148601 2001 RE_{55}	17.0	X	142.23735	79.42139	325.02064	0.74055	0.1711093	0.23752256	2.5822571	20	3 24.9	20.9
148602 2001 RK_{56}	16.0	X	107.64888	7.34765	154.05022	5.77623	0.0969505	0.25073061	2.4907558	20	7 10.0	19.4
148603 2001 RF_{59}	17.1	X	212.18464	181.82472	78.18368	3.70338	0.2153597	0.28409671	2.2917043	20	—	—
148604 Shobbrook	15.9	X	67.32892	118.40512	311.61507	12.40113	0.2070793	0.22832231	2.6511674	20	1 28.6	18.6
148605 2001 RT_{63}	16.4	X	137.74550	324.06959	66.03833	3.33318	0.2324764	0.23514860	2.5996075	20	3 10.6	20.6
148606 2001 RK_{71}	15.5	X	313.46968	21.49166	351.80520	6.02083	0.1277294	0.25694074	2.4504588	20	9 9.7	17.6
148607 2001 RN_{80}	15.2	X	154.37990	54.18374	7.19892	14.94076	0.0905344	0.24100413	2.5573277	20	4 17.8	19.1
148608 2001 RS_{80}	15.7	X	100.19491	91.83745	342.12582	10.79464	0.1731213	0.23340070	2.6125701	20	3 15.1	19.1
148609 2001 RB_{83}	16.3	X	80.51159	173.65131	239.57268	3.11416	0.2757402	0.22803359	2.6534048	20	2 6.9	19.3
148610 2001 RF_{98}	16.5	X	130.16567	200.38539	201.60922	1.79165	0.0806733	0.23386325	2.6091241	20	2 27.8	20.1
148611 2001 RQ_{104}	16.5	X	74.81597	200.83627	98.14334	3.46684	0.2110000	0.26942277	2.3741775	20	12 15.2	20.2
148612 2001 RY_{108}	16.8	X	189.29143	249.69705	8.98827	2.74615	0.1441377	0.28046897	2.3114234	20	—	—
148613 2001 RV_{109}	16.4	X	242.39231	139.24672	6.98965	3.46773	0.1241180	0.26878390	2.3779381	20	11 23.6	19.3
148614 2001 RR_{113}	16.7	X	146.53157	119.63983	137.01553	3.21302	0.1837013	0.27414855	2.3468144	20	12 24.9	20.5
148615 2001 RS_{114}	16.3	X	128.15792	56.84816	27.56478	4.06552	0.1222198	0.24120268	2.5559241	20	4 24.9	19.9
148616 2001 RC_{117}	15.7	X	137.22602	181.08804	358.48340	7.18316	0.0861702	0.25848925	2.4406625	20	9 8.7	19.0
148617 2001 RA_{118}	16.2	X	44.63724	116.84916	359.73402	4.61005	0.1309131	0.23343945	2.6122809	20	2 12.3	18.8
148618 2001 RV_{119}	16.1	X	238.64347	300.24220	50.60541	4.29535	0.1697828	0.24580482	2.5239212	20	4 16.7	20.0
148619 2001 RM_{120}	15.9	X	29.43584	155.88575	163.47240	12.73723	0.1222323	0.21132544	2.7914822	20	10 30.1	19.6
148620 2001 RE_{122}	16.4	X	139.79718	20.25046	8.86504	4.52885	0.1456292	0.23524356	2.5989079	20	3 2.5	20.1
148621 2001 RC_{126}	16.7	X	189.34608	309.40542	52.42911	3.81003	0.2232519	0.23948207	2.5681520	20	3 18.3	21.1
148622 2001 RY_{126}	16.4	X	228.40213	267.35276	76.52428	4.62520	0.1668264	0.24337352	2.5407026	20	3 30.9	20.5
148623 2001 RG_{127}	16.4	X	224.72496	313.11577	34.04949	5.69269	0.1260599	0.24305900	2.5428939	20	4 1.7	20.1
148624 2001 RE_{131}	15.8	X	24.83889	213.45804	122.19706	2.36013	0.1785024	0.26512938	2.3997398	20	12 2.5	18.6
148625 2001 RD_{133}	16.4	X	202.94743	228.60112	145.74802	8.26135	0.1878039	0.24246553	2.5470417	20	4 14.8	20.7
148626 2001 RV_{134}	15.9	X	96.35024	34.09435	16.64774	13.41844	0.1682567	0.23081143	2.6320725	20	2 16.5	19.5
148627 2001 RE_{136}	15.8	X	196.15239	353.35226	25.59641	8.92453	0.0641187	0.24206167	2.5498739	20	4 12.9	19.3
148628 2001 RP_{151}	15.4	X	212.91214	239.88610	62.23596	10.27261	0.2136365	0.23626994	2.5913758	20	1 27.1	20.0
148629 2001 RT_{151}	15.8	X	103.16455	11.04046	45.28385	14.48938	0.1017579	0.23279472	2.6171019	20	2 24.1	19.6
148630 2001 RU_{155}	16.4	X	65.79969	297.94490	154.33873	13.51968	0.2203412	0.22916625	2.6446545	20	2 27.8	19.1
148631 2001 SP_{3}	15.2	X	4.61763	96.12418	13.45249	6.24512	0.1554193	0.22335024	2.6903685	20	—	—
148632 2001 SO_{10}	15.9	X	156.57252	61.70589	351.94811	14.50308	0.1110620	0.24174366	2.5521096	20	4 10.3	19.9
148633 2001 SU_{13}	15.8	X	75.07405	84.17017	1.23616	11.24051	0.1642545	0.23207262	2.6225278	20	2 27.5	18.8
148634 2001 SL_{19}	16.7	X	268.62100	324.71057	359.79540	5.00406	0.1349337	0.24646737	2.5193960	20	4 16.6	20.2
148635 2001 ST_{19}	15.6	X	52.90457	102.54932	2.53704	10.70846	0.2156049	0.23018708	2.6368298	20	2 23.7	18.1
148636 2001 SJ_{22}	17.1	X	262.94759	337.48049	356.75657	3.65543	0.1448601	0.24659063	2.5185564	20	4 21.6	20.5
148637 2001 SY_{23}	16.1	X	116.29392	288.74206	191.73153	1.44726	0.0835480	0.24374764	2.5381022	20	5 24.8	19.5
148638 2001 SH_{31}	16.7	X	312.77723	269.52354	60.86195	3.05525	0.1803942	0.25293224	2.4762810	20	6 24.7	19.1
148639 2001 SQ_{31}	15.4	X	215.50593	2.39190	56.57649	2.87069	0.0692691	0.19563358	2.9388253	20	6 26.2	19.7
148640 2001 SB_{42}	15.8	X	30.16939	358.84544	54.26775	3.96648	0.1284682	0.22110753	2.7085303	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148641 2001 SB_{45}	15.8	X	140.18488	294.07164	129.59465	4.28123	0.1279757	0.23814986	2.5777205	20	4 14.4	19.6
148642 2001 SO_{45}	16.0	X	75.29496	247.96776	163.41283	13.35312	0.1763956	0.22660533	2.6645424	20	1 11.3	19.2
148643 2001 ST_{45}	16.5	X	37.23773	181.57525	107.79712	4.63852	0.2549465	0.26181609	2.4199431	20	10 30.7	19.5
148644 2001 SU_{56}	15.7	X	11.09251	36.69928	34.15382	14.90552	0.1508941	0.21830190	2.7316876	20	—	—
148645 2001 SD_{61}	16.1	X	98.38896	146.66886	190.35543	1.78801	0.1700338	0.22126472	2.7072474	20	—	—
148646 2001 SY_{66}	15.9	X	149.83189	249.92674	168.08741	6.22166	0.1881982	0.23624195	2.5915805	20	4 21.3	20.0
148647 2001 SL_{75}	15.8	X	45.49772	345.25113	335.11849	6.32665	0.1571650	0.26452966	2.4033654	20	12 3.9	19.1
148648 2001 SD_{86}	17.0	X	91.26033	340.50814	293.86002	1.57322	0.1709250	0.26976288	2.3721815	20	11 26.8	20.7
148649 2001 SY_{86}	16.4	X	137.42484	85.21714	316.27530	4.91070	0.0996915	0.23791594	2.5794099	20	3 7.6	20.1
148650 2001 ST_{93}	16.0	X	167.12598	210.25140	319.77501	1.78277	0.1441882	0.26080500	2.4261935	20	9 25.9	19.8
148651 2001 SQ_{110}	15.1	X	63.25102	172.56047	246.53079	11.28705	0.1761759	0.22236190	2.6983346	20	1 1.4	18.1
148652 2001 SB_{111}	14.9	X	146.81379	158.98542	254.81241	13.40677	0.0873580	0.23356174	2.6113690	20	3 28.8	19.0
148653 2001 SK_{118}	16.5	X	136.56077	164.24272	242.07591	3.82885	0.1310965	0.23698053	2.5861931	20	3 15.9	20.3
148654 2001 SK_{119}	15.7	X	30.99701	273.63726	196.97514	12.29935	0.1552488	0.22980701	2.6397362	20	1 7.1	18.7
148655 2001 SG_{121}	15.9	X	154.88370	229.90458	313.33849	6.75331	0.1468122	0.26109018	2.4244265	20	9 28.4	19.7
148656 2001 SW_{123}	16.4	X	62.10352	326.79395	316.30364	6.51543	0.0794599	0.26405832	2.4062245	20	10 23.0	19.7
148657 2001 SX_{124}	16.3	X	13.65104	19.30901	301.53020	5.28341	0.0979438	0.26159835	2.4212858	20	10 8.6	19.0
148658 2001 SG_{128}	16.2	X	58.64459	336.21885	279.92957	4.25014	0.0794404	0.26035194	2.4290074	20	9 11.7	19.3
148659 2001 ST_{128}	16.3	X	138.36105	51.45706	308.27016	4.35135	0.2259850	0.23124964	2.6287463	20	2 1.6	20.2
148660 2001 SW_{131}	15.4	X	11.85462	72.59486	357.78691	9.06284	0.1352094	0.22053474	2.7132181	20	—	—
148661 2001 SE_{137}	16.3	X	168.70539	295.86015	265.78247	1.33730	0.1491919	0.26507909	2.4000433	20	11 7.2	19.8
148662 2001 SA_{138}	16.7	X	278.33010	113.16358	192.84666	0.87038	0.1439735	0.24501381	2.5293504	20	4 4.1	20.0
148663 2001 SM_{145}	15.9	X	114.95100	129.45706	322.31573	5.71320	0.1259790	0.23898130	2.5717383	20	4 17.3	19.6
148664 2001 SH_{150}	15.8	X	49.85482	210.39113	223.02952	7.85488	0.1571069	0.22522891	2.6753871	20	—	—
148665 2001 SQ_{156}	16.3	X	124.33685	103.19721	317.03520	6.63605	0.1813589	0.23534525	2.5981592	20	3 24.9	20.2
148666 2001 SP_{158}	15.3	X	99.55603	143.25628	237.01418	5.81011	0.1853028	0.22605414	2.6688720	20	1 8.8	18.7
148667 2001 SW_{158}	16.0	X	168.06879	26.69031	329.87105	4.17682	0.1822759	0.23376386	2.6098636	20	2 20.8	20.3
148668 2001 SH_{161}	16.0	X	268.73606	328.64060	0.08755	2.65482	0.2129694	0.24646846	2.5193886	20	4 13.1	19.6
148669 2001 SL_{162}	15.7	X	98.94640	120.33256	329.01940	2.49965	0.1323139	0.23424443	2.6062928	20	3 28.3	19.2
148670 2001 SU_{165}	16.7	X	150.21586	272.62146	351.51913	1.91767	0.1830221	0.27546801	2.3393145	20	—	—
148671 2001 SQ_{166}	16.1	X	116.70075	266.85900	182.13934	7.14687	0.1243370	0.23882606	2.5728526	20	4 19.7	19.7
148672 2001 SQ_{172}	16.5	X	77.24722	341.60384	25.19294	1.64094	0.0905157	0.22221168	2.6995506	20	—	—
148673 2001 SB_{176}	16.1	X	43.02154	9.89272	78.27490	3.51812	0.1788612	0.22594817	2.6697063	20	1 3.1	18.4
148674 2001 SZ_{186}	16.2	X	19.01927	14.55118	172.20694	2.61919	0.0855200	0.24309293	2.5426573	20	4 2.4	18.8
148675 2001 SF_{200}	17.0	X	291.47128	195.83480	161.36578	3.42533	0.0523850	0.25334657	2.4735804	20	7 17.6	20.0
148676 2001 SR_{202}	16.0	X	95.20871	328.14215	154.55868	2.57513	0.0724399	0.24210391	2.5495773	20	4 29.5	19.3
148677 2001 ST_{210}	16.7	X	49.26772	119.72412	162.77761	4.12028	0.1635328	0.26194332	2.4191595	20	10 22.5	19.7
148678 2001 SM_{213}	16.6	X	186.00640	252.03265	116.87098	4.94012	0.1926615	0.23901332	2.5715086	20	3 24.2	20.9
148679 2001 SB_{215}	15.6	X	36.65616	286.77496	169.92402	12.91663	0.2266090	0.22563368	2.6721865	20	1 2.0	18.1
148680 2001 SX_{215}	16.5	X	186.83989	52.97827	14.01180	3.70304	0.0652119	0.24768918	2.5111040	20	6 3.8	20.0
148681 2001 SA_{224}	15.3	X	302.29623	177.33368	126.07340	2.21799	0.0419787	0.19357783	2.9595951	20	5 20.8	19.4
148682 2001 SB_{224}	16.8	X	279.90277	286.55967	30.52784	3.79845	0.1736700	0.24677034	2.5173334	20	4 16.5	20.2
148683 2001 SG_{227}	15.2	X	337.72521	266.22660	40.18925	2.38854	0.0820410	0.19905420	2.9050603	20	7 12.7	18.7
148684 2001 SZ_{229}	16.2	X	232.89106	156.20464	171.32483	1.75615	0.1299433	0.23996905	2.5646763	20	3 14.9	20.0
148685 2001 SF_{230}	16.4	X	182.38575	12.08360	21.48192	1.09637	0.1604660	0.23995028	2.5648100	20	4 17.4	20.5
148686 2001 SS_{235}	16.3	X	175.49263	318.21523	24.18408	1.77248	0.1686028	0.23300939	2.6154942	20	2 10.5	20.6
148687 2001 SO_{244}	16.3	X	279.48611	204.30871	108.53917	5.47730	0.1611291	0.24613751	2.5216464	20	4 14.9	19.7
148688 2001 SU_{246}	16.5	X	140.23488	252.86503	106.44768	2.42562	0.0817438	0.22912341	2.6449841	20	1 18.5	20.2
148689 2001 SM_{247}	15.9	X	49.41332	69.72247	28.26837	13.06805	0.2460973	0.22596469	2.6695763	20	2 13.9	18.5
148690 2001 SV_{247}	16.3	X	220.85341	220.73415	118.52080	2.59492	0.0569983	0.23808636	2.5781788	20	3 22.4	19.8
148691 2001 SQ_{250}	16.8	X	77.57044	242.59459	137.07601	3.29675	0.2278806	0.22236586	2.6983025	20	—	—
148692 2001 SC_{252}	16.4	X	196.35698	323.25173	30.94008	3.46829	0.0434199	0.23584805	2.5944652	20	3 13.6	19.9
148693 2001 SJ_{253}	16.3	X	114.46847	263.50877	156.19839	3.81736	0.1129030	0.23210749	2.6222652	20	3 7.9	19.9
148694 2001 SP_{253}	16.1	X	147.37946	240.41008	150.01046	3.55875	0.1694078	0.23353169	2.6115930	20	3 13.6	20.0
148695 2001 SR_{253}	16.6	X	263.85047	190.76976	139.53599	3.18986	0.0883647	0.24300229	2.5432896	20	4 27.7	20.1
148696 2001 SS_{260}	16.6	X	168.31422	35.51783	333.94870	3.47069	0.1687319	0.23516682	2.5994732	20	3 6.3	20.7
148697 2001 SH_{261}	16.4	X	96.92124	101.50512	283.22093	1.50264	0.1393311	0.22591997	2.6699285	20	1 4.9	19.6
148698 2001 SA_{264}	15.1	X	124.91959	184.51556	268.40279	20.85049	0.0500589	0.24006420	2.5639986	20	4 17.3	19.1
148699 2001 SA_{272}	16.1	X	57.73706	234.13200	204.47810	5.60728	0.1322516	0.22598427	2.6694220	20	1 12.9	19.1
148700 2001 SU_{277}	15.5	X	39.82157	73.93828	337.95094	9.24370	0.2902199	0.21896514	2.7261687	20	—	—
148701 2001 SV_{289}	15.9	X	124.84064	49.74605	336.42962	13.00475	0.1572126	0.23182212	2.6244168	20	2 14.0	19.6
148702 2001 SG_{316}	15.3	X	88.40170	126.74028	284.18159	13.49218	0.0943826	0.22459587	2.6804119	20	1 19.1	18.7
148703 2001 SX_{320}	16.6	X	4.58303	107.64918	167.28730	3.77064	0.0836734	0.25258023	2.4785812	20	7 15.9	19.3
148704 2001 SV_{323}	15.6	X	224.36446	349.64485	269.73456	10.54420	0.1448747	0.22835284	2.6509311	20	—	—
148705 2001 SZ_{339}	16.0	X	16.08610	187.20268	267.99454	7.42298	0.0969866	0.22485684	2.6783376	20	—	—
148706 2001 SA_{349}	16.1	X	112.40226	106.97317	343.64973	21.61526	0.1084492	0.23665203	2.5885858	20	4 3.3	20.0
148707 Dodelson	15.9	X	204.55133	200.28572	123.03353	14.77232	0.1897186	0.23343828	2.6122897	20	2 13.6	20.3
148708 2001 TX_{14}	16.3	X	161.34559	280.13068	131.59944	6.12945	0.1087158	0.23943395	2.5684960	20	4 20.8	20.2
148709 2001 TW_{16}	16.5	X	11.78860	218.26009	207.46461	24.21531	0.1007408	0.37694542	1.8979455	20	—	—
148710 2001 TJ_{20}	15.7	X	135.01574	122.80795	281.38842	8.63290	0.0675381	0.23189264	2.6238847	20	3 2.1	19.5
148711 2001 TQ_{22}	16.2	X	261.35359	62.50644	272.91031	1.53803	0.1427420	0.24428815	2.5343570	20	4 22.2	19.7
148712 2001 TX_{30}	16.5	X	175.44988	223.67198	127.00240	5.31444	0.2051671	0.23361699	2.6109573	20	2 22.1	20.7
148713 2001 TA_{36}	15.2	X	9.65802	103.84415	7.67345	8.94027	0.1126901	0.21984911	2.7188562	20	—	—
148714 2001 TD_{39}	15.8	X	90.43381	26.34043	10.52818	9.65565	0.1199357	0.22317009	2.6918161	20	1 11.1	19.3
148715 2001 TK_{40}	15.4	X	69.72607	61.51297	339.83677	5.36096	0.1379447	0.21886359	2.7270120	20	—	—
148716 2001 TR_{40}	15.0	X	120.00281	70.14116	286.45639	11.10515	0.2218397	0.22216983	2.6998895	20	1 10.9	18.9
148717 2001 TB_{50}	15.3	X	81.92902	16.36882	34.74023	11.68723	0.1639645	0.22766583	2.6562614	20	1 24.4	18.7
148718 2001 TK_{51}	16.5	X	217.27967	259.60607	94.29714	4.40470	0.2702037	0.24145238	2.5541617	20	3 29.7	21.1
148719 2001 TO_{51}	15.7	X	174.15586	275.61588	62.60360	5.33722	0.3195658	0.23369927	2.6103444	20	2 12.3	20.5
148720 2001 TC_{52}	15.5	X	171.29220	271.58443	78.52320	5.34670	0.3016169	0.23399782	2.6081236	20	2 23.5	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148721 2001 TD_{52}	15.8	X	92.14776	346.09330	110.55231	4.67561	0.1337069	0.23299740	2.6155839	20	4 1.8	19.2
148722 2001 TN_{64}	15.3	X	58.70395	305.63206	213.74489	14.14928	0.0389763	0.23828825	2.5767224	20	4 22.2	18.3
148723 2001 TJ_{67}	16.2	X	135.12675	163.71043	243.72167	1.23287	0.1521716	0.23290695	2.6162611	20	3 19.6	20.1
148724 2001 TM_{69}	16.3	X	42.30533	67.53384	17.67177	3.48284	0.0776742	0.22601382	2.6691894	20	—	—
148725 2001 TX_{70}	16.3	X	128.86425	257.35673	151.66670	2.76999	0.1783902	0.23248894	2.6193961	20	3 19.1	20.2
148726 2001 TY_{73}	15.6	X	69.03874	91.66570	8.51937	1.96589	0.1728179	0.22898412	2.6460567	20	3 7.9	18.5
148727 2001 TS_{75}	15.7	X	63.92599	204.88141	220.55555	12.11063	0.1373679	0.22466345	2.6798744	20	1 5.4	18.9
148728 2001 TG_{85}	16.9	X	106.43000	130.12618	233.29691	1.18123	0.2174659	0.22507382	2.6766159	20	1 2.4	20.2
148729 2001 TB_{87}	16.5	X	96.86480	137.03996	258.56886	3.54331	0.1731437	0.22770681	2.6559427	20	1 22.9	19.7
148730 2001 TJ_{87}	16.1	X	62.08202	297.22031	336.65363	6.05407	0.1245083	0.26038540	2.4287993	20	10 17.1	19.5
148731 2001 TA_{88}	15.9	X	83.04957	94.24411	327.97099	4.93260	0.1210765	0.22876496	2.6477464	20	1 31.2	19.2
148732 2001 TA_{94}	16.2	X	184.49895	134.22520	256.25149	2.76302	0.0471948	0.23978041	2.5660213	20	4 12.9	19.7
148733 2001 TD_{94}	16.2	X	67.59397	112.68011	322.02211	2.38332	0.0674839	0.22830176	2.6513265	20	1 17.8	19.4
148734 2001 TL_{102}	14.7	X	126.07039	80.49926	335.22845	13.53947	0.0367154	0.23298499	2.6156768	20	3 4.5	18.2
148735 2001 TN_{104}	15.5	X	39.14455	24.94379	40.76258	10.04592	0.1977460	0.21964086	2.7205745	20	—	—
148736 2001 TG_{105}	15.0	X	140.59969	14.36297	37.52241	3.00397	0.1322184	0.23378951	2.6096726	20	3 30.3	18.9
148737 2001 TC_{113}	14.7	X	281.74883	151.90707	10.81569	9.13858	0.1960973	0.21675126	2.7447005	20	—	—
148738 2001 TF_{113}	15.6	X	44.35317	61.52720	26.80936	22.34967	0.0319514	0.22584352	2.6705310	20	—	—
148739 2001 TX_{114}	15.6	X	309.79038	111.19408	7.85420	8.50527	0.1132137	0.21335534	2.7737483	20	—	—
148740 2001 TS_{115}	15.1	X	14.45582	54.62961	26.33103	9.14109	0.1363734	0.21766179	2.7370407	20	—	—
148741 2001 TT_{118}	15.5	X	176.95647	77.08010	294.06254	11.56001	0.2177465	0.23669941	2.5882403	20	3 12.1	20.1
148742 2001 TM_{120}	15.5	X	259.80908	333.56218	342.97954	15.30815	0.0568843	0.24007168	2.5639453	20	4 1.3	19.1
148743 2001 TS_{132}	15.8	X	32.43052	177.14179	309.70273	8.29168	0.1112798	0.23083354	2.6319044	20	2 2.8	18.5
148744 2001 TF_{134}	15.2	X	22.20107	278.71540	168.38450	11.85681	0.1589596	0.22086828	2.7104859	20	—	—
148745 2001 TA_{136}	15.9	X	20.23292	120.63506	327.10833	11.58983	0.1598983	0.22209823	2.7004698	20	—	—
148746 2001 TP_{139}	16.4	X	130.28883	192.33238	63.28576	4.18327	0.2432143	0.27214786	2.3583021	20	12 8.9	20.3
148747 2001 TR_{143}	16.5	X	358.80873	197.38973	120.65018	3.72853	0.0639819	0.25640331	2.4538818	20	9 9.9	19.1
148748 2001 TF_{164}	16.6	X	152.03030	223.13923	152.05812	1.23710	0.0901661	0.23233626	2.6205436	20	2 20.9	20.5
148749 2001 TM_{170}	15.5	X	356.59568	220.35950	230.34578	13.72623	0.0835023	0.22005419	2.7171667	20	—	—
148750 2001 TL_{171}	16.0	X	101.02081	295.93218	108.11929	11.74760	0.1157154	0.22780249	2.6551990	20	2 1.6	19.4
148751 2001 TQ_{178}	16.4	X	121.03979	61.04966	248.01522	3.79104	0.2218769	0.22177224	2.7031155	20	—	—
148752 2001 TS_{180}	15.8	X	70.87033	275.83551	260.70508	3.99594	0.1489790	0.24232843	2.5480022	20	6 20.7	18.8
148753 2001 TZ_{181}	16.1	X	44.41496	153.17105	326.81256	2.73521	0.1256542	0.22942823	2.6426409	20	2 15.6	18.9
148754 2001 TG_{191}	15.4	X	206.10257	218.25054	24.98950	7.96086	0.1657645	0.27193235	2.3595479	20	—	—
148755 2001 TH_{191}	15.8	X	14.21884	43.01131	24.20011	9.07311	0.1472486	0.21635378	2.7480612	20	—	—
148756 2001 TD_{194}	16.6	X	27.01335	290.09035	332.94649	2.10890	0.1524010	0.25458720	2.4655378	20	8 17.3	19.2
148757 2001 TG_{195}	15.3	X	15.68519	14.73905	145.59240	13.20441	0.0733997	0.23287660	2.6164884	20	2 21.5	18.2
148758 2001 TK_{196}	15.8	X	106.55834	202.61467	92.02390	12.32883	0.2673023	0.27258929	2.3557554	20	—	—
148759 2001 TF_{203}	16.0	X	347.00074	355.35548	78.22779	11.83091	0.0674863	0.21624445	2.7489873	20	—	—
148760 2001 TH_{212}	16.0	X	121.27333	179.78548	274.12017	9.19316	0.0882099	0.23989622	2.5651954	20	4 22.2	19.7
148761 2001 TX_{215}	15.8	X	105.57765	77.01986	341.84726	11.44606	0.1353825	0.22989397	2.6390705	20	2 28.4	19.3
148762 2001 TL_{219}	16.2	X	255.31129	226.24744	84.84918	4.88298	0.2053609	0.24141569	2.5544205	20	3 12.9	20.2
148763 2001 TK_{225}	15.7	X	166.61099	306.90213	119.58350	10.57996	0.0429315	0.23982953	2.5656709	20	5 13.9	19.4
148764 2001 TA_{227}	16.4	X	41.04136	175.64957	26.10152	2.31761	0.0512813	0.24226451	2.5484504	20	5 26.4	19.4
148765 2001 TQ_{228}	15.4	X	113.10525	83.51316	298.65253	13.05026	0.1168194	0.22802697	2.6534561	20	1 19.4	19.0
148766 2001 TY_{228}	15.8	X	219.32646	12.98207	313.67800	13.52824	0.1513341	0.23690000	2.5867791	20	2 25.7	20.0
148767 2001 TJ_{229}	15.5	X	91.33099	62.24741	44.31374	12.75379	0.1360635	0.23749350	2.5824677	20	4 14.6	18.8
148768 2001 TB_{232}	15.5	X	80.88803	270.48078	93.23003	8.20159	0.0873547	0.22163376	2.7042413	20	—	—
148769 2001 TE_{239}	15.5	X	78.40521	301.58997	144.31494	12.69063	0.1743263	0.23125136	2.6287332	20	3 4.6	18.5
148770 2001 TD_{240}	15.9	X	198.10001	219.51330	107.85917	4.13638	0.1654139	0.23346929	2.6120583	20	2 12.4	20.0
148771 2001 UN	15.9	X	88.03605	116.00213	304.39804	11.58945	0.1827463	0.22798407	2.6537889	20	2 11.8	19.1
148772 2001 UU_{2}	16.3	X	151.45024	178.22811	132.37151	3.70750	0.0946045	0.22426402	2.6830555	20	—	—
148773 2001 UT_{3}	15.7	X	305.79879	19.10214	91.34118	9.52532	0.2501578	0.21211306	2.7845676	20	12 24.7	18.0
148774 2001 UK_{4}	16.0	X	110.33186	336.55933	63.90010	2.79086	0.0746133	0.22726437	2.6593887	20	2 2.9	19.4
148775 2001 UM_{4}	15.9	X	321.36405	199.81239	73.77678	3.19502	0.0198208	0.23966115	2.5668724	20	5 8.9	19.2
148776 2001 US_{8}	16.2	X	56.45818	111.22812	349.81531	2.71662	0.1348313	0.22830537	2.6512985	20	2 12.0	18.9
148777 2001 UK_{10}	15.8	X	17.58077	107.10742	23.50313	7.47516	0.1883832	0.22555578	2.6728017	20	1 12.1	18.4
148778 2001 UL_{13}	15.5	X	54.73760	316.42324	52.81092	10.88265	0.2048904	0.21598265	2.7512083	20	—	—
148779 2001 UJ_{18}	16.1	X	84.79459	31.65954	65.70716	4.42268	0.0225352	0.23317676	2.6142425	20	3 6.9	19.5
148780 Altjira	5.7	X	129.13137	297.98668	1.72551	5.19630	0.0659703	0.00336918	44.0676174	20	12 6.3	22.3
148781 2001 UL_{19}	15.6	X	49.48877	21.67664	40.09969	10.82524	0.1598234	0.22505558	2.6767606	20	—	—
148782 2001 UE_{21}	16.1	X	65.47931	75.09867	329.49491	11.25614	0.2154043	0.22476747	2.6790475	20	—	—
148783 2001 UL_{21}	15.8	X	103.75990	156.16744	273.38809	6.09884	0.2025116	0.23288074	2.6164574	20	3 16.4	19.5
148784 2001 UK_{25}	15.4	X	109.43754	177.57604	246.44838	12.36111	0.1347287	0.23141088	2.6275251	20	3 3.9	19.3
148785 2001 UN_{26}	16.0	X	54.16175	79.69506	346.04334	10.80905	0.1865930	0.22367546	2.6877600	20	—	—
148786 2001 UD_{32}	15.7	X	53.20355	329.71848	149.68159	4.53231	0.1663576	0.23188139	2.6239695	20	3 6.1	18.3
148787 2001 UV_{32}	15.7	X	179.85064	240.53441	128.40607	6.58850	0.1808145	0.23623898	2.5916022	20	3 18.9	20.0
148788 2001 UP_{42}	16.2	X	48.62942	303.99170	196.00518	7.15113	0.1417325	0.23350692	2.6117778	20	3 22.3	18.8
148789 2001 UX_{47}	15.5	X	45.22064	37.04190	63.88553	14.53651	0.1327726	0.22569328	2.6717161	20	1 26.1	18.6
148790 2001 UU_{50}	15.2	X	97.34984	283.75911	77.79039	12.96575	0.1740106	0.22104507	2.7090405	20	—	—
148791 2001 UW_{53}	15.9	X	125.88108	266.15846	174.63732	2.28274	0.0635686	0.23535100	2.5981169	20	4 11.6	19.3
148792 2001 UF_{54}	16.3	X	41.21028	229.36167	219.37583	1.86045	0.1729720	0.22325078	2.6911675	20	—	—
148793 2001 UZ_{60}	16.2	X	165.92162	234.71812	215.79078	1.45908	0.1026747	0.19147076	2.9812684	20	6 11.6	20.7
148794 2001 UF_{62}	16.1	X	300.42252	254.32606	344.69421	2.28059	0.0442045	0.23410840	2.6073023	20	2 20.6	19.6
148795 2001 UV_{65}	15.6	X	41.05532	35.30404	34.52487	2.09635	0.2169633	0.21989755	2.7184569	20	—	—
148796 2001 UP_{66}	15.6	X	235.58630	63.99147	250.84964	6.98545	0.2126779	0.24057614	2.5603599	20	2 23.1	20.0
148797 2001 UH_{67}	16.1	X	352.84844	173.83690	58.78088	3.27209	0.1286025	0.24196351	2.5505634	20	4 21.4	18.5
148798 2001 UL_{75}	15.8	X	66.82750	280.18831	143.91856	5.33723	0.1584321	0.22412075	2.6841988	20	1 12.9	18.6
148799 2001 UQ_{81}	16.0	X	150.67981	165.84424	209.01451	3.97572	0.1007886	0.23118708	2.6292205	20	2 18.7	19.9
148800 2001 UM_{91}	16.2	X	204.79756	271.98690	130.05382	1.90557	0.0149581	0.24502077	2.5293026	20	5 26.4	19.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148801 2001 UR_{93}	15.7	X	73.96357	30.46724	79.18489	12.58917	0.1459069	0.23098794	2.6307314	20	3 31.5	19.1
148802 2001 UO_{98}	16.4	X	195.60467	235.76072	89.30549	3.69575	0.0939134	0.23143978	2.6273063	20	2 6.4	20.3
148803 2001 US_{99}	16.0	X	175.56037	172.96143	144.62716	2.72543	0.0296910	0.22646174	2.6656686	20	1 2.4	19.6
148804 2001 UX_{101}	16.3	X	56.62434	88.82572	41.55205	5.39557	0.2186457	0.23220788	2.6215093	20	4 6.0	18.9
148805 2001 UU_{103}	16.2	X	327.18987	333.41898	159.44223	3.18415	0.3123167	0.21756670	2.7378381	20	—	—
148806 2001 UW_{106}	14.6	X	225.25174	222.94196	41.24047	26.89149	0.1731700	0.17398465	3.1778161	20	—	—
148807 2001 UM_{108}	16.1	X	182.57285	247.84577	68.34930	3.13967	0.0722782	0.22717632	2.6600758	20	1 12.1	19.9
148808 2001 US_{108}	15.5	X	164.67868	158.00717	216.07175	3.11498	0.2056818	0.23312200	2.6146519	20	3 10.1	19.9
148809 2001 UP_{110}	16.2	X	354.10602	192.20876	9.69159	3.68683	0.0738730	0.23778051	2.5803892	20	3 14.7	19.0
148810 2001 UX_{112}	15.9	X	142.64879	54.78193	315.10935	2.60561	0.1889079	0.22928291	2.6437574	20	2 14.4	19.9
148811 2001 UX_{114}	16.3	X	106.87521	342.64951	58.85873	3.02948	0.0304856	0.22786007	2.6547517	20	1 24.1	19.7
148812 2001 UN_{115}	15.5	X	6.53178	315.50001	182.32562	3.92350	0.1650763	0.22420181	2.6835517	20	—	—
148813 2001 UY_{116}	16.2	X	65.58166	313.83170	141.76015	2.15702	0.0050597	0.22896153	2.6462307	20	2 4.4	19.6
148814 2001 UK_{117}	16.2	X	90.99857	32.04155	65.96661	2.52879	0.0854976	0.23218638	2.6216712	20	3 24.5	19.5
148815 2001 UD_{118}	16.4	X	33.82666	352.74539	116.16725	1.12909	0.1932017	0.22362801	2.6881402	20	1 14.6	18.6
148816 2001 UB_{124}	15.6	X	150.81904	218.35996	138.31657	14.44143	0.1253544	0.23048327	2.6345702	20	1 31.1	19.6
148817 2001 UN_{125}	15.5	X	86.83033	270.41690	105.32281	14.71961	0.1155815	0.22235663	2.6983772	20	—	—
148818 2001 UT_{125}	16.4	X	93.89045	258.06213	116.17769	12.36402	0.2072784	0.22355309	2.6887407	20	—	—
148819 2001 UO_{126}	16.1	X	328.11577	155.56749	50.97830	4.57299	0.0817297	0.23253390	2.6190585	20	2 12.2	19.3
148820 2001 UW_{127}	15.2	X	178.43296	228.16711	152.38414	4.62868	0.2913555	0.23480526	2.6021411	20	4 2.4	19.8
148821 2001 UV_{130}	16.4	X	142.79997	251.09824	99.19268	2.93594	0.0853035	0.22694811	2.6618587	20	1 10.9	20.2
148822 2001 UQ_{132}	16.6	X	69.18576	223.91213	211.95302	1.70953	0.1927093	0.22870832	2.6481835	20	2 5.7	19.4
148823 2001 UR_{141}	16.5	X	162.22280	317.29964	50.44680	2.83864	0.0657942	0.23229088	2.6208849	20	2 22.2	20.1
148824 2001 UY_{144}	16.7	X	137.39582	200.30752	171.46273	2.18485	0.1034929	0.22853882	2.6494927	20	2 1.8	20.3
148825 2001 UA_{145}	15.2	X	74.48163	80.33312	52.44337	8.63626	0.1317165	0.18052008	3.1006474	20	4 26.9	19.3
148826 2001 UJ_{153}	15.7	X	153.06397	269.76856	106.30285	1.54526	0.1148503	0.23006727	2.6377451	20	2 26.2	19.6
148827 2001 UV_{154}	14.8	X	300.01623	194.42342	70.96735	18.20202	0.0848422	0.18104756	3.0946219	20	4 3.4	19.4
148828 2001 UZ_{158}	15.6	X	264.92700	82.60758	139.04769	3.59617	0.0385176	0.22265121	2.6959966	20	—	—
148829 2001 UD_{167}	15.3	X	132.88956	107.30486	338.54404	10.05489	0.1336012	0.23595162	2.5937060	20	4 29.3	19.4
148830 2001 UL_{169}	15.5	X	2.27967	76.04685	340.36028	9.89935	0.3153515	0.21229605	2.7829673	20	—	—
148831 2001 UN_{169}	15.3	X	7.80480	39.52409	19.85904	11.31586	0.2461952	0.21232418	2.7827215	20	—	—
148832 2001 UA_{176}	16.5	X	91.50220	300.87438	107.93252	3.48004	0.0947323	0.22593728	2.6697921	20	1 22.1	19.7
148833 2001 UY_{177}	16.7	X	132.23474	5.03795	94.57284	1.32793	0.0737981	0.23973877	2.5663184	20	5 15.2	20.2
148834 2001 UF_{192}	16.3	X	233.81213	63.77405	314.59896	11.25706	0.1013164	0.24629651	2.5205610	20	5 19.8	20.2
148835 2001 UQ_{192}	15.7	X	186.32106	42.99406	316.74399	10.09063	0.1455413	0.23653197	2.5894616	20	3 7.0	19.9
148836 2001 UN_{196}	15.5	X	192.37273	295.64065	37.39722	1.14245	0.1706575	0.18031274	3.1030238	20	2 18.5	20.7
148837 2001 UK_{210}	15.7	X	84.17159	118.62962	314.92046	21.24716	0.0770512	0.23061690	2.6335524	20	2 8.3	19.0
148838 2001 UP_{214}	16.2	X	56.04309	177.68003	167.41798	3.66595	0.0987194	0.21414656	2.7669118	20	12 28.6	20.1
148839 2001 UK_{218}	15.8	X	86.59488	15.73540	122.08470	14.24625	0.1141757	0.23594483	2.5937557	20	5 19.2	19.5
148840 2001 VD_{7}	16.2	X	261.81138	256.44831	44.41695	3.54580	0.1302417	0.23764965	2.5813363	20	3 13.4	19.9
148841 2001 VL_{11}	15.4	X	123.71359	146.11996	276.22017	10.53280	0.0219502	0.23234727	2.6204608	20	3 3.9	19.1
148842 2001 VG_{13}	16.1	X	284.83534	300.42978	358.11979	2.70726	0.1125591	0.24033435	2.5620768	20	4 6.7	19.5
148843 2001 VZ_{16}	15.6	X	123.68928	102.24694	318.04144	12.04397	0.1616916	0.23292668	2.6161134	20	3 19.7	19.7
148844 2001 VA_{22}	15.2	X	212.62791	225.48759	46.32209	14.05563	0.1170015	0.22399058	2.6852386	20	—	—
148845 2001 VE_{22}	15.8	X	154.20785	336.48306	19.34351	2.76033	0.1475839	0.22866589	2.6485111	20	2 6.1	19.8
148846 2001 VK_{22}	15.6	X	223.87178	286.41905	32.32848	4.23751	0.1054174	0.23319715	2.6140902	20	2 27.7	19.6
148847 2001 VY_{23}	16.4	X	71.55882	136.26911	281.04296	1.80200	0.1890649	0.22320506	2.6915350	20	1 16.6	19.2
148848 2001 VY_{24}	15.5	X	11.38273	7.09635	48.77259	9.33129	0.1330927	0.21400490	2.7681327	20	—	—
148849 2001 VF_{25}	15.7	X	83.80522	326.46512	49.64820	6.97643	0.0516182	0.21911937	2.7248893	20	—	—
148850 2001 VC_{27}	15.5	X	342.15290	33.36979	56.73623	7.52757	0.1534484	0.21309218	2.7760314	20	—	—
148851 2001 VR_{29}	16.0	X	62.74589	271.82478	105.64358	3.35636	0.2087771	0.27067591	2.3668440	20	—	—
148852 2001 VL_{31}	15.9	X	103.22729	321.39207	92.23385	2.96093	0.0692563	0.22632771	2.6667209	20	2 9.8	19.5
148853 2001 VJ_{34}	15.5	X	45.69245	15.40924	71.53508	6.57083	0.1933245	0.22143589	2.7058520	20	1 9.6	18.1
148854 2001 VP_{36}	15.8	X	52.03149	20.64177	25.32238	2.92192	0.1890197	0.21795033	2.7346245	20	—	—
148855 2001 VS_{38}	16.0	X	95.30880	123.49743	309.32805	1.84980	0.0189474	0.22875125	2.6478522	20	2 15.4	19.4
148856 2001 VU_{50}	15.7	X	57.26669	15.52425	7.89007	9.58140	0.1663591	0.21857292	2.7294290	20	—	—
148857 2001 VU_{52}	16.0	X	110.27500	69.21239	305.31938	5.60673	0.1491777	0.22562703	2.6722390	20	1 11.6	19.6
148858 2001 VH_{56}	15.4	X	314.54943	142.88738	323.15654	4.81077	0.0386570	0.21401280	2.7680645	20	—	—
148859 2001 VC_{57}	15.4	X	77.84172	294.40454	249.80558	14.72010	0.2445463	0.24132259	2.5550774	20	7 20.5	19.2
148860 2001 VK_{59}	15.4	X	335.75781	145.38916	38.21353	15.97416	0.0459506	0.22860394	2.6489895	20	2 2.5	19.2
148861 2001 VL_{60}	15.9	X	57.74748	105.29518	350.22432	2.91640	0.0554816	0.22717045	2.6601216	20	1 30.3	19.2
148862 2001 VD_{66}	15.4	X	61.26837	41.01192	48.74762	14.23076	0.1695284	0.22492373	2.6778066	20	2 16.5	18.6
148863 2001 VV_{66}	15.6	X	112.69554	322.28368	42.92355	9.16307	0.0959713	0.22215324	2.7000240	20	—	—
148864 2001 VP_{72}	16.1	X	119.34542	201.77145	348.71822	2.18903	0.1471656	0.25278609	2.4772354	20	9 5.6	19.9
148865 2001 VF_{76}	16.3	X	34.23386	197.17173	280.32454	2.00022	0.0232114	0.22535922	2.6743557	20	1 23.7	19.6
148866 2001 VQ_{81}	15.8	X	356.06080	6.12153	68.94808	10.84645	0.2430808	0.21371395	2.7706445	20	—	—
148867 2001 VR_{88}	15.7	X	103.76585	354.60504	91.13570	4.53933	0.0965309	0.23284305	2.6167398	20	3 28.1	19.2
148868 2001 VV_{90}	15.3	X	231.34100	168.07190	171.50646	11.47116	0.1673781	0.18570925	3.0426152	20	3 30.6	20.3
148869 2001 VL_{99}	14.9	X	30.74303	0.64764	98.17621	16.46909	0.2440308	0.22142023	2.7059796	20	—	—
148870 2001 VE_{103}	16.2	X	11.30732	84.51765	348.10982	3.00402	0.0626935	0.21665967	2.7454739	20	—	—
148871 2001 VC_{113}	15.8	X	41.94816	147.33132	267.11950	7.95510	0.1356232	0.21788540	2.7351677	20	—	—
148872 2001 VM_{114}	16.3	X	71.63382	56.90720	329.03211	1.81985	0.1953232	0.21946062	2.7220639	20	—	—
148873 2001 VV_{115}	15.9	X	46.42700	82.41077	341.46289	2.62271	0.1849074	0.21936623	2.7228447	20	—	—
148874 2001 VH_{116}	16.0	X	54.78256	83.83193	16.43876	3.71252	0.1461460	0.22451124	2.6810855	20	2 10.9	19.0
148875 2001 VZ_{116}	16.0	X	41.77772	94.55869	335.96768	2.51856	0.2114017	0.21914942	2.7246403	20	—	—
148876 2001 VS_{119}	15.7	X	93.28350	327.30199	47.02841	7.05414	0.0435965	0.21901734	2.7257356	20	—	—
148877 2001 VA_{124}	15.9	X	191.87791	1.47728	352.92842	3.98755	0.1081213	0.23366310	2.6106138	20	3 8.8	19.9
148878 2001 VC_{124}	15.7	X	358.06074	137.73603	316.54877	7.76777	0.0983650	0.21867376	2.7285899	20	—	—
148879 2001 VU_{125}	16.0	X	68.21715	131.38792	249.36102	4.08559	0.0891215	0.21730612	2.7400264	20	—	—
148880 2001 WL_{5}	15.7	X	40.67884	286.93756	123.11202	14.10477	0.1974688	0.21996853	2.7178721	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148881 2001 WM_{7}	16.1	X	342.73051	22.70722	82.62369	4.55108	0.0491648	0.21706556	2.7420504	20	—	—
148882 2001 WQ_{9}	15.4	X	190.27947	325.91795	93.23408	13.30883	0.0871094	0.18664535	3.0324334	20	5 30.5	20.2
148883 2001 WP_{11}	15.4	X	196.79967	249.90468	116.34672	4.36381	0.0891555	0.18240614	3.0792367	20	4 2.7	20.1
148884 2001 WO_{14}	16.4	X	164.10027	357.34199	359.70115	3.72525	0.1763619	0.23007021	2.6377226	20	2 18.8	20.6
148885 2001 WV_{15}	16.9	X	332.66802	58.50809	57.64819	21.95427	0.0965800	0.37431942	1.9068117	20	—	—
148886 2001 WC_{19}	15.7	X	53.27645	296.51706	226.38677	14.24277	0.0762720	0.23684561	2.5871751	20	4 22.9	18.8
148887 2001 WQ_{19}	16.1	X	49.15928	291.69283	63.84616	1.23014	0.0817294	0.21345780	2.7728605	20	12 31.2	19.9
148888 2001 WJ_{20}	15.8	X	78.98493	225.31346	143.90919	3.44972	0.1946767	0.21929308	2.7234502	20	—	—
148889 2001 WL_{29}	15.4	X	19.82796	339.24894	86.87350	14.13426	0.1270537	0.21578508	2.7528873	20	—	—
148890 2001 WO_{30}	16.3	X	186.62697	240.24512	90.76311	4.41176	0.1094119	0.22975166	2.6401602	20	2 5.4	20.3
148891 2001 WZ_{30}	16.0	X	135.70656	246.05276	108.29279	5.20929	0.2004900	0.22650381	2.6653385	20	1 21.8	20.1
148892 2001 WY_{32}	15.8	X	19.66544	285.79250	105.00991	6.19202	0.1667078	0.21303231	2.7765515	20	—	—
148893 2001 WP_{34}	16.4	X	26.55197	298.08048	128.32859	4.20984	0.1840048	0.21722441	2.7407135	20	—	—
148894 2001 WX_{34}	16.0	X	222.48184	209.57173	91.09786	5.56608	0.1702420	0.23037075	2.6354280	20	2 2.2	20.3
148895 2001 WE_{38}	15.5	X	111.06945	314.99576	95.02085	10.32522	0.0949912	0.22748806	2.6576451	20	2 21.6	19.2
148896 2001 WQ_{42}	16.2	X	182.72678	180.44083	172.82640	2.46046	0.0631573	0.23207985	2.6224734	20	2 25.2	19.9
148897 2001 WN_{56}	16.4	X	47.88862	101.07094	31.29389	2.32785	0.0453088	0.23114606	2.6295315	20	3 3.5	19.5
148898 2001 WT_{57}	16.4	X	347.04511	274.67886	232.39380	3.66269	0.1784795	0.22343220	2.6897105	20	—	—
148899 2001 WD_{60}	15.8	X	308.46919	237.23258	53.49177	3.95765	0.1181322	0.24172136	2.5522666	20	4 29.7	18.9
148900 2001 WO_{61}	16.3	X	319.10528	211.95658	296.40135	1.50308	0.1244272	0.21829519	2.7317437	20	—	—
148901 2001 WR_{67}	16.3	X	337.82550	136.10598	69.43660	4.49999	0.0313436	0.23277125	2.6172778	20	3 2.2	19.6
148902 2001 WA_{68}	16.0	X	296.80158	105.69041	61.79239	3.37507	0.1856172	0.21849342	2.7300912	20	—	—
148903 2001 WX_{70}	16.7	X	35.86887	307.36860	175.88638	2.19432	0.1577578	0.22630695	2.6668840	20	2 6.2	19.3
148904 2001 WD_{89}	16.2	X	146.52452	188.90064	156.68926	2.53771	0.1018299	0.22588505	2.6702037	20	1 11.1	20.1
148905 2001 WA_{90}	15.5	X	309.89394	207.71220	283.01324	6.79764	0.1661860	0.21468116	2.7623165	20	—	—
148906 2001 WC_{91}	15.6	X	319.05353	132.53447	297.93987	5.35555	0.0376669	0.20854398	2.8162483	20	11 28.6	19.2
148907 2001 WA_{93}	16.2	X	313.24173	116.01233	21.81820	7.94881	0.2937156	0.21303067	2.7765657	20	—	—
148908 2001 XL_{1}	14.2	X	127.45936	117.40159	274.24866	15.32661	0.3289662	0.23032696	2.6357620	20	3 2.9	18.9
148909 2001 XA_{2}	14.8	X	117.01906	52.59238	333.67705	27.26938	0.1704376	0.22801018	2.6535863	20	2 11.1	18.6
148910 2001 XY_{9}	15.2	X	195.23936	214.27336	304.42940	8.17433	0.1180013	0.19864823	2.9090169	20	9 30.0	19.8
148911 2001 XX_{13}	15.7	X	73.39894	63.83640	287.77252	13.67109	0.1867082	0.21391908	2.7688730	20	—	—
148912 2001 XK_{18}	15.5	X	10.14660	150.65561	317.39611	8.58084	0.1102902	0.21754685	2.7380047	20	—	—
148913 2001 XE_{34}	15.4	X	85.35567	164.06141	309.93136	10.90702	0.1042593	0.23159360	2.6261428	20	4 2.4	19.0
148914 2001 XX_{35}	15.6	X	58.56013	17.44722	342.75610	8.19000	0.1442265	0.21426227	2.7659155	20	—	—
148915 2001 XR_{36}	15.3	X	216.34953	27.13311	302.27908	10.94536	0.1626066	0.23301916	2.6154211	20	2 26.1	19.7
148916 2001 XF_{41}	15.3	X	33.27800	49.25543	341.33688	9.49099	0.1570222	0.21191286	2.7863212	20	—	—
148917 2001 XL_{48}	14.5	X	331.96915	134.42168	315.50495	9.87927	0.1328384	0.21477745	2.7614908	20	—	—
148918 2001 XJ_{50}	15.8	X	352.70225	26.56177	78.30394	3.27540	0.1227029	0.21660209	2.7459605	20	—	—
148919 2001 XG_{51}	15.9	X	115.64428	335.30823	82.37298	3.09757	0.0275073	0.22925002	2.6440102	20	2 25.0	19.4
148920 2001 XB_{54}	15.9	X	157.79523	332.48522	95.17312	6.60940	0.1516431	0.18247999	3.0784059	20	5 10.2	20.9
148921 2001 XO_{69}	15.3	X	54.42498	246.53635	136.43332	9.70089	0.1853478	0.21582765	2.7525254	20	—	—
148922 2001 XW_{72}	16.0	X	151.54677	168.78944	178.82548	2.31737	0.0381321	0.22375330	2.6871367	20	1 12.3	19.6
148923 2001 XH_{73}	15.9	X	138.29888	256.12516	121.64885	2.03533	0.1175745	0.22790187	2.6544270	20	2 12.8	19.6
148924 2001 XL_{73}	15.7	X	12.00834	355.59552	152.12740	2.60022	0.0230698	0.22668710	2.6639016	20	2 1.4	18.9
148925 2001 XD_{75}	16.0	X	142.16091	295.73930	96.13462	4.77299	0.1141509	0.22989755	2.6390432	20	3 6.8	19.8
148926 2001 XR_{75}	15.4	X	335.66356	184.00702	78.83038	8.26332	0.1923530	0.24257665	2.5462638	20	4 28.3	17.9
148927 2001 XM_{77}	15.8	X	294.64694	100.25688	76.61162	10.86830	0.0078785	0.21975413	2.7196396	20	—	—
148928 2001 XW_{79}	15.7	X	47.42913	283.79175	121.50956	4.53223	0.0915056	0.21542597	2.7559458	20	—	—
148929 2001 XN_{89}	15.8	X	36.89295	171.16948	288.93993	2.02769	0.0436120	0.22440423	2.6819377	20	1 5.7	19.1
148930 2001 XN_{90}	16.3	X	98.59284	136.14892	353.17850	1.89490	0.1195752	0.23609541	2.5926527	20	5 18.7	19.9
148931 2001 XA_{92}	16.2	X	359.81797	87.21838	25.26368	1.97052	0.0252523	0.21990879	2.7183643	20	—	—
148932 2001 XR_{92}	15.4	X	257.83190	299.51248	27.71473	3.23506	0.1380123	0.23924252	2.5698659	20	4 9.3	19.2
148933 2001 XZ_{99}	14.7	X	69.34481	315.06119	87.79859	14.77143	0.1958374	0.21827093	2.7319460	20	—	—
148934 2001 XO_{101}	15.4	X	282.95519	4.09151	36.00123	3.74730	0.1653708	0.19561898	2.9389716	20	8 13.1	19.1
148935 2001 XU_{106}	16.6	X	315.53817	65.28105	67.85775	1.94030	0.0680292	0.21546178	2.7556405	20	—	—
148936 2001 XL_{113}	15.4	X	286.27890	196.56282	112.10692	6.22636	0.2162781	0.23981949	2.5657425	20	4 10.6	19.1
148937 2001 XK_{114}	15.4	X	324.46783	29.77219	35.34793	6.42103	0.1221501	0.20585818	2.8406908	20	11 28.9	18.6
148938 2001 XB_{117}	15.4	X	290.87236	23.86809	70.47686	9.23512	0.1759684	0.20240662	2.8728938	20	11 7.0	18.6
148939 2001 XT_{123}	16.2	X	6.62489	333.19078	101.60243	2.92656	0.0803187	0.21555686	2.7548301	20	—	—
148940 2001 XF_{126}	16.1	X	163.85778	2.90397	94.66268	2.52771	0.1662196	0.18684366	3.0302873	20	6 19.6	21.2
148941 2001 XC_{131}	16.2	X	118.67599	197.56868	175.44117	3.12393	0.1126299	0.22387482	2.6861642	20	1 14.3	19.8
148942 2001 XC_{138}	15.8	X	224.57953	93.46067	116.20081	4.71061	0.0364601	0.21276295	2.7788944	20	—	—
148943 2001 XA_{139}	15.6	X	248.96482	205.00968	95.67221	7.85306	0.0817494	0.23092088	2.6312407	20	3 6.6	19.5
148944 2001 XW_{141}	15.7	X	286.11169	354.62720	94.97996	3.11022	0.0402397	0.20507013	2.8479637	20	11 8.8	19.3
148945 2001 XS_{144}	15.8	X	356.38293	224.37451	215.89150	3.77230	0.0426660	0.21300855	2.7767580	20	—	—
148946 2001 XE_{148}	16.0	X	14.90832	317.27628	111.51335	4.73475	0.0766972	0.21413610	2.7670019	20	—	—
148947 2001 XA_{151}	15.8	X	279.11332	283.24828	253.33227	6.47696	0.1675738	0.21264423	2.7799286	20	—	—
148948 2001 XQ_{154}	15.6	X	246.56516	236.89429	85.74903	5.90258	0.2385229	0.23545195	2.5973742	20	3 17.7	20.0
148949 2001 XM_{159}	15.8	X	57.08929	234.92855	154.00442	2.03898	0.2194354	0.21576054	2.7530960	20	—	—
148950 2001 XX_{163}	16.1	X	301.87175	290.86667	220.58115	2.53804	0.0316053	0.21432592	2.7653679	20	—	—
148951 2001 XB_{167}	16.0	X	17.08117	137.30775	258.43840	3.19378	0.2080881	0.21105604	2.7938571	20	—	—
148952 2001 XD_{179}	15.1	X	212.41681	122.70684	280.49155	15.46105	0.1102663	0.18428168	3.0583084	20	5 30.4	20.0
148953 2001 XE_{188}	16.0	X	27.91121	291.30236	108.81502	9.74482	0.1585541	0.21057868	2.7980778	20	—	—
148954 2001 XX_{203}	15.5	X	119.09011	308.03727	84.67314	16.99838	0.0602837	0.22673667	2.6635133	20	2 4.5	19.3
148955 2001 XQ_{204}	15.9	X	320.27155	190.43051	150.77452	5.47889	0.1647589	0.25035611	2.4932390	20	7 28.9	18.3
148956 2001 XC_{205}	15.8	X	19.06905	284.34283	114.48214	11.87149	0.2758843	0.21301882	2.7766687	20	—	—
148957 2001 XD_{205}	16.4	X	2.90305	288.54316	121.91280	10.16745	0.2893453	0.21184763	2.7868931	20	—	—
148958 2001 XM_{216}	16.3	X	325.67920	79.69689	75.00017	4.35365	0.1358548	0.21712646	2.7415377	20	—	—
148959 2001 XU_{222}	16.7	X	122.65790	34.87058	1.38821	3.38691	0.1084745	0.22844364	2.6502286	20	2 17.4	20.4
148960 2001 XY_{222}	15.7	X	22.95945	128.50702	61.18906	13.31139	0.2230519	0.23166875	2.6255749	20	4 26.4	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
148961 2001 XM_{224}	15.7	X	67.53310	259.49424	124.45555	7.38199	0.0660364	0.21825659	2.7320657	20	—	—
148962 2001 XU_{224}	15.5	X	280.35794	291.23753	264.52938	11.63128	0.0946419	0.21899434	2.7259264	20	—	—
148963 2001 XW_{225}	15.2	X	305.02115	283.31422	256.06018	9.44431	0.0907276	0.21995336	2.7179971	20	—	—
148964 2001 XF_{226}	15.8	X	112.69620	277.06800	64.66179	5.95532	0.0101846	0.21694355	2.7430784	20	—	—
148965 2001 XK_{227}	16.4	X	48.89127	338.31682	52.85382	2.90520	0.1076170	0.21569493	2.7536544	20	—	—
148966 2001 XT_{228}	16.1	X	202.63148	347.17543	317.02007	3.03604	0.0660071	0.22507777	2.6765847	20	1 18.9	20.0
148967 2001 XV_{231}	16.0	X	357.95056	355.22298	13.71054	1.97622	0.0948364	0.20479143	2.8505469	20	11 7.9	19.3
148968 2001 XN_{233}	16.2	X	9.18177	19.79742	62.79130	4.45568	0.0661729	0.21568339	2.7537525	20	—	—
148969 2001 XY_{233}	15.8	X	35.25277	301.26286	24.45634	2.13839	0.0914346	0.20368718	2.8608401	20	11 5.3	19.6
148970 2001 XG_{235}	16.2	X	53.44885	329.23837	64.85315	4.80494	0.1007381	0.21588692	2.7520215	20	—	—
148971 2001 XZ_{236}	15.7	X	27.23432	60.20958	275.42676	5.36296	0.0701919	0.20332311	2.8642541	20	11 2.7	19.5
148972 2001 XN_{237}	15.5	X	183.84303	44.03359	309.41959	3.74241	0.2187859	0.23273710	2.6175338	20	3 1.6	20.1
148973 2001 XP_{249}	16.0	X	103.41415	202.96318	173.96224	1.66414	0.0729992	0.22170315	2.7036770	20	—	—
148974 2001 XD_{250}	16.3	X	32.09524	167.73704	231.95474	2.65738	0.0988787	0.21239936	2.7820648	20	—	—
148975 2001 XA_{255}	11.1	X	22.88650	90.80409	105.89466	12.60610	0.6768151	0.00629885	29.0376707	20	7 19.0	23.6
148976 2001 XN_{264}	15.9	X	269.25503	190.96044	92.69447	4.15793	0.0615725	0.23344466	2.6122421	20	3 9.2	19.5
148977 2001 YX_{21}	15.6	X	303.92537	110.86217	43.37786	8.03620	0.0568920	0.21711832	2.7416062	20	—	—
148978 2001 YO_{24}	16.9	X	72.37713	3.55194	5.38868	1.60380	0.1292641	0.21670445	2.7450957	20	—	—
148979 2001 YH_{27}	15.4	X	7.82173	84.78205	69.86964	10.14196	0.0472618	0.17216074	3.2002210	20	2 16.2	19.8
148980 2001 YA_{33}	16.2	X	43.67811	91.07057	297.54584	3.06403	0.1082352	0.21407091	2.7675636	20	—	—
148981 2001 YU_{34}	16.2	X	204.23407	316.00723	308.74469	0.77970	0.0175988	0.21826122	2.7320270	20	—	—
148982 2001 YS_{38}	16.2	X	120.17853	334.21946	32.95397	3.38127	0.0181716	0.22068443	2.7119911	20	—	—
148983 2001 YT_{39}	15.8	X	101.10560	38.10399	16.33029	1.80585	0.0590860	0.22503446	2.6769280	20	2 6.6	19.3
148984 2001 YA_{41}	16.2	X	359.22046	56.27887	53.04468	3.43171	0.1576646	0.21644091	2.7473236	20	—	—
148985 2001 YF_{43}	15.9	X	101.94631	313.18941	66.48939	3.10543	0.1004222	0.22073724	2.7115585	20	—	—
148986 2001 YO_{47}	16.1	X	16.52272	104.47614	312.16879	3.42895	0.0602669	0.21231177	2.7828300	20	—	—
148987 2001 YC_{48}	15.9	X	64.10877	290.80640	56.03999	2.46860	0.2363751	0.21230401	2.7828978	20	—	—
148988 2001 YR_{67}	15.8	X	227.71321	332.23772	293.68549	5.74344	0.0417384	0.21877395	2.7277568	20	—	—
148989 2001 YM_{73}	15.8	X	27.55932	325.96648	96.93245	8.59245	0.0693591	0.21261103	2.7802180	20	—	—
148990 2001 YX_{92}	16.4	X	57.73617	126.62203	329.50378	4.52848	0.1030130	0.22929550	2.6436606	20	2 3.9	19.3
148991 2001 YH_{98}	15.8	X	358.95591	309.34426	164.16602	2.33172	0.0280465	0.21818193	2.7326889	20	—	—
148992 2001 YS_{100}	15.9	X	41.99308	139.11029	246.40398	2.67138	0.1043194	0.21185101	2.7868634	20	—	—
148993 2001 YA_{101}	15.5	X	104.30758	248.37417	115.30383	7.24793	0.0370843	0.21699147	2.7426745	20	—	—
148994 2001 YT_{121}	15.6	X	15.57916	59.55280	353.90629	6.21722	0.0649987	0.21319316	2.7751548	20	—	—
148995 2001 YL_{122}	15.6	X	269.42528	162.48244	16.24070	7.50876	0.0594759	0.21258688	2.7804286	20	—	—
148996 2001 YA_{123}	15.5	X	104.30658	347.16042	2.18949	4.94330	0.1250430	0.21792285	2.7348544	20	—	—
148997 2001 YU_{126}	15.4	X	336.08698	170.38319	303.84026	8.42646	0.1099303	0.21301299	2.7767194	20	—	—
148998 2001 YF_{127}	15.6	X	37.70951	7.53459	40.01005	5.20374	0.0675963	0.21320604	2.7750430	20	—	—
148999 2001 YF_{128}	15.7	X	289.94013	48.38395	52.10350	11.60254	0.1248967	0.20533360	2.8455270	20	11 18.1	18.9
149000 2001 YM_{130}	15.5	X	219.21464	223.00694	321.87027	8.54626	0.1831230	0.20266083	2.8704909	20	11 20.9	20.0
149001 2001 YJ_{136}	15.3	X	320.80253	114.12504	9.65620	11.51757	0.0956638	0.21514553	2.7583402	20	—	—
149002 2001 YM_{139}	15.4	X	124.04367	317.57794	131.27606	10.06285	0.2135369	0.17693523	3.1423882	20	5 11.0	20.6
149003 2002 AB_{1}	15.4	X	143.69448	58.62311	312.95297	10.50319	0.2721429	0.22959679	2.6413473	20	2 22.4	19.8
149004 2002 AR_{11}	16.0	X	43.77012	159.99150	141.57516	2.85922	0.0831489	0.19466661	2.9485494	20	10 15.5	20.0
149005 2002 AY_{15}	14.4	X	218.35595	124.33604	312.35842	12.41778	0.0309444	0.18620235	3.0372412	20	7 26.5	18.7
149006 2002 AS_{16}	15.0	X	134.52105	125.50647	35.93155	4.88697	0.0989447	0.18532385	3.0468320	20	8 8.2	19.7
149007 2002 AJ_{32}	15.5	X	214.37356	349.92392	103.66307	3.67971	0.2553522	0.18923099	3.0047468	20	7 24.7	20.6
149008 2002 AW_{36}	16.0	X	347.30071	326.67909	124.44834	6.04884	0.1289441	0.21240369	2.7820270	20	—	—
149009 2002 AG_{42}	15.7	X	4.69423	39.21761	172.93205	3.40807	0.1177017	0.22596112	2.6696043	20	4 15.5	18.5
149010 2002 AX_{43}	16.3	X	84.34659	290.02778	135.49602	3.51370	0.0812698	0.22138325	2.7062809	20	2 1.3	19.5
149011 2002 AR_{44}	16.4	X	270.44855	303.76644	182.15903	2.55103	0.1170815	0.20307669	2.8665708	20	11 22.9	20.0
149012 2002 AA_{45}	15.7	X	206.72363	182.67257	245.83976	0.99878	0.1364036	0.18588914	3.0406519	20	6 23.9	20.4
149013 2002 AL_{46}	15.8	X	301.61321	299.99168	134.38353	2.84314	0.0405277	0.20044171	2.8916384	20	11 9.5	19.5
149014 2002 AQ_{46}	15.9	X	220.82650	26.67399	171.47958	1.96381	0.0389676	0.20562068	2.8428777	20	12 29.7	19.8
149015 2002 AY_{52}	14.5	X	88.47237	231.48356	301.22369	7.03167	0.2107965	0.17822303	3.1272324	20	7 14.3	19.1
149016 2002 AP_{61}	15.1	X	168.51497	65.15561	169.76774	5.55209	0.1387169	0.19820810	2.9133217	20	12 7.7	19.8
149017 2002 AU_{61}	14.1	X	106.44936	351.88455	144.64459	28.84680	0.1316711	0.17630609	3.1498594	20	6 14.2	19.3
149018 2002 AL_{75}	15.7	X	109.41368	355.10947	43.46034	1.27971	0.2285576	0.17036726	3.2226412	20	2 26.7	20.5
149019 2002 AC_{82}	15.6	X	339.96351	352.17879	135.17247	10.97769	0.1969162	0.21409826	2.7673279	20	—	—
149020 2002 AL_{87}	15.7	X	302.90092	18.65298	151.95071	8.56457	0.1373530	0.21204114	2.7851973	20	—	—
149021 2002 AS_{95}	15.5	X	162.36202	23.25265	107.63055	11.83581	0.0471293	0.18693486	3.0293017	20	7 28.1	20.0
149022 2002 AB_{109}	15.7	X	339.51340	352.32277	41.50134	2.53383	0.0877658	0.19980693	2.8977596	20	11 10.5	19.1
149023 2002 AR_{115}	15.3	X	123.71726	245.00813	320.05172	10.22041	0.0088134	0.19113408	2.9847684	20	9 8.7	19.5
149024 2002 AH_{119}	15.0	X	172.19452	1.03505	89.60604	3.23804	0.1255091	0.18010206	3.1054433	20	6 18.2	20.0
149025 2002 AU_{123}	15.9	X	262.29003	140.26656	357.82397	1.57239	0.1702189	0.20128351	2.8835706	20	11 17.7	19.4
149026 2002 AR_{124}	15.8	X	277.25600	129.20590	332.49388	6.60403	0.1136880	0.19879460	2.9075888	20	10 28.6	19.5
149027 2002 AR_{125}	15.3	X	78.63307	157.47033	142.58305	13.57618	0.0414497	0.19618605	2.9333056	20	11 22.6	19.7
149028 2002 AU_{128}	16.2	X	118.70098	2.64843	320.64410	20.63619	0.0737735	0.36890647	1.9254188	20	—	—
149029 2002 AW_{149}	15.6	X	85.22892	144.37945	65.20343	3.34763	0.0262174	0.18701783	3.0284056	20	8 2.6	19.8
149030 2002 AB_{155}	14.9	X	143.21145	33.16993	141.11244	21.15426	0.1214677	0.18624983	3.0367250	20	9 2.9	19.7
149031 2002 AL_{156}	15.7	X	12.49615	340.48855	107.74688	5.37875	0.0832757	0.21508243	2.7588797	20	—	—
149032 2002 AB_{163}	15.6	X	348.20806	284.90697	150.72398	12.55491	0.0863028	0.20540943	2.8448266	20	—	—
149033 2002 AA_{169}	15.1	X	88.70290	60.65500	332.99174	7.84639	0.1468857	0.22045758	2.7138512	20	1 8.3	18.5
149034 2002 AH_{169}	15.8	X	42.61915	92.43973	309.01515	7.92254	0.1552403	0.21364692	2.7712240	20	—	—
149035 2002 AV_{170}	15.4	X	198.42197	340.59332	76.60346	1.48222	0.0552158	0.18191905	3.0847308	20	6 5.1	19.9
149036 2002 AM_{176}	14.9	X	73.03784	291.75911	315.78575	6.73723	0.1420713	0.18753262	3.0228610	20	9 17.6	19.4
149037 2002 AW_{176}	15.1	X	301.68374	26.56077	326.41211	9.32492	0.1022948	0.18619600	3.0373103	20	7 17.5	19.1
149038 2002 AA_{178}	15.8	X	165.43207	350.15770	102.40936	2.43312	0.1311702	0.18032908	3.1028364	20	6 14.2	20.7
149039 2002 AZ_{193}	15.8	X	135.90705	224.32284	111.98869	8.00010	0.1130396	0.21483741	2.7609770	20	—	—
149040 2002 AG_{194}	16.1	X	99.51546	58.53635	98.10005	2.69037	0.0144987	0.18099940	3.0951708	20	6 10.5	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149041 2002 AM_{198}	16.1	X	54.82865	86.60567	258.83693	1.06127	0.0761208	0.20481630	2.8503162	20	12 22.6	20.1
149042 2002 AQ_{199}	15.4	X	50.63375	227.12854	105.86246	16.53818	0.1566482	0.20266985	2.8704057	20	12 14.4	19.6
149043 2002 AT_{208}	15.0	X	117.65818	85.50833	75.87221	12.91336	0.0810126	0.17919366	3.1159295	20	7 17.9	19.7
149044 2002 BV_{3}	15.5	X	357.29123	65.58055	10.72609	11.54343	0.2471795	0.21081379	2.7959970	20	—	—
149045 2002 BE_{4}	15.4	X	318.76489	147.70245	5.54893	13.91512	0.1993074	0.21328826	2.7743298	20	—	—
149046 2002 BU_{11}	15.0	X	183.97952	179.62443	310.80888	9.44308	0.0444903	0.18786735	3.0192692	20	8 19.6	19.3
149047 2002 BE_{15}	15.4	X	1.39903	197.04475	140.34038	10.55994	0.0842662	0.19264359	2.9691559	20	10 3.4	19.2
149048 2002 BP_{15}	15.7	X	263.65497	264.92950	192.62470	1.37666	0.0488334	0.19552221	2.9399413	20	10 16.2	19.7
149049 2002 BP_{16}	15.0	X	100.16251	119.24841	150.08127	10.79147	0.0742304	0.19353243	2.9600580	20	11 12.4	19.5
149050 2002 BN_{24}	14.9	X	28.66905	165.21793	103.46470	12.32789	0.0366153	0.18664069	3.0324839	20	8 6.3	19.0
149051 2002 CU_{7}	15.0	X	179.52762	203.70499	329.77177	2.98980	0.0867182	0.19152388	2.9807172	20	10 6.0	19.6
149052 2002 CK_{12}	16.8	X	288.42594	258.49827	328.08951	19.82019	0.0200830	0.37834686	1.8932558	20	—	—
149053 2002 CW_{12}	14.5	X	301.56324	38.08575	3.49529	13.39689	0.3635704	0.19696946	2.9255226	20	8 16.2	17.8
149054 2002 CS_{16}	15.7	X	322.09058	328.89109	97.20701	3.41167	0.0729746	0.20313367	2.8660347	20	11 27.0	19.1
149055 2002 CK_{18}	15.2	X	271.59985	301.21276	66.84474	10.19281	0.0747991	0.18292118	3.0734540	20	6 27.4	19.6
149056 2002 CF_{20}	15.0	X	29.07526	121.51947	133.94815	11.25410	0.0606565	0.18139926	3.0906207	20	7 20.5	19.0
149057 2002 CC_{30}	15.0	X	81.70699	145.61117	87.79065	9.04818	0.1733428	0.18628968	3.0362919	20	9 21.1	19.7
149058 2002 CU_{32}	14.7	X	96.70727	197.42659	348.96079	12.27774	0.0570231	0.18244165	3.0788372	20	7 24.8	19.2
149059 2002 CB_{35}	15.3	X	140.32335	7.08537	105.50638	11.06089	0.0741933	0.17940141	3.1135236	20	6 11.3	19.9
149060 2002 CA_{51}	15.3	X	267.36330	270.91636	145.23917	10.65791	0.0889490	0.18999414	2.9966953	20	8 22.4	19.3
149061 2002 CA_{57}	15.1	X	41.04263	276.61859	319.76880	4.10270	0.1102594	0.17833708	3.1258991	20	7 19.7	19.2
149062 2002 CK_{59}	15.5	X	53.68488	57.80223	155.25004	1.66055	0.1316770	0.17630821	3.1498342	20	7 9.8	19.7
149063 2002 CL_{59}	15.2	X	77.02903	203.44979	348.91833	5.99188	0.1372312	0.17696180	3.1420737	20	7 16.8	19.7
149064 2002 CW_{63}	15.2	X	124.05041	138.94692	40.96505	8.42820	0.1049391	0.18487636	3.0517465	20	8 22.7	20.0
149065 2002 CV_{68}	15.5	X	32.98442	223.11540	109.74565	3.40619	0.0451775	0.19689184	2.9262914	20	11 5.0	19.5
149066 2002 CW_{68}	15.9	X	242.94055	17.86692	97.95136	3.14360	0.0647591	0.19599141	2.9352473	20	10 12.1	19.9
149067 2002 CA_{70}	15.5	X	322.38952	42.23702	328.56357	9.51659	0.1169682	0.19285156	2.9670209	20	9 8.7	18.9
149068 2002 CS_{71}	15.3	X	291.11781	257.09821	122.47127	11.82558	0.1233005	0.18884428	3.0088474	20	8 2.2	19.1
149069 2002 CD_{72}	15.8	X	56.97124	277.01952	45.73743	2.28818	0.0094625	0.19776891	2.9176333	20	11 16.4	19.9
149070 2002 CM_{72}	15.3	X	24.69564	357.22852	316.26366	9.59257	0.0930184	0.19132295	2.9828037	20	9 29.1	19.3
149071 2002 CP_{72}	15.4	X	321.21483	215.67197	136.79573	11.23021	0.0561149	0.18808324	3.0169583	20	8 19.3	19.2
149072 2002 CV_{76}	15.2	X	62.12272	316.50783	326.43872	9.75640	0.0469068	0.19137593	2.9822531	20	10 4.1	19.5
149073 2002 CA_{78}	15.5	X	158.61145	165.78368	55.37147	2.84550	0.0508177	0.19627796	2.9323897	20	11 13.7	19.8
149074 2002 CN_{78}	15.2	X	228.16471	51.07836	335.15116	9.99652	0.1169713	0.17973179	3.1097068	20	5 22.9	20.1
149075 2002 CK_{79}	15.4	X	35.72208	47.15925	333.28496	7.93506	0.0375334	0.20250432	2.8719697	20	—	—
149076 2002 CG_{80}	15.3	X	190.21815	130.81886	345.66290	7.64158	0.0469215	0.18583988	3.0411892	20	8 12.1	19.7
149077 2002 CX_{81}	15.9	X	225.74946	7.72085	112.83739	2.78207	0.1106700	0.19227742	2.9729243	20	9 20.8	20.2
149078 2002 CB_{85}	15.2	X	273.80170	264.59156	129.42333	9.82998	0.0642041	0.18834135	3.0142013	20	8 5.5	19.3
149079 2002 CQ_{85}	14.9	X	27.98097	136.55728	119.87409	11.72528	0.1638032	0.18151524	3.0893041	20	8 2.4	18.5
149080 2002 CK_{88}	15.6	X	236.88469	257.17636	133.20834	3.04099	0.0645127	0.18087422	3.0965988	20	6 14.9	20.1
149081 2002 CK_{89}	15.1	X	289.07390	7.06739	337.74971	9.48171	0.0443176	0.18061545	3.0995558	20	6 25.8	19.5
149082 2002 CQ_{93}	15.0	X	12.13970	195.12575	81.69509	2.66642	0.1393982	0.18044063	3.1015574	20	7 30.9	18.5
149083 2002 CD_{95}	15.6	X	226.46215	316.68780	145.61596	4.45130	0.1370794	0.18970468	2.9997428	20	8 25.5	20.1
149084 2002 CE_{100}	15.4	X	109.32813	19.06861	102.25823	2.60422	0.1605230	0.17355496	3.1830591	20	5 27.6	20.2
149085 2002 CT_{112}	15.3	X	337.25841	15.47783	326.49725	7.45149	0.0582425	0.19216642	2.9740691	20	8 28.3	19.2
149086 2002 CM_{116}	15.2	X	178.41534	122.12814	40.02206	10.75994	0.0471823	0.18986175	2.9980881	20	9 27.8	19.7
149087 2002 CC_{122}	15.7	X	16.58753	239.72046	144.87553	15.60308	0.1558221	0.20345113	2.8630525	20	—	—
149088 2002 CJ_{122}	15.4	X	249.40532	321.08683	145.34044	12.69070	0.0064734	0.19448997	2.9503344	20	10 19.4	19.7
149089 2002 CA_{131}	15.6	X	263.22616	93.57630	294.78088	8.31523	0.0818070	0.18513930	3.0488564	20	7 12.4	19.7
149090 2002 CL_{132}	16.1	X	245.30410	196.23743	310.45308	0.95632	0.0703348	0.19770804	2.9182321	20	11 20.1	20.0
149091 2002 CW_{136}	14.9	X	198.09596	245.03422	147.58441	16.58766	0.1022962	0.17855798	3.1233204	20	5 8.9	20.0
149092 2002 CH_{144}	15.3	X	232.55859	148.11525	318.13868	7.76156	0.0419632	0.19027220	2.9937750	20	9 15.1	19.7
149093 2002 CK_{145}	14.9	X	137.44481	285.85229	323.23185	4.06905	0.3390861	0.18985194	2.9981914	20	11 25.9	20.6
149094 2002 CT_{155}	15.2	X	359.76926	242.48340	3.10313	5.03338	0.1002831	0.17737225	3.1372246	20	5 23.7	19.1
149095 2002 CQ_{156}	15.9	X	224.24668	148.51759	346.78987	1.56875	0.0510973	0.19608723	2.9342909	20	10 13.5	20.1
149096 2002 CS_{158}	15.5	X	217.30073	358.80250	105.55571	3.40288	0.0454528	0.18789686	3.0189531	20	8 28.5	19.9
149097 2002 CO_{159}	14.5	X	45.54713	86.00609	158.03241	13.85110	0.1965833	0.17726365	3.1385057	20	8 17.0	18.6
149098 2002 CY_{164}	14.8	X	290.50705	222.72720	349.68411	13.08470	0.1384165	0.21337695	2.7735610	20	—	—
149099 2002 CA_{173}	15.4	X	149.49673	118.20527	1.96134	11.24492	0.1108301	0.17953680	3.1119580	20	7 3.2	20.4
149100 2002 CH_{174}	15.2	X	159.28478	94.83656	131.72817	10.79577	0.2067791	0.19197101	2.9760870	20	11 19.8	20.4
149101 2002 CP_{179}	16.0	X	129.30611	201.29682	127.56504	2.92257	0.0631654	0.21038475	2.7997970	20	—	—
149102 2002 CB_{198}	15.8	X	218.71342	95.42365	326.72659	1.64908	0.0819295	0.18285264	3.0742220	20	7 2.5	20.3
149103 2002 CH_{203}	15.4	X	208.05686	57.38036	336.50998	4.28971	0.1476342	0.17798800	3.1299849	20	5 11.9	20.4
149104 2002 CK_{205}	15.3	X	21.59229	145.10397	145.39875	10.41066	0.0783071	0.18509941	3.0492944	20	8 28.2	19.3
149105 2002 CX_{205}	15.7	X	275.93125	294.80227	118.23771	0.30519	0.0224709	0.18896045	3.0076141	20	9 8.1	19.6
149106 2002 CD_{206}	15.3	X	302.58804	356.59805	355.93175	3.95726	0.1618436	0.18432689	3.0578083	20	7 8.6	19.2
149107 2002 CD_{208}	15.6	X	218.41878	270.20541	141.25422	8.95730	0.1525357	0.18144110	3.0901455	20	6 14.0	20.6
149108 2002 CO_{209}	15.5	X	99.46676	129.55450	138.69046	11.40095	0.0202852	0.19366237	2.9587338	20	11 5.9	19.9
149109 2002 CD_{211}	15.3	X	91.15882	108.22576	120.11867	3.10803	0.0883982	0.18538680	3.0461422	20	9 11.3	19.6
149110 2002 CO_{216}	15.5	X	184.90887	291.91726	157.30282	5.48773	0.1141994	0.17996766	3.1069892	20	6 28.7	20.5
149111 2002 CJ_{219}	15.1	X	66.49463	190.61588	14.29249	5.47107	0.0809949	0.17710613	3.1403664	20	7 10.6	19.4
149112 2002 CU_{233}	14.9	X	318.13805	313.88658	340.99657	10.08823	0.0269541	0.17520625	3.1630276	20	5 30.5	19.5
149113 Stewartbushman	15.6	X	343.96764	175.36331	150.90747	2.33255	0.0995366	0.18793850	3.0185072	20	8 17.3	19.3
149114 2002 CX_{259}	14.8	X	226.72659	97.58355	281.60952	12.98404	0.0694221	0.18019599	3.1043639	20	5 17.7	19.6
149115 Lauriecantillo	15.5	X	314.99163	200.46576	138.66697	11.17138	0.1279450	0.18483831	3.0521653	20	7 14.2	19.3
149116 2002 CA_{285}	15.5	X	352.08035	140.50620	268.85076	0.97391	0.0639424	0.20071873	2.8889772	20	12 17.7	19.0
149117 2002 CC_{300}	16.1	X	29.24619	140.47236	237.28679	0.99560	0.0365944	0.20330285	2.8644444	20	12 24.9	20.0
149118 2002 CS_{310}	15.3	X	130.45181	107.79600	75.59768	5.50827	0.0953210	0.18462619	3.0545026	20	8 31.7	20.0
149119 2002 DX	15.2	X	79.68670	67.56863	174.96532	2.95559	0.1356293	0.18333106	3.0688713	20	9 20.3	19.6
149120 2002 DL_{2}	16.7	X	178.07309	207.24115	113.42983	24.62982	0.0665210	0.37462992	1.9057580	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149121 2002 DZ_{7}	14.9	X	168.00096	151.37856	11.14058	15.98088	0.1488025	0.19134430	2.9825818	20	9 14.9	19.8
149122 2002 EM_{12}	14.3	X	39.68060	41.04147	188.40851	11.03784	0.1243106	0.17393839	3.1783794	20	7 8.0	18.6
149123 2002 EW_{15}	15.1	X	172.89733	164.80947	280.05478	8.88947	0.1055213	0.17766734	3.1337498	20	6 11.5	19.9
149124 2002 EF_{19}	14.7	X	112.64482	315.23198	222.74306	12.17309	0.0588412	0.18103271	3.0947911	20	7 25.9	19.5
149125 2002 EQ_{24}	15.8	X	190.27022	303.23482	161.31137	2.66199	0.0809226	0.18150355	3.0894367	20	7 24.1	20.5
149126 2002 EW_{25}	15.5	X	55.86786	289.76094	314.34613	0.48500	0.2100898	0.17894347	3.1188332	20	9 3.5	19.7
149127 2002 EK_{28}	15.2	X	219.38366	71.98268	1.69146	5.97204	0.1271218	0.18277937	3.0750435	20	7 14.9	20.0
149128 2002 EX_{28}	15.9	X	198.94714	88.08069	359.70311	14.89943	0.2521352	0.18271906	3.0757201	20	7 8.2	21.5
149129 2002 EQ_{49}	15.5	X	335.12240	269.41035	338.10993	4.27798	0.0779504	0.17054541	3.2203965	20	4 18.8	19.8
149130 2002 ES_{52}	15.1	X	37.21505	178.74649	42.63962	1.19220	0.1012137	0.17497301	3.1658379	20	6 22.1	19.0
149131 2002 EX_{59}	15.7	X	140.25939	306.87456	302.66474	0.90470	0.0574425	0.19531776	2.9419925	20	11 27.5	19.9
149132 2002 EA_{60}	15.2	X	109.03189	182.15891	338.76633	6.15714	0.0393756	0.17799284	3.1299281	20	7 1.9	19.7
149133 2002 ET_{61}	16.1	X	175.58845	304.03561	248.81277	1.14098	0.1517841	0.19175591	2.9783121	20	10 23.4	20.9
149134 2002 ES_{64}	16.0	X	188.60016	268.45920	202.38251	3.25672	0.1285590	0.18272806	3.0756191	20	7 27.9	21.0
149135 2002 EX_{70}	14.3	X	18.51207	286.05408	349.83752	10.66375	0.0876876	0.17757114	3.1348815	20	8 6.9	18.4
149136 2002 EE_{75}	15.3	X	127.08740	315.92902	199.33621	1.44285	0.1249169	0.17784984	3.1316056	20	7 22.9	20.1
149137 2002 ER_{86}	14.6	X	60.26765	185.01007	22.21111	12.47936	0.1607688	0.17404151	3.1771239	20	7 19.3	19.1
149138 2002 EV_{89}	15.1	X	117.85691	308.73604	291.59820	5.58801	0.2713577	0.18698601	3.0287491	20	10 31.7	20.5
149139 2002 EX_{93}	14.9	X	318.52095	226.72861	158.55577	10.70034	0.0697539	0.19030731	2.9934067	20	9 28.5	18.7
149140 2002 EQ_{95}	15.7	X	141.69017	129.78879	16.31730	5.69223	0.1160925	0.18111975	3.0937996	20	7 28.2	20.6
149141 2002 EO_{103}	14.8	X	151.53930	355.28402	101.50263	10.42856	0.0415367	0.17506240	3.1647601	20	6 2.4	19.4
149142 2002 EH_{104}	15.0	X	120.14507	152.19645	71.65514	6.97427	0.2655358	0.18452537	3.0556152	20	10 18.6	20.3
149143 2002 EA_{105}	15.1	X	110.52825	134.52446	73.98653	6.28230	0.1104529	0.18533059	3.0467582	20	9 12.6	19.8
149144 2002 ED_{117}	15.5	X	241.19190	220.80858	146.77559	8.25301	0.1123812	0.17457114	3.1706947	20	5 19.1	20.4
149145 2002 EJ_{120}	16.0	X	159.46803	132.02758	329.35536	4.30369	0.0697473	0.17805655	3.1291815	20	6 17.1	20.8
149146 2002 EO_{125}	14.9	X	91.55855	0.20747	157.34390	6.70098	0.0384148	0.17288527	3.1912736	20	6 5.8	19.5
149147 2002 EZ_{128}	15.6	X	135.70441	105.06772	54.18668	2.25482	0.0453667	0.18007479	3.1057567	20	8 1.6	20.0
149148 2002 EJ_{129}	15.0	X	42.20230	10.19494	259.16451	2.86001	0.1676751	0.17911165	3.1168805	20	9 9.3	19.0
149149 2002 EM_{141}	15.6	X	338.92280	174.16073	111.51342	2.73947	0.0921830	0.17606628	3.1527189	20	6 14.3	19.5
149150 2002 EO_{141}	15.7	X	158.67603	65.57606	10.33813	3.48196	0.1463031	0.17497026	3.1658711	20	5 18.2	20.8
149151 2002 EF_{148}	15.5	X	52.45086	175.60901	26.01303	4.37135	0.1120540	0.17379397	3.1801401	20	6 20.1	19.6
149152 2002 EE_{149}	15.4	X	16.84200	172.76816	75.00602	2.97029	0.0386151	0.17494366	3.1661920	20	6 21.1	19.5
149153 2002 FK	14.6	X	18.33089	37.34677	189.49932	4.94576	0.0848253	0.17059296	3.2197981	20	5 30.2	18.8
149154 2002 FL_{11}	15.8	X	98.67605	112.67676	89.48779	0.27407	0.1172887	0.18031807	3.1029626	20	8 19.9	20.2
149155 2002 FF_{12}	14.8	X	337.81325	252.17216	37.47251	4.37674	0.1526294	0.17375868	3.1805706	20	6 13.1	18.4
149156 2002 FS_{22}	14.6	X	43.26620	170.65008	66.57689	14.54182	0.1485109	0.17687567	3.1430936	20	8 1.7	18.9
149157 Stephencarr	16.0	X	217.33328	57.94010	342.85279	4.11568	0.1429252	0.17839363	3.1252384	20	5 29.9	21.1
149158 2002 FQ_{29}	15.3	X	150.28038	299.20032	245.66101	6.53690	0.0836913	0.18615235	3.0377850	20	9 17.1	20.1
149159 2002 FG_{33}	14.8	X	74.08515	135.37098	136.56286	17.22443	0.1858316	0.18532765	3.0467903	20	11 1.6	19.7
149160 Geojih	15.3	X	92.72783	26.46533	21.11101	4.50913	0.0703375	0.21148641	2.7900655	20	1 22.4	19.0
149161 2002 GW_{10}	16.7	X	76.45751	265.58447	197.81988	20.02697	0.1001622	0.37920051	1.8904133	20	2 11.4	18.5
149162 2002 GX_{10}	16.5	X	67.40777	27.90902	24.17562	21.15515	0.0866154	0.36940123	1.9236992	20	—	—
149163 Stevenconard	15.1	X	137.59838	9.99530	157.46715	6.39190	0.2109191	0.18202708	3.0835102	20	8 21.7	20.2
149164 2002 GX_{36}	15.3	X	82.35120	111.68310	67.94352	5.44514	0.0610451	0.17490855	3.1666157	20	6 24.6	19.7
149165 2002 GX_{54}	14.8	X	86.59549	129.98833	9.96887	9.83267	0.0425553	0.16818954	3.2503993	20	5 5.1	19.4
149166 2002 GL_{91}	15.1	X	240.02163	35.00055	13.43730	15.15694	0.2103855	0.17877105	3.1208382	20	6 25.3	20.3
149167 2002 GH_{105}	14.8	X	296.29796	285.47412	82.62083	10.48859	0.0281469	0.18013580	3.1050554	20	8 8.9	19.2
149168 2002 GR_{109}	14.8	X	3.97200	127.45471	152.72279	16.08002	0.0922778	0.17280561	3.1922544	20	7 16.3	19.0
149169 2002 GK_{122}	15.0	X	93.43922	93.59036	54.23532	6.00085	0.0832387	0.17116941	3.2125651	20	5 31.8	19.4
149170 2002 GT_{122}	15.0	X	127.73535	41.90968	55.77068	5.61663	0.1325132	0.16958786	3.2325075	20	5 14.6	19.9
149171 2002 GE_{146}	15.0	X	196.77753	22.04975	101.44418	10.10611	0.0261258	0.18507574	3.0495544	20	9 1.0	19.5
149172 2002 GH_{146}	15.4	X	113.27319	359.24331	127.56256	5.97152	0.0939152	0.17195401	3.2027854	20	5 31.8	20.1
149173 2002 HO_{13}	14.5	X	88.48567	79.63986	151.42501	26.52271	0.1836230	0.17773940	3.1329027	20	9 23.8	19.5
149174 2002 JX_{3}	14.6	X	81.87857	66.31958	133.11750	26.68228	0.1375533	0.17506474	3.1647319	20	7 30.2	19.1
149175 2002 JB_{4}	15.8	X	118.48087	270.65950	86.51726	23.64538	0.0970836	0.36633969	1.9344020	20	—	—
149176 2002 JN_{4}	16.4	X	94.28918	317.74037	106.26365	24.51494	0.0468814	0.37467208	1.9056150	20	1 9.7	17.8
149177 2002 JQ_{4}	14.3	X	77.32108	93.01906	123.04344	26.63035	0.1994779	0.17581722	3.1556956	20	8 25.9	19.1
149178 2002 JF_{40}	15.0	X	78.87777	293.07752	286.95057	3.13833	0.1829993	0.17770166	3.1333463	20	8 26.8	19.7
149179 2002 JV_{40}	14.6	X	39.80075	257.08663	359.33141	4.19897	0.1518609	0.17511206	3.1641617	20	8 19.7	18.5
149180 2002 JD_{60}	14.6	X	98.62463	181.40072	51.83837	16.77274	0.2075850	0.17846115	3.1244501	20	10 11.8	19.8
149181 2002 JU_{61}	16.9	X	164.11456	111.00575	138.61789	4.19829	0.1737452	0.29972877	2.2113141	20	—	—
149182 2002 JX_{69}	14.8	X	111.32069	96.40034	51.99121	25.94416	0.1946769	0.17380197	3.1800425	20	7 3.8	20.2
149183 2002 JV_{75}	15.3	X	128.99927	317.58002	216.47508	9.87262	0.0980279	0.18004309	3.1061213	20	8 12.1	20.2
149184 2002 JF_{81}	15.0	X	353.96925	256.82926	6.00234	6.00189	0.0916649	0.17023263	3.2243401	20	6 6.8	19.1
149185 2002 JA_{105}	16.8	X	159.59643	131.01878	106.49143	2.22572	0.1808704	0.29716379	2.2240205	20	12 17.4	19.9
149186 2002 JJ_{115}	16.2	X	41.54125	268.29055	147.14723	24.26483	0.1215132	0.36012097	1.9566078	20	—	—
149187 2002 JQ_{120}	17.1	X	156.82547	166.79099	98.42156	5.02554	0.1524298	0.30010829	2.2094494	20	—	—
149188 2002 JX_{144}	15.1	X	156.24134	100.03727	89.09227	20.64829	0.2159988	0.18390545	3.0624780	20	10 12.3	20.7
149189 2002 KU_{7}	14.3	X	358.43181	162.42687	124.02627	17.15749	0.1163963	0.17314113	3.1881290	20	7 17.2	18.2
149190 2002 LZ_{8}	17.2	X	16.95719	110.57320	175.96428	3.98243	0.2124587	0.27996200	2.3142130	20	9 18.6	19.0
149191 2002 LM_{12}	16.9	X	86.58746	144.04162	133.69769	4.61962	0.1553622	0.28935608	2.2638500	20	11 30.1	20.2
149192 2002 LH_{20}	16.3	X	120.91845	216.66602	81.91892	7.53358	0.2160181	0.29490296	2.2353728	20	—	—
149193 2002 LO_{27}	15.5	X	21.36921	48.40504	300.15997	10.72325	0.2787795	0.28350363	2.2948993	20	—	—
149194 2002 NF_{45}	16.6	X	41.16920	69.50787	274.13705	5.84704	0.1523672	0.28566134	2.2833285	20	—	—
149195 2002 PH	17.7	X	1.20420	75.21555	272.97223	1.86319	0.2348412	0.28044672	2.3115456	20	11 26.6	19.9
149196 2002 PR_{24}	17.0	X	61.38169	110.09705	149.72673	6.64652	0.1197041	0.27911332	2.3189017	20	10 4.5	19.9
149197 2002 PA_{29}	17.4	X	22.48996	93.01490	165.91421	5.38168	0.1821781	0.27340834	2.3510482	20	8 8.5	19.6
149198 2002 PZ_{31}	17.3	X	314.63982	97.38755	252.99118	2.52374	0.1568210	0.27291821	2.3538623	20	8 4.5	19.3
149199 2002 PH_{37}	16.0	X	95.36621	37.07354	316.51304	5.16392	0.2288741	0.29260097	2.2470818	20	—	—
149200 2002 PH_{42}	16.6	X	328.91533	231.42335	139.60550	4.64987	0.2703795	0.27360152	2.3499415	20	10 19.6	17.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149201 2002 PC_{44}	16.4	X	295.07650	37.70812	342.54057	4.62157	0.2268105	0.26970885	2.3724984	20	8 2.2	18.5
149202 2002 PG_{63}	16.9	X	325.75258	153.11453	93.66296	2.08317	0.1026918	0.31760344	2.1275474	20	3 20.7	19.0
149203 2002 PW_{74}	16.4	X	35.06358	27.43842	339.06231	5.96267	0.1984854	0.28499670	2.2868771	20	—	—
149204 2002 PF_{83}	15.8	X	54.31975	59.89370	331.42238	8.43845	0.2051337	0.29196506	2.2503434	20	—	—
149205 2002 PU_{119}	16.0	X	142.99328	115.98880	202.93437	3.72722	0.0673639	0.24228178	2.5483293	20	—	—
149206 2002 PT_{129}	16.7	X	134.18000	300.92723	27.64351	6.32193	0.2218895	0.24131930	2.5551007	20	—	—
149207 2002 PB_{130}	17.2	X	282.80375	345.94779	334.27869	2.86368	0.0985542	0.31968238	2.1183136	20	5 1.7	19.4
149208 2002 PP_{159}	17.3	X	266.70962	298.77989	91.06442	3.37895	0.2292816	0.26985913	2.3716175	20	6 30.5	20.1
149209 2002 PH_{160}	17.7	X	221.24824	14.92667	354.80343	3.92450	0.1197262	0.31731181	2.1288508	20	4 21.7	20.5
149210 2002 QR_{23}	17.8	X	172.37334	260.35784	142.99463	3.05885	0.2283670	0.25604120	2.4561948	20	4 23.1	21.9
149211 2002 QN_{28}	16.5	X	89.74748	131.16437	103.78360	6.90248	0.1082256	0.28058564	2.3107826	20	10 5.9	19.7
149212 2002 QD_{60}	16.9	X	190.26481	129.80528	291.49799	8.60718	0.1788485	0.26187891	2.4195561	20	5 28.6	20.9
149213 2002 QN_{71}	17.3	X	323.15747	278.52369	346.34060	0.90113	0.0924621	0.26301347	2.4125929	20	4 17.7	20.0
149214 2002 QT_{84}	16.7	X	339.43378	324.27674	55.86178	4.70212	0.1883871	0.27893201	2.3199065	20	11 23.8	18.5
149215 2002 RX_{2}	16.7	X	328.55813	184.14853	119.77922	1.51573	0.1891964	0.26806280	2.3822007	20	6 14.9	18.5
149216 2002 RB_{16}	16.3	X	91.53837	139.56465	195.89518	3.63132	0.1468575	0.23486651	2.6016886	20	—	—
149217 2002 RS_{21}	16.8	X	325.98273	259.98711	153.61391	6.85200	0.2409653	0.27942077	2.3172004	20	12 24.4	18.4
149218 2002 RJ_{23}	16.8	X	217.95356	135.74201	174.25005	1.14112	0.1568656	0.25209028	2.4817916	20	2 6.0	20.7
149219 2002 RE_{33}	16.3	X	328.84496	115.30452	325.88838	5.61374	0.1280374	0.28532248	2.2851360	20	—	—
149220 2002 RL_{56}	16.8	X	195.22194	350.72531	281.37881	3.41413	0.1847622	0.29801452	2.2197860	20	—	—
149221 2002 RJ_{63}	16.1	X	333.26487	304.47902	75.35696	5.50732	0.1737205	0.27377213	2.3489651	20	11 7.7	17.8
149222 2002 RA_{64}	16.8	X	75.35736	253.16711	160.42413	6.08380	0.1587214	0.29505015	2.2346293	20	—	—
149223 2002 RM_{65}	16.0	X	343.05554	278.63966	65.39130	8.41593	0.3329345	0.27146120	2.3622773	20	10 25.8	16.9
149224 2002 RK_{78}	17.2	X	229.28113	192.45292	215.05515	0.49430	0.1825136	0.26411879	2.4058572	20	6 17.8	20.9
149225 2002 RC_{83}	15.6	X	306.82956	7.64613	29.27565	7.41699	0.1364259	0.27440584	2.3453472	20	10 7.8	17.7
149226 2002 RQ_{92}	17.0	X	106.68874	2.36677	350.53938	4.74247	0.0973324	0.29357430	2.2421123	20	—	—
149227 2002 RJ_{94}	16.6	X	338.50502	254.90194	151.74562	2.17152	0.2286026	0.27925352	2.3181255	20	—	—
149228 2002 RA_{102}	15.8	X	43.65548	5.51175	346.36261	2.94863	0.2188104	0.28221211	2.3018956	20	—	—
149229 2002 RC_{104}	16.1	X	338.04738	21.27290	3.98273	6.57066	0.1143584	0.27601792	2.3362063	20	11 17.4	18.4
149230 2002 RM_{108}	17.0	X	163.19783	123.22947	163.42892	0.91941	0.1617873	0.29579919	2.2308553	20	—	—
149231 2002 RK_{111}	16.2	X	109.51416	26.87856	338.50605	6.32361	0.1172120	0.29389124	2.2405000	20	—	—
149232 2002 RJ_{118}	16.4	X	283.26720	223.79802	170.79578	6.31960	0.2003139	0.26704850	2.3882289	20	8 4.6	19.0
149233 2002 RP_{118}	16.9	X	102.52361	297.36702	91.26870	4.68864	0.1302975	0.29884985	2.2156476	20	—	—
149234 2002 RE_{135}	17.4	X	94.66349	289.44948	107.34100	4.58363	0.1678210	0.29814304	2.2191480	20	1 6.1	19.3
149235 2002 RJ_{136}	16.0	X	185.73578	199.86022	79.93016	6.11435	0.1720961	0.29863245	2.2167228	20	—	—
149236 2002 RX_{147}	16.9	X	280.75506	152.18952	186.91708	1.74447	0.0993396	0.26392363	2.4070431	20	5 29.5	19.9
149237 2002 RE_{172}	16.7	X	281.76473	330.62215	93.92220	5.75093	0.2091463	0.27444490	2.3451247	20	9 22.1	18.9
149238 2002 RB_{179}	16.6	X	351.01214	45.96126	168.65570	3.22992	0.1514474	0.25734053	2.4479202	20	3 17.2	18.9
149239 2002 RO_{192}	16.8	X	56.20854	113.79489	351.96349	6.76979	0.0897187	0.30361935	2.1923830	20	1 31.4	18.9
149240 2002 RX_{207}	16.9	X	69.91894	103.76208	12.62730	6.26460	0.0304939	0.30840518	2.1696430	20	3 3.3	19.1
149241 2002 RA_{211}	15.9	X	305.64792	139.25711	275.89023	5.46865	0.0653784	0.27028234	2.3691412	20	11 1.7	18.5
149242 2002 RG_{224}	16.8	X	111.65811	283.36340	91.37057	7.82387	0.1699548	0.29875346	2.2161242	20	1 2.0	18.9
149243 Dorothynorton	16.7	X	229.99237	285.03246	203.16440	2.55986	0.1115228	0.27921113	2.3183601	20	10 17.8	19.7
149244 Kriegh	17.3	X	286.24614	312.80246	289.57084	3.71734	0.1066314	0.30847667	2.1693077	20	1 17.6	20.0
149245 2002 SJ_{23}	15.8	X	1.32455	98.84979	22.73125	12.11580	0.0503908	0.23984812	2.5655383	20	—	—
149246 2002 SH_{38}	17.0	X	115.72265	158.17214	129.07640	1.31148	0.2091215	0.28837036	2.2690060	20	—	—
149247 2002 SF_{39}	16.4	X	78.14257	21.21654	32.49495	10.06264	0.1998606	0.23944747	2.5683993	20	1 24.4	19.3
149248 2002 SY_{44}	16.9	X	269.84782	266.77484	5.61060	1.74954	0.0725486	0.30566091	2.1826099	20	2 12.4	19.4
149249 2002 SZ_{44}	17.0	X	324.28190	11.52862	72.28993	2.00008	0.1848481	0.28112891	2.3078047	20	—	—
149250 2002 SC_{49}	15.3	X	316.36053	140.04899	42.12484	10.75449	0.0784821	0.24187969	2.5511527	20	—	—
149251 2002 SL_{50}	16.3	X	63.89617	44.41930	38.07935	3.93021	0.0951815	0.29722118	2.2237342	20	1 10.4	18.4
149252 2002 TJ	17.0	X	254.35690	186.68050	181.56362	3.14195	0.1505699	0.26318747	2.4115295	20	5 27.8	20.4
149253 2002 TV_{4}	16.4	X	353.16315	329.34894	48.20474	5.40879	0.1791112	0.27786211	2.3258578	20	12 14.9	18.7
149254 2002 TQ_{6}	16.4	X	292.93718	349.03630	88.12459	4.24949	0.2188302	0.27424169	2.3462830	20	11 2.5	18.0
149255 2002 TX_{8}	16.7	X	325.16880	61.62202	28.67317	5.60583	0.1613435	0.28329547	2.2960233	20	—	—
149256 2002 TD_{14}	16.8	X	248.59639	262.44411	186.42197	6.27658	0.0816922	0.27178387	2.3604072	20	9 21.5	19.5
149257 2002 TH_{20}	16.6	X	33.53940	266.21954	204.23882	6.59804	0.0593964	0.29851655	2.2172965	20	—	—
149258 2002 TS_{25}	16.4	X	298.03531	104.06824	287.74670	0.77740	0.1067806	0.27083968	2.3658899	20	9 13.0	18.7
149259 2002 TQ_{29}	16.0	X	117.32063	358.90002	23.14754	3.94993	0.1245939	0.24138564	2.5546325	20	1 24.6	19.3
149260 2002 TW_{31}	16.0	X	301.47701	333.31287	35.11042	3.91866	0.0784052	0.26776591	2.3839613	20	8 19.9	18.5
149261 2002 TB_{33}	16.4	X	168.16155	197.24277	185.17341	9.46432	0.0411350	0.25158425	2.4851184	20	3 12.7	19.6
149262 2002 TY_{40}	16.1	X	53.02843	52.87102	20.15407	1.60771	0.2023555	0.23378510	2.6097055	20	1 1.5	18.5
149263 2002 TV_{42}	16.2	X	330.48080	78.08496	33.74851	7.18640	0.0515330	0.28667112	2.2779635	20	—	—
149264 2002 TK_{44}	16.1	X	262.29275	290.67364	152.03103	7.00768	0.0641523	0.27544742	2.3394310	20	10 9.4	18.8
149265 2002 TH_{53}	16.0	X	14.78771	241.46592	119.30972	4.33645	0.2626122	0.27731535	2.3289139	20	—	—
149266 2002 TE_{54}	17.1	X	16.78225	236.27236	112.91440	3.25790	0.2443013	0.27833346	2.3232313	20	12 23.2	19.8
149267 2002 TL_{58}	15.6	X	286.54771	125.56908	8.16377	23.38968	0.2617870	0.28136803	2.3064969	20	—	—
149268 2002 TP_{58}	17.3	X	2.77903	41.69414	347.83688	5.65118	0.1775093	0.28249389	2.3003646	20	—	—
149269 2002 TS_{58}	16.4	X	352.26958	12.99858	352.89980	7.54937	0.1217714	0.27566755	2.3381854	20	11 14.3	18.9
149270 2002 TG_{70}	16.4	X	329.17420	213.76290	228.42776	8.98854	0.1810554	0.28196375	2.3032471	20	—	—
149271 2002 TP_{73}	16.7	X	24.84721	140.47778	302.58370	6.08112	0.0604247	0.29153353	2.2525635	20	—	—
149272 2002 TC_{78}	17.2	X	44.80320	113.41398	287.39343	1.69822	0.0820450	0.28920883	2.2646183	20	—	—
149273 2002 TQ_{79}	15.9	X	92.00475	260.02449	70.20411	7.75137	0.1615732	0.28672361	2.2776854	20	—	—
149274 2002 TS_{79}	16.3	X	312.00611	272.52319	133.11804	6.85992	0.1516371	0.27376439	2.3490094	20	11 2.8	18.3
149275 2002 TW_{91}	16.9	X	155.55145	1.77261	313.61742	4.33861	0.0514643	0.29509750	2.2343902	20	—	—
149276 2002 TL_{109}	17.2	X	220.20435	217.77620	107.70582	4.24029	0.2156392	0.30951755	2.1644415	20	2 22.4	20.6
149277 2002 TS_{115}	16.3	X	55.71786	60.38717	314.78021	5.78343	0.1949211	0.28790003	2.2714765	20	—	—
149278 2002 TS_{118}	16.5	X	190.83168	351.05136	332.57236	7.36243	0.1840043	0.30283773	2.1961537	20	1 26.2	19.8
149279 2002 TP_{120}	16.8	X	1.60487	91.26833	329.61328	6.90217	0.0467448	0.28511267	2.2862569	20	—	—
149280 2002 TU_{126}	16.6	X	206.96880	246.58570	132.07917	6.53296	0.1149802	0.25716464	2.4490362	20	4 25.1	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149281 2002 TB_{135}	16.1	X	332.26553	50.73457	320.70840	5.70937	0.1503280	0.27461911	2.3441328	20	10 16.6	18.2
149282 2002 TU_{138}	16.8	X	24.40742	85.78847	303.48789	6.21520	0.1097156	0.28342663	2.2953149	20	—	—
149283 2002 TT_{142}	16.8	X	343.32778	249.28561	96.24262	4.20106	0.2274864	0.27461759	2.3441415	20	10 13.1	18.3
149284 2002 TH_{143}	16.5	X	31.91734	338.74898	75.18088	7.16550	0.0883615	0.28895339	2.2659528	20	—	—
149285 2002 TV_{203}	16.0	X	10.89745	298.93164	77.54884	5.98319	0.2568477	0.28095733	2.3087441	20	—	—
149286 2002 TN_{204}	16.8	X	78.06083	284.98997	100.19747	6.32013	0.1027537	0.29284280	2.2458445	20	—	—
149287 2002 TV_{205}	16.3	X	83.30882	1.27821	353.41781	5.96470	0.2008720	0.28911267	2.2651204	20	—	—
149288 2002 TD_{211}	16.8	X	230.18552	6.31165	92.16182	1.74684	0.2013278	0.26645667	2.3917639	20	8 25.0	20.2
149289 2002 TH_{223}	16.7	X	74.08084	199.57725	225.77436	2.69013	0.1241197	0.23974741	2.5662567	20	1 18.5	19.6
149290 2002 TO_{226}	16.1	X	42.65904	221.46945	134.01708	5.25897	0.1936715	0.28157035	2.3053919	20	—	—
149291 2002 TJ_{228}	16.7	X	271.07340	328.19071	89.90986	6.44872	0.2232176	0.26810868	2.3819290	20	8 19.9	19.4
149292 2002 TS_{236}	16.2	X	231.10406	104.41277	266.43671	9.32697	0.2397357	0.25836887	2.4414205	20	4 26.0	20.4
149293 2002 TN_{238}	16.0	X	54.34546	306.44813	33.85862	5.64649	0.2022866	0.28150185	2.3057659	20	—	—
149294 2002 TS_{250}	16.5	X	326.50218	167.07491	212.52833	3.51356	0.1992960	0.27273276	2.3549291	20	10 21.2	17.9
149295 2002 TC_{252}	17.0	X	73.24318	271.30457	160.71069	6.84588	0.0873362	0.29834332	2.2181547	20	1 8.7	19.3
149296 2002 TC_{272}	16.8	X	75.67803	43.60155	353.65940	5.41732	0.1442509	0.29308237	2.2446205	20	—	—
149297 2002 TM_{280}	17.0	X	255.25474	145.76447	287.25480	4.60563	0.2173487	0.26744297	2.3858799	20	8 15.7	20.2
149298 2002 TS_{280}	16.2	X	214.75324	140.49330	285.58568	5.37110	0.1085894	0.26104590	2.4247007	20	7 3.7	19.6
149299 2002 TK_{281}	16.3	X	99.18436	17.01725	328.29674	4.64534	0.2054150	0.29024506	2.2592250	20	—	—
149300 2002 TK_{287}	16.4	X	343.34617	18.57387	6.80341	7.39945	0.1208094	0.27530226	2.3402533	20	11 27.9	18.8
149301 2002 TF_{292}	16.5	X	87.47358	5.93251	333.12541	4.48525	0.1447350	0.28663946	2.2781312	20	—	—
149302 2002 TJ_{292}	16.6	X	115.13567	352.49344	335.43192	4.15785	0.1809668	0.28938258	2.2637118	20	—	—
149303 2002 TT_{295}	15.5	X	70.91708	142.31476	330.36119	12.84670	0.1121014	0.24364939	2.5387845	20	3 12.8	18.5
149304 2002 TH_{297}	17.0	X	260.91510	230.06128	229.58029	3.28180	0.1972990	0.27169875	2.3609002	20	10 5.1	19.7
149305 2002 TL_{376}	16.3	X	205.78643	107.69865	187.77953	16.29821	0.2886437	0.24441017	2.5335134	20	1 9.6	21.3
149306 2002 UF_{1}	16.0	X	100.50816	264.03737	90.16150	7.16549	0.2015884	0.29206301	2.2498402	20	—	—
149307 2002 UQ_{1}	15.5	X	191.04125	220.96146	279.42334	3.20231	0.0387104	0.21316381	2.7754095	20	9 12.7	19.5
149308 2002 UE_{2}	16.2	X	47.49209	357.50410	23.02340	7.15341	0.1594214	0.28861516	2.2677227	20	—	—
149309 2002 UJ_{4}	15.0	X	32.01815	85.44304	331.70316	21.62520	0.0823284	0.23010009	2.6374943	20	—	—
149310 2002 UY_{19}	16.1	X	257.39143	294.30163	110.31958	7.45434	0.1426525	0.26301315	2.4125949	20	7 22.4	19.0
149311 2002 UR_{25}	16.9	X	164.62901	350.61045	350.47331	5.71314	0.1633656	0.29986899	2.2106247	20	1 22.3	20.0
149312 2002 UQ_{32}	16.4	X	206.84457	300.50114	23.04510	3.13978	0.2080465	0.30232758	2.1986235	20	2 9.5	20.0
149313 2002 UT_{32}	16.1	X	300.17850	313.59997	243.73554	5.70711	0.0416647	0.29457289	2.2370423	20	—	—
149314 2002 UX_{33}	15.3	X	36.02808	161.69795	271.02247	21.13073	0.0500524	0.22627952	2.6670995	20	—	—
149315 2002 UL_{34}	16.4	X	290.59060	338.78799	72.20563	5.63113	0.1232587	0.27071847	2.3665960	20	9 30.6	18.8
149316 2002 UF_{37}	16.1	X	22.60947	57.11735	31.77979	15.45286	0.1067742	0.23364302	2.6107633	20	—	—
149317 2002 UO_{49}	15.8	X	306.81181	85.09051	11.96512	10.41329	0.1986473	0.22001107	2.7175217	20	12 12.4	18.6
149318 2002 UW_{70}	16.2	X	324.00716	350.30807	129.45879	5.56022	0.1942077	0.22547221	2.6734621	20	—	—
149319 2002 VB	15.7	X	197.22412	98.50220	283.67511	5.96864	0.1708670	0.25201117	2.4823110	20	4 13.4	19.8
149320 2002 VG_{13}	16.3	X	290.86701	160.41759	253.71260	5.74504	0.1352417	0.27057743	2.3674183	20	9 27.4	18.9
149321 2002 VH_{15}	16.7	X	167.76915	139.71397	184.48169	2.10493	0.1996124	0.29672768	2.2261991	20	1 5.9	19.9
149322 2002 VM_{21}	16.9	X	144.99833	51.39093	307.82038	4.52556	0.1643286	0.29862059	2.2167815	20	1 23.6	19.6
149323 2002 VB_{22}	17.0	X	60.31155	104.42251	334.81889	3.38292	0.0803178	0.29454183	2.2371996	20	—	—
149324 2002 VZ_{26}	16.6	X	113.72499	294.02943	37.45206	3.57402	0.1181188	0.28821627	2.2698146	20	—	—
149325 2002 VY_{31}	16.5	X	25.95738	158.74242	194.02608	1.66003	0.2226030	0.27790042	2.3256441	20	—	—
149326 2002 VM_{36}	16.1	X	291.94437	344.01878	79.21613	6.84002	0.1846552	0.26954841	2.3734397	20	10 14.1	18.2
149327 2002 VP_{39}	16.6	X	232.83965	31.89705	78.90301	14.78897	0.1849983	0.26788575	2.3832502	20	9 24.2	20.2
149328 2002 VQ_{39}	16.7	X	157.71468	213.17563	132.78792	5.98031	0.1453477	0.29747898	2.2224493	20	1 17.9	19.7
149329 2002 VP_{42}	16.4	X	50.61606	42.51951	57.64472	3.88296	0.1788537	0.23877823	2.5731962	20	2 3.2	18.7
149330 2002 VD_{46}	16.5	X	187.74392	335.51072	91.58310	5.99681	0.0753699	0.25642209	2.4537620	20	6 5.9	20.0
149331 2002 VH_{50}	16.7	X	326.54521	288.95268	111.44287	4.53934	0.1662489	0.27447881	2.3449316	20	11 24.9	18.6
149332 2002 VR_{61}	16.8	X	51.63003	49.48945	345.63131	3.83859	0.0845829	0.28730470	2.2746133	20	—	—
149333 2002 VX_{62}	16.4	X	347.67479	36.48625	59.25549	7.12899	0.0624613	0.28626278	2.2801292	20	—	—
149334 2002 VK_{67}	16.0	X	202.60727	194.40922	294.84682	9.12896	0.2047616	0.26696429	2.3887311	20	9 1.4	19.9
149335 2002 VW_{68}	16.5	X	8.78327	264.88962	140.23540	8.10277	0.0929439	0.28026532	2.3125430	20	—	—
149336 2002 VS_{71}	16.9	X	354.53664	210.35273	179.99253	2.74856	0.1609864	0.27807803	2.3246537	20	—	—
149337 2002 VD_{78}	16.2	X	304.43233	12.72658	79.01862	7.75895	0.1458046	0.27664617	2.3326680	20	12 26.6	18.2
149338 2002 VV_{78}	16.7	X	322.70449	240.82850	127.12599	3.84341	0.2164318	0.27003989	2.3705590	20	9 21.4	18.1
149339 2002 VZ_{79}	16.4	X	121.57950	224.66309	134.86806	5.17008	0.1122755	0.29236548	2.2482883	20	—	—
149340 2002 VD_{86}	16.6	X	291.53237	59.88222	352.16132	5.00259	0.1678068	0.27154332	2.3618010	20	9 23.7	18.7
149341 2002 VZ_{88}	16.3	X	83.96411	42.36433	283.33654	5.08203	0.1912032	0.28360281	2.2943642	20	—	—
149342 2002 VD_{96}	17.1	X	324.34289	132.28076	329.17453	5.10234	0.1626531	0.28152694	2.3056289	20	—	—
149343 2002 VT_{96}	16.3	X	328.74734	327.92760	73.94628	7.07140	0.1008950	0.27388295	2.3483314	20	11 26.1	18.7
149344 2002 VT_{108}	16.8	X	348.47862	24.21182	356.82535	2.12574	0.2040974	0.27493011	2.3423647	20	12 14.7	18.9
149345 2002 VB_{121}	16.4	X	308.95249	37.94472	341.81083	5.96350	0.1449876	0.26842734	2.3800434	20	9 10.5	18.4
149346 2002 VF_{121}	15.3	X	296.68336	21.53307	355.19650	6.93096	0.1535282	0.20957904	2.8069682	20	8 6.4	18.7
149347 2002 VN_{127}	16.5	X	208.16539	122.38540	355.59946	2.46536	0.1785670	0.26364276	2.4087523	20	8 29.5	19.9
149348 2002 VS_{130}	6.3	X	64.00170	86.73163	275.47174	3.00184	0.1219510	0.00327944	44.8679365	20	12 12.1	22.6
149349 2002 VA_{131}	6.5	X	318.82833	254.85360	224.50229	7.08234	0.2367549	0.00360526	42.1222679	20	11 19.1	22.0
149350 2002 VR_{134}	17.0	X	345.37837	79.71002	3.64502	1.95680	0.1277902	0.28216649	2.3021437	20	—	—
149351 2002 WD_{8}	16.9	X	307.08331	171.21882	218.67170	2.02640	0.1754231	0.26919293	2.3755287	20	9 19.5	18.7
149352 2002 WJ_{15}	16.7	X	67.51124	225.23195	135.64187	7.22835	0.1361966	0.28421781	2.2910533	20	—	—
149353 2002 XN_{5}	17.0	X	280.22772	275.28286	146.56910	1.59703	0.1609070	0.26905472	2.3763422	20	9 19.1	19.2
149354 2002 XF_{19}	16.2	X	307.29269	287.40573	280.29485	5.95873	0.1158388	0.29652041	2.2272364	20	—	—
149355 2002 XO_{24}	17.1	X	273.85947	115.39838	287.07183	1.71742	0.1728727	0.26432494	2.4046062	20	8 6.7	19.9
149356 2002 XR_{28}	17.2	X	235.84728	175.80793	258.45869	1.41088	0.1529163	0.26144391	2.4222392	20	8 3.1	20.5
149357 2002 XP_{33}	16.7	X	331.83953	124.67661	276.24011	9.93727	0.1409056	0.27524545	2.3405753	20	12 3.3	18.9
149358 2002 XQ_{33}	16.5	X	322.27561	128.77720	275.85174	9.09129	0.1314940	0.27384877	2.3485268	20	11 17.5	18.6
149359 2002 XW_{35}	16.1	X	344.05571	127.28260	18.88435	7.21646	0.0856317	0.28960854	2.2625341	20	—	—
149360 2002 XD_{36}	16.2	X	147.28101	279.70344	82.46282	5.71485	0.3119723	0.24076087	2.5590500	20	2 20.6	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149361 2002 XH_{36}	16.1	X	247.66554	82.44281	354.87602	5.76638	0.1090321	0.26192990	2.4192421	20	8 30.5	19.0
149362 2002 XZ_{41}	16.2	X	30.63858	30.97240	299.66946	6.34427	0.1215622	0.27273157	2.3549360	20	11 25.0	19.2
149363 2002 XD_{45}	16.6	X	254.58766	274.49603	214.32096	6.17919	0.0580278	0.27288095	2.3540765	20	11 30.1	19.3
149364 2002 XQ_{47}	16.1	X	226.22415	142.57010	348.31668	5.27492	0.1395284	0.26824049	2.3811486	20	10 8.9	19.2
149365 2002 XZ_{50}	16.6	X	288.29303	349.49400	98.63239	3.11127	0.1786041	0.27211612	2.3584854	20	11 13.3	18.5
149366 2002 XO_{52}	16.8	X	262.41766	296.02492	151.76889	1.33349	0.1546807	0.26715567	2.3875902	20	9 28.4	19.2
149367 2002 XT_{59}	16.6	X	300.68603	97.86822	319.65846	6.09175	0.1257609	0.27088858	2.3656051	20	10 22.5	19.0
149368 2002 XY_{62}	16.3	X	21.15819	288.15753	111.45609	6.90501	0.1118968	0.28038684	2.3118747	20	—	—
149369 2002 XU_{65}	15.8	X	333.68999	13.46870	40.29786	24.13495	0.2106290	0.27485015	2.3428189	20	—	—
149370 2002 XN_{67}	16.7	X	287.11185	272.61993	145.66926	7.86536	0.1587790	0.26979834	2.3719737	20	9 29.3	19.0
149371 2002 XR_{69}	16.4	X	152.40268	126.89097	75.96877	2.20156	0.1362765	0.26830356	2.3807754	20	10 25.9	20.1
149372 2002 XC_{71}	15.3	X	120.90912	254.25813	78.50193	7.91040	0.1441864	0.28531459	2.2851782	20	—	—
149373 2002 XW_{80}	16.3	X	271.33827	120.46430	353.46300	4.22792	0.1863880	0.27011959	2.3700927	20	11 14.2	18.7
149374 2002 XB_{81}	15.8	X	209.92307	91.00412	307.82193	12.10670	0.1852584	0.25143198	2.4861216	20	5 15.3	20.1
149375 2002 XK_{81}	15.7	X	113.24934	345.99848	83.07387	11.59999	0.2085624	0.23932064	2.5693067	20	4 5.7	19.6
149376 2002 XB_{86}	16.3	X	341.12065	63.98059	316.50367	6.03820	0.1562187	0.27152576	2.3619028	20	11 19.3	18.5
149377 2002 XT_{86}	16.5	X	248.69868	25.07110	8.59356	5.18561	0.1111479	0.25819705	2.4425035	20	6 30.2	19.8
149378 2002 XF_{94}	16.6	X	243.02748	280.43580	225.05493	5.64330	0.0516820	0.27564569	2.3383090	20	12 7.7	19.2
149379 2002 XE_{99}	16.6	X	298.11455	111.86699	262.65492	4.88088	0.1357364	0.26498209	2.4006289	20	8 10.7	19.0
149380 2002 YJ_{4}	16.6	X	299.80434	342.04525	114.05514	3.24594	0.1130902	0.27612417	2.3356070	20	12 23.9	18.8
149381 2002 YX_{9}	16.6	X	232.55491	47.75381	71.61352	3.08408	0.0689749	0.26549131	2.3975583	20	10 14.5	19.6
149382 2002 YJ_{10}	16.1	X	109.43174	217.37728	262.58489	2.70187	0.1248714	0.24553392	2.5257773	20	5 20.4	19.7
149383 2002 YM_{15}	15.8	X	121.52795	119.38004	99.41909	14.75500	0.1295425	0.25701203	2.4500056	20	10 21.2	19.8
149384 2002 YY_{19}	16.7	X	236.65114	321.94228	94.39858	2.52164	0.1757584	0.25917566	2.4363513	20	7 8.2	20.3
149385 2002 YS_{23}	15.9	X	2.55785	272.75155	108.13382	7.37248	0.1138008	0.27293752	2.3537512	20	12 23.5	18.5
149386 2003 AQ_{1}	15.5	X	7.76278	189.06755	292.79549	21.25038	0.0277628	0.22741804	2.6581905	20	—	—
149387 2003 AZ_{4}	16.2	X	248.76397	126.88233	258.83178	1.36279	0.1797724	0.25695918	2.4503415	20	6 9.8	19.8
149388 2003 AJ_{6}	16.1	X	236.48177	255.52939	164.90825	3.39286	0.1594485	0.25585748	2.4573705	20	7 14.7	19.6
149389 2003 AA_{8}	15.2	X	17.41143	198.97695	334.98442	17.58703	0.1743584	0.23161476	2.6259829	20	3 8.9	17.8
149390 2003 AN_{8}	16.3	X	132.06864	134.22309	93.30528	7.80183	0.0577052	0.26849535	2.3796415	20	11 7.6	19.6
149391 2003 AE_{11}	15.8	X	83.81493	284.70881	146.76311	10.30080	0.1429992	0.23710913	2.5852579	20	2 14.8	18.8
149392 2003 AS_{14}	15.7	X	26.01012	296.41748	252.56624	8.67793	0.1621996	0.23769377	2.5810169	20	4 19.6	18.4
149393 2003 AY_{23}	16.0	X	259.05095	292.31067	98.11636	15.67469	0.1663752	0.25946585	2.4345344	20	6 30.5	19.0
149394 2003 AD_{31}	16.3	X	53.44891	200.36602	323.12789	5.81108	0.2724041	0.23730551	2.5838314	20	5 25.2	19.1
149395 2003 AM_{37}	16.0	X	65.86863	159.37586	267.76339	6.78081	0.1065211	0.23159116	2.6261613	20	1 7.7	19.0
149396 2003 AU_{39}	16.0	X	94.37223	78.44952	155.21112	5.11745	0.0682036	0.25865502	2.4396195	20	9 29.5	19.2
149397 2003 AM_{41}	15.5	X	285.12991	172.87426	292.94357	13.05770	0.1366062	0.21220212	2.7837885	20	11 15.4	19.1
149398 2003 AW_{41}	15.8	X	56.13362	179.77697	294.51219	12.50971	0.1078966	0.23321354	2.6139677	20	2 20.1	19.0
149399 2003 AQ_{42}	14.7	X	338.22306	195.67921	283.81642	12.25238	0.1272108	0.22217282	2.6998653	20	—	—
149400 2003 AB_{50}	16.4	X	222.94270	187.60443	354.08227	2.05613	0.1588774	0.27045769	2.3681170	20	12 10.5	19.3
149401 2003 AH_{50}	15.8	X	341.78087	139.87346	93.91371	10.41250	0.0732276	0.24204503	2.5499907	20	4 13.6	19.0
149402 2003 AE_{53}	16.2	X	217.13010	338.75545	90.68624	3.75342	0.1456508	0.25510335	2.4622110	20	7 7.4	19.9
149403 2003 AU_{54}	15.5	X	110.08524	262.95540	109.75585	12.10543	0.3175347	0.23148911	2.6269331	20	2 1.2	19.3
149404 2003 AL_{55}	15.8	X	151.80046	204.87267	327.86433	6.06055	0.0908734	0.25788084	2.4444997	20	9 13.3	19.4
149405 2003 AD_{57}	15.1	X	75.02406	156.15839	329.81732	9.03492	0.1655279	0.18215315	3.0820873	20	4 18.4	19.4
149406 2003 AM_{57}	16.2	X	89.54388	85.66926	15.49615	4.49282	0.1923903	0.23887008	2.5725365	20	4 10.2	19.6
149407 2003 AO_{58}	15.2	X	265.84997	206.46010	330.39301	11.61533	0.1352656	0.21821562	2.7324076	20	—	—
149408 2003 AY_{59}	15.3	X	87.50295	134.55463	314.80031	15.22933	0.0707198	0.23548613	2.5971229	20	2 28.4	18.8
149409 2003 AF_{60}	15.7	X	344.44279	160.56738	325.22721	12.81515	0.1179002	0.22450733	2.6811166	20	—	—
149410 2003 AZ_{61}	16.1	X	117.97972	45.85151	36.56913	4.92083	0.1433304	0.24085687	2.5583700	20	4 14.1	19.6
149411 2003 AB_{67}	15.9	X	23.12115	106.29032	9.63119	11.68664	0.2382489	0.22781679	2.6550878	20	—	—
149412 2003 AA_{74}	15.5	X	210.78189	114.21827	34.61437	10.67574	0.2068528	0.26364646	2.4087298	20	10 10.2	19.0
149413 2003 AN_{92}	16.1	X	264.87011	241.92886	118.64137	3.40713	0.2054028	0.25496220	2.4631197	20	5 22.9	19.5
149414 2003 BH_{1}	16.1	X	305.59175	167.59078	316.12946	7.14331	0.0548376	0.27598221	2.3364079	20	—	—
149415 2003 BM_{8}	16.2	X	44.57126	322.82824	211.88094	3.05385	0.1303121	0.24057101	2.5603963	20	5 3.6	18.8
149416 2003 BM_{11}	15.5	X	347.22417	262.21508	341.52026	5.26552	0.1104685	0.24051697	2.5607798	20	4 25.6	18.3
149417 2003 BU_{11}	16.0	X	43.51365	56.76311	133.32578	10.52583	0.0793729	0.24168768	2.5525036	20	5 20.9	19.2
149418 2003 BD_{14}	15.7	X	7.63184	316.02751	250.85621	7.82360	0.1318126	0.23838383	2.5760336	20	4 7.6	18.5
149419 2003 BV_{17}	16.8	X	191.78915	14.80598	148.75233	1.86937	0.1323105	0.26142612	2.4223491	20	10 14.9	20.3
149420 2003 BC_{18}	16.1	X	129.57449	271.01879	137.85942	8.63766	0.1692117	0.23726333	2.5841376	20	3 20.3	20.0
149421 2003 BS_{18}	16.2	X	141.17508	113.91221	309.66708	13.97387	0.1793913	0.24165100	2.5527620	20	4 9.9	20.6
149422 2003 BA_{20}	16.0	X	321.52121	187.82397	337.90890	4.13641	0.1049154	0.22382889	2.6865316	20	—	—
149423 2003 BU_{20}	15.9	X	138.83822	1.09654	112.08886	7.05716	0.0618000	0.24433341	2.5340439	20	6 9.8	19.5
149424 2003 BT_{22}	15.3	X	348.01656	274.66935	241.83743	12.99583	0.0847370	0.22944486	2.6425132	20	1 2.4	18.7
149425 2003 BF_{27}	15.6	X	122.24222	240.57661	170.65894	6.09702	0.2909295	0.23744520	2.5828179	20	3 26.9	19.6
149426 2003 BN_{39}	15.9	X	172.81788	322.23246	275.61020	3.87870	0.1086541	0.21342018	2.7731864	20	12 18.9	20.0
149427 2003 BN_{43}	16.3	X	193.04903	208.00748	182.56227	3.07005	0.1228385	0.24606783	2.5221224	20	4 24.3	20.1
149428 2003 BM_{45}	15.8	X	183.91304	324.83346	117.50261	3.10402	0.0833146	0.19395581	2.9557488	20	6 20.2	20.1
149429 2003 BF_{48}	15.6	X	83.56498	349.77852	159.18042	6.24204	0.2068547	0.18450913	3.0557945	20	6 8.9	20.1
149430 2003 BH_{52}	15.8	X	354.37568	260.95669	303.32108	7.00932	0.1090600	0.23582108	2.5946630	20	3 11.7	18.9
149431 2003 BK_{52}	15.1	X	277.33012	345.38657	311.42063	13.94168	0.1451041	0.23868427	2.5738714	20	3 15.2	19.0
149432 2003 BU_{58}	16.0	X	355.61879	57.83234	111.01883	10.97638	0.1628675	0.22939737	2.6428779	20	1 23.8	18.7
149433 2003 BL_{66}	15.4	X	26.35943	52.64165	143.83898	14.06711	0.0908211	0.23878215	2.5731680	20	5 4.8	18.6
149434 2003 BM_{70}	15.6	X	216.12950	321.29671	329.18800	9.23528	0.1037557	0.22665977	2.6641157	20	1 17.4	19.7
149435 2003 BU_{72}	15.5	X	307.94921	117.23503	97.03826	13.99292	0.2064303	0.22746269	2.6578427	20	1 6.9	19.2
149436 2003 BL_{74}	15.8	X	132.61338	14.85705	86.21683	11.36576	0.0327462	0.24373684	2.5381772	20	5 15.5	19.3
149437 2003 BW_{76}	14.5	X	250.49435	318.12800	340.93491	30.21034	0.1991417	0.23471573	2.6028027	20	2 24.8	18.7
149438 2003 BV_{77}	15.6	X	254.45986	290.19374	310.33558	13.60277	0.0813363	0.22513532	2.6761285	20	—	—
149439 2003 BW_{81}	15.2	X	358.15675	251.74730	343.62810	11.00213	0.2496562	0.23389831	2.6088633	20	4 23.5	17.3
149440 2003 BD_{82}	14.8	X	185.37299	20.97865	330.86727	15.03175	0.1378697	0.23325377	2.6136670	20	2 27.5	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149441 2003 BO_{87}	16.0	X	312.44119	179.58637	26.07024	6.88432	0.1532720	0.22754251	2.6572211	20	1 10.2	19.7
149442 2003 BE_{89}	16.6	X	54.96737	199.44745	321.21037	3.29880	0.1314464	0.23750613	2.5823761	20	4 29.6	19.6
149443 2003 BZ_{89}	15.9	X	60.02456	138.94608	320.02961	11.88721	0.1309400	0.23051510	2.6343277	20	2 13.2	18.7
149444 2003 CP_{2}	15.4	X	214.56043	193.47954	285.60864	23.95082	0.1994673	0.26239120	2.4164058	20	8 21.9	19.6
149445 2003 CQ_{5}	15.4	X	313.35825	294.03710	321.41086	14.06042	0.1564227	0.23763535	2.5814399	20	3 7.9	18.8
149446 2003 CC_{6}	15.9	X	270.04510	83.27414	78.63935	5.65322	0.0679149	0.21701513	2.7424752	20	—	—
149447 2003 CR_{7}	15.1	X	303.16000	229.18831	286.43138	13.41385	0.1332371	0.21989038	2.7185160	20	—	—
149448 2003 CJ_{9}	16.0	X	188.45618	222.61076	177.46186	4.02933	0.1604907	0.24544199	2.5264079	20	5 2.1	20.0
149449 2003 CE_{10}	14.9	X	296.87897	124.43620	142.50365	13.86314	0.3211021	0.22988198	2.6391623	20	2 13.7	18.7
149450 2003 CE_{14}	16.3	X	244.24812	21.22589	292.89206	5.98495	0.0376193	0.23675451	2.5878388	20	3 15.1	19.9
149451 2003 CF_{14}	15.9	X	308.54290	105.59288	154.58270	14.07959	0.0817990	0.23334619	2.6129769	20	3 27.5	19.3
149452 2003 CM_{17}	15.6	X	302.31529	130.20440	134.09746	13.36428	0.1749865	0.23280843	2.6169991	20	3 10.3	19.1
149453 2003 CW_{21}	16.9	X	104.59815	324.19309	163.20895	3.12388	0.1193559	0.24306235	2.5428706	20	5 24.9	20.3
149454 2003 DC	14.8	X	301.48172	79.95648	115.10624	27.91651	0.0847756	0.22459818	2.6803935	20	—	—
149455 2003 DX_{11}	16.0	X	22.93220	249.63980	340.69170	4.00523	0.1314876	0.24117629	2.5561106	20	6 15.8	18.7
149456 2003 DA_{13}	15.6	X	100.51022	315.48726	16.86756	3.97321	0.1003040	0.21242271	2.7818609	20	—	—
149457 2003 DS_{13}	15.7	X	294.29663	188.30955	279.60744	15.21095	0.1759682	0.21320709	2.7750339	20	12 2.7	18.8
149458 2003 DM_{15}	15.9	X	119.38019	78.02484	56.41413	7.27228	0.1874774	0.24374964	2.5380883	20	6 26.9	19.9
149459 2003 DC_{20}	15.5	X	242.00155	139.83920	158.95753	14.57912	0.0552880	0.23170265	2.6253188	20	2 23.5	19.1
149460 2003 DY_{20}	16.6	X	232.68638	43.29382	156.30351	2.75587	0.1653569	0.26971517	2.3724613	20	—	—
149461 2003 DQ_{21}	15.9	X	347.37493	82.51471	163.81849	13.12615	0.1208778	0.23796602	2.5790480	20	5 5.6	18.9
149462 2003 DO_{24}	16.0	X	44.00154	66.27492	146.82901	15.21777	0.0541512	0.24207012	2.5498145	20	6 18.7	19.5
149463 2003 EV_{4}	15.2	X	277.41192	229.59865	357.75823	10.71227	0.0876466	0.22376428	2.6870487	20	1 6.1	19.2
149464 2003 EP_{7}	15.1	X	242.32867	0.59684	326.15710	13.33445	0.1660148	0.23603057	2.5931276	20	3 16.2	19.3
149465 2003 EC_{8}	14.9	X	16.12448	311.25946	172.99088	15.56672	0.0722139	0.16973199	3.2306772	20	1 15.7	19.4
149466 2003 EP_{8}	15.9	X	162.76782	219.14594	203.18275	6.06436	0.2240533	0.24409407	2.5357001	20	5 8.5	20.2
149467 2003 EV_{8}	15.7	X	325.08104	231.80662	307.37614	8.53175	0.0446841	0.22711721	2.6605373	20	1 8.6	19.2
149468 2003 EO_{10}	16.5	X	50.62173	308.05497	203.42034	4.00270	0.2014736	0.23547708	2.5971894	20	4 21.3	18.9
149469 2003 EL_{12}	16.2	X	49.64489	238.63047	270.17076	2.59183	0.1696518	0.23329109	2.6133883	20	4 9.1	19.0
149470 2003 EU_{12}	16.1	X	269.60272	52.31735	179.88717	12.38920	0.1175785	0.22265497	2.6959663	20	—	—
149471 2003 EF_{13}	15.9	X	266.91110	306.38745	335.04676	3.70532	0.1369327	0.23238761	2.6201575	20	2 21.8	19.5
149472 2003 EA_{14}	16.5	X	67.29221	318.18963	161.85596	4.41975	0.1177323	0.23350715	2.6117760	20	3 24.1	19.4
149473 2003 EO_{15}	15.5	X	314.66757	212.63847	329.95942	10.91153	0.1045494	0.22290227	2.6939718	20	—	—
149474 2003 EA_{20}	16.1	X	326.06628	349.44769	241.36769	1.42787	0.1142643	0.23181309	2.6244849	20	3 5.1	19.2
149475 2003 EX_{21}	15.2	X	71.55779	10.16993	150.63646	13.91530	0.1936560	0.18221516	3.0813879	20	6 8.5	19.7
149476 2003 EK_{23}	15.7	X	263.56308	82.78838	116.75933	5.73101	0.0604339	0.21709516	2.7418011	20	—	—
149477 2003 EL_{24}	15.9	X	279.40526	90.14635	104.84344	3.56814	0.1736105	0.21845825	2.7303841	20	—	—
149478 2003 EQ_{24}	16.0	X	280.71921	229.59348	18.64167	4.34369	0.1592157	0.22684071	2.6626989	20	1 26.1	19.9
149479 2003 ER_{25}	16.3	X	324.09715	124.85035	83.62428	2.93629	0.1386417	0.22753950	2.6572445	20	1 31.1	19.7
149480 2003 EG_{29}	15.8	X	269.23814	152.21290	27.53888	4.99042	0.0929541	0.21487911	2.7606197	20	—	—
149481 2003 EC_{35}	16.3	X	63.52610	204.82401	289.10890	4.02655	0.2034009	0.23486841	2.6016746	20	4 16.9	19.3
149482 2003 EA_{36}	15.5	X	99.74017	319.68008	23.14451	5.99964	0.0179868	0.21440692	2.7646714	20	—	—
149483 2003 EN_{36}	16.4	X	48.47005	275.39536	165.53839	1.88876	0.3031863	0.22849258	2.6498502	20	1 14.2	17.9
149484 2003 EP_{36}	16.3	X	318.47005	21.23215	145.38181	2.93114	0.0559197	0.22241063	2.6979404	20	—	—
149485 2003 EB_{37}	15.2	X	229.56706	118.00049	87.84586	13.48233	0.1769343	0.21363207	2.7713524	20	—	—
149486 2003 EM_{37}	15.8	X	0.12511	54.97768	76.80155	13.59292	0.0893053	0.22443049	2.6817285	20	—	—
149487 2003 EU_{37}	15.0	X	354.36202	54.93807	165.38831	16.23052	0.1748903	0.17703573	3.1411988	20	4 12.1	18.6
149488 2003 EJ_{38}	15.3	X	70.38241	130.75169	314.91144	21.44669	0.0376272	0.22821470	2.6520008	20	2 2.2	18.5
149489 2003 EG_{45}	15.3	X	347.09073	102.38032	329.92818	12.44348	0.1445764	0.21315836	2.7754568	20	—	—
149490 2003 EB_{47}	15.1	X	162.06694	314.12155	269.94063	9.07769	0.3299637	0.20124107	2.8839760	20	11 13.5	20.6
149491 2003 EC_{48}	15.4	X	47.22448	276.87489	278.24873	10.53042	0.1205526	0.23884185	2.5727392	20	6 5.4	18.4
149492 2003 EK_{48}	15.5	X	48.83193	325.31936	169.27732	15.72632	0.1582035	0.23178140	2.6247241	20	3 19.1	18.2
149493 2003 EK_{49}	15.6	X	199.80082	301.22540	356.64279	5.77587	0.0361391	0.22149057	2.7054066	20	1 8.7	19.5
149494 2003 ET_{49}	15.7	X	62.21344	82.06798	359.39322	21.97581	0.0541448	0.22672683	2.6635904	20	1 26.6	19.5
149495 2003 EE_{58}	15.5	X	337.04695	117.10318	86.08119	14.38332	0.1280367	0.22960064	2.6413178	20	2 17.9	18.9
149496 2003 EJ_{60}	15.8	X	308.84903	68.89391	162.15964	13.36759	0.2127384	0.22611759	2.6683727	20	1 26.7	19.6
149497 2003 FJ_{9}	15.8	X	38.02415	35.81403	12.77429	4.37315	0.0664698	0.21292752	2.7774623	20	—	—
149498 2003 FZ_{11}	15.7	X	21.10198	61.13424	258.24638	1.06449	0.1184272	0.19470078	2.9482044	20	10 9.8	19.2
149499 2003 FP_{16}	15.0	X	289.80302	199.73810	52.79695	9.97435	0.2919531	0.22473227	2.6793272	20	1 27.2	19.3
149500 2003 FP_{17}	15.7	X	338.88902	122.90514	341.67066	5.31969	0.0402492	0.21534599	2.7566282	20	—	—
149501 2003 FV_{34}	16.1	X	348.99421	137.04029	23.78117	2.37472	0.0277789	0.22380608	2.6867142	20	1 19.4	19.6
149502 2003 FP_{35}	15.6	X	348.55563	156.81553	175.43043	1.77057	0.1618429	0.19160828	2.9798418	20	9 4.3	18.8
149503 2003 FP_{39}	16.2	X	28.44019	9.37211	299.53516	0.92882	0.0697275	0.19482930	2.9469077	20	9 30.5	20.0
149504 2003 FQ_{46}	15.5	X	315.74896	127.25680	145.57336	1.54190	0.1091223	0.17713621	3.1400109	20	4 21.4	19.4
149505 2003 FS_{49}	16.3	X	5.48424	354.29701	167.27740	4.03674	0.1958731	0.22667289	2.6640129	20	1 28.1	18.9
149506 2003 FF_{55}	16.3	X	300.77540	21.37655	197.01806	1.74004	0.1383928	0.22602030	2.6691383	20	1 12.8	19.8
149507 2003 FC_{57}	16.0	X	146.80252	324.60769	159.68809	10.56933	0.1943439	0.18914633	3.0056433	20	7 7.7	21.2
149508 2003 FN_{57}	15.5	X	109.32157	180.61273	138.76694	10.25805	0.1624924	0.20861532	2.8156062	20	—	—
149509 2003 FH_{59}	16.2	X	332.36476	325.49701	122.35717	4.21244	0.1508542	0.21279196	2.7786418	20	—	—
149510 2003 FB_{68}	16.1	X	55.08013	276.65718	112.96652	6.01438	0.0692276	0.21309775	2.7759831	20	—	—
149511 2003 FC_{68}	16.1	X	176.74673	181.04679	141.42794	5.89816	0.0655627	0.22028875	2.7152376	20	1 13.3	20.0
149512 2003 FK_{69}	15.7	X	150.70080	192.96801	124.51031	6.25047	0.0066236	0.21613171	2.7499432	20	—	—
149513 2003 FB_{71}	15.8	X	172.88664	192.33926	64.89781	4.89955	0.0564561	0.20965159	2.8063205	20	—	—
149514 2003 FJ_{71}	16.4	X	320.49262	98.55616	139.07564	2.98102	0.1527122	0.22912831	2.6449464	20	3 1.7	19.7
149515 2003 FA_{72}	15.3	X	216.36482	144.70207	90.79705	8.52725	0.0383833	0.21335458	2.7737548	20	—	—
149516 2003 FS_{73}	15.1	X	123.02016	337.52644	168.79519	15.93282	0.1776146	0.18514348	3.0488105	20	7 11.5	20.2
149517 2003 FF_{74}	15.5	X	245.03395	164.31598	85.99157	5.51610	0.2241898	0.21703998	2.7422658	20	—	—
149518 2003 FC_{82}	16.1	X	341.03976	6.74346	149.81649	3.02791	0.1377620	0.22248215	2.6973622	20	—	—
149519 2003 FA_{91}	15.0	X	258.61274	276.98829	320.83859	7.59000	0.1459377	0.21820320	2.7325113	20	—	—
149520 2003 FJ_{93}	16.2	X	94.00036	345.91089	150.81791	5.78428	0.2171039	0.23813417	2.5778337	20	6 7.1	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149521 2003 FS_{93}	15.2	X	179.94007	131.29443	146.05181	13.25126	0.1012779	0.21012873	2.8020707	20	—	—
149522 2003 FT_{97}	15.8	X	13.53368	179.60736	297.74854	12.47379	0.2247119	0.22380518	2.6867213	20	—	—
149523 2003 FM_{106}	15.6	X	144.05004	192.00259	36.93915	6.33475	0.0192541	0.20137576	2.8826899	20	11 7.3	19.5
149524 2003 FH_{107}	15.6	X	359.60725	158.01402	50.90708	7.91627	0.2754184	0.23018775	2.6368246	20	3 23.1	17.5
149525 2003 FB_{111}	15.5	X	13.71996	231.90469	27.70710	12.83112	0.1354397	0.24366062	2.5387065	20	7 17.3	18.4
149526 2003 FE_{113}	16.3	X	328.26284	158.63008	345.41219	4.49269	0.1008777	0.22065626	2.7122219	20	—	—
149527 2003 FK_{117}	15.7	X	189.47328	181.29926	109.62285	5.39256	0.0674319	0.21948047	2.7218998	20	—	—
149528 Simónrodríguez	15.2	X	342.27491	162.83697	131.27324	18.24761	0.2016737	0.17843628	3.1247404	20	6 26.8	18.7
149529 2003 GR_{4}	16.5	X	31.00657	107.72242	33.15284	2.20565	0.1700934	0.22859846	2.6490318	20	2 23.5	18.9
149530 2003 GC_{6}	16.0	X	341.06728	146.49014	31.66185	9.66809	0.2482444	0.22389992	2.6859634	20	—	—
149531 2003 GO_{11}	15.7	X	108.88891	12.35065	351.18773	5.48918	0.0240684	0.22098413	2.7095385	20	—	—
149532 2003 GS_{14}	15.7	X	19.15814	26.45917	135.08014	8.71046	0.0678012	0.22968305	2.6406860	20	3 1.2	18.9
149533 2003 GK_{16}	16.0	X	298.81908	106.96009	88.25100	8.52237	0.0816603	0.22151237	2.7052291	20	—	—
149534 2003 GG_{23}	16.3	X	303.48940	156.72867	17.16906	9.63747	0.2087046	0.21793070	2.7347887	20	—	—
149535 2003 GS_{29}	15.8	X	279.76680	94.94709	97.27787	3.73571	0.0263737	0.21574593	2.7532203	20	—	—
149536 2003 GV_{41}	14.5	X	249.91974	105.89714	97.18689	9.00667	0.1568542	0.15742966	3.3968654	20	—	—
149537 2003 GE_{42}	14.6	X	0.29996	101.35223	165.64855	27.85405	0.3753905	0.23056245	2.6339670	20	7 12.7	16.6
149538 2003 GJ_{49}	15.9	X	269.78581	137.43833	49.31973	8.69824	0.1563265	0.21368668	2.7708802	20	—	—
149539 2003 GS_{50}	15.8	X	211.03883	140.39457	79.44434	6.00550	0.0731309	0.21043594	2.7993429	20	—	—
149540 2003 GY_{50}	15.5	X	284.29462	124.96122	105.82053	11.06756	0.0767507	0.22192683	2.7018600	20	1 18.3	19.3
149541 2003 HX_{7}	15.9	X	308.83892	105.55931	47.25134	4.69520	0.1025276	0.21384684	2.7694965	20	—	—
149542 2003 HO_{33}	15.6	X	171.48293	101.04507	41.34010	11.64000	0.0207377	0.18914964	3.0056082	20	8 28.3	20.1
149543 2003 HM_{47}	15.5	X	38.98999	185.39610	81.07815	3.42935	0.1958790	0.18611301	3.0382131	20	9 9.7	19.3
149544 2003 HY_{50}	14.4	X	336.25167	201.30339	87.58306	15.28256	0.1079351	0.17694880	3.1422276	20	6 13.5	18.2
149545 2003 HE_{52}	15.2	X	49.90310	176.02608	104.50649	11.44231	0.0888724	0.18729333	3.0254351	20	10 1.2	19.5
149546 2003 JP_{4}	15.9	X	236.26740	71.12710	155.69684	3.39617	0.0955179	0.21312833	2.7757175	20	—	—
149547 2003 JG_{7}	15.2	X	291.32620	182.42277	33.78644	13.42489	0.2305122	0.22270612	2.6955534	20	—	—
149548 2003 KY	14.4	X	320.88210	232.10618	66.30547	23.96354	0.0318592	0.17653214	3.1471699	20	6 7.4	18.8
149549 2003 KP_{1}	15.5	X	88.78027	142.70249	139.11989	11.14505	0.0968720	0.19354317	2.9599485	20	11 17.5	20.1
149550 2003 KH_{2}	15.2	X	26.55570	129.02793	125.61939	11.71889	0.0313817	0.17964551	3.1107025	20	7 13.1	19.4
149551 2003 KO_{7}	15.6	X	272.37834	88.34644	133.98946	9.98868	0.0969182	0.21702858	2.7423619	20	—	—
149552 2003 KL_{15}	16.5	X	286.64449	108.26428	45.36822	2.39315	0.1590019	0.21231780	2.7827773	20	—	—
149553 2003 KT_{15}	15.8	X	346.41221	133.00822	157.72655	0.54431	0.1549905	0.18102459	3.0948837	20	7 1.5	19.0
149554 2003 KF_{28}	15.6	X	205.99554	47.07174	74.18047	10.78553	0.1181220	0.19061371	2.9901981	20	9 3.6	20.4
149555 2003 KN_{31}	14.8	X	240.23229	308.81087	106.93524	14.90481	0.0618168	0.18207422	3.0829779	20	7 21.8	19.2
149556 2003 LJ_{2}	16.1	X	138.64448	140.60575	89.58917	1.41611	0.1488558	0.19631754	2.9319956	20	11 5.0	20.9
149557 2003 LW_{5}	15.4	X	322.25897	238.32473	76.33765	4.50015	0.2270121	0.23281438	2.6169546	20	6 11.2	17.6
149558 2003 NJ_{9}	14.7	X	27.86645	144.39552	164.88855	10.44593	0.0636318	0.18074899	3.0980289	20	9 29.1	18.8
149559 2003 OG_{1}	14.3	X	102.90396	254.58929	319.84748	15.19471	0.1890488	0.17912665	3.1167066	20	9 10.1	19.4
149560 2003 QZ_{91}	8.1	X	38.33034	137.82944	130.71026	34.75255	0.4795652	0.00364616	41.8066463	20	9 30.2	23.3
149561 2003 SJ_{219}	16.4	X	325.92406	157.84681	272.13455	17.54431	0.0872735	0.35812385	1.9638752	20	—	—
149562 2003 US_{13}	17.0	X	328.06348	118.40994	35.69554	21.51269	0.0697141	0.37009779	1.9212847	20	—	—
149563 2003 VF_{9}	16.2	X	307.53922	64.65413	64.26013	24.71164	0.1002345	0.35808295	1.9640247	20	—	—
149564 2003 WK_{7}	16.5	X	2.15666	328.98377	105.55858	24.30619	0.0784289	0.36271843	1.9472556	20	—	—
149565 2003 WH_{47}	17.6	X	172.48224	344.78666	244.90742	0.17700	0.0860696	0.29675154	2.2260798	20	12 29.0	20.3
149566 2003 WC_{122}	16.7	X	142.25267	183.16330	15.96386	6.50370	0.0500405	0.28369975	2.2938415	20	10 12.5	19.6
149567 2003 XG_{11}	16.4	X	119.10896	96.74426	341.25671	20.56757	0.0764280	0.38008187	1.8874898	20	3 13.2	18.1
149568 2003 YG_{4}	16.8	X	203.50921	79.97394	126.32415	5.95207	0.0946334	0.29414836	2.2391942	20	—	—
149569 2003 YJ_{47}	16.3	X	102.25167	339.23263	151.19562	3.14619	0.1062205	0.26057216	2.4276387	20	5 24.1	19.4
149570 2003 YW_{51}	16.2	X	165.63145	47.34200	92.75957	6.83281	0.0551182	0.27331992	2.3515553	20	8 22.5	19.4
149571 2003 YJ_{52}	15.3	X	274.09375	256.72343	284.20347	10.27874	0.2446930	0.23260840	2.6184992	20	—	—
149572 2003 YY_{92}	16.7	X	128.82575	261.39092	70.18395	2.82904	0.0154592	0.30235425	2.1984942	20	—	—
149573 Mamorudoi	16.9	X	297.57885	315.60788	286.48822	3.04408	0.0260045	0.30857416	2.1688508	20	2 11.9	19.2
149574 2004 BU_{30}	15.8	X	221.73335	204.28962	80.32146	2.25032	0.0967330	0.24139639	2.5545566	20	1 12.5	19.4
149575 2004 BA_{37}	17.2	X	322.57842	147.08051	94.72588	1.69792	0.1475333	0.31165978	2.1545118	20	2 29.4	19.4
149576 2004 BA_{43}	16.7	X	108.30716	333.25940	170.93895	7.75983	0.1538948	0.26027927	2.4294595	20	6 24.9	20.3
149577 2004 BH_{44}	16.0	X	194.58628	278.38026	338.07259	6.56434	0.0820434	0.29050148	2.2578954	20	—	—
149578 2004 BJ_{56}	16.6	X	179.46236	340.41226	173.33585	2.00288	0.1302832	0.27353722	2.3503097	20	9 20.2	19.9
149579 2004 BT_{79}	16.2	X	226.75632	6.88117	177.77490	6.68899	0.2203464	0.22440418	2.6819381	20	12 1.4	20.2
149580 2004 BQ_{97}	17.1	X	216.88974	307.25057	138.99708	6.72605	0.1337179	0.27205103	2.3588616	20	7 31.5	20.3
149581 2004 BF_{99}	16.6	X	177.36043	185.81509	124.78930	7.06872	0.1619195	0.29424959	2.2386806	20	—	—
149582 2004 BX_{104}	17.3	X	131.62084	1.88663	143.92209	2.76879	0.1492135	0.26610651	2.3938616	20	7 22.1	20.8
149583 2004 BK_{105}	17.0	X	234.61369	324.58087	128.36458	2.75036	0.1767433	0.27568706	2.3380752	20	8 26.5	20.2
149584 2004 BD_{108}	16.5	X	354.60037	100.85521	59.91840	3.60940	0.0860554	0.24405526	2.5359689	20	1 17.3	19.4
149585 2004 BV_{115}	16.9	X	255.47295	18.37612	130.34410	7.92391	0.0592452	0.28604775	2.2812718	20	—	—
149586 2004 CZ_{17}	16.7	X	171.51242	63.52962	122.84547	6.75203	0.0699644	0.27729586	2.3290231	20	10 31.9	19.9
149587 2004 CY_{18}	16.1	X	227.65879	234.14844	317.72301	12.39081	0.1213801	0.22856841	2.6492641	20	12 25.9	19.9
149588 2004 CC_{29}	16.3	X	228.64865	139.37293	134.52979	3.86271	0.0315522	0.24357781	2.5392818	20	1 7.5	19.8
149589 2004 CN_{35}	16.9	X	333.46857	109.33645	132.59165	3.70876	0.0602074	0.31175298	2.1540824	20	4 3.1	18.9
149590 2004 CO_{36}	16.3	X	103.59589	333.61030	281.24252	3.33136	0.1114296	0.27411563	2.3470023	20	11 10.8	19.7
149591 2004 CL_{51}	16.2	X	267.68816	335.71352	158.42499	6.74129	0.0477339	0.28364025	2.2941623	20	12 30.7	18.8
149592 2004 CU_{51}	16.0	X	336.76358	233.96948	147.50895	21.91494	0.3040107	0.28192917	2.3034354	20	12 14.9	18.2
149593 2004 CL_{69}	16.6	X	16.46856	26.12705	61.27348	4.08846	0.0647510	0.29570432	2.2313324	20	—	—
149594 2004 CR_{80}	15.0	X	188.93860	257.95892	67.48092	4.75607	0.2209874	0.23988295	2.5652900	20	2 3.7	19.3
149595 2004 CM_{85}	16.4	X	65.93866	153.02142	107.04985	3.40423	0.1719447	0.26819350	2.3814267	20	10 15.5	19.7
149596 2004 CC_{96}	16.1	X	130.00628	84.01803	154.97871	5.81786	0.1113458	0.21626961	2.7487741	20	11 11.0	20.4
149597 2004 CH_{103}	16.8	X	64.09199	121.38726	290.94539	6.36250	0.0762048	0.29773616	2.2211693	20	—	—
149598 2004 CP_{110}	17.1	X	278.60666	135.51885	122.68687	6.46763	0.0108644	0.30781041	2.1724369	20	2 12.5	19.4
149599 2004 CT_{128}	17.0	X	219.09773	264.51661	15.69938	3.61212	0.1565168	0.29819259	2.2189021	20	—	—
149600 2004 DH_{12}	16.4	X	223.15831	121.61892	74.25119	3.26236	0.0481388	0.28421987	2.2910422	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149601 2004 DJ_{13}	16.1	X	187.78713	300.47147	334.73910	6.59747	0.1966512	0.28691456	2.2766747	20	—	—
149602 2004 DS_{15}	17.2	X	335.33724	155.91182	18.76056	3.70074	0.0893281	0.30102922	2.2049409	20	—	—
149603 2004 DG_{16}	16.2	X	166.72853	101.45637	158.00143	6.66210	0.0992815	0.28292570	2.2980234	20	—	—
149604 2004 DS_{20}	15.8	X	311.39249	215.21401	281.46275	10.15434	0.0849839	0.23067181	2.6331344	20	—	—
149605 2004 DO_{23}	16.6	X	205.90984	107.50181	115.45198	4.48646	0.1234686	0.28358106	2.2944815	20	—	—
149606 2004 DQ_{28}	15.7	X	96.56471	109.71014	145.33424	13.53819	0.1842398	0.21174365	2.7878054	20	11 5.0	20.4
149607 2004 DJ_{38}	15.8	X	339.97061	305.96906	141.79179	6.47217	0.0507441	0.22769098	2.6560658	20	—	—
149608 2004 DK_{45}	15.0	X	223.03197	178.10409	83.13621	15.31948	0.2140963	0.22644932	2.6657660	20	—	—
149609 2004 DK_{49}	15.9	X	167.28369	319.41355	350.11235	7.27731	0.1974460	0.29197986	2.2502673	20	—	—
149610 2004 DT_{61}	16.8	X	78.24143	230.66125	47.79007	3.13555	0.1657248	0.27148100	2.3621624	20	11 19.3	20.1
149611 2004 DK_{77}	17.1	X	342.07975	337.47078	71.80931	3.27160	0.1875549	0.28397860	2.2923397	20	—	—
149612 2004 EO_{7}	16.2	X	99.22078	160.71127	144.90731	2.68722	0.2094787	0.27729160	2.3290469	20	—	—
149613 2004 EL_{8}	15.8	X	258.44175	52.83611	175.34625	7.07452	0.2223684	0.16951765	3.2334000	20	—	—
149614 2004 EP_{11}	16.5	X	310.20261	84.75851	89.44927	5.56145	0.0753012	0.29593964	2.2301494	20	—	—
149615 2004 EX_{11}	16.8	X	342.74990	191.57012	325.05998	7.65558	0.0473768	0.30037639	2.2081345	20	—	—
149616 2004 EN_{13}	16.5	X	267.85004	241.62706	36.60498	2.32962	0.1197631	0.24274758	2.5450683	20	2 20.6	20.2
149617 2004 EK_{16}	16.5	X	145.72533	210.54987	63.13469	5.42941	0.1221909	0.28209106	2.3025540	20	—	—
149618 2004 EJ_{20}	16.8	X	202.43528	311.74058	332.37284	4.53430	0.1698063	0.29361823	2.2418887	20	—	—
149619 2004 EY_{21}	16.6	X	110.33678	143.48388	127.49132	4.64173	0.1239285	0.27577375	2.3375851	20	12 10.4	20.0
149620 2004 EM_{27}	17.5	X	196.95065	279.39239	348.72402	3.28564	0.1573712	0.28952729	2.2629574	20	—	—
149621 2004 EJ_{32}	17.0	X	300.24080	19.02645	174.25700	3.66858	0.0978104	0.29606424	2.2295236	20	—	—
149622 2004 EP_{33}	16.9	X	280.24935	182.43902	115.77143	3.12440	0.1809495	0.30861836	2.1686437	20	3 18.3	19.7
149623 2004 EU_{36}	16.8	X	148.00672	245.44215	6.86327	3.65909	0.1159696	0.27816335	2.3241783	20	12 24.7	20.3
149624 2004 EC_{37}	16.5	X	345.09398	156.66333	17.80074	7.38252	0.0655369	0.29957424	2.2120744	20	1 13.9	19.0
149625 2004 EK_{41}	16.7	X	209.04775	340.80070	212.42406	1.68195	0.1478306	0.28066880	2.3103262	20	12 12.9	19.7
149626 2004 EG_{43}	15.0	X	321.96558	111.42744	168.87490	10.93624	0.1093405	0.19095458	2.9866386	20	5 12.1	18.9
149627 2004 ES_{51}	15.5	X	49.72118	78.25385	347.27100	21.66535	0.0903894	0.23563260	2.5960465	20	—	—
149628 2004 EC_{56}	16.6	X	184.22858	352.71001	284.01672	4.06851	0.1208064	0.28769742	2.2725428	20	—	—
149629 2004 EQ_{56}	16.7	X	182.89119	87.24408	150.64054	1.64261	0.1551845	0.27971984	2.3155484	20	—	—
149630 2004 ET_{59}	16.1	X	228.96323	299.17860	311.04395	6.78994	0.0962219	0.29025793	2.2591582	20	—	—
149631 2004 EO_{60}	17.1	X	239.08499	116.07858	12.19773	0.18258	0.0315138	0.27691840	2.3311390	20	11 11.6	19.8
149632 2004 EM_{62}	16.6	X	134.91357	150.47630	161.99986	3.70141	0.1267755	0.28643267	2.2792275	20	—	—
149633 2004 EX_{65}	16.8	X	166.96881	343.12371	329.36603	1.66463	0.1236064	0.29346190	2.2426847	20	—	—
149634 2004 EU_{72}	17.0	X	114.71789	287.63341	118.01935	3.79419	0.0888555	0.30261918	2.1972109	20	2 5.6	19.3
149635 2004 EH_{73}	16.4	X	13.05895	295.25331	185.49229	4.49460	0.1599427	0.23754286	2.5821099	20	—	—
149636 2004 EC_{78}	16.2	X	202.38364	62.11976	178.40861	14.40971	0.0809191	0.22517686	2.6757993	20	—	—
149637 2004 EE_{79}	16.6	X	260.36347	339.48072	168.32603	3.97693	0.1051155	0.28078538	2.3096866	20	12 31.1	18.9
149638 2004 EU_{79}	16.4	X	270.55997	334.74866	90.74559	10.64372	0.1705409	0.27263358	2.3555002	20	9 12.7	19.2
149639 2004 FU_{2}	16.6	X	86.15172	269.59433	157.12525	3.62723	0.2819256	0.30426346	2.1892878	20	2 24.6	18.4
149640 2004 FX_{9}	17.4	X	122.16735	253.46617	165.77298	3.14110	0.0948371	0.30798434	2.1716190	20	3 5.9	19.8
149641 2004 FE_{15}	16.9	X	263.68769	326.81886	268.84560	1.37593	0.1600526	0.29342602	2.2428676	20	—	—
149642 2004 FB_{22}	16.3	X	290.21648	9.54037	182.54543	5.55781	0.0885373	0.29260956	2.2470378	20	—	—
149643 2004 FJ_{23}	16.0	X	331.61458	32.09378	200.30458	0.53442	0.0968476	0.18533951	3.0466603	20	3 23.8	19.7
149644 2004 FF_{27}	15.0	X	133.23031	158.79562	175.76006	0.28517	0.1541423	0.16840312	3.2476506	20	—	—
149645 2004 FK_{32}	16.9	X	220.34933	338.97149	253.30498	1.51828	0.0996522	0.28621986	2.2803572	20	—	—
149646 2004 FX_{34}	16.6	X	270.50350	249.31493	211.50687	5.55023	0.0860263	0.27787759	2.3257714	20	11 12.7	19.0
149647 2004 FC_{38}	16.7	X	250.11433	260.59384	319.16916	4.61583	0.0818742	0.28956358	2.2627683	20	—	—
149648 2004 FH_{38}	16.1	X	155.56578	288.68022	331.65198	6.13886	0.0937523	0.28064389	2.3104629	20	—	—
149649 2004 FR_{43}	16.3	X	70.01572	254.95932	62.24677	3.92753	0.1585871	0.27578945	2.3374964	20	12 30.1	19.7
149650 2004 FW_{44}	17.0	X	172.33655	136.61196	101.21524	3.67196	0.1936528	0.27760703	2.3272824	20	12 24.9	20.6
149651 2004 FC_{53}	16.8	X	253.70433	56.16044	94.14906	3.89032	0.0721391	0.27962928	2.3160483	20	12 28.2	19.1
149652 2004 FW_{53}	17.1	X	45.12664	268.51228	72.50128	2.96819	0.2268334	0.27858413	2.3218374	20	—	—
149653 2004 FF_{56}	16.3	X	186.73172	110.76156	158.94783	6.81640	0.0913843	0.28721195	2.2751029	20	—	—
149654 2004 FO_{60}	16.7	X	216.36565	101.40538	38.25304	2.96074	0.1338549	0.27358148	2.3500563	20	10 12.6	19.8
149655 2004 FM_{64}	16.9	X	270.61389	47.51440	71.45711	3.29342	0.1189749	0.27854400	2.3220604	20	12 4.5	19.2
149656 2004 FP_{64}	17.1	X	94.17439	189.00480	66.91422	3.22459	0.1886231	0.26657794	2.3910386	20	11 8.1	20.7
149657 2004 FH_{86}	17.6	X	309.47217	132.62241	81.77421	5.13967	0.0898687	0.30171980	2.2015751	20	1 13.1	20.1
149658 2004 FO_{91}	17.3	X	354.43639	352.59655	159.84262	4.48513	0.0501732	0.29868441	2.2164657	20	—	—
149659 2004 FR_{92}	17.0	X	164.80635	356.38744	191.40395	0.85276	0.1298779	0.27146522	2.3622540	20	10 19.1	20.3
149660 2004 FC_{93}	16.6	X	316.16891	321.98292	173.05730	6.04080	0.0629853	0.28823766	2.2697023	20	—	—
149661 2004 FP_{104}	16.7	X	333.90492	39.43819	123.74721	7.28493	0.0469318	0.29600723	2.2298099	20	—	—
149662 2004 FW_{105}	16.3	X	284.53952	78.38363	128.88987	12.02282	0.1392441	0.23451537	2.6042850	20	—	—
149663 2004 FR_{106}	16.4	X	158.07449	187.29652	65.54564	4.37449	0.0608870	0.27953677	2.3165593	20	—	—
149664 2004 FA_{109}	15.9	X	227.19521	21.30157	16.32668	11.58395	0.1208942	0.25581488	2.4576433	20	6 5.8	19.7
149665 2004 FD_{122}	16.8	X	141.25440	88.58637	163.54143	2.96490	0.1421889	0.27454647	2.3445462	20	12 16.2	20.5
149666 2004 FJ_{126}	16.0	X	182.30505	256.20324	15.71902	6.85569	0.1078011	0.28623927	2.2802541	20	—	—
149667 2004 FF_{130}	16.0	X	332.70606	354.65680	161.82356	13.85937	0.0848099	0.23331567	2.6132048	20	—	—
149668 2004 FV_{136}	14.8	X	245.07605	149.46812	132.88086	17.65465	0.1715783	0.17397922	3.1778822	20	2 5.0	19.9
149669 2004 FM_{141}	15.8	X	345.05568	143.27249	41.28564	0.95310	0.1104146	0.17876884	3.1208640	20	2 11.9	19.5
149670 2004 FJ_{142}	16.8	X	119.42484	218.96158	26.95943	2.91710	0.0949324	0.27073493	2.3665001	20	11 15.3	20.3
149671 2004 FD_{143}	16.5	X	203.33311	152.76207	97.88380	6.57670	0.1317504	0.28449720	2.2895531	20	—	—
149672 2004 FH_{145}	16.8	X	86.76366	145.94058	148.45914	1.60580	0.2198765	0.27424904	2.3462411	20	12 21.3	20.5
149673 2004 GE_{9}	16.9	X	162.65263	261.27438	346.62819	2.02597	0.1726492	0.27641844	2.3339491	20	12 29.9	20.4
149674 2004 GN_{11}	15.0	X	188.42934	201.31750	123.44264	33.68918	0.1648888	0.22894389	2.6463667	20	1 31.4	19.4
149675 2004 GS_{12}	16.6	X	173.54244	83.69399	131.75521	7.27693	0.0541758	0.27458236	2.3443420	20	12 10.4	19.7
149676 2004 GG_{13}	15.2	X	10.07248	112.83415	81.93826	6.08712	0.1305277	0.18206246	3.0831106	20	4 7.2	18.8
149677 2004 GL_{15}	16.0	X	159.60998	141.42866	137.69008	22.85735	0.2057003	0.27863865	2.3215345	20	—	—
149678 2004 GZ_{17}	15.2	X	234.04344	131.30241	150.53462	13.79809	0.1507270	0.17362269	3.1822312	20	1 26.1	20.4
149679 2004 GA_{18}	15.5	X	228.24784	121.98695	51.37090	16.50369	0.1234521	0.21898572	2.7259979	20	11 27.9	19.3
149680 2004 GK_{21}	15.1	X	257.49942	62.54989	186.85018	19.03342	0.1023425	0.17053146	3.2205722	20	1 13.4	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149681 2004 GU_{24}	15.6	X	110.34116	167.68218	140.73371	3.79259	0.3028304	0.21221181	2.7837038	20	—	—
149682 2004 GD_{29}	16.1	X	243.59566	263.00581	42.58043	4.53460	0.2802019	0.23519188	2.5992886	20	2 20.7	20.8
149683 2004 GM_{30}	16.7	X	304.86106	301.96507	342.04577	1.65639	0.1927431	0.24489572	2.5301635	20	4 1.4	19.6
149684 2004 GC_{34}	15.7	X	310.86610	148.81267	82.64041	5.73787	0.1960484	0.23712914	2.5851124	20	2 2.5	19.1
149685 2004 GM_{34}	15.0	X	139.77456	354.76908	299.73121	10.14994	0.2871661	0.21829188	2.7317712	20	—	—
149686 2004 GB_{35}	16.2	X	108.34206	298.45621	302.24779	5.87895	0.0737354	0.26839129	2.3802565	20	10 23.3	19.6
149687 2004 GV_{65}	16.6	X	53.06526	187.07926	185.73177	3.66319	0.1303042	0.28205964	2.3027250	20	—	—
149688 2004 GU_{71}	16.4	X	178.88272	155.24888	66.49025	7.40961	0.0589989	0.27753473	2.3276865	20	12 24.3	19.5
149689 2004 GG_{72}	15.1	X	216.16374	176.82548	103.66393	5.90030	0.0814974	0.17007492	3.2263330	20	1 12.2	19.9
149690 2004 GZ_{86}	16.6	X	229.61804	317.91677	296.83760	5.61083	0.1750984	0.28757890	2.2731672	20	—	—
149691 2004 HN	17.2	X	235.45677	346.97881	199.47184	2.45246	0.1333424	0.28127138	2.3070253	20	—	—
149692 2004 HM_{2}	15.6	X	119.67534	257.04476	112.91944	14.45518	0.1126625	0.22689129	2.6623031	20	1 11.7	19.3
149693 2004 HP_{6}	16.6	X	12.98305	148.95203	129.67576	5.54714	0.1650077	0.25572792	2.4582004	20	8 17.0	18.9
149694 2004 HY_{15}	16.3	X	59.41311	141.77841	137.15643	11.30324	0.1457455	0.26308587	2.4121503	20	10 31.3	19.8
149695 2004 HW_{21}	15.6	X	279.59018	199.83667	38.04375	4.35894	0.0423977	0.17436058	3.1732468	20	2 3.2	20.1
149696 2004 HP_{25}	14.9	X	220.70195	232.31918	55.29474	7.36204	0.1056698	0.17011442	3.2258336	20	1 25.6	20.0
149697 2004 HR_{25}	16.7	X	116.67811	28.12795	143.38950	3.28410	0.1197679	0.25832288	2.4417103	20	8 6.7	20.3
149698 2004 HJ_{38}	16.4	X	40.67475	194.11515	91.07315	6.95496	0.0794706	0.26186697	2.4196297	20	10 3.8	19.4
149699 2004 HN_{41}	17.5	X	55.11888	74.87053	199.68482	1.55779	0.1546329	0.26215178	2.4178768	20	10 16.6	20.7
149700 2004 HL_{42}	17.2	X	198.42133	239.07591	346.91315	1.68998	0.1371701	0.28018721	2.3129727	20	—	—
149701 2004 HD_{43}	16.5	X	148.49106	156.70839	33.74234	6.80388	0.0622715	0.26511169	2.3998465	20	10 7.1	19.9
149702 2004 HF_{50}	16.2	X	196.06000	33.16629	99.79361	6.66956	0.0578697	0.26463828	2.4027077	20	9 19.5	19.5
149703 2004 HS_{52}	16.9	X	216.48224	139.79251	88.07876	0.50840	0.1679487	0.28223128	2.3017913	20	—	—
149704 2004 HR_{53}	15.3	X	212.20860	63.18377	119.97557	15.37282	0.1286503	0.21478606	2.7614170	20	11 26.3	19.6
149705 2004 HC_{56}	15.8	X	180.00472	14.97039	279.22317	14.14497	0.1224081	0.22664314	2.6642460	20	—	—
149706 2004 HY_{56}	15.7	X	232.89555	189.30762	128.69495	19.22026	0.2086127	0.23428028	2.6060269	20	3 2.7	20.2
149707 2004 HA_{63}	15.0	X	144.17317	302.06406	119.52532	12.82466	0.1009536	0.17906896	3.1173759	20	4 20.4	20.0
149708 2004 HB_{65}	15.0	X	168.48728	358.52919	22.59293	17.86964	0.1290464	0.18072118	3.0983467	20	3 26.8	20.0
149709 2004 JM_{6}	16.7	X	110.75107	346.22389	243.94693	2.31841	0.0946263	0.26419957	2.4053668	20	10 15.1	20.2
149710 2004 JG_{8}	15.0	X	267.26439	31.19862	212.68931	11.60247	0.0955987	0.17146766	3.2088388	20	1 17.3	20.0
149711 2004 JD_{10}	16.2	X	112.83879	82.20093	136.55584	11.33162	0.0532413	0.26234138	2.4167117	20	10 4.2	19.6
149712 2004 JF_{10}	15.3	X	272.71438	44.25797	146.71960	13.16379	0.2030320	0.22462301	2.6801960	20	—	—
149713 2004 JK_{10}	15.6	X	252.92922	174.08830	116.98023	15.94380	0.1099985	0.23335486	2.6129122	20	2 24.7	19.6
149714 2004 JZ_{14}	16.4	X	13.57914	148.99564	145.01582	6.69185	0.1320140	0.25533962	2.4606919	20	9 6.9	18.9
149715 2004 JT_{15}	16.2	X	261.75971	191.63197	105.61511	3.73025	0.1859000	0.23699372	2.5860971	20	3 3.1	20.1
149716 2004 JQ_{18}	17.1	X	136.58967	149.68360	65.83025	2.80037	0.0747166	0.26669735	2.3903248	20	10 25.9	20.5
149717 2004 JP_{19}	17.3	X	132.21286	228.71172	8.44485	1.37333	0.1477819	0.26843812	2.3799797	20	11 17.6	20.8
149718 2004 JF_{20}	16.9	X	299.97810	134.40977	35.25503	5.73173	0.1474145	0.28805784	2.2706468	20	—	—
149719 2004 JS_{22}	16.5	X	62.92991	201.15573	66.90182	4.01807	0.1075871	0.26056782	2.4276656	20	10 12.4	19.6
149720 2004 JH_{27}	16.2	X	285.74214	69.88116	224.81124	4.49340	0.1583297	0.24041469	2.5615060	20	3 26.1	19.7
149721 2004 JZ_{29}	16.6	X	236.82453	80.62613	71.06914	5.71020	0.1049935	0.27364366	2.3497002	20	11 28.5	19.2
149722 2004 JB_{30}	16.3	X	94.24597	186.89120	74.68082	5.15810	0.0207911	0.26576176	2.3959315	20	11 2.0	19.3
149723 2004 JJ_{30}	16.4	X	310.68239	192.51436	108.64821	3.54128	0.0612413	0.24685842	2.5167346	20	5 26.7	19.4
149724 2004 JK_{32}	16.8	X	60.41233	164.56965	94.09483	7.49331	0.1918271	0.25856515	2.4401848	20	10 10.7	20.2
149725 2004 JO_{34}	16.3	X	53.25610	170.84639	111.59432	7.01127	0.1263058	0.25957111	2.4338762	20	10 23.7	19.5
149726 2004 JN_{35}	15.2	X	328.27094	241.67426	97.10079	8.53784	0.2669966	0.18873536	3.0100049	20	7 24.9	17.9
149727 2004 JO_{54}	16.9	X	260.19394	329.21075	200.16391	4.96160	0.0975182	0.28027062	2.3125138	20	—	—
149728 Klostermann	15.6	X	184.89260	271.01739	95.63150	15.50938	0.0901148	0.23754941	2.5820625	20	3 24.2	19.8
149729 2004 KA_{4}	14.9	X	331.59788	251.07388	69.73087	12.29902	0.1178468	0.19028260	2.9936659	20	7 20.8	18.6
149730 2004 KG_{5}	16.3	X	255.10885	242.59285	57.79070	2.56978	0.1331803	0.23552874	2.5968096	20	3 5.2	20.1
149731 2004 KH_{13}	16.0	X	257.23334	178.01417	143.88140	12.17538	0.1334538	0.23885991	2.5726095	20	4 6.2	19.9
149732 2004 KU_{15}	17.2	X	227.75829	232.29378	312.02941	1.98161	0.0718544	0.27970999	2.3156028	20	—	—
149733 2004 LL_{7}	15.8	X	298.87597	205.69218	56.32272	5.64620	0.2286077	0.23668160	2.5883702	20	2 23.6	19.4
149734 2004 LV_{8}	14.4	X	302.17243	2.25992	312.71655	18.75226	0.2099263	0.17584586	3.1553529	20	5 3.1	19.0
149735 2004 LC_{11}	15.6	X	329.84814	183.50462	156.43827	5.46175	0.2441495	0.19065140	2.9898040	20	7 31.8	18.3
149736 2004 LH_{24}	15.1	X	264.62755	200.93154	102.93176	14.78225	0.1789066	0.23556668	2.5965308	20	3 20.5	19.3
149737 2004 LS_{29}	16.0	X	222.56810	49.19257	167.23786	4.57901	0.0093976	0.21053969	2.7984232	20	—	—
149738 2004 NH_{2}	15.1	X	294.00950	17.04157	314.58578	17.17970	0.2158377	0.17811056	3.1285488	20	5 14.9	19.7
149739 2004 ND_{5}	16.8	X	89.47545	337.53600	282.74423	1.25401	0.1813489	0.25965807	2.4333328	20	11 6.7	20.6
149740 2004 NL_{6}	14.9	X	257.19252	94.23040	282.14374	12.63342	0.1069921	0.17879447	3.1205656	20	6 15.9	19.5
149741 2004 NQ_{12}	14.7	X	8.96589	229.09335	104.58941	11.35671	0.1047019	0.19106782	2.9854583	20	10 14.2	18.6
149742 2004 NF_{13}	15.1	X	296.39533	208.70864	121.76161	15.16165	0.1527229	0.17983459	3.1085217	20	6 3.6	19.4
149743 2004 ND_{16}	15.4	X	4.30245	166.28612	150.72451	4.24878	0.1056531	0.18856019	3.0118688	20	9 8.6	18.9
149744 2004 NO_{17}	14.7	X	293.64271	217.84584	130.65429	11.20932	0.1419428	0.18041953	3.1017993	20	6 22.4	18.9
149745 2004 NR_{22}	14.0	X	194.50269	37.55154	302.56279	18.43197	0.0725788	0.16132455	3.3419689	20	2 22.7	19.3
149746 2004 NW_{30}	14.6	X	263.98022	208.76808	121.14488	8.38858	0.1503380	0.17311155	3.1884921	20	4 24.7	19.4
149747 2004 OT_{2}	14.6	X	221.56763	285.52147	117.62343	16.43129	0.1791920	0.17684640	3.1434404	20	6 6.9	19.9
149748 2004 OY_{2}	14.7	X	258.58135	225.71558	141.07313	14.98732	0.0843908	0.17758370	3.1347336	20	6 10.5	19.4
149749 2004 OQ_{4}	15.5	X	180.89191	195.77402	119.92046	10.13734	0.1236336	0.21972470	2.7198824	20	1 13.2	19.6
149750 2004 OE_{5}	15.5	X	183.95630	194.22399	115.03508	8.24425	0.1466236	0.21868581	2.7284897	20	1 9.7	19.9
149751 2004 OW_{7}	15.9	X	79.06131	25.44494	292.85619	1.35165	0.1509525	0.20195966	2.8771310	20	12 24.3	20.3
149752 2004 OE_{10}	15.7	X	247.92367	304.77792	323.03540	14.16072	0.1156139	0.22432513	2.6825682	20	1 21.9	19.9
149753 2004 PH_{12}	15.8	X	94.98348	136.56589	166.91548	1.84168	0.0586387	0.20070722	2.8890877	20	12 14.6	20.0
149754 2004 PR_{12}	15.1	X	255.76614	231.71339	141.58898	4.84640	0.0820344	0.17586520	3.1551217	20	6 13.7	19.6
149755 2004 PE_{18}	15.0	X	35.56270	355.10033	320.28532	8.24049	0.1373528	0.19089581	2.9872515	20	10 24.0	19.1
149756 2004 PC_{28}	15.5	X	334.10398	291.17936	292.68921	12.83596	0.1466578	0.22999091	2.6383289	20	2 27.2	18.8
149757 2004 PO_{55}	14.9	X	303.96030	226.02823	126.44822	8.75864	0.1023929	0.17923377	3.1154646	20	7 17.8	19.0
149758 2004 PY_{62}	14.9	X	275.50124	28.79355	298.47142	10.89084	0.1026819	0.17472916	3.1687827	20	5 3.5	19.6
149759 2004 PR_{69}	14.4	X	44.15923	258.98988	323.27918	17.00868	0.0824905	0.17529230	3.1619924	20	7 4.4	18.8
149760 2004 PR_{71}	16.3	X	344.52385	256.21430	339.67496	2.79339	0.1873240	0.23608966	2.5926949	20	4 2.4	18.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149761 2004 PT_{72}	14.8	X	147.60616	125.60749	328.04711	11.94284	0.0932901	0.17162630	3.2068611	20	5 24.3	19.9
149762 2004 PE_{73}	14.7	X	234.41806	253.31084	129.66605	11.72722	0.1392027	0.17293557	3.1906549	20	5 28.8	19.8
149763 2004 PH_{75}	15.2	X	320.53456	206.91024	131.97461	10.57857	0.0787621	0.18177189	3.0863954	20	7 27.8	19.2
149764 2004 PT_{98}	14.5	X	298.58341	216.30569	105.25046	12.78378	0.1265061	0.17506968	3.1646724	20	5 29.4	18.9
149765 2004 PM_{106}	15.0	X	0.09560	355.29446	295.20259	10.64928	0.1523207	0.18140071	3.0906042	20	7 27.1	18.5
149766 2004 PH_{110}	16.0	X	161.78459	184.43895	117.97928	6.54773	0.1064410	0.21417620	2.7666565	20	—	—
149767 2004 QF_{2}	15.0	X	273.11112	259.77344	97.07296	9.98583	0.1057015	0.17512225	3.1640390	20	6 10.9	19.4
149768 2004 QP_{2}	15.8	X	359.27587	320.24012	6.10713	1.92714	0.0699765	0.18721447	3.0262847	20	9 10.4	19.5
149769 2004 QM_{9}	14.5	X	128.43071	315.49778	82.86802	6.70481	0.0755415	0.15504373	3.4316257	20	3 3.7	19.6
149770 2004 QO_{10}	15.0	X	15.25516	122.97412	101.22531	11.64658	0.0327244	0.17006835	3.2264161	20	5 21.9	19.5
149771 2004 RP_{22}	15.7	X	99.27455	324.66977	13.44117	1.93803	0.1246403	0.20420312	2.8560193	20	—	—
149772 2004 RN_{27}	14.2	X	81.03401	205.00324	359.31019	17.64679	0.0852333	0.17570897	3.1569917	20	8 4.1	18.9
149773 2004 RE_{37}	15.2	X	28.70674	248.08223	13.43310	6.17975	0.0633253	0.18121397	3.0927271	20	7 30.8	19.3
149774 2004 RH_{107}	14.4	X	281.32492	181.01893	274.65259	4.90523	0.2501162	0.12599759	3.9405899	20	9 23.7	19.8
149775 2004 RV_{121}	16.0	X	25.38073	213.54533	64.58778	1.78042	0.1440065	0.18332857	3.0688991	20	8 25.6	19.7
149776 2004 RU_{152}	14.2	X	28.95339	217.73834	259.19296	8.65639	0.0253152	0.15178068	3.4806342	20	1 26.1	19.1
149777 2004 RX_{208}	14.9	X	151.08814	295.61934	294.45085	14.98663	0.0450964	0.19639763	2.9311985	20	11 12.8	19.5
149778 2004 RQ_{215}	14.7	X	85.26211	322.49306	321.98648	15.02772	0.0570587	0.18995515	2.9971053	20	11 1.8	19.4
149779 2004 RY_{255}	14.4	X	1.75845	188.00295	129.75536	17.94252	0.1110043	0.18010348	3.1054269	20	9 7.6	18.3
149780 2004 RN_{313}	15.1	X	118.20837	232.47193	350.98191	8.49342	0.0325265	0.18546807	3.0452524	20	9 28.1	19.4
149781 2004 RV_{321}	15.0	X	51.35038	60.66887	201.84614	6.70046	0.2178780	0.18360239	3.0658471	20	9 21.7	19.1
149782 2004 RZ_{343}	15.3	X	132.77036	116.92300	158.71667	8.62855	0.1798412	0.19899948	2.9055928	20	12 23.1	20.3
149783 2004 TH_{87}	15.7	X	158.62417	115.86595	29.48362	1.16627	0.1235222	0.17489755	3.1667484	20	8 11.4	20.6
149784 2004 TM_{221}	14.8	X	53.56851	295.75342	324.17273	13.31388	0.1624691	0.18003324	3.1062346	20	9 9.8	19.1
149785 2005 BW_{5}	16.1	X	250.78926	354.15310	50.18375	4.15226	0.0532945	0.22487932	2.6781591	20	7 25.2	19.7
149786 2005 EG_{28}	16.3	X	283.83804	234.63854	12.05097	8.27940	0.1212748	0.25604854	2.4561479	20	1 29.7	19.8
149787 2005 ER_{94}	16.8	X	180.82363	135.96323	83.44492	4.51133	0.1469975	0.29648770	2.2274003	20	12 18.3	19.6
149788 2005 EY_{323}	16.8	X	291.21528	124.58795	73.86413	2.09484	0.0809749	0.30958076	2.1641469	20	—	—
149789 2005 GS_{5}	16.7	X	86.53921	259.18574	77.35198	4.16381	0.2398029	0.29535150	2.2331091	20	—	—
149790 2005 GK_{20}	16.8	X	174.65002	178.81672	37.08564	6.16337	0.0757607	0.29343484	2.2428226	20	12 13.0	19.8
149791 2005 GU_{23}	16.6	X	113.21674	211.04450	69.15499	6.92507	0.1784878	0.29044594	2.2581832	20	12 27.8	20.1
149792 2005 GW_{24}	16.8	X	357.45130	82.66825	148.75793	4.59948	0.2259730	0.26307031	2.4122454	20	4 22.2	18.3
149793 2005 GO_{126}	17.0	X	249.01893	37.99371	215.40545	1.48354	0.1277030	0.24627054	2.5207382	20	—	—
149794 2005 GS_{144}	16.9	X	145.42194	245.42408	97.98569	5.76811	0.2144874	0.30643987	2.1789096	20	1 8.3	19.8
149795 2005 GG_{153}	16.8	X	144.79823	144.90987	88.85944	6.07603	0.1024519	0.28951682	2.2630120	20	12 1.1	19.9
149796 2005 HH_{7}	17.4	X	339.61532	99.86373	167.02490	1.57143	0.1368663	0.26741605	2.3860401	20	5 15.8	19.5
149797 2005 JR_{29}	16.3	X	324.49239	125.08419	106.27041	3.07476	0.1311054	0.25508536	2.4623268	20	2 28.7	19.2
149798 2005 JH_{34}	16.9	X	134.30074	232.95840	97.09006	8.72458	0.2453167	0.29812248	2.2192500	20	—	—
149799 2005 JL_{45}	16.7	X	149.58143	239.41263	118.89476	23.58537	0.0885418	0.37717782	1.8971658	20	1 3.9	18.6
149800 2005 JR_{104}	16.3	X	96.33447	99.61607	177.61970	12.35432	0.1693214	0.21929339	2.7234476	20	11 28.5	20.8
149801 2005 JC_{133}	16.0	X	5.21456	35.63853	165.56536	5.29363	0.1489428	0.19229646	2.9727281	20	4 3.8	19.2
149802 2005 JR_{148}	16.2	X	289.05261	215.20067	118.08204	3.34027	0.2225871	0.26909606	2.3760988	20	5 13.4	19.0
149803 2005 KX_{12}	16.0	X	257.88431	141.85256	170.51219	5.41221	0.2128819	0.18770561	3.0210034	20	3 17.7	20.8
149804 2005 KC_{13}	16.7	X	62.10287	32.21811	227.86097	6.19082	0.0997695	0.27599914	2.3363123	20	9 27.8	19.8
149805 2005 LP_{13}	16.4	X	6.88550	277.75714	92.64214	14.37999	0.3350258	0.21444952	2.7643053	20	—	—
149806 2005 LL_{22}	16.8	X	222.36621	356.85138	166.91032	3.49987	0.0696902	0.29114149	2.2545852	20	12 5.4	19.5
149807 2005 LY_{32}	16.5	X	245.21874	261.11771	79.96366	7.20823	0.1493519	0.25769643	2.4456658	20	4 14.5	20.2
149808 2005 LZ_{32}	17.3	X	127.55096	23.87449	178.71854	2.62400	0.1150215	0.28083445	2.3094175	20	10 1.6	20.5
149809 2005 MB_{2}	17.0	X	297.50427	145.15089	108.33450	25.34026	0.1136827	0.38215020	1.8806731	20	2 6.0	19.2
149810 2005 MT_{2}	16.6	X	359.23400	180.97967	135.65719	3.07627	0.2118650	0.26591084	2.3950359	20	9 27.4	18.5
149811 2005 MZ_{8}	15.4	X	52.96770	95.87355	137.56184	10.34630	0.0249033	0.19651425	2.9300386	20	7 21.2	19.3
149812 2005 MN_{26}	16.4	X	205.27423	53.92557	312.53377	1.82850	0.1778228	0.24556929	2.5255347	20	4 3.2	20.4
149813 2005 MJ_{32}	16.6	X	302.72799	70.08038	281.47036	2.42502	0.1867396	0.26037651	2.4288546	20	7 7.6	19.0
149814 2005 MF_{34}	15.4	X	197.79993	282.21848	131.44933	11.83699	0.0543953	0.18670448	3.0317931	20	6 2.4	20.0
149815 2005 MG_{34}	16.6	X	43.98094	206.54132	134.29579	5.26528	0.1388542	0.27774278	2.3265240	20	12 30.2	19.6
149816 2005 MS_{37}	15.1	X	354.09961	95.34984	133.25922	10.34232	0.0518145	0.18431515	3.0579381	20	4 29.0	19.3
149817 2005 MP_{41}	16.4	X	115.11196	84.37206	352.82279	0.72840	0.0488567	0.24302849	2.5431068	20	3 20.9	19.8
149818 2005 MD_{49}	16.1	X	203.59842	61.23020	265.39177	4.61539	0.0710228	0.23880579	2.5729982	20	2 12.7	19.8
149819 2005 NJ	15.1	X	209.81970	88.50407	307.30925	14.92374	0.2522538	0.17955032	3.1118018	20	5 8.5	20.8
149820 2005 NY	16.1	X	5.90132	30.37129	266.42853	13.96632	0.2468309	0.26935644	2.3745673	20	9 4.9	18.4
149821 2005 NE_{9}	16.8	X	20.90282	291.93994	143.53561	5.85500	0.1266864	0.28992711	2.2608765	20	—	—
149822 2005 NM_{11}	16.1	X	279.85322	262.95272	125.61365	7.94861	0.1783559	0.26175655	2.4203101	20	7 25.6	18.8
149823 2005 NN_{27}	17.7	X	214.08712	46.61321	276.37285	6.43427	0.0494833	0.30869297	2.1682943	20	2 10.9	20.6
149824 2005 ND_{30}	16.3	X	307.89008	275.10890	121.68418	5.61689	0.2369967	0.26802618	2.3824177	20	9 30.1	17.8
149825 2005 NK_{39}	16.0	X	323.53684	325.82169	11.42041	5.65608	0.2231106	0.26346936	2.4098091	20	7 28.1	17.8
149826 2005 NN_{39}	15.8	X	214.29555	331.86866	21.09327	6.38504	0.2185937	0.24590540	2.5232329	20	3 26.3	20.0
149827 2005 NQ_{58}	16.8	X	31.11526	189.52185	198.12286	1.47408	0.1086038	0.21293214	2.7774222	20	—	—
149828 2005 NZ_{62}	16.9	X	49.22503	356.11679	327.52554	1.69290	0.2239908	0.27534243	2.3400257	20	12 23.8	20.3
149829 2005 NP_{65}	17.0	X	3.70597	186.58801	192.68580	1.38343	0.0553371	0.27761584	2.3272331	20	12 15.6	19.7
149830 2005 NK_{99}	16.0	X	355.05081	217.56466	127.52344	10.16558	0.1070086	0.26760473	2.3849184	20	10 23.7	18.7
149831 2005 NG_{101}	15.6	X	198.09537	199.38670	169.63568	11.07738	0.2315558	0.17686863	3.1431770	20	4 5.5	21.0
149832 2005 OS_{6}	16.3	X	324.20715	298.15846	41.78362	2.99916	0.2178201	0.26081864	2.4261089	20	8 2.9	17.9
149833 2005 OO_{11}	16.6	X	121.03025	193.73499	128.09002	7.17406	0.1571174	0.28790363	2.2714575	20	—	—
149834 2005 OT_{14}	16.6	X	5.62069	63.73860	292.46474	1.28694	0.2155085	0.26904746	2.3763849	20	12 8.9	18.9
149835 2005 OR_{15}	15.5	X	149.22451	158.82868	247.02491	11.28544	0.2176955	0.24013885	2.5634672	20	4 1.8	19.8
149836 2005 OO_{19}	16.4	X	229.51078	312.29518	133.89509	5.52934	0.0839824	0.26317438	2.4116094	20	8 22.2	19.4
149837 2005 OX_{20}	16.1	X	288.01410	248.21929	128.07515	7.22675	0.1158416	0.26035533	2.4289863	20	7 31.5	18.6
149838 2005 OZ_{21}	16.4	X	288.07578	236.15366	140.74334	5.95619	0.0985293	0.26041860	2.4285929	20	8 3.9	19.1
149839 2005 OP_{27}	16.5	X	259.23601	114.79800	307.10276	5.34539	0.1681113	0.19241329	2.9715246	20	8 7.3	20.8
149840 2005 PO_{1}	16.6	X	349.88098	229.57912	120.20790	6.47443	0.1474158	0.26801053	2.3825104	20	10 24.2	18.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149841 2005 PT_{2}	16.6	X	165.74213	3.35568	317.81977	6.92920	0.1232859	0.29707666	2.2244553	20	—	—
149842 2005 PP_{6}	15.9	X	253.83901	290.41070	69.95280	6.53798	0.1439368	0.25226303	2.4806585	20	5 17.5	19.4
149843 2005 PX_{15}	16.6	X	262.40544	241.79413	121.85504	4.81767	0.2021695	0.25269579	2.4778255	20	5 24.9	20.1
149844 2005 PC_{18}	15.1	X	198.73486	351.77536	27.39837	16.49484	0.2238371	0.24429091	2.5343378	20	4 14.2	19.3
149845 2005 PE_{20}	15.9	X	170.25140	234.64828	88.68615	12.69898	0.1440545	0.23174362	2.6250093	20	1 12.2	19.9
149846 2005 PY_{20}	15.9	X	329.97033	206.94730	143.29909	6.00777	0.1716550	0.26486428	2.4013407	20	9 8.8	17.6
149847 2005 QO_{1}	16.3	X	163.64618	177.89767	250.09243	4.48272	0.1139449	0.24685441	2.5167618	20	5 11.0	19.9
149848 2005 QX_{3}	16.6	X	320.41763	200.41859	167.65883	4.54779	0.1912562	0.26292342	2.4131438	20	9 12.8	18.3
149849 2005 QH_{6}	16.3	X	216.57180	134.01608	257.33874	2.19059	0.2099390	0.17976146	3.1093646	20	5 14.5	21.5
149850 2005 QN_{8}	16.5	X	328.42666	202.49449	140.30661	1.86195	0.2026793	0.26224142	2.4173258	20	8 19.8	17.9
149851 2005 QS_{9}	16.4	X	339.92733	187.03879	266.97143	5.14898	0.0423754	0.21794299	2.7346859	20	—	—
149852 2005 QB_{10}	15.0	X	59.98671	251.53618	170.63211	17.37884	0.0798955	0.15939197	3.3689282	20	1 5.2	19.8
149853 2005 QX_{26}	16.4	X	24.32411	212.23495	95.85410	3.81884	0.2033304	0.26615666	2.3935609	20	10 30.4	19.0
149854 2005 QF_{31}	16.7	X	2.33772	355.36284	348.14899	5.37859	0.1758284	0.26965373	2.3728216	20	11 6.2	19.1
149855 2005 QZ_{40}	16.5	X	88.01133	34.98885	316.78771	5.86977	0.2008149	0.28428132	2.2907120	20	—	—
149856 2005 QG_{46}	17.2	X	287.01241	50.43529	107.54362	2.89596	0.0581139	0.28557829	2.2837712	20	—	—
149857 2005 QT_{52}	16.5	X	349.40087	335.68049	25.30409	2.72555	0.2259181	0.26977635	2.3721026	20	11 17.1	18.2
149858 2005 QS_{53}	16.8	X	88.41029	184.70978	148.75070	4.79601	0.0939005	0.28299594	2.2976431	20	—	—
149859 2005 QA_{55}	15.7	X	265.97915	228.29822	101.57078	3.11576	0.1718848	0.18206928	3.0830336	20	4 21.5	20.2
149860 2005 QA_{56}	15.9	X	94.03269	325.53653	13.16479	3.59384	0.1863399	0.21595743	2.7514225	20	—	—
149861 2005 QA_{63}	16.2	X	58.08678	252.58509	154.32607	8.42706	0.1376708	0.22052091	2.7133316	20	—	—
149862 2005 QR_{72}	15.6	X	117.56301	25.35581	334.99501	7.40485	0.0760800	0.22300990	2.6931050	20	—	—
149863 2005 QP_{74}	16.0	X	47.86131	348.80233	22.74000	3.07196	0.0971192	0.21130770	2.7916384	20	—	—
149864 2005 QE_{83}	16.7	X	27.01930	130.16843	217.93221	1.64829	0.1420481	0.27280608	2.3545072	20	12 18.1	19.4
149865 Michelhernandez	16.5	X	74.69721	335.93763	99.51959	3.43992	0.1901338	0.22963682	2.6410403	20	2 15.7	19.4
149866 2005 QV_{90}	16.2	X	26.51023	258.45598	147.83777	4.45824	0.1003949	0.21393696	2.7687187	20	—	—
149867 2005 QX_{90}	17.1	X	261.71981	119.84037	154.66777	3.11667	0.1803797	0.30564250	2.1826975	20	1 26.1	20.3
149868 2005 QH_{95}	16.7	X	57.65684	209.57250	116.76874	3.85640	0.1832549	0.27692500	2.3311020	20	12 31.6	20.0
149869 2005 QF_{106}	16.8	X	172.54917	206.21821	81.20291	3.41077	0.1250098	0.29129161	2.2538105	20	—	—
149870 2005 QT_{121}	16.7	X	33.72218	277.63451	243.96199	1.56719	0.1308099	0.23985596	2.5654824	20	3 24.3	19.2
149871 2005 QQ_{137}	16.8	X	78.61724	22.64187	40.31004	2.50156	0.0764947	0.22671698	2.6636675	20	1 20.1	20.1
149872 2005 QL_{140}	15.9	X	214.57585	335.77053	38.35146	1.46038	0.1937330	0.17652083	3.1473043	20	4 23.6	21.0
149873 2005 QA_{144}	14.8	X	227.92439	288.47113	24.83482	7.59288	0.1194168	0.17115217	3.2127809	20	3 2.2	19.8
149874 2005 QN_{146}	16.0	X	93.62676	236.99625	86.63782	6.96195	0.0287497	0.21684769	2.7438867	20	—	—
149875 2005 QB_{149}	15.2	X	350.53658	224.72009	218.72409	13.56410	0.1620484	0.21088641	2.7953551	20	—	—
149876 2005 QL_{157}	15.6	X	295.73886	59.06055	341.06799	10.88716	0.1316009	0.19275644	2.9679970	20	9 4.7	19.3
149877 2005 QK_{158}	15.9	X	108.97878	269.05660	149.64174	9.84595	0.0523982	0.23168094	2.6254828	20	2 19.7	19.4
149878 2005 QH_{164}	15.5	X	213.53443	51.06221	296.76451	12.55180	0.2893547	0.23940519	2.5687017	20	3 11.1	20.5
149879 2005 QB_{178}	16.4	X	267.87928	316.11344	48.22455	3.33297	0.1931413	0.25548569	2.4597539	20	6 1.2	19.6
149880 2005 QV_{178}	16.4	X	127.11754	117.28437	300.39057	8.43382	0.1140221	0.23448129	2.6045373	20	3 15.6	20.2
149881 2005 RZ	15.7	X	42.25531	356.72378	315.76804	13.74149	0.2365184	0.26956513	2.3733415	20	11 30.9	19.3
149882 2005 RM_{4}	16.5	X	223.71517	301.52907	13.31992	2.40289	0.1281182	0.23470536	2.6028794	20	2 20.7	20.6
149883 2005 RT_{4}	15.9	X	85.83951	226.93356	112.52153	22.80283	0.1714345	0.28419436	2.2911793	20	—	—
149884 Radebeul	15.2	X	132.04278	159.09824	12.45873	10.86826	0.0349442	0.18487409	3.0517715	20	8 16.2	19.7
149885 2005 RV_{11}	16.1	X	13.37042	12.36195	353.87270	1.55903	0.0781361	0.20263918	2.8706953	20	11 24.7	19.8
149886 2005 RX_{20}	15.6	X	21.46807	138.09601	310.81018	8.47947	0.1117918	0.21763858	2.7372353	20	—	—
149887 2005 RA_{22}	15.5	X	308.26076	221.04076	110.47462	1.31917	0.1422270	0.18767189	3.0213653	20	6 21.5	19.1
149888 2005 RK_{23}	16.4	X	45.32157	27.33030	265.27930	4.59434	0.1007449	0.26777408	2.3839128	20	10 19.0	19.3
149889 2005 RT_{23}	15.6	X	192.11798	356.79911	319.53274	10.81648	0.1113928	0.22726132	2.6594125	20	1 24.6	19.6
149890 2005 RV_{23}	16.0	X	256.37370	6.75573	289.07230	7.34519	0.1773448	0.23736490	2.5834004	20	2 21.7	20.0
149891 2005 RG_{27}	15.6	X	140.55289	31.62153	300.25775	10.77275	0.1933442	0.22302539	2.6929803	20	—	—
149892 2005 RA_{29}	15.2	X	150.34029	242.16750	174.83462	14.36085	0.1727975	0.23215699	2.6218925	20	4 20.6	19.5
149893 2005 RD_{30}	16.2	X	340.82483	208.59657	162.14780	5.89800	0.1736129	0.26557675	2.3970440	20	11 7.8	18.3
149894 2005 RD_{33}	15.8	X	81.16161	233.60936	128.36022	14.38615	0.1591372	0.21580146	2.7527481	20	—	—
149895 2005 RN_{44}	15.7	X	146.92203	215.79887	102.63125	8.58502	0.0975304	0.21964082	2.7205748	20	—	—
149896 2005 SD_{1}	15.9	X	24.38630	142.09267	215.55397	1.98142	0.1611364	0.20175628	2.8790642	20	12 11.0	19.5
149897 2005 ST_{7}	16.2	X	247.17634	237.57319	10.36375	1.62946	0.0124157	0.22322497	2.6913749	20	1 2.3	19.7
149898 2005 SG_{8}	14.7	X	216.99755	341.68086	50.60051	11.49798	0.0696244	0.17697497	3.1419178	20	5 23.9	19.3
149899 2005 SC_{20}	17.0	X	221.10325	194.00027	96.71964	4.39392	0.1389708	0.29664052	2.2266352	20	1 11.4	20.4
149900 2005 SK_{24}	15.9	X	132.05433	246.69019	105.95583	6.86221	0.0329342	0.22365465	2.6879267	20	—	—
149901 2005 SK_{35}	15.9	X	264.88981	10.02650	111.92666	3.09554	0.0181555	0.20296714	2.8676021	20	11 23.5	19.8
149902 2005 SR_{35}	15.1	X	207.23285	24.45439	35.90501	9.86570	0.0825626	0.17924347	3.1153522	20	6 16.5	19.9
149903 2005 SE_{37}	16.2	X	278.98403	122.75816	20.16872	3.09327	0.0932678	0.20995662	2.8036018	20	12 31.8	19.6
149904 2005 SB_{38}	15.9	X	331.53045	330.56328	54.92431	2.31141	0.0992787	0.19889977	2.9065638	20	10 18.5	19.2
149905 2005 SF_{45}	16.4	X	323.20465	23.97596	243.91019	3.04157	0.0837301	0.24266826	2.5456229	20	4 24.3	19.3
149906 2005 SM_{45}	15.6	X	314.14942	291.37116	208.44904	8.57961	0.0990027	0.21385025	2.7694671	20	—	—
149907 2005 SB_{46}	16.8	X	90.24286	46.19999	241.14628	1.86496	0.1611043	0.27223230	2.3578144	20	12 12.0	20.3
149908 2005 SO_{50}	16.2	X	316.79233	252.96331	183.44123	1.81705	0.0436508	0.20304923	2.8668292	20	12 2.6	19.9
149909 2005 SY_{52}	15.1	X	194.55760	344.31920	31.48064	6.42802	0.1423236	0.17149344	3.2085173	20	4 10.6	20.4
149910 2005 SA_{66}	14.3	X	165.15637	52.49757	36.08431	23.41633	0.1003457	0.17611988	3.1520792	20	6 2.7	19.5
149911 2005 SE_{69}	16.8	X	291.87134	21.77575	258.85573	2.15036	0.0717350	0.24086524	2.5583108	20	3 28.7	20.2
149912 2005 SL_{73}	14.7	X	192.12611	358.21318	41.56771	9.71978	0.0995229	0.17220425	3.1996819	20	5 6.3	19.7
149913 2005 SU_{73}	15.5	X	58.25661	27.92756	331.64375	12.09862	0.1800421	0.27788865	2.3257097	20	—	—
149914 2005 SB_{76}	16.5	X	265.32730	233.24840	182.27262	0.43667	0.1451616	0.19013924	2.9951705	20	8 10.0	20.5
149915 2005 SA_{88}	16.6	X	12.40964	169.98250	22.12113	4.92354	0.0650521	0.23769626	2.5809989	20	3 30.6	19.7
149916 2005 SK_{101}	16.3	X	96.74615	126.36058	322.13910	3.12642	0.0760035	0.23119925	2.6291282	20	3 15.9	19.7
149917 2005 SN_{102}	16.0	X	226.91091	318.63051	276.57122	4.24239	0.0318541	0.21776721	2.7361573	20	—	—
149918 2005 SU_{105}	15.7	X	150.41625	214.24984	151.82256	4.17444	0.2010766	0.22614679	2.6681430	20	2 18.4	20.0
149919 2005 SR_{106}	15.9	X	268.76352	39.04101	3.35622	1.94248	0.0781084	0.18936415	3.0033379	20	8 8.2	20.1
149920 2005 SH_{112}	15.7	X	164.09612	37.16835	322.49261	10.99007	0.0616732	0.23050781	2.6343832	20	2 12.6	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
149921 2005 SZ_{112}	15.8	X	269.11122	74.11338	320.88023	8.17810	0.1786955	0.18653039	3.0336792	20	7 15.3	20.1
149922 2005 SF_{113}	15.2	X	347.06741	311.72222	18.57231	6.74268	0.1185034	0.19253231	2.9702999	20	8 31.9	18.6
149923 2005 SK_{114}	16.4	X	164.11185	46.91471	311.38454	2.02830	0.0992846	0.23015315	2.6370889	20	2 13.9	20.2
149924 2005 SS_{116}	16.1	X	136.34159	199.12175	157.29332	6.41602	0.0596171	0.22407896	2.6845325	20	1 7.6	19.9
149925 2005 SL_{119}	16.0	X	203.64365	207.69687	105.01073	8.42034	0.2050902	0.23127264	2.6285720	20	1 31.3	20.5
149926 2005 SU_{124}	16.7	X	46.47677	84.75725	241.67858	2.03618	0.0786713	0.26969535	2.3725775	20	12 4.3	19.7
149927 2005 SB_{125}	16.0	X	190.80404	167.56845	158.80332	4.26313	0.1727153	0.23115843	2.6294377	20	2 3.9	20.2
149928 2005 SP_{144}	16.4	X	22.66486	315.51472	136.16991	2.93963	0.0523747	0.21993445	2.7181529	20	—	—
149929 2005 SV_{149}	16.5	X	288.13686	238.92138	40.50091	4.96739	0.1105400	0.23889214	2.5723781	20	3 19.7	20.0
149930 2005 SP_{152}	14.7	X	218.20854	10.22203	56.22861	10.61498	0.0799630	0.17945761	3.1128734	20	7 7.9	19.5
149931 2005 SY_{155}	16.5	X	170.54912	222.35412	324.55993	1.76819	0.1419553	0.26479159	2.4017802	20	10 21.3	20.1
149932 2005 SC_{166}	15.2	X	200.37752	300.29856	88.06543	5.89909	0.0963433	0.17451504	3.1713740	20	5 2.9	20.1
149933 2005 SQ_{179}	15.9	X	23.82103	307.23223	30.32485	6.54975	0.0706101	0.20097063	2.8865627	20	11 1.2	19.6
149934 2005 SD_{191}	15.0	X	171.86152	342.34052	70.72497	6.23988	0.1528244	0.17111862	3.2132008	20	5 5.0	20.2
149935 2005 SQ_{193}	16.1	X	255.82704	247.90462	12.27080	3.40447	0.1709498	0.22844450	2.6502219	20	1 14.4	20.2
149936 2005 SG_{195}	16.0	X	307.68682	173.65604	243.69377	5.30214	0.0971994	0.26935998	2.3745465	20	11 8.4	18.2
149937 2005 SH_{209}	14.9	X	214.61437	272.70551	129.63465	11.01707	0.0995596	0.17715181	3.1398265	20	6 3.7	19.8
149938 2005 ST_{210}	16.4	X	274.39283	214.87880	352.53297	5.60539	0.0962212	0.28967281	2.2621994	20	—	—
149939 2005 SZ_{216}	15.7	X	118.32632	251.67337	83.07974	3.24433	0.0784045	0.21533891	2.7566886	20	—	—
149940 2005 ST_{219}	16.2	X	304.36535	228.43152	336.47983	3.60632	0.0336439	0.22836461	2.6508400	20	1 15.8	19.7
149941 2005 SM_{221}	16.1	X	14.20932	40.91855	248.81292	0.60978	0.0495870	0.18711571	3.0273494	20	8 12.9	20.0
149942 2005 SB_{233}	16.1	X	13.23569	183.62134	203.20400	1.52309	0.0754639	0.20331456	2.8643345	20	12 20.6	19.8
149943 2005 SV_{249}	16.4	X	279.79192	297.92517	153.33302	7.32233	0.0692879	0.27016499	2.3698272	20	11 15.8	19.2
149944 2005 SD_{250}	16.7	X	245.22625	184.49125	134.70839	4.11624	0.1416465	0.24165293	2.5527484	20	3 17.3	20.5
149945 2005 SW_{250}	14.8	X	248.72390	328.74709	48.52860	10.49402	0.1080574	0.17992910	3.1074330	20	6 5.5	19.4
149946 2005 SK_{251}	16.3	X	30.44826	330.97118	47.53586	3.91476	0.1777560	0.21079634	2.7961513	20	—	—
149947 2005 SG_{257}	16.4	X	210.42070	206.83664	113.38862	3.69913	0.1541527	0.23439911	2.6051460	20	2 14.4	20.5
149948 2005 TG_{1}	15.8	X	117.64373	62.88937	294.84447	5.53421	0.0656554	0.22268819	2.6956981	20	—	—
149949 2005 TM_{9}	16.0	X	265.50484	35.66728	160.33141	3.31500	0.0336286	0.21660599	2.7459275	20	—	—
149950 2005 TW_{13}	16.2	X	238.56190	141.71685	16.99791	7.55958	0.0483043	0.27440233	2.3453672	20	12 18.9	19.1
149951 Hildakowalski	16.5	X	52.46950	226.97423	88.93745	6.44573	0.1527754	0.27378709	2.3488795	20	12 8.9	19.5
149952 2005 TK_{15}	16.6	X	73.10857	324.11766	319.42448	7.23818	0.1228356	0.26754892	2.3852501	20	11 12.9	20.1
149953 2005 TD_{31}	15.7	X	7.76820	8.60957	34.82549	4.84969	0.0691984	0.20903166	2.8118663	20	—	—
149954 2005 TV_{48}	16.0	X	41.65037	184.33925	126.80489	2.95861	0.0415821	0.19775990	2.9177219	20	10 19.7	19.9
149955 Maron	16.2	X	40.86974	304.26831	300.39188	13.74516	0.0905571	0.25484140	2.4638980	20	8 1.9	19.0
149956 2005 TE_{54}	15.9	X	327.55112	292.92206	66.31115	2.10793	0.0896622	0.19228395	2.9728571	20	9 6.3	19.6
149957 2005 TJ_{72}	15.1	X	243.18786	260.15065	134.06234	10.32461	0.1381657	0.18006403	3.1058805	20	6 19.0	20.0
149958 2005 TY_{73}	15.7	X	69.54753	285.02111	120.42249	6.29363	0.0565387	0.21722561	2.7407034	20	—	—
149959 2005 TF_{74}	15.0	X	327.50122	263.74933	80.80443	11.09012	0.1139856	0.18816259	3.0161101	20	8 18.2	18.8
149960 2005 TV_{77}	16.1	X	130.04183	77.45607	202.98583	1.43741	0.0326389	0.20712388	2.8291063	20	12 25.7	20.2
149961 2005 TB_{90}	15.8	X	294.77221	301.43112	126.19276	3.00062	0.0460133	0.20000306	2.8958649	20	10 22.3	19.5
149962 2005 TQ_{95}	14.9	X	261.06098	235.67069	16.39391	13.33438	0.1701351	0.22866655	2.6485059	20	1 11.3	19.4
149963 2005 TP_{103}	16.5	X	57.74191	12.72668	289.34379	5.76385	0.1361306	0.26828832	2.3808656	20	11 22.6	19.8
149964 2005 TX_{104}	15.5	X	296.45403	67.10822	292.55788	3.97049	0.1434973	0.18501563	3.0502149	20	7 10.9	19.2
149965 2005 TB_{105}	15.3	X	277.19637	46.63560	309.32035	4.73098	0.1876109	0.18119593	3.0929324	20	6 1.9	19.7
149966 2005 TY_{106}	15.8	X	333.38219	337.18359	66.36755	2.89722	0.0363205	0.19965080	2.8992701	20	11 13.0	19.6
149967 2005 TK_{126}	15.8	X	180.80032	100.81381	37.85311	4.49088	0.0116790	0.18926051	3.0044343	20	8 31.5	20.0
149968 Trondal	16.3	X	339.56609	70.89525	91.53022	2.71426	0.0212990	0.22325304	2.6911494	20	1 9.4	19.9
149969 2005 TE_{154}	15.3	X	281.71353	20.54669	323.22421	5.28184	0.1497944	0.18160272	3.0883119	20	5 28.1	19.7
149970 2005 TF_{155}	16.5	X	137.76562	5.41939	339.98685	4.77305	0.0776776	0.22245062	2.6976171	20	—	—
149971 2005 TO_{159}	15.9	X	349.89060	237.46833	321.96877	3.72748	0.0306877	0.23284220	2.6167461	20	3 7.5	19.2
149972 2005 TQ_{180}	15.1	X	185.02254	288.63575	134.09688	5.99713	0.1563628	0.17467618	3.1694234	20	5 28.3	20.3
149973 2005 TV_{183}	16.1	X	147.75909	278.27997	157.73126	9.74569	0.0912153	0.24029911	2.5623373	20	5 6.5	20.0
149974 2005 TY_{191}	14.2	X	194.46680	33.45525	265.00474	8.69292	0.0607512	0.15230252	3.4726792	20	1 12.6	19.4
149975 2005 UY_{1}	15.7	X	197.86457	235.75125	217.89935	0.37469	0.1030087	0.17993563	3.1073579	20	7 17.8	20.5
149976 2005 UO_{6}	15.2	X	6.72241	46.86577	226.05750	2.70679	0.0625526	0.17987189	3.1080919	20	7 10.6	19.1
149977 2005 UK_{9}	16.1	X	149.10471	334.12814	112.17786	4.78376	0.0481856	0.24042941	2.5614015	20	5 16.7	19.6
149978 2005 UP_{9}	16.2	X	80.35161	352.38907	62.56848	2.93522	0.0869253	0.22184520	2.7025228	20	1 14.3	19.4
149979 2005 UK_{10}	15.6	X	6.86770	314.72932	152.68956	6.45564	0.0610120	0.21663485	2.7456837	20	—	—
149980 2005 UU_{19}	15.5	X	335.38501	138.51297	46.21886	10.13022	0.1701928	0.21959808	2.7209278	20	1 14.3	18.9
149981 2005 UO_{22}	16.5	X	193.52619	71.03244	248.52925	3.12905	0.1918538	0.22828226	2.6514775	20	1 29.5	21.0
149982 2005 UJ_{23}	15.5	X	63.03749	322.02079	345.46211	1.37603	0.0748315	0.19924761	2.9031800	20	11 14.1	19.6
149983 2005 UF_{55}	15.1	X	230.48049	3.37559	32.17818	12.00404	0.1268186	0.17682020	3.1437509	20	6 5.7	20.1
149984 2005 UT_{56}	15.9	X	270.23166	347.70133	308.36752	4.82634	0.1082192	0.23654087	2.5893967	20	3 15.7	19.6
149985 2005 UL_{57}	16.3	X	70.96492	138.26553	32.02068	5.03068	0.0929472	0.24041163	2.5615278	20	6 1.9	19.4
149986 2005 UV_{58}	15.5	X	328.30113	78.37487	267.43382	1.62580	0.1618267	0.18715735	3.0269004	20	8 13.1	18.8
149987 2005 UW_{62}	15.9	X	79.01986	238.06614	74.88008	3.16536	0.0440666	0.20000604	2.8958361	20	12 6.2	20.1
149988 2005 UK_{64}	15.2	X	289.04680	298.38154	97.38804	7.71224	0.0801438	0.18654318	3.0335405	20	8 29.3	19.3
149989 2005 UD_{68}	15.4	X	290.96027	294.35818	90.23464	5.29681	0.0935185	0.18725644	3.0258324	20	8 14.1	19.3
149990 2005 UM_{68}	15.5	X	184.29229	221.74014	130.86737	12.49231	0.0232255	0.22919114	2.6444630	20	2 27.2	19.2
149991 2005 UA_{71}	15.7	X	43.39765	177.24337	341.99491	8.40740	0.1785548	0.23111936	2.6297340	20	4 11.5	18.4
149992 2005 UC_{71}	15.5	X	208.64237	300.32051	347.91572	10.93831	0.0569369	0.22397268	2.6853816	20	1 7.7	19.6
149993 2005 UN_{72}	15.0	X	105.14359	244.90462	48.51223	9.66413	0.0944911	0.20379330	2.8598469	20	12 15.8	19.5
149994 2005 UZ_{73}	14.8	X	281.32721	262.84164	78.77886	6.66640	0.0435982	0.17513066	3.1639377	20	6 10.6	19.0
149995 2005 UH_{75}	15.3	X	169.81101	37.41127	297.93549	13.04774	0.2156422	0.22765947	2.6563109	20	1 29.5	19.8
149996 2005 UM_{114}	14.8	X	216.53253	300.49769	92.62434	10.01350	0.0946899	0.17446038	3.1720365	20	5 25.3	19.7
149997 2005 UT_{124}	15.1	X	293.96777	52.10383	239.19311	5.73232	0.0589960	0.16981270	3.2296536	20	4 20.9	19.7
149998 2005 UK_{130}	15.4	X	255.07131	147.97003	107.06550	14.29657	0.1399456	0.22464143	2.6800495	20	1 9.5	19.6
149999 2005 UH_{132}	14.6	X	267.31210	45.45750	78.56829	18.38363	0.0818824	0.19802650	2.9151026	20	11 22.2	18.5
150000 2005 UC_{142}	14.5	X	226.87217	349.21870	77.50281	12.72942	0.0489731	0.18083150	3.0970864	20	7 22.3	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150001 2005 UJ_{151}	15.9	X	79.37232	328.30018	36.63473	3.34583	0.1019324	0.21081322	2.7960020	20	—	—
150002 2005 UZ_{155}	15.4	X	225.87765	314.11355	123.20230	11.87554	0.0981155	0.18324887	3.0697889	20	7 28.0	20.0
150003 2005 UH_{159}	15.5	X	270.40866	249.97678	94.75909	4.39794	0.1425157	0.17715657	3.1397703	20	5 18.4	20.1
150004 2005 UG_{163}	15.9	X	265.13625	172.75174	354.72342	2.25117	0.0372958	0.20839697	2.8175726	20	—	—
150005 2005 UG_{166}	15.8	X	46.99197	248.24834	18.86426	1.05111	0.1051094	0.18895845	3.0076353	20	9 7.0	19.8
150006 2005 UO_{200}	15.7	X	284.34347	44.57810	212.70822	6.33994	0.1645007	0.22976800	2.6400350	20	2 5.5	19.6
150007 2005 UD_{204}	15.3	X	204.78686	280.07140	164.34698	1.25221	0.0154597	0.17970377	3.1100301	20	7 19.5	19.8
150008 2005 UD_{216}	15.2	X	265.48567	296.60398	88.85104	3.11070	0.0659062	0.18195705	3.0843013	20	7 13.8	19.4
150009 2005 UY_{216}	16.3	X	22.35775	195.45675	133.95691	2.91868	0.0120555	0.19498577	2.9453310	20	10 13.5	20.3
150010 2005 UJ_{217}	15.1	X	31.81693	275.35147	61.99612	11.79328	0.1176953	0.19711979	2.9240350	20	11 18.5	18.8
150011 2005 UO_{231}	15.8	X	1.99184	238.61632	53.87537	1.62021	0.1684782	0.18514712	3.0487706	20	8 5.5	19.1
150012 2005 UQ_{241}	15.9	X	31.71896	42.51306	302.25199	2.54284	0.1100204	0.19729966	2.9222575	20	11 25.6	19.8
150013 2005 UU_{254}	15.9	X	284.81242	233.68242	114.65905	1.53660	0.1621290	0.18198684	3.0839647	20	6 6.4	20.1
150014 2005 UC_{343}	15.6	X	333.90855	254.30411	108.27002	11.66053	0.1561296	0.19440217	2.9512227	20	9 25.3	19.0
150015 2005 UD_{350}	15.0	X	257.38668	220.66229	141.70342	11.75544	0.1086444	0.17666749	3.1455623	20	5 31.4	19.8
150016 2005 UB_{353}	15.2	X	58.65460	123.14375	13.56149	13.70577	0.1298779	0.22888427	2.6468261	20	4 3.6	18.1
150017 2005 UY_{382}	15.4	X	325.61789	206.03861	103.43443	5.80063	0.1571381	0.18125769	3.0922297	20	6 18.6	19.1
150018 2005 UF_{386}	15.3	X	78.24721	206.23259	137.75855	14.09588	0.1300562	0.21051676	2.7986264	20	—	—
150019 2005 UB_{398}	15.8	X	72.83947	92.91389	302.61276	5.38029	0.0159250	0.21559504	2.7545048	20	—	—
150020 2005 UQ_{402}	16.3	X	308.79006	140.86423	87.10267	3.07563	0.0187190	0.22983573	2.6395163	20	2 22.6	19.7
150021 2005 UB_{448}	15.6	X	297.22520	196.90002	331.93486	3.92431	0.0539113	0.21532398	2.7568160	20	—	—
150022 2005 UB_{485}	15.7	X	108.88610	223.49402	122.95668	7.21874	0.0642974	0.21449678	2.7638992	20	—	—
150023 2005 UK_{493}	15.4	X	157.73404	195.15159	115.66705	14.59695	0.0985951	0.22062209	2.7125019	20	—	—
150024 2005 UM_{493}	15.6	X	112.22210	241.89289	138.60753	15.65710	0.0788602	0.22315260	2.6919568	20	1 11.2	19.4
150025 2005 VD_{6}	16.6	X	240.06924	209.55444	151.98409	3.19530	0.0172196	0.24125119	2.5555815	20	5 18.4	20.0
150026 2005 VU_{6}	15.1	X	2.71158	292.88410	23.70118	1.76392	0.1434157	0.18994937	2.9971661	20	9 8.7	18.3
150027 2005 VB_{13}	15.8	X	359.74042	12.83664	318.20135	2.28298	0.0629011	0.19069146	2.9893853	20	9 16.2	19.7
150028 2005 VH_{33}	14.8	X	135.83658	200.38633	270.26040	22.05999	0.1103158	0.24112510	2.5564724	20	6 6.9	18.7
150029 2005 VR_{34}	15.3	X	306.54236	142.10726	43.99177	27.85322	0.1548308	0.28730729	2.2745995	20	—	—
150030 2005 VD_{60}	15.3	X	244.90661	90.25013	321.59572	7.89763	0.1313979	0.18144290	3.0901251	20	7 14.4	19.9
150031 2005 VC_{97}	15.8	X	138.23028	73.84872	223.17468	3.35898	0.1820431	0.21095626	2.7947380	20	—	—
150032 2005 VE_{98}	15.8	X	64.50584	237.77486	46.05594	2.19625	0.0473510	0.19261680	2.9694313	20	10 13.4	19.9
150033 2005 VQ_{106}	15.1	X	266.56958	236.16988	222.19018	2.04771	0.1889561	0.12616616	3.9370790	20	9 19.4	20.6
150034 2005 VZ_{115}	16.0	X	203.55883	243.71701	13.02778	4.37777	0.0190006	0.21204870	2.7851311	20	—	—
150035 Williamson	14.8	X	314.55147	267.45142	66.76000	11.34494	0.0723517	0.17902483	3.1178881	20	7 14.3	19.0
150036 2005 WD_{3}	15.8	X	231.62316	181.85947	149.83069	5.19860	0.2517338	0.23703985	2.5857616	20	3 13.6	20.1
150037 2005 WX_{4}	14.4	X	168.57868	336.48097	81.81506	13.37222	0.0658955	0.16947136	3.2339888	20	5 8.4	19.4
150038 2005 WL_{19}	14.4	X	345.87859	174.06989	107.23026	17.84219	0.0784245	0.17337183	3.1853001	20	6 21.0	18.5
150039 2005 WZ_{159}	15.5	X	87.54296	243.05340	127.34814	9.50585	0.2647642	0.21805767	2.7337270	20	—	—
150040 2005 WJ_{163}	15.9	X	119.30651	289.44955	329.74936	1.00389	0.0357868	0.19433556	2.9518970	20	11 14.9	20.2
150041 2005 WO_{163}	14.6	X	56.17166	333.60954	269.56329	9.16298	0.1758479	0.17776577	3.1325929	20	8 24.1	19.0
150042 2005 WK_{179}	14.7	X	211.01414	319.90396	102.44190	12.70330	0.0346056	0.17446950	3.1719260	20	6 27.5	19.3
150043 2005 WA_{185}	14.3	X	39.06778	102.56919	136.85602	16.98309	0.0696855	0.17671174	3.1450371	20	7 14.7	18.6
150044 2005 WX_{187}	15.0	X	93.57228	354.74483	145.09555	13.91814	0.1036035	0.23210228	2.6223044	20	5 28.3	18.8
150045 2005 WC_{194}	14.9	X	96.13223	47.40629	121.18637	8.87371	0.0630281	0.17463615	3.1699077	20	6 28.2	19.5
150046 Cynthiaconrad	15.5	X	351.37880	308.71661	35.35166	10.94494	0.0325207	0.19443905	2.9508495	20	9 25.4	19.5
150047 2005 YB_{17}	16.3	X	310.24874	119.21201	121.30050	2.12763	0.1039061	0.22694408	2.6618903	20	2 27.9	19.7
150048 2005 YV_{94}	15.2	X	151.91238	28.47557	342.30201	12.54292	0.1750947	0.22577518	2.6710699	20	2 24.5	19.3
150049 2006 OE_{1}	16.0	X	62.48777	191.70850	120.07401	7.80605	0.0762936	0.22363320	2.6880986	20	11 26.3	19.9
150050 2006 PT_{12}	16.0	X	274.06938	157.50366	208.23746	1.45167	0.0836242	0.20291201	2.8681216	20	6 27.2	19.9
150051 2006 QM_{10}	17.0	X	304.74080	306.04829	38.75305	4.07680	0.2085492	0.27716247	2.3297703	20	6 28.1	19.2
150052 2006 QO_{10}	16.0	X	354.88598	209.90363	122.52110	4.25207	0.0973447	0.21253786	2.7808561	20	9 19.1	19.2
150053 2006 QW_{54}	16.3	X	94.31244	154.95403	160.11453	2.37773	0.2014611	0.22910830	2.6451005	20	—	—
150054 2006 QO_{62}	16.2	X	197.94226	358.96334	34.10466	3.30309	0.1983791	0.26243783	2.4161196	20	4 29.8	20.3
150055 2006 QM_{113}	16.6	X	304.31528	124.64340	193.36201	10.29586	0.2603669	0.27136466	2.3628375	20	5 8.1	19.2
150056 2006 QN_{137}	16.6	X	63.88556	267.86088	119.92770	8.73518	0.1383530	0.23378151	2.6097322	20	—	—
150057 2006 QT_{144}	15.8	X	291.51542	246.32077	175.17562	7.68716	0.2144213	0.21069251	2.7970699	20	9 17.9	19.0
150058 2006 QJ_{147}	16.6	X	241.14775	132.09883	161.98419	4.92980	0.1283397	0.25410366	2.4686647	20	2 8.8	20.4
150059 2006 QA_{169}	15.3	X	25.10328	112.06930	5.33237	15.07705	0.1818768	0.23531485	2.5983829	20	1 7.8	18.1
150060 2006 RL_{4}	17.0	X	43.63283	185.86224	161.75892	2.00562	0.0963285	0.29428054	2.2385236	20	—	—
150061 2006 RE_{10}	15.8	X	259.09293	339.91625	350.94367	1.11728	0.0593291	0.19031290	2.9933481	20	4 26.9	20.1
150062 2006 RN_{17}	15.3	X	67.92585	10.26041	312.45753	11.04798	0.0970994	0.22276258	2.6950979	20	12 16.9	19.4
150063 2006 RA_{40}	17.1	X	243.62877	290.66066	54.07009	3.21784	0.2288465	0.26250187	2.4157266	20	4 8.4	21.0
150064 2006 RJ_{41}	16.0	X	39.29523	158.83618	154.91297	6.40640	0.0585715	0.21570616	2.7535588	20	10 26.6	19.7
150065 2006 RG_{48}	16.0	X	356.72395	167.89385	187.00775	9.49948	0.1557268	0.21249300	2.7812475	20	10 28.3	19.0
150066 2006 SN_{7}	14.5	X	131.09841	169.08814	208.76859	18.47832	0.0113151	0.17449606	3.1716041	20	1 24.7	19.4
150067 2006 SJ_{8}	15.2	X	248.59913	166.31727	170.89091	14.76911	0.1376775	0.18731259	3.0252277	20	4 17.2	19.9
150068 2006 SK_{12}	16.9	X	344.52341	265.81982	118.69270	6.42501	0.1419698	0.28620785	2.2804210	20	12 8.1	19.0
150069 2006 SW_{55}	14.9	X	174.90889	239.37056	160.73346	16.00902	0.0729504	0.18258737	3.0771988	20	4 22.9	19.8
150070 2006 SJ_{61}	15.6	X	73.62952	104.36109	351.43229	12.55071	0.2122149	0.24176077	2.5519892	20	3 13.4	18.2
150071 2006 SZ_{110}	15.5	X	250.00329	198.71234	116.26600	3.80966	0.2137029	0.18655672	3.0333937	20	3 15.1	20.4
150072 2006 SL_{154}	16.3	X	215.15389	286.71886	155.82427	6.36189	0.0870127	0.27176496	2.3605167	20	7 28.7	19.6
150073 2006 SK_{181}	16.4	X	102.08579	309.05974	213.43278	0.80170	0.1210757	0.26639892	2.3921096	20	7 8.9	19.7
150074 2006 SX_{191}	17.1	X	312.36450	255.68617	18.72743	6.58576	0.1029738	0.26279507	2.4139294	20	4 12.7	19.7
150075 2006 SP_{223}	14.6	X	91.24844	329.74572	8.34338	13.75621	0.1484561	0.15594293	3.4184214	20	—	—
150076 2006 ST_{282}	16.3	X	202.02593	131.92739	159.64504	14.80847	0.0953078	0.24257483	2.5462765	20	—	—
150077 2006 SE_{356}	16.3	X	326.95059	259.14243	44.68361	5.98760	0.0361345	0.26619050	2.3933581	20	6 27.9	19.2
150078 2006 TV_{42}	15.3	X	325.88334	298.82258	301.89602	0.66943	0.1000490	0.17788438	3.1312002	20	3 26.1	19.3
150079 2006 TM_{71}	17.0	X	252.55023	141.84956	263.92505	2.41748	0.1734395	0.27039476	2.3684844	20	7 12.9	20.0
150080 2006 UV_{9}	16.8	X	8.94665	241.07027	75.90343	7.42955	0.1253247	0.27637076	2.3342175	20	10 9.8	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150081 2006 UH_{109}	17.1	X	25.36784	246.39905	16.18025	3.84897	0.1803492	0.26932736	2.3747382	20	8 22.1	19.3
150082 2006 UZ_{255}	16.0	X	105.12665	158.87786	233.17506	4.84725	0.2808199	0.23179666	2.6246089	20	2 11.8	19.6
150083 2006 VD_{71}	17.3	X	29.44855	277.61090	77.44101	3.02010	0.1770961	0.28936158	2.2638213	20	—	—
150084 2006 WN_{11}	15.8	X	77.78976	7.65634	10.51373	2.79488	0.2175536	0.22734050	2.6587949	20	—	—
150085 2006 WQ_{14}	16.7	X	78.28903	162.66415	213.68511	5.18531	0.1635210	0.29940727	2.2128967	20	—	—
150086 2006 WW_{61}	15.7	X	1.54272	338.95451	85.77925	15.20828	0.1912918	0.21723740	2.7406042	20	—	—
150087 2006 WC_{175}	16.2	X	243.92884	281.20835	195.55676	1.60047	0.0213382	0.20436006	2.8545568	20	10 20.8	20.0
150088 2006 XY_{16}	16.1	X	58.46382	359.91141	83.15676	5.66387	0.1006495	0.22919456	2.6444367	20	1 18.4	19.1
150089 2006 XL_{30}	15.9	X	342.52941	351.88323	103.41393	12.35306	0.2174044	0.21599611	2.7510940	20	—	—
150090 2006 XA_{61}	16.0	X	167.22281	350.72731	5.92022	0.24174	0.2277782	0.24151626	2.5537113	20	2 22.1	20.1
150091 2006 YQ_{35}	16.8	X	210.65577	121.57030	4.54788	2.61935	0.1289000	0.26601303	2.3944224	20	9 16.9	20.2
150092 4156 *P–L*	15.4	X	238.11342	108.40361	268.07684	2.22185	0.0867074	0.17665722	3.1456842	20	5 26.9	20.1
150093 4197 *P–L*	16.6	X	47.61731	118.03374	265.64599	2.23104	0.2059051	0.21741655	2.7390985	20	—	—
150094 6845 *P–L*	15.7	X	220.24324	280.47418	65.60839	3.90635	0.1964068	0.17635898	3.1492296	20	3 28.1	21.0
150095 1235 *T–2*	17.3	X	356.68425	18.51423	353.96461	2.69118	0.1666952	0.27471980	2.3435600	20	12 10.6	19.6
150096 3023 *T–2*	16.3	X	343.96474	355.07033	16.27093	6.84598	0.2157450	0.27397632	2.3477978	20	11 20.0	18.1
150097 4319 *T–2*	16.5	X	15.68954	294.95205	54.54016	3.03073	0.2361105	0.27490822	2.3424890	20	12 19.8	19.1
150098 5086 *T–2*	16.4	X	31.09561	52.09974	304.39287	6.31335	0.1183425	0.27595123	2.3365827	20	—	—
150099 1137 *T–3*	15.2	X	238.89318	81.81687	338.80940	9.31348	0.0635044	0.17862797	3.1225045	20	7 27.8	19.8
150100 1229 *T–3*	16.7	X	311.16910	49.99751	348.21144	8.40704	0.2488999	0.27484815	2.3428303	20	10 6.5	18.1
150101 2428 *T–3*	15.2	X	268.20769	351.53654	6.30471	3.61654	0.2257741	0.17857679	3.1231011	20	5 19.5	20.0
150102 3503 *T–3*	16.3	X	20.79622	186.20352	177.51241	1.32974	0.2418849	0.27822782	2.3238193	20	—	—
150103 4262 *T–3*	16.2	X	127.95131	330.05334	65.51686	6.07629	0.2129532	0.24018770	2.5631196	20	3 7.2	20.1
150104 5007 *T–3*	15.9	X	84.42507	242.08584	101.01503	7.46885	0.3015260	0.21207265	2.7849214	20	—	—
150105 5062 *T–3*	15.7	X	130.86574	208.38640	116.69758	9.26928	0.2177238	0.21404731	2.7677670	20	—	—
150106 5084 *T–3*	16.9	X	281.02034	264.14722	112.84503	5.94450	0.2472928	0.27217465	2.3581473	20	6 28.9	19.8
150107 1978 VL_4	16.9	X	306.28549	203.19663	229.94119	4.09073	0.2297478	0.28172703	2.3045371	20	12 3.3	18.0
150108 1979 QG_3	16.8	X	77.03175	345.74220	336.43403	0.65013	0.2430570	0.27085421	2.3658053	20	—	—
150109 1981 EA_{17}	15.8	X	294.93109	309.73000	323.23525	5.12422	0.0825388	0.25263915	2.4781958	20	3 18.9	19.1
150110 1981 EA_{30}	15.5	X	50.80529	8.16475	171.97636	16.01526	0.2451150	0.17800179	3.1298232	20	6 11.2	19.7
150111 1991 TK_{15}	16.3	X	215.35397	244.01157	198.62923	12.03389	0.2477445	0.22948320	2.6422188	20	7 11.8	21.0
150112 1991 TY_{15}	15.7	X	345.66320	47.11079	48.75116	9.89303	0.1732077	0.20925009	2.8099091	20	—	—
150113 1991 VX_4	15.9	X	315.01110	21.65381	24.06799	7.39350	0.2565084	0.27172647	2.3607396	20	11 2.2	17.0
150114 1991 VA_{11}	16.1	X	44.02647	251.02918	182.66922	3.60756	0.0770958	0.21363651	2.7713140	20	—	—
150115 1992 SB_3	16.2	X	287.41802	261.54913	50.32095	1.08487	0.1394542	0.23932190	2.5692977	20	4 24.7	19.4
150116 1993 FE_{33}	17.0	X	186.06659	111.38745	130.34150	2.57503	0.1746037	0.27620097	2.3351740	20	—	—
150117 1993 FF_{43}	15.4	X	254.88687	57.23124	176.53804	9.27832	0.1008676	0.21085769	2.7956089	20	—	—
150118 Petersberg	15.2	X	349.78068	7.41969	329.59045	3.05497	0.2968444	0.18198149	3.0840251	20	9 17.9	17.7
150119 1993 TM_{10}	17.1	X	171.22196	73.02954	305.67094	3.05623	0.1189430	0.23830332	2.5766138	20	3 16.7	21.0
150120 1993 TS_{24}	15.0	X	351.22599	142.76865	179.52287	8.65405	0.1542869	0.17924540	3.1153298	20	8 22.5	18.5
150121 1994 AB_5	16.6	X	128.34150	75.88589	64.50857	1.23696	0.0876071	0.23943642	2.5684783	20	7 5.5	20.2
150122 1994 CC_2	15.1	X	1.13715	48.65307	155.71455	18.50334	0.3248499	0.22764105	2.6564541	20	3 11.2	16.7
150123 1994 PY_6	16.3	X	54.94164	176.44626	181.76663	2.01407	0.2248063	0.27521944	2.3407227	20	—	—
150124 1994 PU_{22}	17.1	X	77.68139	339.10385	355.63370	4.22710	0.1532711	0.27573403	2.3378096	20	—	—
150125 1994 PQ_{29}	16.7	X	35.67835	166.16370	206.34396	3.64052	0.1892960	0.27423866	2.3463003	20	—	—
150126 1994 SD_8	17.2	X	8.10709	171.83580	202.05939	0.80620	0.2001061	0.27018913	2.3696860	20	—	—
150127 1994 SD_9	16.1	X	36.14756	146.48262	171.22207	1.30011	0.1168375	0.19156287	2.9803127	20	10 29.2	19.9
150128 1994 UP_7	15.3	X	91.23185	15.41469	230.53566	8.97311	0.0755849	0.18753415	3.0228445	20	9 27.9	19.9
150129 Besshi	16.5	X	106.04451	318.93234	98.21873	5.39729	0.2317627	0.24355232	2.5394590	20	3 12.4	20.0
150130 1995 AN_2	16.7	X	30.61530	317.73423	115.51289	4.75531	0.0677322	0.23236555	2.6203234	20	—	—
150131 1995 BO_7	15.5	X	42.06279	324.23470	321.69795	10.06901	0.1905921	0.25338921	2.4733029	20	10 13.4	18.8
150132 1995 DK_9	17.1	X	149.50903	298.82354	154.66797	7.31368	0.1498134	0.24416765	2.5351907	20	6 2.3	21.1
150133 1995 OG_{16}	15.8	X	316.15856	234.91610	289.15072	9.66381	0.0581270	0.21691160	2.7433477	20	—	—
150134 1995 SP_{48}	16.1	X	347.32128	300.01073	135.42296	2.89245	0.0699189	0.20489816	2.8495570	20	—	—
150135 1995 UH_8	16.5	X	4.59847	161.71975	226.13618	7.44502	0.2603901	0.28023370	2.3127169	20	—	—
150136 1995 VW_4	17.0	X	13.59113	244.26162	135.78428	2.67727	0.2541990	0.28114964	2.3076912	20	—	—
150137 1995 VV_{14}	14.8	X	200.36686	70.83766	234.09811	24.79440	0.2212233	0.17341901	3.1847223	20	1 17.3	20.7
150138 1995 WR_1	15.2	X	338.37912	7.25322	58.24964	24.71520	0.2242277	0.27986898	2.3147257	20	—	—
150139 1995 WW_{38}	16.6	X	224.46480	137.38790	303.20523	2.05130	0.2014008	0.18725569	3.0258405	20	7 21.2	21.3
150140 1995 YF_6	15.5	X	204.64173	43.51974	230.25863	7.45047	0.2707008	0.21004578	2.8028083	20	—	—
150141 1995 YE_7	17.0	X	275.99153	212.73604	187.33538	2.92005	0.1418526	0.26993074	2.3711980	20	8 11.9	19.6
150142 1995 YQ_7	16.3	X	283.02472	4.77508	202.73549	4.60053	0.0873384	0.28803140	2.2707857	20	—	—
150143 1996 AC_7	15.5	X	233.93778	87.84442	319.19648	6.93903	0.1532133	0.18082255	3.0971887	20	6 23.4	20.3
150144 1996 AV_{11}	16.9	X	235.26479	224.51738	248.19795	5.55752	0.0877176	0.26773270	2.3841584	20	10 2.5	20.0
150145 Uvic	15.9	X	164.18016	238.01787	245.40498	6.09085	0.1696488	0.17982865	3.1085901	20	7 19.9	21.2
150146 1996 ES_9	16.1	X	142.24569	98.94188	46.32477	1.74565	0.1242920	0.17715442	3.1397957	20	7 26.6	21.0
150147 1996 EO_{10}	16.1	X	318.19842	216.47827	158.76599	9.74482	0.1183774	0.26457415	2.4030959	20	9 26.0	18.4
150148 1996 FX_3	17.3	X	171.88079	68.13701	132.63623	2.68421	0.0940636	0.26543197	2.3979156	20	11 14.1	20.7
150149 1996 JF_{11}	16.1	X	70.68280	136.01037	154.18966	6.37446	0.1089190	0.25948672	2.4344039	20	11 19.9	19.5
150150 1996 TV_{23}	15.8	X	57.43869	266.94488	205.21327	3.49241	0.0548832	0.22516507	2.6758928	20	2 18.8	19.2
150151 1996 TY_{29}	16.1	X	8.64174	212.52683	210.67158	5.78237	0.2382485	0.21163577	2.7887527	20	—	—
150152 1996 VL_{16}	16.3	X	208.28733	138.60283	108.42557	1.07104	0.0167062	0.21459209	2.7630807	20	—	—
150153 1997 AB	16.1	X	327.21462	333.69643	98.00652	8.21702	0.1733587	0.20427813	2.8553201	20	12 14.7	19.1
150154 1997 EG_{16}	16.2	X	250.26690	306.81530	187.42408	1.55765	0.0648939	0.19488814	2.9463146	20	11 11.8	20.2
150155 1997 EJ_{32}	16.0	X	291.82549	108.28755	0.74529	3.70195	0.0426286	0.19641210	2.9310545	20	12 7.1	19.8
150156 1997 EM_{32}	16.9	X	23.27840	45.68106	2.49694	5.67181	0.1964761	0.28636859	2.2795675	20	—	—
150157 1997 GX_{25}	16.3	X	317.65515	123.13011	30.78286	25.26641	0.2141239	0.28934111	2.2639280	20	—	—
150158 1997 HG_2	15.3	X	185.98081	267.90135	204.38730	9.15865	0.0943419	0.17962635	3.1109237	20	7 26.5	20.3
150159 1997 JW_1	16.4	X	254.73908	181.75945	51.02828	7.10456	0.1615330	0.28758694	2.2731248	20	—	—
150160 1997 OF_2	15.7	X	201.25265	32.35330	286.90373	3.67711	0.2010995	0.24015085	2.5633818	20	2 3.6	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150161 1997 PE_5	16.0	X	38.14226	165.04140	177.50646	2.06846	0.2290773	0.26480247	2.4017144	20	—	—
150162 1997 SO	15.7	X	31.97369	320.69260	3.80456	6.20313	0.2414330	0.26182253	2.4199034	20	12 4.2	19.0
150163 1997 ST_{26}	16.1	X	325.09708	354.77751	8.99991	3.94353	0.2034097	0.25717101	2.4489958	20	9 16.0	17.9
150164 1997 TP_5	16.8	X	181.08601	312.95820	51.98088	3.30908	0.2547414	0.23918706	2.5702632	20	3 16.1	21.3
150165 1997 UG_9	15.7	X	89.00595	13.84679	34.10941	8.04586	0.3803544	0.22975859	2.6401071	20	3 4.3	19.3
150166 1997 WS_1	16.7	X	173.57262	334.10358	47.07245	2.58832	0.2149279	0.23767090	2.5811825	20	3 28.0	21.0
150167 1997 XB_1	16.0	X	60.02170	350.32136	75.03509	10.80806	0.3560652	0.22526919	2.6750682	20	2 4.6	18.3
150168 1998 BJ_{27}	16.6	X	24.17391	121.77384	324.41691	1.67731	0.0670373	0.21869773	2.7283905	20	—	—
150169 1998 BG_{39}	16.1	X	146.65596	41.61988	319.10112	2.30687	0.2021520	0.22639960	2.6661563	20	2 8.8	20.3
150170 1998 BW_{45}	15.4	X	125.16788	64.44476	315.48967	5.89759	0.2751167	0.22639635	2.6661819	20	2 18.5	19.6
150171 1998 DV_{19}	15.6	X	353.07553	166.45537	35.73206	4.77970	0.1687986	0.22311478	2.6922610	20	3 8.4	18.4
150172 1998 DV_{25}	16.3	X	139.07202	12.17879	0.08724	5.27275	0.1308949	0.22190093	2.7020703	20	2 10.3	20.3
150173 1998 DO_{28}	15.8	X	269.68566	106.08689	147.21147	5.85758	0.0336005	0.21976929	2.7195145	20	2 2.9	19.4
150174 1998 DU_{32}	15.2	X	271.24801	126.86493	102.48044	13.16298	0.1205063	0.21410386	2.7672796	20	—	—
150175 1998 ED_{11}	15.5	X	0.98563	140.59039	1.61209	13.71408	0.1352262	0.21948379	2.7218723	20	1 4.2	18.9
150176 1998 EL_{20}	15.6	X	7.33436	190.52705	344.64838	11.52330	0.2013353	0.22396733	2.6854244	20	2 23.7	17.9
150177 1998 FR	15.9	X	68.28724	209.96776	125.26100	3.03149	0.0752927	0.20402865	2.8576472	20	12 25.4	20.1
150178 1998 FX_8	15.9	X	263.46480	99.31999	126.38816	2.85282	0.1077861	0.21290470	2.7776608	20	—	—
150179 1998 FN_{15}	15.6	X	340.91654	316.23283	219.06489	14.00800	0.1829717	0.21878861	2.7276349	20	1 4.4	19.1
150180 1998 FT_{15}	15.7	X	328.29376	124.78112	359.73061	10.65673	0.1482474	0.21235108	2.7824865	20	—	—
150181 1998 FR_{24}	16.0	X	358.92617	273.07974	262.43922	2.10815	0.1978760	0.22241322	2.6979195	20	2 4.7	18.6
150182 1998 GM_7	15.1	X	307.21569	114.27469	145.92248	14.22407	0.1724789	0.22189942	2.7020825	20	3 12.3	18.6
150183 1998 HL_6	15.5	X	294.79384	59.74364	142.93492	4.21292	0.1224558	0.21414777	2.7669014	20	—	—
150184 1998 HK_{28}	15.6	X	278.74241	176.93149	6.99603	7.94387	0.1527791	0.21161484	2.7889365	20	—	—
150185 1998 HO_{144}	15.1	X	273.43449	164.80053	100.37693	2.83837	0.1366326	0.17271756	3.1933392	20	2 16.4	19.8
150186 1998 KF_{43}	15.4	X	290.42402	237.93128	114.07142	12.45445	0.1270104	0.18337688	3.0683601	20	6 24.6	19.5
150187 1998 MH_7	15.4	X	250.98796	42.07401	285.89482	3.21876	0.1029949	0.16928204	3.2363996	20	4 8.7	20.3
150188 1998 MT_{16}	15.8	X	301.34896	348.86106	340.49645	1.05728	0.2430273	0.17477903	3.1681799	20	5 22.6	19.7
150189 1998 MV_{38}	16.3	X	164.36585	198.40670	123.13547	7.51449	0.1590223	0.29332014	2.2434073	20	—	—
150190 1998 QB_5	16.2	X	345.27762	153.16795	228.25395	6.00258	0.1196701	0.27467400	2.3438205	20	11 27.5	18.3
150191 1998 QL_{45}	16.4	X	92.77783	119.57603	236.97372	4.15592	0.2666240	0.28441799	2.2899782	20	—	—
150192 1998 QY_{56}	16.9	X	261.18970	234.74344	175.97314	5.35164	0.2307078	0.26427249	2.4049243	20	7 21.1	20.1
150193 1998 QG_{88}	16.3	X	110.96125	93.04097	257.64316	4.73267	0.2203743	0.28615790	2.2806863	20	—	—
150194 1998 QB_{100}	16.7	X	51.88575	303.09013	23.66649	2.63864	0.1918657	0.27674668	2.3321032	20	12 27.3	19.9
150195 1998 QT_{100}	16.6	X	16.63371	266.97208	107.88097	4.03950	0.1710934	0.27641186	2.3339861	20	—	—
150196 1998 RA_4	16.3	X	158.15632	335.19506	343.06545	10.34313	0.1915988	0.28905878	2.2654020	20	—	—
150197 1998 RS_9	17.1	X	242.99513	35.82923	155.36073	2.99627	0.0958041	0.28442019	2.2899664	20	—	—
150198 1998 RE_{25}	14.9	X	20.79193	125.31310	188.83893	6.51043	0.2963469	0.18178103	3.0862920	20	10 27.9	18.5
150199 1998 RX_{34}	16.5	X	23.37344	23.48263	8.32800	5.66344	0.2124811	0.27879323	2.3206763	20	—	—
150200 1998 RR_{45}	16.4	X	220.87688	94.11295	197.48126	3.89613	0.1570219	0.29428608	2.2384956	20	1 11.8	20.0
150201 1998 RR_{50}	14.3	X	4.74480	323.65817	356.43409	17.15983	0.2192142	0.17902740	3.1178584	20	9 21.5	17.5
150202 1998 RS_{56}	16.7	X	53.06530	165.05547	194.75894	4.36976	0.1584443	0.27931405	2.3177906	20	—	—
150203 1998 RF_{57}	17.4	X	109.72244	220.68863	111.74381	0.42409	0.2266897	0.28444544	2.2898308	20	—	—
150204 1998 RM_{64}	16.7	X	82.82643	335.54571	34.15527	1.64376	0.1506573	0.28392322	2.2926378	20	—	—
150205 1998 RY_{76}	16.7	X	133.19743	268.71427	56.49757	3.46299	0.2255277	0.28646332	2.2790650	20	—	—
150206 1998 SN_9	16.7	X	4.27835	157.66423	209.12570	2.02460	0.2117586	0.27299439	2.3534243	20	12 22.3	19.1
150207 1998 SV_{18}	16.2	X	68.12719	208.24228	167.28040	6.54418	0.1266270	0.28186365	2.3037924	20	—	—
150208 1998 SR_{50}	16.7	X	268.55562	20.49071	2.25763	2.68601	0.1913645	0.26143431	2.4222985	20	6 28.7	19.9
150209 1998 SW_{51}	17.0	X	324.78288	229.03351	199.85904	2.83844	0.1941020	0.27461960	2.3441300	20	—	—
150210 1998 ST_{55}	16.7	X	33.88427	184.34419	170.14565	2.52753	0.2254058	0.27655790	2.3331644	20	—	—
150211 1998 SC_{76}	15.0	X	54.74358	320.55356	311.69354	11.55073	0.2245822	0.18216725	3.0819282	20	10 3.9	19.6
150212 1998 SV_{79}	14.9	X	321.76170	117.37093	192.27426	0.41250	0.1918221	0.17255827	3.1953041	20	6 7.1	18.6
150213 1998 SS_{88}	16.6	X	217.62061	307.35057	331.70350	6.93160	0.1542698	0.29205392	2.2498869	20	—	—
150214 1998 SF_{106}	16.5	X	348.50382	11.44485	24.72826	6.90090	0.1074504	0.27418651	2.3465978	20	12 21.9	19.1
150215 1998 SP_{111}	16.5	X	85.16595	318.93784	22.09221	5.12252	0.1652952	0.28092231	2.3089360	20	—	—
150216 1998 SY_{112}	16.3	X	12.81885	285.03016	147.24523	6.64237	0.1123588	0.28129135	2.3069161	20	—	—
150217 1998 SP_{113}	16.9	X	100.27180	202.90211	156.59968	6.48722	0.1901387	0.28473760	2.2882642	20	—	—
150218 1998 SN_{117}	16.1	X	305.91408	40.62714	340.56604	4.21949	0.2306931	0.26643633	2.3918857	20	8 25.9	17.9
150219 1998 SW_{121}	16.5	X	56.19144	26.55912	326.11989	2.69256	0.1816432	0.27801924	2.3249814	20	—	—
150220 1998 SS_{134}	16.2	X	4.83641	153.64254	182.22520	4.03740	0.2828851	0.27088781	2.3656096	20	11 21.9	18.4
150221 1998 SX_{162}	16.7	X	343.62177	359.31380	2.59724	1.10384	0.1994945	0.26947676	2.3738604	20	11 1.7	18.4
150222 1998 TA_{21}	16.9	X	281.75044	115.02578	316.52418	0.54937	0.1590707	0.26758184	2.3850544	20	10 5.8	19.3
150223 1998 TT_{22}	16.4	X	90.42672	90.94015	220.94591	2.57923	0.1611263	0.27678384	2.3318945	20	—	—
150224 1998 UE_1	17.0	X	141.38298	68.46282	276.37974	18.84119	0.1076751	0.37915947	1.8905497	20	—	—
150225 1998 UG_{21}	16.4	X	277.62687	137.15482	269.07150	5.62135	0.1918412	0.26413363	2.4057671	20	8 12.9	19.1
150226 1998 UP_{40}	16.2	X	237.51757	111.68552	356.75419	4.18107	0.1483657	0.26605365	2.3941787	20	9 22.5	19.2
150227 1998 UT_{41}	16.5	X	335.99415	335.47993	52.95006	8.91354	0.1500943	0.27058741	2.3673601	20	11 21.7	18.5
150228 1998 VN_3	15.8	X	71.02058	270.34447	47.54482	4.51484	0.2434491	0.27531701	2.3401697	20	—	—
150229 1998 VJ_{22}	16.3	X	111.80238	352.47593	338.40458	2.65257	0.2180907	0.28186197	2.3038015	20	—	—
150230 1998 VW_{28}	16.1	X	314.93585	87.52482	297.65888	4.18936	0.2353353	0.26643821	2.3918745	20	9 22.3	17.6
150231 1998 WV_{28}	16.3	X	76.64990	191.26633	237.16517	3.76830	0.1822950	0.24071986	2.5593407	20	2 3.4	19.0
150232 1998 XO_1	16.7	X	170.60139	294.35307	192.64405	2.23262	0.1259996	0.25767144	2.4458239	20	8 4.5	20.4
150233 1998 XM_8	16.6	X	235.97045	286.05426	198.68466	1.89854	0.1435017	0.26565397	2.3965795	20	10 13.6	19.6
150234 1998 XW_{13}	17.2	X	263.32598	239.91078	196.77440	1.64905	0.2071433	0.26389140	2.4072391	20	9 3.3	20.0
150235 1998 XO_{18}	16.2	X	103.28477	332.87370	70.99276	6.49532	0.1737979	0.24076530	2.5590187	20	2 12.6	19.5
150236 1998 XV_{19}	16.1	X	128.73234	311.69655	63.49047	8.00994	0.1465125	0.24138429	2.5546420	20	2 2.9	19.8
150237 1998 XD_{23}	16.3	X	301.45099	141.52453	250.81839	5.67014	0.1225336	0.26472306	2.4021947	20	9 14.0	18.9
150238 1998 YG_9	16.7	X	257.09824	353.61201	71.56523	2.35735	0.1616923	0.26108563	2.4244547	20	8 17.9	19.8
150239 1999 AN_{11}	16.3	X	321.04649	42.17977	291.47967	5.73175	0.1297622	0.25402682	2.4691625	20	7 23.2	18.6
150240 1999 CQ_{10}	16.7	X	39.85583	312.74106	149.54290	22.78226	0.1001785	0.37187480	1.9151592	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150241 1999 CK_{39}	15.8	X	17.02049	89.85079	50.56185	2.77503	0.1905100	0.23324179	2.6137566	20	1 22.1	18.0
150242 1999 CD_{99}	15.7	X	284.39873	35.76797	138.39777	13.44960	0.2151148	0.22367296	2.6877801	20	—	—
150243 1999 CH_{133}	16.1	X	37.55797	233.24179	333.03173	3.23546	0.0838294	0.24290104	2.5439963	20	5 30.9	19.1
150244 1999 CZ_{150}	16.7	X	190.00824	244.70676	149.20046	7.02788	0.1992485	0.24429504	2.5343093	20	4 27.3	21.0
150245 1999 FY_{7}	16.2	X	74.34504	228.25308	174.93325	22.42843	0.0880091	0.36503583	1.9390055	20	—	—
150246 1999 GV_{1}	16.3	X	97.46137	121.23596	12.34806	2.76884	0.0367638	0.23825421	2.5769678	20	5 10.3	19.8
150247 1999 JK_{30}	15.6	X	38.40018	117.32242	72.20531	13.11301	0.2235883	0.23516569	2.5994816	20	5 28.5	18.0
150248 1999 JK_{59}	15.3	X	33.10023	86.88730	186.52909	5.42199	0.2559281	0.24116083	2.5562198	20	9 27.2	18.3
150249 1999 JY_{82}	15.3	X	38.53894	133.90442	120.46873	11.76652	0.2561468	0.24118647	2.5560387	20	9 13.3	18.4
150250 1999 JC_{99}	15.7	X	63.50208	39.39289	170.26330	12.56650	0.2437188	0.23995596	2.5647696	20	8 8.6	19.3
150251 1999 JR_{99}	15.4	X	282.37737	79.17014	170.25189	16.09476	0.2131525	0.22463504	2.6801003	20	1 20.5	19.8
150252 1999 LJ_{5}	16.5	X	238.81558	143.76817	96.53939	24.50970	0.0431807	0.36094220	1.9536388	20	—	—
150253 1999 LQ_{8}	15.4	X	296.86188	122.99335	120.31799	13.25052	0.1471879	0.22657437	2.6647851	20	2 8.4	19.1
150254 1999 LB_{31}	15.7	X	312.05624	105.07847	97.44534	13.95229	0.1333028	0.22404619	2.6847942	20	1 8.2	19.3
150255 1999 NH_{2}	15.4	X	314.81905	108.68695	173.77024	13.05912	0.1959021	0.22899861	2.6459450	20	4 18.6	18.6
150256 1999 PN_{7}	15.0	X	281.09504	54.49562	298.26312	7.28199	0.2738757	0.18238317	3.0794953	20	5 20.5	19.7
150257 1999 RO_{7}	17.3	X	250.17029	330.50382	39.60772	1.47066	0.0360996	0.31965828	2.1184200	20	6 10.3	19.4
150258 1999 RV_{18}	15.6	X	335.45463	192.08001	165.63916	4.63986	0.2795861	0.18688497	3.0298407	20	9 10.3	17.8
150259 1999 RD_{30}	15.1	X	192.70668	327.24281	332.13928	17.46871	0.2557542	0.21149198	2.7900166	20	1 13.5	20.2
150260 1999 RV_{67}	16.1	X	200.70790	318.49688	321.87221	9.57259	0.2872983	0.21156083	2.7894112	20	—	—
150261 1999 RC_{68}	15.1	X	260.23843	65.71650	335.15107	14.49193	0.2295966	0.18065751	3.0990747	20	7 6.8	20.0
150262 1999 RN_{101}	16.1	X	50.21347	211.83137	139.58747	2.74684	0.1033902	0.19931970	2.9024800	20	12 26.7	20.3
150263 1999 RQ_{108}	15.1	X	263.97541	84.18715	300.78699	9.11806	0.1101747	0.18012079	3.1052279	20	7 5.1	19.5
150264 1999 RS_{108}	14.6	X	105.43582	47.20104	285.06605	7.84656	0.1529360	0.15497298	3.4326701	20	—	—
150265 1999 RW_{116}	15.3	X	239.21820	131.21436	154.16819	8.37746	0.2746091	0.21850376	2.7300050	20	1 24.3	20.1
150266 1999 RZ_{137}	15.0	X	321.33108	9.73313	341.90551	14.53179	0.1592085	0.18588157	3.0407344	20	8 12.5	18.5
150267 1999 RP_{139}	14.5	X	210.41260	249.51910	149.88948	26.48329	0.2517428	0.17553081	3.1591274	20	5 23.9	20.4
150268 1999 RB_{162}	15.0	X	249.15207	222.99704	176.40896	15.54961	0.1630820	0.18000027	3.1066139	20	6 27.9	20.0
150269 1999 RB_{187}	15.7	X	348.32755	154.42571	195.41521	0.38930	0.2750413	0.18814156	3.0163349	20	10 5.0	18.2
150270 1999 RV_{187}	15.9	X	94.24359	58.74840	207.94750	0.37671	0.0997918	0.19335414	2.9618773	20	11 1.9	20.3
150271 1999 RO_{202}	15.1	X	319.29280	31.87060	330.27976	13.84832	0.1543992	0.18439364	3.0570703	20	8 20.4	18.4
150272 1999 RY_{204}	14.0	X	312.29732	77.28756	307.82126	15.19674	0.1450003	0.18575210	3.0421472	20	9 2.7	17.8
150273 1999 RA_{233}	15.1	X	15.14968	317.31553	0.42453	8.87960	0.1493246	0.19065790	2.9897361	20	10 1.1	18.6
150274 1999 SS	15.1	X	272.82140	211.51953	182.05441	12.82119	0.0849560	0.18147244	3.0897898	20	7 28.2	19.6
150275 1999 TR_{16}	17.3	X	45.25576	101.88299	351.12404	4.97585	0.1134691	0.29921059	2.2138664	20	—	—
150276 1999 TH_{38}	14.7	X	201.80427	346.20943	184.14805	11.54462	0.0198662	0.19109837	2.9851402	20	11 4.4	19.0
150277 1999 TJ_{45}	15.4	X	69.18407	309.56182	229.21742	4.61872	0.1083115	0.17182426	3.2043975	20	6 13.4	19.7
150278 1999 TP_{48}	15.4	X	322.21206	236.01056	152.22416	2.74062	0.0861727	0.18757240	3.0224336	20	10 5.5	19.2
150279 1999 TG_{49}	15.4	X	227.61238	240.25454	129.43879	2.09257	0.2019230	0.17301483	3.1896803	20	4 29.8	20.7
150280 1999 TO_{57}	15.3	X	290.71494	187.89315	147.72211	0.79987	0.2001534	0.17702142	3.1413682	20	5 23.1	19.4
150281 1999 TT_{58}	15.2	X	130.06184	327.95350	192.37134	4.85904	0.1277791	0.17406315	3.1768606	20	7 31.2	20.1
150282 1999 TK_{73}	15.3	X	275.25448	49.78328	355.17024	10.97189	0.1360206	0.18366639	3.0651348	20	8 13.9	19.5
150283 1999 TL_{81}	15.4	X	55.56306	302.72393	333.97367	4.42986	0.0991732	0.18883121	3.0089862	20	9 28.1	19.4
150284 1999 TV_{89}	16.2	X	19.56935	338.30311	46.37694	5.15735	0.1732697	0.29061356	2.2573148	20	—	—
150285 1999 TV_{94}	14.9	X	350.89430	302.43446	49.01704	11.65371	0.1184533	0.18742306	3.0240389	20	10 7.5	18.6
150286 1999 TA_{96}	15.4	X	209.08832	286.80728	50.98303	5.32722	0.1850121	0.21532046	2.7568461	20	3 8.1	20.0
150287 1999 TB_{113}	14.6	X	243.29069	190.91289	213.87151	12.29481	0.0475696	0.17900311	3.1181404	20	7 10.4	19.3
150288 1999 TS_{116}	15.0	X	336.47621	355.22047	15.51655	7.16370	0.1072849	0.18759551	3.0221853	20	10 4.3	18.6
150289 1999 TX_{143}	15.3	X	222.68597	89.29930	293.11863	3.61850	0.1860448	0.17362138	3.1822472	20	5 9.7	20.6
150290 1999 TT_{150}	14.6	X	236.51497	151.90062	232.54762	8.22566	0.0944582	0.17439799	3.1727930	20	6 3.7	19.3
150291 1999 TH_{158}	16.7	X	182.69851	21.33832	352.00350	4.80267	0.1537007	0.30931880	2.1653686	20	3 18.6	19.9
150292 1999 TJ_{162}	16.9	X	165.76146	197.64214	179.85727	6.71083	0.1356916	0.30793860	2.1718340	20	3 5.4	19.8
150293 1999 TV_{167}	16.9	X	94.39882	55.48473	351.61832	4.56265	0.1520263	0.30275414	2.1965579	20	1 18.5	19.0
150294 1999 TN_{179}	15.3	X	273.53994	58.58296	259.10052	4.21774	0.1584858	0.17249970	3.1960273	20	4 14.1	20.0
150295 1999 TJ_{187}	15.1	X	304.65389	358.26465	353.05315	10.51721	0.1091803	0.17940464	3.1134861	20	7 19.7	19.3
150296 1999 TR_{200}	15.0	X	264.99241	192.89883	171.74106	11.20898	0.2541433	0.18052268	3.1006175	20	5 24.1	19.9
150297 1999 TN_{212}	14.9	X	242.68820	173.30335	220.22902	9.99307	0.0438748	0.17609804	3.1523399	20	6 27.2	19.6
150298 1999 TH_{213}	15.0	X	252.18123	73.68371	356.16854	10.47134	0.1070066	0.18270843	3.0758394	20	8 20.0	19.4
150299 1999 TU_{214}	14.8	X	36.65907	135.33455	188.33840	10.12890	0.0170823	0.18834253	3.0141888	20	10 23.9	19.0
150300 1999 TZ_{228}	15.3	X	101.18534	244.80232	67.45756	3.10109	0.1480723	0.19795632	2.9157915	20	—	—
150301 1999 TD_{234}	14.9	X	192.84948	104.23792	347.84710	17.74534	0.1451305	0.17594480	3.1541699	20	7 13.6	20.2
150302 1999 TX_{234}	15.3	X	243.74496	253.65351	134.62656	5.21849	0.1435724	0.17578777	3.1560481	20	6 11.4	20.1
150303 1999 TV_{250}	15.2	X	311.30068	30.76469	315.49765	8.59405	0.1684275	0.18127882	3.0919895	20	7 13.8	18.9
150304 1999 TO_{259}	15.1	X	230.82431	106.83116	197.70326	16.20909	0.1477078	0.21334945	2.7737993	20	2 11.6	19.8
150305 1999 TH_{279}	14.9	X	234.17744	7.84182	17.93085	12.78225	0.2539532	0.17616448	3.1515472	20	5 16.7	20.3
150306 1999 TJ_{295}	14.9	X	69.00614	311.75971	338.24301	19.06143	0.1488540	0.19303728	2.9651176	20	10 30.5	19.6
150307 1999 TR_{303}	16.4	X	81.44805	84.23732	139.29572	1.99212	0.0328564	0.18205363	3.0832104	20	8 15.3	20.7
150308 1999 TQ_{320}	17.1	X	163.65982	88.23762	304.20332	2.53775	0.1762215	0.30918058	2.1660139	20	3 25.2	20.2
150309 1999 US_{2}	17.5	X	201.80898	32.70664	286.43152	3.18661	0.1422102	0.30559704	2.1829139	20	1 27.2	20.7
150310 1999 UF_{12}	14.6	X	156.87599	79.59716	26.34871	18.13294	0.1772245	0.17235705	3.1977906	20	6 22.5	20.2
150311 1999 UN_{19}	16.9	X	169.19706	326.27140	43.40320	4.38611	0.0869380	0.30704266	2.1760569	20	2 26.9	19.7
150312 1999 UR_{28}	16.1	X	241.43896	18.34590	68.86568	1.94953	0.0243438	0.18453411	3.0555188	20	9 7.6	20.5
150313 1999 UB_{34}	17.8	X	327.20359	214.74495	36.28514	0.86593	0.0698483	0.31241891	2.1510203	20	4 3.4	19.7
150314 1999 UQ_{54}	15.9	X	131.66161	318.76118	196.99163	3.01791	0.0419039	0.18021669	3.1041263	20	7 21.6	20.3
150315 1999 UB_{58}	15.5	X	182.58459	221.89986	35.94056	6.51421	0.0442060	0.19690893	2.9261221	20	—	—
150316 1999 VO_{1}	16.5	X	85.89789	218.92645	282.56114	3.36214	0.0722881	0.30992899	2.1625255	20	5 8.2	18.9
150317 1999 VQ_{40}	17.0	X	289.68829	161.22687	232.09976	3.40543	0.1204488	0.27783905	2.3259865	20	8 28.9	19.5
150318 1999 VB_{43}	15.4	X	256.28589	249.93801	123.13553	2.24330	0.2219632	0.17400708	3.1775430	20	5 27.8	20.4
150319 1999 VA_{57}	16.8	X	41.26729	34.82425	42.58907	5.57372	0.1379726	0.29683392	2.2256679	20	—	—
150320 1999 VQ_{64}	14.3	X	250.92041	170.92468	219.88923	8.63901	0.0810084	0.17472606	3.1688202	20	6 28.9	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150321 1999 VN_{83}	15.3	X	256.97235	0.68836	7.73354	4.96274	0.1789757	0.17542690	3.1603748	20	5 26.2	20.1
150322 1999 VQ_{84}	15.8	X	17.01859	218.26872	35.52632	0.57057	0.1228966	0.17491452	3.1665436	20	7 5.3	19.6
150323 1999 VV_{99}	17.1	X	297.29458	11.65401	50.89279	4.40770	0.0945088	0.28113754	2.3077574	20	11 2.0	19.3
150324 1999 VM_{107}	15.5	X	17.58288	289.02197	48.20628	1.18579	0.1806560	0.18583145	3.0412812	20	11 3.8	19.2
150325 1999 VD_{112}	16.8	X	38.08990	227.07692	236.92855	4.94083	0.0485522	0.29774805	2.2211101	20	—	—
150326 1999 VO_{134}	17.6	X	1.81045	201.06140	41.80457	5.48336	0.1239613	0.31459335	2.1410971	20	5 21.9	18.9
150327 1999 VY_{139}	16.0	X	350.75944	27.04747	285.35575	1.58698	0.0915226	0.18043951	3.1015703	20	8 8.5	19.9
150328 1999 VU_{142}	15.4	X	233.94271	111.03536	256.08642	3.51313	0.1866318	0.17238028	3.1975033	20	5 1.8	20.5
150329 1999 VZ_{173}	16.5	X	147.96964	129.51510	253.99295	5.12599	0.1493894	0.30601637	2.1809194	20	2 22.6	19.5
150330 1999 VZ_{177}	14.6	X	32.40218	235.10018	61.63536	12.17416	0.0958743	0.18472422	3.0534220	20	9 29.3	18.8
150331 1999 VG_{180}	17.2	X	351.02734	234.42984	135.89022	2.42142	0.2142366	0.28406787	2.2918594	20	12 9.1	19.0
150332 1999 VR_{183}	17.5	X	102.66489	174.71588	248.65984	1.30893	0.1817007	0.30220477	2.1992191	20	2 27.6	19.9
150333 1999 VD_{189}	15.4	X	197.96182	290.61790	139.35046	1.87388	0.1260917	0.17055849	3.2202320	20	6 17.5	20.5
150334 1999 VQ_{195}	15.6	X	282.11443	226.99714	144.28284	1.59816	0.1860960	0.17833101	3.1259700	20	6 28.6	19.9
150335 1999 VD_{221}	15.7	X	352.92494	318.17644	37.05940	1.55739	0.0439834	0.18575793	3.0420836	20	10 7.0	19.8
150336 1999 WV_{10}	17.1	X	334.59597	71.84130	201.72118	1.79238	0.1073000	0.31417002	2.1430200	20	5 18.4	18.8
150337 1999 WN_{12}	15.2	X	338.92494	327.90976	31.90304	2.30773	0.2236460	0.18626011	3.0366132	20	9 24.1	18.0
150338 1999 XL_{15}	16.0	X	134.15800	122.89741	239.61082	4.45759	0.1947362	0.29987157	2.2106120	20	1 17.9	18.8
150339 1999 XX_{27}	14.5	X	145.96400	43.85740	70.54580	25.42202	0.1400274	0.16933047	3.2357824	20	6 20.1	19.7
150340 1999 XH_{31}	15.9	X	76.21968	123.66131	247.01658	3.74322	0.3195442	0.29221396	2.2490654	20	—	—
150341 1999 XD_{61}	16.5	X	71.18634	195.67608	230.78377	5.01536	0.1369085	0.29779219	2.2208907	20	1 2.0	18.3
150342 1999 XJ_{89}	16.3	X	33.95385	212.89725	267.78065	5.13773	0.1045729	0.29635770	2.2280516	20	1 11.9	18.4
150343 1999 XS_{99}	16.5	X	67.68825	350.16125	54.31985	5.72100	0.1692409	0.29499829	2.2348912	20	—	—
150344 1999 XO_{107}	15.9	X	326.71768	101.58818	236.47167	18.11032	0.1569313	0.27628923	2.3346767	20	8 2.9	18.5
150345 1999 XQ_{187}	16.5	X	31.86931	73.32015	36.55190	8.95554	0.1589741	0.29621496	2.2287673	20	—	—
150346 1999 YX_{4}	16.7	X	344.14288	67.22424	90.01465	6.56466	0.0804696	0.29456184	2.2370982	20	—	—
150347 1999 YZ_{7}	17.2	X	266.35892	359.23469	100.18875	1.67737	0.1261824	0.27838846	2.3229252	20	10 29.2	19.4
150348 1999 YU_{12}	17.3	X	50.62314	190.33981	231.98760	5.28564	0.1145185	0.29476440	2.2360732	20	—	—
150349 1999 YB_{24}	16.7	X	77.75123	13.59374	155.83852	1.85263	0.0703531	0.31183650	2.1536977	20	6 8.8	19.0
150350 2000 AD_{7}	16.2	X	82.42150	320.07760	57.76991	7.04447	0.1972091	0.29378617	2.2410342	20	—	—
150351 2000 AK_{11}	16.7	X	27.57133	36.80626	77.17206	6.50096	0.1067147	0.29670083	2.2263334	20	—	—
150352 2000 AF_{12}	16.7	X	40.91681	3.63484	59.41699	6.15376	0.1977262	0.29297862	2.2451503	20	—	—
150353 2000 AL_{22}	17.1	X	102.30057	69.30649	331.70672	3.48211	0.1375383	0.29766547	2.2215210	20	1 20.6	19.4
150354 2000 AQ_{39}	16.4	X	113.45082	292.17642	75.47816	6.41824	0.1968395	0.29551276	2.2322966	20	—	—
150355 2000 AU_{56}	16.7	X	294.89631	179.12463	314.43773	6.16936	0.0533048	0.28455346	2.2892513	20	—	—
150356 2000 AY_{130}	17.1	X	1.17339	196.73930	247.64331	5.05683	0.1280275	0.28792937	2.2713222	20	—	—
150357 2000 AL_{160}	16.5	X	49.40151	108.91772	319.77805	4.91197	0.1455701	0.29287754	2.2456669	20	—	—
150358 2000 AZ_{208}	16.7	X	292.12647	46.66493	122.42385	5.85477	0.0946371	0.28616125	2.2806685	20	—	—
150359 2000 AO_{229}	16.6	X	180.61688	30.01761	40.15777	4.92523	0.1019647	0.30988569	2.1627270	20	5 31.7	19.4
150360 2000 BE_{10}	16.9	X	76.25709	5.82921	314.97826	2.15290	0.1393832	0.27800920	2.3250374	20	—	—
150361 2000 BZ_{20}	17.3	X	54.42238	55.69247	340.36319	2.92404	0.1529400	0.28887768	2.2663487	20	—	—
150362 2000 BB_{21}	16.8	X	174.26330	141.88562	143.81417	3.43503	0.1344251	0.23703323	2.5858097	20	—	—
150363 2000 BB_{22}	16.5	X	240.92201	15.82160	154.71252	7.12315	0.0466210	0.27733309	2.3288147	20	—	—
150364 2000 CN_{9}	16.7	X	196.22739	222.92287	280.10946	3.10114	0.1867626	0.27091923	2.3654267	20	9 17.2	20.5
150365 2000 CF_{11}	16.6	X	320.63015	232.35205	265.21234	7.05316	0.0782821	0.28687901	2.2768628	20	—	—
150366 2000 CE_{17}	16.6	X	143.79250	344.08828	213.82710	1.24131	0.0789455	0.27008859	2.3702740	20	10 10.6	19.8
150367 2000 CF_{19}	16.7	X	346.36187	152.50035	291.30434	5.75326	0.1420187	0.28421652	2.2910602	20	—	—
150368 2000 CO_{22}	16.7	X	9.10553	256.26991	169.91165	3.92535	0.1376399	0.28474407	2.2882295	20	—	—
150369 2000 CB_{64}	15.6	X	240.28503	73.78297	162.49360	23.23576	0.2048685	0.28204340	2.3028134	20	—	—
150370 2000 CG_{65}	15.2	X	243.85841	289.61640	5.53548	2.21927	0.1046926	0.24675288	2.5174522	20	2 16.6	18.9
150371 2000 CC_{72}	16.3	X	250.45490	210.40981	319.11583	6.44586	0.0761428	0.28003717	2.3137988	20	—	—
150372 2000 CF_{76}	16.4	X	265.64877	16.45267	184.10906	1.54221	0.1148814	0.28363861	2.2941711	20	—	—
150373 2000 CG_{78}	16.8	X	324.24542	106.29655	327.67803	6.01968	0.1387432	0.27821499	2.3238907	20	—	—
150374 Jasoncook	17.2	X	57.03207	136.75705	151.39233	1.54356	0.1788118	0.26817610	2.3815297	20	11 10.7	20.4
150375 2000 CG_{118}	16.8	X	340.81109	150.47448	338.06864	4.25170	0.0914641	0.28763438	2.2728749	20	—	—
150376 2000 DG_{4}	17.2	X	279.60112	63.84254	43.18621	3.56815	0.1794873	0.27716444	2.3297592	20	11 24.7	19.2
150377 2000 DO_{14}	16.4	X	287.85897	97.02927	122.84343	5.74610	0.2282027	0.28747890	2.2736943	20	—	—
150378 2000 DK_{26}	15.9	X	227.23449	302.94203	330.20662	8.57451	0.1459254	0.28846897	2.2684888	20	—	—
150379 2000 DL_{28}	16.7	X	315.63992	87.47341	346.46560	4.74681	0.1478107	0.27770678	2.3267250	20	12 23.2	18.7
150380 2000 DE_{33}	16.9	X	245.27624	359.54871	192.26676	2.13577	0.0938050	0.28061574	2.3106173	20	—	—
150381 2000 DC_{37}	16.3	X	339.16408	50.48969	347.42043	5.89298	0.1726349	0.27589723	2.3368876	20	12 17.5	18.4
150382 2000 DK_{48}	16.9	X	346.62283	311.85688	153.47919	5.38574	0.1103951	0.28426236	2.2908139	20	—	—
150383 2000 DX_{50}	16.9	X	196.48877	81.89020	172.39215	3.30667	0.2299432	0.27923460	2.3182302	20	—	—
150384 2000 DN_{59}	17.0	X	321.88785	180.25813	295.62754	0.81535	0.1602252	0.28234606	2.3011675	20	—	—
150385 2000 DS_{63}	16.4	X	131.49283	287.96388	333.41059	6.17417	0.2214392	0.27073371	2.3665072	20	12 16.7	20.6
150386 2000 DP_{64}	16.3	X	166.58473	266.54883	331.84425	6.49610	0.0707990	0.27481743	2.3430049	20	12 30.2	19.5
150387 2000 DH_{77}	16.3	X	155.39362	222.51648	353.63553	5.34673	0.0798386	0.27038563	2.3685377	20	11 14.8	19.8
150388 2000 DV_{77}	16.1	X	273.22426	154.55770	351.44240	6.93172	0.0490045	0.27787351	2.3257942	20	—	—
150389 2000 DZ_{81}	17.2	X	340.88559	122.95676	351.54257	5.45543	0.1457070	0.28620000	2.2804626	20	—	—
150390 2000 DZ_{89}	16.8	X	3.27451	88.65177	318.57940	7.79887	0.1436851	0.28154337	2.3055392	20	—	—
150391 2000 DP_{94}	16.9	X	192.21795	98.06896	18.98450	2.39407	0.1443198	0.26567284	2.3964660	20	8 15.2	20.5
150392 2000 DG_{97}	16.4	X	25.37193	83.62106	334.03798	4.12240	0.1461541	0.28515309	2.2860409	20	—	—
150393 2000 EN	16.3	X	267.76733	61.88762	6.57088	8.60012	0.1169171	0.26772878	2.3841816	20	9 16.3	19.0
150394 2000 EF_{6}	16.7	X	284.66568	126.61087	13.42994	2.71029	0.1201984	0.27812183	2.3244096	20	—	—
150395 2000 ES_{11}	16.5	X	185.71577	164.70865	56.22262	6.35742	0.1815087	0.27540813	2.3396535	20	12 17.2	19.8
150396 2000 EP_{14}	16.1	X	201.02310	242.06439	5.93160	7.86322	0.1847823	0.27796085	2.3253070	20	—	—
150397 2000 EH_{40}	16.7	X	226.25273	8.37308	172.80107	3.83201	0.2080421	0.27456503	2.3444406	20	12 8.5	19.6
150398 2000 EC_{59}	16.7	X	148.47375	284.39631	341.43629	2.06290	0.1963629	0.27202662	2.3590027	20	—	—
150399 2000 EO_{62}	16.4	X	223.30932	233.18930	11.18778	6.44379	0.0960368	0.28172633	2.3045409	20	—	—
150400 2000 ES_{71}	16.6	X	236.43124	254.94452	345.78844	5.92295	0.1414788	0.28267498	2.2993821	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150401 2000 EZ_{74}	16.5	X	309.85682	252.60024	177.38232	7.08967	0.0897136	0.27189852	2.3597436	20	12 3.5	19.0
150402 2000 EM_{75}	16.3	X	320.30053	138.45572	357.70990	23.70374	0.2545682	0.28404674	2.2919731	20	—	—
150403 2000 EV_{100}	15.8	X	3.32126	8.57586	2.29234	5.28070	0.2056588	0.27047429	2.3680201	20	12 24.9	18.4
150404 2000 EK_{129}	16.0	X	154.23588	215.21593	19.86769	5.72362	0.1754329	0.27073532	2.3664978	20	12 4.2	19.8
150405 2000 EN_{132}	17.0	X	213.63697	236.10866	352.90774	5.84302	0.1536141	0.27799133	2.3251370	20	—	—
150406 2000 EW_{136}	15.7	X	176.44622	227.95914	9.09018	13.09949	0.1617739	0.27341435	2.3510138	20	12 30.9	19.4
150407 2000 EH_{151}	15.5	X	111.69400	102.83589	154.68587	21.13700	0.1643014	0.26593879	2.3948681	20	11 28.7	19.8
150408 2000 EZ_{157}	16.3	X	275.83526	292.10443	201.66206	10.70133	0.1946078	0.27692118	2.3311234	20	12 25.9	18.5
150409 2000 EV_{172}	16.5	X	198.19626	172.50734	141.13555	7.53730	0.1265270	0.29214851	2.2494012	20	1 17.7	19.8
150410 2000 ES_{196}	16.4	X	304.43000	126.08849	340.05689	7.05131	0.0617061	0.27662366	2.3327946	20	—	—
150411 2000 FW_{6}	17.5	X	198.61645	321.57518	298.29866	1.31547	0.1868587	0.28125075	2.3071381	20	—	—
150412 2000 FT_{18}	16.3	X	262.71954	79.90189	109.74262	6.82925	0.0709587	0.28007130	2.3136108	20	—	—
150413 2000 FN_{21}	16.4	X	264.98853	15.56466	104.34056	6.22086	0.1166287	0.27310363	2.3527967	20	11 26.2	19.0
150414 2000 FA_{23}	15.7	X	182.15080	181.76946	47.97546	13.21539	0.1366974	0.27308333	2.3529133	20	12 28.6	19.2
150415 2000 FR_{27}	16.3	X	149.18856	288.78439	349.02433	1.92525	0.1476836	0.27423497	2.3463214	20	—	—
150416 2000 FU_{52}	14.2	X	307.03382	62.02631	26.95083	4.10788	0.1573953	0.12763198	3.9068768	20	11 6.7	19.2
150417 2000 FX_{56}	16.1	X	108.88779	153.22423	79.70816	6.93984	0.0921459	0.26356098	2.4092506	20	10 20.3	19.5
150418 2000 FK_{64}	16.9	X	126.36014	112.10576	143.92116	2.73531	0.1549998	0.26815565	2.3816508	20	12 6.2	20.7
150419 2000 GX	16.2	X	111.45000	119.14961	198.82995	4.27114	0.1858251	0.27226080	2.3576498	20	—	—
150420 2000 GH_{6}	16.1	X	203.18873	62.91803	182.61223	7.51835	0.1745825	0.27746874	2.3280556	20	—	—
150421 2000 GA_{14}	16.9	X	175.10012	235.22061	24.94314	2.55938	0.1875333	0.27513475	2.3412031	20	—	—
150422 2000 GC_{15}	16.7	X	173.19943	91.77128	175.38792	7.15368	0.0995566	0.27737577	2.3285758	20	—	—
150423 2000 GN_{17}	16.7	X	193.10161	9.89788	140.30519	1.75817	0.1236001	0.26645740	2.3917596	20	9 30.3	20.0
150424 2000 GA_{18}	16.5	X	153.80368	162.78418	25.44843	4.98962	0.0910811	0.26501111	2.4004537	20	10 8.9	19.7
150425 2000 GB_{35}	16.2	X	95.46961	88.26431	228.45493	1.92809	0.2014025	0.27061653	2.3671903	20	—	—
150426 2000 GR_{40}	16.6	X	249.46894	299.24425	200.05322	2.38146	0.1108571	0.27187729	2.3598665	20	11 28.7	19.1
150427 2000 GK_{41}	16.8	X	160.43662	266.18242	357.99316	2.87563	0.1855626	0.27259486	2.3557233	20	—	—
150428 2000 GL_{46}	16.9	X	173.51546	16.03546	214.41760	1.05398	0.1474510	0.27112511	2.3642291	20	12 19.4	20.2
150429 2000 GR_{46}	16.8	X	281.20960	197.00421	16.59145	3.79376	0.0743875	0.28419789	2.2911603	20	—	—
150430 2000 GG_{49}	15.9	X	130.33873	34.13018	223.51627	0.70691	0.1553011	0.26788684	2.3832438	20	12 11.3	19.6
150431 2000 GZ_{49}	16.2	X	108.24392	279.96196	43.81302	3.16890	0.1765093	0.27320213	2.3522312	20	—	—
150432 2000 GV_{56}	16.2	X	179.63490	343.36388	195.00653	4.45599	0.1578431	0.26657191	2.3910746	20	10 19.9	19.7
150433 2000 GY_{75}	16.0	X	353.54512	176.72971	35.01056	5.78945	0.1882684	0.24387768	2.5371999	20	3 18.2	18.3
150434 2000 GV_{83}	16.4	X	264.87880	137.95568	55.49871	4.93446	0.1074765	0.28144950	2.3060518	20	—	—
150435 2000 GT_{98}	16.0	X	143.83683	315.10911	354.32914	5.62523	0.2386772	0.27573089	2.3378273	20	—	—
150436 2000 GE_{99}	15.8	X	85.63286	309.98217	347.71884	5.75841	0.1364536	0.26756403	2.3851602	20	12 17.6	19.4
150437 2000 GM_{101}	16.4	X	102.66259	354.56773	258.71912	1.73088	0.1907914	0.26449646	2.4035665	20	11 11.6	20.2
150438 2000 GG_{117}	17.3	X	258.01091	316.78559	197.23965	2.23080	0.1435012	0.27660881	2.3328781	20	12 29.4	19.5
150439 2000 GZ_{117}	16.9	X	197.45236	259.80912	337.99247	1.82714	0.1609794	0.27674447	2.3321156	20	—	—
150440 2000 GR_{118}	17.1	X	186.53100	343.90341	216.97367	1.95532	0.1363647	0.27167656	2.3610287	20	11 26.9	20.6
150441 2000 GU_{118}	17.7	X	184.87810	206.90005	337.50505	2.01539	0.1399314	0.26979621	2.3719862	20	11 2.5	21.2
150442 2000 GN_{127}	15.8	X	183.11354	86.67499	53.67139	25.52339	0.2144886	0.26470691	2.4022924	20	9 17.6	20.3
150443 2000 GT_{139}	16.3	X	118.10615	153.05959	121.96862	5.93034	0.1951643	0.26772407	2.3842096	20	12 22.0	20.2
150444 2000 GH_{146}	16.2	X	105.99397	108.91890	157.84005	6.60411	0.0945913	0.26459451	2.4029727	20	11 28.2	19.7
150445 2000 GD_{161}	16.2	X	192.29661	102.86963	43.92915	6.67961	0.0379994	0.26350860	2.4095698	20	10 4.2	19.3
150446 2000 GM_{164}	16.2	X	293.78888	251.51692	192.71307	5.97516	0.0662209	0.27163994	2.3612409	20	11 27.4	18.7
150447 2000 GD_{173}	16.8	X	162.55246	95.45505	118.34735	4.83171	0.1434757	0.26959442	2.3731697	20	11 19.2	20.4
150448 2000 GJ_{176}	17.3	X	180.31464	40.41237	167.00407	1.35350	0.1302479	0.27140889	2.3625808	20	11 29.2	20.6
150449 2000 HF_{1}	17.1	X	95.57211	351.01376	216.52555	2.22406	0.1310873	0.25652618	2.4530981	20	8 31.3	20.5
150450 2000 HK_{2}	16.2	X	256.04914	15.18643	53.98030	6.50199	0.0852449	0.26157492	2.4214304	20	9 6.3	19.3
150451 2000 HC_{10}	16.4	X	114.93527	132.47738	129.99655	1.68612	0.1652271	0.26492400	2.4009798	20	12 3.2	20.2
150452 2000 HM_{39}	16.5	X	208.90668	188.88176	145.92692	4.28259	0.1081110	0.23759693	2.5817182	20	3 1.7	20.5
150453 2000 HH_{46}	16.6	X	126.86863	253.95071	19.94371	2.55548	0.1707042	0.26860067	2.3790194	20	12 28.2	20.3
150454 2000 HX_{52}	16.4	X	186.23077	113.94233	64.74271	5.51228	0.1687861	0.26602005	2.3943803	20	10 26.9	20.1
150455 2000 HC_{54}	16.7	X	106.93130	182.71129	59.31734	3.87300	0.1628795	0.26114752	2.4240716	20	10 31.5	20.4
150456 2000 HX_{55}	16.9	X	255.67561	130.48927	17.61681	2.65071	0.1563466	0.27305225	2.3530918	20	12 13.5	19.3
150457 2000 HG_{66}	16.7	X	130.92525	284.40869	339.83273	2.13789	0.2040274	0.26656038	2.3911436	20	12 19.2	20.6
150458 2000 HR_{68}	17.0	X	106.70846	171.77291	82.34238	1.87422	0.1845293	0.26257348	2.4152874	20	11 16.1	20.9
150459 2000 HO_{82}	16.3	X	266.69825	48.23140	44.72082	5.03214	0.1167098	0.26597013	2.3946799	20	10 19.2	18.8
150460 2000 HG_{88}	16.2	X	225.35634	115.72250	81.44886	7.30805	0.1692095	0.27354019	2.3502927	20	—	—
150461 2000 HY_{89}	16.8	X	121.85975	84.08547	184.69657	1.11445	0.1697801	0.26574945	2.3960055	20	12 17.0	20.4
150462 2000 JX_{1}	16.2	X	226.87721	130.25955	60.76745	7.18625	0.0586998	0.27366931	2.3495534	20	—	—
150463 2000 JA_{9}	16.5	X	225.89565	271.92936	266.19191	4.10589	0.1662342	0.27283332	2.3543505	20	12 9.3	19.3
150464 2000 JH_{11}	16.4	X	152.84676	128.58922	18.61850	2.91885	0.1341575	0.25802706	2.4435761	20	8 14.9	20.1
150465 2000 JD_{12}	16.3	X	250.48098	122.00610	51.62504	6.91213	0.0516053	0.27421467	2.3464371	20	—	—
150466 2000 JP_{34}	16.7	X	117.04480	359.04025	243.79612	0.90724	0.1386470	0.26336952	2.4104181	20	11 9.6	20.3
150467 2000 JC_{64}	16.9	X	215.21729	115.06851	95.60755	0.63257	0.1590546	0.27294328	2.3537181	20	—	—
150468 2000 JY_{83}	16.7	X	157.20109	98.26799	97.85127	4.78507	0.1703097	0.26433827	2.4045253	20	10 22.2	20.5
150469 2000 KV_{4}	15.8	X	223.64402	121.88019	80.76230	22.23207	0.1900202	0.27267706	2.3552499	20	—	—
150470 2000 KT_{28}	15.9	X	127.45127	167.56706	72.87488	7.91525	0.1963069	0.26294204	2.4130299	20	11 18.2	19.8
150471 2000 KH_{55}	16.1	X	45.99254	129.77244	136.55101	3.65136	0.1460836	0.25459532	2.4654854	20	9 21.8	19.0
150472 2000 KM_{73}	15.2	X	324.09064	185.68987	122.79349	10.56641	0.2326331	0.24361117	2.5390500	20	6 6.8	17.7
150473 2000 KE_{83}	16.1	X	110.67934	127.16575	175.03678	4.36359	0.2037976	0.26831130	2.3807296	20	—	—
150474 2000 LV_{32}	16.3	X	183.35401	21.73153	194.03188	6.17480	0.1363973	0.26902359	2.3765255	20	12 12.0	19.8
150475 2000 NJ_{15}	15.2	X	139.79401	11.11262	315.11100	16.13990	0.1834026	0.21836542	2.7311579	20	—	—
150476 2000 NT_{22}	15.6	X	274.84441	16.96645	312.90500	3.73921	0.2044399	0.23966636	2.5668352	20	4 21.5	19.2
150477 2000 OQ_{21}	15.4	X	147.17026	207.57031	140.47770	17.86453	0.2713951	0.22216205	2.6999526	20	1 31.0	20.0
150478 2000 OS_{26}	16.1	X	278.66287	119.28905	168.52941	3.22873	0.2749696	0.23536734	2.5979967	20	2 26.1	20.2
150479 2000 OS_{40}	15.2	X	51.89784	127.57459	237.87837	6.90881	0.2415999	0.20934434	2.8090657	20	—	—
150480 2000 OM_{46}	15.4	X	356.10639	139.60169	153.83182	15.19791	0.2141404	0.24379551	2.5377699	20	8 3.2	17.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150481 2000 OR_{60}	15.8	X	115.80000	184.30653	134.51358	10.63936	0.2040470	0.21458681	2.7631261	20	—	—
150482 2000 PR_{3}	15.5	X	171.15468	125.42598	161.74165	22.23677	0.2405865	0.27125726	2.3634612	20	—	—
150483 2000 PQ_{4}	16.4	X	159.29841	358.91343	315.17021	17.53649	0.0726658	0.36800170	1.9285734	20	—	—
150484 2000 PM_{29}	15.2	X	50.50586	278.96098	94.63172	10.16787	0.1705871	0.21014061	2.8019651	20	—	—
150485 2000 QF_{2}	16.9	X	272.24571	287.41624	339.48506	19.92558	0.0913943	0.37784018	1.8949480	20	2 1.1	19.2
150486 2000 QT_{11}	15.5	X	342.90787	236.30263	129.50613	8.72563	0.2209526	0.20079207	2.8882736	20	10 20.5	18.3
150487 2000 QY_{11}	15.9	X	95.86469	221.89880	147.53935	10.17162	0.2446574	0.21660330	2.7459503	20	1 1.7	19.5
150488 2000 QJ_{14}	15.7	X	113.61656	225.48395	144.67556	5.67192	0.1588942	0.21981374	2.7191478	20	1 11.9	19.5
150489 2000 QS_{43}	15.8	X	302.45225	87.70475	166.28115	4.51750	0.1943732	0.23346890	2.6120613	20	2 19.5	19.4
150490 2000 QD_{44}	15.7	X	269.24990	189.34379	153.86719	5.47057	0.1220631	0.23807832	2.5782369	20	5 17.6	19.3
150491 2000 QN_{45}	15.6	X	111.86977	20.95941	330.09527	10.70335	0.1378569	0.21669441	2.7451806	20	—	—
150492 2000 QZ_{70}	16.5	X	146.10565	174.95027	176.16264	1.04300	0.1886875	0.22076806	2.7113061	20	1 27.0	20.7
150493 2000 QV_{77}	15.5	X	110.40588	18.50412	318.22154	4.38676	0.1889095	0.21402596	2.7679511	20	—	—
150494 2000 QL_{80}	16.4	X	347.01090	320.08413	329.46764	3.98253	0.2632924	0.24271426	2.5453013	20	7 2.6	17.8
150495 2000 QO_{88}	15.7	X	160.26807	55.82197	261.26197	4.72216	0.0830561	0.21906710	2.7253228	20	—	—
150496 2000 QD_{94}	15.5	X	125.03641	33.19646	309.07527	8.74294	0.1562053	0.21700850	2.7425311	20	—	—
150497 2000 QM_{96}	15.3	X	128.81641	203.41421	154.53303	11.01323	0.2434178	0.21838849	2.7309655	20	1 23.8	19.5
150498 2000 QV_{111}	15.6	X	98.49568	236.08261	153.29689	6.16215	0.1532699	0.21787576	2.7352484	20	1 16.0	19.1
150499 2000 QV_{117}	15.4	X	240.40926	247.06931	62.74741	4.68135	0.2572180	0.23028011	2.6361195	20	2 24.9	19.9
150500 2000 QD_{125}	15.4	X	224.61163	7.78143	275.74505	8.39262	0.1372145	0.22507367	2.6766171	20	1 14.4	19.6
150501 2000 QU_{125}	15.2	X	164.63996	24.48480	330.95714	15.01524	0.1247012	0.22341073	2.6898828	20	2 14.7	19.2
150502 2000 QZ_{169}	15.6	X	268.65243	83.68835	322.03655	8.28749	0.2249101	0.19120780	2.9840011	20	7 22.2	19.8
150503 2000 QR_{171}	15.8	X	266.14941	58.07389	257.99459	3.03573	0.2027308	0.23377977	2.6097451	20	3 26.3	19.8
150504 2000 QT_{190}	15.5	X	155.55657	352.25487	5.72463	13.01811	0.1870146	0.22308501	2.6925005	20	2 17.4	19.9
150505 2000 QR_{196}	15.6	X	48.61110	35.73323	340.83177	8.71256	0.1661951	0.21052830	2.7985242	20	—	—
150506 2000 QZ_{201}	15.5	X	58.04966	226.98523	136.99645	5.15561	0.0808730	0.21013224	2.8020395	20	—	—
150507 2000 QY_{209}	15.2	X	32.12010	241.41244	166.79812	14.49242	0.1444121	0.21128460	2.7918419	20	—	—
150508 2000 QT_{220}	15.7	X	64.63003	228.37130	140.32042	8.56323	0.1193993	0.21268283	2.7795923	20	—	—
150509 2000 QK_{237}	16.4	X	321.46000	53.21220	155.86060	2.82888	0.0197585	0.22847597	2.6499786	20	2 13.2	19.7
150510 2000 QQ_{247}	15.8	X	50.25051	85.13077	223.64178	1.38580	0.0631151	0.20420680	2.8559850	20	10 30.6	19.6
150511 2000 QU_{252}	15.9	X	359.53841	358.75300	153.39198	14.04773	0.2780875	0.22349382	2.6892161	20	—	—
150512 2000 QQ_{254}	15.8	X	130.02677	186.54026	154.71431	14.18522	0.1310026	0.21937605	2.7227634	20	—	—
150513 2000 RL_{17}	15.4	X	308.84574	333.90671	315.67446	13.08978	0.1599019	0.23638846	2.5905096	20	4 14.0	18.9
150514 2000 RQ_{25}	15.0	X	19.15896	151.13453	242.72345	3.95750	0.1146075	0.20659795	2.8339056	20	—	—
150515 2000 RA_{30}	15.5	X	62.15802	41.77601	326.68459	9.91058	0.2107656	0.20919202	2.8104291	20	—	—
150516 2000 RD_{32}	15.1	X	128.62920	98.09438	233.51612	6.74609	0.2155986	0.21477678	2.7614965	20	—	—
150517 2000 RF_{54}	14.7	X	247.87531	196.03413	224.01036	11.98948	0.2160347	0.18404680	3.0609098	20	7 14.0	19.6
150518 2000 RK_{85}	15.8	X	7.18995	306.56480	344.69916	4.90150	0.1710253	0.24567455	2.5248133	20	8 24.1	18.1
150519 2000 RR_{89}	16.1	X	338.29817	321.56219	304.16128	6.89430	0.1738950	0.23823645	2.5770959	20	5 4.5	18.8
150520 Dong	16.4	X	337.87285	213.48197	37.31099	3.19098	0.1015815	0.23521761	2.5990990	20	4 23.1	19.1
150521 2000 SK_{1}	16.3	X	355.21654	142.42468	294.48487	22.66865	0.0492901	0.35836741	1.9629853	20	—	—
150522 2000 SU_{14}	15.6	X	70.17180	235.33433	120.45805	14.16491	0.0645505	0.20910241	2.8112320	20	—	—
150523 2000 SH_{15}	16.2	X	71.57217	29.77821	335.00268	8.31820	0.1619060	0.21095104	2.7947841	20	—	—
150524 2000 SY_{21}	16.8	X	346.65473	32.04511	182.48887	22.57077	0.0675545	0.37747466	1.8961710	20	2 27.1	18.6
150525 2000 SQ_{32}	15.5	X	357.40577	8.75532	37.79878	5.34770	0.1631530	0.20454732	2.8528144	20	—	—
150526 2000 SW_{43}	16.7	X	263.45488	252.23982	330.09456	17.75574	0.0242581	0.36733642	1.9309012	20	—	—
150527 2000 SY_{45}	15.2	X	152.94551	120.19047	231.73657	12.12199	0.0940000	0.22288731	2.6940924	20	1 22.1	19.3
150528 2000 SF_{47}	15.3	X	134.67209	128.76890	238.13728	10.91622	0.1059930	0.22151225	2.7052302	20	1 22.2	19.3
150529 2000 SK_{49}	15.4	X	268.16428	315.20404	334.04088	11.64066	0.1831958	0.23073562	2.6326489	20	2 27.4	19.4
150530 2000 SN_{50}	16.0	X	184.84191	54.98186	249.27189	2.22422	0.0683555	0.21920581	2.7241730	20	—	—
150531 2000 SR_{50}	15.4	X	21.86054	218.96751	305.41400	4.81360	0.1221073	0.22577301	2.6710870	20	3 6.6	18.3
150532 2000 SQ_{53}	16.1	X	18.35364	243.74390	191.51995	4.90354	0.1508260	0.21129331	2.7917652	20	—	—
150533 2000 SE_{57}	15.9	X	22.51113	48.39714	304.35187	1.02458	0.0821765	0.20230324	2.8738724	20	11 20.7	19.6
150534 2000 SK_{57}	15.8	X	49.82006	59.77728	336.40245	3.68994	0.0727571	0.21124628	2.7921795	20	—	—
150535 2000 SH_{62}	15.8	X	60.80406	45.64763	0.02098	1.03967	0.0844140	0.21352776	2.7722548	20	—	—
150536 2000 SG_{77}	15.7	X	325.32031	74.20158	188.24358	11.79104	0.2345974	0.23560144	2.5962754	20	3 29.0	18.5
150537 2000 SV_{77}	16.0	X	130.35172	315.98384	340.20011	3.52120	0.0890409	0.21038031	2.7998364	20	—	—
150538 2000 SZ_{102}	15.7	X	111.66699	146.46266	212.08242	1.23869	0.1261523	0.21465998	2.7624982	20	—	—
150539 2000 SS_{128}	15.8	X	232.42011	245.36905	159.90874	5.86744	0.3347958	0.18298012	3.0727940	20	6 5.9	21.3
150540 2000 SR_{133}	15.6	X	126.47297	14.48867	310.36278	8.34376	0.1511251	0.21381523	2.7697695	20	—	—
150541 2000 ST_{142}	14.9	X	43.20091	19.73868	346.02681	12.42487	0.1331425	0.20426768	2.8554175	20	—	—
150542 2000 SW_{157}	16.0	X	181.10847	124.86537	253.74293	4.25400	0.1913891	0.17663773	3.1459156	20	3 30.9	21.4
150543 2000 ST_{161}	16.0	X	77.43425	237.78205	138.81727	7.52913	0.1289370	0.21300880	2.7767558	20	—	—
150544 2000 SG_{164}	16.3	X	303.13255	305.49262	174.72525	22.80410	0.0846751	0.35625707	1.9707297	20	—	—
150545 2000 SR_{166}	15.3	X	285.47272	313.45351	336.99075	11.14861	0.1775899	0.23110024	2.6298791	20	3 17.1	19.1
150546 2000 SD_{168}	15.4	X	292.73602	162.84113	225.16881	12.33749	0.2053361	0.19117126	2.9843813	20	7 29.6	19.5
150547 2000 ST_{174}	15.8	X	126.17407	23.02570	298.45129	9.58751	0.1055045	0.21092710	2.7949956	20	—	—
150548 2000 SE_{176}	15.1	X	172.02439	322.16940	353.03711	12.31366	0.1647093	0.21645721	2.7471856	20	1 9.7	19.7
150549 2000 SQ_{181}	16.0	X	327.19348	160.20663	117.98056	5.23557	0.1754165	0.23789213	2.5795820	20	5 6.6	18.7
150550 2000 SV_{182}	15.4	X	342.07344	245.24210	180.18261	7.28925	0.0564132	0.20475153	2.8509172	20	12 24.3	19.2
150551 2000 SY_{193}	16.4	X	284.24789	305.53534	16.12336	3.11758	0.1364380	0.23640875	2.5903614	20	5 3.5	19.7
150552 2000 SC_{194}	15.7	X	146.38119	21.40535	356.56652	5.63016	0.0272088	0.22366211	2.6878670	20	2 13.7	19.3
150553 2000 SM_{196}	16.0	X	0.59925	62.66988	178.30871	8.07683	0.1614869	0.23653043	2.5894729	20	5 20.5	18.6
150554 2000 SS_{204}	15.0	X	169.78999	2.12743	29.46440	6.28747	0.1058259	0.17604174	3.1530120	20	4 5.6	19.9
150555 2000 SK_{206}	15.8	X	83.39832	343.20114	46.42498	3.44032	0.1940359	0.21273847	2.7791076	20	1 2.8	19.0
150556 2000 ST_{206}	15.9	X	180.18851	198.52512	140.80388	7.10720	0.2220318	0.22161651	2.7043816	20	2 13.4	20.4
150557 2000 SQ_{215}	15.7	X	8.17792	58.12806	19.71070	4.33567	0.0839740	0.21027233	2.8007949	20	—	—
150558 2000 SY_{235}	16.2	X	353.71108	292.75726	333.53449	1.86566	0.1825675	0.23794593	2.5791931	20	6 11.9	18.3
150559 2000 SA_{236}	16.4	X	344.22994	255.51303	5.84612	2.72298	0.1586578	0.23692410	2.5866037	20	5 14.1	18.8
150560 2000 SF_{246}	15.6	X	23.10483	61.91735	44.92541	5.51216	0.0714554	0.21707716	2.7419527	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150561 2000 SL_{246}	15.6	X	42.10415	211.83597	152.78287	9.99336	0.1431329	0.20633486	2.8363140	20	—	—
150562 2000 SR_{249}	16.1	X	302.33742	117.65073	164.90246	7.73048	0.1842565	0.23432883	2.6056669	20	3 31.2	19.5
150563 2000 ST_{276}	14.7	X	70.72572	258.68799	326.69836	9.85769	0.2212285	0.24156561	2.5533635	20	9 4.5	18.4
150564 2000 SV_{284}	15.3	X	211.72892	110.77822	258.92131	5.73117	0.1209738	0.18000658	3.1065413	20	4 16.8	20.3
150565 2000 SY_{305}	15.5	X	141.49989	131.71749	293.41188	9.51206	0.2198004	0.17449559	3.1716098	20	4 21.1	20.9
150566 2000 SG_{313}	15.0	X	247.53375	339.95148	295.72309	14.05281	0.0710491	0.22128457	2.7070855	20	1 30.6	19.1
150567 2000 SO_{336}	15.7	X	140.56305	5.66758	335.77794	8.17599	0.1561551	0.21526329	2.7573341	20	1 9.1	19.9
150568 2000 SC_{341}	15.9	X	84.84356	57.60206	336.09386	4.23467	0.0575408	0.21681162	2.7441910	20	—	—
150569 2000 ST_{348}	15.6	X	91.79074	255.77912	97.05562	9.67288	0.1668560	0.21196660	2.7858502	20	—	—
150570 2000 SE_{352}	15.9	X	64.70497	309.28094	54.87704	9.24421	0.2176264	0.21068294	2.7971546	20	—	—
150571 2000 SE_{368}	15.8	X	105.42626	124.94877	258.10758	5.16057	0.0309199	0.21839658	2.7308981	20	—	—
150572 2000 TQ_{10}	15.7	X	275.52963	93.18233	13.49145	15.73171	0.1822593	0.19843478	2.9111027	20	10 22.2	19.4
150573 2000 TK_{34}	15.6	X	95.17036	309.02680	49.14964	7.02684	0.0245750	0.21077562	2.7963346	20	—	—
150574 2000 TR_{36}	16.0	X	49.77603	279.58897	98.15273	3.10836	0.0932058	0.20658809	2.8339957	20	—	—
150575 2000 TM_{41}	15.8	X	25.95159	237.42893	170.22380	9.30412	0.1641471	0.20924244	2.8099776	20	—	—
150576 2000 TP_{49}	14.1	X	105.08772	135.80338	75.14633	12.86490	0.1932629	0.24281542	2.5445942	20	9 27.3	18.4
150577 2000 UQ_{19}	14.3	X	201.37933	188.62140	213.59328	27.50376	0.1532191	0.17981895	3.1087019	20	5 17.2	19.5
150578 2000 UU_{20}	15.6	X	33.88090	281.60535	66.10276	2.99402	0.0864676	0.20022752	2.8937002	20	11 29.9	19.4
150579 2000 UJ_{21}	15.5	X	208.07097	222.91384	131.43616	3.12086	0.2142100	0.17689086	3.1429137	20	3 26.9	20.8
150580 2000 UY_{39}	15.5	X	231.21119	11.83807	42.63417	5.49593	0.1820414	0.18347036	3.0673178	20	6 26.9	20.4
150581 2000 UE_{68}	14.8	X	182.04059	139.66935	340.62073	9.80512	0.0519360	0.18725357	3.0258634	20	8 7.8	19.3
150582 2000 UP_{69}	15.4	X	228.55131	37.20808	12.69641	6.01605	0.2472856	0.18291675	3.0735037	20	6 13.2	20.6
150583 2000 UH_{75}	15.2	X	300.04882	77.01698	335.34152	11.27921	0.0497350	0.19439390	2.9513063	20	10 2.7	19.2
150584 2000 VC_{45}	15.7	X	128.33051	339.67771	1.63516	5.28019	0.0321149	0.21187813	2.7866257	20	—	—
150585 2000 WN_{9}	14.7	X	172.81489	98.26835	53.82565	21.68305	0.2594991	0.18504200	3.0499250	20	9 12.6	20.5
150586 2000 WQ_{16}	15.6	X	238.50169	348.09772	74.56966	2.06749	0.1693587	0.18342464	3.0678275	20	7 15.9	20.3
150587 2000 WF_{26}	15.2	X	196.73121	349.71109	86.01804	1.81804	0.1963748	0.17804509	3.1293157	20	6 21.0	20.3
150588 2000 WS_{26}	15.4	X	229.68186	10.97453	59.38591	2.39872	0.1554503	0.18273148	3.0755807	20	7 17.9	20.2
150589 2000 WV_{41}	15.0	X	196.65013	211.74030	221.82565	9.25013	0.1005686	0.17749983	3.1357211	20	6 21.2	19.9
150590 2000 WQ_{75}	15.0	X	139.50136	248.20095	257.80697	15.22808	0.1752032	0.18015892	3.1047898	20	7 22.9	20.3
150591 2000 WF_{94}	15.1	X	193.46205	11.81868	63.71218	8.16525	0.1525647	0.17806364	3.1290984	20	6 18.9	20.3
150592 2000 WG_{99}	14.9	X	223.35791	168.49111	260.68579	9.75789	0.0446238	0.18154075	3.0890147	20	7 18.4	19.5
150593 2000 WM_{129}	15.0	X	237.87686	181.59100	245.26550	8.94791	0.0614741	0.18607133	3.0386667	20	7 30.1	19.5
150594 2000 WY_{129}	14.8	X	173.17478	62.61216	4.90305	13.09321	0.2675908	0.17367710	3.1815666	20	5 19.9	20.7
150595 2000 WK_{132}	14.9	X	340.62558	21.78266	334.52811	10.76447	0.1180030	0.19320983	2.9633519	20	9 19.6	18.4
150596 2000 WE_{136}	15.1	X	191.12808	247.06377	251.34828	8.97466	0.0383377	0.18971759	2.9996067	20	9 4.5	19.7
150597 2000 WA_{140}	15.7	X	17.28690	356.33492	24.21662	1.97807	0.0811486	0.20001341	2.8957649	20	12 18.0	19.4
150598 2000 WS_{145}	15.3	X	178.34013	285.89921	159.44547	16.96630	0.1883562	0.17770515	3.1333053	20	6 18.6	20.9
150599 2000 WK_{161}	15.1	X	254.91522	251.13701	166.59862	10.77847	0.0446881	0.18649307	3.0340839	20	8 12.7	19.4
150600 2000 WB_{175}	14.9	X	203.71213	230.65360	212.11714	16.13043	0.2532450	0.17993755	3.1073358	20	6 30.8	20.5
150601 2000 WR_{181}	15.5	X	178.59261	331.86960	125.90743	16.74187	0.2244642	0.17914050	3.1165459	20	7 2.8	20.9
150602 2000 WV_{183}	14.9	X	217.01214	73.98747	25.24431	15.95044	0.0624298	0.18738349	3.0244645	20	8 26.6	19.6
150603 2000 XV_{3}	15.0	X	245.08423	35.07982	3.79927	10.78623	0.1037696	0.18291221	3.0735545	20	7 1.6	19.7
150604 2000 XY_{8}	14.5	X	213.01817	315.55469	74.59038	17.48095	0.2326382	0.17483404	3.1675153	20	5 13.0	20.0
150605 2000 XV_{11}	15.8	X	195.68442	71.33796	359.94786	9.57210	0.2649219	0.17824433	3.1269834	20	6 12.1	21.4
150606 2000 XN_{30}	15.3	X	156.58394	212.68820	297.36189	11.98437	0.1934103	0.18182179	3.0858307	20	8 13.6	20.6
150607 2000 XT_{32}	15.1	X	224.11112	32.74627	45.38964	10.77644	0.0738568	0.18081954	3.0972230	20	8 1.9	19.8
150608 2000 XG_{40}	14.6	X	191.87116	112.95467	308.46405	21.19115	0.1529865	0.17706924	3.1408026	20	5 30.4	20.1
150609 2000 XY_{44}	15.5	X	25.31186	102.87309	2.05552	18.64106	0.0722797	0.36005753	1.9568376	20	—	—
150610 2000 YY_{10}	14.8	X	149.25385	108.46120	84.08096	22.92832	0.1016833	0.18442790	3.0566917	20	10 11.5	20.0
150611 2000 YR_{12}	14.8	X	142.44944	235.28898	268.37203	8.98885	0.2448670	0.17595059	3.1541008	20	7 27.5	20.3
150612 2000 YJ_{36}	15.0	X	263.21010	304.61379	110.02379	10.75449	0.1775796	0.18415159	3.0597485	20	8 1.9	19.3
150613 2000 YF_{39}	15.2	X	202.30466	341.81683	136.03344	5.54108	0.1722017	0.18259637	3.0770977	20	8 17.5	20.2
150614 2000 YA_{42}	14.9	X	104.28158	31.94376	103.28642	14.50512	0.0520291	0.17137805	3.2099573	20	5 28.3	19.6
150615 2000 YS_{42}	15.0	X	191.53310	174.65046	276.31872	9.61728	0.0668829	0.17741612	3.1367073	20	7 8.8	19.8
150616 2000 YV_{43}	15.3	X	235.32661	70.68247	293.64331	8.14672	0.3503858	0.17753633	3.1352912	20	4 16.2	21.1
150617 2000 YM_{53}	15.2	X	201.58551	313.76047	95.39614	2.41271	0.2116719	0.17468873	3.1692716	20	5 24.0	20.5
150618 2000 YO_{64}	14.4	X	296.21222	74.61206	291.93939	20.20928	0.0795512	0.17970919	3.1099676	20	7 25.9	18.6
150619 2000 YM_{69}	14.8	X	322.26166	111.22615	245.60881	3.61489	0.2483572	0.18950932	3.0018040	20	8 6.9	17.8
150620 2000 YM_{71}	15.4	X	180.67271	194.14316	256.10029	10.89197	0.1951247	0.17703278	3.1412337	20	6 24.7	20.7
150621 2000 YA_{79}	14.9	X	323.05174	292.41541	94.74193	12.01399	0.0527862	0.19011218	2.9954547	20	10 12.9	19.0
150622 2000 YD_{81}	14.8	X	146.46598	260.17648	247.23206	9.99873	0.1693376	0.17956628	3.1116173	20	7 31.3	20.0
150623 2000 YF_{110}	15.0	X	195.46894	88.47090	311.27676	8.39674	0.1047854	0.17151354	3.2082665	20	5 6.9	20.2
150624 2000 YF_{125}	14.8	X	116.49613	110.76314	64.48817	17.06140	0.1761375	0.17584393	3.1553761	20	8 16.8	20.1
150625 2000 YN_{130}	16.0	X	188.02939	256.08088	162.41878	1.35479	0.1766889	0.17575361	3.1564570	20	5 24.7	21.2
150626 2001 AG_{7}	14.7	X	255.08393	271.26039	119.93000	17.15325	0.2344795	0.18065807	3.0990683	20	6 17.9	19.7
150627 2001 AU_{26}	15.2	X	168.81296	34.07130	58.91830	10.02762	0.1945211	0.17446931	3.1719282	20	6 18.0	20.6
150628 2001 AX_{32}	14.7	X	319.89941	311.99531	76.63703	12.44556	0.0952522	0.18821035	3.0155998	20	10 8.2	18.7
150629 2001 AU_{40}	14.9	X	112.41880	249.36695	307.19596	8.77225	0.0284064	0.17978649	3.1090761	20	8 17.2	19.4
150630 2001 AQ_{45}	14.9	X	178.46946	94.29518	336.25251	10.35590	0.1778139	0.17269915	3.1935661	20	5 28.7	20.4
150631 2001 AK_{48}	15.2	X	76.80262	142.38358	104.42230	3.18642	0.0546133	0.18328165	3.0694228	20	9 12.8	19.5
150632 2001 BY_{6}	15.0	X	250.65104	354.62964	52.85983	5.44930	0.1533108	0.18087094	3.0966362	20	7 12.2	19.6
150633 2001 BE_{8}	14.7	X	142.40675	220.48711	316.17518	16.05027	0.1626118	0.17944256	3.1130474	20	8 30.8	19.9
150634 2001 BY_{25}	14.7	X	146.46028	216.87002	305.10163	13.70970	0.1327311	0.17787146	3.1313518	20	8 17.1	19.8
150635 2001 BM_{40}	15.0	X	208.62686	93.93876	309.13944	11.57757	0.1262771	0.17277783	3.1925966	20	5 24.0	20.2
150636 2001 BR_{50}	14.3	X	117.48666	185.05045	5.94322	26.92354	0.1086783	0.17447952	3.1718045	20	9 4.7	19.4
150637 2001 BL_{55}	14.8	X	137.33647	251.82564	277.68461	15.49348	0.0953298	0.17828533	3.1265040	20	8 12.5	19.8
150638 2001 BO_{80}	14.9	X	115.32753	12.52821	157.06862	23.13449	0.0192965	0.17549870	3.1595128	20	7 16.9	19.7
150639 2001 CX_{8}	14.8	X	61.23501	71.13674	132.36988	21.25843	0.0967351	0.17000730	3.2271885	20	7 3.7	19.4
150640 2001 CQ_{20}	14.1	X	137.09523	121.61806	84.41600	27.20103	0.2376351	0.17580641	3.1558250	20	10 20.7	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150641 2001 CU_{25}	14.7	X	24.95534	313.56054	352.34197	9.54080	0.0227115	0.17989659	3.1078074	20	9 14.6	19.0
150642 2001 CZ_{31}	5.9	X	341.15159	48.86068	136.28432	10.23837	0.1169927	0.00326283	45.0200863	20	3 2.7	21.9
150643 2001 CB_{39}	15.2	X	121.29228	76.97709	78.48769	14.99269	0.1825866	0.17292452	3.1907908	20	7 23.7	20.4
150644 2001 DR_{27}	16.6	X	118.66315	141.81048	43.28517	4.31523	0.1673607	0.27602446	2.3361694	20	9 3.4	20.1
150645 2001 DF_{35}	14.5	X	282.11762	39.08779	319.04711	14.59912	0.1265084	0.17478260	3.1681368	20	6 21.9	19.0
150646 2001 DX_{36}	16.8	X	116.57085	51.70319	159.23720	4.61228	0.1669454	0.27931481	2.3177864	20	10 4.4	20.3
150647 2001 DU_{71}	14.7	X	74.29373	341.26921	167.38142	9.19073	0.0823531	0.16242752	3.3268226	20	5 11.4	19.4
150648 2001 DA_{74}	14.9	X	124.49489	352.16957	165.17077	15.59843	0.1988976	0.17181899	3.2044631	20	7 26.8	20.3
150649 2001 DK_{88}	14.5	X	133.20171	226.75683	323.26685	12.95085	0.2292580	0.17490048	3.1667131	20	9 10.6	20.0
150650 2001 DN_{91}	15.6	X	109.39369	47.62482	134.20728	1.94902	0.1173156	0.17352920	3.1833740	20	8 5.7	20.4
150651 2001 DR_{94}	15.2	X	162.92771	291.46719	176.38835	1.24907	0.1306862	0.17028415	3.2236897	20	6 30.1	20.2
150652 2001 DG_{98}	14.6	X	65.61876	71.96804	141.77540	26.38719	0.1627488	0.17045370	3.2215516	20	7 31.3	19.1
150653 2001 DT_{100}	14.2	X	126.12210	270.14540	336.81684	21.50517	0.2977456	0.18182956	3.0857428	20	11 7.4	20.1
150654 2001 DR_{105}	14.9	X	130.00717	353.78543	177.19677	4.91317	0.1238612	0.17607508	3.1526139	20	8 13.4	19.8
150655 2001 EO_{2}	14.5	X	117.39579	104.92084	63.03452	11.29549	0.1406665	0.17132248	3.2106514	20	8 2.0	19.6
150656 2001 EE_{6}	15.3	X	119.60585	193.04653	31.95328	8.21829	0.1541170	0.17647073	3.1479000	20	10 11.4	20.3
150657 2001 EJ_{21}	16.5	X	295.16258	249.93634	252.96893	3.71786	0.0764095	0.29591097	2.2302935	20	—	—
150658 2001 FN_{39}	14.4	X	91.19940	58.76709	175.14055	27.37675	0.1430143	0.17475672	3.1684496	20	9 22.5	19.1
150659 2001 FY_{74}	16.9	X	72.72427	153.03602	40.26621	4.22969	0.1158247	0.26794874	2.3828767	20	7 13.9	19.8
150660 2001 FG_{106}	16.9	X	219.91614	313.83591	289.69345	4.56461	0.1728963	0.29554456	2.2321364	20	—	—
150661 2001 FU_{188}	14.7	X	111.80200	95.21341	124.90261	17.91895	0.1243162	0.17601935	3.1532793	20	10 1.3	19.8
150662 2001 HG_{37}	15.9	X	239.70879	230.48403	44.05896	6.73113	0.2159392	0.29631834	2.2282489	20	1 7.4	19.6
150663 2001 JN_{6}	17.3	X	269.15689	208.70887	70.05177	2.26154	0.1752761	0.30271378	2.1967531	20	2 10.0	20.5
150664 2001 KQ_{18}	17.0	X	123.72557	167.77626	136.22700	5.54858	0.2118916	0.28266836	2.2994179	20	—	—
150665 2001 KE_{22}	17.4	X	276.25686	117.60601	143.15574	1.06243	0.1458893	0.30115581	2.2043229	20	1 27.2	20.4
150666 2001 KH_{41}	16.8	X	247.73885	155.30275	94.68511	5.65583	0.1301760	0.29491264	2.2353239	20	—	—
150667 2001 KV_{66}	15.4	X	219.81398	90.94544	169.16651	22.18984	0.1714989	0.28832102	2.2692648	20	—	—
150668 2001 MP_{4}	15.6	X	222.42363	279.03304	72.21470	8.28312	0.2822357	0.24575268	2.5242782	20	3 31.5	20.2
150669 2001 MZ_{9}	16.6	X	220.22072	294.23021	314.88852	7.18558	0.0896798	0.28765239	2.2727799	20	—	—
150670 2001 MX_{17}	15.2	X	205.84921	123.61123	247.83468	14.00833	0.2052373	0.24425353	2.5345964	20	4 5.9	19.7
150671 2001 MZ_{20}	16.4	X	25.73246	230.93355	105.71888	3.88187	0.2158913	0.26864777	2.3787414	20	12 11.5	19.3
150672 2001 MJ_{28}	15.7	X	166.44619	160.28693	202.60233	5.64213	0.3301170	0.23711254	2.5852330	20	3 3.2	20.4
150673 2001 NW_{4}	17.2	X	32.41144	0.62815	296.33510	2.63645	0.1271945	0.26571156	2.3962332	20	10 10.9	19.9
150674 2001 NK_{12}	17.0	X	152.91200	161.53340	116.01502	4.25528	0.2380222	0.28143077	2.3061541	20	—	—
150675 2001 NF_{16}	16.9	X	354.43488	128.69643	132.15738	2.79183	0.1127746	0.30823116	2.1704595	20	6 7.7	18.6
150676 2001 OY_{1}	16.4	X	168.19118	188.17677	72.72011	8.01048	0.0757363	0.27987183	2.3147100	20	—	—
150677 2001 OP_{8}	16.5	X	182.92219	333.73976	298.12507	6.55404	0.1269117	0.28326398	2.2961935	20	—	—
150678 2001 OY_{8}	15.1	X	120.67802	188.45471	174.55772	14.77314	0.1883767	0.23094746	2.6310388	20	1 12.4	19.0
150679 2001 OB_{10}	17.0	X	38.55955	254.41137	77.02084	2.31190	0.2019733	0.27027309	2.3691952	20	12 18.4	20.0
150680 2001 OZ_{42}	15.8	X	167.28348	136.20366	280.05849	7.54397	0.1569435	0.24111050	2.5565756	20	4 29.4	20.0
150681 2001 OX_{47}	16.3	X	180.63538	347.85348	295.29975	5.13585	0.1643749	0.28439808	2.2900851	20	—	—
150682 2001 OS_{49}	16.3	X	150.97719	229.91213	153.19683	5.18915	0.2051374	0.23819773	2.5773751	20	3 10.5	20.5
150683 2001 OE_{51}	16.0	X	259.26299	33.14680	3.50056	6.25107	0.1377910	0.25779695	2.4450301	20	7 15.4	19.2
150684 2001 OB_{60}	16.5	X	21.20615	211.08656	138.57284	4.59916	0.1174378	0.27042205	2.3683251	20	12 8.4	19.3
150685 2001 OP_{62}	16.6	X	239.61079	136.12302	145.81005	6.75576	0.1839285	0.29318048	2.2441197	20	1 16.4	20.1
150686 2001 OR_{62}	16.5	X	13.30481	206.80005	138.48159	7.25185	0.1273433	0.26700958	2.3884610	20	11 22.9	19.3
150687 2001 OR_{65}	16.4	X	103.47507	313.81410	31.90670	1.45474	0.2055561	0.28013220	2.3132755	20	—	—
150688 2001 OJ_{67}	16.4	X	54.36720	235.10397	113.89016	3.20631	0.2516738	0.27409151	2.3471400	20	—	—
150689 2001 OP_{69}	15.7	X	215.64713	12.25832	344.07334	5.34140	0.3163080	0.24337307	2.5407057	20	3 26.7	20.4
150690 2001 OO_{74}	16.8	X	26.29429	349.74883	337.92370	2.38014	0.2487161	0.26715137	2.3876158	20	12 4.3	19.8
150691 2001 OW_{86}	15.6	X	189.12607	214.09080	152.45075	5.62651	0.3060880	0.23978093	2.5660175	20	3 24.1	20.3
150692 2001 OL_{89}	16.1	X	92.73453	24.84308	281.91328	5.13856	0.1258384	0.27557723	2.3386963	20	—	—
150693 2001 OH_{95}	16.8	X	109.55125	335.25858	358.82012	3.36917	0.1791671	0.28097213	2.3086631	20	—	—
150694 2001 OM_{96}	15.8	X	83.99817	358.02351	303.15218	8.58684	0.2635181	0.27074587	2.3664363	20	12 29.5	19.8
150695 2001 OJ_{98}	16.5	X	24.77570	273.30024	35.38826	3.50135	0.1637621	0.26432540	2.4046034	20	10 23.4	19.1
150696 2001 OE_{102}	16.0	X	145.81382	193.75461	211.19057	4.34819	0.3101377	0.23811871	2.5779453	20	4 7.4	20.5
150697 2001 PS_{2}	17.0	X	225.58318	144.54758	121.80729	3.96856	0.2042674	0.28928623	2.2642144	20	—	—
150698 2001 PG_{7}	16.4	X	233.18730	158.88067	173.81182	3.24730	0.1411100	0.29606020	2.2295439	20	3 16.9	19.6
150699 2001 PU_{8}	16.6	X	143.56947	158.13271	151.15551	8.23855	0.1432872	0.27979111	2.3151552	20	—	—
150700 2001 PB_{20}	16.6	X	217.41562	191.36267	55.13421	4.20869	0.1338301	0.28516710	2.2859660	20	—	—
150701 2001 PT_{21}	16.7	X	235.73229	209.50576	137.09611	2.76726	0.1745806	0.24650886	2.5191133	20	4 8.4	20.7
150702 2001 PT_{22}	16.7	X	161.91284	118.30546	171.77435	5.65318	0.1771873	0.28235783	2.3011035	20	—	—
150703 2001 PK_{32}	15.6	X	183.88983	311.12743	47.62141	6.29371	0.3189273	0.23942472	2.5685620	20	3 13.4	20.4
150704 2001 PE_{37}	15.6	X	19.71359	153.05621	98.07391	11.33454	0.2776650	0.25796164	2.4439893	20	8 8.4	17.6
150705 2001 PC_{38}	15.5	X	125.98798	17.53403	19.43000	13.89575	0.3592225	0.23366835	2.6105747	20	3 21.7	20.0
150706 2001 PZ_{43}	16.1	X	115.09427	270.96476	28.05733	4.90325	0.1640147	0.22418996	2.6836463	20	—	—
150707 2001 PG_{45}	16.3	X	160.50357	97.68856	165.50024	6.60894	0.0926727	0.27573817	2.3377862	20	—	—
150708 2001 PK_{58}	16.2	X	66.84309	162.96277	148.92138	7.09941	0.1386430	0.26945164	2.3740079	20	12 17.3	19.6
150709 2001 PF_{61}	16.2	X	232.35393	188.42827	77.41862	6.29489	0.1937248	0.28954715	2.2628539	20	—	—
150710 2001 PX_{61}	16.9	X	68.47585	130.18091	171.65356	2.46231	0.2282517	0.26968032	2.3726657	20	12 14.5	20.6
150711 2001 PE_{62}	16.3	X	228.18836	24.95063	201.39992	3.67749	0.0921212	0.28126058	2.3070843	20	—	—
150712 2001 QD	17.1	X	144.30238	173.78593	140.87238	3.45643	0.2339955	0.28194372	2.3033562	20	—	—
150713 2001 QF	16.8	X	118.11646	159.44334	148.44239	2.92450	0.2197718	0.27742347	2.3283088	20	—	—
150714 2001 QL_{4}	16.2	X	258.96972	63.06808	320.99923	7.45313	0.1114271	0.25466509	2.4650351	20	6 30.4	19.4
150715 2001 QJ_{5}	16.1	X	332.96683	358.64637	342.03791	5.61596	0.1175996	0.26030510	2.4292988	20	8 29.8	18.1
150716 2001 QN_{5}	16.6	X	210.86332	262.47410	121.43465	3.58634	0.2546077	0.24611158	2.5218235	20	4 29.6	21.1
150717 2001 QT_{7}	16.0	X	215.51033	32.11203	328.82530	4.25639	0.2486307	0.24444066	2.5333027	20	4 2.4	20.4
150718 2001 QT_{13}	16.2	X	181.14113	324.58028	345.73436	8.82701	0.2318329	0.28649621	2.2788905	20	1 5.9	20.0
150719 2001 QQ_{17}	16.7	X	117.41921	258.18276	47.59975	2.99530	0.1770390	0.27730109	2.3289938	20	—	—
150720 2001 QB_{19}	16.3	X	4.66665	122.76428	184.26506	0.66041	0.2017070	0.25991071	2.4317556	20	9 19.3	18.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150721 2001 QN_{21}	16.1	X	8.06621	159.84610	182.68384	7.69404	0.1519580	0.26319184	2.4115028	20	11 13.1	18.7
150722 2001 QJ_{22}	15.7	X	17.44320	16.96080	342.98061	5.69340	0.1613504	0.26552171	2.3973753	20	12 22.0	18.6
150723 2001 QF_{24}	16.3	X	74.95017	269.51052	28.12368	2.86019	0.1925098	0.26906540	2.3762793	20	12 11.8	19.9
150724 2001 QB_{32}	15.8	X	103.02408	238.17969	162.89304	11.60417	0.2532510	0.23149692	2.6268740	20	2 18.0	19.4
150725 2001 QD_{32}	16.2	X	24.50730	37.12350	296.48559	5.53001	0.1479017	0.26472302	2.4021949	20	11 22.7	19.1
150726 2001 QL_{36}	17.0	X	43.11234	11.34832	318.72721	2.52690	0.1950690	0.27000530	2.3707614	20	12 20.9	20.2
150727 2001 QP_{38}	16.4	X	7.85062	231.52761	99.37137	2.37583	0.1945101	0.26493967	2.4008851	20	11 2.5	18.7
150728 2001 QK_{39}	16.8	X	8.71736	223.49596	144.05531	1.82481	0.1896563	0.26918964	2.3755481	20	12 25.3	19.5
150729 2001 QG_{40}	17.0	X	339.98202	245.02996	89.56916	0.21595	0.2297991	0.26109007	2.4244272	20	9 6.4	18.5
150730 2001 QN_{44}	16.7	X	355.48419	354.74903	21.09466	1.47626	0.1951546	0.26719265	2.3873699	20	12 15.7	19.1
150731 2001 QW_{45}	16.8	X	95.17122	176.33398	144.88584	2.82626	0.1226392	0.27589893	2.3368780	20	—	—
150732 2001 QG_{46}	16.8	X	6.54218	167.72003	186.27411	1.78122	0.1996353	0.26619448	2.3933342	20	12 4.1	19.3
150733 2001 QR_{49}	17.2	X	153.96986	149.61118	149.42497	7.10641	0.1867682	0.28177066	2.3042992	20	—	—
150734 2001 QG_{50}	16.4	X	179.97564	247.39324	146.48832	4.92511	0.2906107	0.24167826	2.5525700	20	4 19.5	21.1
150735 2001 QX_{50}	16.7	X	168.02494	237.45502	138.81716	6.00346	0.2482363	0.23851474	2.5750910	20	3 19.8	21.2
150736 2001 QW_{51}	15.9	X	259.74767	184.37302	104.64921	6.62148	0.1693098	0.24414115	2.5353742	20	2 21.4	19.8
150737 2001 QA_{55}	16.7	X	35.56267	174.35111	119.65256	3.52208	0.1824184	0.26370808	2.4083545	20	10 23.4	19.5
150738 2001 QP_{62}	16.0	X	158.20595	37.81102	321.68527	4.18891	0.2677428	0.23505483	2.6002989	20	2 20.7	20.5
150739 2001 QA_{67}	15.0	X	133.85850	54.62873	1.68647	5.68826	0.3278188	0.23529789	2.5985078	20	4 12.7	19.4
150740 2001 QF_{69}	15.8	X	181.45767	122.93869	257.72250	5.61789	0.1982074	0.24048725	2.5609908	20	3 29.8	20.2
150741 2001 QE_{85}	16.1	X	237.26665	27.02305	16.44892	6.80552	0.1256483	0.25361871	2.4718106	20	6 27.3	19.7
150742 2001 QY_{85}	16.7	X	127.85396	54.71972	6.19332	3.94133	0.2753048	0.23423679	2.6063495	20	4 10.0	21.0
150743 2001 QS_{87}	15.9	X	285.94815	55.26493	349.48923	6.18150	0.1183090	0.26159064	2.4213333	20	9 8.6	18.2
150744 2001 QE_{94}	17.0	X	298.04222	230.88847	139.62480	2.04782	0.1895577	0.25609828	2.4558298	20	7 27.3	19.5
150745 2001 QU_{113}	16.3	X	245.70922	267.95004	279.92099	7.06132	0.1221092	0.27541290	2.3396265	20	—	—
150746 2001 QH_{118}	16.1	X	348.87117	26.85691	306.68016	5.63714	0.1390121	0.25936819	2.4351454	20	9 17.0	18.5
150747 2001 QL_{118}	15.7	X	152.26145	164.52162	334.75368	15.71284	0.0226449	0.25254695	2.4787989	20	8 3.3	19.1
150748 2001 QT_{119}	16.6	X	63.57723	164.86548	145.27074	8.40755	0.1669152	0.26852035	2.3794938	20	12 14.7	20.2
150749 2001 QJ_{120}	16.0	X	183.19898	242.68435	133.46362	4.74459	0.2942161	0.23856746	2.5747115	20	3 31.9	20.8
150750 2001 QS_{123}	16.8	X	23.13083	248.77140	50.61387	2.13304	0.1934806	0.26291978	2.4131661	20	10 12.7	19.3
150751 2001 QK_{125}	16.6	X	272.30802	359.64694	28.14893	3.39174	0.1965638	0.25479264	2.4642124	20	7 10.3	19.6
150752 2001 QE_{131}	15.9	X	195.12680	70.81158	314.57180	12.17273	0.1906013	0.24357029	2.5393341	20	4 12.3	20.4
150753 2001 QS_{134}	16.0	X	52.92544	93.56083	298.94674	8.07461	0.2772804	0.22079057	2.7111218	20	—	—
150754 2001 QJ_{139}	16.2	X	196.27438	37.29002	295.88363	6.26440	0.2337545	0.23560228	2.5962692	20	2 15.9	20.7
150755 2001 QP_{140}	15.9	X	0.02766	156.20397	256.93562	9.77961	0.3281850	0.21310030	2.7759609	20	—	—
150756 2001 QB_{148}	15.5	X	129.83329	286.34920	117.78403	9.75170	0.2490677	0.23141511	2.6274930	20	3 24.8	19.8
150757 2001 QX_{154}	15.4	X	284.96077	95.11623	185.84030	11.65648	0.0759849	0.19266432	2.9689430	20	3 24.6	19.4
150758 2001 QV_{155}	16.6	X	155.46417	179.05638	204.34041	2.87892	0.2396821	0.23716506	2.5848514	20	3 15.7	20.9
150759 2001 QE_{157}	16.6	X	231.55575	88.52482	200.53207	3.96809	0.2416444	0.29247449	2.2477296	20	1 16.9	20.4
150760 2001 QO_{161}	16.5	X	353.01461	335.16271	1.43191	4.47613	0.1931405	0.26174145	2.4204032	20	10 9.4	18.3
150761 2001 QA_{180}	15.3	X	113.23291	252.29788	143.28747	15.79646	0.2088004	0.23157360	2.6262940	20	2 18.1	19.0
150762 2001 QD_{197}	16.5	X	256.39032	168.89026	178.08371	5.24292	0.1460871	0.24735116	2.5133911	20	5 3.2	20.0
150763 2001 QM_{201}	16.3	X	168.48207	92.03567	284.49180	3.23706	0.2845370	0.23740912	2.5830796	20	3 18.6	21.0
150764 2001 QY_{204}	15.8	X	181.42403	338.51857	278.29914	5.14319	0.1295658	0.27958177	2.3163107	20	—	—
150765 2001 QE_{210}	17.3	X	98.82455	135.03239	173.05427	1.49811	0.1954108	0.27304594	2.3531281	20	—	—
150766 2001 QB_{212}	16.6	X	30.80868	134.62331	163.35749	4.18500	0.1616788	0.26207946	2.4183216	20	10 17.9	19.4
150767 2001 QQ_{216}	16.0	X	240.45042	47.36668	356.76244	14.73527	0.1703047	0.25132305	2.4868400	20	6 27.5	20.0
150768 2001 QE_{218}	16.6	X	139.63423	147.48892	148.19235	2.72309	0.2104005	0.27884655	2.3203804	20	—	—
150769 2001 QX_{227}	16.4	X	52.81349	45.50513	285.67928	0.56016	0.1977693	0.26872005	2.3783148	20	—	—
150770 2001 QX_{234}	16.4	X	18.21737	188.22680	152.15327	4.17441	0.1621712	0.26468535	2.4024228	20	11 27.4	19.1
150771 2001 QX_{236}	16.4	X	55.62647	339.65719	334.93411	5.02451	0.1155689	0.26668713	2.3903859	20	12 3.5	19.7
150772 2001 QV_{237}	16.6	X	309.42631	194.87674	143.01180	2.95692	0.2146548	0.25428738	2.4674755	20	6 23.9	18.9
150773 2001 QJ_{240}	17.1	X	188.63600	279.37665	351.21396	2.55110	0.1511281	0.28179081	2.3041893	20	—	—
150774 2001 QD_{245}	16.2	X	139.21859	173.86046	161.77551	6.54221	0.1319690	0.28073950	2.3099382	20	—	—
150775 2001 QY_{248}	15.8	X	155.07031	353.35145	49.86330	4.63578	0.1702931	0.23588076	2.5942254	20	4 6.4	19.9
150776 2001 QG_{256}	15.4	X	93.89307	38.20260	4.48352	12.83661	0.2623664	0.22863215	2.6487716	20	2 16.3	18.9
150777 2001 QW_{263}	16.3	X	159.72431	275.37272	68.54798	4.87906	0.3098422	0.23108555	2.6299905	20	2 8.5	21.0
150778 2001 QY_{267}	16.5	X	51.51423	340.79568	322.19243	5.94916	0.1383550	0.26602382	2.3943577	20	11 15.2	19.8
150779 2001 QO_{268}	15.2	X	218.41328	98.16473	271.69884	12.75098	0.1842770	0.24357172	2.5393241	20	4 14.9	19.6
150780 2001 QM_{272}	15.7	X	79.73706	218.69352	101.77355	10.15160	0.0737017	0.22080376	2.7110139	20	12 24.2	19.6
150781 2001 QO_{282}	15.0	X	126.98202	354.19338	25.10517	13.72549	0.2932479	0.22959075	2.6413936	20	2 27.8	19.4
150782 2001 QH_{291}	15.3	X	127.04848	78.48866	357.41634	14.90014	0.1195433	0.23726484	2.5841267	20	4 8.5	19.2
150783 2001 QC_{328}	15.5	X	173.22911	109.52440	288.74486	13.79148	0.1401331	0.23805596	2.5783983	20	4 7.3	19.9
150784 2001 RG_{6}	15.3	X	151.34321	142.91446	278.29891	21.59697	0.1220164	0.23980231	2.5658650	20	4 11.4	19.7
150785 2001 RJ_{19}	16.7	X	38.96800	157.75538	163.61671	5.40868	0.1430716	0.26699894	2.3885244	20	11 27.9	19.8
150786 2001 RT_{19}	16.9	X	220.48325	127.94096	146.33130	5.46052	0.1456684	0.28793076	2.2713149	20	—	—
150787 2001 RZ_{21}	16.1	X	180.59830	251.79039	328.04990	5.81650	0.0694097	0.27264973	2.3554072	20	12 21.8	19.3
150788 2001 RT_{26}	16.4	X	221.92040	59.22020	355.52723	6.06889	0.1098681	0.25111264	2.4882289	20	6 26.4	20.1
150789 2001 RM_{31}	16.2	X	176.57086	101.08049	153.06322	7.28854	0.0906613	0.27713729	2.3299114	20	—	—
150790 2001 RM_{33}	16.0	X	156.32131	83.74386	313.10393	11.00469	0.2178765	0.23942236	2.5685789	20	3 26.4	20.4
150791 2001 RB_{34}	16.1	X	193.93751	231.64076	258.74517	5.29915	0.0857445	0.26067803	2.4269813	20	9 3.7	19.6
150792 2001 RT_{34}	16.1	X	157.91118	167.34603	243.49515	5.15125	0.1510312	0.24202143	2.5501565	20	4 14.3	20.1
150793 2001 RJ_{38}	17.2	X	103.07087	79.51389	205.56255	1.80582	0.2023415	0.27174323	2.3606426	20	12 22.4	21.0
150794 2001 RY_{43}	16.2	X	111.60443	63.30754	342.04111	12.25546	0.1813201	0.23169165	2.6254019	20	2 25.3	19.8
150795 2001 RR_{52}	16.4	X	196.21157	289.68845	102.35569	2.82722	0.2095319	0.24412093	2.5355142	20	4 28.6	20.7
150796 2001 RO_{54}	16.3	X	53.41901	273.69438	26.52648	5.11259	0.0249297	0.26241284	2.4162730	20	10 29.0	19.1
150797 2001 RW_{57}	15.5	X	102.72912	83.47277	6.93468	12.47270	0.2154528	0.23659318	2.5890150	20	4 13.5	19.2
150798 2001 RO_{61}	16.1	X	104.01761	85.20502	353.46750	12.14834	0.1433445	0.23690809	2.5867202	20	3 21.8	19.7
150799 2001 RZ_{62}	16.4	X	194.69893	242.97842	132.15471	4.67009	0.2109459	0.24027915	2.5624692	20	4 7.7	20.8
150800 2001 RU_{74}	15.5	X	291.69523	348.11688	6.11246	5.55171	0.1013527	0.25090982	2.4895696	20	7 7.3	18.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150801 2001 RF_{78}	15.4	X	0.44915	228.80448	191.63466	7.51917	0.3010317	0.21464859	2.7625958	20	—	—
150802 2001 RW_{81}	15.1	X	41.78951	257.24283	203.81915	14.57662	0.1474668	0.22407995	2.6845246	20	1 14.4	18.3
150803 2001 RL_{83}	16.3	X	88.10350	320.71272	311.28423	5.23379	0.2079945	0.26786866	2.3833516	20	11 22.3	20.1
150804 2001 RC_{88}	16.4	X	173.61192	228.13181	151.94722	3.46821	0.1614842	0.23807778	2.5782407	20	3 24.8	20.4
150805 2001 RP_{88}	16.9	X	293.25488	222.02830	111.74503	2.80162	0.2368428	0.25139105	2.4863915	20	5 17.7	19.9
150806 2001 RW_{91}	16.8	X	96.79570	283.72698	13.70035	1.29452	0.1876198	0.27139388	2.3626679	20	12 31.5	20.5
150807 2001 RT_{95}	17.3	X	30.93071	177.60439	164.02606	3.44773	0.1437193	0.26548713	2.3975835	20	12 13.2	20.3
150808 2001 RZ_{100}	16.1	X	220.91316	74.00356	6.75268	6.22049	0.1151073	0.25482163	2.4640255	20	7 31.9	19.6
150809 2001 RM_{103}	16.3	X	40.96646	208.58510	161.20433	2.15738	0.1001413	0.21986223	2.7187480	20	—	—
150810 2001 RN_{105}	16.7	X	41.00595	153.99195	140.32694	7.27828	0.1057710	0.26347017	2.4098041	20	10 20.6	19.7
150811 2001 RX_{110}	16.6	X	122.62667	167.37136	139.59925	4.65192	0.1967475	0.27724773	2.3292926	20	—	—
150812 2001 RA_{111}	15.8	X	168.35611	73.07876	1.65024	11.34523	0.1066429	0.24625927	2.5208151	20	5 21.7	19.8
150813 2001 RK_{113}	16.3	X	50.88863	38.66705	27.12341	2.36266	0.2565675	0.22535533	2.6743865	20	—	—
150814 2001 RB_{114}	16.6	X	215.08954	10.75570	10.85763	5.85754	0.2133998	0.24538009	2.5268328	20	4 28.9	20.9
150815 2001 RH_{114}	17.0	X	357.30018	244.31409	114.12214	4.96501	0.2092611	0.26372281	2.4082649	20	11 26.1	19.3
150816 2001 RS_{119}	16.1	X	133.07240	53.77308	12.07479	9.52364	0.1932656	0.23821123	2.5772778	20	4 12.7	20.0
150817 2001 RN_{126}	16.3	X	72.82530	186.60799	106.23707	4.51954	0.1286216	0.26720732	2.3872825	20	11 28.3	19.6
150818 2001 RZ_{126}	15.7	X	253.00912	26.42726	35.42725	6.51437	0.1124553	0.25583550	2.4575112	20	8 16.9	18.9
150819 2001 RD_{127}	16.1	X	212.65177	326.15283	66.60191	4.06119	0.1717289	0.24602176	2.5224372	20	5 14.3	20.0
150820 2001 RV_{127}	16.9	X	306.30888	208.32289	66.58567	2.77091	0.1270450	0.29878315	2.2159773	20	3 29.8	19.3
150821 2001 RM_{131}	16.0	X	106.43752	201.92658	142.76973	3.66060	0.1240200	0.22488217	2.6781365	20	—	—
150822 2001 RY_{142}	15.1	X	149.33911	322.18693	64.78257	15.64410	0.1079184	0.23167712	2.6255116	20	3 14.5	19.3
150823 2001 SZ_{2}	15.9	X	80.32542	261.88975	180.06506	9.81616	0.1902980	0.22967641	2.6407368	20	3 1.9	19.2
150824 2001 SL_{3}	16.0	X	300.14386	355.50996	15.59601	7.90668	0.1040831	0.25477245	2.4643426	20	8 18.3	18.8
150825 2001 SR_{8}	16.7	X	342.22002	172.08669	186.55703	1.00555	0.1470331	0.25975653	2.4327178	20	10 16.5	18.9
150826 2001 SZ_{19}	16.6	X	177.83457	3.30281	56.14939	2.46476	0.1474180	0.24332293	2.5410548	20	5 15.7	20.6
150827 2001 SL_{20}	15.7	X	50.66794	279.72741	38.99880	4.39788	0.2367700	0.26660069	2.3909025	20	12 18.5	19.2
150828 2001 SJ_{21}	15.8	X	63.12349	27.47385	56.55774	5.69643	0.2337633	0.22710911	2.6606006	20	2 16.3	18.5
150829 2001 SE_{24}	16.8	X	146.93973	64.38934	353.04273	6.42826	0.2375310	0.23752211	2.5822603	20	4 17.4	21.2
150830 2001 SQ_{25}	16.5	X	89.58528	236.51314	17.40418	3.36195	0.0705626	0.26178469	2.4201366	20	10 19.8	19.6
150831 2001 SP_{28}	16.3	X	108.68221	284.77106	158.66808	4.60404	0.2175120	0.23464128	2.6033533	20	4 15.6	20.0
150832 2001 SM_{30}	17.0	X	210.30407	231.25951	128.70756	1.31090	0.2070243	0.24124959	2.5555928	20	3 31.6	21.4
150833 2001 SE_{32}	16.1	X	103.78043	71.93762	34.45958	4.53724	0.1818320	0.23723343	2.5843547	20	5 3.3	19.6
150834 2001 SZ_{32}	16.5	X	356.24847	308.39243	22.75350	1.61942	0.1994950	0.25955035	2.4340059	20	10 9.1	18.3
150835 2001 SE_{34}	15.9	X	97.24443	79.82889	13.31306	14.76068	0.0638386	0.23618215	2.5920179	20	3 23.7	19.2
150836 2001 SM_{34}	17.1	X	48.74790	307.13885	23.82038	3.41496	0.1891786	0.26702417	2.3883740	20	12 26.8	20.6
150837 2001 SE_{40}	16.0	X	226.10519	313.39056	95.24696	4.53494	0.1127611	0.24787616	2.5098410	20	6 22.2	19.5
150838 2001 SW_{45}	16.8	X	204.39429	271.11673	98.32603	3.74994	0.2333694	0.24143418	2.5542901	20	4 8.1	21.2
150839 2001 SD_{47}	16.3	X	149.15854	328.51234	28.66707	7.75745	0.1338516	0.28447646	2.2896643	20	1 26.5	19.5
150840 2001 SF_{47}	16.7	X	144.98579	185.74609	123.05778	3.75422	0.1892435	0.27884672	2.3203795	20	—	—
150841 2001 SH_{52}	16.2	X	211.81912	259.24412	132.93642	5.59652	0.0928503	0.24396740	2.5365778	20	5 18.4	20.0
150842 2001 SO_{55}	16.3	X	28.19422	191.79985	150.03919	5.51231	0.1953209	0.26411211	2.4058978	20	12 17.4	19.4
150843 2001 SB_{58}	15.7	X	100.67163	43.04868	13.86152	9.13128	0.2066738	0.23009575	2.6375275	20	3 3.8	19.2
150844 2001 SN_{66}	15.7	X	60.96120	268.00511	195.11147	12.24406	0.1601840	0.22847135	2.6500143	20	2 21.8	18.7
150845 2001 SE_{68}	15.8	X	56.68533	231.06275	195.56289	11.42851	0.1778387	0.22295284	2.6935645	20	—	—
150846 2001 SH_{69}	16.2	X	176.87680	218.77339	150.42103	5.70169	0.2992106	0.23561818	2.5961524	20	3 19.1	20.9
150847 2001 SL_{69}	15.7	X	132.37372	197.67557	171.17408	5.49612	0.2850553	0.22886168	2.6470003	20	2 12.2	19.9
150848 2001 SE_{74}	15.8	X	163.38448	101.21676	262.17408	6.10955	0.2043914	0.23409138	2.6074287	20	2 23.3	20.1
150849 2001 SZ_{87}	17.1	X	69.94258	31.24276	262.38139	2.48900	0.1554968	0.26811933	2.3818659	20	11 28.3	20.3
150850 2001 SB_{92}	16.3	X	241.47830	116.68854	339.92140	6.38562	0.0848902	0.25989359	2.4318624	20	9 19.1	19.3
150851 2001 SY_{92}	16.5	X	97.93511	249.31510	177.42046	13.12616	0.2399659	0.23228363	2.6209394	20	3 14.2	19.9
150852 2001 SD_{99}	16.6	X	69.78828	165.25051	182.45351	7.13391	0.1382024	0.27269982	2.3551188	20	—	—
150853 2001 SL_{107}	16.0	X	348.69791	20.43750	331.25589	5.43068	0.2495514	0.25827301	2.4420246	20	10 28.6	17.8
150854 2001 SG_{110}	14.6	X	133.84590	76.07548	4.67520	10.77681	0.1764172	0.23544836	2.5974006	20	4 28.7	18.8
150855 2001 SW_{111}	15.3	X	124.47023	117.34232	257.12689	9.21795	0.1836915	0.22688815	2.6623276	20	1 29.4	19.3
150856 2001 SS_{112}	15.9	X	175.90452	40.03511	12.86373	3.39165	0.0938009	0.23906157	2.5711626	20	5 3.7	19.6
150857 2001 SF_{120}	16.3	X	201.05800	58.66989	336.38853	9.26519	0.1462184	0.24463942	2.5319304	20	5 2.9	20.4
150858 2001 SH_{130}	16.7	X	153.09087	112.25491	309.50595	1.22877	0.1037635	0.24096117	2.5576317	20	4 21.1	20.3
150859 2001 SK_{130}	16.5	X	12.52911	77.27061	206.66860	1.48111	0.1587453	0.25673442	2.4517715	20	8 22.4	18.7
150860 2001 SW_{137}	16.3	X	120.62663	244.50149	3.57497	4.90138	0.0076452	0.26445560	2.4038140	20	11 14.3	19.4
150861 2001 SP_{140}	16.2	X	303.35080	287.36395	194.38345	7.58640	0.0682692	0.27093535	2.3653329	20	—	—
150862 2001 SW_{140}	16.4	X	173.16017	196.69470	198.12439	2.48883	0.1137080	0.23948081	2.5681609	20	4 9.0	20.3
150863 2001 SY_{140}	16.7	X	282.96727	122.15458	199.47005	2.36112	0.1581731	0.24742139	2.5129155	20	4 28.9	20.0
150864 2001 SY_{147}	16.0	X	264.55432	54.90783	332.62565	8.55344	0.0892676	0.25238626	2.4798509	20	7 17.6	19.2
150865 2001 SZ_{149}	16.3	X	89.26193	344.74730	307.52739	3.81246	0.1704567	0.26736794	2.3863263	20	12 16.8	20.1
150866 2001 SS_{158}	15.9	X	106.32792	89.04137	354.65892	6.95675	0.1697981	0.23497040	2.6009217	20	4 3.9	19.5
150867 2001 SS_{163}	16.1	X	292.27847	81.86294	225.31334	3.99069	0.0529591	0.24436569	2.5338208	20	5 8.5	19.3
150868 2001 SK_{176}	16.1	X	89.11287	305.78082	150.12377	4.75832	0.2118651	0.23219469	2.6216087	20	4 8.1	19.5
150869 2001 SH_{192}	15.9	X	208.41538	178.99105	353.02755	6.18758	0.0758759	0.26755381	2.3852210	20	11 19.0	19.1
150870 2001 SP_{193}	17.4	X	156.68385	103.13907	170.65179	2.52844	0.1815402	0.27758015	2.3274326	20	—	—
150871 2001 SM_{200}	16.5	X	157.85786	290.00748	166.52795	3.70991	0.1652521	0.24546164	2.5262731	20	6 13.9	20.5
150872 2001 ST_{201}	13.2	X	208.91867	348.12121	5.58598	5.14107	0.0947473	0.08323077	5.1953336	20	4 3.0	20.4
150873 2001 SX_{206}	16.7	X	263.59057	149.96730	14.42725	2.21882	0.1410890	0.27272430	2.3549779	20	—	—
150874 2001 SG_{209}	16.2	X	177.82508	353.74040	161.51170	6.83621	0.0680652	0.25897827	2.4375891	20	9 23.2	19.5
150875 2001 SD_{213}	16.7	X	276.14164	259.38439	61.18660	1.95892	0.0974176	0.24636886	2.5200675	20	4 27.9	20.0
150876 2001 SA_{220}	13.4	X	233.96547	312.27978	28.86908	4.13617	0.0761871	0.08418574	5.1559696	20	4 14.8	20.4
150877 2001 SK_{226}	15.5	X	1.20676	145.56357	122.97936	2.73973	0.0958634	0.19756221	2.9196680	20	6 28.3	19.0
150878 2001 SE_{227}	15.9	X	137.02033	172.94197	28.21407	6.79978	0.0746441	0.25909266	2.4368716	20	10 6.8	19.4
150879 2001 SQ_{233}	16.2	X	120.78821	359.67713	68.60750	3.81288	0.2018506	0.23460121	2.6036497	20	4 7.4	20.1
150880 2001 SR_{234}	15.8	X	10.40579	109.84764	22.80696	12.35089	0.1288717	0.22702643	2.6612465	20	1 5.3	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150881 2001 SB_{237}	16.5	X	87.98932	134.44261	154.92121	5.24711	0.2062180	0.26743958	2.3859001	20	12 14.7	20.4
150882 2001 SY_{238}	16.6	X	110.06229	217.89457	105.58040	3.00749	0.2366922	0.27488239	2.3426358	20	—	—
150883 2001 SE_{242}	15.9	X	131.27552	37.94567	17.56133	13.68285	0.1750016	0.23439054	2.6052096	20	3 30.1	19.9
150884 2001 SY_{242}	17.1	X	85.54368	172.02167	138.27597	3.19646	0.1977908	0.26965382	2.3728211	20	—	—
150885 2001 SF_{244}	16.4	X	147.22532	234.48324	135.99209	5.87560	0.1902850	0.23161264	2.6259989	20	2 20.0	20.6
150886 2001 SK_{248}	16.3	X	114.50766	215.28735	166.79379	2.91647	0.1036830	0.22797110	2.6538896	20	1 18.6	19.9
150887 2001 SY_{248}	16.5	X	43.75676	204.63454	70.07140	1.42883	0.0583500	0.25536756	2.4605124	20	9 15.7	19.5
150888 2001 SD_{254}	16.7	X	26.89673	282.09720	37.63757	1.54668	0.1886698	0.26127670	2.4232726	20	11 13.9	19.6
150889 2001 ST_{257}	16.3	X	50.48293	165.16575	162.37635	5.95864	0.1330275	0.27053796	2.3676486	20	12 18.5	19.5
150890 2001 SN_{267}	15.8	X	92.52342	214.53715	147.45731	3.46508	0.1990694	0.22154525	2.7049615	20	—	—
150891 2001 SQ_{272}	16.5	X	175.02228	62.42409	17.12139	2.83136	0.1416927	0.24397481	2.5365264	20	6 7.5	20.5
150892 2001 SA_{278}	15.8	X	150.84274	47.44064	340.26988	9.97744	0.1720191	0.23341684	2.6124496	20	3 11.8	20.0
150893 2001 SK_{278}	16.1	X	254.37940	21.45014	291.30062	3.47651	0.2937436	0.24203615	2.5500531	20	3 3.4	20.4
150894 2001 SV_{278}	14.9	X	18.44567	232.54661	220.62613	12.89689	0.1702776	0.22061549	2.7125560	20	—	—
150895 2001 SU_{282}	14.6	X	241.15038	345.33853	15.66137	13.76698	0.1756811	0.24055261	2.5605268	20	4 27.5	18.7
150896 2001 SC_{290}	16.1	X	131.70217	163.74854	295.38994	12.69838	0.1298298	0.24199679	2.5503296	20	5 16.7	20.1
150897 2001 SU_{292}	16.6	X	15.53812	50.72215	233.53959	1.48608	0.1168105	0.25585685	2.4573745	20	8 22.6	19.1
150898 2001 SW_{304}	16.3	X	113.03066	276.12676	225.61501	3.54218	0.2067360	0.24366845	2.5386521	20	7 1.6	20.2
150899 2001 SJ_{307}	17.0	X	187.94754	238.47509	22.48388	2.98984	0.1378259	0.27874196	2.3209609	20	—	—
150900 2001 SL_{315}	15.2	X	144.33224	83.10354	343.09161	14.71931	0.1093108	0.23605182	2.5929719	20	4 11.9	19.2
150901 2001 SB_{318}	16.9	X	31.68697	219.73263	78.19141	2.80508	0.1644053	0.25898156	2.4375685	20	10 18.8	19.6
150902 2001 SW_{323}	16.4	X	235.63454	60.50861	274.48272	9.09375	0.1857795	0.24130975	2.5551680	20	3 18.3	20.8
150903 2001 SN_{341}	16.9	X	141.31541	161.02659	290.29740	2.32884	0.1787548	0.24088297	2.5581852	20	5 22.5	20.8
150904 2001 SX_{347}	15.9	X	155.18924	148.62602	274.60870	10.37360	0.2225581	0.24020559	2.5629924	20	4 29.7	20.4
150905 2001 SG_{353}	16.3	X	84.49039	180.42846	26.13087	6.99397	0.0829113	0.25246255	2.4793514	20	8 13.9	19.6
150906 2001 TF	15.0	X	194.38646	286.96004	105.23670	23.21107	0.2696212	0.24078581	2.5588734	20	5 6.1	20.0
150907 2001 TA_{3}	16.3	X	219.04682	106.48591	166.43036	1.66435	0.0365226	0.22948944	2.6421710	20	—	—
150908 2001 TV_{4}	16.2	X	108.29867	170.56560	7.67794	7.79994	0.0600471	0.25106309	2.4885563	20	8 2.1	19.6
150909 2001 TZ_{11}	15.9	X	353.15039	358.87081	56.92934	3.81114	0.0829860	0.21462365	2.7628099	20	—	—
150910 2001 TV_{24}	15.2	X	317.16223	226.63288	4.34743	13.91288	0.1051239	0.23692602	2.5865897	20	2 27.4	18.5
150911 2001 TO_{26}	16.7	X	251.92577	323.25911	355.18312	4.96549	0.2961887	0.24301738	2.5431842	20	3 9.8	21.1
150912 2001 TT_{28}	16.0	X	14.35574	351.56722	337.81270	5.25808	0.0346760	0.25777814	2.4451490	20	10 13.3	19.0
150913 2001 TV_{31}	15.4	X	194.49705	325.84865	21.50453	13.18792	0.2084321	0.23473143	2.6026867	20	3 8.5	19.9
150914 2001 TR_{38}	15.5	X	278.61998	28.15551	276.66877	8.17372	0.1120935	0.23968334	2.5667140	20	4 3.4	19.1
150915 2001 TN_{39}	14.9	X	110.32450	16.86591	32.03076	9.74082	0.1226912	0.22701964	2.6612995	20	2 24.4	18.6
150916 2001 TP_{43}	15.0	X	19.96924	4.39354	45.12391	11.42170	0.1656892	0.21054144	2.7984077	20	—	—
150917 2001 TD_{44}	14.9	X	194.13425	299.98374	41.57587	14.45586	0.1803864	0.22995120	2.6386326	20	3 3.9	19.5
150918 2001 TO_{54}	16.2	X	136.81811	256.84418	209.09994	9.91254	0.1500231	0.24343103	2.5403024	20	6 4.8	20.2
150919 2001 TT_{54}	16.3	X	140.17782	219.24040	205.53974	12.84412	0.1613193	0.23822676	2.5771657	20	4 16.9	20.2
150920 2001 TQ_{57}	16.1	X	158.95317	216.55325	231.58485	2.41527	0.1233773	0.24306576	2.5428468	20	6 2.5	19.8
150921 2001 TC_{58}	16.3	X	146.48441	203.17842	208.54655	5.44129	0.1060527	0.23687601	2.5869537	20	4 1.2	19.9
150922 2001 TK_{61}	15.8	X	209.61059	359.68364	37.47129	13.22636	0.0908432	0.24368712	2.5385224	20	5 18.6	19.6
150923 2001 TL_{61}	16.6	X	233.55224	164.12252	188.71226	4.00981	0.2111623	0.24295659	2.5436085	20	4 11.0	20.6
150924 2001 TP_{62}	15.7	X	185.05685	6.49371	32.34858	4.61208	0.1771762	0.23994388	2.5648557	20	4 26.5	19.9
150925 2001 TT_{62}	15.2	X	94.30959	31.34810	55.96578	9.99504	0.1622780	0.23145686	2.6271771	20	3 30.2	18.8
150926 2001 TW_{62}	16.0	X	175.88384	341.02053	47.41932	3.75273	0.1423373	0.23752007	2.5822751	20	4 5.8	20.0
150927 2001 TL_{67}	15.6	X	350.62242	321.04514	31.46224	5.52406	0.1240424	0.25820276	2.4424675	20	10 21.0	17.9
150928 2001 TP_{68}	15.4	X	2.09324	288.61804	201.88379	16.37476	0.1686203	0.22611282	2.6684102	20	—	—
150929 2001 TE_{69}	16.2	X	113.95051	279.73780	14.80928	2.32954	0.1289607	0.27068409	2.3667964	20	—	—
150930 2001 TE_{71}	15.5	X	39.89072	283.98886	213.03210	12.11083	0.1177104	0.23139496	2.6276456	20	2 25.9	18.6
150931 2001 TN_{72}	16.0	X	100.54002	345.84970	48.48740	6.87951	0.1332871	0.22685375	2.6625968	20	1 22.9	19.5
150932 2001 TO_{72}	15.4	X	156.83051	40.41631	48.74460	9.24464	0.0937233	0.18855579	3.0119157	20	5 30.1	20.1
150933 2001 TU_{74}	16.8	X	202.84159	295.45945	75.28979	3.60304	0.1924869	0.23933439	2.5692083	20	4 8.9	21.1
150934 2001 TL_{78}	16.2	X	160.96826	325.39776	53.68198	4.31879	0.2299475	0.23366219	2.6106206	20	3 17.3	20.6
150935 2001 TT_{78}	15.4	X	111.21882	254.14835	188.94528	2.52599	0.1115250	0.23282347	2.6168864	20	4 2.7	18.8
150936 2001 TC_{81}	16.3	X	64.37369	78.95169	269.38593	4.41836	0.0560326	0.21824555	2.7321579	20	—	—
150937 2001 TJ_{83}	16.3	X	173.04656	300.56249	318.81215	4.53834	0.1140529	0.27452300	2.3446799	20	—	—
150938 2001 TK_{92}	16.3	X	13.20532	121.80699	267.05890	2.53993	0.1032617	0.21444885	2.7643110	20	12 30.0	19.7
150939 2001 TX_{97}	16.4	X	268.27569	76.61769	264.79441	2.56334	0.1914271	0.24621798	2.5210969	20	5 1.7	19.8
150940 2001 TL_{100}	15.5	X	142.48970	286.22400	328.74878	5.89321	0.0982113	0.26651964	2.3913872	20	12 20.6	19.0
150941 2001 TN_{100}	16.6	X	115.31816	139.93012	256.64896	2.75829	0.2190804	0.22931897	2.6434802	20	2 21.6	20.3
150942 2001 TU_{102}	15.0	X	179.85920	49.75554	340.48065	13.22398	0.1088789	0.23756074	2.5819804	20	4 4.7	19.1
150943 2001 TZ_{104}	15.9	X	226.83467	324.27079	31.36204	1.91796	0.0954546	0.24011567	2.5636322	20	4 15.6	19.6
150944 2001 TB_{106}	14.5	X	228.55272	279.19704	50.12320	14.90229	0.1417561	0.23452240	2.6042329	20	3 20.5	18.8
150945 2001 TS_{106}	15.7	X	165.00593	7.03241	25.65847	2.34988	0.2619257	0.23389969	2.6088530	20	4 5.3	20.2
150946 2001 TK_{110}	16.0	X	169.79881	29.70644	336.99153	6.95214	0.1004727	0.23356985	2.6113086	20	2 29.8	20.0
150947 2001 TP_{112}	15.7	X	207.10693	71.27099	293.75441	4.06358	0.1553964	0.23866758	2.5739914	20	4 2.6	19.8
150948 2001 TR_{117}	14.5	X	233.91401	285.17088	63.51919	15.04989	0.1831743	0.23569290	2.5956037	20	4 14.4	18.8
150949 2001 TS_{118}	16.0	X	121.08566	96.36237	306.46692	12.69837	0.1735267	0.23147263	2.6270577	20	2 26.6	19.9
150950 2001 TK_{121}	15.7	X	161.97765	76.17776	340.94849	11.85605	0.1556600	0.23824553	2.5770304	20	4 22.7	20.0
150951 2001 TP_{121}	16.2	X	28.70174	171.61615	278.22555	8.67160	0.2439193	0.22114992	2.7081841	20	—	—
150952 2001 TU_{124}	15.5	X	299.82425	151.57313	319.12674	7.34602	0.1779834	0.21269808	2.7794594	20	12 17.1	18.4
150953 2001 TM_{125}	15.8	X	195.79915	49.71819	325.66170	9.20397	0.1081427	0.23938171	2.5688697	20	4 3.1	19.8
150954 2001 TH_{126}	16.9	X	139.04646	266.99710	200.19097	3.53308	0.0936523	0.24422530	2.5347917	20	6 4.3	20.5
150955 2001 TT_{131}	15.9	X	89.94470	268.50218	160.58783	22.88518	0.2231281	0.23136389	2.6278808	20	3 5.4	19.1
150956 2001 TZ_{132}	16.1	X	74.56192	106.43175	343.44277	10.58081	0.1177564	0.23144355	2.6272778	20	2 23.9	19.1
150957 2001 TS_{140}	15.9	X	7.42296	291.76872	78.82265	5.19770	0.1136255	0.21348467	2.7726279	20	11 29.7	19.1
150958 2001 TR_{142}	16.1	X	101.59495	151.40655	39.32826	10.12914	0.0904179	0.25187192	2.4832258	20	8 16.6	19.7
150959 2001 TL_{143}	16.5	X	92.48883	332.03846	63.53585	4.93786	0.1305375	0.22725738	2.6594432	20	1 11.7	19.9
150960 2001 TA_{150}	15.9	X	310.87746	344.64630	87.50386	5.29382	0.0840518	0.21018146	2.8016021	20	11 19.9	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
150961 2001 TL_{158}	16.5	X	230.73102	151.73750	191.79372	3.17470	0.1178085	0.24319916	2.5419168	20	4 2.5	20.1
150962 2001 TA_{161}	16.7	X	116.43478	231.94992	214.61626	3.18027	0.1871257	0.23697832	2.5862091	20	4 22.6	20.3
150963 2001 TG_{162}	16.3	X	101.22835	126.40657	1.06535	10.08007	0.2200955	0.23932652	2.5692646	20	5 31.1	20.2
150964 2001 TX_{162}	16.3	X	77.87899	154.60768	359.92064	4.82809	0.0726208	0.24244860	2.5471602	20	5 16.8	19.6
150965 2001 TY_{164}	15.8	X	94.72606	64.40836	61.81833	11.57419	0.0638632	0.24054155	2.5606053	20	5 3.6	19.1
150966 2001 TL_{167}	15.7	X	215.54299	354.05395	351.78199	9.81387	0.2168876	0.23824217	2.5770546	20	3 17.5	20.1
150967 2001 TG_{169}	15.4	X	203.86337	352.90390	340.82838	8.27589	0.0919173	0.23190633	2.6237814	20	2 24.9	19.3
150968 2001 TQ_{169}	15.4	X	141.37390	34.28063	7.91197	14.51751	0.1019447	0.23224118	2.6212588	20	3 17.4	19.2
150969 2001 TQ_{172}	16.6	X	164.56231	357.20777	78.92411	0.57306	0.0522039	0.24361179	2.5390457	20	5 20.9	20.2
150970 2001 TG_{179}	16.2	X	355.13878	201.90004	247.29306	5.20310	0.0220203	0.21986213	2.7187488	20	—	—
150971 2001 TJ_{191}	16.0	X	101.09030	37.21053	8.61607	3.69783	0.1025735	0.22695097	2.6618363	20	2 2.2	19.4
150972 2001 TH_{195}	16.4	X	96.68598	271.12338	148.83214	11.85534	0.1808320	0.22942912	2.6426340	20	2 25.3	19.7
150973 2001 TO_{195}	15.9	X	145.71755	358.72545	96.88646	11.87100	0.0873104	0.24168019	2.5525564	20	5 28.7	19.7
150974 2001 TP_{196}	15.6	X	134.14142	319.49782	96.88793	15.56695	0.2138971	0.23408511	2.6074752	20	4 13.4	20.1
150975 2001 TV_{196}	15.8	X	211.18861	237.35329	120.14402	14.02899	0.2017103	0.24099929	2.5573620	20	4 3.9	20.3
150976 2001 TN_{210}	16.2	X	63.94035	12.96040	291.37064	5.91236	0.1195448	0.26569496	2.3963330	20	11 30.4	19.5
150977 2001 TY_{212}	15.9	X	147.17888	64.63623	6.56874	15.02893	0.0390752	0.23887453	2.5725046	20	4 17.7	19.6
150978 2001 TN_{214}	16.3	X	43.85053	109.51785	338.12730	11.17294	0.1648755	0.22449089	2.6812475	20	1 5.9	19.1
150979 2001 TR_{214}	15.9	X	208.58291	68.38773	327.80739	8.54766	0.0595685	0.24328673	2.5413068	20	5 17.4	19.7
150980 2001 TC_{216}	15.4	X	45.86450	138.01371	348.40001	12.10370	0.1257777	0.22950791	2.6420292	20	2 28.6	18.3
150981 2001 TX_{220}	15.8	X	55.99549	143.98127	341.54978	7.83124	0.0657865	0.23365393	2.6106820	20	3 6.3	18.9
150982 2001 TV_{225}	16.2	X	81.97275	273.97600	141.65382	13.26463	0.2648820	0.22542915	2.6738025	20	2 12.4	19.1
150983 2001 TM_{229}	16.0	X	249.35163	355.90511	324.95716	13.11057	0.1632176	0.24040903	2.5615462	20	3 15.6	20.1
150984 2001 TP_{233}	15.5	X	207.26003	356.37558	270.03795	13.21115	0.0571335	0.22672367	2.6636151	20	—	—
150985 2001 TB_{235}	15.5	X	130.99827	218.88985	263.86708	5.43399	0.1907884	0.24320334	2.5418877	20	6 23.3	19.4
150986 2001 TL_{239}	16.0	X	198.85415	299.04035	71.42840	9.56775	0.0360214	0.23949850	2.5680345	20	4 9.9	19.7
150987 2001 TT_{240}	15.9	X	24.58866	257.00019	251.14473	11.77162	0.1393345	0.22842272	2.6503904	20	2 13.3	18.9
150988 2001 TU_{241}	15.3	X	235.05576	202.82606	94.47104	16.07181	0.0421099	0.23042776	2.6349933	20	2 19.8	19.2
150989 2001 UL_{4}	16.2	X	108.23540	199.48874	188.21727	2.05844	0.2176963	0.22634765	2.6665643	20	2 3.4	19.7
150990 2001 UC_{8}	16.0	X	108.78244	114.72302	213.28923	2.67629	0.0919660	0.22064916	2.7122801	20	—	—
150991 2001 UF_{8}	15.9	X	51.24513	295.58918	180.17981	5.02468	0.1359879	0.22985224	2.6393899	20	2 21.5	18.6
150992 2001 UD_{13}	15.6	X	251.09499	187.28970	186.53719	3.11280	0.0760544	0.24429259	2.5343262	20	6 10.2	18.9
150993 2001 UK_{15}	16.6	X	124.95387	117.62737	352.17404	2.80352	0.1828934	0.23881687	2.5729186	20	5 30.5	20.7
150994 2001 UL_{23}	15.4	X	133.10144	69.06877	357.48799	14.84005	0.1225657	0.23565374	2.5958912	20	4 4.4	19.2
150995 2001 UX_{23}	15.7	X	157.04041	92.95228	337.42685	9.57448	0.1141918	0.23965058	2.5669480	20	5 3.8	19.7
150996 2001 UR_{28}	16.5	X	145.34876	268.24746	141.98902	3.18749	0.1944115	0.23569537	2.5955855	20	4 7.6	20.6
150997 2001 UF_{32}	16.3	X	121.30391	256.55311	161.72530	9.45125	0.1444494	0.23356058	2.6113777	20	3 19.1	20.0
150998 2001 UC_{34}	15.8	X	50.17274	289.81548	153.07682	8.70799	0.1965851	0.22391928	2.6858086	20	1 11.4	18.5
150999 2001 UT_{35}	15.8	X	91.03630	11.45876	78.06228	14.28265	0.1738256	0.23042546	2.6350108	20	4 3.1	19.6
151000 2001 UB_{37}	15.8	X	69.40424	289.23770	160.55080	9.68354	0.1452036	0.22711088	2.6605868	20	2 18.4	18.9
151001 2001 UQ_{39}	16.1	X	135.92709	149.83159	139.75152	2.57009	0.0538791	0.21822468	2.7323320	20	—	—
151002 2001 UF_{57}	16.9	X	188.59199	32.00638	12.18555	5.48731	0.2416290	0.24127940	2.5553823	20	5 4.9	21.4
151003 2001 UZ_{58}	15.9	X	56.03214	316.38461	211.84329	8.12790	0.1019218	0.23953436	2.5677782	20	5 10.0	18.9
151004 2001 UA_{59}	17.2	X	31.55310	323.77176	1.82906	1.98006	0.1965740	0.26305044	2.4123669	20	11 29.5	20.1
151005 2001 UL_{68}	16.1	X	129.40608	208.95046	198.28852	3.86479	0.0454494	0.23179556	2.6246172	20	2 28.6	19.7
151006 2001 UB_{72}	15.4	X	156.28616	11.46455	78.60718	15.59667	0.1329915	0.24203329	2.5500732	20	6 3.1	19.2
151007 2001 UJ_{73}	16.2	X	183.99379	210.23761	148.84554	4.03703	0.2633759	0.23635464	2.5907567	20	3 10.8	20.9
151008 2001 UR_{80}	16.0	X	146.54080	32.93542	42.52348	15.09935	0.0814934	0.23827494	2.5768183	20	4 30.9	19.8
151009 2001 UD_{81}	16.1	X	55.56557	293.70773	204.76131	3.52517	0.1410482	0.23238756	2.6201579	20	4 1.9	18.8
151010 2001 UT_{81}	15.7	X	59.96349	49.31730	45.59855	15.25941	0.0486983	0.22815216	2.6524854	20	2 6.4	19.4
151011 2001 UK_{83}	16.3	X	159.57444	227.22415	152.67615	1.61274	0.1511976	0.23275809	2.6173765	20	3 10.7	20.4
151012 2001 US_{92}	15.7	X	53.55754	24.42932	77.71311	6.26346	0.0903161	0.22715459	2.6602455	20	2 5.9	18.8
151013 2001 UE_{101}	16.3	X	80.23950	133.63873	20.20096	4.81465	0.0704388	0.24264426	2.5457907	20	5 19.2	19.6
151014 2001 UB_{113}	15.9	X	209.27812	56.74440	315.04821	3.24022	0.2147145	0.23935577	2.5690552	20	4 11.9	20.2
151015 2001 UC_{113}	15.9	X	160.43191	359.28765	25.28972	4.12646	0.2067735	0.23320031	2.6140665	20	3 21.2	20.3
151016 2001 UO_{113}	16.2	X	355.21439	282.27327	209.61236	7.50389	0.2521540	0.22161341	2.7044068	20	—	—
151017 2001 UC_{114}	15.8	X	65.21182	106.05650	42.95439	12.80440	0.1326336	0.23582284	2.5946502	20	5 1.7	18.6
151018 2001 UV_{116}	16.1	X	83.96319	290.46548	168.61194	3.43741	0.1788891	0.23019530	2.6367669	20	3 30.2	19.4
151019 2001 UF_{119}	15.5	X	351.75894	105.14545	206.62316	4.79455	0.1093046	0.25135877	2.4866044	20	8 17.5	18.2
151020 2001 UU_{120}	16.0	X	200.13978	261.97534	58.04984	4.20261	0.0683778	0.23027257	2.6361770	20	2 5.2	19.8
151021 2001 UU_{123}	15.7	X	119.06109	307.23321	136.87549	12.49121	0.1608181	0.23570995	2.5954785	20	4 24.5	19.7
151022 2001 UH_{126}	16.2	X	120.99215	244.33104	146.65021	11.10366	0.1086869	0.22877429	2.6476744	20	2 7.4	19.9
151023 2001 UT_{126}	15.8	X	82.27476	320.37064	171.67502	4.73839	0.1770819	0.23508789	2.6000551	20	5 11.7	19.1
151024 2001 UV_{126}	16.0	X	71.42944	229.29363	74.81862	7.33955	0.1426224	0.26433891	2.4045215	20	12 11.1	19.4
151025 2001 UD_{144}	16.0	X	36.07446	265.52747	78.21340	4.16556	0.1036747	0.21023535	2.8011232	20	12 2.8	19.7
151026 2001 UD_{145}	15.9	X	261.09865	300.72875	62.99278	2.13085	0.1638287	0.19316607	2.9637995	20	5 27.7	20.3
151027 2001 UA_{146}	16.2	X	86.49357	15.19076	62.39619	5.25398	0.0739930	0.22893927	2.6464022	20	2 20.4	19.6
151028 2001 UM_{146}	16.3	X	273.40463	198.30840	208.39153	1.61117	0.1554676	0.19882529	2.9072896	20	8 7.9	20.3
151029 2001 UT_{154}	15.5	X	60.38033	170.27032	223.93775	10.21378	0.1197002	0.21818245	2.7326846	20	—	—
151030 2001 UC_{156}	16.6	X	228.28163	202.25814	147.86094	1.47551	0.1605521	0.23951691	2.5679029	20	4 6.3	20.6
151031 2001 UG_{167}	15.9	X	345.97091	100.74573	1.92614	13.39225	0.2582397	0.21462969	2.7627580	20	—	—
151032 2001 UM_{169}	14.9	X	156.61275	332.00026	26.14550	13.39225	0.3024880	0.22940240	2.6428392	20	2 26.7	19.7
151033 2001 UJ_{170}	15.9	X	117.86496	234.81929	250.45799	2.36527	0.1577283	0.23933303	2.5692180	20	6 10.4	19.5
151034 2001 UX_{173}	16.3	X	54.22679	163.03095	61.48709	4.08978	0.0417538	0.24674312	2.5175185	20	7 18.1	19.5
151035 2001 UQ_{179}	16.0	X	101.96109	287.20282	159.62409	13.12445	0.2340488	0.23230542	2.6207755	20	4 16.9	19.9
151036 2001 UE_{182}	15.6	X	165.82487	65.35376	95.06905	6.33643	0.0929312	0.25754484	2.4466254	20	9 17.4	19.3
151037 2001 UZ_{182}	16.3	X	118.83099	275.21613	127.92047	6.24240	0.1693409	0.23157179	2.6263077	20	2 29.8	20.1
151038 2001 UL_{191}	17.0	X	114.86251	300.01736	328.78137	1.51891	0.1734999	0.26854044	2.3793751	20	12 11.3	20.7
151039 2001 UW_{198}	16.6	X	100.61439	54.39770	354.76966	2.84131	0.1033958	0.22987210	2.6392379	20	2 5.1	19.9
151040 2001 UT_{201}	16.4	X	211.62756	206.23474	11.96222	6.30704	0.1188346	0.27118252	2.3638954	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151041 2001 UX_{201}	16.5	X	124.10840	233.68254	270.13937	2.74747	0.1239247	0.24483012	2.5306155	20	7 8.5	20.3
151042 2001 UR_{205}	16.3	X	297.68077	334.89836	311.69632	2.12156	0.1103988	0.24072174	2.5593273	20	4 7.7	19.6
151043 2001 UU_{205}	15.4	X	354.66114	185.55129	31.64373	12.24396	0.0971252	0.23679710	2.5875285	20	4 6.4	18.3
151044 2001 UX_{205}	15.3	X	343.48771	342.77070	233.09360	10.16449	0.0903459	0.23471697	2.6027935	20	3 10.7	18.7
151045 2001 UL_{216}	15.6	X	74.34294	315.55634	186.24688	5.16582	0.2453508	0.18135409	3.0911339	20	5 25.1	19.8
151046 2001 UX_{219}	16.0	X	327.44087	11.57046	240.78946	1.09703	0.1541736	0.23961619	2.5671936	20	3 30.5	18.9
151047 2001 UB_{220}	15.2	X	207.55046	341.14832	25.77157	24.84251	0.0408274	0.23775417	2.5805798	20	4 12.5	18.6
151048 2001 UO_{220}	16.6	X	194.83331	13.11834	344.19151	1.62218	0.0905941	0.23515718	2.5995443	20	3 14.8	20.4
151049 2001 UK_{221}	16.8	X	67.44906	226.10001	220.52762	1.50403	0.1798105	0.22594239	2.6697519	20	2 16.1	19.7
151050 2001 UW_{222}	15.8	X	310.43866	320.57747	244.18200	7.04067	0.1509226	0.22428755	2.6828678	20	1 5.5	19.4
151051 2001 UC_{225}	15.8	X	176.78248	77.79986	349.15981	11.36325	0.1052409	0.23949229	2.5680789	20	5 20.4	20.0
151052 2001 VN_{1}	16.8	X	111.43657	143.54447	284.66111	1.89749	0.2156315	0.23083624	2.6318839	20	3 27.6	20.6
151053 2001 VS_{6}	15.6	X	317.25085	68.32730	232.36459	2.78520	0.0806288	0.24502083	2.5293022	20	6 2.3	18.4
151054 2001 VW_{6}	16.2	X	143.29035	108.76732	338.84717	0.85847	0.1650075	0.23804654	2.5784663	20	5 18.9	20.3
151055 2001 VV_{11}	15.1	X	228.06142	62.65418	306.64033	7.40973	0.1235320	0.24087893	2.5582138	20	4 29.2	19.2
151056 2001 VO_{13}	15.3	X	186.58045	189.03499	261.14990	12.76560	0.1290527	0.19026931	2.9938053	20	6 30.8	20.0
151057 2001 VO_{14}	15.8	X	57.20770	49.30027	22.52922	9.84203	0.1014373	0.22245614	2.6975725	20	1 3.2	19.1
151058 2001 VP_{14}	15.5	X	162.28690	118.06104	290.85830	5.50266	0.0804951	0.23536691	2.5979998	20	4 11.1	19.3
151059 2001 VF_{18}	16.4	X	214.14448	340.71826	31.30117	1.91508	0.0970453	0.23987088	2.5653760	20	4 22.7	20.0
151060 2001 VA_{19}	15.5	X	57.29607	173.77964	232.95858	8.10583	0.1461809	0.22083616	2.7107487	20	—	—
151061 2001 VQ_{19}	15.3	X	93.84673	187.94426	230.19789	8.06901	0.1598514	0.22739073	2.6584034	20	2 12.2	18.8
151062 2001 VP_{28}	15.9	X	227.51409	67.45508	271.00201	1.65278	0.1986614	0.23702317	2.5858829	20	3 18.9	20.2
151063 2001 VH_{29}	15.8	X	241.69968	235.03888	125.36567	0.99680	0.1325108	0.24113519	2.5564011	20	5 5.1	19.5
151064 2001 VP_{29}	15.9	X	17.44332	28.74979	78.41258	7.62992	0.1859532	0.21975652	2.7196199	20	—	—
151065 2001 VV_{29}	15.7	X	139.58153	308.84731	49.55556	3.36781	0.2289527	0.22686533	2.6625062	20	2 3.2	19.8
151066 2001 VP_{31}	15.2	X	188.75211	243.76924	152.20671	0.67472	0.2017761	0.18439712	3.0570318	20	4 28.1	20.4
151067 2001 VP_{35}	15.1	X	35.79441	161.22189	228.98891	8.70397	0.1729064	0.21386728	2.7693201	20	—	—
151068 2001 VJ_{36}	16.2	X	207.35405	65.96831	324.78148	1.40068	0.0923380	0.23845877	2.5754938	20	5 9.4	20.1
151069 2001 VL_{37}	15.5	X	189.33440	278.34134	88.39558	4.99948	0.2312964	0.23486296	2.6017148	20	3 25.3	20.0
151070 2001 VU_{49}	15.8	X	110.10385	81.78260	1.27542	12.91930	0.1441435	0.23359716	2.6111050	20	4 3.5	19.4
151071 2001 VY_{49}	16.0	X	197.84332	34.10917	342.46332	8.55442	0.1768805	0.23918055	2.5703098	20	4 7.3	20.3
151072 2001 VE_{50}	15.8	X	67.98501	93.12441	6.85053	11.59050	0.1622628	0.22876264	2.6477643	20	3 7.1	18.8
151073 2001 VF_{50}	15.2	X	311.42465	49.26938	298.10531	6.77560	0.0352806	0.25041966	2.4928172	20	8 4.6	18.2
151074 2001 VV_{57}	16.1	X	42.57161	81.88071	31.52215	11.25642	0.2237824	0.22557015	2.6726882	20	2 17.9	18.7
151075 2001 VD_{60}	16.0	X	45.96557	304.44278	356.29422	4.80922	0.1035915	0.25813927	2.4428680	20	10 29.8	19.0
151076 2001 VD_{61}	15.6	X	46.62859	103.05319	29.58860	12.45888	0.1612803	0.22888566	2.6468154	20	3 17.4	18.5
151077 2001 VC_{63}	15.4	X	53.07185	256.66376	255.27103	13.25216	0.0941243	0.23331688	2.6131958	20	4 5.3	18.8
151078 2001 VD_{64}	15.6	X	164.38686	322.53814	30.25378	6.57545	0.0701831	0.22875453	2.6478268	20	2 8.1	19.5
151079 2001 VP_{64}	14.3	X	221.42366	281.80967	36.80818	13.62548	0.1635831	0.18074122	3.0981177	20	3 3.3	19.5
151080 2001 VD_{65}	15.5	X	198.84442	351.86716	37.78237	7.33472	0.1435814	0.23915394	2.5705005	20	4 28.1	19.6
151081 2001 VA_{74}	15.6	X	156.91104	123.02293	306.44330	10.63112	0.1356412	0.23845280	2.5755368	20	5 3.6	19.8
151082 2001 VK_{74}	15.9	X	39.61608	266.83221	158.63418	9.57434	0.1759366	0.21910220	2.7250317	20	—	—
151083 2001 VM_{79}	16.3	X	4.11243	320.79724	138.53774	5.87227	0.2573741	0.21694949	2.7430283	20	—	—
151084 2001 VG_{81}	15.6	X	80.90296	341.74817	105.26695	11.20115	0.0954696	0.22847892	2.6499557	20	2 29.5	19.0
151085 2001 VK_{83}	15.7	X	345.91307	138.76232	256.50646	3.29248	0.0755399	0.20961662	2.8066327	20	11 23.9	19.2
151086 2001 VE_{84}	16.1	X	116.09613	339.56058	107.70754	5.27657	0.0845764	0.23288139	2.6164525	20	4 13.2	19.7
151087 2001 VH_{84}	15.5	X	208.38880	68.93434	279.33333	14.02549	0.1930338	0.24050073	2.5608951	20	3 8.0	20.1
151088 2001 VG_{91}	16.0	X	199.01609	243.65675	123.08889	10.39272	0.2245901	0.23778913	2.5803269	20	4 3.5	20.6
151089 2001 VB_{92}	15.7	X	78.60299	236.02634	137.72968	9.70421	0.1435855	0.21933947	2.7230662	20	—	—
151090 2001 VU_{94}	15.5	X	214.52698	262.22446	110.20453	12.57914	0.3311835	0.24072530	2.5593021	20	4 20.5	20.5
151091 2001 VF_{95}	15.2	X	144.68600	268.40878	120.06503	15.81110	0.1143026	0.22929833	2.6436389	20	3 7.5	19.3
151092 2001 VZ_{97}	15.4	X	326.55364	268.42130	191.24453	12.94237	0.1699606	0.21007393	2.8025580	20	—	—
151093 2001 VE_{99}	15.5	X	100.97222	253.91221	174.00730	12.97504	0.2147472	0.22455439	2.6807420	20	3 17.1	19.1
151094 2001 VX_{100}	16.0	X	97.96465	114.40138	272.25888	4.69884	0.0730943	0.22428528	2.6828859	20	—	—
151095 2001 VA_{103}	16.2	X	206.54883	19.31824	300.29761	2.80765	0.2052732	0.23260825	2.6185004	20	2 9.2	20.7
151096 2001 VS_{103}	16.1	X	203.07485	84.06818	303.65757	2.06379	0.1668652	0.23984827	2.5655372	20	4 28.2	20.3
151097 2001 VN_{108}	15.9	X	235.86539	33.93112	309.27797	3.66793	0.2071884	0.23973608	2.5663376	20	3 30.5	20.2
151098 2001 VH_{109}	16.4	X	63.85872	130.43415	9.72391	2.20277	0.1455529	0.23181763	2.6244506	20	4 18.7	19.5
151099 2001 VX_{113}	15.9	X	207.29058	44.70247	318.33675	2.40784	0.1122940	0.23595137	2.5937078	20	4 2.6	19.8
151100 2001 VP_{116}	16.5	X	106.83659	12.79096	57.12041	4.71507	0.1687950	0.22893651	2.6464235	20	3 21.9	20.2
151101 2001 VN_{119}	16.2	X	149.90687	124.95338	287.69357	2.15846	0.0519232	0.23324448	2.6137365	20	4 1.2	19.7
151102 2001 VB_{124}	15.8	X	209.19513	359.89358	326.07528	4.21872	0.0250334	0.23078632	2.6322634	20	2 21.1	19.2
151103 2001 VV_{132}	15.0	X	211.86770	205.47041	177.14255	10.29836	0.0982433	0.18608571	3.0385102	20	5 7.7	19.8
151104 2001 WH_{6}	15.8	X	18.05212	332.52070	230.58118	8.88653	0.1417880	0.23721068	2.5845200	20	4 25.4	18.3
151105 2001 WM_{9}	15.3	X	146.82974	350.89777	79.90061	15.80538	0.0842163	0.23568518	2.5956604	20	5 1.2	19.3
151106 2001 WR_{12}	15.6	X	345.52780	289.42395	207.80180	10.85009	0.1638745	0.21892508	2.7265013	20	—	—
151107 2001 WW_{14}	16.1	X	343.43094	119.24538	59.29859	7.00753	0.1071721	0.22521469	2.6754997	20	1 26.4	19.4
151108 2001 WK_{16}	16.2	X	77.46917	108.77478	21.82912	12.09971	0.2184308	0.23462880	2.6034456	20	5 5.5	19.5
151109 2001 WB_{23}	15.0	X	86.93269	95.65371	16.51321	28.41738	0.1383894	0.23115219	2.6294851	20	4 10.9	18.5
151110 2001 WZ_{28}	15.2	X	345.95506	326.29404	155.34707	5.28277	0.0661109	0.21832036	2.7315336	20	—	—
151111 2001 WX_{29}	15.5	X	215.01078	278.73093	96.41123	8.46729	0.1721351	0.23904251	2.5712993	20	4 27.6	19.7
151112 2001 WZ_{31}	16.1	X	5.08498	82.70510	80.33666	7.29404	0.0664258	0.22829981	2.6513416	20	2 11.9	19.4
151113 2001 WG_{32}	16.6	X	120.24462	333.46131	133.59814	1.94583	0.0770467	0.23713729	2.5850532	20	5 11.3	20.0
151114 2001 WS_{33}	16.0	X	105.82787	296.76501	110.81504	4.06081	0.1159830	0.22722672	2.6596824	20	2 12.2	19.4
151115 2001 WU_{33}	16.1	X	86.36503	176.49668	102.94660	3.26432	0.1525643	0.26012842	2.4303986	20	11 26.2	19.8
151116 2001 WW_{33}	16.5	X	54.10006	272.39155	160.56850	2.33366	0.0557492	0.22266172	2.6959118	20	—	—
151117 2001 WY_{33}	15.6	X	302.55139	190.32229	110.83752	4.33997	0.1338092	0.24224965	2.5485546	20	5 4.1	18.6
151118 2001 WZ_{47}	15.5	X	83.89876	8.67140	84.01129	15.25242	0.1602092	0.22952317	2.6419121	20	3 27.3	19.2
151119 2001 WD_{51}	15.9	X	263.16116	101.59634	19.03481	4.49300	0.0161747	0.21017424	2.8016663	20	11 19.9	19.6
151120 2001 WT_{52}	15.9	X	19.32198	146.63952	237.36871	4.88603	0.0623495	0.21273490	2.7791387	20	12 25.8	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151121 2001 WT_{54}	16.6	X	90.51607	217.11760	265.53620	1.75748	0.1595942	0.23458465	2.6037722	20	5 5.4	20.0
151122 2001 WU_{56}	16.0	X	351.34525	247.61352	36.00748	2.32789	0.0956360	0.24688627	2.5165453	20	7 5.9	18.6
151123 2001 WY_{63}	16.4	X	111.91262	340.54592	10.56612	1.93229	0.0863524	0.22094621	2.7098485	20	—	—
151124 2001 WL_{94}	16.2	X	39.61496	292.36812	198.98913	2.86119	0.0128667	0.23040781	2.6351454	20	2 15.9	19.6
151125 2001 WF_{101}	16.1	X	346.41634	132.23095	53.56712	3.27308	0.1660442	0.22732790	2.6588932	20	1 31.9	19.1
151126 2001 XD_{2}	15.5	X	150.92405	93.87187	314.49824	21.14267	0.1025445	0.23486267	2.6017170	20	3 21.1	19.8
151127 2001 XO_{2}	15.0	X	161.79874	44.90292	6.37663	22.65388	0.0318814	0.23520834	2.5991673	20	4 8.5	18.7
151128 2001 XK_{5}	15.1	X	137.58831	21.60980	72.08226	15.61436	0.0128620	0.23760038	2.5816932	20	5 10.6	18.7
151129 2001 XO_{6}	15.0	X	203.70605	357.76208	343.99903	13.04841	0.1918146	0.23401337	2.6080081	20	3 4.4	19.2
151130 2001 XH_{12}	15.3	X	59.61245	148.94479	16.07514	6.43827	0.2579008	0.23140717	2.6275532	20	6 4.5	18.4
151131 2001 XJ_{14}	16.3	X	24.42307	5.27856	65.31218	10.11300	0.2779258	0.21535325	2.7565662	20	—	—
151132 2001 XP_{18}	15.8	X	90.98622	42.03853	41.56237	5.47754	0.0514626	0.22632315	2.6667567	20	3 2.5	19.3
151133 2001 XA_{21}	15.7	X	328.68547	102.63803	39.52259	6.16337	0.2113348	0.21380823	2.7698299	20	—	—
151134 2001 XT_{23}	15.5	X	319.84979	94.79079	63.67917	10.13819	0.1002867	0.21392650	2.7688090	20	—	—
151135 2001 XH_{33}	15.6	X	339.53728	12.73436	111.59570	10.37891	0.1276542	0.21282347	2.7783676	20	—	—
151136 2001 XZ_{34}	15.1	X	139.26952	152.30875	282.27781	12.68836	0.1345987	0.23583095	2.5945907	20	4 21.1	19.2
151137 2001 XH_{37}	15.5	X	56.38839	179.09266	287.52275	12.47803	0.1959677	0.22655537	2.6649341	20	2 20.9	18.5
151138 2001 XL_{40}	15.3	X	35.92373	359.73482	6.06453	10.23953	0.2500917	0.21068874	2.7971033	20	—	—
151139 2001 XJ_{41}	15.3	X	31.70781	172.21835	320.73412	11.83795	0.2097266	0.22288933	2.6940761	20	2 14.5	17.5
151140 2001 XX_{41}	15.9	X	313.76346	86.04745	45.28314	11.84405	0.2079856	0.21079494	2.7961637	20	—	—
151141 2001 XG_{43}	15.6	X	322.06940	104.35359	15.56626	9.61371	0.0659716	0.21340418	2.7733250	20	—	—
151142 2001 XP_{43}	14.7	X	138.79888	343.62191	59.36616	14.93308	0.1030889	0.17463979	3.1698636	20	3 25.9	19.7
151143 2001 XQ_{47}	14.8	X	91.30514	320.98104	73.26557	14.74576	0.2414271	0.21941170	2.7224685	20	1 29.2	18.4
151144 2001 XG_{48}	15.3	X	151.93489	71.79752	327.27584	10.67775	0.1885187	0.23561731	2.5961588	20	3 24.8	19.6
151145 2001 XT_{49}	16.3	X	101.35548	325.58613	89.34450	1.38713	0.1093840	0.22706987	2.6609071	20	2 14.5	19.7
151146 2001 XH_{53}	16.1	X	27.95863	219.89392	231.16557	2.88757	0.1085933	0.21951047	2.7216517	20	—	—
151147 2001 XZ_{54}	15.5	X	225.75580	283.42113	85.64977	3.57266	0.0747242	0.23806743	2.5783155	20	5 4.6	19.1
151148 2001 XP_{58}	16.1	X	355.50205	198.18511	246.83618	7.22130	0.2003171	0.21321122	2.7749980	20	—	—
151149 2001 XK_{59}	15.2	X	238.75317	136.86914	236.90680	3.17963	0.1270376	0.24025573	2.5626358	20	5 19.6	19.0
151150 2001 XM_{59}	16.2	X	144.72474	240.21561	135.93400	2.93779	0.2572017	0.22879120	2.6475439	20	3 1.3	20.6
151151 2001 XS_{74}	15.6	X	354.66199	244.20014	225.56547	7.43090	0.1163485	0.21730258	2.7400561	20	—	—
151152 2001 XC_{75}	16.0	X	168.47123	38.70387	308.14859	4.81117	0.2104322	0.22828242	2.6514763	20	2 11.1	20.2
151153 2001 XJ_{78}	15.7	X	4.37565	179.35496	82.26927	15.78007	0.1490951	0.24298948	2.5433789	20	6 28.0	18.1
151154 2001 XD_{89}	15.6	X	36.88091	272.43982	252.23985	11.26675	0.0257275	0.23442790	2.6049328	20	3 22.8	19.1
151155 2001 XL_{92}	15.6	X	103.78374	65.11970	66.18495	7.55635	0.0770745	0.23729494	2.5839081	20	5 22.6	18.9
151156 2001 XK_{102}	15.9	X	334.78030	57.17097	49.25248	5.70627	0.1204559	0.21392702	2.7688045	20	—	—
151157 2001 XA_{105}	16.1	X	235.97344	317.73317	262.93615	2.05488	0.0221379	0.21143800	2.7904914	20	—	—
151158 2001 XD_{113}	15.5	X	11.51813	305.94660	104.57097	14.50413	0.1518368	0.21123414	2.7922865	20	—	—
151159 2001 XR_{126}	16.5	X	80.77601	275.73791	109.73721	2.81879	0.0950664	0.22011889	2.7166342	20	—	—
151160 2001 XJ_{130}	16.3	X	172.27937	179.70157	161.41494	1.80501	0.1029659	0.22743176	2.6580836	20	2 1.8	20.1
151161 2001 XL_{130}	16.4	X	119.79707	308.32149	102.69410	2.53016	0.1225327	0.22891991	2.6465514	20	3 5.7	20.0
151162 2001 XJ_{137}	16.2	X	222.96222	254.89087	109.31111	2.76413	0.1197159	0.23765645	2.5812871	20	4 22.1	20.0
151163 2001 XU_{137}	16.2	X	165.18474	297.78023	134.01006	2.39220	0.0561200	0.23729574	2.5839023	20	5 16.8	19.8
151164 2001 XR_{138}	16.0	X	91.88406	261.04763	140.40577	2.97174	0.0783341	0.22238715	2.6981303	20	1 11.1	19.5
151165 2001 XB_{140}	16.2	X	113.29561	160.30130	245.15782	2.18429	0.1040257	0.22619156	2.6677909	20	2 15.5	19.8
151166 2001 XD_{148}	15.7	X	218.99006	336.91626	119.55582	4.30436	0.0733523	0.19432877	2.9519657	20	8 17.6	20.1
151167 2001 XP_{151}	15.6	X	347.93675	131.31287	211.79027	1.23529	0.0580561	0.19774727	2.9178461	20	9 15.9	19.4
151168 2001 XC_{154}	15.9	X	129.57216	326.14628	111.63431	3.03717	0.0627549	0.23185032	2.6242039	20	4 13.3	19.5
151169 2001 XP_{157}	15.6	X	7.46779	64.47714	98.04438	13.71929	0.1110050	0.22417816	2.6837405	20	2 13.9	18.8
151170 2001 XR_{164}	15.9	X	19.10485	15.73015	82.15485	3.29780	0.0323613	0.21810586	2.7333243	20	—	—
151171 2001 XU_{166}	16.4	X	97.10569	264.79820	185.76226	2.51538	0.0628126	0.22869166	2.6483121	20	3 18.3	19.9
151172 2001 XW_{167}	15.9	X	135.70054	266.02966	118.96113	4.26981	0.1324396	0.22628116	2.6670866	20	2 21.4	19.7
151173 2001 XS_{171}	16.1	X	359.10753	30.57968	84.69622	3.30146	0.0423176	0.21702914	2.7423572	20	—	—
151174 2001 XT_{182}	16.0	X	117.02443	191.56955	199.04939	1.48225	0.2104297	0.22346470	2.6894497	20	2 16.4	19.9
151175 2001 XP_{189}	15.5	X	268.80922	149.94955	213.69999	1.73261	0.2466033	0.24266858	2.5456207	20	5 25.5	19.1
151176 2001 XM_{194}	16.3	X	15.94583	265.05388	158.50370	2.07443	0.2407317	0.21194004	2.7860830	20	—	—
151177 2001 XV_{195}	15.1	X	321.93390	254.96888	269.76904	9.40374	0.2329627	0.21326091	2.7745669	20	—	—
151178 2001 XJ_{200}	16.1	X	207.41951	204.26287	145.51400	9.15293	0.1974175	0.23710780	2.5852675	20	3 18.8	20.5
151179 2001 XE_{206}	16.5	X	341.25170	325.11090	123.91833	5.46776	0.1776759	0.21209299	2.7847433	20	—	—
151180 2001 XY_{207}	16.1	X	81.65590	341.83418	178.07651	4.95627	0.1973671	0.23426881	2.6061120	20	6 19.7	19.8
151181 2001 XR_{209}	15.5	X	68.53008	326.64463	170.41117	4.15175	0.1452485	0.22991221	2.6389310	20	4 23.5	18.6
151182 2001 XU_{211}	15.5	X	78.80653	253.98501	149.30510	6.47749	0.1273740	0.22067899	2.7120356	20	1 1.6	18.9
151183 2001 XZ_{211}	15.6	X	298.08445	277.48380	233.54602	8.86936	0.0611440	0.21420553	2.7664040	20	—	—
151184 2001 XW_{212}	16.0	X	162.23379	212.30070	183.37620	5.54435	0.2980393	0.23275166	2.6174246	20	4 8.7	20.7
151185 2001 XH_{214}	16.7	X	345.91579	180.29554	273.00255	17.66795	0.0955740	0.37048884	1.9199325	20	—	—
151186 2001 XP_{216}	15.1	X	350.94643	291.05343	257.65277	7.57974	0.0190251	0.17397918	3.1778827	20	2 28.9	19.7
151187 2001 XB_{217}	15.3	X	167.51062	273.32871	93.32968	11.37333	0.1989133	0.22893945	2.6464008	20	3 9.8	19.8
151188 2001 XK_{217}	15.1	X	107.65103	73.60319	101.80920	21.06122	0.0854070	0.18524416	3.0477057	20	7 24.5	19.6
151189 2001 XH_{218}	15.9	X	359.15702	128.75669	20.72843	5.04860	0.2025819	0.22389481	2.6860042	20	—	—
151190 2001 XT_{219}	15.9	X	72.26699	35.76990	53.55595	5.02700	0.0565926	0.22757418	2.6569746	20	2 13.4	19.2
151191 2001 XD_{220}	16.2	X	65.07175	226.62141	298.61521	0.86239	0.1004484	0.23644794	2.5900751	20	5 18.8	19.4
151192 2001 XS_{221}	16.5	X	68.00779	84.88783	0.74206	1.70961	0.0398158	0.22686082	2.6625415	20	1 30.2	19.9
151193 2001 XL_{222}	15.9	X	321.98821	228.67163	277.45898	7.16158	0.0968000	0.21814673	2.7329829	20	—	—
151194 2001 XG_{230}	15.8	X	140.93034	71.41762	261.70742	3.92047	0.0650293	0.22040090	2.7143164	20	—	—
151195 2001 XQ_{231}	16.2	X	71.47282	104.82466	313.17696	3.17734	0.1452717	0.22210128	2.7004450	20	1 12.1	19.1
151196 2001 XB_{263}	16.1	X	324.61390	237.08689	51.65759	2.69920	0.1561801	0.24400741	2.5363005	20	5 17.8	18.7
151197 2001 YS	15.7	X	83.44787	328.92674	126.72202	17.49584	0.1967871	0.22980541	2.6397485	20	4 3.5	19.4
151198 2001 YS_{6}	15.3	X	62.83461	42.11150	167.86953	13.19865	0.0435712	0.24562805	2.5251320	20	7 8.3	18.8
151199 2001 YT_{14}	16.6	X	147.27565	43.06664	353.26960	3.33999	0.1893429	0.23242656	2.6198648	20	3 21.5	20.8
151200 2001 YP_{15}	16.0	X	339.81426	103.16882	81.81132	3.20842	0.1360017	0.22331533	2.6906489	20	1 24.6	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151201 2001 YT_{18}	15.7	X	210.14238	300.52061	106.29644	13.22551	0.1162154	0.18422463	3.0589398	20	6 3.7	20.5
151202 2001 YB_{23}	16.1	X	261.74164	268.18322	42.12290	3.33235	0.0653874	0.23574661	2.5952094	20	4 1.7	19.5
151203 2001 YV_{26}	15.4	X	147.35227	309.39171	40.57398	6.42802	0.0626431	0.22371543	2.6874399	20	1 14.8	19.2
151204 2001 YV_{29}	15.9	X	333.09851	276.69947	272.81909	3.53145	0.0874410	0.22534154	2.6744955	20	1 25.7	19.2
151205 2001 YQ_{31}	16.4	X	42.14101	144.35698	274.14825	1.49753	0.0786371	0.21763638	2.7372537	20	—	—
151206 2001 YY_{33}	16.2	X	7.22840	236.72934	306.61634	2.86548	0.0538099	0.22940430	2.6428247	20	3 9.9	19.5
151207 2001 YS_{36}	16.4	X	70.30335	98.39086	285.56888	3.60614	0.1715063	0.21792784	2.7348126	20	—	—
151208 2001 YK_{37}	16.2	X	36.88655	35.38643	57.23141	1.99057	0.1394371	0.22057360	2.7128995	20	—	—
151209 2001 YP_{41}	15.6	X	63.19935	336.37996	59.52866	5.20433	0.1213183	0.21736779	2.7395081	20	—	—
151210 2001 YK_{43}	16.1	X	355.56841	20.38658	68.05118	4.27916	0.1598751	0.21351074	2.7724022	20	—	—
151211 2001 YX_{45}	15.8	X	145.87569	299.43773	66.30539	2.85819	0.2236766	0.22722910	2.6596639	20	2 17.0	20.1
151212 2001 YD_{52}	16.6	X	92.50152	43.45633	1.47010	1.96288	0.2085108	0.22325800	2.6911094	20	2 5.5	19.9
151213 2001 YQ_{52}	15.6	X	16.86644	116.24734	83.25324	14.15233	0.1004083	0.23117599	2.6293045	20	4 24.9	18.8
151214 2001 YU_{52}	15.7	X	46.72458	31.23295	69.69351	3.46527	0.0664828	0.22236088	2.6983428	20	1 22.9	18.9
151215 2001 YA_{53}	15.5	X	12.57429	336.04891	77.18932	8.23865	0.1643411	0.21190144	2.7864213	20	—	—
151216 2001 YW_{57}	16.0	X	331.50542	17.54594	72.95153	4.69135	0.0668997	0.21016569	2.8017422	20	—	—
151217 2001 YH_{61}	15.7	X	196.75028	225.99869	61.27674	6.84858	0.0546503	0.21848585	2.7301542	20	—	—
151218 2001 YY_{65}	15.7	X	48.28744	118.74198	286.36811	5.20170	0.0337501	0.21354415	2.7721130	20	—	—
151219 2001 YA_{66}	15.7	X	335.30368	233.28358	290.18683	2.02546	0.1395466	0.21794472	2.7346714	20	—	—
151220 2001 YU_{68}	15.6	X	125.50556	27.02274	357.07103	1.96158	0.1625391	0.22392366	2.6857736	20	2 12.6	19.3
151221 2001 YS_{76}	15.6	X	240.57770	204.02074	59.69297	5.36166	0.0213781	0.22052957	2.7132605	20	1 14.4	19.3
151222 2001 YJ_{91}	15.8	X	237.85753	180.73833	334.31255	1.61973	0.1558346	0.20104312	2.8858687	20	11 9.8	19.8
151223 2001 YB_{96}	15.8	X	8.82779	79.73172	24.58905	4.91441	0.0752110	0.21519620	2.7579072	20	—	—
151224 2001 YL_{96}	15.2	X	292.26176	93.17517	92.55623	16.51848	0.1651657	0.21227734	2.7831308	20	—	—
151225 2001 YM_{99}	16.4	X	211.09399	255.21740	131.36976	0.45262	0.2660171	0.18637934	3.0353181	20	5 2.6	21.6
151226 2001 YB_{102}	16.1	X	334.74286	28.16408	111.22451	4.59307	0.1256568	0.21634092	2.7481701	20	—	—
151227 2001 YR_{103}	16.2	X	41.46821	268.21054	187.58071	2.55500	0.1529380	0.21980326	2.7192343	20	1 10.9	19.1
151228 2001 YN_{106}	15.6	X	307.89424	73.07185	120.13573	10.59724	0.0977451	0.21695168	2.7430099	20	—	—
151229 2001 YB_{109}	15.7	X	91.35940	345.22968	77.77970	10.74228	0.1089176	0.22438498	2.6820911	20	2 15.4	19.3
151230 2001 YG_{114}	15.7	X	312.94647	294.59243	116.27948	7.46909	0.0615574	0.20401817	2.8577450	20	10 28.3	19.4
151231 2001 YT_{114}	14.8	X	104.59539	300.50445	63.93317	13.87630	0.1782403	0.21689963	2.7434487	20	—	—
151232 2001 YM_{116}	15.8	X	190.99952	75.47004	319.52651	3.53426	0.1364797	0.23660613	2.5889205	20	4 25.9	19.9
151233 2001 YT_{122}	15.6	X	332.67783	83.95456	31.60505	8.73182	0.0770588	0.21448212	2.7640251	20	—	—
151234 2001 YX_{122}	15.5	X	60.05513	340.83319	57.93848	14.91061	0.0733565	0.21735126	2.7396470	20	—	—
151235 2001 YG_{124}	15.4	X	100.72045	12.65172	10.81449	4.71239	0.1301273	0.22165513	2.7040674	20	1 8.8	18.9
151236 2001 YS_{128}	15.7	X	359.28730	197.92746	295.18378	13.23139	0.0266098	0.21997190	2.7178444	20	—	—
151237 2001 YR_{145}	15.8	X	200.43120	137.62192	142.42674	4.27024	0.0209397	0.21524856	2.7574600	20	—	—
151238 2001 YA_{153}	15.7	X	20.36076	44.71566	0.28785	13.04475	0.2059149	0.21078613	2.7962416	20	—	—
151239 2001 YR_{155}	15.7	X	349.78112	126.47083	327.78606	11.04553	0.2145473	0.21271607	2.7793027	20	—	—
151240 2001 YL_{157}	15.6	X	20.78487	43.67713	39.27875	13.57610	0.1630545	0.21529790	2.7570386	20	—	—
151241 2002 AE	15.9	X	7.62323	191.89622	252.77852	2.97437	0.0754170	0.21346130	2.7728302	20	—	—
151242 Hajós	16.3	X	22.20712	93.23504	304.70589	6.37949	0.2331475	0.21009221	2.8023954	20	—	—
151243 2002 AC_{20}	15.6	X	21.26954	80.27894	331.11418	2.65525	0.0926604	0.20998318	2.8033654	20	—	—
151244 2002 AU_{23}	15.5	X	333.51898	356.82770	63.82196	6.92613	0.0521134	0.20484139	2.8500834	20	12 5.9	19.2
151245 2002 AJ_{24}	15.7	X	67.39890	87.84947	333.78457	11.03717	0.0874739	0.21803618	2.7339066	20	1 6.3	19.2
151246 2002 AK_{24}	15.5	X	9.89247	102.02769	120.73407	13.94635	0.1258274	0.23063605	2.6334066	20	5 15.5	18.6
151247 2002 AX_{24}	15.6	X	163.15735	166.43213	276.20234	7.88957	0.1050005	0.18035299	3.1025621	20	5 29.5	20.5
151248 2002 AA_{26}	16.0	X	293.45758	279.42424	120.92840	5.55533	0.1030847	0.19475363	2.9476710	20	9 7.7	19.8
151249 2002 AX_{30}	16.3	X	260.26105	244.76012	344.93570	2.02596	0.1264312	0.21405708	2.7676828	20	—	—
151250 2002 AN_{38}	15.1	X	335.89045	62.44726	109.04605	15.18521	0.1409274	0.21964961	2.7205022	20	—	—
151251 2002 AE_{41}	16.3	X	58.75173	257.15378	152.00835	3.84118	0.1963000	0.21722985	2.7406677	20	—	—
151252 2002 AJ_{47}	15.5	X	300.32065	296.31035	126.31145	13.38647	0.0689008	0.19882279	2.9073140	20	10 26.0	19.5
151253 2002 AS_{51}	15.9	X	258.95146	284.69772	297.28497	3.19189	0.0406629	0.21350210	2.7724770	20	—	—
151254 2002 AG_{55}	15.9	X	81.87638	252.85799	130.82159	5.18694	0.0851732	0.21426141	2.7659230	20	—	—
151255 2002 AK_{55}	16.1	X	262.62146	350.64416	115.79577	2.23988	0.1048663	0.19912013	2.9044190	20	10 19.7	19.8
151256 2002 AT_{57}	14.8	X	232.04381	301.51328	299.81148	16.15978	0.1138664	0.21012682	2.8020877	20	—	—
151257 2002 AT_{59}	14.8	X	348.17255	230.89474	307.44265	13.11715	0.1114395	0.21862500	2.7289956	20	1 31.8	18.2
151258 2002 AT_{65}	16.0	X	106.74442	241.78157	134.77908	3.56098	0.1079577	0.21830852	2.7316324	20	1 4.4	19.5
151259 2002 AR_{69}	15.2	X	156.04106	63.73293	269.80108	12.21981	0.2068360	0.22619907	2.6677318	20	1 14.8	19.5
151260 2002 AR_{79}	15.5	X	163.43192	337.87430	69.14670	2.96081	0.0842664	0.17716519	3.1396684	20	4 16.9	20.3
151261 2002 AT_{84}	15.7	X	60.04250	239.98003	164.71477	5.57188	0.0605180	0.21440161	2.7647170	20	—	—
151262 2002 AO_{88}	15.7	X	280.94881	11.76421	169.57442	5.74844	0.0304742	0.21264717	2.7799030	20	—	—
151263 2002 AX_{95}	15.8	X	127.01289	226.18080	85.42443	6.91620	0.0216213	0.20940006	2.8085674	20	—	—
151264 2002 AT_{101}	16.1	X	19.62639	116.74470	336.33836	1.56257	0.0355003	0.21454364	2.7634967	20	—	—
151265 2002 AO_{114}	15.4	X	53.51752	72.27994	93.34709	4.45951	0.1069777	0.17375902	3.1805665	20	5 6.4	19.5
151266 2002 AZ_{119}	15.8	X	285.16147	317.57333	123.06223	11.41123	0.0913132	0.19757175	2.9195740	20	10 23.9	19.7
151267 2002 AY_{124}	14.1	X	61.99412	242.95967	340.27535	26.03384	0.1437385	0.17850248	3.1239677	20	8 13.6	18.6
151268 2002 AJ_{133}	16.0	X	337.63790	119.21752	43.23736	4.00371	0.1329115	0.21750117	2.7383880	20	—	—
151269 2002 AX_{138}	15.8	X	104.55793	227.81721	130.00835	5.85359	0.0771798	0.21475975	2.7616425	20	—	—
151270 2002 AF_{140}	15.9	X	102.32362	126.82582	260.89815	3.72825	0.0884388	0.22170758	2.7036410	20	1 9.1	19.5
151271 2002 AO_{146}	16.0	X	112.83937	76.21735	267.84822	4.98537	0.0420188	0.21282394	2.7783635	20	—	—
151272 2002 AG_{147}	16.0	X	163.43034	235.80905	103.82694	5.90708	0.0711320	0.22015801	2.7163125	20	1 20.8	20.0
151273 2002 AF_{149}	15.9	X	39.38019	79.66605	309.52252	6.38361	0.2336747	0.21210846	2.7846079	20	—	—
151274 2002 AE_{159}	15.9	X	236.74087	276.58088	165.94493	3.11191	0.0978741	0.19009603	2.9956244	20	8 16.0	20.3
151275 2002 AH_{181}	15.9	X	76.28060	82.44308	334.55113	14.42557	0.0584750	0.21937220	2.7227953	20	1 10.9	19.6
151276 2002 AD_{182}	15.3	X	321.76557	151.91269	84.23493	11.88486	0.1838155	0.22355759	2.6887047	20	3 2.9	18.8
151277 2002 AM_{182}	15.6	X	71.04890	64.09519	323.63711	12.06744	0.2232290	0.21561345	2.7543480	20	—	—
151278 2002 AK_{183}	15.0	X	218.07099	96.94760	286.33914	13.43389	0.0672724	0.24232748	2.5480089	20	5 10.7	19.0
151279 2002 AY_{184}	15.7	X	146.12394	294.24500	111.05931	11.68310	0.1256885	0.23193119	2.6235939	20	4 1.3	19.9
151280 2002 AM_{188}	16.2	X	320.65040	8.46549	131.68915	4.40736	0.0359321	0.21166151	2.7885266	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151281 2002 AK_{193}	15.7	X	173.65202	172.35641	137.88373	3.60716	0.0729468	0.21551145	2.7552171	20	—	—
151282 2002 AV_{195}	16.1	X	263.45414	19.61081	61.30784	2.90062	0.0731718	0.19504608	2.9447238	20	9 22.4	20.0
151283 2002 AM_{202}	15.8	X	341.79532	201.26020	269.75575	2.31677	0.0497805	0.20998890	2.8033145	20	—	—
151284 2002 AK_{203}	15.6	X	57.52500	175.97905	106.40165	2.60297	0.0325269	0.18752387	3.0229550	20	9 30.7	19.7
151285 2002 AQ_{208}	15.6	X	277.38990	76.85144	276.84434	6.04359	0.1122774	0.19008367	2.9957542	20	6 10.9	19.6
151286 2002 BJ_{14}	15.3	X	264.97307	111.65081	316.20759	12.21078	0.1337243	0.19171748	2.9787101	20	8 25.2	19.5
151287 2002 BQ_{22}	14.9	X	81.68884	99.63560	353.59541	11.42108	0.1387381	0.22593643	2.6697988	20	3 12.8	18.0
151288 2002 BV_{24}	15.2	X	287.23496	147.14946	96.19641	13.47187	0.2081370	0.21495463	2.7599731	20	1 22.4	19.4
151289 2002 BW_{31}	16.3	X	273.43871	261.63028	169.37641	1.41991	0.0607623	0.19337438	2.9616707	20	9 23.2	20.2
151290 2002 CO_{7}	16.1	X	298.44638	244.96912	286.50713	2.27604	0.1312418	0.21059504	2.7979329	20	—	—
151291 2002 CV_{10}	17.2	X	75.57113	61.05051	38.77264	22.59925	0.0574887	0.37972304	1.8886787	20	2 21.1	19.6
151292 2002 CD_{13}	15.1	X	21.49949	46.73910	108.87151	15.92001	0.1502889	0.21998609	2.7177275	20	3 2.4	18.2
151293 2002 CN_{26}	14.7	X	244.39438	67.40585	304.01686	11.12363	0.1210328	0.24314103	2.5423220	20	5 21.3	18.5
151294 2002 CV_{27}	15.5	X	342.72381	123.17089	334.66075	8.58127	0.1221252	0.20926706	2.8097572	20	—	—
151295 2002 CY_{33}	15.0	X	244.70123	327.40974	96.94742	15.70481	0.0812951	0.18691491	3.0295172	20	8 7.0	19.5
151296 2002 CQ_{46}	14.4	X	101.27862	38.47634	180.32303	24.48705	0.2753024	0.17918515	3.1160282	20	9 26.4	19.7
151297 2002 CE_{52}	15.1	X	153.14235	0.89047	160.59541	11.42915	0.0996337	0.18497770	3.0506318	20	8 25.0	19.8
151298 2002 CD_{67}	15.7	X	122.29772	14.76394	323.56220	3.65910	0.0769666	0.21145730	2.7903216	20	—	—
151299 2002 CV_{77}	15.7	X	315.93008	161.28250	359.74548	4.14102	0.0104471	0.21134917	2.7912732	20	—	—
151300 2002 CL_{81}	15.5	X	152.47781	208.60622	68.58076	3.07104	0.0244700	0.20343415	2.8632118	20	—	—
151301 2002 CW_{82}	15.0	X	184.48650	140.81053	123.45627	6.48274	0.1303001	0.20384153	2.8593958	20	—	—
151302 2002 CZ_{83}	15.1	X	120.97708	82.70353	148.19836	11.01883	0.0582910	0.19087454	2.9874734	20	10 18.2	19.6
151303 2002 CT_{84}	15.7	X	205.69232	333.81460	100.40667	3.28640	0.1376112	0.18219851	3.0815757	20	6 29.9	20.7
151304 2002 CJ_{85}	15.7	X	348.20779	91.20250	314.18883	15.85553	0.0912387	0.20190963	2.8776062	20	12 9.4	19.5
151305 2002 CW_{90}	15.9	X	227.82314	45.26642	131.74271	2.94085	0.0146507	0.19955583	2.9001899	20	12 14.6	20.0
151306 2002 CZ_{90}	15.2	X	324.12566	206.83206	137.22764	9.94516	0.0887647	0.18528779	3.0472273	20	8 9.2	18.7
151307 2002 CJ_{92}	15.3	X	141.35556	183.18841	132.31882	8.61478	0.0582867	0.20941156	2.8084646	20	—	—
151308 2002 CO_{95}	15.7	X	302.24249	107.32096	133.02090	0.76701	0.1079201	0.21775321	2.7362745	20	2 17.2	19.4
151309 2002 CD_{97}	15.4	X	122.47478	80.44490	137.02448	11.18168	0.0644099	0.18877613	3.0095715	20	10 3.7	20.0
151310 2002 CO_{98}	15.6	X	246.86997	162.63955	359.00887	4.32008	0.0755988	0.19947236	2.9009989	20	12 9.9	19.5
151311 2002 CA_{105}	15.3	X	112.02032	43.74019	151.33335	10.43631	0.0531639	0.18271111	3.0758094	20	8 18.9	19.9
151312 2002 CY_{105}	15.2	X	181.81743	184.27085	355.97866	12.08999	0.1324376	0.19117043	2.9843900	20	10 12.1	20.0
151313 2002 CN_{107}	15.3	X	184.14497	335.86283	157.44469	16.41878	0.0428001	0.18428031	3.0583235	20	8 24.2	19.8
151314 2002 CF_{108}	14.5	X	164.13521	1.88509	165.36597	11.37389	0.1023432	0.18615262	3.0377821	20	9 13.2	19.2
151315 2002 CQ_{115}	16.0	X	188.29362	55.54485	57.70237	2.91698	0.1758377	0.18412956	3.0599926	20	7 30.9	21.0
151316 2002 CE_{118}	15.0	X	186.60574	150.16443	332.48942	9.84293	0.0626787	0.18423967	3.0587732	20	8 14.2	19.5
151317 2002 CH_{121}	15.8	X	247.82987	333.09458	148.51605	2.97352	0.0428624	0.19752303	2.9200540	20	10 28.4	19.7
151318 2002 CH_{123}	15.4	X	107.68558	337.97842	229.63009	3.43514	0.1478354	0.18614108	3.0379076	20	9 7.2	20.2
151319 2002 CT_{125}	15.5	X	188.08735	192.95955	317.39125	8.84546	0.0112954	0.19084476	2.9877841	20	9 18.8	19.8
151320 2002 CQ_{131}	15.7	X	179.65753	200.77825	186.38438	6.07413	0.0208779	0.22432669	2.6825557	20	4 4.6	19.3
151321 2002 CY_{133}	15.1	X	114.20168	222.48420	352.37462	12.78830	0.1191540	0.18445851	3.0563535	20	9 20.6	19.7
151322 2002 CO_{136}	15.1	X	271.49703	295.88809	142.57042	17.47132	0.0719490	0.19574891	2.9376709	20	10 3.9	19.3
151323 2002 CF_{138}	15.0	X	351.06222	78.13675	155.01632	13.44114	0.1524148	0.22594073	2.6697650	20	4 22.2	18.0
151324 2002 CG_{147}	14.8	X	72.55701	57.26826	178.03853	10.23392	0.1495809	0.18090586	3.0962377	20	9 3.5	19.3
151325 2002 CN_{147}	16.1	X	38.58523	18.90017	60.91743	1.02017	0.0453232	0.21343510	2.7730571	20	—	—
151326 2002 CO_{149}	15.6	X	216.17886	135.27438	319.26492	9.34227	0.0732528	0.18732401	3.0251047	20	8 10.7	19.9
151327 2002 CG_{151}	15.3	X	333.13380	181.49795	100.44603	13.27065	0.1698673	0.22875748	2.6478041	20	5 26.1	18.1
151328 2002 CF_{163}	15.2	X	216.09967	108.85097	9.07743	8.60115	0.0553522	0.19146451	2.9813333	20	9 13.2	19.5
151329 2002 CO_{176}	15.2	X	262.08014	173.24233	106.25518	6.83956	0.0921021	0.16923306	3.2370239	20	2 27.9	20.0
151330 2002 CD_{178}	15.7	X	186.06917	358.04443	42.15198	2.12371	0.1127133	0.17787048	3.1313634	20	4 30.9	20.7
151331 2002 CH_{198}	15.9	X	75.75040	327.54248	358.51831	1.94568	0.0609734	0.20018664	2.8940941	20	12 20.2	20.0
151332 2002 CK_{202}	15.8	X	148.75397	254.18373	43.04099	2.57772	0.0687101	0.20566480	2.8424712	20	—	—
151333 2002 CF_{203}	15.5	X	162.67435	296.86843	330.71579	10.25121	0.1047366	0.20206666	2.8761152	20	—	—
151334 2002 CY_{213}	15.8	X	147.11731	235.36285	341.06425	2.98146	0.0294586	0.19271780	2.9683936	20	10 24.4	20.1
151335 2002 CH_{216}	15.5	X	90.78290	291.31528	26.61762	2.18735	0.0661250	0.19853164	2.9101557	20	12 27.4	19.6
151336 2002 CE_{217}	15.6	X	102.85501	227.42281	6.53521	6.64264	0.1474227	0.18635846	3.0355448	20	10 5.4	20.4
151337 2002 CM_{217}	15.5	X	150.92471	158.53095	107.55159	3.23958	0.0284397	0.19957324	2.9000213	20	12 30.4	19.6
151338 2002 CM_{224}	15.6	X	218.20961	260.92111	320.76682	1.02663	0.0116048	0.20407847	2.8571821	20	—	—
151339 2002 CT_{224}	15.2	X	277.12497	26.53871	197.33287	4.31584	0.1367301	0.20965340	2.8063044	20	—	—
151340 2002 CE_{227}	15.2	X	297.44837	270.00633	147.07061	12.56369	0.0350840	0.19528825	2.9422888	20	10 15.4	19.3
151341 2002 CK_{236}	16.2	X	349.86097	275.62887	149.44301	2.49491	0.0617572	0.20570302	2.8421191	20	—	—
151342 2002 CV_{236}	14.4	X	55.69473	80.80689	152.55541	14.72277	0.1426067	0.17508105	3.1645354	20	8 9.0	18.6
151343 2002 CM_{241}	15.1	X	209.44549	25.15973	174.26097	15.05359	0.0739168	0.19914398	2.9041871	20	12 13.0	19.6
151344 2002 CE_{246}	15.3	X	294.55957	210.28554	149.56567	12.03389	0.1997036	0.18399044	3.0615349	20	6 29.4	19.5
151345 2002 CD_{247}	15.5	X	269.23153	259.00963	176.06103	1.88266	0.0812801	0.18978234	2.9989245	20	9 19.2	19.4
151346 2002 CK_{259}	14.6	X	168.14367	302.63281	117.47782	22.23534	0.3925898	0.17794422	3.1304982	20	5 20.8	20.9
151347 2002 CP_{265}	16.2	X	169.76019	166.12316	125.75411	5.38781	0.0818607	0.20822886	2.8190889	20	—	—
151348 2002 CJ_{270}	16.2	X	125.97265	69.92377	136.16246	3.89015	0.1662785	0.18771044	3.0209515	20	9 26.9	21.1
151349 Stanleycooper	16.3	X	134.40633	348.86526	2.35294	1.62718	0.0960306	0.21520193	2.7578583	20	1 5.9	20.1
151350 2002 CZ_{279}	16.0	X	256.70946	71.24470	316.26273	3.77127	0.1599865	0.18477724	3.0528378	20	6 22.4	20.4
151351 Dalleore	15.7	X	6.86627	185.33352	162.06083	1.15247	0.1367697	0.19195144	2.9762892	20	10 26.9	19.3
151352 2002 CK_{286}	15.8	X	85.57425	143.24885	158.04157	2.61974	0.0271512	0.19626729	2.9324961	20	11 27.5	19.8
151353 2002 CW_{291}	15.8	X	92.26583	216.16740	275.15581	1.48540	0.0534404	0.17587720	3.1549782	20	5 5.1	20.2
151354 2002 CW_{294}	15.2	X	222.66238	113.32202	6.05246	10.73420	0.0504065	0.19318619	2.9635937	20	9 22.6	19.4
151355 2002 CH_{295}	15.6	X	310.81013	277.21766	132.14669	1.04628	0.0265109	0.19348026	2.9605900	20	10 20.1	19.4
151356 2002 CQ_{296}	15.8	X	205.72018	326.87882	123.13021	1.92025	0.1094018	0.18312035	3.0712251	20	7 21.2	20.4
151357 2002 CN_{304}	15.2	X	25.42029	39.48541	259.12383	9.55082	0.0889032	0.18733567	3.0249792	20	9 9.2	19.3
151358 2002 CY_{309}	15.4	X	206.98884	291.08011	173.48095	10.33351	0.0887621	0.18758347	3.0223146	20	8 9.8	20.0
151359 2002 CG_{311}	15.5	X	61.68344	256.99631	40.33247	4.81339	0.0552042	0.19017523	2.9947926	20	10 27.2	19.7
151360 2002 CA_{312}	14.9	X	82.04491	306.57686	319.79752	9.89079	0.1272272	0.18770892	3.0209679	20	10 16.8	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151361 2002 CB_{312}	15.6	X	97.46008	176.79157	121.37024	6.71109	0.1060611	0.19894940	2.9060804	20	12 14.8	20.1
151362 Chenkegong	15.4	X	213.95610	213.48174	273.05554	8.70912	0.1108678	0.19037005	2.9927491	20	9 9.1	20.1
151363 2002 CO_{314}	15.3	X	202.50255	185.72695	81.16011	9.97747	0.0948726	0.20867695	2.8150518	20	—	—
151364 2002 DN_{3}	17.0	X	148.60888	211.67365	21.40314	16.49452	0.1315161	0.41139187	1.7904639	20	12 29.9	19.4
151365 2002 DR_{6}	15.8	X	215.16983	333.68708	178.02232	2.27577	0.0760735	0.19439441	2.9513012	20	10 20.9	20.0
151366 2002 DK_{15}	15.1	X	282.89653	26.09789	316.60221	14.65068	0.0982832	0.17937702	3.1138057	20	6 5.1	19.7
151367 2002 DM_{16}	15.2	X	195.49619	309.63552	294.93897	5.07599	0.1856048	0.20186678	2.8780134	20	—	—
151368 2002 ET_{3}	15.4	X	234.47265	326.28937	169.24743	11.86079	0.0419369	0.19345947	2.9608021	20	10 30.3	19.7
151369 2002 EB_{4}	15.5	X	37.34374	92.98871	161.98324	1.23093	0.1430352	0.17878329	3.1206958	20	8 11.8	19.3
151370 2002 EF_{5}	15.8	X	243.25071	285.12178	151.33254	2.93302	0.0893445	0.18624449	3.0367830	20	8 17.1	20.2
151371 2002 EK_{14}	14.9	X	65.19082	76.16661	186.10958	13.35692	0.2348239	0.18254093	3.0777207	20	10 11.9	19.4
151372 2002 EM_{15}	15.2	X	213.26031	51.75632	172.28277	2.69121	0.0160107	0.20348476	2.8627371	20	—	—
151373 2002 EW_{16}	15.3	X	130.54972	231.32457	27.17612	10.62867	0.3088833	0.19144461	2.9815399	20	11 30.9	20.9
151374 2002 EX_{19}	14.5	X	41.88385	295.51322	359.84328	10.30134	0.1293977	0.18482480	3.0523140	20	10 7.1	18.7
151375 2002 EK_{22}	14.9	X	114.75800	130.71356	128.34883	8.97683	0.0947779	0.19147132	2.9812626	20	11 16.2	19.6
151376 2002 EP_{26}	15.3	X	272.74759	176.25531	262.59174	3.75117	0.0634412	0.19069492	2.9893491	20	9 29.4	19.3
151377 2002 EY_{27}	15.2	X	225.06147	71.42256	40.50745	3.43166	0.0461314	0.18766685	3.0214194	20	9 16.5	19.6
151378 2002 EH_{43}	14.9	X	49.54698	81.68935	185.75057	11.79157	0.0586847	0.18296269	3.0729892	20	9 1.0	19.1
151379 2002 ED_{45}	15.0	X	55.05113	260.04091	330.88806	4.46160	0.0954390	0.17840963	3.1250516	20	7 30.8	19.1
151380 2002 EF_{47}	15.4	X	279.29241	85.71763	342.26998	10.25736	0.0869655	0.19054815	2.9908839	20	9 20.9	19.3
151381 2002 EY_{49}	15.4	X	50.35551	154.12521	164.50114	10.77589	0.0812002	0.19238090	2.9718581	20	11 15.1	19.7
151382 2002 EY_{50}	15.2	X	56.89427	184.71721	42.39137	11.46865	0.1684496	0.17649629	3.1475961	20	8 12.7	19.6
151383 2002 EZ_{58}	16.0	X	218.20442	253.19175	179.79750	1.14788	0.1229691	0.18293247	3.0733276	20	7 11.7	20.6
151384 2002 EU_{59}	15.7	X	321.43558	177.79722	264.29107	0.96985	0.0258675	0.19873295	2.9081902	20	12 14.7	19.6
151385 2002 EH_{62}	15.6	X	149.68283	131.28293	344.88406	4.40087	0.0928652	0.17766117	3.1338223	20	6 26.3	20.4
151386 2002 EL_{63}	15.4	X	256.90862	239.55107	179.15868	9.67194	0.0759103	0.18487396	3.0517730	20	8 11.2	19.7
151387 2002 EF_{68}	15.4	X	96.32533	258.79711	355.30467	1.21297	0.0508177	0.18767246	3.0213592	20	10 13.6	19.7
151388 2002 EY_{69}	15.5	X	150.28090	320.97861	190.47657	3.86100	0.0991906	0.18154729	3.0889404	20	8 8.9	20.4
151389 2002 EZ_{69}	15.5	X	137.51705	23.44303	197.54761	2.87346	0.0610841	0.18871922	3.0101765	20	10 20.6	19.9
151390 2002 ED_{71}	15.2	X	70.87640	332.35804	214.94524	4.44465	0.0910025	0.17382515	3.1797597	20	6 23.8	19.6
151391 2002 EM_{72}	14.8	X	195.18430	119.45268	356.98530	17.03198	0.1345576	0.18362486	3.0655970	20	8 16.9	19.8
151392 2002 EJ_{78}	15.3	X	119.42633	204.38154	30.41790	2.17655	0.0953290	0.18531532	3.0469255	20	10 19.3	19.8
151393 2002 ET_{79}	15.2	X	123.28216	284.21981	227.25034	5.46737	0.0792697	0.17732306	3.1378047	20	7 9.6	20.0
151394 2002 EX_{79}	15.8	X	221.16833	17.38946	131.20522	2.09667	0.1254918	0.19307525	2.9647288	20	10 18.3	20.1
151395 2002 ET_{83}	15.1	X	79.82735	96.92954	156.95951	7.11510	0.0763212	0.18511978	3.0490708	20	9 28.6	19.4
151396 2002 EM_{86}	14.4	X	36.15641	249.21149	15.60159	12.71643	0.2427517	0.17556085	3.1587670	20	9 11.4	18.4
151397 2002 EF_{89}	15.0	X	156.19371	252.13635	322.36084	8.72992	0.0540644	0.19074496	2.9888263	20	10 29.1	19.6
151398 2002 EH_{89}	14.4	X	78.40143	278.28428	350.96133	14.67362	0.2419841	0.18225193	3.0809735	20	10 27.2	19.5
151399 2002 EU_{90}	14.8	X	10.26346	114.78270	164.31268	5.62949	0.1141090	0.17772740	3.1330437	20	7 26.8	18.7
151400 2002 EW_{99}	14.6	X	1.24242	330.55073	297.11936	9.51062	0.1031610	0.17807497	3.1289657	20	6 27.0	18.5
151401 2002 EC_{101}	14.7	X	205.50370	132.71911	16.35109	11.40454	0.1140465	0.19225372	2.9731687	20	10 3.3	19.2
151402 2002 EW_{105}	15.0	X	155.07083	340.20780	137.30903	10.92190	0.0571850	0.17712621	3.1401291	20	7 1.9	19.7
151403 2002 EV_{106}	15.3	X	186.59376	108.62162	31.02392	9.63932	0.0906368	0.18652451	3.0337430	20	9 6.6	20.0
151404 2002 ER_{107}	15.4	X	177.27977	81.23369	346.14064	25.02569	0.2519025	0.17714311	3.1399294	20	5 17.6	21.4
151405 2002 EQ_{111}	14.7	X	205.26093	79.71715	132.08999	11.06599	0.0819623	0.19656272	2.9295570	20	12 21.3	19.1
151406 2002 EO_{115}	15.0	X	188.04576	63.59719	136.78183	12.51907	0.1983951	0.19105328	2.9856098	20	11 13.8	20.1
151407 2002 EF_{116}	16.1	X	186.18064	333.18062	248.55148	1.20721	0.0327785	0.19744653	2.9208082	20	12 16.5	20.4
151408 2002 EN_{121}	14.8	X	60.08846	212.38486	11.44480	16.30480	0.0710742	0.17535541	3.1612337	20	7 30.3	19.4
151409 2002 EX_{125}	15.4	X	58.64485	275.45758	352.42941	6.95884	0.0217022	0.18973471	2.9994263	20	9 11.4	19.4
151410 2002 EC_{126}	15.6	X	266.24302	70.59623	351.60605	7.16065	0.0168844	0.18931329	3.0038758	20	9 8.4	19.6
151411 2002 EN_{131}	15.1	X	16.81634	336.05352	322.71221	15.98654	0.0757290	0.18592864	3.0402213	20	8 28.4	19.1
151412 2002 EB_{137}	15.2	X	332.54290	29.68009	356.63643	10.00316	0.1133831	0.19147725	2.9812011	20	10 15.9	18.9
151413 2002 EN_{137}	15.4	X	285.21063	267.30161	163.58792	4.45262	0.0300664	0.19062617	2.9900678	20	10 13.4	19.4
151414 2002 EL_{139}	15.3	X	185.78265	305.46068	155.00907	9.17324	0.0240495	0.17887053	3.1196810	20	7 15.4	19.9
151415 2002 ES_{140}	15.3	X	64.36966	141.31880	145.35870	10.90123	0.0789223	0.18953213	3.0015632	20	10 24.2	19.7
151416 2002 ED_{145}	15.2	X	338.64858	315.61119	299.60130	2.66145	0.0312356	0.16988621	3.2287219	20	5 8.1	19.7
151417 2002 EA_{146}	15.8	X	147.24243	225.24383	15.04419	1.86946	0.0537638	0.19437005	2.9515478	20	11 23.5	20.2
151418 2002 ES_{146}	15.5	X	52.24180	36.22895	154.16775	2.86111	0.1361509	0.17158121	3.2074230	20	6 8.9	19.7
151419 2002 EA_{150}	15.6	X	76.25071	161.56240	123.18516	3.16407	0.2944895	0.18452749	3.0555917	20	11 23.8	20.6
151420 2002 EK_{151}	14.6	X	78.51814	142.50555	186.22882	10.72702	0.1553597	0.19277286	2.9678284	20	—	—
151421 2002 EW_{151}	14.8	X	38.35376	114.13761	179.29317	3.98205	0.0336440	0.18265154	3.0764780	20	9 17.8	19.1
151422 2002 FH	14.6	X	7.96223	212.13976	9.60007	14.18299	0.0566145	0.16876515	3.2430044	20	5 1.9	19.0
151423 2002 FS_{1}	15.0	X	80.06113	89.10918	140.95990	20.62890	0.2467916	0.17991094	3.1076421	20	9 22.4	20.0
151424 2002 FT_{1}	14.5	X	64.36886	146.04873	73.33709	13.20076	0.0888995	0.17786212	3.1314615	20	7 29.2	19.0
151425 2002 FT_{2}	14.8	X	17.68200	66.85334	188.85621	9.29003	0.0482005	0.17429741	3.1740135	20	7 2.3	19.2
151426 2002 FV_{2}	15.0	X	72.52986	202.58104	36.87290	5.27843	0.1403706	0.17900144	3.1181598	20	9 10.6	19.4
151427 2002 FF_{3}	16.4	X	95.05186	30.53604	10.51320	23.34162	0.0939641	0.37285061	1.9118162	20	—	—
151428 2002 FO_{10}	15.2	X	150.54028	100.99011	114.52485	7.27472	0.0906023	0.19075824	2.9886875	20	10 31.1	19.9
151429 2002 FT_{13}	14.7	X	81.05382	237.30183	35.89517	6.99902	0.1549321	0.18609182	3.0384437	20	10 31.5	19.2
151430 Nemunas	15.9	X	140.56547	67.45323	111.08326	2.73315	0.1064020	0.18341103	3.0679792	20	9 3.9	20.6
151431 2002 FH_{14}	16.0	X	231.87337	300.13790	144.91793	3.51675	0.1450387	0.18716713	3.0267950	20	8 8.3	20.7
151432 2002 FN_{27}	14.9	X	76.95360	193.20115	28.16523	10.10506	0.0560644	0.18291996	3.0734677	20	8 14.8	19.3
151433 2002 FS_{28}	15.3	X	176.77960	118.52274	36.75247	13.23724	0.1718713	0.18793377	3.0185578	20	9 15.2	20.4
151434 2002 FK_{38}	15.3	X	171.09600	70.58339	46.19124	5.59604	0.1169194	0.18066436	3.0989963	20	7 20.5	20.2
151435 2002 FN_{39}	16.0	X	205.65116	86.32529	84.30680	2.09857	0.0879168	0.19293360	2.9661797	20	11 1.0	20.3
151436 2002 GK_{2}	14.7	X	138.04082	221.56224	23.55935	8.63955	0.2341520	0.18757563	3.0223988	20	11 19.7	20.0
151437 2002 GB_{7}	14.4	X	23.39852	192.36046	94.61350	16.59742	0.0789160	0.17911353	3.1168588	20	8 31.0	18.8
151438 2002 GL_{7}	15.3	X	144.84409	84.40739	104.64772	6.26017	0.1004402	0.18418932	3.0593307	20	9 22.9	20.1
151439 2002 GY_{8}	15.3	X	125.39644	132.28943	34.39254	18.47869	0.2201749	0.17912402	3.1167370	20	8 20.3	20.8
151440 2002 GY_{14}	15.2	X	146.99681	164.10785	72.19612	2.31340	0.0231682	0.19307101	2.9647723	20	11 18.8	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151441 2002 GT_{16}	15.3	X	104.41537	120.98650	94.67420	2.90339	0.1454648	0.18129235	3.0918357	20	9 15.9	20.1
151442 2002 GJ_{26}	14.3	X	144.42487	164.09226	26.12615	24.18086	0.1534945	0.18185775	3.0854239	20	9 29.7	19.5
151443 2002 GH_{34}	15.1	X	161.32170	348.59985	150.72626	12.44368	0.0302104	0.18078125	3.0976603	20	8 4.4	19.6
151444 2002 GR_{45}	15.0	X	165.56216	117.31564	8.85506	7.65720	0.1754117	0.17891426	3.1191726	20	7 28.1	20.3
151445 2002 GW_{49}	14.7	X	241.08819	12.97180	331.35820	18.26595	0.0495902	0.16972585	3.2307552	20	4 15.4	19.8
151446 2002 GU_{53}	15.5	X	164.12134	102.72305	107.75984	2.02005	0.1917404	0.18799150	3.0179398	20	11 2.6	20.6
151447 2002 GZ_{54}	15.5	X	147.23988	22.95918	178.96752	1.39853	0.1326149	0.18555809	3.0442673	20	10 8.6	20.2
151448 2002 GS_{77}	14.9	X	63.78777	66.53306	152.60215	10.59901	0.0623835	0.17621148	3.1509868	20	7 20.6	19.3
151449 2002 GY_{77}	15.0	X	150.37605	236.92015	265.29270	3.76989	0.0882269	0.17813574	3.1282540	20	7 28.2	19.9
151450 2002 GC_{86}	14.7	X	329.92462	164.27876	155.21775	10.48029	0.0718565	0.17455954	3.1708351	20	7 15.6	18.9
151451 2002 GB_{101}	15.7	X	178.84320	149.34123	20.16009	2.45440	0.1019211	0.18744096	3.0238463	20	9 30.7	20.3
151452 2002 GX_{101}	15.0	X	109.60197	335.22007	171.36655	15.38479	0.1664959	0.17275364	3.1928946	20	6 28.1	20.2
151453 2002 GT_{102}	16.2	X	229.60762	122.66678	6.66339	2.32309	0.2186572	0.19172361	2.9786467	20	9 22.5	20.8
151454 2002 GP_{104}	14.7	X	162.52349	307.64821	182.56511	15.85206	0.0285888	0.17467268	3.1694658	20	7 23.0	19.6
151455 2002 GL_{105}	15.1	X	150.05894	115.56933	108.18472	10.54270	0.0927539	0.19001872	2.9964368	20	11 10.0	19.9
151456 2002 GH_{106}	15.1	X	144.74876	93.33116	130.53789	12.38729	0.1097565	0.18792768	3.0186230	20	11 5.7	20.1
151457 2002 GX_{106}	15.0	X	241.79125	267.13014	152.56715	12.00517	0.0733032	0.17954190	3.1118991	20	7 25.7	19.6
151458 2002 GV_{108}	15.0	X	182.07268	280.47305	154.80316	16.49848	0.0549481	0.17207986	3.2012237	20	6 11.4	20.1
151459 2002 GS_{109}	14.9	X	120.70211	114.38980	55.89546	21.27509	0.2226377	0.17841136	3.1250314	20	8 21.1	20.5
151460 2002 GZ_{110}	15.1	X	148.93712	297.69352	179.39430	14.17273	0.1925987	0.17485646	3.1672445	20	6 30.1	20.6
151461 2002 GB_{113}	14.7	X	359.03190	144.18343	138.32303	10.94619	0.1511838	0.17310298	3.1885974	20	7 13.3	18.4
151462 2002 GJ_{119}	14.7	X	238.91767	324.70486	69.35842	9.68113	0.0483507	0.17470029	3.1691318	20	6 23.3	19.2
151463 2002 GS_{121}	15.1	X	128.50783	298.10872	206.06478	11.24772	0.1214166	0.17606404	3.1527457	20	7 8.7	20.2
151464 2002 GE_{128}	15.5	X	10.85705	341.99359	325.43428	0.10936	0.1150406	0.17989740	3.1077980	20	9 5.3	19.3
151465 2002 GX_{140}	15.8	X	27.78905	61.07637	159.14707	1.67017	0.0715183	0.16997708	3.2275710	20	6 3.4	19.9
151466 2002 GL_{150}	15.7	X	145.48384	140.01320	7.34535	5.76798	0.0188633	0.17748521	3.1358932	20	7 28.4	20.2
151467 2002 GK_{153}	15.2	X	110.00234	94.02386	95.20672	10.57960	0.1629422	0.17839266	3.1252498	20	8 23.5	20.2
151468 2002 GT_{154}	15.9	X	105.49159	132.24115	59.69994	4.89696	0.1418256	0.17999594	3.1066637	20	8 19.3	20.7
151469 2002 GX_{154}	15.2	X	214.78532	353.18894	153.08140	11.14817	0.0909218	0.19055547	2.9908074	20	10 14.3	19.7
151470 2002 GL_{160}	14.9	X	197.82367	245.43097	178.53664	26.20203	0.2425684	0.17704234	3.1411207	20	6 7.9	20.8
151471 2002 GD_{161}	14.7	X	344.16895	167.34131	129.90973	9.65948	0.0706169	0.17295059	3.1904702	20	7 8.5	18.9
151472 2002 GJ_{167}	15.0	X	122.88906	252.03785	262.36879	4.40523	0.0994333	0.17572029	3.1568561	20	7 15.0	19.8
151473 2002 GP_{168}	15.6	X	97.16517	356.81833	218.59779	3.39350	0.1104549	0.17915347	3.1163954	20	9 1.3	20.2
151474 2002 HZ_{2}	14.4	X	286.66286	265.28716	79.18435	7.40723	0.1724908	0.17204463	3.2016606	20	6 2.3	18.7
151475 2002 HF_{11}	14.4	X	220.16215	302.98566	156.15262	22.77317	0.0854606	0.18268798	3.0760690	20	8 18.5	19.1
151476 2002 HE_{13}	16.4	X	287.86352	31.70153	127.48457	24.93831	0.0462297	0.36212839	1.9493702	20	—	—
151477 2002 HG_{16}	15.4	X	173.04889	61.59731	58.48946	2.27948	0.1217247	0.17910173	3.1169956	20	7 25.7	20.3
151478 2002 JR	15.2	X	96.91322	99.66686	168.65717	7.88397	0.1199729	0.18292126	3.0734531	20	11 8.9	19.9
151479 2002 JL_{4}	14.3	X	63.46423	126.16363	137.38200	27.32262	0.2338721	0.17615989	3.1516020	20	10 17.8	19.4
151480 2002 JR_{4}	16.4	X	22.97743	323.46863	164.88302	21.97412	0.0862933	0.37394840	1.9080728	20	—	—
151481 2002 JV_{9}	14.3	X	343.74316	181.45705	121.13656	23.03395	0.1005375	0.17049772	3.2209970	20	7 14.3	18.3
151482 2002 JM_{10}	14.9	X	72.19643	86.63235	154.08914	16.50098	0.2085880	0.17704032	3.1411446	20	9 20.5	19.6
151483 2002 JH_{16}	17.0	X	321.40568	109.45639	88.82763	23.31852	0.0563252	0.37133866	1.9170022	20	—	—
151484 2002 JP_{16}	14.9	X	109.43513	76.54881	97.79956	11.88712	0.0295127	0.17594359	3.1541845	20	7 17.9	19.4
151485 2002 JX_{17}	14.9	X	116.22844	289.45740	235.37352	4.02376	0.1056800	0.17406968	3.1767811	20	7 20.9	19.6
151486 2002 JM_{22}	14.8	X	154.44730	124.77351	40.52772	18.08680	0.0983301	0.18103029	3.0948187	20	9 10.1	19.9
151487 2002 JU_{22}	15.3	X	81.50026	124.44132	119.35134	2.31507	0.1355544	0.17919922	3.1158651	20	9 24.4	19.9
151488 2002 JG_{23}	14.8	X	95.43693	29.89909	209.84126	12.38166	0.1425848	0.18050970	3.1007662	20	10 2.6	19.6
151489 2002 JE_{30}	14.8	X	64.43524	20.79785	216.98563	4.45022	0.1219076	0.17451907	3.1713253	20	8 22.2	19.2
151490 2002 JL_{45}	15.4	X	101.85809	168.81614	32.75730	6.05750	0.0947617	0.17754132	3.1352325	20	8 22.6	20.0
151491 2002 JU_{46}	14.5	X	23.67812	288.21964	347.31426	7.34234	0.1666393	0.17298321	3.1900690	20	8 21.3	18.2
151492 2002 JS_{58}	14.8	X	147.96752	297.18937	242.13800	15.55614	0.2072224	0.18063524	3.0993293	20	9 6.5	20.4
151493 2002 JE_{68}	16.8	X	8.63259	53.27577	65.54699	22.79644	0.0804087	0.36702225	1.9320030	20	—	—
151494 2002 JU_{68}	14.6	X	133.83054	166.94851	53.45957	15.98247	0.1386094	0.18675018	3.0312985	20	10 22.7	19.5
151495 2002 JM_{69}	13.9	X	3.35173	227.11630	54.05686	18.36208	0.1944844	0.17319311	3.1874910	20	7 27.0	17.7
151496 2002 JC_{72}	14.9	X	106.97209	29.85553	163.58504	10.98679	0.1641737	0.17673781	3.1447278	20	8 21.5	19.8
151497 2002 JD_{78}	14.8	X	39.88166	305.25109	16.38853	6.28102	0.1769731	0.18358960	3.0659895	20	11 13.3	19.0
151498 2002 JM_{78}	15.2	X	150.35542	133.79091	20.65180	5.02650	0.0947850	0.17961000	3.1111124	20	8 15.5	20.0
151499 2002 JL_{97}	14.9	X	102.41859	113.06241	165.69081	16.21782	0.2415551	0.18487494	3.0517622	20	12 5.0	20.4
151500 2002 JE_{108}	14.5	X	90.89305	47.15396	172.54959	27.76312	0.1290019	0.17868540	3.1218354	20	9 2.1	19.2
151501 2002 JW_{119}	14.6	X	55.82385	50.03755	172.39974	23.46709	0.0688187	0.17350555	3.1836634	20	7 14.4	19.4
151502 2002 JK_{123}	15.0	X	36.40336	113.79471	166.80887	14.79318	0.0968332	0.17718778	3.1394016	20	9 6.2	19.2
151503 2002 JA_{125}	15.3	X	73.89897	303.78404	260.36304	3.90923	0.1256106	0.17353437	3.1833108	20	7 23.9	19.7
151504 2002 KQ_{9}	14.7	X	37.38684	109.98540	154.91802	18.93149	0.1500688	0.17154963	3.2078166	20	8 25.0	18.8
151505 2002 LG_{37}	16.2	X	41.01609	54.87654	237.95586	6.06468	0.1601329	0.28167885	2.3047999	20	10 26.5	19.1
151506 2002 LV_{57}	16.2	X	350.99039	75.19915	266.30554	2.55692	0.2503165	0.27768672	2.3268371	20	10 26.6	17.8
151507 2002 MK_{1}	16.4	X	340.18271	91.67576	148.97058	23.36526	0.0657984	0.37730010	1.8967559	20	4 11.6	18.5
151508 2002 NW_{33}	16.9	X	347.52262	32.07226	290.80328	4.05814	0.2420088	0.27571837	2.3378981	20	9 9.9	18.1
151509 2002 NK_{48}	17.0	X	348.44987	234.17929	113.27596	3.28931	0.2367641	0.27786841	2.3258226	20	10 31.1	18.5
151510 2002 NW_{59}	17.6	X	345.13622	178.72146	213.96872	1.52534	0.2204933	0.28352278	2.2947960	20	—	—
151511 2002 PL_{22}	16.8	X	24.87110	45.27946	282.81166	5.58648	0.1362211	0.28202331	2.3029228	20	11 18.1	19.4
151512 2002 PW_{31}	17.4	X	336.53559	197.45182	166.26955	1.06660	0.2343913	0.27727655	2.3291312	20	10 25.9	18.7
151513 2002 PW_{44}	16.1	X	26.91600	302.11515	90.22709	6.44521	0.2175272	0.28358879	2.2944398	20	—	—
151514 2002 PG_{52}	17.0	X	53.44813	138.42848	119.84616	6.86720	0.0612246	0.27689575	2.3312662	20	9 12.1	19.8
151515 2002 PD_{61}	16.8	X	203.82413	90.94676	160.34313	23.97870	0.0647126	0.35479805	1.9761287	20	—	—
151516 2002 PN_{78}	16.5	X	1.96547	172.84030	73.71373	3.47612	0.1438278	0.26812942	2.3818061	20	5 30.2	18.6
151517 2002 PQ_{113}	15.2	X	328.62800	90.98278	318.26013	20.98309	0.3272659	0.27443422	2.3451856	20	—	—
151518 2002 PE_{133}	17.4	X	303.64229	125.31786	162.39398	3.57503	0.2489350	0.26568783	2.3963759	20	3 26.2	20.2
151519 2002 QG_{36}	16.2	X	29.32632	195.67528	197.37293	5.04995	0.1612494	0.28654396	2.2786373	20	—	—
151520 2002 RL_{1}	16.8	X	101.09512	56.13980	256.31839	4.66141	0.1925719	0.29038437	2.2585024	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151521 2002 RB_{2}	16.8	X	153.74091	37.08268	333.82133	6.20027	0.1562236	0.30397295	2.1906824	20	2 16.3	19.7
151522 2002 RM_{17}	17.0	X	144.29795	182.48368	170.18592	3.46964	0.1974176	0.30074495	2.2063301	20	1 17.2	20.0
151523 2002 RG_{28}	16.0	X	33.16973	190.48893	184.35329	7.99156	0.1706173	0.28210949	2.3024538	20	—	—
151524 2002 RZ_{45}	16.6	X	70.90025	23.75161	15.38435	4.65862	0.1486247	0.29500363	2.2348642	20	—	—
151525 2002 RA_{50}	17.4	X	244.82333	177.90861	136.29100	3.69873	0.2290225	0.31214925	2.1522589	20	2 27.4	20.8
151526 2002 RU_{62}	16.8	X	338.64386	199.88415	205.17086	2.61297	0.2424344	0.27695657	2.3309248	20	—	—
151527 2002 RN_{67}	16.4	X	314.65861	184.40108	234.82866	6.83713	0.2114558	0.27734636	2.3287404	20	11 29.9	17.6
151528 2002 RZ_{68}	17.2	X	192.42890	145.73138	257.06045	1.59042	0.0841791	0.31497352	2.1393739	20	5 7.1	20.0
151529 2002 RR_{80}	17.1	X	335.76692	22.67344	317.52327	1.51876	0.1847806	0.27301900	2.3532829	20	9 6.1	18.8
151530 2002 RO_{93}	16.9	X	141.23668	45.87153	305.27063	6.18456	0.1897468	0.29970917	2.2114105	20	1 12.0	19.6
151531 2002 RU_{99}	16.3	X	33.68814	4.85207	21.59342	6.12118	0.1690231	0.28528633	2.2853290	20	—	—
151532 2002 RN_{101}	16.3	X	71.13888	161.14887	209.01847	6.04388	0.1497672	0.28822058	2.2697920	20	—	—
151533 2002 RB_{103}	17.1	X	252.35549	9.56966	28.97602	2.00728	0.1697773	0.26502034	2.4003979	20	7 3.3	20.3
151534 2002 RM_{104}	16.9	X	138.37218	174.70044	202.77328	4.83811	0.1762876	0.29965717	2.2116663	20	2 8.6	19.9
151535 2002 RS_{110}	17.0	X	166.86334	240.01216	132.54826	5.41309	0.1369076	0.30570767	2.1823873	20	3 2.4	19.9
151536 2002 RR_{122}	16.5	X	118.25745	284.20321	78.47862	7.36245	0.1942409	0.29734346	2.2231245	20	—	—
151537 2002 RD_{132}	16.3	X	57.88823	10.86254	283.18705	6.23139	0.0991251	0.27908588	2.3190537	20	11 8.6	19.3
151538 2002 RH_{139}	16.3	X	64.41596	199.91152	91.09186	6.57469	0.1820336	0.28178117	2.3042419	20	11 25.7	19.6
151539 2002 RB_{180}	17.5	X	22.98515	291.33257	170.79602	2.76783	0.1211283	0.29496504	2.2350591	20	—	—
151540 2002 SR_{14}	17.0	X	318.79516	201.45653	96.42824	2.19878	0.0938604	0.31900477	2.1213122	20	5 29.9	18.9
151541 2002 SE_{19}	16.9	X	33.72789	247.85972	158.51641	2.79138	0.1466448	0.28913931	2.2649813	20	—	—
151542 2002 SH_{25}	15.8	X	334.97223	302.18665	181.59939	24.15438	0.2013170	0.28912536	2.2650542	20	—	—
151543 2002 SF_{35}	17.1	X	66.50653	52.49089	10.63520	6.52319	0.0946695	0.29628201	2.2284310	20	—	—
151544 2002 SE_{47}	16.8	X	240.85167	137.71019	261.23731	1.26790	0.1946773	0.26397615	2.4067238	20	6 17.3	20.4
151545 2002 SH_{47}	16.8	X	88.77477	78.71516	350.63015	4.78103	0.0785239	0.30168795	2.2017301	20	1 30.8	19.1
151546 2002 SE_{49}	16.9	X	12.88592	343.63927	54.29551	6.17001	0.1603563	0.28375839	2.2935255	20	—	—
151547 2002 SF_{54}	17.2	X	209.83778	36.23994	317.52250	5.84449	0.1178776	0.31147255	2.1553751	20	3 17.7	20.3
151548 2002 SE_{58}	17.0	X	94.39772	258.90959	124.46127	6.31785	0.1454558	0.29417979	2.2390347	20	—	—
151549 2002 TA_{5}	16.7	X	50.86731	230.99024	159.22220	5.69522	0.1213721	0.28814712	2.2701778	20	—	—
151550 2002 TV_{8}	16.5	X	355.55941	184.93534	152.62039	2.92317	0.1636810	0.27412700	2.3469374	20	10 18.1	18.4
151551 2002 TR_{24}	16.5	X	102.58827	190.70260	199.76083	6.60553	0.1516978	0.29652741	2.2272014	20	1 6.6	18.9
151552 2002 TU_{27}	17.7	X	212.02115	35.38981	303.36897	0.22032	0.1885233	0.30765721	2.1731581	20	3 2.1	20.8
151553 2002 TW_{27}	16.9	X	51.70091	14.82288	16.79715	5.84054	0.1478851	0.28835313	2.2690963	20	—	—
151554 2002 TF_{31}	17.2	X	48.07015	328.42861	54.14097	1.68073	0.2166969	0.28665174	2.2780661	20	—	—
151555 2002 TJ_{43}	16.0	X	119.72248	161.52734	214.81772	8.53967	0.1283021	0.24053083	2.5606814	20	1 17.6	19.6
151556 2002 TO_{52}	16.0	X	7.61656	320.94900	40.64834	6.06390	0.1695367	0.27576066	2.3376591	20	12 13.5	18.6
151557 2002 TM_{74}	15.8	X	70.82050	138.92748	214.43067	4.73840	0.1883578	0.28713014	2.2755350	20	—	—
151558 2002 TB_{75}	16.2	X	23.74586	332.11775	64.20148	7.15646	0.1829525	0.28587721	2.2821789	20	—	—
151559 2002 TP_{77}	16.7	X	231.20989	137.47364	285.25580	1.95568	0.1529250	0.26370626	2.4083656	20	7 13.4	20.0
151560 2002 TW_{82}	17.2	X	197.32510	34.14304	281.69415	1.27220	0.1909183	0.30235854	2.1984734	20	1 21.1	20.7
151561 2002 TE_{88}	16.3	X	327.95479	186.82700	221.70113	8.11589	0.1890401	0.27498832	2.3420341	20	12 12.3	18.1
151562 2002 TW_{100}	17.0	X	170.48355	113.74220	216.40075	3.83135	0.1873623	0.30125326	2.2038475	20	1 13.8	20.2
151563 2002 TM_{135}	17.0	X	117.13743	257.19314	122.18120	6.96347	0.1771426	0.29699541	2.2248610	20	1 17.9	19.5
151564 2002 TZ_{144}	16.9	X	343.09049	304.54489	132.37429	10.03536	0.1908451	0.28255026	2.3000586	20	—	—
151565 2002 TH_{168}	16.6	X	74.72225	235.80632	152.51629	6.61292	0.0998543	0.29370083	2.2414683	20	—	—
151566 2002 TJ_{169}	16.0	X	119.67755	173.49547	226.16168	14.25164	0.1772932	0.24528593	2.5274794	20	2 18.6	19.9
151567 2002 TW_{184}	17.3	X	150.29242	69.81912	276.98072	1.82838	0.1195012	0.29984669	2.2107343	20	1 7.2	20.0
151568 2002 TP_{189}	16.1	X	26.35656	51.94673	274.44197	5.94293	0.1440085	0.27820170	2.3239647	20	11 18.3	18.8
151569 2002 TU_{205}	16.5	X	11.13545	237.98013	239.13161	6.52888	0.0610444	0.29402934	2.2397984	20	—	—
151570 2002 TO_{215}	16.5	X	146.45934	247.12652	119.76830	7.91718	0.2090250	0.29839270	2.2179100	20	2 10.1	19.7
151571 2002 TC_{223}	17.1	X	165.48441	333.50046	26.62308	6.50010	0.0976196	0.30226708	2.1989169	20	2 11.9	20.0
151572 2002 TX_{223}	16.5	X	101.95744	225.18522	197.78041	3.65152	0.1445818	0.24377195	2.5379334	20	2 27.2	19.8
151573 2002 TM_{225}	15.8	X	112.93610	309.94564	55.88914	6.34189	0.1156105	0.23714141	2.5850232	20	—	—
151574 2002 TD_{226}	16.4	X	76.26563	226.19416	159.42430	6.25310	0.1710353	0.28910486	2.2651612	20	—	—
151575 2002 TD_{239}	16.7	X	311.44048	150.75729	261.79487	2.74863	0.2350725	0.27386899	2.3484112	20	11 5.9	18.1
151576 2002 TJ_{242}	16.2	X	140.61890	290.56497	90.58547	9.15493	0.1080983	0.30045355	2.2077564	20	2 11.8	19.1
151577 2002 TX_{246}	16.4	X	145.36424	287.30275	53.17745	1.91357	0.0871060	0.24010051	2.5637401	20	—	—
151578 2002 TQ_{249}	16.7	X	189.48748	60.45260	237.68758	2.51904	0.1401512	0.29667279	2.2264737	20	—	—
151579 2002 TQ_{255}	17.3	X	113.53065	10.79323	19.85094	2.59922	0.1700070	0.29700806	2.2247979	20	1 28.5	19.8
151580 2002 TJ_{257}	16.8	X	276.20280	328.11679	115.19174	2.90979	0.2518127	0.27169902	2.3608986	20	9 30.0	18.9
151581 2002 TG_{264}	16.3	X	71.33462	141.95475	236.58479	5.04681	0.1470538	0.28819441	2.2699294	20	—	—
151582 2002 TD_{273}	17.1	X	101.74104	57.73869	340.29448	7.07079	0.0383116	0.29802740	2.2197220	20	—	—
151583 2002 TL_{280}	15.7	X	189.90226	137.90198	283.27625	5.72236	0.1148661	0.25685298	2.4510169	20	5 29.6	19.5
151584 2002 TS_{297}	17.0	X	289.08562	245.66101	219.24064	4.82719	0.2011447	0.27671964	2.3322552	20	12 10.7	18.6
151585 2002 UO_{9}	16.9	X	357.71278	219.82975	209.43848	1.90683	0.1474637	0.28232007	2.3013087	20	—	—
151586 2002 UK_{15}	16.1	X	22.68349	34.49996	97.77635	7.94249	0.0530041	0.24107401	2.5568335	20	1 24.8	19.1
151587 2002 UT_{19}	16.7	X	337.58025	309.04360	89.70817	7.86042	0.1127065	0.27533693	2.3400568	20	12 8.8	18.8
151588 2002 UG_{23}	17.1	X	310.21934	38.77516	26.50611	3.46800	0.1794594	0.27547713	2.3392628	20	11 26.4	18.9
151589 2002 UK_{40}	15.6	X	99.80810	344.09195	77.38011	14.80522	0.1047931	0.24195985	2.5505892	20	2 24.4	19.2
151590 Fan	16.2	X	108.52949	114.00838	111.41860	7.58694	0.0623216	0.27147818	2.3621788	20	10 9.9	19.5
151591 2002 VW_{7}	16.7	X	325.65148	122.55369	304.32091	6.09744	0.0818880	0.27916321	2.3186254	20	12 27.4	19.0
151592 2002 VX_{11}	16.1	X	60.49180	82.13977	44.63286	7.16390	0.2026193	0.24168022	2.5525562	20	4 5.2	18.7
151593 2002 VL_{22}	16.9	X	35.32299	153.85382	234.95540	2.74587	0.1518363	0.28403458	2.2920385	20	—	—
151594 2002 VL_{31}	16.4	X	236.29427	253.67441	223.10151	7.19113	0.1237803	0.26897839	2.3767917	20	10 4.9	19.5
151595 2002 VA_{34}	16.7	X	213.77789	295.39394	59.41642	3.98651	0.2141362	0.30686076	2.1769167	20	3 25.7	20.1
151596 2002 VM_{34}	15.9	X	272.62023	307.08093	71.66230	9.15051	0.2511378	0.26259662	2.4151455	20	6 18.5	19.2
151597 2002 VZ_{36}	16.7	X	99.24081	216.19959	144.46159	3.92554	0.1668548	0.29128668	2.2538360	20	—	—
151598 2002 VL_{37}	17.0	X	59.68619	49.01722	305.53397	3.97648	0.1576190	0.28366439	2.2940322	20	—	—
151599 2002 VK_{40}	16.7	X	37.43107	234.35084	161.89458	6.89999	0.1458811	0.28404848	2.2919637	20	—	—
151600 2002 VG_{44}	16.6	X	355.14034	226.02838	187.83456	6.52876	0.0944991	0.28027317	2.3124998	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151601 2002 VJ_{47}	16.9	X	166.14117	231.49692	132.37213	2.55424	0.2918291	0.24625241	2.5208619	20	3 4.1	21.2
151602 2002 VX_{47}	17.1	X	333.39938	274.86553	170.26346	2.57977	0.1604280	0.27921021	2.3183652	20	—	—
151603 2002 VG_{51}	16.6	X	335.38402	22.57055	92.94719	5.84339	0.1072479	0.28633498	2.2797459	20	—	—
151604 2002 VC_{61}	16.6	X	0.50791	180.37725	241.18364	4.98386	0.1083388	0.28312569	2.2969411	20	—	—
151605 2002 VJ_{61}	16.5	X	42.54532	321.81942	88.70141	7.37091	0.1460430	0.28801933	2.2708492	20	—	—
151606 2002 VU_{61}	16.6	X	116.44435	329.89995	353.81468	2.88743	0.1805273	0.28889421	2.2662622	20	—	—
151607 2002 VV_{70}	16.7	X	89.19880	290.41519	79.28815	5.53100	0.1733990	0.29081108	2.2562926	20	—	—
151608 2002 VA_{73}	16.8	X	295.92743	323.76425	105.43885	4.53945	0.1289643	0.27311835	2.3527122	20	11 6.1	19.0
151609 2002 VZ_{74}	17.1	X	334.65248	266.25290	142.60213	3.75246	0.0858988	0.27680068	2.3317999	20	12 15.9	19.6
151610 2002 VU_{79}	16.5	X	309.99503	320.99319	93.49398	6.93261	0.1362744	0.27275040	2.3548276	20	11 11.5	18.6
151611 2002 VY_{80}	16.4	X	32.24799	176.59087	197.06242	5.80951	0.1350206	0.28012593	2.3133100	20	—	—
151612 2002 VR_{84}	15.2	X	285.94657	22.36798	108.91170	21.43783	0.1554556	0.27326719	2.3518578	20	—	—
151613 2002 VT_{91}	16.2	X	93.07585	83.88155	255.24488	5.65831	0.1315932	0.28533909	2.2850473	20	—	—
151614 2002 VS_{93}	16.3	X	327.35285	166.08957	274.97268	5.42613	0.0770491	0.27917970	2.3185341	20	—	—
151615 2002 VR_{97}	16.5	X	17.22691	146.75648	19.23551	3.63948	0.0580589	0.29984891	2.2107233	20	2 22.8	18.6
151616 2002 VW_{99}	16.5	X	285.66603	140.39231	66.15778	6.40284	0.0863352	0.29213301	2.2494808	20	—	—
151617 2002 VQ_{100}	16.6	X	22.08502	121.18359	303.19862	4.88275	0.1340203	0.28581250	2.2825234	20	—	—
151618 2002 VZ_{102}	16.5	X	74.46435	337.55995	357.15790	5.14675	0.1379166	0.28288593	2.2982388	20	—	—
151619 2002 VB_{105}	16.9	X	261.67692	54.61710	358.69260	4.22688	0.2205488	0.26485324	2.4014075	20	7 29.5	20.1
151620 2002 VK_{108}	16.3	X	36.06577	336.95178	48.17304	10.35686	0.1421629	0.28223130	2.3017913	20	—	—
151621 2002 VH_{114}	17.1	X	278.50460	298.72625	136.90364	1.64307	0.1630989	0.27015096	2.3699092	20	10 7.1	19.5
151622 2002 VX_{121}	16.9	X	158.84653	18.17141	315.57978	6.86705	0.2428767	0.29769070	2.2213954	20	1 14.3	20.2
151623 2002 VF_{123}	16.7	X	98.90364	29.81418	323.95265	5.58809	0.1563361	0.28903027	2.2655509	20	—	—
151624 2002 WS_{6}	16.5	X	211.87256	139.66564	37.60367	7.88074	0.0530795	0.27573208	2.3378206	20	12 6.5	19.6
151625 2002 WP_{7}	17.3	X	284.02721	241.86337	176.95442	1.11336	0.1640561	0.26896371	2.3768782	20	9 20.4	19.4
151626 2002 WQ_{9}	16.6	X	50.81994	228.84542	123.05935	3.17265	0.2334189	0.28207847	2.3026225	20	—	—
151627 2002 WB_{12}	16.1	X	201.58009	346.60506	131.65290	12.92557	0.1440269	0.26275325	2.4141856	20	8 27.2	19.7
151628 2002 WA_{17}	16.4	X	261.91884	304.97949	177.37540	7.25909	0.1934375	0.27192341	2.3595996	20	11 12.6	18.9
151629 2002 WP_{17}	16.5	X	259.54100	270.09310	179.68616	9.16894	0.1807498	0.26877760	2.3779753	20	9 22.2	19.2
151630 2002 WO_{19}	16.8	X	242.53203	9.91318	220.46701	2.80914	0.0312696	0.28912037	2.2650802	20	—	—
151631 2002 XN	16.7	X	37.32070	254.51846	134.10913	7.41851	0.1202645	0.28328051	2.2961041	20	—	—
151632 2002 XC_{4}	16.6	X	236.98421	137.34329	165.77862	4.71847	0.2167677	0.30244838	2.1980381	20	2 7.1	20.2
151633 2002 XL_{7}	16.4	X	27.42572	56.90414	330.82594	5.75483	0.1274639	0.28273751	2.2990430	20	—	—
151634 2002 XX_{19}	17.0	X	89.40005	54.63306	4.58304	3.30233	0.0262453	0.29515264	2.2341120	20	1 10.8	19.6
151635 2002 XY_{22}	17.1	X	78.79392	94.00174	279.83245	2.42931	0.1887375	0.28823949	2.2696927	20	—	—
151636 2002 XO_{27}	17.0	X	292.66214	188.72288	245.91485	2.23721	0.1266738	0.27199535	2.3591835	20	11 5.5	19.3
151637 2002 XN_{28}	16.3	X	178.26085	119.19647	264.27070	2.97311	0.1050600	0.24617713	2.5213758	20	3 28.6	20.1
151638 2002 XV_{28}	16.9	X	86.49993	47.26278	326.81480	5.38330	0.2076825	0.28885729	2.2664553	20	—	—
151639 2002 XF_{31}	16.6	X	49.17464	27.50470	9.10035	3.20525	0.0927419	0.28495433	2.2871038	20	—	—
151640 2002 XC_{33}	16.8	X	194.01472	5.46149	343.03678	3.03563	0.1838486	0.30233553	2.1985850	20	2 28.1	20.2
151641 2002 XM_{38}	15.1	X	125.60814	167.87308	294.59085	8.99612	0.0570304	0.19114924	2.9846105	20	5 7.1	19.6
151642 2002 XG_{49}	16.0	X	337.51318	81.51017	80.19988	5.76247	0.1370871	0.23344734	2.6122220	20	—	—
151643 2002 XH_{54}	16.6	X	1.85581	320.97783	121.29983	3.10146	0.1359506	0.28337330	2.2956029	20	—	—
151644 2002 XB_{57}	16.2	X	291.43830	162.39464	259.69311	5.02991	0.1738231	0.26892874	2.3770842	20	10 5.5	18.5
151645 2002 XR_{60}	16.6	X	256.63438	313.11107	256.58606	6.56729	0.0302705	0.28627559	2.2800612	20	—	—
151646 2002 XA_{66}	15.0	X	262.22950	99.01206	48.44803	23.60510	0.2763012	0.26960225	2.3731237	20	11 28.2	17.4
151647 2002 XC_{66}	16.0	X	215.48539	68.27008	82.99885	2.85831	0.1637502	0.26355805	2.4092685	20	10 22.1	19.3
151648 2002 XQ_{70}	15.9	X	259.65059	177.13048	275.17519	6.56442	0.1524076	0.26774362	2.3840936	20	9 26.6	18.9
151649 2002 XL_{71}	17.1	X	248.22269	355.48633	141.55442	6.86568	0.1999817	0.27083750	2.3659025	20	11 11.1	19.9
151650 2002 XN_{81}	16.2	X	271.47752	10.96503	41.80195	4.96754	0.1248112	0.26327405	2.4110007	20	8 29.4	19.0
151651 2002 XS_{88}	16.5	X	286.79441	198.75918	303.82229	2.13201	0.1019743	0.27802085	2.3249724	20	—	—
151652 2002 XF_{93}	16.6	X	241.56327	135.90228	335.67247	1.83826	0.1685186	0.26645738	2.3917597	20	9 28.7	19.5
151653 2002 XB_{94}	16.9	X	327.21423	75.68668	344.22039	6.23191	0.1012780	0.27626074	2.3348372	20	12 20.2	19.3
151654 2002 XU_{95}	17.3	X	331.71114	130.70690	260.59433	0.40809	0.1876776	0.27357202	2.3501104	20	11 22.3	19.0
151655 2002 XZ_{103}	16.3	X	246.38180	204.59402	251.15462	5.07916	0.1484662	0.26505670	2.4001784	20	9 13.7	19.5
151656 2002 XC_{115}	17.5	X	242.61805	25.36320	99.21109	6.80617	0.2032467	0.27049012	2.3679277	20	10 17.5	20.6
151657 Finkbeiner	16.6	X	8.86031	47.61856	124.35900	10.05961	0.1638076	0.23127568	2.6285490	20	2 23.8	19.1
151658 2002 YK	16.0	X	253.99070	329.15651	88.78777	8.49312	0.2396215	0.26070391	2.4268207	20	7 22.9	19.4
151659 Egerszegi	15.8	X	187.74861	186.91338	103.33703	15.45098	0.1059193	0.22846344	2.6500755	20	—	—
151660 2002 YC_{6}	15.6	X	251.85712	87.08486	84.61486	14.26511	0.0926179	0.22141151	2.7060506	20	—	—
151661 2002 YF_{8}	16.0	X	356.31737	351.36561	64.70533	4.53881	0.1761311	0.27832190	2.3232955	20	—	—
151662 2002 YZ_{8}	16.8	X	287.89907	122.03137	316.10343	1.74763	0.1604953	0.26954842	2.3734396	20	10 27.3	19.1
151663 2002 YF_{10}	16.1	X	337.46768	244.66342	278.86642	2.65130	0.1405134	0.23024852	2.6363607	20	—	—
151664 2002 YJ_{12}	16.3	X	91.19907	100.52029	264.68721	3.66447	0.0677129	0.28517174	2.2859412	20	—	—
151665 2002 YP_{19}	16.8	X	337.00311	165.15346	281.40183	1.63728	0.1711046	0.27881327	2.3205651	20	—	—
151666 2002 YS_{19}	16.3	X	287.81441	29.53681	89.16151	7.08601	0.1031656	0.27510369	2.3413793	20	—	—
151667 2002 YO_{23}	16.4	X	16.22526	8.75816	117.03887	2.83866	0.0739220	0.23249754	2.6193315	20	1 6.5	19.4
151668 2002 YY_{26}	16.8	X	18.25423	279.29747	115.93605	2.25502	0.1712525	0.27772873	2.3266024	20	—	—
151669 2002 YH_{27}	16.8	X	264.52609	133.00859	265.01427	1.26520	0.1963913	0.26013639	2.4303490	20	7 13.7	19.8
151670 2002 YL_{27}	16.5	X	261.70452	54.94301	92.97582	1.65681	0.1502015	0.27262711	2.3555375	20	12 24.7	18.8
151671 2002 YC_{29}	16.5	X	180.23088	94.41365	81.23252	3.11235	0.1119989	0.26357434	2.4091692	20	10 20.7	19.9
151672 2003 AU	16.4	X	328.27611	275.85774	152.73788	6.86055	0.1005113	0.27343939	2.3508703	20	—	—
151673 2003 AQ_{5}	15.9	X	198.46265	237.84351	244.66243	1.69353	0.1523238	0.25796056	2.4439961	20	8 25.8	19.7
151674 2003 AQ_{6}	16.4	X	215.59046	113.36703	313.46255	1.84805	0.1628283	0.25413018	2.4684929	20	6 30.9	20.0
151675 2003 AW_{7}	17.0	X	271.15061	264.50330	189.81490	2.30372	0.1727533	0.26654825	2.3912161	20	10 18.9	19.2
151676 2003 AG_{10}	16.6	X	348.29596	301.26727	157.29309	6.36594	0.1666865	0.28228309	2.3015097	20	—	—
151677 2003 AB_{12}	16.8	X	274.73007	124.95196	346.47996	1.73760	0.1019466	0.27097078	2.3651267	20	11 29.9	19.1
151678 2003 AF_{16}	16.3	X	23.54055	233.54907	148.03246	5.17554	0.1674682	0.27464727	2.3439726	20	—	—
151679 2003 AE_{20}	15.9	X	217.49554	3.95970	141.86735	8.83155	0.1573293	0.20965045	2.8063307	20	10 12.3	20.2
151680 2003 AZ_{23}	16.2	X	253.34731	40.44496	78.07722	4.47173	0.1837225	0.26909043	2.3761319	20	10 25.2	18.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151681 2003 AR_{25}	16.8	X	306.60249	82.39245	332.18464	1.96997	0.1634966	0.26963115	2.3729541	20	10 29.6	18.6
151682 2003 AQ_{28}	16.4	X	232.64207	354.95020	150.14373	1.71212	0.1330367	0.26713860	2.3876919	20	11 8.3	19.2
151683 2003 AE_{29}	16.5	X	279.02712	131.72055	292.24157	1.86667	0.1588753	0.26427279	2.4049225	20	9 17.9	19.2
151684 2003 AZ_{30}	16.8	X	270.21381	282.27885	133.48818	2.69169	0.2079332	0.26193028	2.4192398	20	8 14.7	19.6
151685 2003 AU_{35}	15.6	X	215.63127	283.09989	243.78572	7.52017	0.1979448	0.21174399	2.7878024	20	10 27.6	20.1
151686 2003 AP_{39}	16.0	X	263.85969	331.47177	141.75942	7.30665	0.0812751	0.26789243	2.3832106	20	11 19.7	18.8
151687 2003 AK_{42}	16.4	X	218.77517	276.91405	201.68186	2.89531	0.1492846	0.26067303	2.4270124	20	9 12.1	19.8
151688 2003 AQ_{46}	15.8	X	212.85969	151.14902	329.40699	4.81329	0.1241236	0.20541598	2.8447661	20	9 4.9	20.1
151689 2003 AM_{49}	16.7	X	21.91512	143.70724	322.63613	4.04069	0.2003477	0.22981263	2.6396932	20	—	—
151690 2003 AH_{53}	16.7	X	306.69091	59.02330	1.46599	1.92234	0.1810552	0.26891686	2.3771542	20	11 7.5	18.3
151691 2003 AL_{53}	15.9	X	343.26002	47.64216	97.35003	9.71831	0.0652144	0.22801100	2.6535800	20	—	—
151692 2003 AU_{53}	16.4	X	267.43010	54.11340	337.25101	6.08393	0.1332053	0.25758898	2.4463459	20	7 19.8	19.6
151693 2003 AH_{55}	16.2	X	107.14618	188.06385	3.65042	4.64886	0.1561077	0.25255449	2.4787495	20	8 27.5	19.9
151694 2003 AS_{58}	16.8	X	312.75282	62.88504	53.82767	3.23900	0.2030137	0.27534237	2.3400260	20	—	—
151695 2003 AB_{64}	16.4	X	15.77773	71.29540	339.89288	6.62092	0.0996749	0.27862293	2.3216219	20	—	—
151696 2003 AX_{65}	16.1	X	248.95690	124.02566	359.09509	8.35189	0.0609326	0.26736902	2.3863199	20	11 8.7	19.0
151697 Paolobattaini	16.8	X	191.24596	221.33768	306.03030	1.64022	0.1540867	0.26173451	2.4204460	20	10 15.8	20.5
151698 2003 AH_{84}	16.1	X	280.54084	148.96989	259.92703	1.45694	0.1844358	0.26121395	2.4236606	20	8 24.3	18.7
151699 2003 AA_{94}	15.4	X	175.78074	356.28267	74.73711	14.25559	0.1559876	0.24692279	2.5162972	20	5 29.3	19.5
151700 2003 BQ_{17}	16.7	X	211.13133	238.46493	267.94185	0.36906	0.1310544	0.26257724	2.4152643	20	10 13.2	20.0
151701 2003 BK_{18}	17.1	X	184.42763	197.11542	263.22552	0.77337	0.1453617	0.25228789	2.4804955	20	7 14.4	20.9
151702 2003 BL_{20}	14.6	X	338.35700	88.62931	132.37497	14.33636	0.1823447	0.17550279	3.1594637	20	3 14.6	18.4
151703 2003 BU_{21}	15.8	X	225.78407	156.87981	246.36935	7.46253	0.3332435	0.25486927	2.4637184	20	5 29.2	20.3
151704 2003 BH_{28}	15.5	X	157.94617	92.80725	163.28948	7.38380	0.2115212	0.26715709	2.3875817	20	12 31.1	19.5
151705 2003 BE_{30}	15.0	X	333.79767	102.16700	124.55476	9.98248	0.1767050	0.17863986	3.1223659	20	3 14.3	18.8
151706 2003 BT_{33}	15.6	X	319.46927	334.86716	303.57419	13.12664	0.1426267	0.24390847	2.5369863	20	4 17.9	18.9
151707 2003 BQ_{34}	16.9	X	280.01317	65.40564	347.20581	2.51403	0.1181008	0.26237675	2.4164945	20	9 10.2	19.4
151708 2003 BV_{34}	16.5	X	186.76660	100.01417	84.93292	3.43135	0.1413354	0.26451339	2.4034639	20	11 5.9	20.1
151709 2003 BN_{37}	16.0	X	12.10948	271.55512	349.37074	8.24861	0.0672342	0.24375224	2.5380702	20	7 8.7	19.1
151710 2003 BL_{39}	15.9	X	54.24030	225.57004	131.08182	2.93253	0.2263269	0.27535649	2.3399460	20	—	—
151711 2003 BM_{39}	16.9	X	147.80112	260.23169	166.94434	3.60101	0.0478995	0.24198171	2.5504356	20	4 19.1	20.4
151712 2003 BH_{40}	16.9	X	225.69855	154.21348	352.85114	0.94380	0.1246075	0.26590193	2.3950894	20	11 2.0	20.0
151713 2003 BK_{40}	15.7	X	271.53069	183.92186	120.93951	15.52027	0.0607633	0.24167305	2.5526067	20	4 13.6	19.5
151714 2003 BM_{43}	16.1	X	137.21081	328.51389	281.46902	6.43969	0.0919475	0.26845461	2.3798822	20	12 9.1	19.5
151715 2003 BZ_{46}	16.0	X	197.89066	125.10104	95.19046	10.68761	0.1862610	0.26908371	2.3761715	20	12 27.4	19.1
151716 2003 BN_{48}	15.6	X	184.55806	287.10679	334.51080	5.94649	0.1550636	0.27246086	2.3564956	20	—	—
151717 2003 BR_{49}	16.7	X	240.82238	37.74092	57.99659	2.28398	0.1305233	0.26149466	2.4219258	20	9 12.8	19.8
151718 2003 BL_{53}	16.0	X	28.06535	254.69112	307.29268	4.38084	0.0737407	0.24108241	2.5567742	20	5 6.8	19.0
151719 2003 BN_{56}	15.9	X	326.23158	319.80147	302.10177	14.52510	0.0849233	0.24305926	2.5428921	20	4 12.6	19.3
151720 2003 BR_{58}	16.7	X	189.03890	302.09814	230.58678	1.63827	0.1543854	0.26216808	2.4177766	20	10 20.9	20.2
151721 2003 BT_{58}	16.1	X	20.82493	148.94755	69.42414	5.45322	0.1632267	0.23959865	2.5673188	20	5 27.4	18.5
151722 2003 BU_{61}	17.1	X	265.89353	321.15618	180.69932	2.09790	0.1516892	0.26968583	2.3726333	20	12 22.1	19.4
151723 2003 BX_{63}	15.9	X	157.19666	283.58755	153.14644	12.10303	0.3478635	0.24465682	2.5318103	20	5 27.7	20.9
151724 2003 BU_{65}	16.0	X	349.05730	39.03576	343.64599	11.39976	0.2687683	0.27074497	2.3664416	20	12 29.8	18.4
151725 2003 BF_{73}	16.4	X	206.48708	65.19867	34.70738	2.54025	0.1468217	0.25598227	2.4565718	20	8 6.5	20.1
151726 2003 BN_{76}	15.9	X	186.39058	40.59738	6.60465	12.44645	0.1971244	0.24656776	2.5187121	20	5 4.1	20.2
151727 2003 BQ_{80}	15.8	X	39.32830	176.29025	333.19315	6.83776	0.1431679	0.23280502	2.6170247	20	3 17.9	18.5
151728 2003 BQ_{81}	16.0	X	333.59304	63.73972	328.35338	4.27841	0.2351164	0.26765226	2.3846361	20	11 30.1	17.6
151729 2003 BY_{83}	16.1	X	28.96950	77.11985	141.98654	13.71000	0.1240150	0.24138815	2.5546148	20	6 11.8	19.1
151730 2003 BJ_{84}	15.9	X	1.92512	248.22822	2.54791	5.54115	0.1253894	0.24466438	2.5317581	20	6 4.4	18.5
151731 2003 BA_{86}	16.1	X	161.99131	316.77966	270.26608	6.70225	0.0652961	0.26908924	2.3761389	20	12 8.6	19.2
151732 2003 BG_{87}	16.3	X	23.42988	151.52122	140.74139	5.81240	0.1774803	0.25280745	2.4770958	20	9 29.6	18.9
151733 2003 BA_{88}	16.6	X	259.15616	69.48893	139.80617	2.64443	0.1497595	0.27836482	2.3230568	20	—	—
151734 2003 BH_{89}	15.9	X	325.35659	222.46419	165.22104	2.29804	0.0745508	0.20316117	2.8657761	20	10 12.9	19.4
151735 2003 BO_{90}	16.5	X	239.44181	31.03248	52.79280	2.90614	0.1442176	0.25786029	2.4446296	20	8 23.4	19.7
151736 2003 CQ	15.6	X	67.47362	73.67877	165.86879	15.09016	0.1477820	0.25226842	2.4806231	20	9 12.8	18.8
151737 2003 CV_{6}	16.1	X	4.99534	62.80703	128.98826	12.10699	0.1314369	0.23455605	2.6039839	20	3 19.8	19.0
151738 2003 CB_{7}	16.6	X	214.77610	88.76216	100.32029	2.33820	0.1199975	0.26711593	2.3878270	20	12 15.1	19.7
151739 2003 CU_{9}	16.3	X	348.91309	155.34204	54.01489	4.70347	0.1381421	0.23264359	2.6182352	20	3 13.1	19.1
151740 2003 CO_{13}	15.1	X	203.05501	97.41953	96.06760	12.33301	0.1355822	0.20931189	2.8093561	20	11 25.6	19.5
151741 2003 CT_{14}	16.9	X	181.24270	297.34749	165.55478	6.24043	0.0839425	0.25139007	2.4863980	20	7 15.3	20.6
151742 2003 CW_{19}	16.7	X	118.84238	163.99673	283.91519	6.08946	0.2680466	0.24130155	2.5552259	20	5 3.3	20.8
151743 2003 CE_{21}	15.7	X	325.37629	49.40216	137.44817	14.28024	0.1181201	0.22526567	2.6750960	20	1 7.6	19.3
151744 2003 CA_{22}	15.8	X	10.67035	116.77386	152.62160	12.96270	0.1571196	0.23984663	2.5655489	20	7 23.4	18.4
151745 2003 DG_{3}	16.0	X	76.33601	157.21589	334.03139	14.64565	0.0403091	0.23733551	2.5836136	20	4 2.1	19.5
151746 2003 DQ_{7}	15.8	X	347.59220	309.88345	333.98932	14.13338	0.0883189	0.24560424	2.5252951	20	7 1.8	18.8
151747 2003 DM_{11}	16.8	X	188.03980	219.00608	16.32041	1.11136	0.1445577	0.26888923	2.3773171	20	—	—
151748 2003 DY_{16}	16.5	X	126.40065	300.03097	141.58598	5.27174	0.2420081	0.24131292	2.5551457	20	5 3.8	20.6
151749 2003 DF_{18}	16.1	X	307.22558	20.13667	5.91325	10.41912	0.2182709	0.26189667	2.4194467	20	9 10.0	17.9
151750 2003 DR_{18}	16.7	X	135.98999	168.00585	30.54873	2.05996	0.1234762	0.25649128	2.4533206	20	10 2.4	20.3
151751 2003 DT_{18}	16.5	X	134.03916	308.29157	111.46442	3.20534	0.2212347	0.23973524	2.5663436	20	4 11.3	20.5
151752 2003 DZ_{23}	15.6	X	22.89457	205.04726	94.15140	6.12577	0.0802838	0.19547674	2.9403972	20	9 15.0	19.4
151753 2003 EX	15.5	X	334.69248	253.96362	12.54072	9.75928	0.1054230	0.23945499	2.5683455	20	5 6.6	18.5
151754 2003 EF_{2}	16.7	X	238.89357	38.22503	145.16791	1.74180	0.1220572	0.27007913	2.3703294	20	—	—
151755 2003 EG_{2}	15.5	X	216.96593	29.01614	330.43440	13.58574	0.1211606	0.23960149	2.5672985	20	4 2.1	19.6
151756 2003 EN_{3}	16.4	X	32.87678	114.38660	49.76932	4.18245	0.1126366	0.23495823	2.6010115	20	3 28.5	19.2
151757 2003 EG_{6}	16.0	X	29.82795	177.70337	20.00057	6.36160	0.1139268	0.23855589	2.5747948	20	5 7.4	18.8
151758 2003 EO_{6}	16.5	X	132.70592	283.99441	179.96466	4.81173	0.1572629	0.24387588	2.5372124	20	5 29.9	20.4
151759 2003 EF_{9}	16.0	X	97.35764	308.03665	178.51994	10.32027	0.0361510	0.23898947	2.5716797	20	5 3.5	19.4
151760 2003 EH_{10}	15.8	X	42.59500	195.38024	0.29236	9.02934	0.0985857	0.23885143	2.5726704	20	5 23.7	18.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151761 2003 EG_{11}	15.3	X	300.44688	262.39109	351.80004	11.61562	0.2164683	0.22709688	2.6606961	20	2 18.4	19.0
151762 2003 EP_{11}	16.4	X	58.31069	286.08002	206.96047	3.95394	0.1575881	0.23413878	2.6070767	20	3 31.9	19.3
151763 2003 ET_{12}	15.8	X	287.76696	294.60065	178.28532	14.14539	0.1597270	0.21094484	2.7948389	20	12 1.0	19.2
151764 2003 EX_{12}	15.7	X	342.08279	246.63591	329.81224	10.21234	0.1250299	0.23153600	2.6265784	20	3 7.9	18.7
151765 2003 EB_{19}	15.9	X	144.16859	237.64006	160.77517	7.46488	0.0778029	0.23308867	2.6149011	20	3 11.6	19.7
151766 2003 EL_{19}	16.3	X	56.43498	233.07357	307.86351	4.63185	0.0691652	0.24032978	2.5621094	20	5 22.1	19.4
151767 2003 EY_{20}	15.7	X	289.18260	183.59914	160.99743	8.92631	0.0566936	0.24416876	2.5351830	20	6 25.3	19.0
151768 2003 EX_{22}	15.1	X	7.19934	166.68787	359.30282	14.82485	0.0571664	0.22933727	2.6433396	20	2 21.7	18.4
151769 2003 EK_{24}	16.3	X	133.94838	11.60297	103.56673	2.75757	0.1512251	0.24303783	2.5430416	20	6 13.6	20.1
151770 2003 EO_{24}	16.3	X	13.03285	138.91239	77.92333	4.69195	0.1368139	0.23622714	2.5916888	20	5 8.2	18.9
151771 2003 EV_{25}	16.2	X	4.51132	5.09152	209.96293	3.96556	0.0804462	0.23611945	2.5924768	20	4 18.3	19.2
151772 2003 EW_{25}	15.8	X	72.55344	322.86021	155.41544	13.89656	0.0376431	0.23238684	2.6201633	20	3 19.8	19.2
151773 2003 EK_{26}	16.3	X	71.05082	1.27224	136.19092	4.90969	0.1206079	0.23636955	2.5906478	20	4 24.6	19.4
151774 2003 EZ_{29}	16.4	X	182.20995	251.32343	2.61212	2.13085	0.1786881	0.27024213	2.3693761	20	—	—
151775 2003 EV_{34}	15.8	X	319.48805	295.89108	319.42070	8.49090	0.1713063	0.23158715	2.6261917	20	3 16.7	19.0
151776 2003 EZ_{41}	16.0	X	27.97659	97.27400	174.82771	6.71164	0.2356810	0.24241700	2.5473815	20	9 13.5	18.7
151777 2003 EW_{46}	15.8	X	168.61314	349.36347	352.27438	4.48002	0.1105663	0.22568198	2.6718052	20	1 31.9	19.9
151778 2003 EE_{47}	15.7	X	98.02930	43.35160	71.96586	17.93192	0.1368658	0.23579946	2.5948216	20	5 7.2	19.4
151779 2003 EP_{47}	16.4	X	96.99843	281.51048	205.48126	6.99301	0.1488264	0.24093974	2.5577834	20	5 19.1	19.9
151780 2003 EX_{47}	14.3	X	258.89769	48.23564	307.30561	14.29117	0.1108131	0.24228316	2.5483196	20	5 17.5	18.2
151781 2003 EJ_{49}	16.0	X	79.65384	235.17553	183.90259	11.05380	0.0631594	0.22374986	2.6871642	20	1 13.0	19.6
151782 2003 ES_{53}	15.3	X	35.78315	69.07955	147.21904	14.13665	0.1371738	0.23497912	2.6008573	20	6 20.6	18.5
151783 2003 EJ_{58}	15.8	X	334.38275	304.20765	203.65468	8.13552	0.1337956	0.22054976	2.7130949	20	—	—
151784 2003 EL_{58}	14.7	X	128.23016	200.58002	64.21455	12.95978	0.1416240	0.20406847	2.8572754	20	12 6.2	19.4
151785 2003 FZ_{3}	14.8	X	122.71418	38.09725	20.69054	22.38506	0.0464036	0.22773971	2.6556869	20	3 16.8	18.6
151786 2003 FL_{13}	16.1	X	135.61248	107.94362	205.11148	2.81432	0.0792637	0.21380059	2.7698959	20	—	—
151787 2003 FS_{18}	16.4	X	344.19763	60.43121	180.62543	4.78202	0.1669647	0.23366125	2.6106276	20	4 14.3	18.9
151788 2003 FJ_{24}	16.2	X	15.24776	346.77164	258.74691	1.48995	0.0513501	0.24097153	2.5575584	20	6 18.4	19.3
151789 2003 FH_{32}	16.4	X	92.14896	177.50966	155.82750	2.69474	0.0481000	0.20980679	2.8049364	20	—	—
151790 2003 FL_{32}	16.0	X	317.31077	143.41993	31.10841	4.03599	0.0352806	0.22105598	2.7089513	20	—	—
151791 2003 FE_{33}	16.7	X	354.31009	93.61171	24.42607	5.28353	0.1167129	0.21967604	2.7202841	20	—	—
151792 2003 FH_{33}	15.7	X	27.89754	262.17838	163.50593	6.04958	0.0826947	0.21600550	2.7510143	20	—	—
151793 2003 FB_{42}	15.6	X	355.49763	171.75626	2.00695	13.68307	0.0921469	0.22698484	2.6615716	20	2 12.6	18.9
151794 2003 FX_{42}	15.5	X	300.76209	206.68046	5.33011	11.18784	0.1575503	0.22271404	2.6954895	20	1 4.8	19.5
151795 2003 FJ_{45}	16.5	X	70.12083	37.87816	157.28489	3.36710	0.1809006	0.24175830	2.5520065	20	7 20.3	19.7
151796 2003 FZ_{47}	15.9	X	130.99124	173.11561	209.01534	3.43891	0.0965268	0.22383036	2.6865198	20	2 6.4	19.7
151797 2003 FP_{54}	15.3	X	223.34306	49.72550	179.69829	13.07044	0.0779832	0.21127313	2.7919429	20	—	—
151798 2003 FV_{54}	16.2	X	359.69776	116.24881	46.53208	10.93407	0.1585727	0.22492140	2.6778250	20	1 27.4	19.3
151799 2003 FN_{56}	15.9	X	280.20429	294.09613	357.88992	6.90319	0.1253501	0.23340696	2.6125233	20	3 22.2	19.3
151800 2003 FE_{57}	16.0	X	292.20300	243.97771	10.70443	9.53511	0.0388893	0.23080704	2.6321058	20	3 4.9	19.5
151801 2003 FK_{57}	15.7	X	350.51384	134.56772	115.85100	3.00646	0.0837484	0.23815466	2.5776859	20	5 16.4	18.6
151802 2003 FS_{57}	15.5	X	104.88765	64.15513	21.03720	22.34038	0.0433922	0.23151284	2.6267535	20	3 24.9	19.1
151803 2003 FE_{58}	16.4	X	36.23356	346.19458	212.75425	4.71595	0.2190630	0.23692448	2.5866009	20	6 6.8	18.8
151804 2003 FV_{58}	16.5	X	25.07594	143.26723	32.14225	10.49611	0.1598795	0.23302353	2.6153884	20	4 2.9	19.0
151805 2003 FO_{61}	16.1	X	81.54308	13.94777	135.09653	5.79302	0.1258730	0.23812857	2.5778742	20	5 26.0	19.5
151806 2003 FO_{64}	15.6	X	252.51686	141.05729	45.42554	6.46213	0.0726535	0.21227316	2.7831674	20	—	—
151807 2003 FG_{75}	16.4	X	17.79072	276.09745	327.12587	4.59030	0.1459073	0.23799152	2.5788637	20	6 27.5	19.0
151808 2003 FX_{77}	15.6	X	65.28019	135.59321	29.05667	6.80075	0.0763316	0.23623668	2.5916191	20	5 13.5	18.8
151809 2003 FB_{79}	15.6	X	155.70411	305.25941	344.81527	6.26123	0.0430683	0.21157411	2.7892945	20	—	—
151810 2003 FF_{82}	15.3	X	28.09579	263.10140	171.48541	8.97725	0.1146512	0.21724935	2.7405037	20	—	—
151811 2003 FR_{82}	15.8	X	238.48753	126.88559	95.78954	5.29805	0.0467958	0.21333219	2.7739489	20	—	—
151812 2003 FE_{84}	15.3	X	151.61783	220.42881	182.58416	21.91468	0.0405860	0.23467817	2.6030805	20	3 21.6	19.0
151813 2003 FF_{87}	15.8	X	6.46245	18.73015	225.79788	10.92279	0.1264088	0.23784863	2.5798965	20	6 5.2	18.5
151814 2003 FP_{87}	15.6	X	296.36289	280.63692	346.28300	10.98424	0.1754265	0.22835661	2.6509019	20	3 3.8	19.0
151815 2003 FH_{89}	16.1	X	320.22886	351.09240	306.85740	4.02373	0.2612358	0.23514300	2.5996488	20	5 4.2	18.7
151816 2003 FF_{90}	15.2	X	260.39011	308.94279	336.47547	10.98774	0.3143314	0.22254913	2.6968210	20	2 8.3	20.0
151817 2003 FK_{93}	16.2	X	33.24479	358.38969	150.99336	6.08633	0.0805675	0.22807324	2.6530972	20	3 6.5	19.2
151818 2003 FW_{93}	15.7	X	7.04528	0.99053	162.86805	14.52786	0.0369651	0.22487176	2.6782191	20	2 14.1	19.1
151819 2003 FM_{94}	15.6	X	311.90700	57.20648	161.94620	12.08001	0.1368932	0.22383316	2.6864974	20	1 27.0	19.3
151820 2003 FW_{96}	15.3	X	151.41415	35.92951	357.41200	13.62177	0.1119492	0.22974218	2.6402328	20	3 16.4	19.2
151821 2003 FB_{97}	16.3	X	85.17340	160.22060	183.88253	5.75072	0.0749509	0.21068354	2.7971493	20	—	—
151822 2003 FW_{98}	16.0	X	76.45789	30.42680	116.88282	5.14575	0.1593690	0.23623707	2.5916162	20	5 21.8	19.3
151823 2003 FK_{99}	15.4	X	301.89357	198.70513	48.30943	10.06439	0.1663411	0.22607889	2.6686772	20	2 20.5	19.2
151824 2003 FD_{100}	15.4	X	251.24797	95.87112	147.69762	13.64650	0.1427673	0.21825544	2.7320753	20	—	—
151825 2003 FY_{101}	16.7	X	328.60085	169.49261	346.99533	2.76669	0.1487882	0.27797583	2.3252234	20	—	—
151826 2003 FE_{104}	16.3	X	38.90661	293.29258	227.35202	2.11486	0.1712428	0.23194656	2.6234780	20	4 6.9	18.9
151827 2003 FX_{106}	15.3	X	316.48262	64.33908	190.41389	11.29789	0.1565785	0.22810516	2.6528497	20	3 16.5	18.6
151828 2003 FL_{107}	15.3	X	329.75086	326.73251	190.79538	12.58992	0.1803889	0.21931242	2.7232900	20	—	—
151829 2003 FO_{108}	14.9	X	250.44192	227.30067	41.94986	5.26126	0.0719328	0.16705938	3.2650423	20	2 5.6	19.8
151830 2003 FN_{109}	16.3	X	25.35707	113.31294	58.63731	13.77007	0.2004868	0.22975739	2.6401163	20	4 6.0	18.9
151831 2003 FR_{115}	15.5	X	256.13235	97.22887	146.28556	11.65567	0.0974444	0.21931842	2.7232404	20	—	—
151832 2003 FN_{117}	16.4	X	41.55208	54.32830	102.28119	6.05899	0.0575172	0.23322714	2.6138660	20	3 29.9	19.6
151833 2003 FE_{120}	16.0	X	342.11988	10.62402	159.77659	5.54900	0.1655867	0.22548237	2.6733818	20	1 3.1	19.1
151834 Mongkut	15.4	X	129.42728	31.36804	2.25134	11.50995	0.0628672	0.22780438	2.6551843	20	2 19.1	19.2
151835 Christinarichey	15.6	X	44.12956	55.11615	161.42706	15.38939	0.1572636	0.23800843	2.5787416	20	7 7.0	18.9
151836 2003 FH_{126}	16.5	X	233.64550	172.92074	177.18116	2.09307	0.1117213	0.23787603	2.5796983	20	4 15.1	20.2
151837 2003 FP_{130}	16.2	X	210.22858	228.85266	35.67266	2.37939	0.0480523	0.21376083	2.7702394	20	—	—
151838 2003 GJ_{1}	16.0	X	342.39568	125.54502	36.37165	5.33767	0.2236192	0.22329768	2.6907907	20	—	—
151839 2003 GK_{3}	15.9	X	131.79120	169.57657	199.54665	6.03808	0.0319895	0.22271348	2.6954941	20	1 13.7	19.6
151840 2003 GF_{4}	15.5	X	306.85434	151.46472	16.74497	13.93840	0.1296946	0.21830520	2.7316601	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151841 2003 GU_8	15.8	X	292.98179	321.20504	207.00191	8.91144	0.1721593	0.21516994	2.7581316	20	—	—
151842 2003 GT_9	15.9	X	40.25250	46.24158	164.76631	6.66255	0.0975108	0.23633299	2.5909149	20	6 14.3	19.0
151843 2003 GS_{12}	15.8	X	30.63908	323.49637	200.08192	13.36106	0.0661484	0.22978294	2.6399205	20	3 18.1	19.1
151844 2003 GP_{13}	16.4	X	112.95792	230.73472	37.69146	2.32618	0.0270777	0.20112473	2.8850880	20	11 19.7	20.4
151845 2003 GA_{15}	15.7	X	90.83105	94.98213	62.20362	13.51038	0.1825082	0.24104004	2.5570737	20	6 24.6	19.4
151846 2003 GH_{15}	15.6	X	97.12932	37.25709	125.16607	13.66043	0.0863042	0.24179031	2.5517813	20	6 27.4	19.2
151847 2003 GT_{17}	15.1	X	334.52519	313.26582	17.40547	6.20831	0.1277169	0.18809048	3.0168810	20	8 8.9	18.7
151848 2003 GD_{26}	15.9	X	220.19016	345.50507	4.95257	3.34068	0.0979768	0.23211540	2.6222057	20	4 1.8	19.6
151849 2003 GN_{29}	15.9	X	146.37587	260.49158	354.14738	2.54394	0.2158608	0.20115881	2.8847621	20	12 9.7	20.8
151850 2003 GK_{35}	16.0	X	133.83470	246.58651	78.15016	3.31314	0.0485448	0.21421586	2.7663150	20	—	—
151851 2003 GU_{36}	15.6	X	162.73575	10.98429	68.26073	12.21487	0.1651794	0.24312523	2.5424321	20	5 27.2	19.7
151852 2003 GX_{36}	15.8	X	129.65036	19.12565	65.78100	12.72578	0.1521163	0.23876094	2.5733204	20	5 3.6	19.7
151853 2003 GX_{42}	15.4	X	335.22551	50.12743	124.41078	14.03748	0.1962960	0.22475960	2.6791100	20	—	—
151854 2003 HT_2	16.0	X	325.94715	335.10852	197.50926	4.16597	0.1313843	0.22220217	2.6996276	20	—	—
151855 2003 HH_8	15.7	X	74.96839	7.01580	11.12086	7.40371	0.1920588	0.21475264	2.7617034	20	—	—
151856 2003 HC_9	16.0	X	341.98745	97.78644	23.27209	5.61223	0.0335206	0.21331007	2.7741406	20	—	—
151857 2003 HG_{11}	16.4	X	264.76151	22.02949	199.50577	1.38317	0.0142508	0.21922471	2.7240164	20	—	—
151858 2003 HD_{15}	15.8	X	295.07372	113.93803	147.56823	7.05375	0.0485137	0.22761784	2.6566347	20	3 15.1	19.2
151859 2003 HG_{23}	16.9	X	243.61294	165.33168	11.07213	2.86645	0.0229413	0.20917877	2.8105478	20	—	—
151860 2003 HD_{24}	16.0	X	127.87373	194.96996	81.20429	3.18678	0.0314453	0.20260624	2.8710065	20	12 17.0	19.9
151861 2003 HB_{27}	15.3	X	96.82726	242.39700	203.51024	12.52889	0.1794535	0.22766027	2.6563047	20	3 28.3	18.9
151862 2003 HD_{29}	15.1	X	296.70214	178.12417	23.18605	14.37948	0.1041984	0.21906282	2.7253583	20	—	—
151863 2003 HP_{38}	15.6	X	310.53509	340.19352	261.98571	14.50596	0.2000489	0.22718631	2.6599978	20	2 8.7	19.5
151864 2003 HO_{45}	16.0	X	36.03910	324.81523	208.11389	3.17378	0.1793219	0.23093448	2.6311374	20	4 21.3	18.2
151865 2003 HQ_{47}	16.1	X	193.85411	143.49071	136.26528	2.80521	0.1868540	0.21037784	2.7998583	20	—	—
151866 2003 HF_{48}	14.8	X	163.46021	242.51338	27.96702	15.31258	0.1223081	0.20486251	2.8498875	20	—	—
151867 2003 HO_{54}	15.2	X	283.95115	144.97751	51.69063	12.64501	0.0965933	0.21474018	2.7618103	20	—	—
151868 2003 HV_{54}	16.0	X	267.77208	48.74608	168.54184	2.91950	0.0851841	0.21713232	2.7414883	20	—	—
151869 2003 JZ	15.8	X	315.04677	3.82267	53.54549	6.89127	0.0789815	0.19763070	2.9189934	20	11 3.8	19.4
151870 2003 JG_2	15.7	X	87.08702	196.91305	106.53442	3.23942	0.0696355	0.19834151	2.9120152	20	12 6.6	20.0
151871 2003 JN_{12}	16.0	X	263.48194	128.54052	127.59164	3.30163	0.0528665	0.22084871	2.7106460	20	1 28.2	19.8
151872 2003 JD_{14}	15.7	X	230.07741	307.96863	321.84492	10.29708	0.3441606	0.21401503	2.7680453	20	1 1.4	21.1
151873 2003 KL_9	15.8	X	255.29397	300.68094	339.01399	6.35323	0.1594266	0.21934516	2.7230191	20	2 8.3	20.1
151874 2003 KQ_{17}	16.1	X	356.79907	90.47214	97.18749	2.96900	0.2215829	0.22624402	2.6673785	20	2 15.9	18.5
151875 2003 KC_{28}	16.4	X	325.15549	78.98977	84.50045	9.50956	0.1463990	0.21642103	2.7474918	20	—	—
151876 2003 NH_7	15.0	X	139.77870	299.73819	318.75535	12.20357	0.1310216	0.19324376	2.9630050	20	12 7.0	19.9
151877 2003 OU_9	14.5	X	63.54957	338.92472	292.43050	14.74724	0.0967496	0.18058705	3.0998807	20	9 22.8	19.2
151878 2003 PZ_4	15.5	X	52.95440	152.88731	135.39776	1.85478	0.1909397	0.18187611	3.0852162	20	10 23.6	19.8
151879 2003 RF_3	15.0	X	44.76364	192.95759	150.37179	2.54746	0.1021945	0.18404395	3.0609414	20	12 7.0	19.1
151880 2003 SF_{151}	14.5	X	68.04850	245.85945	32.30884	16.22756	0.0748191	0.17592549	3.1544007	20	10 13.9	19.0
151881 2003 SC_{209}	14.6	X	4.43233	126.83119	166.69469	21.71719	0.0860490	0.17247931	3.1962793	20	8 2.4	18.9
151882 2003 UW_{146}	17.0	X	110.35525	305.03176	91.73301	5.85030	0.1598142	0.31439321	2.1420056	20	1 27.8	19.1
151883 2003 WQ_{25}	12.9	X	171.49551	306.64364	76.48269	5.52254	0.0427884	0.08452353	5.1422239	20	4 2.6	19.9
151884 2003 WO_{40}	12.6	X	246.82460	260.86192	56.85825	15.26580	0.0356477	0.08355247	5.1819893	20	4 11.5	19.6
151885 2003 XY_{21}	16.8	X	357.65798	340.33391	99.27026	3.43962	0.1397310	0.29779984	2.2208526	20	—	—
151886 2003 YO_{13}	16.8	X	255.45489	193.66170	297.31950	15.98970	0.0816488	0.34642592	2.0078401	20	12 26.1	18.6
151887 2003 YY_{101}	16.7	X	301.13991	193.61038	249.58783	2.80242	0.1038664	0.28768046	2.2726321	20	12 11.5	18.7
151888 2003 YV_{117}	15.6	X	59.46647	351.21876	153.81524	28.02044	0.3373162	0.30857090	2.1688661	20	5 28.7	18.6
151889 2004 BG_3	16.1	X	192.57931	241.99394	308.28884	5.60717	0.0751959	0.28289454	2.2981922	20	11 27.9	19.1
151890 2004 BN_{80}	16.6	X	173.17978	290.61738	284.68635	2.85639	0.1335380	0.28219623	2.3019819	20	12 3.1	19.9
151891 2004 BF_{84}	15.1	X	303.96166	49.85805	156.83632	5.36059	0.1931477	0.17517727	3.1633765	20	1 3.5	19.6
151892 2004 BR_{91}	15.8	X	92.67442	7.79159	260.17829	4.04641	0.0214961	0.21946565	2.7220223	20	10 27.8	19.7
151893 2004 BU_{106}	16.5	X	255.68447	73.72461	107.44359	5.81166	0.0476079	0.29100184	2.2553064	20	—	—
151894 2004 CU_{24}	17.1	X	315.65262	203.73299	281.54810	4.86254	0.0793120	0.29159592	2.2522422	20	—	—
151895 2004 CN_{66}	16.8	X	237.72116	79.56424	92.85633	7.76670	0.0481458	0.28688336	2.2768398	20	—	—
151896 2004 DA_{16}	16.6	X	240.97959	92.29543	166.85794	4.50295	0.0966734	0.29729519	2.2233651	20	—	—
151897 2004 DK_{16}	16.6	X	200.92633	2.04672	164.20183	2.60768	0.1387197	0.27622895	2.3350163	20	10 30.1	19.7
151898 2004 DK_{33}	15.3	X	64.56764	89.42123	157.84995	15.53527	0.2296856	0.20263496	2.8707352	20	9 26.2	19.5
151899 2004 EP	16.4	X	59.49050	205.34174	112.62336	4.96296	0.1448902	0.27536758	2.3398832	20	12 18.7	19.5
151900 2004 EB_7	17.6	X	288.51887	209.09468	356.62270	3.40742	0.1056898	0.29563676	2.2316723	20	—	—
151901 2004 EZ_9	17.0	X	144.23261	326.85261	319.25744	1.97950	0.1650185	0.28401396	2.2921494	20	—	—
151902 2004 EK_{10}	17.0	X	42.69579	104.90727	340.28142	6.90279	0.0442376	0.29763782	2.2216585	20	—	—
151903 2004 EO_{13}	15.2	X	245.72209	91.00054	165.37741	13.55804	0.2420857	0.17138840	3.2098281	20	1 2.9	20.8
151904 2004 EZ_{20}	17.9	X	303.46117	11.75184	250.70119	0.69944	0.2084842	0.30511966	2.1851903	20	2 21.1	20.3
151905 2004 EE_{21}	17.3	X	210.01795	6.05338	164.99031	2.02110	0.1484556	0.27820213	2.3239623	20	11 14.7	20.5
151906 2004 EO_{27}	17.7	X	146.57391	312.99494	345.25613	1.16308	0.1756123	0.28623312	2.2802867	20	—	—
151907 2004 EE_{38}	16.9	X	269.61147	235.71258	1.42616	4.79567	0.1281699	0.29536571	2.2330374	20	—	—
151908 2004 EP_{38}	16.6	X	204.35213	152.21016	121.68002	3.42747	0.1863473	0.28909130	2.2652321	20	—	—
151909 2004 ET_{39}	16.9	X	302.59537	316.95389	314.81985	1.56957	0.1235755	0.30836549	2.1698291	20	3 17.0	19.3
151910 2004 EY_{39}	16.7	X	136.29230	25.78595	191.26806	1.89951	0.1601670	0.27277629	2.3546786	20	10 28.7	20.2
151911 2004 EW_{42}	16.5	X	19.85186	113.49158	124.31425	3.13857	0.1302819	0.25394972	2.4696622	20	6 21.9	18.8
151912 2004 EB_{43}	16.5	X	160.46690	221.27117	46.90343	3.66032	0.2079886	0.28115352	2.3076700	20	—	—
151913 2004 EN_{54}	16.7	X	305.58875	230.53364	18.31657	8.00329	0.0082900	0.30517267	2.1849372	20	3 11.2	19.2
151914 2004 EO_{54}	17.3	X	15.69110	114.39863	88.66462	1.45981	0.0818601	0.30908960	2.1664389	20	4 15.2	19.0
151915 2004 EM_{56}	16.1	X	240.85522	257.18534	348.08772	5.17128	0.0982019	0.29135777	2.2534693	20	—	—
151916 2004 EX_{57}	16.7	X	269.46709	163.72342	133.39182	3.53845	0.1856436	0.30615119	2.1802790	20	3 3.9	19.6
151917 2004 EY_{57}	16.7	X	303.91968	120.49137	108.18665	7.35739	0.0807849	0.30264279	2.1970966	20	1 26.8	19.2
151918 2004 EW_{66}	16.0	X	147.41700	105.70213	189.94044	4.64746	0.1389679	0.28320554	2.2965094	20	—	—
151919 2004 EJ_{74}	15.6	X	81.53183	44.19590	268.61187	3.81222	0.2663751	0.27540462	2.3396734	20	—	—
151920 2004 EN_{78}	16.0	X	358.83515	285.21213	31.29981	4.65781	0.1284402	0.26390892	2.4071325	20	9 15.6	18.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
151921 2004 EW_{86}	16.3	X	259.58706	332.20213	161.83516	6.48473	0.1728355	0.27977825	2.3152261	20	12 1.0	18.6
151922 2004 EY_{86}	15.9	X	355.32618	65.05874	92.95674	5.67269	0.0625681	0.23657170	2.5891717	20	1 18.5	19.0
151923 2004 EE_{94}	16.1	X	79.66936	332.88543	27.33924	9.02298	0.1810334	0.28623323	2.2802861	20	—	—
151924 2004 EW_{107}	17.7	X	225.89462	275.29332	38.46005	0.26807	0.0342071	0.30418487	2.1896648	20	2 16.6	20.3
151925 2004 FD_{6}	17.2	X	286.98123	194.88839	61.64806	1.47321	0.1134284	0.30371899	2.1919034	20	2 7.2	19.9
151926 2004 FR_{11}	16.7	X	220.11149	338.13105	267.16772	4.77011	0.1125140	0.28945977	2.2633093	20	—	—
151927 2004 FP_{15}	15.8	X	286.56529	335.65102	280.26650	12.09720	0.1090322	0.24114328	2.5563439	20	2 9.9	19.6
151928 2004 FG_{19}	17.0	X	117.21858	8.60253	259.54557	2.17947	0.1531450	0.27517633	2.3409672	20	12 13.5	20.6
151929 2004 FM_{20}	16.6	X	224.53393	34.60062	202.13999	4.98504	0.1071288	0.28831603	2.2692910	20	—	—
151930 2004 FA_{22}	14.9	X	263.75953	197.88439	24.37466	6.20335	0.1068885	0.16990425	3.2284932	20	—	—
151931 2004 FQ_{25}	16.5	X	232.13760	36.00910	204.70180	4.63051	0.1817962	0.28892124	2.2661209	20	—	—
151932 2004 FR_{26}	17.0	X	171.04762	168.14064	123.97527	1.05871	0.2069289	0.28686583	2.2769326	20	—	—
151933 2004 FZ_{26}	17.1	X	286.98810	323.23296	357.71206	5.24998	0.1455111	0.31362767	2.1454899	20	4 30.5	19.7
151934 2004 FT_{36}	16.2	X	200.24758	246.08820	44.91025	3.69763	0.1875428	0.29027112	2.2590898	20	—	—
151935 2004 FP_{44}	16.2	X	253.99780	108.60364	137.50209	4.98299	0.1551993	0.29423835	2.2387376	20	—	—
151936 2004 FB_{45}	16.5	X	268.62361	56.72805	150.77800	6.56846	0.1102533	0.29087029	2.2559864	20	—	—
151937 2004 FD_{53}	16.4	X	298.14592	336.16390	168.71194	6.53667	0.1076174	0.28603692	2.2813293	20	—	—
151938 2004 FB_{63}	17.1	X	272.95835	88.99711	157.26838	6.25166	0.0251697	0.29889992	2.2154002	20	1 16.9	19.8
151939 2004 FC_{64}	16.6	X	256.12440	105.76755	156.83807	3.47553	0.1218425	0.29627581	2.2284621	20	1 10.7	19.9
151940 2004 FO_{80}	17.2	X	117.88957	125.46738	125.90193	2.10761	0.1555603	0.27087725	2.3656711	20	11 23.3	20.9
151941 2004 FY_{87}	17.2	X	343.00945	116.81537	171.99213	3.98704	0.0842426	0.31708391	2.1298707	20	7 2.2	18.9
151942 2004 FL_{95}	17.1	X	284.58778	169.81492	98.29531	4.67722	0.1305753	0.30516358	2.1849806	20	2 18.6	19.9
151943 2004 FN_{95}	16.8	X	182.56597	243.68906	38.83667	6.12485	0.0874551	0.28931993	2.2640385	20	—	—
151944 2004 FL_{97}	17.1	X	346.67706	27.53080	141.21871	7.88200	0.0562738	0.29995273	2.2102132	20	1 7.3	19.6
151945 2004 FY_{106}	16.1	X	207.91823	336.78783	357.05962	7.84458	0.2169997	0.30065683	2.2067612	20	2 23.9	19.6
151946 2004 FR_{116}	16.6	X	160.55627	99.67607	128.26660	9.20947	0.1035655	0.27433314	2.3457616	20	12 8.2	20.0
151947 2004 FK_{117}	17.0	X	337.02688	288.01911	247.36664	3.23496	0.0105574	0.29971896	2.2113623	20	1 9.3	19.6
151948 2004 FA_{119}	16.5	X	198.72400	192.52585	60.02802	5.92707	0.2410929	0.28039829	2.3118118	20	—	—
151949 2004 FN_{125}	16.1	X	74.45552	218.26300	166.06997	2.25838	0.1095752	0.22912933	2.6449386	20	—	—
151950 2004 FM_{128}	16.4	X	323.27840	66.03239	185.27288	4.63959	0.1637201	0.30443939	2.1884442	20	3 12.5	18.3
151951 2004 FO_{131}	16.5	X	217.71612	37.84349	182.02994	5.33141	0.0516793	0.28303592	2.2974268	20	—	—
151952 2004 FO_{139}	17.2	X	270.80532	3.15967	252.23282	2.64564	0.1977678	0.29644062	2.2276361	20	1 10.6	20.7
151953 2004 FB_{145}	17.1	X	110.90451	188.14105	244.68808	2.98383	0.1683721	0.24568547	2.5247385	20	3 25.3	20.5
151954 2004 GO_{1}	16.4	X	166.04711	139.88913	131.52870	11.47966	0.1828463	0.27928645	2.3179433	20	—	—
151955 2004 GH_{3}	17.5	X	26.14951	192.84022	19.91685	1.29210	0.0759589	0.31137614	2.1558200	20	5 19.7	19.5
151956 2004 GV_{3}	16.2	X	17.79202	335.30781	8.03267	0.67878	0.1972785	0.26896166	2.3768903	20	12 6.5	19.0
151957 2004 GE_{14}	16.1	X	267.45209	3.22817	126.65356	6.54984	0.0101999	0.27620135	2.3351719	20	12 26.1	19.0
151958 2004 GR_{20}	15.6	X	229.88840	122.53459	53.82085	26.47341	0.1603900	0.21836471	2.7311638	20	11 27.1	19.5
151959 2004 GY_{20}	17.0	X	201.43283	186.24029	72.05568	5.79314	0.0844721	0.28563550	2.2834662	20	—	—
151960 2004 GJ_{24}	16.6	X	357.35722	338.48568	153.23849	7.66040	0.1239221	0.29345725	2.2427085	20	—	—
151961 2004 GK_{29}	17.0	X	227.46308	42.22037	185.02008	4.20238	0.0817799	0.28575562	2.2828263	20	—	—
151962 2004 GG_{30}	16.4	X	211.79464	24.02732	204.13560	6.62783	0.0673056	0.28239493	2.3009020	20	—	—
151963 2004 GT_{30}	16.4	X	263.07558	133.74643	49.22368	6.35302	0.0978504	0.28441177	2.2900116	20	—	—
151964 2004 GH_{31}	17.3	X	215.34580	216.19965	56.00209	3.25342	0.1525728	0.28960535	2.2625508	20	—	—
151965 2004 GT_{31}	16.0	X	346.97923	326.96209	23.70344	6.75433	0.1238635	0.26470100	2.4023282	20	10 13.2	18.2
151966 2004 GG_{33}	17.2	X	325.94514	168.33123	55.26753	1.55205	0.1184165	0.30185834	2.2009015	20	2 14.3	19.4
151967 2004 GT_{36}	16.3	X	28.59637	272.07791	236.30364	9.67619	0.2311405	0.24139999	2.5545313	20	2 21.9	18.4
151968 2004 GC_{37}	17.4	X	227.72129	330.09234	280.79315	2.23220	0.1353670	0.28918606	2.2647372	20	—	—
151969 2004 GE_{39}	16.5	X	339.48049	120.57752	91.23687	3.46027	0.1281782	0.30099822	2.2050923	20	2 18.2	18.6
151970 2004 GR_{50}	17.3	X	333.58541	199.21657	308.17923	1.99405	0.0962983	0.29285951	2.2457591	20	—	—
151971 2004 GX_{70}	16.7	X	307.48674	103.10404	18.75511	6.00247	0.1057768	0.28495096	2.2871218	20	—	—
151972 2004 GK_{73}	16.7	X	329.24615	174.79388	2.17222	3.63151	0.1053004	0.29540886	2.2328199	20	—	—
151973 2004 GQ_{75}	16.8	X	250.58156	338.31425	221.38074	3.29650	0.1134050	0.28489402	2.2874265	20	—	—
151974 2004 GM_{76}	16.6	X	281.72722	194.68628	46.59340	7.13917	0.0830279	0.29987293	2.2106053	20	1 16.5	19.5
151975 2004 HU_{1}	16.5	X	36.71491	256.64195	122.06939	6.64729	0.1157243	0.27928367	2.3179587	20	—	—
151976 2004 HW_{5}	16.5	X	247.44762	47.61910	191.67065	6.43267	0.0528086	0.28932977	2.2639872	20	—	—
151977 2004 HK_{6}	16.6	X	256.76205	38.42902	211.12584	7.52686	0.2220831	0.29081651	2.2562645	20	—	—
151978 2004 HO_{6}	16.2	X	188.34642	179.83053	61.68813	12.07872	0.0703942	0.27865094	2.3214663	20	—	—
151979 2004 HO_{9}	16.9	X	294.55090	283.01131	325.66329	2.11881	0.1403905	0.29912657	2.2142810	20	2 2.5	19.5
151980 2004 HR_{9}	16.9	X	322.69459	184.38560	24.27325	4.44240	0.1663292	0.29876589	2.2160627	20	1 12.2	19.4
151981 2004 HC_{11}	17.0	X	232.58619	352.30425	301.82064	5.21618	0.1907224	0.29765351	2.2215804	20	1 25.2	20.4
151982 2004 HW_{15}	15.5	X	168.37211	179.53898	91.71223	12.66526	0.1264076	0.22002625	2.7173967	20	—	—
151983 2004 HF_{16}	17.2	X	176.75221	226.23943	2.51331	2.25970	0.1966291	0.27523345	2.3406433	20	12 17.1	20.7
151984 2004 HY_{17}	16.7	X	209.00713	208.00571	337.38765	4.05814	0.0733937	0.27648106	2.3335967	20	12 11.6	19.7
151985 2004 HM_{19}	15.8	X	84.17264	28.95065	15.77986	9.11093	0.0489944	0.23346548	2.6120868	20	—	—
151986 2004 HD_{26}	16.7	X	177.08423	125.45989	95.63934	2.96127	0.1546043	0.27504676	2.3417024	20	12 11.6	20.1
151987 2004 HJ_{26}	16.9	X	231.91652	39.23925	173.99537	2.86646	0.1037293	0.28257803	2.2999080	20	—	—
151988 2004 HO_{28}	16.8	X	162.35427	165.67108	110.86231	4.70166	0.1820575	0.27905490	2.3192253	20	—	—
151989 2004 HT_{28}	16.3	X	2.80750	94.88811	112.57441	5.00613	0.1406218	0.24291155	2.5439228	20	4 4.5	18.8
151990 2004 HV_{43}	16.5	X	6.09399	293.87256	267.79867	3.71390	0.1620656	0.24459553	2.5322333	20	3 26.8	18.9
151991 2004 HO_{52}	16.9	X	101.17743	176.66964	63.18042	3.45408	0.1359048	0.26430912	2.4047021	20	10 22.1	20.4
151992 2004 HY_{52}	16.4	X	158.35421	197.01643	122.87634	7.56603	0.1431172	0.28822471	2.2697703	20	—	—
151993 2004 HX_{57}	16.7	X	284.80702	38.33061	250.48046	3.16315	0.1139038	0.24072611	2.5592964	20	3 23.5	20.1
151994 2004 HH_{61}	17.0	X	252.31727	23.56382	217.26620	2.09284	0.1212511	0.28963754	2.2623831	20	—	—
151995 2004 HQ_{61}	16.5	X	168.94406	177.42852	64.62640	7.90244	0.0762800	0.27580673	2.3373988	20	—	—
151996 2004 HM_{65}	16.5	X	232.34970	300.66529	357.71015	9.95801	0.1114447	0.29695452	2.2250653	20	2 5.1	19.7
151997 Bauhinia	17.5	X	173.28502	41.66831	235.57388	0.71510	0.1620932	0.28079318	2.3096438	20	—	—
151998 2004 JY_{13}	17.0	X	254.98984	220.55243	45.61557	0.21706	0.0588027	0.29500140	2.2348755	20	1 19.2	19.9
151999 2004 JD_{14}	17.0	X	81.84605	348.80916	282.94012	0.55056	0.1515722	0.26461026	2.4028773	20	11 11.9	20.5
152000 2004 JD_{18}	17.4	X	36.17730	252.78243	19.24036	2.22613	0.1951892	0.25659459	2.4526621	20	9 22.9	20.1