Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44001 Jonquet	13.7	X	14.52221	114.93340	309.71970	4.74944	0.1591389	0.18237543	3.0795824	20	—	—
44002 1997 ST_1	14.9	X	148.75349	305.46113	20.77448	0.61107	0.1430704	0.18869934	3.0103879	20	—	—
44003 1997 SZ_2	13.8	X	322.75052	133.59704	322.52059	1.24737	0.1519198	0.17828572	3.1264993	20	12 28.3	17.2
44004 1997 SS_3	14.9	X	309.97605	330.92348	47.57476	5.96839	0.1989547	0.25558012	2.4591480	20	9 6.1	17.0
44005 Migliardi	13.8	X	164.57345	2.05937	309.07654	9.97323	0.0865839	0.19064981	2.9898206	20	—	—
44006 1997 TF_{17}	14.7	X	42.19835	184.76345	143.63946	6.35320	0.2608717	0.26279495	2.4139302	20	12 24.3	18.3
44007 1997 TA_{25}	13.8	X	100.80316	150.39411	189.61599	1.47725	0.1315674	0.18378920	3.0637693	20	—	—
44008 1997 TN_{25}	15.1	X	6.77996	152.31616	172.53415	5.36086	0.2177813	0.30145338	2.2028721	20	11 6.7	17.1
44009 1997 TB_{26}	14.3	X	43.45061	218.61819	158.97581	5.92576	0.1677877	0.17993606	3.1073529	20	—	—
44010 1997 UH_{11}	14.9	X	135.26197	281.97790	51.02491	9.70817	0.3008334	0.27441737	2.3452816	20	—	—
44011 Juubichi	13.4	X	147.84646	123.61630	206.15139	8.64233	0.0736879	0.18407736	3.0605711	20	—	—
44012 1997 UL_{22}	15.4	X	23.81871	192.03866	114.75333	3.59956	0.1153196	0.29909187	2.2144522	20	10 20.6	17.7
44013 Iidetenmomdai	14.6	X	17.06427	190.20411	210.25088	8.08929	0.1172568	0.21978868	2.7193545	20	—	—
44014 1997 WT_1	14.4	X	16.60560	283.63310	38.42012	3.70287	0.1077762	0.20979226	2.8050660	20	10 9.5	17.7
44015 1997 WD_{10}	14.5	X	100.96316	7.17979	113.73109	3.18103	0.0537699	0.19456797	2.9495459	20	5 3.9	18.5
44016 Jimmypage	13.9	X	45.53312	89.63631	8.50571	11.28655	0.1575247	0.22896290	2.6462201	20	1 24.5	16.8
44017 1997 WV_{35}	13.6	X	323.87412	151.97636	286.48215	3.73830	0.1143447	0.17272967	3.1931899	20	12 5.8	17.6
44018 1997 WL_{36}	14.9	X	155.45537	118.24456	249.76805	4.57914	0.2053022	0.27700497	2.3306533	20	2 18.9	18.6
44019 1997 WO_{39}	14.5	X	27.04450	184.14249	197.81297	4.33185	0.1314972	0.21818605	2.7326545	20	—	—
44020 1997 WS_{39}	14.3	X	356.31010	255.91952	118.21964	3.85186	0.2045148	0.25819626	2.4425085	20	12 13.5	16.7
44021 1997 WU_{39}	14.3	X	120.17299	310.20055	78.53337	16.02752	0.1394842	0.23030146	2.6359566	20	2 13.1	18.3
44022 1997 WB_{43}	14.3	X	94.49673	1.42091	86.66753	7.04070	0.0980309	0.18861333	3.0113031	20	3 24.7	18.5
44023 1997 WO_{46}	14.4	X	69.04422	186.24313	245.83973	2.65965	0.0753246	0.22814263	2.6525592	20	1 16.5	17.6
44024 1997 WP_{47}	14.6	X	216.58685	25.10674	284.93724	4.36511	0.3019298	0.23554655	2.5966787	20	2 4.0	19.3
44025 1997 XY_{11}	14.4	X	22.42196	258.20513	106.38046	6.49809	0.0899166	0.21474600	2.7617604	20	12 10.6	17.9
44026 1997 YD_{11}	12.8	X	266.77376	90.02435	348.78193	17.01930	0.1049541	0.16163554	3.3376808	20	9 12.9	17.4
44027 Termain	14.8	X	88.14066	51.72537	350.67032	12.20470	0.2548274	0.23121855	2.6289819	20	2 5.3	18.0
44028 1998 BD_1	13.5	X	329.93603	253.70935	314.00232	11.94303	0.1238146	0.22400611	2.6851145	20	2 8.9	16.9
44029 1998 BK_4	15.8	X	174.88703	75.04520	110.35686	3.81783	0.2136397	0.29057393	2.2575200	20	10 25.5	19.4
44030 1998 BQ_{11}	15.5	X	199.76221	288.28227	323.04003	4.39207	0.0870275	0.30407500	2.1901923	20	—	—
44031 1998 CO	15.7	X	186.58102	34.57381	147.19934	7.34972	0.0965151	0.29244356	2.2478881	20	11 12.5	18.8
44032 1998 CD_3	16.0	X	108.84257	33.67949	154.19991	3.81008	0.0975955	0.28223231	2.3017857	20	8 19.9	18.9
44033 Michez	15.7	X	267.92265	186.15671	46.67883	1.95401	0.1300099	0.30664496	2.1779379	20	—	—
44034 1998 DB	15.6	X	196.50108	139.20257	100.93137	2.09136	0.1665607	0.29912881	2.2142699	20	—	—
44035 1998 DM_6	15.5	X	145.19251	54.59664	128.17717	8.24035	0.0656065	0.28653435	2.2786883	20	9 27.9	18.7
44036 1998 DO_7	16.2	X	188.83996	263.40472	43.14480	1.94873	0.2336645	0.30538845	2.1839079	20	1 4.3	19.6
44037 1998 DD_{18}	15.7	X	73.43395	166.09240	141.32042	6.21508	0.1907111	0.28900924	2.2656608	20	12 26.3	19.3
44038 1998 DQ_{27}	15.6	X	145.54993	292.73090	15.73619	4.88360	0.1797677	0.29847585	2.2174981	20	—	—
44039 de Sahagún	15.6	X	73.14388	177.60085	41.45673	2.33180	0.0709331	0.28048713	2.3113236	20	8 14.9	18.4
44040 1998 DA_{35}	15.2	X	35.24768	143.98941	123.73732	4.41301	0.0839655	0.23674364	2.5879179	20	8 25.7	18.3
44041 1998 ER_1	15.8	X	129.05315	90.05814	175.40722	1.27744	0.0655676	0.29047776	2.2580183	20	12 25.5	18.9
44042 1998 ES_9	15.8	X	130.09008	110.09977	170.63656	6.27655	0.2058781	0.29253383	2.2474256	20	—	—
44043 1998 EW_{12}	15.2	X	163.48379	290.89836	3.32927	5.57333	0.1743960	0.29888974	2.2154505	20	—	—
44044 1998 EE_{13}	16.0	X	84.22315	20.54577	135.76414	5.55681	0.1605181	0.27495212	2.3422397	20	6 13.7	18.9
44045 1998 EA_{14}	15.6	X	11.84677	316.41087	96.42271	2.52743	0.1566416	0.29903436	2.2147361	20	—	—
44046 1998 FS_1	16.2	X	179.21243	138.75281	145.31359	4.24228	0.1179119	0.29914432	2.2141934	20	—	—
44047 1998 FL_2	16.0	X	327.69504	174.74527	174.26592	22.67322	0.0783361	0.37166478	1.9158806	20	9 26.4	17.1
44048 1998 FF_4	15.1	X	151.42184	30.78551	122.18369	7.13029	0.0583389	0.27853571	2.3221065	20	8 21.9	18.1
44049 1998 FG_4	15.2	X	310.18893	230.17096	114.99074	8.08644	0.1835629	0.27406459	2.3472937	20	7 14.2	17.1
44050 1998 FU_{11}	15.4	X	229.41401	56.74415	165.70327	1.80217	0.0841764	0.29949102	2.2124842	20	—	—
44051 1998 FP_{13}	15.0	X	155.75180	144.65051	106.01141	6.13189	0.1688516	0.29363615	2.2417974	20	12 30.3	18.3
44052 1998 FA_{16}	15.1	X	22.49062	117.50830	157.10189	5.33534	0.1462320	0.27436606	2.3455739	20	8 28.7	17.5
44053 1998 FU_{20}	15.0	X	86.01307	103.91601	143.77197	5.11884	0.1044871	0.28546109	2.2843962	20	10 17.3	18.1
44054 1998 FR_{26}	15.8	X	63.77909	355.03989	111.48354	3.12495	0.0527399	0.31136351	2.1558783	20	2 8.3	17.9
44055 1998 FC_{30}	13.7	X	240.29112	101.66307	341.49964	14.48520	0.0616547	0.24109907	2.5566563	20	9 1.7	17.0
44056 1998 FW_{36}	15.8	X	200.41731	230.14662	27.66081	2.39582	0.1023493	0.29940510	2.2129075	20	—	—
44057 1998 FW_{39}	15.8	X	270.62607	85.86627	215.33375	4.74314	0.0863329	0.31404413	2.1435927	20	3 19.7	18.5
44058 1998 FA_{40}	16.1	X	229.97158	268.79032	326.60498	3.27033	0.0971080	0.30079593	2.2060808	20	—	—
44059 1998 FP_{40}	15.2	X	144.94544	336.08002	317.61137	4.08684	0.1738865	0.29615856	2.2290502	20	—	—
44060 1998 FU_{42}	14.7	X	82.56617	173.12661	204.07800	3.75542	0.1743749	0.30174243	2.2014650	20	—	—
44061 1998 FJ_{43}	15.4	X	217.30003	281.16109	191.70463	4.52964	0.0408743	0.28541346	2.2846504	20	9 20.3	18.1
44062 1998 FK_{46}	15.4	X	231.03069	196.28631	13.52083	2.49069	0.1205852	0.29775633	2.2210690	20	—	—
44063 1998 FW_{50}	15.2	X	95.81887	250.48376	12.00272	5.99640	0.1505828	0.28620252	2.2804493	20	11 16.5	18.7
44064 1998 FN_{53}	15.0	X	148.69822	184.08183	223.22743	3.05579	0.0860651	0.31336242	2.1467004	20	3 20.7	17.8
44065 1998 FU_{54}	15.5	X	221.30281	279.55379	181.31954	7.63970	0.0962144	0.28471310	2.2883955	20	8 30.9	18.4
44066 1998 FH_{55}	15.7	X	197.47106	51.53083	162.48872	5.41061	0.0780681	0.29414791	2.2391965	20	—	—
44067 1998 FZ_{55}	14.5	X	130.34183	245.59977	51.70346	4.30321	0.1584747	0.29439622	2.2379372	20	—	—
44068 1998 FX_{58}	14.9	X	243.08601	282.96915	174.77981	6.67856	0.0594232	0.28645956	2.2790849	20	10 3.8	17.5
44069 1998 FG_{61}	15.5	X	179.98912	77.50966	269.83361	1.30807	0.1183556	0.30772490	2.1728394	20	2 8.9	18.5
44070 1998 FP_{61}	15.1	X	73.65977	97.39687	198.84446	6.70835	0.1300995	0.28716649	2.2753430	20	12 7.5	18.3
44071 1998 FR_{65}	14.7	X	348.75992	214.26654	291.59497	2.61558	0.0585879	0.30451725	2.1880712	20	—	—
44072 1998 FS_{65}	15.3	X	132.19215	318.19688	253.54131	2.36444	0.1103169	0.28504574	2.2866148	20	10 17.9	18.7
44073 1998 FV_{65}	15.5	X	92.54215	58.49540	204.74503	5.92251	0.1370322	0.28518239	2.2858843	20	11 15.4	18.8
44074 1998 FB_{66}	15.3	X	336.36740	285.41282	352.38634	2.50791	0.0720072	0.22870389	2.6482177	20	5 31.7	18.3
44075 1998 FB_{67}	15.3	X	12.98674	44.85402	55.42418	3.55688	0.0763010	0.30253973	2.1975956	20	—	—
44076 1998 FT_{69}	15.7	X	227.99593	3.66927	154.76980	2.87728	0.0983556	0.29147926	2.2528431	20	12 1.4	18.2
44077 1998 FW_{69}	15.4	X	115.01707	187.02104	45.87418	4.86806	0.1269957	0.28490713	2.2873564	20	10 29.3	18.5
44078 1998 FB_{70}	16.1	X	118.33604	101.53134	150.06433	4.47297	0.1292784	0.28710333	2.2756767	20	11 26.7	19.6
44079 1998 FK_{71}	16.1	X	61.53437	356.52544	246.14185	1.37576	0.1183263	0.27890563	2.3200528	20	9 7.2	19.0
44080 1998 FQ_{71}	16.2	X	48.12420	71.65477	184.68731	2.61549	0.1408662	0.27836857	2.3230359	20	9 11.8	18.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44081 1998 FG_{75}	15.0	X	291.75545	129.10406	189.82001	6.05367	0.1338680	0.27151223	2.3619813	20	5 11.6	17.7
44082 1998 FH_{75}	14.9	X	143.71866	220.51115	165.22396	2.10208	0.1283089	0.30794194	2.1718183	20	2 20.4	17.8
44083 1998 FZ_{77}	15.3	X	89.45764	180.61750	126.32764	5.93334	0.0974095	0.29026956	2.2590979	20	—	—
44084 1998 FX_{78}	15.1	X	63.51731	175.65179	148.64447	6.77384	0.1451988	0.28838432	2.2689328	20	—	—
44085 1998 FG_{80}	15.5	X	102.26094	131.87869	83.20221	3.70366	0.1336786	0.28235691	2.3011085	20	9 24.3	18.8
44086 1998 FV_{83}	15.3	X	259.27518	57.45068	125.94098	3.80436	0.0835718	0.29980104	2.2109587	20	—	—
44087 1998 FG_{99}	15.1	X	92.95645	343.07945	255.36360	5.88863	0.1103031	0.28385672	2.2929958	20	10 8.4	18.3
44088 1998 FW_{101}	15.7	X	111.38142	278.60534	330.35450	6.38909	0.1321256	0.28687189	2.2769005	20	11 13.1	19.2
44089 1998 FZ_{101}	15.6	X	249.80776	343.42952	255.33743	3.32903	0.0474922	0.30362607	2.1923506	20	—	—
44090 1998 FT_{105}	16.0	X	188.77411	3.10238	244.26938	3.87976	0.0610844	0.29667043	2.2264855	20	—	—
44091 1998 FB_{106}	15.3	X	110.67188	86.62586	248.18171	5.49020	0.1719518	0.29679137	2.2258806	20	—	—
44092 1998 FJ_{106}	15.7	X	112.56956	15.81600	245.20522	4.33312	0.1484848	0.28760285	2.2730410	20	12 2.5	19.1
44093 1998 FF_{109}	15.5	X	56.64203	35.89064	228.06756	6.34104	0.1137039	0.28131960	2.3067617	20	9 28.9	18.3
44094 1998 FV_{109}	15.1	X	160.86397	334.27588	294.76867	5.38355	0.1431871	0.29419754	2.2389446	20	—	—
44095 1998 FS_{113}	14.7	X	83.81255	55.64153	253.41182	5.72319	0.2044540	0.28862796	2.2676557	20	—	—
44096 1998 FJ_{114}	15.0	X	34.48201	22.07817	260.25768	5.81956	0.1041170	0.28014213	2.3132209	20	9 19.9	17.7
44097 1998 FK_{115}	14.3	X	331.30050	123.80340	247.78332	5.93460	0.1477940	0.28339115	2.2955065	20	10 18.5	16.1
44098 1998 FB_{117}	14.9	X	72.00565	162.45366	295.29788	3.41158	0.0517363	0.30882392	2.1676813	20	2 7.6	17.1
44099 1998 FT_{117}	15.7	X	232.91050	210.71089	304.55878	2.87146	0.1208396	0.29091020	2.2557800	20	11 29.1	18.2
44100 1998 FX_{117}	14.8	X	301.44317	355.45312	273.68676	3.78502	0.1240827	0.26667521	2.3904571	20	3 14.4	17.7
44101 1998 FT_{121}	14.9	X	129.80205	76.23384	185.22499	5.02916	0.1481011	0.28972409	2.2619325	20	12 19.6	18.3
44102 1998 FY_{129}	16.6	X	331.42059	73.65340	105.04087	1.58893	0.0737586	0.30747796	2.1740026	20	—	—
44103 Aldana	14.9	X	80.88913	138.11265	93.53632	7.11440	0.0886007	0.28286825	2.2983346	20	9 18.5	18.0
44104 1998 GO_{1}	14.3	X	126.65667	73.43295	146.48261	8.77146	0.1433707	0.28304117	2.2973984	20	10 27.4	17.9
44105 1998 GG_{11}	15.9	X	73.01172	247.34971	1.24682	5.71971	0.1535590	0.28088129	2.3091608	20	10 5.4	19.1
44106 1998 HT_{3}	16.3	X	40.69144	219.83546	102.25769	4.20383	0.1470823	0.28485317	2.2876453	20	12 5.0	19.2
44107 1998 HH_{4}	15.0	X	200.36071	276.57181	75.16612	7.57365	0.1286063	0.26215199	2.4178755	20	3 15.8	18.8
44108 1998 HT_{4}	14.5	X	132.85279	225.06568	47.75457	5.89281	0.0608434	0.29061865	2.2572884	20	—	—
44109 1998 HO_{5}	15.3	X	310.67327	278.72179	162.54690	5.19875	0.1213544	0.28931100	2.2640851	20	12 27.6	17.2
44110 1998 HT_{5}	15.4	X	289.69836	141.72923	123.02935	2.85702	0.2092152	0.26369947	2.4084070	20	2 13.8	18.7
44111 1998 HN_{6}	16.1	X	24.20354	150.56061	99.92941	3.21316	0.1833842	0.27280749	2.3544990	20	7 31.1	18.0
44112 1998 HS_{13}	15.0	X	41.95831	321.39081	298.10452	3.85828	0.1102363	0.27876524	2.3208316	20	8 31.7	17.5
44113 1998 HH_{14}	15.3	X	341.47123	37.24736	117.07287	5.11720	0.0763187	0.30292888	2.1957131	20	—	—
44114 1998 HN_{21}	16.2	X	189.30381	121.66909	201.31808	4.84639	0.0534552	0.30579279	2.1819823	20	1 13.3	18.9
44115 1998 HQ_{23}	15.2	X	278.90671	60.82265	229.80167	22.29575	0.1112101	0.26387251	2.4073540	20	3 10.8	19.1
44116 1998 HK_{26}	16.1	X	68.34728	232.12953	140.76093	3.54794	0.1337443	0.29330293	2.2434950	20	—	—
44117 Haroldlarson	14.8	X	40.79972	95.80758	124.71435	3.87741	0.0720948	0.27215786	2.3582443	20	6 26.5	17.4
44118 1998 HB_{29}	14.2	X	56.19776	139.39343	168.36565	24.20894	0.1442583	0.28349507	2.2949455	20	12 6.5	18.0
44119 1998 HN_{32}	15.2	X	3.61307	103.91300	195.16450	6.20323	0.1257765	0.27818028	2.3240840	20	8 26.5	17.5
44120 1998 HU_{32}	15.1	X	32.38729	253.80927	39.97909	2.54614	0.1608892	0.28054835	2.3109874	20	10 17.0	17.7
44121 1998 HL_{34}	15.5	X	97.97380	257.45970	52.83107	4.08678	0.1558825	0.29084661	2.2561088	20	—	—
44122 1998 HT_{34}	15.5	X	19.90472	143.45389	157.17509	5.57238	0.1698913	0.27986500	2.3147477	20	10 10.0	17.8
44123 1998 HC_{36}	15.6	X	195.39427	242.07157	114.13936	2.30475	0.1271644	0.30989448	2.1626861	20	3 9.4	18.7
44124 1998 HM_{37}	16.1	X	46.34540	337.81838	257.92212	2.74322	0.1540949	0.27597960	2.3364226	20	8 10.8	18.6
44125 1998 HE_{38}	14.4	X	57.74712	52.86530	234.50677	3.66305	0.1552983	0.28261843	2.2996888	20	11 9.5	17.3
44126 1998 HR_{38}	14.6	X	339.81675	143.03424	209.58749	6.29391	0.1337342	0.28219775	2.3019737	20	10 6.0	16.6
44127 1998 HO_{43}	14.6	X	341.80376	117.65379	180.58807	6.60260	0.1242958	0.27500669	2.3419298	20	7 10.4	16.7
44128 1998 HU_{50}	15.7	X	70.03597	20.65778	251.01697	3.13155	0.1839879	0.28218166	2.3020612	20	11 5.5	19.0
44129 1998 HX_{50}	15.1	X	136.41456	5.45245	306.28218	3.74676	0.1893749	0.29445655	2.2376315	20	—	—
44130 1998 HU_{51}	14.1	X	321.03297	248.96138	59.06905	5.18515	0.2094688	0.27148020	2.3621671	20	5 31.9	15.9
44131 1998 HG_{53}	14.5	X	318.46964	69.22407	229.21169	2.44573	0.2020987	0.27092469	2.3653949	20	5 12.6	16.5
44132 1998 HL_{79}	15.5	X	2.38619	232.27534	243.21462	4.84390	0.0252617	0.30063652	2.2068605	20	—	—
44133 1998 HL_{80}	15.8	X	63.38487	58.86155	219.88575	4.10601	0.1371679	0.28195105	2.3033162	20	11 2.3	18.8
44134 1998 HB_{87}	15.4	X	42.36522	17.20119	278.21074	2.19641	0.2295166	0.27969519	2.3156845	20	11 11.1	18.4
44135 1998 HD_{88}	15.2	X	224.54886	296.98483	236.83545	5.77232	0.1018729	0.29125944	2.2539765	20	12 16.7	17.9
44136 1998 HW_{89}	15.6	X	336.72263	196.81143	267.77822	3.74026	0.0397045	0.29613406	2.2291732	20	—	—
44137 1998 HD_{92}	15.6	X	164.38006	127.25993	116.86232	2.24816	0.1410055	0.24607654	2.5220629	20	12 22.8	19.5
44138 1998 HG_{92}	15.7	X	38.25941	25.22520	193.76487	6.71013	0.1432722	0.27261834	2.3555880	20	6 30.0	18.1
44139 1998 HZ_{92}	15.5	X	80.69560	328.29618	342.93702	1.29424	0.0398213	0.28877792	2.2668706	20	12 26.9	18.5
44140 1998 HK_{94}	15.1	X	233.24502	103.76420	247.03945	1.72123	0.1777092	0.26643616	2.3918867	20	4 8.2	18.9
44141 1998 HL_{96}	15.4	X	190.00664	102.65759	79.70026	5.11639	0.0985586	0.28765680	2.2727568	20	11 14.5	18.4
44142 1998 HU_{96}	15.5	X	31.48222	127.02154	184.97378	3.62923	0.2518062	0.27959578	2.3162334	20	11 24.5	18.4
44143 1998 HF_{98}	15.7	X	51.87029	299.31619	347.02841	4.02642	0.1348252	0.28058372	2.3107932	20	10 27.3	18.7
44144 1998 HG_{98}	15.0	X	197.56910	270.46779	263.59461	4.62744	0.0975284	0.28744747	2.2738600	20	11 10.7	17.9
44145 1998 HJ_{101}	15.8	X	308.97371	138.48368	182.39853	3.23432	0.2406254	0.27040629	2.3684171	20	5 23.3	18.0
44146 1998 HZ_{101}	16.0	X	84.22806	23.34692	230.15885	5.90007	0.0874508	0.28099501	2.3085377	20	10 16.9	19.2
44147 1998 HB_{103}	14.6	X	138.26621	133.61594	45.74413	7.19314	0.0435975	0.27915782	2.3186553	20	9 13.5	17.7
44148 1998 HC_{106}	14.8	X	182.08087	108.77963	129.25269	6.82489	0.1402656	0.29296194	2.2452356	20	—	—
44149 1998 HS_{106}	14.7	X	342.05327	146.10340	106.80697	8.64747	0.1504779	0.26977760	2.3720953	20	4 30.8	17.0
44150 1998 HC_{108}	14.3	X	161.34658	221.10162	92.55130	7.28341	0.1007201	0.29910264	2.2143991	20	—	—
44151 1998 HX_{110}	15.1	X	25.12614	246.64570	121.74378	5.58472	0.1684051	0.28900705	2.2656723	20	—	—
44152 1998 HN_{121}	15.4	X	341.80462	135.81503	173.57915	7.38259	0.1191055	0.27458521	2.3443257	20	7 28.4	17.7
44153 1998 HQ_{121}	15.6	X	51.49137	108.41151	162.15757	7.17513	0.0932007	0.27936563	2.3175053	20	10 1.3	18.3
44154 1998 HZ_{122}	15.0	X	336.41021	19.15737	175.15096	9.34133	0.1052207	0.21734140	2.7397299	20	2 3.5	18.5
44155 1998 HD_{123}	15.1	X	340.76152	9.04626	139.42762	4.84214	0.0936935	0.30213510	2.1995572	20	—	—
44156 1998 HN_{123}	14.8	X	4.06312	203.14876	109.24361	8.94922	0.1396502	0.27743869	2.3282237	20	9 27.0	17.1
44157 1998 HO_{123}	15.2	X	263.99771	180.69201	152.95784	9.70185	0.2657250	0.26597279	2.3946639	20	4 11.5	19.0
44158 1998 HN_{128}	15.3	X	6.19666	146.06913	136.91803	6.35568	0.0953057	0.27827615	2.3235502	20	8 4.6	17.5
44159 1998 HV_{130}	15.6	X	85.95195	86.98247	144.78662	2.49072	0.1328350	0.23707265	2.5855230	20	9 20.9	19.2
44160 1998 HQ_{134}	14.8	X	284.06906	113.30624	115.55981	4.80353	0.1173954	0.30561226	2.1828415	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44161 1998 HT_{139}	16.0	X	33.72696	154.17439	105.86081	6.87145	0.1879496	0.27642528	2.3339106	20	9 6.3	18.5
44162 1998 HC_{148}	15.3	X	64.42347	176.21547	48.98591	7.81281	0.0616290	0.27506699	2.3415875	20	8 11.8	18.2
44163 1998 HH_{148}	16.1	X	46.47449	243.68561	5.02799	0.95354	0.1710367	0.27512915	2.3412349	20	9 3.6	18.7
44164 1998 JS	14.4	X	89.43963	45.00157	266.59339	4.58081	0.1596826	0.28828870	2.2694344	20	—	—
44165 1998 JR_1	14.8	X	169.85748	233.40500	214.19531	11.50177	0.0877439	0.27278968	2.3546015	20	6 12.7	18.3
44166 1998 JF_2	14.4	X	120.44085	289.18927	103.86488	4.72454	0.1299319	0.30234498	2.1985392	20	2 2.9	16.8
44167 1998 JA_3	14.5	X	102.88397	50.29659	95.88498	8.21367	0.0671655	0.27125025	2.3635019	20	6 10.1	17.4
44168 1998 JJ_4	15.1	X	222.95781	117.12968	223.01388	9.85343	0.3268408	0.25964708	2.4334014	20	3 9.3	19.8
44169 1998 KK_2	14.2	X	190.39224	255.13170	80.26129	14.73826	0.2788275	0.25541138	2.4602310	20	2 20.3	18.8
44170 1998 KK_7	14.7	X	270.14338	297.90936	206.35283	6.68922	0.1136212	0.29238703	2.2481777	20	—	—
44171 1998 KR_8	14.7	X	291.11078	97.17854	130.22579	7.32853	0.1477347	0.25896749	2.4376567	20	1 6.6	18.1
44172 1998 KN_9	13.8	X	143.09580	32.26393	227.39740	16.17232	0.0724787	0.23949487	2.5680604	20	12 20.6	17.7
44173 1998 KH_{13}	15.7	X	32.86044	219.67725	14.55382	4.42792	0.1490545	0.27299704	2.3534091	20	7 17.1	18.0
44174 1998 KL_{22}	15.5	X	247.80662	43.25957	139.28966	2.23496	0.1410538	0.29451977	2.2373113	20	—	—
44175 1998 KA_{29}	14.5	X	22.04118	318.53337	101.97136	5.51599	0.1791730	0.29456034	2.2371059	20	—	—
44176 1998 KT_{30}	15.4	X	216.27604	149.37555	47.10504	4.53563	0.0779052	0.24608596	2.5219985	20	12 27.3	18.6
44177 1998 KX_{31}	15.2	X	74.00962	1.77696	186.36263	2.46939	0.1518596	0.27287648	2.3541022	20	7 13.1	18.0
44178 1998 KY_{32}	15.1	X	353.87255	299.97191	296.77715	4.39848	0.1914431	0.26759730	2.3849626	20	4 19.3	17.1
44179 1998 KJ_{33}	15.4	X	11.35681	79.17998	251.71636	4.87762	0.1628598	0.27879748	2.3206527	20	11 5.0	17.8
44180 1998 KE_{37}	14.3	X	251.56520	41.94838	216.38294	3.57713	0.1190259	0.30135885	2.2033327	20	—	—
44181 1998 KA_{43}	14.4	X	2.30559	103.07253	125.25508	10.94799	0.0621794	0.17902731	3.1178594	20	5 10.5	18.6
44182 1998 KL_{44}	14.8	X	275.66461	207.88318	74.02667	8.63418	0.1148848	0.26171808	2.4205472	20	3 7.5	18.2
44183 1998 KQ_{45}	14.7	X	149.96359	164.20128	66.05925	2.87847	0.1060271	0.28557874	2.2837688	20	11 30.5	17.8
44184 1998 KZ_{45}	15.5	X	338.71907	72.19564	169.70206	2.73080	0.1221686	0.26555627	2.3971673	20	4 7.2	17.9
44185 1998 KH_{54}	14.5	X	254.51032	118.81149	151.02213	9.25358	0.1740243	0.25753142	2.4467104	20	1 19.4	18.5
44186 1998 KX_{55}	15.0	X	326.41582	49.97860	204.01204	9.25953	0.1435637	0.26462686	2.4027768	20	3 29.5	17.6
44187 1998 KC_{56}	13.9	X	209.66742	274.27970	172.41175	12.30206	0.1302837	0.27367967	2.3494941	20	7 22.8	17.5
44188 1998 KJ_{58}	15.4	X	288.99863	212.99967	237.58545	4.96793	0.0699372	0.28638367	2.2794875	20	12 1.9	17.6
44189 1998 KW_{61}	15.7	X	283.19280	82.21529	248.19245	1.23869	0.2253715	0.26671572	2.3902150	20	4 29.7	18.9
44190 1998 KD_{63}	15.1	X	49.60887	227.66571	324.64543	3.82410	0.1536633	0.27049875	2.3678774	20	6 11.1	17.5
44191 1998 LF_2	15.2	X	31.29211	105.36598	157.60460	7.09923	0.1446987	0.27303407	2.3531963	20	8 25.8	17.6
44192 Paulguttman	14.7	X	148.88725	104.26450	136.95820	14.01543	0.1815204	0.24399590	2.5363802	20	12 5.9	19.1
44193 1998 MW_2	15.7	X	327.12214	53.93432	211.75023	6.35336	0.0987645	0.26698215	2.3886246	20	4 24.9	18.1
44194 1998 MQ_7	15.2	X	114.08345	89.15532	222.92547	14.21106	0.1466973	0.24344025	2.5402383	20	—	—
44195 1998 MW_7	15.4	X	159.83328	126.84775	153.04856	9.08105	0.2551848	0.24289813	2.5440166	20	—	—
44196 1998 ML_9	15.2	X	50.76747	174.57899	156.02948	7.07378	0.1327715	0.28261690	2.2996971	20	12 25.3	18.4
44197 1998 MX_{15}	13.6	X	241.39080	13.26385	116.43532	14.50611	0.1204546	0.23409722	2.6073853	20	10 31.7	17.4
44198 1998 MP_{24}	15.1	X	104.83507	76.23918	300.30647	2.18858	0.1735234	0.24699693	2.5157936	20	1 6.4	18.1
44199 1998 MU_{24}	14.4	X	121.39615	121.48127	171.59748	17.39597	0.3182275	0.24107067	2.5568572	20	—	—
44200 1998 MJ_{25}	15.0	X	256.42083	122.67102	211.18254	2.06452	0.3204958	0.26085635	2.4258751	20	3 28.3	19.1
44201 1998 MS_{28}	14.3	X	239.45844	82.87589	263.81182	10.75672	0.2460974	0.21490666	2.7603838	20	4 2.5	19.1
44202 1998 MJ_{32}	14.9	X	356.55415	348.64259	289.10658	11.54364	0.1728884	0.26837037	2.3803803	20	7 10.6	16.4
44203 1998 MN_{34}	14.9	X	291.54705	116.33716	267.60529	7.26208	0.2468912	0.26911559	2.3759838	20	7 25.1	17.3
44204 1998 MJ_{35}	14.4	X	134.66521	19.43190	287.18507	10.71716	0.1641622	0.24292949	2.5437976	20	—	—
44205 1998 MY_{45}	15.1	X	278.27873	65.31186	242.10617	3.91911	0.1962404	0.26137683	2.4226536	20	3 26.9	18.5
44206 1998 OM	14.3	X	87.18104	37.60275	242.32715	13.42082	0.1595251	0.23374053	2.6100372	20	11 23.0	18.3
44207 1998 OJ_1	14.7	X	70.18666	92.12761	243.43304	12.05723	0.1919743	0.23634238	2.5908463	20	—	—
44208 1998 OY_6	14.1	X	184.03731	243.31916	305.21291	11.66068	0.0908612	0.23233268	2.6205705	20	10 31.5	18.2
44209 1998 OH_7	14.1	X	297.80594	44.89475	283.00226	7.91579	0.1813362	0.21817901	2.7327133	20	5 24.3	17.5
44210 1998 OX_{10}	15.5	X	113.32496	307.83727	307.91570	2.80938	0.2120226	0.23468293	2.6030452	20	11 19.8	19.8
44211 1998 OC_{12}	15.5	X	140.67452	276.25906	35.98236	3.41163	0.1776503	0.24413167	2.5354398	20	—	—
44212 1998 OJ_{12}	15.4	X	88.33196	289.35273	16.31006	3.72111	0.1394856	0.23590134	2.5940745	20	12 24.1	19.4
44213 1998 OZ_{13}	14.4	X	99.58101	141.65477	140.62566	13.26174	0.1705135	0.23463880	2.6033716	20	12 10.3	18.8
44214 1998 OC_{14}	14.1	X	242.44033	284.81027	141.87737	12.49993	0.1394270	0.22134625	2.7065825	20	7 30.3	17.9
44215 1998 OX_{14}	13.5	X	126.89455	313.30406	326.52072	12.48722	0.1388439	0.23737577	2.5833215	20	12 30.9	17.7
44216 Olivercabasa	14.6	X	244.03013	203.19290	278.17772	13.93940	0.1954037	0.22941101	2.6427731	20	9 27.8	18.8
44217 Whittle	13.1	X	314.21916	147.36143	275.17581	13.65694	0.0628326	0.23796796	2.5790339	20	11 17.5	16.3
44218 1998 QO_1	14.5	X	71.09254	137.13593	142.09163	8.65016	0.1535020	0.23045398	2.6347934	20	11 7.7	18.5
44219 1998 QB_3	14.5	X	344.06775	133.40656	147.12153	31.29140	0.0907289	0.21917083	2.7244628	20	6 22.3	18.4
44220 1998 QT_7	15.3	X	244.06742	34.67608	313.35188	4.19422	0.2223083	0.25964589	2.4334088	20	4 10.4	19.4
44221 1998 QK_8	14.0	X	50.86105	181.74027	142.78111	14.55701	0.1491386	0.23340978	2.6125023	20	12 10.8	17.9
44222 1998 QG_9	14.0	X	322.19648	312.63401	291.01721	7.94823	0.0993492	0.21359171	2.7717015	20	3 16.9	17.7
44223 1998 QH_{10}	14.3	X	105.48085	66.88216	294.94790	7.76376	0.0582854	0.24416691	2.5351958	20	—	—
44224 1998 QP_{10}	14.8	X	287.94748	64.33962	303.03042	9.70231	0.2844788	0.26560787	2.3968568	20	6 18.8	17.8
44225 1998 QY_{10}	15.1	X	143.63621	270.96164	60.06399	2.72168	0.1306561	0.24544126	2.5264129	20	—	—
44226 1998 QZ_{11}	14.1	X	42.13283	107.00788	296.49442	10.77406	0.1863075	0.23916247	2.5704394	20	—	—
44227 1998 QP_{14}	14.3	X	347.71436	246.30403	292.88595	13.65066	0.1088483	0.25324148	2.4742647	20	1 24.9	17.0
44228 1998 QT_{16}	14.8	X	90.77760	35.03175	341.46022	3.26319	0.2025513	0.24208185	2.5497322	20	—	—
44229 1998 QH_{22}	14.8	X	308.83574	47.72557	301.88951	9.13631	0.0417258	0.22154212	2.7049869	20	7 31.8	18.1
44230 1998 QS_{22}	13.7	X	34.89609	248.49521	65.22673	4.45205	0.1062251	0.22939282	2.6429128	20	10 29.3	16.9
44231 1998 QE_{25}	15.3	X	122.29069	201.46997	147.96679	12.03936	0.1755079	0.24315432	2.5422293	20	—	—
44232 1998 QJ_{28}	13.4	X	42.64694	312.98144	264.98371	33.56691	0.1775297	0.21450119	2.7638613	20	7 3.1	16.8
44233 1998 QM_{28}	14.6	X	48.85998	262.65683	64.56924	0.29168	0.0799883	0.22886655	2.6469628	20	11 28.9	18.0
44234 1998 QE_{29}	13.7	X	337.06784	96.39650	292.17212	11.73549	0.1880788	0.22221293	2.6995404	20	11 6.5	16.6
44235 1998 QL_{31}	14.8	X	257.66910	227.76688	31.38519	4.56269	0.0959914	0.25098668	2.4890614	20	1 17.9	18.4
44236 1998 QA_{33}	15.3	X	71.42922	153.09042	212.38458	2.79541	0.1259824	0.23834072	2.5763442	20	—	—
44237 1998 QC_{33}	14.6	X	346.11591	68.91984	320.50427	14.37322	0.1235141	0.23019657	2.6367572	20	11 22.8	17.9
44238 1998 QV_{33}	15.2	X	249.26882	136.64886	199.71207	1.90446	0.2080091	0.25799423	2.4437835	20	4 3.7	18.9
44239 1998 QR_{34}	15.4	X	101.42665	303.63601	21.85841	5.68536	0.1739095	0.23851916	2.5750591	20	—	—
44240 1998 QB_{35}	14.0	X	8.37171	163.35274	317.16592	13.07401	0.1186368	0.24408216	2.5357826	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44241 1998 QU_{36}	14.2	X	341.19640	62.35023	184.49274	9.06017	0.1042876	0.21399860	2.7681871	20	4 25.9	17.4
44242 1998 QB_{37}	14.9	X	130.76478	75.53872	248.45151	4.98680	0.1372909	0.24127923	2.5553835	20	—	—
44243 1998 QN_{37}	14.9	X	202.50572	311.98744	313.71949	6.92950	0.1316549	0.24444727	2.5332570	20	—	—
44244 1998 QP_{38}	14.3	X	307.94286	253.62696	174.72028	7.78997	0.2800494	0.22748944	2.6576343	20	11 1.4	16.2
44245 1998 QG_{40}	14.9	X	119.25667	119.76847	177.01001	8.17423	0.2357261	0.23812284	2.5779155	20	—	—
44246 1998 QQ_{40}	14.2	X	100.28332	158.34463	175.90106	14.70371	0.0978262	0.23825840	2.5769376	20	—	—
44247 1998 QR_{40}	14.5	X	310.14576	112.76970	245.38402	4.05354	0.1343661	0.22152653	2.7051139	20	8 3.3	17.6
44248 1998 QT_{41}	15.0	X	70.98050	325.27303	355.50470	4.19897	0.1582449	0.23376943	2.6098221	20	12 26.7	19.0
44249 1998 QH_{42}	13.8	X	29.90410	53.49618	337.71676	13.87402	0.1275482	0.23523750	2.5989525	20	—	—
44250 1998 QT_{42}	14.9	X	84.83620	88.39607	247.75781	4.25311	0.1489958	0.23647143	2.5899036	20	—	—
44251 1998 QZ_{43}	14.0	X	145.80944	275.27015	102.36788	3.44526	0.0776936	0.20378379	2.8599358	20	2 20.1	18.2
44252 1998 QF_{44}	14.8	X	32.34368	42.35748	0.75627	3.56790	0.1542385	0.23667796	2.5883967	20	—	—
44253 1998 QO_{44}	14.5	X	195.79801	305.77869	21.28530	1.97777	0.0776231	0.20429699	2.8551444	20	2 11.6	18.7
44254 1998 QM_{45}	15.1	X	69.38960	153.95643	200.34400	7.31967	0.1218756	0.23615204	2.5922383	20	—	—
44255 1998 QV_{45}	14.4	X	281.51404	248.56448	187.09118	8.60869	0.3170482	0.22388721	2.6860651	20	9 3.5	17.6
44256 1998 QJ_{46}	14.9	X	85.27825	359.44865	343.95677	7.48161	0.1973450	0.23728184	2.5840032	20	—	—
44257 1998 QQ_{47}	14.0	X	39.39582	282.18816	158.47813	22.50986	0.0856641	0.24237640	2.5476660	20	—	—
44258 1998 QT_{47}	13.8	X	317.54815	268.61585	161.03547	12.91599	0.1708020	0.22975395	2.6401426	20	12 4.2	16.6
44259 1998 QW_{48}	13.6	X	55.14475	81.53999	164.03485	12.42460	0.1417753	0.22273976	2.6952821	20	8 29.9	17.0
44260 1998 QO_{49}	14.6	X	39.49218	239.56127	148.60118	15.78300	0.1252664	0.23610369	2.5925921	20	—	—
44261 1998 QR_{50}	14.2	X	330.10574	346.69870	40.73630	2.77089	0.1345019	0.18148503	3.0896468	20	10 14.2	17.7
44262 1998 QR_{51}	13.7	X	168.81364	123.06115	337.96951	22.75063	0.2778300	0.25758461	2.4463735	20	7 6.0	18.5
44263 Nansouty	14.2	X	225.52365	76.03582	334.87696	8.34477	0.1429484	0.21617907	2.7495416	20	6 21.3	18.5
44264 1998 QH_{54}	14.1	X	219.37989	42.03865	198.97327	13.94188	0.1522775	0.24119737	2.5559616	20	—	—
44265 1998 QN_{54}	14.6	X	8.79910	159.32175	196.18907	10.25860	0.1509144	0.22769138	2.6560627	20	11 22.0	17.7
44266 1998 QV_{55}	14.9	X	51.38025	68.74184	348.86659	3.23414	0.2718117	0.23888749	2.5724115	20	—	—
44267 1998 QZ_{55}	14.1	X	243.23295	73.51876	298.51563	2.70538	0.1323871	0.21396115	2.7685101	20	5 21.4	18.1
44268 1998 QX_{60}	15.1	X	350.58589	184.78751	244.10020	3.57457	0.2760584	0.23411114	2.6072819	20	—	—
44269 1998 QY_{60}	14.5	X	257.58411	313.72895	164.56255	14.52663	0.0376049	0.23208966	2.6223995	20	11 16.2	18.2
44270 1998 QV_{66}	14.6	X	198.65155	63.62583	179.64169	11.65748	0.2398407	0.24424863	2.5346303	20	—	—
44271 1998 QY_{67}	14.1	X	104.98706	49.14806	218.51708	8.22240	0.0629681	0.23242148	2.6199030	20	11 19.1	17.7
44272 1998 QB_{70}	15.1	X	355.15262	119.97463	278.21356	10.75340	0.0598360	0.23274359	2.6174852	20	12 16.5	18.4
44273 1998 QH_{70}	14.3	X	125.13131	43.09469	224.42047	13.20715	0.1776311	0.23573891	2.5952660	20	12 13.0	18.7
44274 1998 QU_{70}	15.3	X	7.66235	196.81614	230.43961	10.29924	0.1428491	0.23653215	2.5894604	20	—	—
44275 1998 QP_{71}	14.4	X	222.83171	298.07484	305.35758	12.35203	0.1334335	0.24419175	2.5350239	20	—	—
44276 1998 QZ_{71}	14.5	X	275.43700	245.10040	191.60314	21.69108	0.0466125	0.22741705	2.6581982	20	10 11.8	17.8
44277 1998 QY_{72}	14.6	X	113.54563	302.99339	312.36661	12.85094	0.0800560	0.23127491	2.6285548	20	11 9.1	18.7
44278 1998 QU_{74}	14.9	X	213.10313	161.01632	280.53972	12.05641	0.1736393	0.26244519	2.4160744	20	7 16.2	18.6
44279 1998 QH_{75}	14.8	X	145.84067	30.55086	210.14278	12.28297	0.1292975	0.23343021	2.6123499	20	11 29.9	19.0
44280 1998 QE_{77}	14.4	X	340.39156	119.00288	218.26624	9.69937	0.2490007	0.22318575	2.6916902	20	8 27.7	16.8
44281 1998 QX_{77}	13.6	X	58.33382	42.06622	323.69024	13.61604	0.1475741	0.23505394	2.6003054	20	—	—
44282 1998 QB_{78}	14.8	X	297.39334	123.23883	303.34655	10.40946	0.2593249	0.22475174	2.6791725	20	9 25.9	17.7
44283 1998 QP_{78}	13.9	X	339.95372	217.99737	183.14597	14.93390	0.0920550	0.23328771	2.6134136	20	12 2.3	17.2
44284 1998 QX_{78}	13.9	X	54.94236	121.26457	213.06622	13.66134	0.1469393	0.23450784	2.6043408	20	12 24.1	17.9
44285 1998 QD_{80}	14.5	X	312.51038	68.03347	254.32650	14.01493	0.1559769	0.22021796	2.7158194	20	6 14.4	17.5
44286 1998 QK_{83}	13.8	X	92.71855	324.67831	213.46608	11.48806	0.0926148	0.21842963	2.7306226	20	7 10.0	17.8
44287 1998 QO_{85}	13.9	X	26.95425	331.89338	302.53197	12.57987	0.1554506	0.22310631	2.6923291	20	8 25.0	17.1
44288 1998 QP_{85}	14.4	X	59.25588	160.73387	212.44837	10.37322	0.1078002	0.19165604	2.9793467	20	—	—
44289 1998 QU_{86}	14.4	X	179.23000	29.64715	222.05733	12.12728	0.1558117	0.23935934	2.5690297	20	—	—
44290 1998 QA_{87}	14.1	X	182.77237	182.72761	263.78486	11.56555	0.1346323	0.21410840	2.7672406	20	6 23.6	18.4
44291 1998 QL_{87}	14.2	X	325.51818	78.86242	220.13506	10.73948	0.1731748	0.21781179	2.7357839	20	6 2.3	17.1
44292 1998 QO_{87}	14.0	X	38.91515	121.50693	264.71651	10.39490	0.1122574	0.18969858	2.9998071	20	—	—
44293 1998 QQ_{87}	14.4	X	2.81769	137.74991	248.92953	13.21710	0.1117550	0.23060273	2.6336603	20	12 17.9	17.5
44294 1998 QE_{89}	14.4	X	352.11673	66.53658	261.99346	10.10863	0.2008351	0.22362508	2.6881636	20	9 9.1	17.1
44295 1998 QU_{89}	12.9	X	293.93421	274.17067	220.93871	9.85202	0.0482168	0.19028006	2.9936925	20	—	—
44296 1998 QM_{90}	14.1	X	234.30953	171.36196	266.15916	13.04904	0.0313382	0.26600100	2.3944946	20	8 17.2	17.5
44297 1998 QF_{93}	14.7	X	42.26959	177.28322	198.43437	13.46318	0.1970469	0.23119703	2.6291451	20	—	—
44298 1998 QD_{94}	13.6	X	80.86536	202.59098	136.52840	16.23253	0.1495382	0.23710442	2.5852921	20	—	—
44299 1998 QX_{94}	14.6	X	42.76887	25.85699	299.64122	13.53949	0.1318639	0.23076351	2.6324368	20	11 25.2	18.4
44300 1998 QC_{95}	13.5	X	142.22783	256.85770	303.86856	12.81064	0.2244061	0.22957465	2.6415171	20	10 1.9	18.3
44301 1998 QM_{96}	14.1	X	30.07739	307.91495	309.20977	11.56976	0.1270026	0.22057718	2.7128701	20	8 5.2	17.2
44302 1998 QQ_{99}	14.6	X	24.14636	134.88252	121.30991	3.57411	0.0343071	0.21799635	2.7342396	20	7 14.5	18.0
44303 1998 QA_{101}	15.9	X	46.82626	264.94065	132.08505	3.93288	0.2105448	0.23681736	2.5873808	20	—	—
44304 1998 QD_{102}	13.6	X	31.26294	348.75784	155.42459	12.82137	0.1391307	0.20371511	2.8605786	20	3 2.3	16.6
44305 1998 QK_{102}	14.8	X	354.05188	231.51168	125.55012	5.70488	0.1192610	0.22681572	2.6628944	20	10 27.7	17.9
44306 1998 QC_{104}	15.2	X	134.34263	168.33720	145.11744	8.72700	0.1700886	0.23981760	2.5657559	20	—	—
44307 1998 QH_{105}	14.1	X	280.00201	56.60627	139.55908	13.68843	0.1135848	0.24327197	2.5414096	20	—	—
44308 1998 RG	14.4	X	175.59415	327.16179	125.92459	10.09485	0.1249836	0.21413347	2.7670246	20	6 25.5	18.8
44309 1998 RT	14.8	X	154.66605	61.26361	223.94887	12.99043	0.1427140	0.24249086	2.5468642	20	—	—
44310 1998 RU_{1}	14.3	X	143.95491	291.54009	318.04283	12.34185	0.1313418	0.23253944	2.6190169	20	12 7.2	18.6
44311 1998 RP_{6}	14.1	X	169.43639	348.85980	321.83305	11.86156	0.1367135	0.24501413	2.5293483	20	—	—
44312 1998 RC_{8}	14.4	X	19.07041	35.62385	3.61273	5.13579	0.2127405	0.23251005	2.6192376	20	—	—
44313 1998 RV_{12}	14.5	X	208.08794	209.17342	186.52817	5.88494	0.0283617	0.21135764	2.7911986	20	5 22.3	18.4
44314 1998 RV_{15}	14.6	X	330.68089	225.78080	178.89002	12.43220	0.1861525	0.22646125	2.6656724	20	11 24.5	17.3
44315 1998 RG_{16}	14.5	X	358.74006	96.93521	269.62219	13.75638	0.1709830	0.22592564	2.6698839	20	11 19.9	17.5
44316 1998 RN_{22}	14.8	X	37.31696	252.36652	173.00747	3.47377	0.1941226	0.23944603	2.5684096	20	—	—
44317 1998 RC_{23}	14.4	X	34.84632	177.24007	143.86048	13.93816	0.1805533	0.22963295	2.6410700	20	11 22.2	18.1
44318 1998 RK_{24}	14.8	X	107.28151	100.44172	138.95130	9.94090	0.1310323	0.22951513	2.6419738	20	10 25.2	19.0
44319 1998 RR_{29}	15.5	X	32.95431	245.14910	137.53188	4.25468	0.1315438	0.23458864	2.6037427	20	—	—
44320 1998 RJ_{31}	13.8	X	158.57226	198.57093	327.81928	12.24817	0.1134164	0.22380758	2.6867021	20	9 7.4	18.1

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44321 1998 RY_{42}	14.4	X	258.01427	284.52203	186.78612	21.60842	0.0332256	0.22842974	2.6503361	20	11 6.4	18.1
44322 1998 RZ_{42}	15.4	X	74.92869	77.29939	232.20338	3.82232	0.2198402	0.23278034	2.6172097	20	12 21.9	19.6
44323 1998 RT_{44}	13.8	X	126.42822	38.44278	157.04717	13.70902	0.1035703	0.22346999	2.6894073	20	9 14.7	17.8
44324 1998 RA_{45}	13.8	X	260.27716	293.79932	163.79321	12.36608	0.2433230	0.22423803	2.6832628	20	9 17.9	17.5
44325 1998 RU_{45}	14.6	X	172.80501	120.74078	323.27022	3.40519	0.0366282	0.21401775	2.7680219	20	6 9.7	18.6
44326 1998 RM_{47}	15.2	X	171.84244	34.83542	277.64700	3.69281	0.1655764	0.24455203	2.5325335	20	—	—
44327 1998 RC_{48}	15.3	X	99.40927	107.34226	217.31418	3.58331	0.2564683	0.23711872	2.5851882	20	—	—
44328 1998 RC_{55}	14.9	X	215.24651	148.21336	244.04416	5.51618	0.0335429	0.21224631	2.7834021	20	5 25.2	18.7
44329 1998 RN_{58}	13.8	X	326.89833	116.72898	274.85156	1.15858	0.1281641	0.22623544	2.6674459	20	10 24.5	16.6
44330 1998 RV_{58}	15.2	X	269.71490	101.73708	256.80331	0.90205	0.0956987	0.21548137	2.7554734	20	6 10.2	18.7
44331 1998 RW_{58}	14.0	X	127.10935	204.21407	351.76963	13.15321	0.1012602	0.22266130	2.6959152	20	9 14.5	18.1
44332 1998 RU_{60}	14.7	X	189.74912	220.95844	215.40155	9.75696	0.0873022	0.21327403	2.7744532	20	6 18.8	19.0
44333 1998 RB_{63}	15.0	X	302.92052	253.87195	155.46779	11.61242	0.1821609	0.22467523	2.6797807	20	10 3.0	17.8
44334 1998 RO_{63}	15.2	X	339.14379	252.50144	74.36184	3.74218	0.1216760	0.22125783	2.7073035	20	8 15.7	18.1
44335 1998 RU_{63}	14.3	X	145.55276	38.57700	162.78538	13.94938	0.1225322	0.22606652	2.6687745	20	10 14.1	18.6
44336 1998 RE_{64}	14.2	X	135.62601	70.90169	119.88351	3.23343	0.1298831	0.22307528	2.6925788	20	9 19.5	18.3
44337 1998 RE_{65}	15.0	X	294.35720	130.08890	266.19182	0.97275	0.0900722	0.22242731	2.6978056	20	9 6.9	18.4
44338 1998 RM_{65}	15.5	X	344.57952	226.57762	184.19881	1.90990	0.3103271	0.22880587	2.6474307	20	—	—
44339 1998 RV_{65}	15.3	X	274.61543	198.22630	204.35198	1.70376	0.0894755	0.22031457	2.7150254	20	8 16.6	18.9
44340 1998 RH_{66}	14.5	X	316.32162	244.76942	189.70124	15.36522	0.1545094	0.22859352	2.6490701	20	12 6.8	17.5
44341 1998 RX_{66}	15.0	X	168.75285	351.06891	339.65386	10.90706	0.1478225	0.24505864	2.5290419	20	1 20.4	19.0
44342 1998 RJ_{67}	14.0	X	81.85191	252.10448	207.31229	11.07810	0.0305804	0.20328990	2.8645661	20	3 4.6	18.0
44343 1998 RS_{67}	14.9	X	26.16041	98.14469	246.81860	2.54734	0.0990763	0.22838067	2.6507157	20	11 24.7	18.3
44344 1998 RN_{68}	15.0	X	302.49830	23.18308	348.45489	2.30609	0.1277922	0.22028724	2.7152500	20	8 12.3	18.0
44345 1998 RO_{73}	14.7	X	247.39971	146.10912	220.38915	5.06307	0.0577033	0.21284125	2.7782129	20	5 29.0	18.6
44346 1998 RC_{74}	13.8	X	302.77763	123.64796	234.19819	6.42943	0.0931721	0.21851027	2.7299508	20	7 25.9	17.3
44347 1998 RV_{74}	15.4	X	78.96025	30.92843	320.35748	1.56586	0.1870955	0.23568635	2.5956518	20	—	—
44348 1998 RZ_{76}	14.4	X	282.31070	265.27957	165.88291	13.28563	0.1444406	0.22410752	2.6843044	20	10 1.5	17.5
44349 1998 RN_{77}	13.4	X	170.15546	323.99143	177.14068	24.50250	0.1070916	0.17365492	3.1818374	20	8 14.2	18.7
44350 1998 RY_{78}	13.3	X	220.59155	355.44619	110.97493	6.31273	0.0784243	0.17588265	3.1549129	20	8 30.9	17.9
44351 1998 RA_{79}	15.3	X	69.42625	224.33388	150.79114	8.01541	0.1886378	0.23677419	2.5876953	20	—	—
44352 1998 RY_{79}	14.2	X	61.66868	164.07104	217.28981	10.67253	0.1224729	0.19051382	2.9912432	20	—	—
44353 1998 SB_{1}	14.6	X	334.63953	294.69732	30.78438	6.05468	0.0713721	0.17162654	3.2068582	20	8 2.7	18.8
44354 1998 SS_{2}	13.5	X	132.94635	57.41313	258.91607	12.36167	0.1796459	0.23817925	2.5775085	20	—	—
44355 1998 ST_{2}	14.9	X	116.43408	72.61802	295.25239	12.62775	0.0778965	0.24136423	2.5547835	20	—	—
44356 1998 SL_{7}	15.2	X	355.54759	269.37904	348.96365	1.18706	0.1515106	0.21643253	2.7473945	20	6 3.5	17.9
44357 1998 SS_{8}	14.6	X	301.85446	167.28493	16.70577	4.02563	0.1396905	0.19584119	2.9367480	20	—	—
44358 1998 SX_{8}	14.0	X	339.53311	171.07615	186.49668	13.39197	0.1760253	0.22354427	2.6888115	20	9 30.8	16.4
44359 1998 SM_{9}	14.5	X	265.41739	209.85361	198.74527	8.96221	0.1607144	0.21829257	2.7317655	20	7 29.6	18.5
44360 1998 SK_{10}	14.7	X	156.04840	212.67989	213.15484	5.90355	0.0883916	0.20459288	2.8523909	20	4 30.7	19.1
44361 1998 SG_{13}	14.9	X	39.32544	286.67145	75.98163	4.76207	0.1285488	0.23213660	2.6220460	20	—	—
44362 1998 SM_{14}	14.1	X	329.47499	157.81463	116.73054	9.68158	0.1032277	0.21588837	2.7520092	20	5 16.8	17.5
44363 1998 SS_{19}	14.8	X	320.11729	130.53496	272.20435	0.82249	0.1837028	0.22747069	2.6577803	20	10 26.9	17.3
44364 1998 SA_{22}	15.2	X	12.01459	116.40563	9.09313	7.09123	0.0682537	0.28742182	2.2739953	20	—	—
44365 1998 SO_{22}	15.1	X	98.14758	326.37509	350.99103	2.98457	0.1969968	0.23520803	2.5991696	20	—	—
44366 1998 SQ_{23}	14.2	X	282.10935	233.99437	125.37712	7.16870	0.0397131	0.21668430	2.7452659	20	7 6.9	17.9
44367 1998 SE_{25}	14.5	X	12.45791	218.82571	173.04721	13.09702	0.1814745	0.23029753	2.6359866	20	—	—
44368 1998 SR_{26}	14.5	X	228.93146	223.53817	206.87140	8.55182	0.1519227	0.21660757	2.7459142	20	7 16.8	18.9
44369 1998 SX_{32}	14.8	X	156.51811	235.59408	46.05022	0.93841	0.0814322	0.19293704	2.9661445	20	—	—
44370 1998 SK_{35}	14.6	X	16.18780	311.87725	4.19607	6.50599	0.1163338	0.22565147	2.6720460	20	10 3.7	17.7
44371 1998 SR_{37}	14.2	X	62.30459	133.49643	216.09599	5.37134	0.0822152	0.23166238	2.6256230	20	—	—
44372 1998 SZ_{37}	15.8	X	86.82963	99.95429	264.81754	0.56446	0.1456276	0.23982797	2.5656820	20	—	—
44373 1998 SU_{42}	14.5	X	136.78886	309.84861	188.55509	7.67685	0.1649898	0.21237122	2.7823106	20	7 14.8	19.1
44374 1998 SY_{42}	14.8	X	14.65965	246.62947	16.23688	7.19346	0.0872300	0.21627554	2.7487239	20	7 15.6	18.2
44375 1998 SG_{46}	14.8	X	23.65340	33.39163	12.36184	3.22002	0.2261509	0.23253913	2.6190193	20	—	—
44376 1998 SJ_{48}	15.0	X	166.23000	23.07851	354.65270	1.59230	0.1108658	0.20249818	2.8720277	20	3 14.2	19.3
44377 1998 SD_{54}	14.9	X	315.14739	2.38866	358.52795	3.67021	0.1179177	0.22142344	2.7059534	20	8 20.8	17.8
44378 1998 SC_{56}	15.0	X	340.92672	202.22125	207.45504	3.47170	0.1442909	0.22997186	2.6384746	20	12 17.4	17.7
44379 1998 SH_{56}	14.9	X	152.46437	296.56833	358.68011	4.11848	0.1554432	0.23998014	2.5645973	20	—	—
44380 1998 SS_{56}	15.6	X	103.23628	130.18403	163.98197	4.57992	0.1963755	0.23467307	2.6031182	20	12 26.6	20.0
44381 1998 SV_{56}	14.4	X	78.51987	224.14815	130.06207	1.32001	0.0712106	0.19118459	2.9842426	20	—	—
44382 1998 SA_{59}	14.3	X	252.12437	348.95356	27.18171	5.58674	0.1463537	0.21453857	2.7635402	20	6 3.8	18.4
44383 1998 SL_{60}	14.3	X	307.75523	133.52579	77.67364	3.13813	0.0126845	0.20137155	2.8827300	20	2 4.5	18.2
44384 1998 SJ_{61}	14.9	X	324.08289	141.56535	213.56371	10.55809	0.1133694	0.22107613	2.7087868	20	8 23.3	18.2
44385 1998 SR_{61}	14.0	X	159.14187	118.24634	336.82271	11.22479	0.0422866	0.21204605	2.7851542	20	6 6.8	18.2
44386 1998 SV_{61}	14.6	X	163.79511	255.26043	235.75154	6.11677	0.0251620	0.21727857	2.7402580	20	7 29.2	18.6
44387 1998 ST_{62}	14.6	X	127.54310	21.32655	183.56830	12.45071	0.0964807	0.22442757	2.6817518	20	9 26.2	18.7
44388 1998 SK_{63}	13.2	X	300.72876	38.36190	79.24793	3.88711	0.1134438	0.18646946	3.0343400	20	12 23.1	16.9
44389 1998 SO_{63}	14.1	X	89.12940	170.04569	190.09790	10.46951	0.0935818	0.19286699	2.9668626	20	—	—
44390 1998 ST_{63}	14.1	X	18.25309	201.98055	211.78938	3.18850	0.2092045	0.23441114	2.6050569	20	—	—
44391 1998 SH_{64}	15.1	X	24.98273	335.29385	67.63760	6.07695	0.1935466	0.23269394	2.6178575	20	—	—
44392 1998 SY_{65}	14.2	X	283.63249	226.63165	102.54575	4.69783	0.0924421	0.21210120	2.7846715	20	5 22.0	17.8
44393 1998 SJ_{66}	14.1	X	315.83038	263.72188	123.74568	6.09197	0.0521331	0.17682175	3.1437326	20	9 26.8	18.3
44394 1998 ST_{66}	14.5	X	304.17029	105.61256	180.40412	7.75411	0.2051690	0.21083755	2.7957870	20	4 5.3	18.0
44395 1998 SE_{68}	14.7	X	200.98701	285.17069	228.37711	10.99602	0.0400471	0.22786064	2.6547472	20	10 13.5	18.5
44396 1998 SF_{68}	14.8	X	204.53223	297.06011	216.60460	14.26469	0.0694764	0.22811950	2.6527385	20	10 15.6	18.7
44397 1998 SG_{71}	15.0	X	273.19327	312.30437	47.89593	5.16457	0.1159596	0.21453350	2.7635838	20	6 13.6	18.7
44398 1998 SD_{75}	15.0	X	227.39746	259.66136	176.21781	8.94253	0.1255266	0.21581385	2.7526427	20	7 25.3	19.2
44399 1998 SZ_{84}	15.0	X	272.41472	272.10117	107.07139	3.95238	0.1004582	0.21782285	2.7356913	20	7 11.2	18.4
44400 1998 ST_{97}	14.9	X	336.90700	138.37808	173.58895	5.09038	0.1111742	0.21867812	2.7285536	20	7 17.9	18.1

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44401 1998 SD_{106}	14.7	X	336.90994	241.31072	182.34695	13.10783	0.1464825	0.22972579	2.6403584	20	12 28.8	17.8
44402 1998 SX_{107}	14.3	X	210.81064	45.53914	352.72312	6.13418	0.0722099	0.21139715	2.7908508	20	5 23.4	18.5
44403 1998 SH_{111}	15.0	X	92.87239	145.63315	196.77324	12.40553	0.1855070	0.23645494	2.5900240	20	—	—
44404 1998 SB_{113}	14.6	X	264.71131	220.16267	127.82021	6.53134	0.0233973	0.21296252	2.7771580	20	6 1.6	18.4
44405 1998 SS_{123}	13.7	X	67.77878	179.76392	190.61429	8.43837	0.0857951	0.18982113	2.9985159	20	—	—
44406 1998 SU_{127}	14.3	X	35.65915	329.42155	173.86687	14.14990	0.1082897	0.20117132	2.8846426	20	3 5.9	17.7
44407 1998 SO_{132}	14.8	X	194.80520	192.93570	230.71721	7.00617	0.1581332	0.21048502	2.7989078	20	6 6.2	19.4
44408 1998 SK_{133}	15.3	X	265.27375	164.28773	214.03031	4.97393	0.1339773	0.21514685	2.7583290	20	6 24.9	19.1
44409 1998 SW_{134}	14.7	X	271.11576	200.04091	182.12371	7.69608	0.0794028	0.21632507	2.7483043	20	7 15.3	18.5
44410 1998 SQ_{137}	14.2	X	301.37910	219.50491	80.32887	5.50306	0.0456102	0.21077333	2.7963548	20	5 14.3	17.8
44411 1998 SX_{138}	14.8	X	352.29231	136.04361	207.18378	17.10710	0.1273421	0.22276381	2.6950880	20	9 29.7	17.8
44412 1998 SJ_{139}	15.6	X	49.69118	73.17894	311.19763	3.38479	0.2754977	0.23415254	2.6069746	20	—	—
44413 1998 SR_{139}	13.6	X	63.44352	313.37335	274.98325	6.13207	0.1321081	0.21600220	2.7510423	20	8 14.1	17.3
44414 1998 SC_{141}	14.6	X	7.37811	138.58015	200.04429	11.16484	0.1975033	0.22482010	2.6786294	20	11 2.3	17.4
44415 1998 SF_{143}	15.1	X	211.49636	213.87666	197.80828	5.74088	0.0603207	0.21201016	2.7854686	20	6 13.4	19.2
44416 1998 ST_{143}	15.1	X	231.76498	128.99397	243.12589	1.92514	0.1101211	0.21048479	2.7989098	20	5 11.8	19.1
44417 1998 SS_{146}	13.2	X	185.26339	75.41311	190.44670	9.64490	0.0204646	0.19036642	2.9927871	20	—	—
44418 1998 SY_{146}	15.0	X	267.75201	176.01769	175.30297	2.56588	0.0424987	0.21173239	2.7879042	20	6 6.3	18.8
44419 1998 SM_{151}	14.8	X	228.77153	30.13474	31.56060	5.55709	0.0157951	0.21768675	2.7368314	20	7 24.9	18.6
44420 1998 SC_{155}	14.9	X	197.58314	71.90816	350.78418	2.81579	0.0807103	0.21223595	2.7834927	20	6 10.0	19.0
44421 1998 SL_{156}	14.5	X	17.68147	44.78858	197.97825	7.76130	0.1645020	0.21450607	2.7638194	20	6 26.3	17.5
44422 1998 SD_{159}	13.9	X	217.84867	131.27299	322.70257	3.27629	0.0543847	0.21802841	2.7339715	20	8 16.5	17.8
44423 1998 SP_{162}	13.8	X	319.16624	59.58477	230.71076	11.57146	0.0644205	0.21123354	2.7922918	20	5 23.9	17.2
44424 1998 TL_{1}	14.5	X	7.91556	77.46945	209.64369	12.44678	0.0781036	0.21662712	2.7457490	20	8 1.0	18.1
44425 1998 TY_{1}	14.7	X	286.84837	288.80611	77.53660	7.15612	0.0745658	0.21781462	2.7357603	20	7 19.1	18.3
44426 1998 TJ_{4}	14.2	X	318.25704	113.59459	352.44829	1.16590	0.0270440	0.18648048	3.0342204	20	—	—
44427 1998 TC_{5}	13.7	X	345.41666	94.65308	231.07540	14.88802	0.2840856	0.17567514	3.1573969	20	8 9.1	16.8
44428 1998 TF_{5}	15.6	X	301.09216	235.69327	65.73393	5.60362	0.1656888	0.30238065	2.1983663	20	4 23.6	17.8
44429 1998 TU_{5}	15.6	X	156.97842	272.30385	50.62543	5.63012	0.1868176	0.28674730	2.2775600	20	—	—
44430 1998 TZ_{6}	14.8	X	19.95163	143.53992	183.74952	13.27576	0.1934534	0.22352686	2.6889511	20	11 8.1	18.1
44431 1998 TJ_{18}	14.5	X	157.60826	178.94058	92.19659	8.41111	0.2143630	0.23974939	2.5662426	20	—	—
44432 1998 TP_{19}	13.6	X	111.52026	346.90661	214.47873	16.23189	0.0750545	0.17273960	3.1930675	20	8 22.5	18.6
44433 1998 TL_{30}	15.1	X	289.09384	180.02202	214.65966	2.02296	0.1847349	0.21887483	2.7269185	20	8 12.1	18.3
44434 1998 UD_{4}	14.5	X	219.41629	219.86804	82.53789	7.24075	0.1778297	0.29201043	2.2501103	20	1 26.1	18.0
44435 1998 UB_{7}	14.6	X	36.10680	285.67848	76.45285	7.77431	0.2504162	0.27558940	2.3386274	20	—	—
44436 1998 UE_{7}	14.9	X	54.71470	142.84618	207.53576	13.59284	0.3148361	0.23153692	2.6265714	20	—	—
44437 1998 UN_{7}	15.8	X	204.96366	276.72290	50.15307	7.46819	0.2105079	0.29319412	2.2440501	20	2 15.0	19.6
44438 1998 UG_{8}	12.7	X	182.28925	253.28194	227.22043	21.12512	0.0513115	0.16847301	3.2467523	20	7 28.4	18.0
44439 1998 UR_{8}	15.3	X	349.89575	51.19235	324.46428	2.05220	0.1529924	0.22557554	2.6726456	20	11 14.8	18.2
44440 1998 UM_{15}	15.3	X	347.61734	235.28102	63.70624	6.08444	0.1692424	0.30690247	2.1767194	20	8 2.9	16.6
44441 1998 UO_{16}	14.9	X	249.15854	263.03014	139.18258	4.39503	0.1255513	0.21373840	2.7704332	20	7 7.8	18.9
44442 1998 UG_{17}	14.6	X	306.57690	67.81438	309.57585	4.39637	0.0804125	0.21986628	2.7187147	20	8 30.9	17.8
44443 1998 UY_{19}	12.1	X	150.26934	1.90372	233.23819	16.86562	0.1560462	0.17976696	3.1093012	20	11 18.2	17.0
44444 1998 UZ_{19}	14.8	X	304.69448	359.33727	15.98845	1.53324	0.1719515	0.21824368	2.7321735	20	8 15.1	17.7
44445 1998 UX_{20}	14.7	X	317.93566	176.27293	223.51975	12.71563	0.1753074	0.22256690	2.6966774	20	10 14.9	17.4
44446 1998 UJ_{21}	14.4	X	290.15746	102.56444	237.97012	7.40370	0.1419623	0.21573483	2.7533148	20	6 6.9	18.0
44447 1998 UM_{21}	14.7	X	85.71340	169.53251	213.89839	13.63112	0.1907517	0.23922692	2.5699777	20	—	—
44448 1998 UU_{22}	13.9	X	83.70368	157.78158	233.90552	9.65927	0.0934549	0.19187004	2.9771310	20	—	—
44449 1998 UK_{24}	14.4	X	22.73686	358.90176	307.89415	11.44468	0.1533765	0.22456539	2.6806545	20	9 30.2	17.8
44450 1998 UB_{25}	15.0	X	273.27733	226.50327	119.76826	5.23067	0.1086840	0.21197334	2.7857912	20	5 28.6	18.9
44451 1998 UT_{30}	14.3	X	108.77985	249.93064	90.46964	11.16285	0.0531651	0.18880581	3.0092561	20	—	—
44452 1998 UO_{32}	14.3	X	110.86405	114.24564	229.51236	10.37238	0.0966626	0.19092537	2.9869432	20	—	—
44453 1998 UL_{40}	15.3	X	35.02713	36.33767	298.41353	5.12804	0.1714473	0.22739041	2.6584058	20	12 3.5	18.9
44454 1998 UE_{43}	14.4	X	236.32392	126.78313	260.94267	4.56871	0.0496998	0.21167590	2.7884002	20	6 12.9	18.2
44455 Artdula	14.6	X	121.25078	93.64016	312.39523	12.09477	0.1856819	0.24479725	2.5308420	20	3 2.3	18.3
44456 1998 VP_{4}	14.2	X	330.68216	226.25868	232.58260	8.33716	0.0304761	0.18524223	3.0477270	20	—	—
44457 1998 VG_{7}	14.6	X	103.22305	62.87973	331.57627	3.42833	0.2817711	0.24203754	2.5500434	20	2 13.7	17.9
44458 1998 VJ_{8}	14.9	X	242.20104	265.84984	152.54979	2.21472	0.2067704	0.21516105	2.7582076	20	7 11.1	19.0
44459 1998 VW_{11}	13.7	X	173.86847	270.31434	197.02037	12.97237	0.1057551	0.21203334	2.7852656	20	7 9.6	18.3
44460 1998 VC_{15}	15.3	X	281.13557	84.44273	280.79822	0.64300	0.1779135	0.21532711	2.7567893	20	6 21.9	18.8
44461 1998 VH_{17}	14.1	X	355.30528	74.95956	209.75300	8.67025	0.1321374	0.21489536	2.7604805	20	7 10.9	17.2
44462 1998 VU_{17}	14.5	X	5.00745	137.81505	234.04207	8.30970	0.2056495	0.22671589	2.6636760	20	12 14.5	17.5
44463 1998 VT_{18}	13.5	X	235.78735	227.75334	251.23330	9.01695	0.1920841	0.17530071	3.1618913	20	9 12.6	18.5
44464 1998 VN_{21}	15.7	X	103.54583	54.95841	313.42699	2.71445	0.2591120	0.23907377	2.5710751	20	1 8.9	18.9
44465 1998 VR_{23}	14.8	X	261.54239	294.32405	58.81988	6.52263	0.0659155	0.21035384	2.8000713	20	5 27.5	18.7
44466 1998 VT_{23}	14.4	X	70.78730	221.53095	71.68130	3.14169	0.1213606	0.17938435	3.1137209	20	11 8.9	18.8
44467 1998 VU_{27}	14.5	X	227.93151	184.56754	215.38118	8.78058	0.1502489	0.21121101	2.7924904	20	6 8.9	19.0
44468 1998 VH_{34}	13.9	X	331.37608	47.81724	302.82418	6.98047	0.1444465	0.17375126	3.1806611	20	8 23.3	17.6
44469 1998 VP_{34}	15.2	X	209.49682	97.13862	221.34468	1.13497	0.0692015	0.19870158	2.9084962	20	2 14.9	19.5
44470 1998 VZ_{35}	14.7	X	73.45463	204.60809	186.88128	13.20681	0.2795113	0.23665799	2.5885423	20	—	—
44471 1998 VB_{37}	14.6	X	7.72693	177.71659	147.31374	4.45984	0.2278496	0.22354413	2.6888126	20	10 19.8	17.3
44472 1998 VH_{53}	14.2	X	47.18877	48.35059	259.86651	12.67968	0.1603252	0.22588932	2.6701700	20	11 12.2	17.9
44473 Randytatum	13.6	X	326.83176	264.61233	126.48040	22.62944	0.1222719	0.17757821	3.1347983	20	10 22.1	17.9
44474 1998 WE	13.8	X	218.04035	357.83851	118.32118	2.54191	0.1530996	0.17185168	3.2040567	20	8 31.3	18.7
44475 Hikarumasai	14.8	X	18.22312	244.83389	131.45988	5.89147	0.2996980	0.23032485	2.6357781	20	—	—
44476 1998 WN_{3}	13.4	X	170.90259	25.01774	265.21607	9.32842	0.0450063	0.18452314	3.0556398	20	—	—
44477 1998 WL_{5}	14.3	X	62.60640	70.89062	38.29487	2.29404	0.0643415	0.19710650	2.9241665	20	2 29.5	18.2
44478 1998 WK_{6}	14.3	X	313.15917	226.67415	191.13107	2.11796	0.2004743	0.22313758	2.6920776	20	11 1.6	16.6
44479 Oláheszter	14.5	X	218.97321	64.06231	276.53270	12.08663	0.0311948	0.20110245	2.8853011	20	3 18.4	19.0
44480 1998 WU_{9}	14.4	X	187.76049	0.42086	308.54315	12.57277	0.2624896	0.24385206	2.5373775	20	1 15.3	18.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44481 1998 WN_{10}	15.3	X	55.95378	194.03539	191.58014	2.93725	0.2197178	0.23370297	2.6103169	20	—	—
44482 1998 WQ_{14}	13.6	X	244.23609	303.26209	229.68480	8.14504	0.0687802	0.18220069	3.0815511	20	12 17.5	17.9
44483 1998 WL_{16}	14.0	X	299.88941	25.72861	68.78440	11.83543	0.1241693	0.17966203	3.1105118	20	11 20.6	17.7
44484 1998 WV_{17}	14.6	X	299.34011	32.53271	354.54992	2.23027	0.1949031	0.21817779	2.7327235	20	8 18.8	17.7
44485 1998 WZ_{17}	13.6	X	309.63973	205.72710	285.22966	4.97962	0.1235189	0.18418040	3.0594295	20	—	—
44486 1998 WZ_{19}	14.5	X	343.32805	104.39881	243.82400	8.64912	0.1185771	0.21873959	2.7280424	20	9 16.8	17.8
44487 1998 WC_{20}	14.1	X	240.98267	175.10669	256.64578	7.95360	0.1753321	0.21355535	2.7720161	20	7 28.5	18.4
44488 1998 WO_{20}	14.9	X	87.10719	149.12723	229.49118	14.13678	0.1198990	0.23639039	2.5904955	20	—	—
44489 1998 WK_{22}	14.2	X	344.96569	168.50834	270.00546	8.93661	0.0646052	0.18368509	3.0649268	20	—	—
44490 1998 WL_{23}	14.1	X	99.52494	200.66787	245.51767	0.83186	0.0324589	0.19957637	2.8999909	20	3 13.9	18.0
44491 1998 WU_{30}	13.8	X	357.52779	302.28043	119.80570	14.59228	0.0791799	0.18339426	3.0681662	20	—	—
44492 1998 WE_{31}	13.7	X	221.80804	303.08987	131.53746	19.83702	0.1053901	0.16853352	3.2459751	20	7 18.5	18.8
44493 1998 WT_{40}	14.1	X	323.29873	74.95540	302.73931	16.28176	0.1695577	0.22186990	2.7023221	20	9 14.9	17.2
44494 1998 WD_{41}	14.3	X	338.43746	107.82597	226.83238	11.71191	0.0146106	0.21602537	2.7508456	20	8 19.2	18.2
44495 1998 XL_{4}	14.7	X	308.57094	314.79646	77.10419	5.43101	0.2224751	0.22351540	2.6890430	20	9 13.5	17.2
44496 1998 XM_{5}	13.3	X	267.74744	3.67282	152.93013	13.93332	0.0945578	0.18147461	3.0897652	20	12 24.7	17.7
44497 1998 XJ_{11}	13.6	X	11.04122	313.01565	92.56850	12.07522	0.1176170	0.18000147	3.1066000	20	—	—
44498 1998 XL_{11}	14.3	X	4.34555	343.04007	66.52733	2.65940	0.1668865	0.18030670	3.1030931	20	—	—
44499 1998 XV_{16}	14.4	X	71.60470	257.96210	94.70204	7.57447	0.0999940	0.26999206	2.3708390	20	—	—
44500 1998 XT_{17}	13.8	X	320.24026	190.66767	207.33747	4.98272	0.1191693	0.17292518	3.1907826	20	10 8.9	17.5
44501 1998 XN_{21}	13.4	X	292.97043	296.27791	115.64203	2.74412	0.1981718	0.17035370	3.2228123	20	9 4.0	17.4
44502 1998 XQ_{27}	14.5	X	268.98112	355.20479	45.07815	9.70137	0.2733607	0.21543862	2.7558380	20	7 9.7	18.6
44503 1998 XR_{27}	13.9	X	83.28312	129.21463	271.47724	10.96831	0.1362654	0.23751783	2.5822914	20	1 2.2	16.7
44504 1998 XX_{34}	13.9	X	318.07188	184.89415	262.32436	10.94593	0.1635594	0.22521786	2.6754746	20	12 25.7	16.6
44505 1998 XT_{38}	14.0	X	13.84874	74.42971	313.07873	11.14947	0.2659852	0.22719300	2.6599456	20	—	—
44506 1998 XS_{39}	13.4	X	11.29233	63.84181	299.78483	12.12989	0.2295897	0.22390411	2.6859299	20	12 16.9	16.7
44507 1998 XM_{40}	13.6	X	314.81036	196.67894	276.33962	13.95801	0.2001389	0.18057177	3.1000555	20	—	—
44508 1998 XH_{45}	13.7	X	339.46467	46.76745	348.06328	4.15565	0.1426948	0.17578727	3.1560541	20	11 5.9	17.5
44509 1998 XJ_{46}	13.5	X	327.71308	128.91727	295.12308	14.18683	0.2113797	0.17833643	3.1259067	20	11 23.3	17.0
44510 1998 XB_{51}	13.3	X	359.83392	190.05201	309.28847	8.73777	0.0423013	0.18835558	3.0140496	20	1 12.3	17.2
44511 1998 XC_{51}	12.8	X	187.52340	253.55869	301.66454	11.78859	0.0373878	0.17354153	3.1832232	20	11 7.2	17.6
44512 1998 XM_{58}	14.1	X	320.01852	256.28155	100.99724	9.40809	0.3016272	0.21752931	2.7381518	20	8 1.5	16.2
44513 1998 XT_{62}	12.7	X	250.38115	196.50859	333.49355	17.37502	0.0769799	0.17858605	3.1229931	20	12 20.7	17.3
44514 1998 XE_{65}	14.3	X	337.29592	105.23478	318.95577	11.48723	0.1310076	0.22595826	2.6696269	20	12 29.6	17.3
44515 1998 XR_{74}	13.0	X	106.25886	330.21862	313.24813	10.71096	0.0454258	0.17543928	3.1602261	20	11 24.7	17.8
44516 1998 XE_{83}	14.0	X	15.71678	259.22744	191.60814	11.57626	0.1438415	0.18713716	3.0271181	20	—	—
44517 1998 XF_{83}	14.3	X	347.01330	287.57742	169.81401	10.16303	0.0922370	0.18438032	3.0572175	20	—	—
44518 1998 XQ_{86}	13.9	X	115.91958	283.31773	97.34630	11.27760	0.1205797	0.19186247	2.9772093	20	1 28.2	18.2
44519 1998 XY_{91}	13.6	X	311.38436	193.84251	256.66406	16.52009	0.1776374	0.17801705	3.1296443	20	11 29.1	17.0
44520 1998 XC_{92}	13.2	X	42.21681	168.26812	257.28765	9.85086	0.0387685	0.18560427	3.0437623	20	—	—
44521 1998 XZ_{93}	13.8	X	271.56820	179.96647	252.27661	8.24361	0.2420624	0.21663203	2.7457075	20	8 24.1	17.6
44522 1998 YP_{1}	14.9	X	54.03821	83.86463	122.63630	6.20361	0.0790471	0.29417760	2.2390458	20	6 28.9	17.4
44523 1998 YR_{3}	14.6	X	194.87910	64.13099	118.71104	10.44126	0.0179585	0.21808373	2.7335092	20	11 18.3	18.5
44524 1998 YZ_{3}	13.2	X	16.41430	191.96688	265.31488	10.54523	0.1076872	0.18510248	3.0492607	20	—	—
44525 1998 YE_{4}	12.9	X	276.03501	162.59092	267.05193	10.94727	0.0953914	0.16973139	3.2306849	20	9 10.4	17.5
44526 1998 YN_{4}	14.0	X	75.93245	89.09151	299.17819	13.62336	0.1367962	0.23500515	2.6006653	20	—	—
44527 1998 YC_{6}	13.4	X	56.62494	358.49867	251.37301	13.99142	0.1316118	0.21438811	2.7648331	20	8 28.2	17.5
44528 1998 YZ_{6}	13.8	X	266.00065	267.58876	97.69608	9.82975	0.1727546	0.21157462	2.7892900	20	6 4.3	17.8
44529 1998 YP_{7}	14.2	X	92.30750	297.20975	103.07640	11.41004	0.1243191	0.19253642	2.9702576	20	1 22.9	18.1
44530 Horáková	13.1	X	104.32759	89.02176	280.50829	11.67811	0.2258842	0.23767389	2.5811609	20	1 6.1	16.2
44531 1998 YR_{8}	13.6	X	248.68109	351.34403	141.69063	13.28588	0.0397266	0.17847072	3.1243384	20	11 12.5	18.2
44532 1998 YA_{9}	14.1	X	202.00568	53.11384	237.11790	9.65989	0.0609768	0.19273600	2.9682068	20	1 4.6	18.6
44533 1998 YN_{9}	14.0	X	44.48607	218.25645	340.83928	8.28057	0.1381511	0.24069402	2.5595238	20	6 8.5	17.0
44534 1998 YZ_{9}	15.5	X	311.28977	349.47677	127.09078	5.73339	0.0907238	0.27046308	2.3680856	20	—	—
44535 1998 YN_{15}	13.9	X	43.60136	274.99087	79.67902	1.83699	0.1276044	0.17588772	3.1548524	20	12 20.4	18.2
44536 1998 YY_{27}	14.9	X	255.43420	262.77137	135.83394	13.75496	0.2127139	0.21320889	2.7750183	20	6 29.6	19.3
44537 1999 AG	15.6	X	94.05440	326.30217	126.91483	4.26564	0.0900654	0.28634686	2.2796828	20	3 17.9	18.1
44538 1999 AO_{2}	13.0	X	79.76451	39.05791	340.71880	9.10956	0.1570955	0.18424840	3.0586767	20	—	—
44539 1999 AH_{4}	15.6	X	85.27590	247.43876	269.06513	5.70016	0.1068517	0.29243304	2.2479419	20	6 6.3	18.2
44540 1999 AH_{6}	14.0	X	337.71488	124.23222	262.52103	11.63781	0.1871754	0.22500209	2.6771848	20	11 8.2	16.6
44541 1999 AV_{6}	14.6	X	225.68523	33.46501	124.68964	7.36407	0.0731971	0.26372389	2.4082583	20	11 26.3	17.8
44542 1999 AD_{7}	14.2	X	312.20514	199.57379	248.73031	3.50609	0.1006266	0.17486199	3.1671777	20	12 1.2	18.1
44543 1999 AG_{23}	13.2	X	296.48601	172.47621	286.49406	16.52550	0.2268354	0.17980821	3.1088257	20	11 2.6	17.1
44544 1999 AO_{23}	13.3	X	121.55093	46.47002	299.69765	13.30480	0.1414946	0.23752893	2.5822109	20	—	—
44545 1999 AJ_{24}	14.1	X	94.04526	33.38737	302.22652	13.32437	0.1449183	0.17880311	3.1204652	20	—	—
44546 1999 BR	13.8	X	120.01775	88.57964	289.97018	9.81446	0.1288899	0.18931272	3.0038819	20	1 29.2	18.2
44547 1999 BC_{3}	13.5	X	132.70188	244.07851	180.14480	4.32695	0.0251502	0.15059009	3.4989559	20	3 30.9	18.6
44548 1999 BQ_{5}	13.7	X	133.76204	107.31233	279.13708	9.75569	0.0915805	0.19035100	2.9929487	20	2 15.7	18.2
44549 1999 BH_{13}	12.9	X	271.58948	313.41015	159.15466	4.48701	0.0832942	0.12420997	3.9783080	20	10 28.0	18.3
44550 1999 BL_{23}	13.0	X	352.65575	158.41009	247.28448	13.79380	0.0244648	0.17560087	3.1582872	20	12 4.5	17.4
44551 1999 BV_{27}	13.2	X	272.96808	24.39792	79.04889	11.55423	0.2080746	0.17696473	3.1420390	20	10 15.1	17.5
44552 1999 BL_{34}	13.3	X	342.50397	74.00742	309.25680	12.13706	0.0837927	0.17037140	3.2225890	20	10 19.4	17.7
44553 1999 CH_{5}	13.2	X	240.48545	100.70270	331.09537	8.25178	0.2022024	0.21032104	2.8003624	20	7 28.5	17.6
44554 1999 CQ_{9}	14.5	X	40.82110	74.38548	97.78535	8.27003	0.2017237	0.23793460	2.5792750	20	5 6.1	17.1
44555 1999 CF_{11}	15.7	X	82.29439	211.75128	155.50132	25.12956	0.0876135	0.36442645	1.9411665	20	—	—
44556 1999 CD_{23}	13.7	X	197.78121	319.15809	321.08592	12.24672	0.1525042	0.22757376	2.6569778	20	—	—
44557 1999 CZ_{23}	14.4	X	8.42555	288.78222	136.53997	8.70579	0.1799972	0.17983700	3.1084939	20	—	—
44558 1999 CF_{35}	13.3	X	42.40751	33.15525	359.86053	9.57912	0.1670564	0.17938080	3.1137620	20	—	—
44559 1999 CC_{38}	14.1	X	200.31482	72.08291	143.03673	7.50318	0.0559771	0.21907819	2.7252308	20	12 27.4	17.9
44560 1999 CM_{42}	14.1	X	49.19726	310.14630	350.51073	6.94463	0.0185924	0.21104306	2.7939717	20	10 11.7	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44561 1999 CF_{53}	13.1	X	325.45416	328.87125	113.67332	8.65733	0.2510572	0.17552470	3.1592007	20	12 15.3	16.1
44562 1999 CH_{57}	14.2	X	295.30035	9.28136	165.36307	1.44210	0.1324078	0.17816650	3.1278940	20	—	—
44563 1999 CX_{59}	13.5	X	359.32414	259.05186	181.46174	15.54833	0.2140950	0.18098838	3.0952965	20	—	—
44564 1999 CZ_{60}	14.8	X	1.09989	236.71437	193.12951	2.72094	0.0443834	0.22254021	2.6968930	20	—	—
44565 1999 CF_{84}	15.2	X	325.71292	145.24716	63.55747	8.22409	0.1450923	0.28153138	2.3056046	20	1 24.4	17.9
44566 1999 CK_{103}	12.2	X	272.46927	89.01174	287.13768	25.43608	0.2031788	0.16112179	3.3447721	20	6 21.9	17.1
44567 1999 CL_{111}	16.0	X	296.27860	20.29173	167.14741	2.29645	0.1501938	0.27349472	2.3505532	20	—	—
44568 1999 CR_{114}	13.9	X	278.75988	237.20174	295.22997	4.21926	0.0909090	0.17680271	3.1439583	20	—	—
44569 1999 CG_{133}	15.2	X	267.03818	173.73397	143.29263	7.76211	0.1481346	0.28741460	2.2740334	20	4 4.8	18.3
44570 1999 FX_{5}	14.6	X	181.14283	115.97858	139.60101	12.72805	0.1420995	0.22236266	2.6983284	20	—	—
44571 1999 FQ_{15}	14.8	X	119.09127	319.53967	148.93712	8.49878	0.0613931	0.19560017	2.9391600	20	5 12.9	19.1
44572 1999 FW_{38}	14.6	X	25.57911	91.40192	329.66998	4.19759	0.1609152	0.27090414	2.3655145	20	—	—
44573 1999 FZ_{51}	14.0	X	30.93565	296.99385	172.85771	2.25831	0.1391272	0.18366176	3.0651864	20	1 19.1	17.6
44574 Lavoratti	16.0	X	322.87127	9.75458	160.56470	2.60016	0.1063960	0.27253382	2.3560750	20	—	—
44575 1999 GG_{3}	16.2	X	276.86335	89.04536	182.28301	2.55868	0.1683381	0.27734707	2.3287364	20	2 10.5	19.7
44576 1999 GJ_{10}	14.9	X	39.96483	205.30462	52.17882	1.05310	0.1222213	0.19924860	2.9031705	20	8 19.2	18.4
44577 1999 GJ_{17}	14.7	X	309.07478	77.70941	119.59134	3.20785	0.1951921	0.22702399	2.6612656	20	—	—
44578 1999 GL_{25}	15.0	X	293.44648	291.77669	147.11302	5.49960	0.0787203	0.25799446	2.4437820	20	11 15.5	17.8
44579 1999 GR_{25}	14.0	X	51.72822	121.04239	126.67841	3.18349	0.0397308	0.20001758	2.8957247	20	8 10.7	17.7
44580 1999 GY_{25}	15.4	X	33.64608	213.13583	23.57101	4.61506	0.0807719	0.24161769	2.5529965	20	7 9.3	18.5
44581 1999 GB_{40}	16.3	X	43.78131	117.71899	95.15538	1.78574	0.1490004	0.28719069	2.2752152	20	7 3.1	18.3
44582 1999 JE_{10}	14.0	X	272.90955	163.66867	138.86117	10.54087	0.0621220	0.18566413	3.0431081	20	4 12.4	18.4
44583 1999 JT_{11}	15.6	X	68.19604	14.90827	92.36910	24.10714	0.0677572	0.36799325	1.9286029	20	2 12.9	17.7
44584 1999 JO_{21}	15.7	X	131.67279	274.38964	340.42925	1.60515	0.1745780	0.25427423	2.4675605	20	12 6.5	19.8
44585 1999 JT_{28}	15.8	X	16.96175	205.59013	2.66917	2.96551	0.1127177	0.28138138	2.3064240	20	4 27.1	17.9
44586 1999 JJ_{70}	14.7	X	110.42624	307.48945	70.87570	7.15865	0.0305985	0.22174062	2.7033724	20	—	—
44587 1999 JQ_{70}	16.1	X	65.76802	131.48737	155.80221	4.20784	0.1755104	0.29557446	2.2319859	20	11 24.3	19.3
44588 1999 JF_{124}	15.3	X	271.47771	142.15156	122.94410	24.33521	0.0663745	0.36667672	1.9332165	20	1 26.2	17.2
44589 1999 LQ_{5}	15.2	X	273.57968	115.25889	133.24808	24.95280	0.0646561	0.36486791	1.9396004	20	1 6.6	17.7
44590 1999 LC_{16}	15.8	X	51.18372	307.88997	220.74749	20.06383	0.0416645	0.37015246	1.9210955	20	4 13.6	17.4
44591 1999 NF_{40}	15.0	X	210.60521	110.26000	116.41153	7.58953	0.1024973	0.30196465	2.2003849	20	—	—
44592 1999 OM	14.4	X	237.01633	150.46302	311.32631	10.51751	0.1046646	0.28728562	2.2747139	20	9 17.2	17.5
44593 1999 OG_{3}	14.9	X	350.18677	137.92068	233.05231	20.65848	0.2352994	0.28313493	2.2968912	20	12 10.4	17.0
44594 1999 OX_{3}	7.0	X	352.85989	144.18193	259.04276	2.62595	0.4555712	0.00535983	32.3371843	20	10 16.6	19.5
44595 1999 PE	15.4	X	318.93915	230.60260	142.57648	6.94727	0.1239148	0.28287695	2.2982874	20	9 29.2	17.4
44596 1999 PF	15.7	X	48.77655	220.89475	137.12185	6.79182	0.1973603	0.29287460	2.2456819	20	—	—
44597 Thoreau	15.4	X	147.28618	7.25367	208.46667	5.04339	0.1183860	0.29136805	2.2534163	20	11 10.2	18.5
44598 1999 PL_{6}	14.7	X	195.62940	218.42853	273.75254	4.89543	0.0829045	0.28666212	2.2780112	20	9 11.8	17.8
44599 1999 RA_{2}	15.7	X	177.16083	168.17566	170.23098	3.33285	0.1778381	0.30687331	2.1768573	20	1 29.4	19.0
44600 1999 RU_{10}	14.7	X	78.21922	202.15777	332.02478	20.58440	0.0574711	0.36977714	1.9223952	20	6 17.2	17.1
44601 1999 RM_{12}	15.1	X	200.68675	192.66697	314.39443	5.89971	0.0763557	0.28586930	2.2822210	20	10 8.9	18.1
44602 1999 RN_{12}	15.7	X	195.91403	193.31611	181.86395	6.12980	0.1558911	0.26697449	2.3886703	20	4 6.3	19.4
44603 1999 RT_{12}	14.8	X	184.70644	306.58021	263.18426	3.81166	0.1017673	0.29357368	2.2421154	20	12 14.6	17.8
44604 1999 RN_{14}	16.2	X	237.32304	164.61826	182.90406	2.45701	0.1208976	0.31715688	2.1295441	20	4 10.7	19.1
44605 1999 RM_{16}	15.5	X	192.28435	37.85028	166.48890	2.48086	0.0989798	0.29309127	2.2445750	20	12 16.8	18.5
44606 1999 RQ_{17}	16.1	X	256.54940	323.05013	295.38984	2.11846	0.1124071	0.30913545	2.1662247	20	1 4.8	18.9
44607 1999 RT_{17}	15.0	X	122.82742	348.39256	183.61192	4.89504	0.0888154	0.27834611	2.3231609	20	8 12.4	18.2
44608 1999 RR_{18}	14.8	X	112.01489	115.76356	185.42603	4.91905	0.1686395	0.29549861	2.2323678	20	—	—
44609 1999 RW_{18}	14.9	X	53.18980	69.96374	356.18374	4.78302	0.0827903	0.30132218	2.2035115	20	—	—
44610 1999 RW_{24}	15.6	X	253.06117	272.03059	204.40882	5.86563	0.0676188	0.28589188	2.2821009	20	11 12.7	18.1
44611 1999 RO_{25}	15.7	X	40.12814	202.21372	255.33733	1.70692	0.0785492	0.30243886	2.1980842	20	—	—
44612 1999 RP_{27}	15.5	X	143.57423	189.61516	141.52205	1.12143	0.1776826	0.30243276	2.1981138	20	—	—
44613 Rudolf	15.5	X	239.84423	80.46021	220.54646	7.81386	0.0241748	0.26171351	2.4205754	20	2 19.8	18.9
44614 1999 RM_{34}	15.4	X	67.05084	353.49473	6.30843	7.03704	0.1361703	0.29398383	2.2400296	20	—	—
44615 1999 RQ_{34}	15.6	X	303.18925	271.04947	166.79180	4.97650	0.1212095	0.28642460	2.2792703	20	12 7.4	17.6
44616 1999 RT_{34}	16.2	X	5.98661	198.91717	84.02394	3.42832	0.2077109	0.27746111	2.3280983	20	8 19.6	17.8
44617 1999 RY_{37}	15.5	X	25.84956	37.04942	9.75621	4.79965	0.1424786	0.29310927	2.2444831	20	—	—
44618 1999 RO_{38}	15.3	X	342.42833	232.97986	185.79800	5.97176	0.2263327	0.28784091	2.2717875	20	—	—
44619 1999 RO_{42}	15.9	X	270.67259	197.46816	113.76972	5.48867	0.2279948	0.31611973	2.1341994	20	3 20.3	19.0
44620 1999 RS_{43}	15.6	X	178.93969	181.22929	181.99212	4.39932	0.1639348	0.30702927	2.1761201	20	3 1.9	18.9
44621 1999 RV_{48}	15.6	X	125.31391	80.88734	252.05272	1.71381	0.1285274	0.30237188	2.1984088	20	—	—
44622 1999 RJ_{51}	16.0	X	105.02047	148.91905	183.89785	3.16177	0.1234641	0.29932728	2.2132910	20	—	—
44623 1999 RP_{55}	14.6	X	290.92800	332.60769	132.25610	5.27463	0.1337085	0.29215259	2.2493803	20	12 25.9	16.5
44624 1999 RS_{57}	16.1	X	249.56767	171.16232	110.61271	3.55086	0.1899607	0.31318478	2.1475121	20	1 23.2	19.2
44625 1999 RS_{63}	14.7	X	229.36250	77.09834	248.18987	1.03606	0.1652438	0.17225629	3.1990375	20	3 11.4	20.0
44626 1999 RU_{65}	15.5	X	314.67481	216.68883	236.25980	3.13400	0.1030716	0.29245076	2.2478511	20	—	—
44627 1999 RN_{71}	14.5	X	227.27368	316.36885	152.54000	8.09788	0.0516759	0.28352856	2.2947648	20	9 29.4	17.3
44628 1999 RQ_{75}	15.9	X	5.40506	52.34105	292.16866	3.15263	0.1641069	0.28569803	2.2831330	20	11 17.1	18.0
44629 1999 RT_{83}	15.3	X	314.51426	25.89456	128.01757	6.04289	0.0842311	0.30035849	2.2082222	20	—	—
44630 1999 RY_{83}	15.9	X	307.98213	285.95212	153.76668	6.57762	0.0499223	0.28943106	2.2634590	20	12 18.8	18.3
44631 1999 RT_{87}	14.9	X	347.47537	244.12442	156.13453	5.35875	0.1515172	0.24076408	2.5590273	20	12 20.7	17.6
44632 1999 RZ_{88}	15.1	X	145.62759	288.60190	334.88030	3.44856	0.1276605	0.29422919	2.2387841	20	—	—
44633 1999 RB_{90}	14.6	X	204.38187	299.44711	147.19767	6.71690	0.0646492	0.27566255	2.3382137	20	7 23.6	17.7
44634 1999 RZ_{94}	15.9	X	7.75781	100.05832	175.50324	4.39236	0.1585406	0.27745730	2.3281196	20	8 1.2	17.8
44635 1999 RO_{97}	15.7	X	3.38340	262.42209	33.20355	4.21198	0.1497428	0.27951778	2.3166642	20	8 28.3	17.7
44636 1999 RQ_{103}	15.0	X	303.15763	57.76134	297.65818	6.02192	0.1342913	0.27887826	2.3202045	20	7 24.9	17.1
44637 1999 RN_{105}	15.1	X	245.93854	287.94272	162.71045	3.99094	0.0888643	0.27976906	2.3152768	20	9 21.4	17.7
44638 1999 RA_{109}	16.3	X	112.39354	104.95205	148.73262	5.07204	0.0803279	0.28826506	2.2695585	20	11 22.3	19.4
44639 1999 RM_{109}	15.0	X	319.27212	327.40229	270.98744	5.42151	0.0980164	0.26545497	2.3977771	20	3 1.1	18.0
44640 1999 RQ_{110}	15.7	X	156.89411	12.45395	296.44252	7.10698	0.1440706	0.29996141	2.2101706	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44641 1999 RZ_{111}	15.7	X	208.36830	71.23252	318.41957	20.13762	0.0433184	0.36819739	1.9278900	20	4 26.5	18.5
44642 1999 RL_{114}	16.0	X	0.41845	274.01895	178.25236	5.78721	0.0775498	0.29864276	2.2166718	20	—	—
44643 1999 RS_{114}	15.3	X	92.50731	35.65188	242.40847	4.73254	0.1716122	0.29100271	2.2553019	20	12 6.6	18.8
44644 1999 RY_{114}	15.3	X	44.56564	221.36823	216.83600	5.61162	0.1254876	0.30161144	2.2021024	20	—	—
44645 1999 RC_{118}	15.0	X	205.96729	189.87170	253.37589	5.72840	0.0777814	0.27859987	2.3217499	20	7 19.2	18.3
44646 1999 RN_{121}	15.8	X	85.59171	104.83583	155.31869	6.55547	0.1007022	0.28738413	2.2741941	20	11 2.6	18.9
44647 1999 RA_{129}	14.9	X	175.06220	178.90880	183.67508	2.61388	0.1361831	0.21628788	2.7486193	20	3 4.2	19.1
44648 1999 RN_{140}	16.1	X	267.50908	265.65732	2.96785	1.83818	0.2047466	0.26686588	2.3893183	20	1 27.8	19.8
44649 1999 RY_{141}	15.9	X	70.54212	194.79608	203.73926	2.18583	0.1151109	0.29948605	2.2125087	20	—	—
44650 1999 RF_{143}	15.9	X	13.56115	322.66406	142.88950	3.92471	0.0706915	0.30000623	2.2099504	20	—	—
44651 1999 RB_{148}	15.5	X	283.30218	228.48512	238.14744	3.15533	0.1064696	0.29053675	2.2577127	20	12 14.6	17.6
44652 1999 RC_{150}	15.3	X	23.25143	102.68936	321.27419	2.28789	0.1444550	0.29713839	2.2241473	20	—	—
44653 1999 RO_{151}	15.8	X	126.54526	177.56283	102.98824	2.59140	0.1498831	0.29590213	2.2303379	20	—	—
44654 1999 RR_{155}	15.7	X	67.21614	69.23251	245.18455	3.43205	0.2235782	0.29158319	2.2523077	20	—	—
44655 1999 RQ_{158}	15.8	X	204.42703	157.74254	153.59730	1.90169	0.1158375	0.30888760	2.1673834	20	1 18.7	18.8
44656 1999 RU_{159}	16.2	X	93.05804	346.58709	71.14323	3.15302	0.1075984	0.30598729	2.1810575	20	1 23.6	18.2
44657 1999 RK_{163}	16.2	X	115.82968	199.47707	228.64917	2.70656	0.0996725	0.31003697	2.1620234	20	3 9.0	18.7
44658 1999 RD_{168}	16.0	X	238.85697	228.36178	77.03156	1.19365	0.1576718	0.31285849	2.1490050	20	2 14.2	19.0
44659 1999 RJ_{169}	15.6	X	191.74680	194.62077	330.50770	7.01235	0.0389599	0.28635076	2.2796621	20	10 26.7	18.7
44660 1999 RQ_{169}	16.1	X	155.83434	158.22745	217.81662	2.97455	0.1163140	0.30881921	2.1677033	20	2 18.9	19.0
44661 1999 RX_{169}	15.1	X	309.35184	256.02370	337.90558	5.49006	0.1311935	0.31280759	2.1492381	20	2 1.5	17.4
44662 1999 RV_{170}	16.1	X	80.42793	265.74542	161.40973	1.70814	0.0588181	0.30547787	2.1834816	20	1 9.2	18.3
44663 1999 RS_{171}	15.4	X	221.15122	219.09187	152.59055	6.68152	0.1135964	0.26965022	2.3728423	20	4 30.3	18.9
44664 1999 RX_{171}	15.4	X	138.74835	315.70300	27.57578	2.66028	0.1336237	0.30321344	2.1943391	20	—	—
44665 1999 RF_{174}	15.6	X	267.84422	49.65515	44.85297	3.35745	0.1153186	0.28556198	2.2838582	20	10 27.6	18.0
44666 1999 RX_{176}	15.9	X	65.99673	182.10458	189.37225	3.20692	0.0524708	0.29642795	2.2276996	20	—	—
44667 1999 RB_{179}	15.6	X	250.64708	234.76554	136.15113	6.99762	0.1283178	0.27316151	2.3524644	20	5 30.9	18.9
44668 1999 RC_{181}	15.5	X	307.20475	324.38239	111.33232	2.41084	0.0759042	0.28852227	2.2682094	20	12 11.6	17.6
44669 1999 RC_{182}	15.7	X	178.05073	63.91345	180.01973	1.95293	0.1594324	0.29669747	2.2253503	20	—	—
44670 1999 RQ_{183}	16.4	X	211.15928	144.39036	136.99376	3.23924	0.1072810	0.30541289	2.1837914	20	—	—
44671 1999 RE_{184}	15.9	X	29.96011	190.47513	153.16489	8.25901	0.1173457	0.28856100	2.2680065	20	12 16.9	18.8
44672 1999 RL_{184}	15.0	X	156.63445	158.19377	136.64024	6.16316	0.1336864	0.30017940	2.2091004	20	—	—
44673 1999 RE_{185}	14.7	X	239.45964	52.14306	126.01588	7.69345	0.0781314	0.29440640	2.2378856	20	—	—
44674 1999 RD_{186}	15.7	X	13.05001	340.12340	137.52330	2.78133	0.0555214	0.30374276	2.1917891	20	—	—
44675 1999 RX_{186}	15.4	X	217.17972	308.85530	281.83059	2.31804	0.1059767	0.29956493	2.2121203	20	—	—
44676 1999 RG_{187}	15.1	X	260.38177	91.61939	14.92792	4.84519	0.1219154	0.28625455	2.2801729	20	10 30.6	17.4
44677 1999 RK_{190}	15.7	X	345.02224	128.74793	339.38542	5.37071	0.0563162	0.29872679	2.2162561	20	—	—
44678 1999 RP_{192}	15.6	X	9.62986	6.96563	182.21395	6.03428	0.0767114	0.26637693	2.3922412	20	3 17.4	18.1
44679 1999 RQ_{193}	14.8	X	358.53795	158.55317	132.46436	5.66686	0.1923846	0.27639074	2.3341050	20	8 11.1	16.2
44680 1999 RD_{194}	14.6	X	218.86193	4.85367	216.43551	5.52187	0.1069831	0.29797234	2.2199954	20	—	—
44681 1999 RZ_{195}	15.4	X	357.58639	115.25739	240.61011	5.80497	0.1505115	0.28593798	2.2818555	20	11 18.9	17.4
44682 1999 RK_{197}	14.4	X	74.08065	227.42528	271.55803	4.68880	0.1064450	0.26555762	2.3971592	20	4 23.2	17.2
44683 1999 RR_{197}	14.9	X	145.01891	220.34257	293.14330	6.38072	0.1039863	0.27785182	2.3259153	20	8 13.1	18.2
44684 1999 RY_{197}	15.2	X	66.35878	5.98113	261.83555	6.55273	0.1472059	0.28511041	2.2862690	20	10 21.7	18.3
44685 1999 RM_{200}	14.7	X	301.29563	156.33520	245.69919	13.30978	0.0847105	0.23543415	2.5975051	20	9 23.3	18.1
44686 1999 RN_{200}	14.8	X	235.76126	207.13984	238.21896	11.27769	0.0524754	0.27998352	2.3140944	20	8 29.6	17.9
44687 1999 RS_{204}	14.3	X	238.80214	249.44098	249.02238	11.96240	0.0991676	0.23893314	2.5720839	20	11 4.7	17.8
44688 1999 RR_{207}	15.1	X	8.17459	121.74099	222.16150	7.61594	0.1672938	0.28497706	2.2869822	20	11 22.6	17.4
44689 1999 RK_{210}	14.8	X	114.43584	123.20849	251.56864	7.37817	0.0672224	0.25363022	2.4717358	20	—	—
44690 1999 RK_{211}	15.1	X	257.70090	328.38055	295.89530	4.83730	0.1320295	0.30746570	2.1740604	20	1 12.7	17.9
44691 1999 RF_{221}	14.6	X	31.86978	126.88165	123.27680	6.73024	0.1034183	0.27689985	2.3312431	20	8 1.2	16.8
44692 1999 RG_{225}	15.1	X	11.05789	70.44094	322.57250	5.12976	0.1739742	0.29004893	2.2602434	20	—	—
44693 1999 RH_{234}	15.5	X	299.64382	235.99860	127.09300	7.31848	0.1297856	0.27829194	2.3234623	20	7 31.4	17.5
44694 1999 RT_{234}	15.3	X	263.67821	105.33476	106.50649	4.96983	0.0797257	0.30216971	2.1993892	20	—	—
44695 1999 RY_{235}	14.9	X	335.38389	325.13070	102.39469	9.97903	0.0936453	0.29030446	2.2589168	20	—	—
44696 1999 RZ_{235}	15.2	X	73.58543	254.05362	113.31838	8.81752	0.1621145	0.29616984	2.2289936	20	—	—
44697 1999 RC_{239}	15.5	X	151.17283	105.46398	132.42553	7.16839	0.1382103	0.29090050	2.2558302	20	12 11.9	18.9
44698 1999 RS_{247}	15.1	X	199.24999	18.91209	113.52209	6.71381	0.0479283	0.28159231	2.3052721	20	9 26.2	18.1
44699 1999 SG	14.4	X	235.90291	113.42223	7.91312	5.32290	0.1147615	0.28240053	2.3008716	20	10 15.5	17.2
44700 1999 SG_{3}	13.8	X	304.00425	109.17254	259.06042	22.21662	0.2230923	0.27879881	2.3206453	20	7 23.1	16.3
44701 1999 SD_{7}	14.1	X	106.49154	115.77224	82.99096	6.90727	0.0511728	0.28176642	2.3043223	20	8 31.1	17.1
44702 1999 SJ_{7}	15.0	X	272.94001	277.27834	120.29719	6.58476	0.1979214	0.27906427	2.3191735	20	7 26.4	17.6
44703 1999 SX_{10}	15.1	X	165.58984	15.59324	105.13509	7.52140	0.0573736	0.27238691	2.3569221	20	7 24.1	18.2
44704 1999 SA_{11}	14.9	X	192.86391	343.72708	165.36118	11.49303	0.1104583	0.27926536	2.3180600	20	10 2.8	18.1
44705 1999 SL_{11}	14.4	X	18.13102	70.84076	70.25911	6.75755	0.0862487	0.25517073	2.4617776	20	1 26.6	17.1
44706 1999 SW_{24}	15.7	X	332.26476	240.49836	161.84610	1.83263	0.0300372	0.23917318	2.5703626	20	11 19.2	18.8
44707 1999 TR_{1}	15.3	X	241.17908	226.43747	199.54028	6.25371	0.0835420	0.27554505	2.3388784	20	8 7.6	18.4
44708 1999 TS_{1}	15.4	X	39.29491	113.12580	198.90243	2.04324	0.1357787	0.28436059	2.2902863	20	11 17.8	18.0
44709 1999 TV_{1}	15.3	X	285.58481	175.36575	170.68932	2.66741	0.2446117	0.27389369	2.3482700	20	5 22.6	18.0
44710 1999 TM_{3}	15.7	X	20.56062	205.69513	85.96590	4.21136	0.1417968	0.27939560	2.3173396	20	9 23.5	18.0
44711 Carp	14.6	X	155.61315	281.19964	307.48154	5.32735	0.2359926	0.29143833	2.2530540	20	11 28.3	18.3
44712 1999 TJ_{5}	15.4	X	156.36080	6.99886	347.14597	3.85408	0.1716620	0.30385466	2.1912510	20	1 30.3	18.5
44713 1999 TP_{5}	15.6	X	173.94030	248.15128	111.26870	1.73415	0.0059211	0.30671666	2.1775985	20	2 9.4	18.1
44714 1999 TS_{5}	15.5	X	128.96175	25.15654	337.22088	3.70014	0.1787146	0.30201499	2.2001403	20	1 10.4	18.2
44715 1999 TZ_{5}	15.6	X	203.60187	259.16195	21.13455	5.98719	0.1919384	0.30287524	2.1959723	20	—	—
44716 1999 TG_{6}	15.2	X	12.86225	259.03106	8.85491	4.37761	0.2229549	0.27351748	2.3504228	20	8 12.3	16.9
44717 1999 TY_{6}	15.0	X	74.82146	254.19270	14.07519	3.73859	0.1714425	0.28422131	2.2910345	20	11 4.8	18.3
44718 1999 TP_{8}	15.4	X	286.76441	258.84786	69.18433	2.57457	0.0626336	0.27025483	2.3693019	20	5 28.2	18.2
44719 1999 TP_{9}	15.6	X	267.22029	336.06231	18.85380	2.30609	0.2210428	0.27174163	2.3606518	20	5 14.3	18.8
44720 1999 TS_{9}	14.8	X	68.96678	273.00739	31.23374	5.68787	0.2068037	0.28769962	2.2725312	20	12 18.9	18.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44721 1999 TG_{10}	14.7	X	9.30555	160.21354	350.36011	2.25694	0.1333145	0.25569743	2.4583958	20	1 20.0	17.2
44722 1999 TQ_{10}	16.4	X	262.14197	277.16790	14.49900	2.58731	0.1639906	0.31258517	2.1502575	20	2 19.6	19.5
44723 1999 TQ_{12}	16.0	X	96.13150	293.61308	66.72802	3.34506	0.1715887	0.29733304	2.2231764	20	—	—
44724 1999 TU_{13}	15.6	X	36.37060	312.99077	36.13952	6.57724	0.1441357	0.28773724	2.2723331	20	—	—
44725 1999 TD_{14}	15.9	X	40.81477	140.18262	216.93737	5.71375	0.1367064	0.28874104	2.2670636	20	—	—
44726 1999 TT_{14}	15.0	X	348.40062	170.99150	49.08623	3.13217	0.1367999	0.26394868	2.4068908	20	3 22.5	17.2
44727 1999 TZ_{14}	15.1	X	76.74745	156.88694	182.34095	7.71409	0.2314465	0.29298631	2.2451110	20	—	—
44728 1999 TT_{15}	14.8	X	257.76807	216.08210	241.81278	13.11645	0.1365137	0.22848883	2.6498791	20	9 25.9	18.6
44729 1999 TF_{17}	15.3	X	147.62688	322.70968	117.12738	1.58169	0.1313147	0.26264081	2.4148746	20	5 11.3	18.7
44730 1999 TY_{17}	15.4	X	276.97878	335.40938	50.01027	4.55452	0.1890460	0.27397444	2.3478086	20	7 16.6	18.1
44731 1999 TF_{18}	15.8	X	221.80075	123.20114	225.98433	0.54230	0.2053351	0.31159980	2.1547883	20	3 23.3	19.0
44732 1999 TM_{18}	15.9	X	100.36524	261.23497	230.99759	2.15337	0.0923211	0.26529339	2.3987506	20	5 21.2	18.7
44733 1999 TW_{19}	15.3	X	23.04617	331.52154	243.55728	1.43669	0.1458340	0.26798200	2.3826795	20	5 24.8	17.2
44734 1999 TJ_{25}	15.5	X	263.23302	136.87701	210.25210	6.18760	0.1375593	0.27004494	2.3705294	20	5 11.3	18.5
44735 1999 TJ_{27}	14.5	X	323.15521	326.51493	358.03071	1.92767	0.0755078	0.22534630	2.6744578	20	7 16.8	17.7
44736 1999 TF_{30}	15.0	X	134.64277	117.13309	325.09869	1.62342	0.1646744	0.26369267	2.4084484	20	5 2.3	18.4
44737 1999 TW_{32}	15.1	X	173.07867	125.66556	196.76252	8.70819	0.1563180	0.20870271	2.8148202	20	1 15.5	19.7
44738 1999 TD_{35}	15.0	X	98.03186	45.11606	194.78716	24.05883	0.1998448	0.28577448	2.2827258	20	10 26.9	18.6
44739 1999 TV_{36}	15.9	X	235.55794	29.12816	290.28562	4.55283	0.2022972	0.31096785	2.1577066	20	2 24.9	19.3
44740 1999 TJ_{37}	14.1	X	256.38162	31.05366	130.72196	8.86479	0.1210222	0.24137916	2.5546782	20	12 28.9	17.1
44741 1999 TO_{38}	15.6	X	280.95825	304.47847	178.37020	5.41842	0.1255003	0.28892783	2.2660864	20	—	—
44742 1999 TK_{40}	15.4	X	153.61507	81.07929	70.16426	3.85701	0.0788654	0.27690928	2.3311902	20	8 22.9	18.6
44743 1999 TR_{48}	14.7	X	105.51585	7.41814	149.23064	2.57255	0.1445646	0.27010331	2.3701879	20	7 7.9	18.0
44744 1999 TX_{48}	15.1	X	2.92488	32.14874	146.83984	2.57505	0.1091654	0.26062119	2.4273341	20	2 19.2	17.6
44745 1999 TZ_{54}	16.2	X	32.93920	37.83892	212.01522	6.09930	0.0930637	0.27391140	2.3481688	20	7 29.1	18.9
44746 1999 TE_{61}	15.2	X	62.08213	278.32014	193.79192	7.33101	0.1883928	0.21147514	2.7901646	20	3 15.9	18.3
44747 1999 TN_{80}	14.5	X	358.11003	152.20865	39.78026	4.71219	0.1115191	0.26195031	2.4191164	20	3 2.6	16.9
44748 1999 TT_{86}	15.8	X	272.20572	190.08125	174.08348	2.73467	0.1062899	0.23003618	2.6379827	20	6 19.9	19.4
44749 1999 TY_{91}	15.7	X	328.02112	269.68979	120.17893	6.77241	0.1244174	0.28423661	2.2909522	20	11 13.8	17.8
44750 1999 TC_{94}	15.9	X	12.75651	124.68199	171.51655	6.37305	0.1486842	0.27986517	2.3147467	20	9 14.7	18.0
44751 1999 TS_{97}	14.9	X	73.45042	58.89066	89.65429	4.38813	0.1098664	0.26453640	2.4033246	20	5 10.0	17.7
44752 1999 TY_{99}	15.4	X	299.27128	307.75452	143.84993	8.01484	0.0742326	0.28684212	2.2770580	20	12 21.1	17.8
44753 1999 TJ_{102}	14.2	X	166.20887	57.67377	91.56924	15.64770	0.0285073	0.22873341	2.6479899	20	9 4.7	18.2
44754 1999 TJ_{105}	15.4	X	151.48563	309.27210	356.23302	5.29756	0.1969958	0.29820801	2.2188257	20	—	—
44755 1999 TN_{105}	16.1	X	114.36444	272.03976	17.29859	3.36864	0.0694486	0.29066203	2.2570639	20	—	—
44756 1999 TQ_{107}	16.0	X	298.67961	244.89363	241.02457	6.27599	0.0525026	0.29468929	2.2364532	20	—	—
44757 1999 TF_{113}	15.6	X	29.12789	28.81917	279.52593	3.87255	0.1656935	0.28408987	2.2917411	20	11 1.5	18.2
44758 1999 TH_{113}	15.3	X	229.09255	351.06268	242.18271	4.33793	0.1302776	0.30004959	2.2097375	20	—	—
44759 1999 TY_{113}	15.3	X	275.08385	65.37122	207.86270	6.35585	0.0955986	0.26380478	2.4077660	20	2 19.5	18.8
44760 1999 TJ_{114}	15.5	X	269.82448	260.73784	185.17178	5.10358	0.1097815	0.28303161	2.2974501	20	10 18.9	17.7
44761 1999 TF_{115}	15.2	X	8.36930	277.44290	275.89781	5.34640	0.0731339	0.26391620	2.4070883	20	3 18.7	18.0
44762 1999 TZ_{115}	14.7	X	180.19182	156.44419	351.32655	6.64792	0.0484248	0.27991025	2.3144982	20	9 18.7	17.5
44763 1999 TM_{116}	15.4	X	218.98765	32.61915	22.91126	1.47315	0.0509029	0.27287332	2.3541204	20	6 30.4	18.3
44764 1999 TG_{120}	14.9	X	130.39190	74.58772	331.12720	3.69530	0.1069403	0.30697555	2.1763740	20	2 28.5	17.5
44765 1999 TP_{122}	16.0	X	332.91676	246.66200	165.03535	5.34219	0.1457440	0.28634668	2.2796838	20	12 26.9	18.2
44766 1999 TM_{123}	15.0	X	160.59189	68.75812	54.96957	5.80155	0.1771527	0.27086493	2.3657428	20	7 24.2	18.8
44767 1999 TK_{124}	15.8	X	110.44489	247.03662	138.72574	3.46478	0.1523123	0.30166725	2.2018308	20	1 11.9	18.2
44768 1999 TR_{124}	14.7	X	287.62052	245.92969	301.58244	5.40139	0.1052944	0.30033817	2.2083218	20	—	—
44769 1999 TU_{130}	16.6	X	181.24925	290.90846	352.10568	3.46440	0.1539398	0.30139524	2.2031554	20	—	—
44770 1999 TA_{131}	15.7	X	106.11396	32.30003	197.81301	5.11426	0.1954277	0.28457749	2.2891224	20	10 20.4	19.1
44771 1999 TA_{135}	15.3	X	80.60766	306.88315	250.73921	2.21261	0.1350564	0.27311610	2.3527250	20	8 1.7	18.2
44772 1999 TM_{139}	15.9	X	46.70384	12.85604	209.31636	6.08203	0.0877596	0.27109563	2.3644005	20	7 9.9	18.7
44773 1999 TU_{140}	15.8	X	308.02020	16.53612	229.36962	4.29478	0.0730908	0.26091563	2.4255077	20	2 29.7	19.0
44774 1999 TK_{141}	16.1	X	170.01857	82.84042	228.63041	3.03198	0.1938779	0.30096881	2.2052359	20	—	—
44775 1999 TL_{148}	15.3	X	74.70766	346.91566	207.19133	6.68585	0.0515708	0.27223139	2.3578197	20	7 5.5	18.3
44776 1999 TM_{149}	15.8	X	204.72737	183.14710	255.26958	1.72349	0.1167322	0.27222509	2.3578560	20	7 8.7	19.3
44777 1999 TS_{151}	15.1	X	23.22382	204.98194	319.12436	3.89797	0.0288702	0.26020188	2.4299412	20	3 4.1	17.9
44778 1999 TK_{152}	15.4	X	333.75316	179.90923	196.87537	4.78553	0.1469776	0.28226012	2.3016346	20	11 3.9	17.2
44779 1999 TM_{153}	15.4	X	210.13686	305.30630	233.70543	6.55865	0.0465877	0.28759896	2.2730615	20	12 11.8	18.1
44780 1999 TN_{154}	15.9	X	140.76850	253.99031	79.18872	4.27908	0.1303403	0.29971803	2.2113669	20	—	—
44781 1999 TO_{154}	15.4	X	142.15798	295.14945	167.22869	6.27148	0.0835182	0.26638328	2.3922032	20	6 1.4	18.8
44782 1999 TK_{156}	15.3	X	102.42808	194.05090	83.06900	5.47633	0.1571628	0.28613120	2.2808282	20	12 13.1	18.8
44783 1999 TA_{164}	14.9	X	130.32427	95.78433	138.84124	7.55862	0.0753638	0.28278324	2.2987952	20	11 17.5	18.2
44784 1999 TQ_{165}	16.1	X	174.60631	323.23643	327.79354	6.01829	0.0217132	0.29896793	2.2150642	20	—	—
44785 1999 TF_{168}	16.2	X	173.47197	335.75834	291.67010	2.65291	0.1168823	0.29676326	2.2260212	20	—	—
44786 1999 TQ_{171}	15.5	X	16.51667	28.84636	167.18993	2.25505	0.0644121	0.26301001	2.4126141	20	4 9.6	18.2
44787 1999 TE_{172}	14.7	X	135.52195	186.45179	57.46027	5.65871	0.0912836	0.28566353	2.2833169	20	12 2.9	17.9
44788 1999 TS_{172}	15.2	X	352.58542	155.38176	288.95147	4.40336	0.1123248	0.29218598	2.2492089	20	—	—
44789 1999 TU_{172}	15.2	X	186.40630	280.88033	303.62408	4.51674	0.1208835	0.29063079	2.2572256	20	—	—
44790 1999 TV_{173}	14.3	X	53.29412	199.41254	51.93307	12.86539	0.1492858	0.22775579	2.6555619	20	9 14.3	18.0
44791 1999 TN_{176}	15.9	X	250.27914	260.32994	30.00009	2.43328	0.1860373	0.26134760	2.4228343	20	2 10.1	19.8
44792 1999 TK_{177}	15.0	X	274.71908	323.19547	204.53020	3.16424	0.1374890	0.24422516	2.5347927	20	—	—
44793 1999 TB_{178}	15.6	X	33.88901	111.63127	199.88767	6.78732	0.1394800	0.28252823	2.3001782	20	11 10.6	18.2
44794 1999 TP_{180}	15.2	X	242.96383	62.94103	192.65583	6.63473	0.0889728	0.25289650	2.4765143	20	—	—
44795 1999 TU_{180}	15.3	X	293.84554	188.05184	114.92124	3.43900	0.1919248	0.26801570	2.3824798	20	4 13.0	18.2
44796 1999 TY_{180}	14.6	X	246.50905	155.76444	198.14498	4.61971	0.1267867	0.26629578	2.3927272	20	5 2.0	17.8
44797 1999 TD_{181}	15.4	X	224.35924	261.53231	140.57900	2.74851	0.1859524	0.26789936	2.3831695	20	6 5.8	19.1
44798 1999 TL_{191}	14.7	X	132.18595	295.21526	304.92725	7.43482	0.2306583	0.28612366	2.2808683	20	11 22.6	18.7
44799 1999 TQ_{192}	15.4	X	28.19854	320.04368	298.48615	5.89251	0.0850977	0.27329329	2.3517080	20	8 3.6	17.8
44800 1999 TY_{194}	15.1	X	173.77262	347.88320	252.35845	2.59871	0.1114953	0.24153105	2.5536070	20	12 28.4	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44801 1999 TD_{200}	15.8	X	58.50401	304.76440	351.83138	3.64397	0.1603846	0.28397755	2.2923453	20	11 22.5	18.9
44802 1999 TG_{206}	16.0	X	334.21179	301.46922	23.83255	4.35549	0.1825699	0.27474480	2.3434178	20	8 9.8	17.6
44803 1999 TO_{206}	15.4	X	118.72265	288.70197	1.36818	3.60835	0.1726656	0.24263513	2.5458546	20	—	—
44804 1999 TO_{210}	14.2	X	234.03359	164.49353	315.77138	11.28302	0.1377728	0.22915861	2.6447133	20	9 24.6	18.2
44805 1999 TT_{214}	15.9	X	253.13369	139.60331	181.59200	6.55819	0.1257324	0.26596591	2.3947053	20	3 26.8	19.2
44806 1999 TW_{215}	15.0	X	330.99899	66.72285	130.71827	3.22133	0.1293253	0.25745033	2.4472241	20	1 21.6	18.0
44807 1999 TP_{217}	15.5	X	221.48225	132.96751	161.90741	3.92841	0.1688489	0.30538271	2.1839352	20	1 15.2	18.8
44808 1999 TM_{220}	15.8	X	106.67488	304.86031	316.04054	5.34058	0.1331772	0.28698031	2.2763270	20	11 24.8	19.3
44809 1999 TN_{221}	15.5	X	280.50230	300.53825	123.51340	4.70459	0.1230881	0.28064454	2.3104593	20	10 3.6	17.8
44810 1999 TR_{221}	14.8	X	147.34022	223.91060	142.71591	7.72062	0.1402641	0.30371897	2.1919036	20	1 31.8	17.8
44811 1999 TE_{222}	15.2	X	10.16064	137.60525	261.43546	5.57495	0.0997063	0.24366880	2.5386496	20	—	—
44812 1999 TH_{222}	15.5	X	252.31421	272.18583	284.21367	4.67532	0.1017275	0.29728402	2.2234209	20	—	—
44813 1999 TV_{222}	15.3	X	31.46818	196.19543	103.85508	6.63404	0.1405839	0.28171400	2.3046082	20	10 24.5	18.0
44814 1999 TX_{222}	15.6	X	63.96995	217.10892	118.61297	8.77326	0.1706321	0.28955653	2.2628050	20	—	—
44815 1999 TO_{223}	15.5	X	333.37360	325.54291	129.44654	4.84105	0.2032637	0.29114215	2.2545818	20	—	—
44816 1999 TB_{224}	15.2	X	289.63482	87.98293	330.58291	8.33111	0.2172336	0.27964925	2.3159381	20	9 21.3	17.1
44817 1999 TW_{234}	15.6	X	144.03569	195.02242	82.91104	4.92502	0.1579030	0.29453982	2.2372098	20	—	—
44818 1999 TQ_{236}	16.0	X	101.66039	197.64256	102.90705	5.35887	0.1525867	0.29025232	2.2591874	20	—	—
44819 1999 TS_{236}	15.4	X	144.82988	230.10086	95.78582	6.11059	0.1214067	0.29867170	2.2165285	20	—	—
44820 1999 TX_{236}	14.1	X	220.03456	111.34306	74.93100	13.16135	0.0962622	0.23954590	2.5676957	20	12 14.2	17.6
44821 Amadora	14.9	X	335.86212	88.94626	89.74384	12.07572	0.1032476	0.25383009	2.4704381	20	1 8.4	17.9
44822 1999 TW_{239}	14.9	X	9.51617	162.36198	73.69105	7.22039	0.0717105	0.26873969	2.3781989	20	5 27.2	17.4
44823 1999 TG_{242}	15.4	X	129.69756	32.27275	145.76198	8.88017	0.0356424	0.27459664	2.3442607	20	8 27.1	18.4
44824 1999 TH_{243}	15.4	X	304.32378	280.46182	185.94263	11.54502	0.0595986	0.24458166	2.5323290	20	—	—
44825 1999 TS_{243}	14.6	X	14.47524	138.08103	233.67727	23.51830	0.1714574	0.28413382	2.2915047	20	—	—
44826 1999 TH_{244}	15.8	X	96.27579	153.16585	16.04564	5.35981	0.0553390	0.27243955	2.3566185	20	7 2.5	18.8
44827 1999 TN_{247}	14.0	X	237.41818	352.38970	167.16817	5.47246	0.0837236	0.23740975	2.5830750	20	12 4.6	17.5
44828 1999 TR_{247}	15.7	X	253.25054	249.85015	195.27470	7.13378	0.0658168	0.27803089	2.3249165	20	9 26.3	18.5
44829 1999 TS_{247}	15.2	X	259.86337	206.15602	109.95830	4.99432	0.0653542	0.26342181	2.4100991	20	4 6.8	18.4
44830 1999 TT_{247}	16.5	X	94.31048	184.88824	173.51996	6.79819	0.2122858	0.29591251	2.2302857	20	—	—
44831 1999 TF_{248}	15.9	X	291.07447	185.96309	181.17281	6.54785	0.1290025	0.27394187	2.3479947	20	7 20.3	18.4
44832 1999 TJ_{248}	16.2	X	283.01728	186.69188	134.83033	2.89632	0.2190752	0.26907446	2.3762259	20	4 19.8	19.4
44833 1999 TL_{248}	14.1	X	295.29288	208.28088	101.50586	7.61794	0.0603547	0.26666945	2.3904915	20	5 17.1	17.0
44834 1999 TE_{256}	16.1	X	356.89340	221.46533	256.24381	3.05427	0.0244105	0.30102120	2.2049800	20	—	—
44835 1999 TS_{259}	15.7	X	48.79537	37.81375	139.74725	1.81642	0.1117600	0.26551316	2.3974267	20	5 12.2	18.0
44836 1999 TB_{262}	16.1	X	358.82113	278.46218	284.46965	1.60079	0.1251009	0.26182234	2.4199046	20	3 15.4	18.4
44837 1999 TM_{270}	14.4	X	85.75527	338.50999	293.09190	8.82864	0.0997152	0.23728240	2.5839992	20	11 3.1	18.3
44838 1999 TK_{272}	15.0	X	145.28326	311.33322	295.66303	5.63119	0.0961951	0.28863263	2.2676312	20	12 18.2	18.1
44839 1999 TU_{273}	14.4	X	202.39267	249.70735	291.49991	9.78249	0.0719593	0.23661311	2.5888696	20	11 17.5	18.1
44840 1999 TO_{284}	15.6	X	38.13558	191.83685	112.02228	7.19333	0.1565424	0.28178069	2.3042445	20	11 10.2	18.5
44841 1999 TP_{284}	16.0	X	20.67935	212.52542	92.82001	8.21646	0.1682273	0.27981036	2.3150490	20	10 20.7	18.6
44842 1999 TG_{285}	15.0	X	235.60382	180.83863	95.33331	7.93252	0.1225561	0.25534581	2.4606522	20	1 13.4	18.6
44843 1999 TX_{286}	16.0	X	84.70658	348.75121	241.88548	5.32350	0.0255187	0.27780579	2.3261722	20	9 5.4	19.0
44844 1999 TG_{288}	15.2	X	109.59219	89.41251	186.44063	6.49585	0.1309554	0.28789972	2.2714781	20	12 18.0	18.6
44845 1999 TE_{289}	15.4	X	264.34230	185.60293	172.57342	6.18152	0.0275794	0.22130406	2.7069265	20	6 13.6	19.1
44846 1999 TN_{290}	14.4	X	53.14211	38.20800	203.25304	12.48312	0.1150868	0.22499962	2.6772044	20	8 13.9	18.1
44847 1999 TA_{291}	14.5	X	104.29955	43.32550	209.85958	14.54654	0.1276725	0.23191649	2.6237047	20	11 5.2	18.5
44848 1999 TY_{291}	14.4	X	200.79972	293.77188	212.97437	12.02960	0.1354504	0.22340397	2.6899371	20	9 24.3	18.7
44849 1999 UE_{1}	15.3	X	61.46999	262.67416	62.73331	3.21827	0.1529139	0.28838710	2.2689181	20	—	—
44850 1999 UR_{1}	15.8	X	113.50092	117.90803	218.43681	3.22570	0.1860264	0.29511086	2.2343228	20	—	—
44851 1999 UE_{2}	15.1	X	50.32084	286.49134	72.68860	6.51542	0.2034772	0.28840993	2.2687984	20	—	—
44852 1999 UG_{2}	15.1	X	300.05809	175.10584	159.57006	2.77686	0.2235950	0.27303888	2.3531687	20	5 31.7	17.4
44853 1999 UR_{4}	14.9	X	179.03575	291.13637	167.02880	5.11863	0.0894233	0.22327328	2.6909867	20	7 5.5	19.0
44854 1999 UY_{5}	15.0	X	341.33318	327.67104	271.88169	5.83002	0.0744465	0.26429211	2.4048053	20	4 10.1	17.9
44855 1999 UF_{6}	16.0	X	84.51740	90.93180	292.01526	3.40161	0.0687175	0.29899302	2.2149403	20	—	—
44856 1999 UH_{6}	15.9	X	249.39445	136.59299	217.25723	2.45862	0.2009963	0.26876801	2.3780318	20	4 26.6	19.5
44857 1999 UW_{8}	15.2	X	291.31133	194.21946	209.44246	7.69041	0.1628580	0.27813104	2.3243583	20	9 9.8	17.4
44858 1999 UZ_{13}	16.2	X	125.02456	258.12844	105.82892	2.91577	0.1629253	0.30102312	2.2049706	20	1 4.5	18.5
44859 1999 UH_{14}	15.8	X	345.75118	251.74739	74.22212	5.69973	0.0481844	0.27692253	2.3311158	20	9 4.4	18.4
44860 1999 UC_{15}	15.9	X	195.17169	4.99551	48.39470	6.74037	0.1048609	0.26732014	2.3866108	20	5 25.0	19.3
44861 1999 UL_{15}	14.8	X	239.19346	61.34611	193.62870	4.79657	0.0715874	0.25315920	2.4748008	20	—	—
44862 1999 UM_{15}	14.7	X	168.61944	195.76567	30.25242	7.13516	0.1312324	0.28766813	2.2726971	20	12 12.7	18.0
44863 1999 UV_{15}	15.1	X	146.47546	26.66423	76.68412	5.04647	0.0551989	0.26706630	2.3881228	20	6 4.8	18.2
44864 1999 UJ_{23}	15.4	X	243.43360	107.69126	254.55217	5.03052	0.1203799	0.27056037	2.3675178	20	5 8.9	18.8
44865 1999 UO_{23}	14.6	X	256.37452	296.66346	218.73859	13.05438	0.1076794	0.24341959	2.5403821	20	12 21.9	17.8
44866 1999 UP_{27}	15.5	X	78.73613	208.18464	329.95065	1.47216	0.1454840	0.27194066	2.3594998	20	7 4.8	18.4
44867 1999 UN_{29}	15.4	X	287.58259	151.87247	69.86636	3.57265	0.1355208	0.25701058	2.4500148	20	—	—
44868 1999 UQ_{29}	15.1	X	197.05697	293.20023	28.57764	6.07566	0.1405953	0.25943168	2.4347482	20	2 2.9	18.9
44869 1999 UQ_{34}	15.6	X	17.80012	247.59222	38.44113	5.23904	0.1616332	0.27746577	2.3280722	20	9 12.8	17.8
44870 1999 UP_{35}	15.6	X	315.37211	60.54282	228.32855	6.24733	0.1165180	0.26810343	2.3819600	20	5 6.7	18.1
44871 1999 UR_{38}	14.5	X	45.66776	14.00920	248.08144	7.63543	0.1037538	0.27784975	2.3259268	20	9 6.1	17.4
44872 1999 UA_{41}	15.0	X	29.77615	335.43793	301.09437	5.86276	0.1059769	0.27823519	2.3237782	20	9 4.6	17.6
44873 1999 UF_{41}	15.9	X	6.88765	295.71650	116.26283	6.11840	0.1488658	0.28938630	2.2636923	20	—	—
44874 1999 UY_{44}	15.0	X	208.39403	199.47051	197.26244	4.81246	0.0132724	0.21712491	2.7415507	20	5 24.6	18.7
44875 1999 UO_{45}	15.1	X	97.43254	309.94494	287.02624	5.84756	0.0796268	0.27980035	2.3151042	20	10 7.4	18.4
44876 1999 UG_{46}	16.0	X	39.16124	326.41363	356.03050	6.58698	0.1411208	0.28471745	2.2883722	20	11 30.7	19.0
44877 1999 UK_{46}	15.5	X	53.64315	358.76032	270.43923	6.08859	0.0942363	0.27865983	2.3214169	20	9 27.2	18.5
44878 1999 UD_{49}	14.5	X	238.50845	16.53248	274.16573	5.06843	0.1308797	0.25932317	2.4354273	20	1 31.7	18.3
44879 1999 UP_{50}	15.5	X	52.53469	171.15356	123.82193	4.56518	0.1554495	0.28268269	2.2993402	20	11 15.2	18.6
44880 1999 UF_{51}	15.5	X	114.54627	305.10045	142.48584	6.86187	0.0727067	0.25974485	2.4327907	20	4 8.2	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44881 1999 UJ_{51}	15.8	X	313.07080	217.36561	120.34219	7.01753	0.1465611	0.27404970	2.3473787	20	7 13.6	17.8
44882 1999 UR_{51}	16.2	X	316.29314	198.29288	163.04468	7.08658	0.1241284	0.27674378	2.3321195	20	8 30.8	18.1
44883 1999 UW_{52}	14.5	X	244.29329	336.26108	184.35604	14.37594	0.0775968	0.23763117	2.5814702	20	12 15.7	18.2
44884 1999 UT_{56}	16.1	X	10.87041	30.66554	250.51568	6.39191	0.0940101	0.27519720	2.3408489	20	8 7.1	18.6
44885 Vodička	15.3	X	96.83214	270.93233	85.74720	4.61106	0.1715480	0.24655814	2.5187776	20	—	—
44886 1999 VF_{1}	15.1	X	196.64890	128.95588	247.62407	6.30933	0.2505224	0.26338279	2.4103371	20	4 5.6	19.4
44887 1999 VF_{5}	14.6	X	39.59179	198.79072	160.39864	2.30373	0.0772525	0.23931656	2.5693359	20	12 29.9	17.9
44888 1999 VJ_{5}	14.9	X	115.97310	6.91024	348.57492	3.79137	0.2161446	0.29742995	2.2226935	20	—	—
44889 1999 VC_{6}	14.9	X	158.92484	179.67688	207.54857	2.22164	0.1491671	0.30572120	2.1823229	20	3 12.4	17.8
44890 1999 VF_{7}	15.0	X	85.73653	189.71880	57.86336	3.60726	0.1673474	0.27995824	2.3142337	20	10 21.1	18.2
44891 1999 VB_{8}	15.9	X	188.22573	292.25904	151.69112	2.28628	0.1814385	0.26634993	2.3924029	20	6 26.0	19.7
44892 1999 VJ_{8}	12.9	X	353.09310	78.44668	292.21904	12.20946	0.2118501	0.22801304	2.6535641	20	11 20.4	15.7
44893 1999 VV_{8}	15.9	X	64.82802	268.03378	53.29166	5.34233	0.2551125	0.28777907	2.2721129	20	—	—
44894 1999 VK_{9}	15.2	X	79.87463	108.26559	233.36456	4.94689	0.1222670	0.29039317	2.2584568	20	—	—
44895 1999 VL_{9}	13.8	X	1.75900	356.65134	237.02249	17.99680	0.1168421	0.21521299	2.7577638	20	5 10.6	17.0
44896 1999 VB_{12}	13.3	X	262.71557	183.71393	337.22923	8.37298	0.1102294	0.24091306	2.5579722	20	—	—
44897 1999 VP_{12}	14.6	X	39.89966	267.03702	164.28704	3.52094	0.1430681	0.24665648	2.5181080	20	—	—
44898 1999 VA_{15}	15.5	X	146.54143	319.72229	195.42245	11.90352	0.1246795	0.22948740	2.6421866	20	8 11.9	19.8
44899 1999 VD_{15}	15.4	X	27.46034	303.13255	215.85590	2.80905	0.2120423	0.26125213	2.4234245	20	3 6.6	17.0
44900 1999 VG_{17}	15.0	X	126.31389	290.42791	279.67230	2.12877	0.2530798	0.23174219	2.6250202	20	10 7.7	19.7
44901 1999 VS_{18}	16.8	X	24.41312	284.92679	328.81891	1.57444	0.1809910	0.27377858	2.3489282	20	8 5.2	18.8
44902 1999 VJ_{19}	15.4	X	114.02978	273.21730	79.36217	4.75991	0.1710619	0.29569318	2.2313885	20	—	—
44903 1999 VR_{19}	15.5	X	75.53677	174.70981	205.47051	2.80570	0.1561010	0.29422421	2.2388093	20	—	—
44904 1999 VH_{21}	14.5	X	199.72255	223.81620	209.67420	11.12005	0.1721137	0.22213780	2.7001490	20	6 21.9	19.0
44905 1999 VS_{22}	15.0	X	358.15948	153.39654	247.25021	5.46002	0.1596601	0.28749271	2.2736215	20	—	—
44906 1999 VF_{23}	15.1	X	175.26956	300.24870	294.43358	3.14752	0.0887018	0.28871874	2.2671803	20	—	—
44907 1999 VM_{24}	14.0	X	351.15241	115.71778	261.11713	18.92247	0.0398709	0.28302906	2.2974639	20	11 22.5	16.8
44908 1999 VR_{24}	16.3	X	221.33524	145.89432	229.32872	1.13312	0.1523785	0.26479395	2.4017659	20	4 30.3	20.1
44909 1999 VV_{24}	14.8	X	39.10375	99.34605	252.29028	9.40023	0.2360723	0.28617114	2.2806160	20	—	—
44910 1999 VX_{24}	15.1	X	337.27031	193.68735	211.31679	3.74580	0.2084978	0.28298588	2.2976976	20	—	—
44911 1999 VJ_{25}	14.7	X	26.82832	76.55587	277.92054	3.46702	0.1470992	0.28332459	2.2958660	20	12 29.9	17.4
44912 1999 VN_{25}	14.7	X	358.95260	68.85287	320.15466	3.17053	0.1058314	0.28319803	2.2965500	20	12 31.6	17.1
44913 1999 VD_{26}	14.7	X	317.17873	223.09485	243.51384	5.55437	0.1005368	0.23944142	2.5684426	20	—	—
44914 1999 VN_{27}	15.6	X	295.31293	62.27003	9.44950	4.93361	0.1248885	0.28271190	2.2991819	20	11 8.4	17.6
44915 1999 VR_{27}	15.1	X	353.33061	92.28303	238.81696	4.67353	0.2138513	0.28053920	2.3110376	20	10 8.7	16.7
44916 1999 VL_{28}	16.6	X	24.02227	137.15934	255.54239	0.52361	0.1990211	0.28932438	2.2640153	20	—	—
44917 1999 VY_{29}	15.8	X	55.40643	91.37975	234.08125	5.90376	0.1412409	0.28533012	2.2850952	20	12 25.2	19.0
44918 1999 VV_{30}	14.0	X	311.27953	192.34568	54.47746	5.33834	0.1450882	0.25842047	2.4410955	20	2 29.5	17.1
44919 1999 VC_{31}	13.7	X	221.38568	195.50069	235.38058	3.84058	0.1230123	0.27030961	2.3689818	20	7 16.1	17.1
44920 1999 VK_{32}	15.8	X	266.94558	87.74792	203.06179	1.00053	0.1823323	0.26140072	2.4225060	20	2 25.5	19.4
44921 1999 VL_{32}	14.4	X	313.27534	200.31764	54.15303	4.42339	0.0476842	0.21238603	2.7821812	20	4 1.1	18.0
44922 1999 VE_{34}	15.7	X	316.91633	99.01977	236.09515	4.78525	0.1433779	0.27274969	2.3548317	20	7 16.5	17.9
44923 1999 VF_{34}	14.3	X	163.17046	93.61348	55.66552	5.89467	0.1480183	0.22296245	2.6934871	20	8 26.7	18.7
44924 1999 VN_{34}	14.9	X	38.36582	58.12447	250.24317	14.10955	0.1660476	0.23190826	2.6237669	20	11 2.7	18.4
44925 1999 VB_{36}	15.2	X	149.13036	149.40480	267.64227	1.37602	0.1754992	0.25921934	2.4360776	20	4 15.3	18.9
44926 1999 VC_{36}	14.5	X	232.26833	276.68992	253.17882	7.30872	0.1577547	0.23417718	2.6067917	20	11 28.6	17.9
44927 1999 VX_{36}	15.1	X	26.54566	107.99396	239.99639	5.86293	0.2092504	0.28416495	2.2913374	20	12 29.8	18.0
44928 1999 VJ_{37}	15.7	X	343.75353	83.56356	250.08153	4.94066	0.1590173	0.27548871	2.3391972	20	9 11.1	17.6
44929 1999 VR_{37}	14.1	X	299.19122	211.66552	72.53663	18.73706	0.1245285	0.21332338	2.7740252	20	4 17.2	18.1
44930 1999 VC_{39}	15.4	X	49.69424	9.72336	242.33452	6.10900	0.1107441	0.27242669	2.3566926	20	8 29.9	18.2
44931 1999 VD_{39}	15.4	X	342.05608	2.98896	242.07301	8.32766	0.0791156	0.26233155	2.4167721	20	4 20.3	18.2
44932 1999 VJ_{40}	15.4	X	345.92800	41.01650	246.87593	3.66252	0.1553956	0.27206758	2.3587660	20	7 1.9	17.1
44933 1999 VU_{44}	15.0	X	80.09180	336.36808	254.57854	7.20279	0.1448830	0.27835451	2.3231141	20	9 15.1	18.4
44934 1999 VV_{45}	15.9	X	25.78739	1.97365	354.00599	6.82564	0.1560412	0.28709341	2.2757291	20	—	—
44935 1999 VT_{49}	15.8	X	333.37022	80.05213	250.16792	3.23963	0.1738473	0.27597756	2.3364341	20	8 12.6	17.5
44936 1999 VD_{50}	15.2	X	230.98990	301.98556	350.38481	2.51811	0.1086893	0.30410543	2.1900461	20	1 23.3	18.1
44937 1999 VU_{50}	13.9	X	244.72767	308.70507	243.06374	10.99373	0.1050156	0.24118853	2.5560241	20	—	—
44938 1999 VV_{50}	15.1	X	125.63758	70.26388	266.68031	2.65599	0.1714695	0.29649189	2.2273793	20	—	—
44939 1999 VB_{52}	14.5	X	12.16887	3.77063	242.15483	8.51654	0.1189258	0.21964869	2.7205099	20	6 17.1	17.5
44940 1999 VH_{53}	14.3	X	40.20601	99.61966	78.24764	6.94295	0.0684452	0.25860423	2.4399390	20	4 25.1	17.0
44941 1999 VQ_{53}	15.6	X	320.38744	224.76013	27.74019	1.55799	0.1566694	0.26484381	2.4014645	20	3 16.8	18.2
44942 1999 VM_{55}	15.4	X	166.12289	237.78859	227.18420	4.37940	0.1802347	0.26764786	2.3846622	20	7 2.7	19.2
44943 1999 VB_{57}	15.4	X	129.98184	260.84197	204.79990	1.88743	0.1788564	0.26314973	2.4117600	20	5 30.6	19.1
44944 1999 VS_{58}	15.1	X	279.53295	282.69749	49.48627	6.52200	0.1177271	0.26823666	2.3811713	20	5 14.2	17.9
44945 1999 VG_{59}	15.5	X	44.85117	272.52108	227.87360	8.88733	0.1073980	0.25621497	2.4550841	20	3 6.2	18.3
44946 1999 VU_{61}	15.7	X	309.87704	231.17668	14.24967	0.85685	0.1312004	0.26099403	2.4250219	20	2 24.9	18.6
44947 1999 VK_{62}	14.2	X	312.02469	20.44796	228.90524	3.13147	0.1102346	0.26138468	2.4226051	20	3 5.7	17.1
44948 1999 VT_{63}	15.3	X	170.66143	321.27456	241.75833	1.42414	0.0979180	0.23471233	2.6028278	20	11 8.9	19.0
44949 1999 VX_{63}	14.8	X	269.64468	91.12146	50.31282	8.20449	0.1356117	0.23830365	2.5766114	20	12 18.6	17.7
44950 1999 VY_{65}	15.7	X	177.57145	208.31454	212.55819	5.27092	0.0707820	0.26494007	2.4008827	20	5 16.5	19.0
44951 1999 VD_{68}	13.7	X	197.34692	7.12714	227.81385	13.40932	0.1235078	0.24205860	2.5498955	20	—	—
44952 1999 VB_{71}	15.9	X	21.20846	111.90756	198.91390	2.12784	0.1804002	0.27962327	2.3160815	20	10 27.3	18.4
44953 1999 VB_{72}	14.8	X	149.94065	302.84729	112.04734	7.06044	0.1458450	0.25563141	2.4588191	20	4 15.5	18.6
44954 1999 VN_{72}	15.1	X	358.88299	62.91483	231.01693	5.70017	0.1195939	0.27474246	2.3434311	20	8 6.8	17.4
44955 1999 VS_{72}	14.6	X	131.18684	272.83210	259.25593	2.59482	0.1377497	0.22399354	2.6852149	20	8 20.4	18.7
44956 1999 VQ_{77}	15.7	X	216.09028	36.95336	312.96625	1.89276	0.1122286	0.26144213	2.4222502	20	3 24.6	19.2
44957 1999 VG_{78}	15.6	X	46.32132	279.71920	318.71709	4.22054	0.1550722	0.27447102	2.3449759	20	8 15.8	18.2
44958 1999 VT_{78}	15.6	X	37.49482	207.19870	13.29826	6.56961	0.0476461	0.26891746	2.3771507	20	6 17.2	18.4
44959 1999 VL_{82}	16.3	X	93.12798	219.70037	81.86219	1.81249	0.1746794	0.29036253	2.2586157	20	—	—
44960 1999 VJ_{86}	14.8	X	86.60272	130.42565	78.87767	7.70807	0.0687369	0.27364405	2.3496980	20	8 20.8	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
44961 1999 VS$_{86}$	15.3	X	4.32343	224.91290	147.89091	10.87824	0.0909570	0.23788342	2.5796449	20	12 3.6	18.6
44962 1999 VL$_{87}$	15.4	X	264.57998	104.57670	244.86031	4.82657	0.2189056	0.27048791	2.3679406	20	5 4.0	18.7
44963 1999 VZ$_{88}$	16.6	X	60.27221	104.77240	215.64378	5.53507	0.1418692	0.28644772	2.2791477	20	12 24.4	19.8
44964 1999 VK$_{90}$	15.1	X	338.97237	164.68449	32.84686	6.78078	0.0623692	0.25893360	2.4378695	20	2 15.5	18.0
44965 1999 VY$_{92}$	15.6	X	226.04230	289.50926	199.20913	6.65486	0.0601830	0.28266411	2.2994410	20	10 22.3	18.3
44966 1999 VD$_{93}$	15.4	X	132.38868	330.67455	192.38151	2.93099	0.1072335	0.27417855	2.3466432	20	8 12.5	18.7
44967 1999 VG$_{93}$	15.4	X	6.56204	194.75875	20.06605	3.13489	0.1181518	0.26605702	2.3941585	20	4 18.4	17.7
44968 1999 VC$_{97}$	16.1	X	207.47009	257.62645	187.52069	1.74602	0.0753433	0.27222843	2.3578368	20	7 24.4	19.2
44969 1999 VD$_{97}$	15.9	X	105.18380	172.50962	215.67394	5.11524	0.2403403	0.30057987	2.2071378	20	1 21.4	18.3
44970 1999 VJ$_{98}$	16.2	X	302.27897	222.53664	54.25802	3.18657	0.1194410	0.26464388	2.4026738	20	3 30.8	19.2
44971 1999 VA$_{100}$	15.9	X	275.79039	37.91917	226.59441	1.79809	0.1755951	0.25893784	2.4378428	20	2 2.2	19.4
44972 1999 VB$_{112}$	15.1	X	182.07251	152.96088	230.46376	0.55511	0.0782483	0.21132543	2.7914823	20	4 4.4	19.2
44973 1999 VV$_{112}$	16.5	X	273.39004	26.29947	317.86211	0.63558	0.1972013	0.26809855	2.3819889	20	5 10.5	19.8
44974 1999 VT$_{114}$	14.9	X	333.45090	58.68662	257.69554	9.13342	0.1676560	0.27604878	2.3360322	20	7 18.9	16.9
44975 1999 VD$_{145}$	14.6	X	157.37132	107.48548	285.13640	4.78921	0.0635878	0.21117694	2.7927907	20	3 16.7	18.7
44976 1999 VJ$_{146}$	15.8	X	3.78047	30.16441	194.80766	3.46793	0.1085149	0.26466189	2.4025648	20	4 30.1	18.2
44977 1999 VN$_{156}$	14.6	X	93.43019	279.61424	238.80114	7.60916	0.1454956	0.21544570	2.7557776	20	6 23.8	18.5
44978 1999 VN$_{157}$	15.4	X	246.54070	218.48368	225.16141	8.86372	0.1391363	0.27808913	2.3245918	20	8 29.8	18.4
44979 1999 VT$_{157}$	15.9	X	315.74062	196.10295	220.87848	7.46736	0.0846539	0.28480272	2.2879154	20	11 28.1	18.0
44980 1999 VW$_{157}$	15.7	X	270.94127	52.77037	258.32775	1.60480	0.1972842	0.26592118	2.3949738	20	3 24.0	19.0
44981 1999 VG$_{159}$	15.6	X	314.05591	39.55727	241.94287	5.46382	0.0884188	0.26705234	2.3882060	20	4 27.1	18.3
44982 1999 VD$_{160}$	14.5	X	357.47857	192.70381	358.88356	2.66955	0.1248314	0.26002130	2.4310661	20	2 26.9	16.9
44983 1999 VU$_{163}$	15.2	X	293.77619	46.30311	236.57896	7.27591	0.1081747	0.26418475	2.4054568	20	3 24.8	18.3
44984 1999 VC$_{164}$	15.5	X	57.09782	338.56288	336.66827	1.68536	0.1141650	0.28470887	2.2884182	20	12 10.6	18.4
44985 1999 VD$_{164}$	15.0	X	20.98996	245.75268	292.01192	2.48513	0.0240920	0.21164951	2.7886320	20	3 24.1	18.6
44986 1999 VT$_{164}$	15.6	X	7.51420	278.37644	43.53283	7.52875	0.1358468	0.27897016	2.3196949	20	10 14.6	17.8
44987 1999 VW$_{168}$	15.6	X	259.02294	82.35620	348.41420	1.50625	0.1164728	0.27534758	2.3399965	20	9 6.0	18.4
44988 1999 VR$_{172}$	15.8	X	76.69336	58.17453	32.91785	2.40992	0.0273189	0.25302573	2.4756710	20	2 13.3	18.7
44989 1999 VG$_{173}$	15.9	X	219.53970	185.72362	142.66143	1.73496	0.2060488	0.26159306	2.4213184	20	2 28.3	20.0
44990 1999 VD$_{174}$	14.3	X	353.98918	342.55476	314.82294	8.83455	0.0673657	0.22696619	2.6617174	20	7 29.3	17.5
44991 1999 VJ$_{174}$	14.5	X	315.28914	237.92666	27.47303	6.92644	0.0859290	0.26269342	2.4145521	20	4 8.1	17.3
44992 1999 VK$_{178}$	15.3	X	49.18002	177.13155	111.41046	6.14180	0.1145797	0.28135520	2.3065671	20	10 28.5	18.2
44993 1999 VP$_{178}$	16.3	X	48.11078	228.87739	144.95738	6.10571	0.1643932	0.29135312	2.2534933	20	—	—
44994 1999 VM$_{179}$	15.2	X	333.93667	24.64562	117.61301	10.09790	0.0591179	0.24745456	2.5126909	20	—	—
44995 1999 VS$_{184}$	15.8	X	8.74414	294.92138	136.39062	2.05969	0.0933688	0.29280155	2.2460554	20	—	—
44996 1999 VT$_{184}$	15.5	X	183.89719	110.16338	64.18576	3.61303	0.0430414	0.28264125	2.2995650	20	11 1.1	18.3
44997 1999 VX$_{184}$	16.2	X	95.96019	224.21465	105.94811	2.96726	0.1909021	0.29371483	2.2413971	20	—	—
44998 1999 VH$_{185}$	15.2	X	228.76390	33.67358	113.30331	2.77994	0.0453002	0.23398705	2.6082037	20	11 12.2	18.6
44999 1999 VQ$_{186}$	15.1	X	204.23446	289.90255	120.44987	2.96278	0.0777619	0.21999681	2.7176392	20	6 2.4	19.0
45000 1999 VR$_{186}$	14.7	X	111.68089	303.48955	191.89547	5.74608	0.0218276	0.21879741	2.7275618	20	5 31.3	18.4
45001 1999 VZ$_{186}$	15.1	X	322.32196	212.40655	75.74710	6.56935	0.2565941	0.27076559	2.3663214	20	4 26.4	17.2
45002 1999 VS$_{193}$	14.9	X	327.56894	357.80490	251.71673	6.46080	0.0575771	0.26447774	2.4036799	20	4 4.7	17.8
45003 1999 VL$_{194}$	16.0	X	124.56293	317.44492	158.88904	4.61280	0.0543599	0.26434966	2.4044563	20	5 26.7	19.2
45004 1999 VD$_{197}$	16.5	X	126.90029	194.29047	139.46623	5.41700	0.1957483	0.29892119	2.2152951	20	—	—
45005 1999 VR$_{198}$	15.9	X	126.54266	186.42213	105.52085	8.75937	0.1064725	0.29125530	2.2539978	20	—	—
45006 1999 VV$_{198}$	16.5	X	30.41698	175.89401	166.21600	6.93588	0.1370191	0.28548529	2.2842671	20	12 17.4	19.4
45007 1999 VD$_{201}$	14.6	X	48.49042	301.15906	127.21311	18.87411	0.1392647	0.20002284	2.8956739	20	—	—
45008 1999 VN$_{201}$	15.4	X	342.87453	355.56316	314.04658	3.04560	0.2160900	0.27444376	2.3451312	20	8 2.1	16.5
45009 1999 VR$_{204}$	13.8	X	266.42322	95.54103	348.48130	12.31069	0.1687049	0.22505815	2.6767402	20	9 17.9	17.3
45010 1999 VS$_{209}$	14.6	X	198.98875	216.29521	286.31711	5.79704	0.1498896	0.18252644	3.0778836	20	9 11.6	19.6
45011 1999 VC$_{217}$	15.3	X	333.71846	320.15067	141.70704	4.97812	0.1703424	0.24055307	2.5605236	20	—	—
45012 1999 VY$_{222}$	14.5	X	205.56079	334.85660	146.34884	14.80524	0.1490940	0.22602641	2.6690902	20	8 30.5	18.5
45013 1999 WK	13.5	X	266.09641	66.16240	52.73432	9.67016	0.1568682	0.23188068	2.6239749	20	11 8.6	16.4
45014 1999 WP	15.4	X	216.88860	288.14041	149.89740	1.32580	0.1681982	0.26976236	2.3721846	20	7 17.1	19.0
45015 1999 WQ	14.6	X	17.38747	103.15305	271.63821	10.61504	0.1828097	0.23698960	2.5861271	20	—	—
45016 1999 WV$_{2}$	14.2	X	142.10610	6.26181	111.65942	10.17775	0.0899196	0.21594821	2.7515008	20	6 21.3	18.3
45017 1999 WK$_{3}$	14.8	X	287.10186	156.10615	234.42261	12.37604	0.1832477	0.27435381	2.3456437	20	8 4.6	17.6
45018 1999 WS$_{3}$	15.2	X	347.37492	164.42266	227.43058	2.58380	0.2148673	0.28310139	2.2970726	20	—	—
45019 1999 WU$_{4}$	14.5	X	344.34947	33.31017	295.70597	6.14514	0.1302607	0.27442950	2.3452124	20	9 2.9	16.6
45020 1999 WC$_{5}$	12.9	X	176.98165	129.83662	91.12610	12.35610	0.0587879	0.18618146	3.0374684	20	12 2.3	17.4
45021 1999 WE$_{6}$	15.6	X	140.84498	351.03046	116.88533	3.49882	0.1179396	0.26419599	2.4053885	20	6 9.3	19.2
45022 1999 WF$_{6}$	15.5	X	264.41169	269.49174	80.05282	7.28028	0.1524406	0.26841885	2.3800936	20	5 14.8	18.6
45023 1999 WM$_{6}$	15.3	X	329.01624	234.25797	210.77183	3.04598	0.1037204	0.23822104	2.5772070	20	—	—
45024 1999 WN$_{7}$	15.0	X	288.50261	252.98061	79.59574	7.57322	0.2165665	0.26919848	2.3754960	20	5 13.0	17.8
45025 1999 WY$_{7}$	13.9	X	175.94580	237.62412	267.73559	12.00438	0.1787117	0.22023551	2.7156752	20	8 24.0	18.6
45026 1999 WE$_{8}$	16.1	X	336.21186	297.28412	90.04390	2.75680	0.2060123	0.28201825	2.3029503	20	12 2.3	17.7
45027 Cosquer	15.4	X	237.11710	234.59849	140.42272	5.12378	0.0625440	0.21779054	2.7359619	20	5 27.8	19.3
45028 1999 WD$_{9}$	14.3	X	185.84412	251.77744	203.83121	6.84780	0.0664883	0.26850247	2.3795995	20	7 11.7	17.6
45029 1999 WN$_{9}$	14.9	X	87.11739	196.87508	133.06971	1.99532	0.1452406	0.24114572	2.5563267	20	—	—
45030 1999 WJ$_{13}$	15.6	X	199.13655	148.23274	58.92166	3.12177	0.1150291	0.23868929	2.5738353	20	12 13.7	19.3
45031 1999 WR$_{13}$	14.3	X	18.42552	72.02683	102.98211	8.03969	0.1518556	0.20598382	2.8395355	20	3 25.2	17.4
45032 1999 WL$_{16}$	15.6	X	302.82370	273.82774	68.29079	4.85369	0.1290378	0.27284907	2.3542599	20	7 3.9	17.9
45033 1999 WL$_{20}$	15.0	X	328.91605	302.78466	206.32047	10.53219	0.1170744	0.24510610	2.5287155	20	—	—
45034 1999 XA$_{2}$	14.4	X	359.62234	281.60134	112.63782	14.21460	0.1835607	0.23740118	2.5831371	20	—	—
45035 1999 XB$_{2}$	14.3	X	32.73085	199.16099	169.84480	9.42606	0.0930473	0.23799879	2.5788112	20	—	—
45036 1999 XD$_{3}$	15.7	X	228.84045	200.22503	214.51801	7.09270	0.0844826	0.27018648	2.3697015	20	7 6.7	19.0
45037 1999 XP$_{4}$	15.0	X	109.35705	333.89976	106.24860	3.26261	0.0397055	0.20970885	2.8058097	20	3 20.9	18.9
45038 1999 XE$_{6}$	15.3	X	347.44055	273.50806	62.49421	7.38608	0.1430032	0.27689660	2.3312614	20	9 30.4	17.4
45039 1999 XW$_{7}$	15.4	X	47.15852	150.34135	259.91070	1.34919	0.1500697	0.24340525	2.5404818	20	—	—
45040 1999 XJ$_{8}$	14.0	X	112.78450	193.16302	93.06583	8.07358	0.1427744	0.23495276	2.6010519	20	12 23.7	18.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45041 1999 XE_{10}	15.1	X	205.98402	146.84817	322.66733	6.65680	0.0670636	0.27482874	2.3429406	20	8 26.4	18.2
45042 1999 XW_{10}	13.8	X	179.31100	289.71591	329.92304	4.85574	0.0832376	0.29243412	2.2479364	20	—	—
45043 1999 XG_{11}	15.3	X	259.26226	96.28862	290.96952	5.69191	0.1207901	0.27181544	2.3602244	20	7 4.0	18.2
45044 1999 XW_{12}	15.4	X	249.71518	201.53008	163.68114	6.88375	0.1121639	0.26619498	2.3933312	20	5 24.1	18.7
45045 1999 XD_{17}	14.6	X	0.89232	75.24397	272.91566	22.56067	0.2737468	0.27916857	2.3185957	20	12 3.5	17.0
45046 1999 XN_{20}	15.5	X	77.95141	302.57144	170.48216	2.83767	0.1295865	0.25781089	2.4449419	20	3 29.9	18.3
45047 1999 XO_{20}	14.9	X	320.03514	201.12845	65.19357	7.32430	0.0718339	0.26524040	2.3990700	20	4 20.7	17.7
45048 1999 XB_{21}	15.5	X	194.44705	358.32169	71.81738	4.95896	0.0911227	0.26864276	2.3787709	20	6 17.0	18.9
45049 1999 XL_{21}	15.8	X	37.54700	156.64412	180.74206	6.61729	0.1344983	0.28508849	2.2863862	20	12 19.4	18.8
45050 1999 XW_{21}	13.8	X	201.36721	299.02050	282.76714	12.01959	0.1205420	0.23107339	2.6300828	20	—	—
45051 1999 XP_{22}	15.0	X	327.22992	330.57656	66.03067	6.99484	0.1438228	0.28260182	2.2997789	20	11 21.0	16.8
45052 1999 XX_{23}	15.4	X	301.15497	130.97076	244.99369	5.79790	0.1370576	0.27704678	2.3304188	20	8 19.3	17.7
45053 1999 XK_{26}	14.4	X	127.05296	144.96936	344.35771	2.12459	0.1485695	0.26578863	2.3957700	20	6 25.4	17.9
45054 1999 XN_{26}	14.6	X	260.39446	298.15445	244.42492	1.72053	0.1274467	0.24335656	2.5408207	20	—	—
45055 1999 XT_{26}	15.4	X	52.40587	93.13000	242.57396	4.32283	0.1333146	0.28692507	2.2766192	20	—	—
45056 1999 XR_{27}	15.7	X	34.23319	284.87753	77.67993	5.55977	0.2221954	0.28793150	2.2713110	20	—	—
45057 1999 XO_{29}	15.5	X	265.78494	275.78512	96.12364	7.12558	0.1213857	0.26995481	2.3710570	20	6 20.7	18.2
45058 1999 XR_{29}	15.6	X	76.66672	246.67920	99.11354	4.34722	0.1797019	0.29065137	2.2571191	20	—	—
45059 1999 XT_{29}	15.3	X	346.92981	179.40306	205.71777	6.13832	0.1238239	0.28194321	2.3033590	20	12 8.8	17.5
45060 1999 XL_{30}	15.4	X	274.54367	138.28165	186.61386	6.72835	0.1240318	0.26437368	2.4043106	20	4 27.9	18.5
45061 1999 XL_{31}	13.9	X	330.11150	336.52921	133.87266	10.14236	0.0190692	0.23874982	2.5734003	20	—	—
45062 1999 XM_{31}	14.1	X	258.11209	60.83074	121.34935	9.52777	0.1157149	0.18772377	3.0208085	20	—	—
45063 1999 XR_{31}	13.9	X	77.96121	220.82458	119.52447	15.33051	0.1956975	0.23639793	2.5904404	20	—	—
45064 1999 XT_{31}	14.9	X	279.89504	191.00419	244.35562	1.26148	0.2333865	0.22632039	2.6667784	20	9 16.5	18.1
45065 1999 XU_{31}	14.3	X	300.68216	227.97026	296.61602	8.81375	0.0763210	0.23737505	2.5833267	20	—	—
45066 1999 XN_{32}	13.8	X	324.19157	317.49422	116.66606	16.33463	0.0778989	0.23158083	2.6262394	20	12 20.1	17.0
45067 1999 XW_{32}	14.1	X	314.76432	253.32362	280.63063	7.49138	0.1619756	0.19185831	2.9772523	20	—	—
45068 1999 XA_{34}	13.1	X	256.31220	238.10834	317.38973	9.53899	0.0592289	0.18711038	3.0274069	20	—	—
45069 1999 XB_{35}	13.1	X	157.70784	109.75736	123.99613	14.32003	0.0238107	0.17795083	3.1304207	20	11 28.3	17.8
45070 1999 XA_{36}	15.6	X	184.75650	316.49229	103.77875	3.04397	0.2012537	0.26393232	2.4069903	20	5 23.6	19.5
45071 1999 XA_{37}	15.7	X	3.89738	170.74371	205.64938	5.97306	0.1706808	0.28307514	2.2972146	20	12 30.9	18.2
45072 1999 XC_{37}	15.2	X	113.08617	175.23580	190.91697	7.87052	0.2111719	0.29852804	2.2172396	20	—	—
45073 Doyanrose	14.8	X	297.24033	21.90541	8.01488	6.90777	0.1476916	0.27639578	2.3340766	20	9 6.8	17.0
45074 1999 XA_{38}	15.5	X	148.86291	60.44623	276.19223	5.22516	0.2513296	0.29962474	2.2118259	20	1 8.1	18.6
45075 1999 XB_{38}	14.5	X	324.90789	177.47406	263.88489	9.75007	0.0355970	0.18917776	3.0053104	20	12 15.9	18.6
45076 1999 XQ_{38}	13.9	X	276.59991	346.21669	78.08845	9.38935	0.2918324	0.22468229	2.6797245	20	8 21.7	17.4
45077 1999 XU_{39}	15.4	X	359.18628	155.62898	186.13134	6.51709	0.1332002	0.27815082	2.3242481	20	10 28.3	17.6
45078 1999 XZ_{39}	14.4	X	44.10143	278.33055	110.46719	10.31270	0.1425066	0.24020112	2.5630241	20	—	—
45079 1999 XZ_{41}	13.7	X	332.48682	151.97756	240.04476	12.58508	0.0947517	0.23422501	2.6064368	20	11 5.1	16.7
45080 1999 XB_{43}	15.9	X	290.43503	0.98825	36.36045	2.49081	0.2204750	0.27711892	2.3300144	20	8 22.9	17.9
45081 1999 XE_{44}	15.6	X	33.06825	38.86103	271.50821	3.86453	0.1539827	0.28065674	2.3103923	20	11 7.7	18.2
45082 1999 XF_{44}	14.4	X	300.06431	253.38474	47.24738	7.04032	0.1323296	0.26653178	2.3913146	20	4 27.5	17.2
45083 1999 XQ_{44}	14.9	X	165.18952	9.64621	252.03257	6.52788	0.1052989	0.29005185	2.2602282	20	—	—
45084 1999 XG_{45}	15.7	X	341.40945	219.32730	106.32933	3.21867	0.2447176	0.27725350	2.3292603	20	9 1.2	16.7
45085 1999 XH_{45}	15.5	X	40.89842	280.68323	83.13805	6.29200	0.1460941	0.28831862	2.2692774	20	—	—
45086 1999 XE_{46}	14.6	X	260.48981	185.55951	48.48646	5.58766	0.1081591	0.29792081	2.2202514	20	—	—
45087 1999 XM_{46}	14.3	X	62.61736	357.38464	244.63220	13.14820	0.1590431	0.22478581	2.6789018	20	8 31.9	18.2
45088 1999 XX_{46}	14.3	X	301.71901	178.95341	255.99470	3.51929	0.1628641	0.18634106	3.0357337	20	10 24.9	17.9
45089 1999 XA_{47}	14.8	X	176.40496	249.66289	24.96355	2.76378	0.0326613	0.24454786	2.5325623	20	—	—
45090 1999 XA_{49}	13.6	X	151.18293	320.87633	249.71045	11.96432	0.2491968	0.22959171	2.6413862	20	10 24.9	18.4
45091 1999 XT_{49}	15.7	X	312.98967	242.78892	257.34478	1.49565	0.0150047	0.24395997	2.5366293	20	—	—
45092 1999 XD_{50}	16.1	X	225.89551	101.64306	233.78078	1.58624	0.2280875	0.26215421	2.4178619	20	3 11.3	20.3
45093 1999 XF_{52}	16.1	X	331.60026	72.56701	262.80348	2.25406	0.1853252	0.27526811	2.3404468	20	8 17.2	17.8
45094 1999 XX_{53}	14.8	X	308.79292	146.66748	176.57983	2.45590	0.0614672	0.22076183	2.7113572	20	6 23.0	18.1
45095 1999 XE_{55}	16.1	X	356.26964	236.89794	88.20246	1.26019	0.1234514	0.27616368	2.3353842	20	9 24.9	18.2
45096 1999 XE_{56}	15.3	X	307.92339	230.04719	246.99949	5.67316	0.0697436	0.23920132	2.5701611	20	—	—
45097 1999 XL_{59}	14.7	X	150.25025	211.08784	70.79486	1.84973	0.1418865	0.24207168	2.5498036	20	—	—
45098 1999 XK_{66}	15.7	X	301.74181	45.19258	254.08855	5.67237	0.1949430	0.26525102	2.3990060	20	4 14.7	18.6
45099 1999 XN_{66}	14.8	X	253.37437	208.13931	252.43938	0.85285	0.0272226	0.18194176	3.0844741	20	10 7.1	19.2
45100 1999 XZ_{66}	15.6	X	93.26589	247.40317	82.32644	5.32770	0.2539202	0.29102742	2.2551743	20	—	—
45101 1999 XA_{68}	15.5	X	84.10373	106.96357	228.79529	5.55619	0.1650249	0.28921614	2.2645802	20	—	—
45102 1999 XN_{69}	15.1	X	248.18751	34.12374	253.74390	6.58117	0.1769158	0.25535964	2.4605633	20	2 3.1	19.0
45103 1999 XJ_{70}	14.2	X	138.29419	1.16506	221.86884	1.42504	0.1057084	0.18166018	3.0876606	20	10 23.8	19.0
45104 1999 XY_{73}	14.6	X	236.10149	181.19987	243.88479	1.40641	0.2003605	0.27055541	2.3675468	20	7 16.8	18.1
45105 1999 XU_{74}	13.8	X	177.45794	78.20988	90.30573	9.93707	0.0501199	0.17937580	3.1138199	20	10 4.1	18.5
45106 1999 XX_{74}	13.8	X	83.82896	21.36045	254.25355	6.41451	0.0243822	0.22978562	2.6399000	20	10 28.5	17.3
45107 1999 XA_{75}	15.2	X	304.22063	241.45497	86.53979	3.16336	0.2238831	0.26928231	2.3750030	20	5 28.4	17.7
45108 1999 XD_{76}	13.5	X	54.32375	0.75716	257.71616	22.01184	0.0779858	0.17478826	3.1680683	20	8 19.1	18.3
45109 1999 XZ_{76}	13.8	X	93.49112	284.70024	259.54660	6.85718	0.0673607	0.16877530	3.2428743	20	7 14.1	18.4
45110 1999 XH_{77}	14.7	X	134.01037	233.98723	256.37245	7.84722	0.0787854	0.21519998	2.7578749	20	6 26.7	18.8
45111 1999 XJ_{77}	13.7	X	202.17880	266.31718	250.96449	8.19962	0.0401074	0.18079791	3.0974701	20	10 11.1	18.3
45112 1999 XG_{78}	14.8	X	134.26135	36.02431	253.79869	12.91018	0.0647422	0.24008372	2.5638596	20	—	—
45113 1999 XZ_{78}	15.2	X	103.43021	198.57315	80.15369	4.91557	0.1308347	0.23479663	2.6022048	20	12 5.5	19.3
45114 1999 XY_{81}	15.5	X	267.00099	214.62659	159.20293	2.15626	0.1164125	0.26827414	2.3809495	20	6 25.8	18.4
45115 1999 XN_{82}	15.7	X	278.05231	100.63519	223.64039	1.33267	0.2176699	0.26598617	2.3945837	20	4 16.4	19.0
45116 1999 XE_{83}	15.4	X	23.73577	235.92755	193.04913	2.54615	0.1660613	0.24179277	2.5517640	20	—	—
45117 1999 XA_{85}	14.8	X	124.47485	223.29644	269.27791	6.59344	0.1649272	0.21220355	2.7837760	20	6 26.8	19.2
45118 1999 XZ_{85}	13.7	X	174.07709	83.73244	107.15317	8.34094	0.0786865	0.17868664	3.1218209	20	10 24.7	18.6
45119 1999 XA_{86}	12.9	X	153.43539	307.83586	277.30305	9.35186	0.1945802	0.17849040	3.1241087	20	11 6.9	18.4
45120 1999 XX_{86}	13.4	X	193.95357	108.10618	285.74911	8.59131	0.2223024	0.21263763	2.7799862	20	4 25.5	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45121 1999 XZ_{86}	14.0	X	228.04674	221.95469	285.33740	11.00570	0.1877950	0.22736134	2.6586324	20	10 15.8	18.2
45122 1999 XB_{88}	14.3	X	271.06762	317.01975	258.99853	11.52743	0.1229121	0.24362019	2.5389873	20	—	—
45123 1999 XH_{88}	13.6	X	329.05618	7.98232	269.08049	8.20194	0.1202074	0.21261234	2.7802066	20	5 12.9	16.9
45124 1999 XS_{88}	13.7	X	82.05117	16.37651	265.90409	6.91239	0.1725499	0.22901212	2.6458410	20	11 20.6	17.8
45125 1999 XA_{89}	15.1	X	124.28788	213.23122	110.85305	9.65274	0.1787177	0.24167045	2.5526249	20	—	—
45126 1999 XB_{89}	14.2	X	238.97942	325.60953	261.16940	9.30576	0.0485873	0.19285917	2.9669428	20	—	—
45127 1999 XS_{89}	14.2	X	231.04043	71.51964	103.13685	11.92508	0.0960264	0.18420579	3.0591483	20	12 2.7	18.7
45128 1999 XC_{91}	15.5	X	231.43647	196.21286	198.70474	0.49905	0.1808259	0.26530974	2.3986521	20	6 3.5	19.0
45129 1999 XJ_{91}	14.1	X	123.09309	130.00906	304.50308	0.99960	0.0615985	0.20578024	2.8414080	20	3 31.8	18.2
45130 1999 XQ_{91}	14.0	X	193.64777	197.26383	138.94311	2.54290	0.2038463	0.25188175	2.4831612	20	2 17.4	18.2
45131 1999 XE_{92}	14.5	X	347.49592	83.02084	264.75615	13.85916	0.1720839	0.22792912	2.6542154	20	9 25.5	17.6
45132 1999 XJ_{93}	14.3	X	320.94008	208.49810	278.53429	11.73632	0.2506148	0.23728438	2.5839848	20	—	—
45133 1999 XM_{93}	14.5	X	320.91414	81.76490	304.87247	3.18768	0.1215433	0.22677411	2.6632201	20	10 5.3	17.4
45134 1999 XN_{93}	13.8	X	306.76142	234.23346	101.11488	11.56147	0.2254269	0.21875772	2.7278917	20	6 12.8	16.8
45135 1999 XN_{94}	14.3	X	81.46998	282.65349	111.03644	15.44556	0.1706141	0.24357849	2.5392771	20	—	—
45136 1999 XO_{94}	13.8	X	217.56053	40.75896	113.45205	17.75796	0.1709695	0.17787494	3.1313110	20	10 21.8	19.0
45137 1999 XH_{96}	15.1	X	24.62145	110.84231	275.84373	4.06239	0.1795892	0.28778194	2.2720978	20	—	—
45138 1999 XC_{97}	15.4	X	21.22366	279.74311	59.97021	4.89136	0.1995640	0.28165191	2.3049469	20	12 9.9	18.0
45139 1999 XP_{97}	13.5	X	306.50565	228.07821	66.17339	10.19729	0.1284859	0.21526830	2.7572914	20	5 3.0	16.9
45140 1999 XW_{98}	14.3	X	142.43146	236.89571	263.39026	12.29860	0.1014918	0.21751903	2.7382381	20	7 18.5	18.6
45141 1999 XZ_{100}	15.2	X	199.53060	110.23323	283.07652	7.87641	0.2356817	0.26248225	2.4158470	20	4 28.2	19.5
45142 1999 XJ_{102}	15.7	X	267.88068	78.18849	301.29475	1.32752	0.2243212	0.27024069	2.3693846	20	6 18.1	18.9
45143 1999 XO_{103}	14.7	X	191.07728	33.75105	33.78947	2.18093	0.0804215	0.21393230	2.7687589	20	6 9.2	18.9
45144 1999 XA_{104}	14.7	X	219.38244	211.36183	301.09433	5.34230	0.0463775	0.23192985	2.6236040	20	11 3.7	18.4
45145 1999 XN_{105}	14.5	X	199.66947	359.97360	40.57213	6.22387	0.1672528	0.26398904	2.4066455	20	5 11.2	18.1
45146 1999 XC_{106}	15.1	X	196.54710	163.67416	250.16035	0.40186	0.1823417	0.26250493	2.4157078	20	5 25.5	18.9
45147 1999 XA_{108}	15.8	X	54.47406	225.24352	68.83819	7.23519	0.2051405	0.28304317	2.2973876	20	11 21.5	18.9
45148 1999 XD_{109}	15.0	X	252.26086	54.44744	159.55006	2.81456	0.0797435	0.24675070	2.5174670	20	—	—
45149 1999 XN_{110}	14.9	X	102.90051	15.52981	283.04645	6.21196	0.1394840	0.28966722	2.2622286	20	—	—
45150 1999 XP_{110}	14.0	X	107.09724	287.19781	250.98258	11.15216	0.1202549	0.22212866	2.7002231	20	7 29.5	18.2
45151 1999 XB_{111}	14.7	X	318.63562	270.12527	98.18745	6.33883	0.0880391	0.27713061	2.3299488	20	9 22.1	17.1
45152 1999 XO_{112}	14.6	X	123.98514	285.14671	331.75426	22.45838	0.2025530	0.28781059	2.2719470	20	12 6.2	18.9
45153 1999 XD_{113}	13.4	X	225.11094	255.39420	269.12960	23.55062	0.2168988	0.28283061	2.2985385	20	11 12.9	16.8
45154 1999 XL_{113}	14.2	X	239.12724	213.04229	332.11552	12.82117	0.1068590	0.24106017	2.5569314	20	—	—
45155 1999 XW_{113}	14.1	X	280.72945	284.17685	327.14249	12.25285	0.1639190	0.25716417	2.4490392	20	1 26.2	17.7
45156 1999 XV_{114}	13.3	X	108.99201	234.93041	322.43808	11.91404	0.1027380	0.22475745	2.6791271	20	8 26.3	17.3
45157 1999 XA_{117}	14.9	X	249.30418	147.11435	269.97380	5.72700	0.1109016	0.27341463	2.3510122	20	8 2.1	17.9
45158 1999 XJ_{117}	15.8	X	78.42451	352.49002	20.31461	5.60400	0.2528867	0.29515213	2.2341145	20	—	—
45159 1999 XQ_{119}	15.1	X	91.21808	187.58010	291.88236	5.19834	0.1163791	0.25912010	2.4366995	20	4 22.1	18.2
45160 1999 XS_{123}	15.1	X	340.19416	40.77077	326.17689	6.45188	0.1515930	0.28058558	2.3107829	20	10 28.2	17.1
45161 1999 XX_{123}	15.3	X	72.57450	356.79357	272.96251	11.72677	0.1379716	0.27973015	2.3154915	20	10 27.9	18.8
45162 1999 XX_{124}	14.7	X	42.37958	13.08238	269.23581	9.15866	0.0117927	0.27576565	2.3376309	20	9 13.8	17.8
45163 1999 XE_{127}	14.3	X	315.22871	326.58418	4.95916	6.44913	0.1126805	0.27334420	2.3514160	20	7 14.4	16.7
45164 1999 XK_{127}	15.8	X	250.16475	187.26861	163.01187	9.15780	0.3513247	0.26910514	2.3760453	20	4 12.7	20.0
45165 1999 XS_{128}	14.4	X	38.99095	30.13535	300.84470	6.74895	0.1732064	0.23447638	2.6045737	20	12 5.6	18.0
45166 1999 XZ_{128}	16.0	X	106.02920	358.39143	350.58634	5.29890	0.2011359	0.29492521	2.2352604	20	—	—
45167 1999 XG_{129}	15.0	X	9.73236	330.58684	337.05918	6.65269	0.0579193	0.27435603	2.3456311	20	9 12.2	17.5
45168 1999 XG_{130}	16.1	X	300.79031	33.85737	324.03869	5.59570	0.1418112	0.27230672	2.3573848	20	7 23.7	18.3
45169 1999 XQ_{132}	14.2	X	188.35866	195.56240	296.90526	13.40207	0.0808701	0.27122405	2.3636541	20	8 29.4	17.7
45170 1999 XF_{133}	14.2	X	69.36137	297.18784	331.80592	11.21963	0.2147506	0.22523653	2.6753267	20	10 22.1	18.4
45171 1999 XB_{134}	14.4	X	147.50887	180.30094	305.53486	16.46557	0.2164268	0.21403034	2.7679133	20	7 14.0	19.1
45172 1999 XG_{134}	14.0	X	254.18324	110.75907	299.01953	23.67269	0.1621772	0.26973447	2.3723481	20	7 22.4	16.9
45173 1999 XU_{136}	15.2	X	207.82017	286.87295	123.98565	5.86348	0.2025134	0.26685432	2.3893874	20	6 1.2	19.1
45174 1999 XO_{137}	15.5	X	44.63550	182.21872	149.05548	8.63515	0.1949662	0.28515397	2.2860362	20	12 27.5	18.7
45175 1999 XB_{140}	15.9	X	285.01080	282.58620	112.00732	2.80839	0.2393097	0.27305568	2.3530721	20	8 2.9	18.2
45176 1999 XQ_{140}	15.6	X	61.51830	220.78248	108.73560	6.03674	0.2566069	0.23348978	2.6119055	20	—	—
45177 1999 XS_{140}	14.0	X	164.93028	77.27716	113.12000	3.86213	0.1395087	0.17632399	3.1496462	20	10 11.6	19.0
45178 1999 XW_{143}	15.6	X	253.89879	77.42453	280.48186	4.35626	0.2225701	0.26526032	2.3989500	20	5 2.9	19.2
45179 1999 XQ_{144}	14.3	X	286.97019	13.04141	277.37203	13.49971	0.0564040	0.26015060	2.4302605	20	3 29.6	17.8
45180 1999 XK_{145}	15.4	X	237.07500	33.89043	227.95322	5.70909	0.1190103	0.25276077	2.4774008	20	—	—
45181 1999 XZ_{146}	15.9	X	48.50983	232.18797	80.62803	4.20302	0.1045238	0.28173759	2.3044795	20	11 25.6	18.8
45182 1999 XC_{147}	15.8	X	314.42040	57.18844	240.04076	1.88226	0.1665062	0.26821962	2.3812721	20	5 9.3	18.3
45183 1999 XG_{153}	15.4	X	254.07418	283.02423	30.06088	2.79114	0.1934886	0.26123813	2.4235111	20	3 12.2	19.0
45184 1999 XL_{155}	15.1	X	331.72130	84.74423	232.52106	8.64089	0.2483399	0.27235374	2.3571135	20	7 7.8	16.7
45185 1999 XM_{157}	15.3	X	347.01568	161.29684	213.40627	3.91492	0.1565992	0.27999269	2.3140439	20	11 27.5	17.2
45186 1999 XK_{158}	15.4	X	112.65304	257.97060	100.35100	7.54837	0.0998499	0.24667603	2.5179750	20	—	—
45187 1999 XY_{158}	14.7	X	319.45578	88.01296	215.75190	4.37944	0.0368594	0.21620367	2.7493330	20	6 14.7	18.2
45188 1999 XK_{159}	14.7	X	54.37444	120.60114	234.10689	6.29471	0.2049490	0.23841380	2.5758177	20	—	—
45189 1999 XC_{160}	13.8	X	210.80457	302.23110	257.18452	13.31834	0.1151619	0.23319078	2.6141377	20	12 15.9	17.6
45190 1999 XN_{161}	15.3	X	339.56328	124.03506	316.32112	2.55740	0.0693088	0.23880460	2.5730067	20	—	—
45191 1999 XU_{163}	13.4	X	158.16814	46.92479	107.88205	17.94383	0.1007464	0.17035662	3.2227754	20	8 25.1	18.6
45192 1999 XW_{163}	14.6	X	356.85437	147.06120	306.66844	10.75619	0.1832976	0.23872527	2.5735768	20	—	—
45193 1999 XD_{165}	14.2	X	61.26817	107.82775	323.25175	12.92227	0.2175385	0.24485642	2.5304342	20	1 17.5	16.5
45194 1999 XJ_{165}	14.3	X	29.84365	111.34241	324.37860	11.98741	0.1706131	0.24006637	2.5639831	20	—	—
45195 1999 XT_{166}	14.4	X	243.76016	30.42186	12.99214	6.89540	0.1202753	0.27058661	2.3673648	20	7 7.5	17.7
45196 1999 XV_{166}	15.2	X	67.43909	83.65692	286.89727	7.17439	0.1042029	0.29160761	2.2521820	20	—	—
45197 1999 XY_{167}	14.3	X	196.69621	96.26865	36.19340	5.89401	0.1148331	0.22515209	2.6759956	20	9 9.0	18.3
45198 1999 XF_{169}	15.3	X	106.35857	76.55697	296.81971	5.99399	0.1765255	0.29625540	2.2285644	20	—	—
45199 1999 XF_{170}	13.7	X	200.94505	277.53835	282.31969	12.64106	0.1356020	0.23328543	2.6134306	20	12 2.9	17.7
45200 1999 XS_{170}	14.9	X	358.07208	118.39830	338.83003	3.82720	0.2198902	0.24132673	2.5550482	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45201 1999 XT_{170}	13.5	X	311.45404	202.97053	69.80123	10.10082	0.0619464	0.21037943	2.7998442	20	4 22.8	17.2
45202 1999 XA_{171}	14.5	X	197.61117	19.75484	52.20922	6.40155	0.0654417	0.21615460	2.7497490	20	6 23.0	18.5
45203 1999 XM_{171}	15.1	X	43.93362	143.42000	296.33922	6.36482	0.1673418	0.24512710	2.5285711	20	—	—
45204 1999 XZ_{172}	14.4	X	145.46648	152.96724	307.39106	8.31096	0.1193492	0.21183686	2.7869876	20	6 3.0	18.8
45205 1999 XJ_{173}	13.3	X	203.57339	204.84195	318.87408	9.08742	0.0680116	0.22729451	2.6591536	20	10 24.0	17.3
45206 1999 XK_{174}	14.7	X	234.60731	78.93337	301.18804	7.80455	0.2297893	0.26447189	2.4037154	20	5 11.7	18.6
45207 1999 XH_{175}	14.3	X	74.30519	179.60455	302.16781	13.38005	0.3021166	0.20395150	2.8583678	20	5 1.2	18.4
45208 1999 XQ_{175}	14.5	X	61.20335	68.89569	324.44274	6.39966	0.1756203	0.28989536	2.2610415	20	—	—
45209 1999 XT_{178}	15.5	X	294.62850	330.54477	23.23932	2.76540	0.2554885	0.26916471	2.3756948	20	6 13.8	18.0
45210 1999 XW_{178}	13.8	X	283.67337	293.09864	84.61003	17.93584	0.1177942	0.17062103	3.2194450	20	7 19.9	18.3
45211 1999 XF_{179}	14.6	X	144.26159	52.71105	65.83089	9.36251	0.1032627	0.21205212	2.7851011	20	6 24.5	18.8
45212 1999 XP_{180}	14.1	X	23.98328	76.50547	357.66877	13.07341	0.1670290	0.23913007	2.5706715	20	—	—
45213 1999 XS_{181}	14.4	X	196.46232	324.32712	280.53462	14.20796	0.1187463	0.24268952	2.5454742	20	—	—
45214 1999 XW_{181}	15.5	X	277.43543	40.88541	354.83139	6.74455	0.1137518	0.27418809	2.3465888	20	8 16.3	18.1
45215 1999 XB_{183}	15.3	X	58.10670	28.28735	316.22262	5.84188	0.2092175	0.28788729	2.2715435	20	—	—
45216 1999 XP_{183}	14.1	X	29.10379	299.33290	303.05240	11.85232	0.1642462	0.21780340	2.7358542	20	7 19.3	17.2
45217 1999 XL_{186}	14.6	X	149.27657	294.45233	285.91207	13.67741	0.1766731	0.22977956	2.6399465	20	11 2.9	19.2
45218 1999 XQ_{186}	14.9	X	137.55549	311.43074	2.53170	6.60934	0.1559180	0.24437110	2.5337834	20	—	—
45219 1999 XE_{187}	14.5	X	311.28039	71.57175	291.81589	22.09846	0.0309807	0.27056408	2.3674962	20	8 20.0	17.7
45220 1999 XK_{188}	14.5	X	12.58156	67.36321	305.41110	6.30129	0.1369519	0.28353905	2.2947082	20	—	—
45221 1999 XQ_{188}	14.6	X	179.71165	148.78714	309.44594	6.85613	0.0645035	0.26667059	2.3904847	20	7 9.9	18.0
45222 1999 XY_{194}	13.4	X	239.11441	146.37700	300.70691	12.71965	0.1283317	0.22436826	2.6822243	20	8 20.7	17.3
45223 1999 XF_{200}	14.7	X	229.91994	10.54757	324.12040	6.21763	0.1649535	0.25919839	2.4362088	20	3 15.6	18.5
45224 1999 XO_{209}	13.7	X	26.26056	180.27125	311.29240	12.95542	0.2766098	0.19993687	2.8965039	20	2 6.9	15.9
45225 1999 XZ_{212}	15.6	X	282.22288	254.24847	141.72177	7.38139	0.1182503	0.27471249	2.3436015	20	8 22.2	17.9
45226 1999 XG_{213}	15.5	X	16.86648	205.13437	142.08284	7.79715	0.1362877	0.28122573	2.3072749	20	12 5.5	18.3
45227 1999 XH_{213}	15.3	X	344.88621	240.90024	182.95538	7.63879	0.0972176	0.28534113	2.2850364	20	—	—
45228 1999 XJ_{214}	15.1	X	49.93721	133.83837	221.34406	6.70759	0.2052073	0.23818128	2.5774939	20	—	—
45229 1999 XS_{214}	14.8	X	230.44281	297.61433	3.45717	6.13212	0.1288447	0.25577953	2.4578697	20	2 9.4	18.6
45230 1999 XV_{214}	15.5	X	148.32589	321.39165	127.98864	6.58825	0.1889488	0.26033611	2.4291059	20	5 29.0	19.5
45231 1999 XT_{215}	14.5	X	205.77833	188.83508	234.18070	9.48802	0.1040309	0.21494115	2.7600885	20	6 18.2	18.8
45232 1999 XZ_{215}	14.2	X	24.52003	44.21536	283.01422	10.67820	0.2027056	0.22828454	2.6514598	20	11 12.7	17.6
45233 1999 XK_{216}	14.8	X	214.83669	288.22634	105.09990	7.25857	0.0522133	0.21273044	2.7791775	20	5 26.1	18.8
45234 1999 XA_{228}	14.7	X	154.08997	350.64121	91.71986	7.24567	0.1135081	0.26577055	2.3958786	20	5 21.3	18.1
45235 1999 XD_{228}	14.2	X	46.54570	288.54863	99.02287	11.38945	0.0949210	0.19001245	2.9965028	20	—	—
45236 1999 XP_{229}	15.2	X	357.47352	1.39515	2.66401	7.23729	0.1231920	0.28231218	2.3013516	20	11 23.5	17.7
45237 1999 XV_{229}	15.7	X	4.46797	47.98868	337.11282	6.69971	0.1197667	0.28559274	2.2836942	20	—	—
45238 1999 XM_{230}	14.8	X	203.43081	295.45382	330.27091	5.35654	0.1608640	0.29787719	2.2204681	20	—	—
45239 1999 XV_{231}	14.4	X	215.70132	341.08095	78.31877	10.10821	0.1412579	0.21417081	2.7667029	20	6 21.6	18.6
45240 1999 XL_{233}	14.3	X	102.00925	130.65052	146.32131	14.35134	0.1652198	0.23576851	2.5950487	20	12 6.6	18.7
45241 1999 XE_{238}	15.8	X	218.12077	164.97961	220.59665	1.84709	0.2196372	0.26286874	2.4134784	20	5 7.2	19.8
45242 1999 XT_{241}	15.9	X	259.94604	181.27980	202.48658	6.04248	0.1356040	0.27078314	2.3662192	20	6 26.9	19.1
45243 1999 XB_{242}	15.0	X	205.10692	314.71682	280.33028	7.96996	0.0472401	0.24258380	2.5462137	20	—	—
45244 1999 XC_{242}	15.1	X	272.36168	163.43776	338.73126	5.33371	0.0847332	0.23790513	2.5794880	20	12 31.1	18.2
45245 1999 XN_{242}	14.1	X	195.19433	171.76450	222.60061	16.17304	0.0301142	0.20925125	2.8098987	20	5 3.6	17.9
45246 1999 XF_{245}	15.4	X	275.85466	339.29863	149.06201	7.62779	0.0119335	0.23690837	2.5867182	20	12 24.3	18.9
45247 1999 XY_{245}	15.6	X	340.40123	174.08730	162.39183	8.00516	0.1373291	0.27499560	2.3419928	20	9 10.9	17.4
45248 1999 XO_{258}	14.0	X	167.37768	24.47464	196.25675	25.77152	0.2048205	0.23371235	2.6102470	20	11 23.1	18.7
45249 1999 XZ_{259}	15.5	X	67.02418	3.51542	308.79960	2.32634	0.0485070	0.22995464	2.6386063	20	11 27.8	19.0
45250 1999 YJ	14.4	X	316.82789	337.30515	114.65127	32.89967	0.2155035	0.23624815	2.5915352	20	—	—
45251 1999 YN	14.4	X	279.45444	293.83156	121.38908	22.89880	0.3163374	0.27593113	2.3366962	20	8 11.7	16.9
45252 1999 YY_{1}	15.5	X	144.52677	169.69793	59.89898	6.62813	0.2288327	0.23466609	2.6031698	20	11 14.6	20.0
45253 1999 YU_{4}	14.2	X	345.48626	358.92521	295.39216	7.21842	0.1980976	0.21544275	2.7558027	20	7 6.2	16.7
45254 1999 YS_{12}	13.7	X	196.04602	111.95806	99.49137	2.95042	0.1240411	0.18245391	3.0786993	20	12 3.9	18.5
45255 1999 YK_{13}	14.4	X	122.84515	124.93633	91.98918	2.65657	0.1795514	0.17471697	3.1689301	20	10 6.2	19.6
45256 1999 YM_{13}	14.8	X	198.20268	256.72112	132.28567	22.60435	0.2427998	0.26562906	2.3967294	20	5 3.1	19.4
45257 1999 YC_{14}	14.9	X	141.15861	277.34928	138.09927	2.77535	0.0590083	0.20402750	2.8576579	20	3 30.5	19.1
45258 1999 YG_{18}	14.0	X	26.38809	230.58600	175.54264	24.41820	0.1699553	0.24234781	2.5478664	20	—	—
45259 2000 AF_{1}	14.4	X	171.09706	190.93945	140.77533	2.74159	0.1128339	0.19593792	2.9357815	20	1 24.9	18.9
45260 2000 AY_{1}	14.5	X	67.59716	303.53872	121.58191	12.96095	0.0365041	0.19524828	2.9426904	20	1 8.5	18.5
45261 Decoen	14.6	X	161.62491	259.68474	116.78385	7.29613	0.1910614	0.25351151	2.4725074	20	3 11.9	18.6
45262 2000 AG_{2}	15.6	X	210.67909	247.31678	151.76107	2.78202	0.1994801	0.26330966	2.4107834	20	5 19.5	19.6
45263 2000 AD_{5}	13.4	X	129.13788	7.54797	302.91201	12.33170	0.1709525	0.23768642	2.5810701	20	—	—
45264 2000 AL_{5}	15.3	X	308.07863	115.71687	304.84347	3.38051	0.0887899	0.22947193	2.6423053	20	11 2.2	18.4
45265 2000 AY_{5}	14.3	X	173.58718	203.80468	123.33627	2.85335	0.0650617	0.19560559	2.9391057	20	1 19.4	18.7
45266 2000 AK_{6}	14.4	X	178.46240	334.18395	342.98775	1.24367	0.0705509	0.19646015	2.9305765	20	1 13.2	18.6
45267 2000 AK_{7}	15.8	X	113.07241	7.47824	62.83152	7.15380	0.1121177	0.25436365	2.4669822	20	3 21.4	19.1
45268 2000 AM_{8}	15.3	X	71.65821	320.57758	18.48622	5.37321	0.1151913	0.23680120	2.5874986	20	—	—
45269 2000 AR_{8}	15.4	X	223.55362	26.85134	327.88561	5.86395	0.1464408	0.26153112	2.4217007	20	4 4.1	19.1
45270 2000 AT_{8}	14.5	X	310.73595	258.90363	54.02848	7.47000	0.1210337	0.26628833	2.3927719	20	6 2.9	16.9
45271 2000 AO_{10}	14.5	X	305.14702	239.97988	278.55464	12.07298	0.1327045	0.24330099	2.5412076	20	—	—
45272 2000 AC_{11}	14.8	X	200.45976	318.83440	289.19877	8.99052	0.0699970	0.24251057	2.5467263	20	—	—
45273 2000 AF_{11}	14.3	X	44.48013	293.74331	269.56063	3.55729	0.0806103	0.21474207	2.7617941	20	6 6.9	17.7
45274 2000 AN_{11}	15.8	X	67.67207	31.51810	57.73407	7.28061	0.1103068	0.25109603	2.4883386	20	2 9.9	18.7
45275 2000 AK_{12}	14.5	X	36.44815	276.96808	284.71173	7.89292	0.0964880	0.21232600	2.7827056	20	5 23.8	17.9
45276 2000 AO_{12}	14.3	X	176.22426	20.84955	59.83643	5.93860	0.0145667	0.21609272	2.7502740	20	6 9.4	18.2
45277 2000 AE_{15}	14.8	X	105.68719	198.99787	273.11021	5.05096	0.0712690	0.25804734	2.4434481	20	4 25.2	18.0
45278 2000 AL_{15}	15.3	X	254.45019	281.15208	64.05995	3.16486	0.1994462	0.26450073	2.4035406	20	4 21.7	18.7
45279 2000 AS_{15}	14.9	X	285.15788	279.94101	84.04868	6.93943	0.2591178	0.27174284	2.3606448	20	6 13.9	17.6
45280 2000 AE_{16}	15.8	X	138.43371	73.30606	322.95937	1.46518	0.1738970	0.25455223	2.4657636	20	3 9.7	19.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45281 2000 AA_{19}	14.2	X	133.80473	357.07070	262.18997	14.52326	0.0980296	0.23510251	2.5999473	20	12 10.6	18.1
45282 2000 AL_{19}	16.0	X	261.67835	348.69156	19.52510	2.32864	0.1954161	0.26872652	2.3782766	20	5 29.5	19.4
45283 2000 AU_{22}	14.0	X	115.61739	308.10652	282.39256	12.08173	0.1363919	0.22482174	2.6786163	20	10 12.5	18.4
45284 2000 AO_{24}	14.8	X	221.73292	306.91797	98.97076	6.48330	0.0570586	0.21592790	2.7516733	20	6 18.3	18.8
45285 2000 AO_{26}	15.1	X	307.28859	239.68740	77.05089	4.42845	0.1005672	0.21542476	2.7559562	20	6 6.2	18.5
45286 2000 AC_{27}	15.0	X	74.46090	36.90068	319.04550	3.63273	0.3099177	0.24141410	2.5544317	20	—	—
45287 2000 AB_{29}	14.0	X	273.81897	4.82757	315.78747	6.33354	0.2091551	0.26038509	2.4288012	20	4 5.1	17.6
45288 2000 AP_{29}	13.9	X	210.30481	94.70111	93.72058	10.84556	0.0625411	0.18286325	3.0741031	20	11 29.2	18.4
45289 2000 AY_{29}	14.9	X	187.28241	67.00633	335.56523	4.07732	0.0550742	0.21014070	2.8019643	20	5 2.8	19.0
45290 2000 AG_{33}	14.2	X	205.02568	168.26987	321.97069	12.01612	0.1200715	0.22258688	2.6965161	20	9 8.2	18.3
45291 2000 AS_{33}	15.0	X	259.83850	42.29038	313.22523	8.76997	0.2384962	0.26367209	2.4085737	20	5 1.8	18.8
45292 2000 AX_{34}	14.2	X	14.54688	66.27278	26.46830	3.44524	0.0806294	0.19206666	2.9750988	20	—	—
45293 2000 AA_{35}	14.7	X	261.60979	58.21109	325.03276	11.90550	0.1146391	0.21696815	2.7428710	20	7 1.7	18.6
45294 2000 AF_{37}	15.5	X	54.70218	349.63961	304.13919	1.69391	0.0675018	0.22591359	2.6699788	20	10 21.1	19.0
45295 2000 AN_{37}	14.9	X	73.28194	11.33291	321.71015	3.37484	0.1042472	0.23456439	2.6039221	20	—	—
45296 2000 AZ_{37}	15.1	X	334.70869	15.64296	2.11220	1.81805	0.0996573	0.22709446	2.6607150	20	10 18.9	17.9
45297 2000 AN_{38}	15.8	X	318.22533	30.75700	346.97830	1.51749	0.2389631	0.27502953	2.3418002	20	9 23.9	17.0
45298 Williamon	14.8	X	210.39559	20.61990	167.84131	10.06085	0.1597208	0.18265983	3.0763850	20	11 19.9	19.7
45299 Stivell	15.6	X	79.57660	308.01692	58.15777	4.83251	0.1875495	0.23963273	2.5670754	20	—	—
45300 Thewrewk	13.0	X	81.77249	64.73645	263.38480	10.24918	0.0791353	0.18055174	3.1002849	20	12 26.6	17.7
45301 2000 AW_{45}	14.2	X	275.75782	325.52633	98.58605	10.46317	0.0661913	0.17849941	3.1240036	20	9 19.7	18.6
45302 2000 AX_{46}	15.2	X	200.07557	0.12079	15.39467	2.65107	0.2007738	0.25716119	2.4490582	20	4 9.8	19.3
45303 2000 AP_{47}	14.2	X	125.90020	46.45735	332.10520	1.31954	0.1069994	0.19677033	2.9274960	20	2 2.5	18.3
45304 2000 AQ_{47}	14.7	X	219.07265	258.51696	115.58168	12.78012	0.2749991	0.26015009	2.4302637	20	4 26.9	19.2
45305 Paulscherrer	15.2	X	28.56148	90.02878	286.91725	14.11093	0.1328897	0.23456210	2.6039391	20	—	—
45306 2000 AC_{50}	13.7	X	195.67854	207.52750	317.60371	4.33993	0.1427304	0.17579049	3.1560155	20	10 5.9	18.8
45307 2000 AO_{50}	13.2	X	145.12143	163.56876	137.83295	10.79410	0.0739793	0.18637235	3.0353939	20	—	—
45308 2000 AR_{53}	15.1	X	322.15786	265.84664	113.89097	10.07266	0.2299187	0.27581143	2.3373722	20	10 18.3	16.8
45309 2000 AO_{54}	15.5	X	208.45478	283.25202	96.71694	3.16253	0.2175315	0.26029749	2.4293461	20	4 23.3	19.5
45310 2000 AX_{55}	14.9	X	122.74995	298.55343	71.48844	1.73006	0.2129611	0.24680371	2.5171065	20	1 26.5	18.3
45311 2000 AK_{56}	14.6	X	136.64809	287.50840	110.35665	7.75473	0.0721823	0.20179743	2.8786728	20	3 7.0	18.8
45312 2000 AE_{57}	14.2	X	34.46716	231.55228	121.50389	14.84031	0.1354734	0.18223269	3.0811904	20	12 11.9	18.5
45313 2000 AU_{59}	14.9	X	350.32440	303.73281	101.83098	3.70175	0.1978134	0.23298868	2.6156492	20	—	—
45314 2000 AP_{60}	14.7	X	283.94643	85.56309	304.10685	6.60657	0.2004174	0.26992633	2.3712238	20	7 30.8	16.9
45315 2000 AJ_{61}	15.2	X	231.88595	342.24814	46.96080	3.23819	0.1953751	0.26317265	2.4116200	20	5 25.8	18.9
45316 2000 AR_{61}	14.5	X	47.28459	10.88993	109.44771	6.99942	0.0438517	0.19896315	2.9059465	20	2 21.2	18.3
45317 2000 AC_{63}	13.9	X	359.99024	288.51226	106.66729	12.52872	0.1456369	0.18327109	3.0695408	20	12 15.6	17.7
45318 2000 AG_{63}	14.0	X	240.05573	255.90701	335.29537	8.05332	0.0383379	0.19026717	2.9938278	20	—	—
45319 2000 AQ_{63}	14.1	X	12.94268	8.27578	324.60562	13.04734	0.1603258	0.22362045	2.6882008	20	10 20.6	17.5
45320 2000 AT_{63}	14.4	X	72.20122	93.95959	311.73703	11.78532	0.1963964	0.24343221	2.5402942	20	—	—
45321 2000 AD_{66}	15.3	X	1.85913	343.79674	58.83376	0.57425	0.1904095	0.28128683	2.3069408	20	—	—
45322 2000 AT_{67}	14.5	X	275.36847	264.22260	97.31125	6.54044	0.0996335	0.21391395	2.7689172	20	6 21.3	18.0
45323 2000 AF_{68}	14.5	X	135.13598	265.09497	163.39546	7.24377	0.0964403	0.26147421	2.4220521	20	4 10.4	17.9
45324 2000 AG_{69}	15.4	X	287.09723	274.22197	113.94058	7.55349	0.1071167	0.27381191	2.3487376	20	8 21.9	17.9
45325 2000 AD_{70}	14.7	X	215.44880	306.18144	177.76411	3.62963	0.1805957	0.22587080	2.6703160	20	9 8.9	18.7
45326 2000 AE_{72}	15.5	X	261.21047	46.33147	107.94312	2.80944	0.0529361	0.23643844	2.5901445	20	—	—
45327 2000 AE_{74}	14.5	X	2.55124	254.95914	124.78371	8.56375	0.1275937	0.28251435	2.3002535	20	12 27.2	17.0
45328 2000 AM_{74}	15.4	X	222.06031	260.04882	118.80810	7.26288	0.2182434	0.26475781	2.4019845	20	5 4.9	19.4
45329 2000 AX_{74}	14.6	X	201.28608	219.08539	150.45257	5.12260	0.1647390	0.26004228	2.4309353	20	4 5.5	18.4
45330 2000 AN_{76}	15.2	X	19.20367	301.04521	133.14404	5.21345	0.1768013	0.24219763	2.5489195	20	—	—
45331 2000 AZ_{76}	14.8	X	256.18233	173.43530	253.75348	4.47305	0.0443140	0.22399506	2.6852028	20	8 30.1	18.4
45332 2000 AM_{79}	14.8	X	18.25135	123.06444	227.29746	5.50665	0.1740067	0.27994056	2.3143311	20	12 16.1	17.6
45333 2000 AR_{81}	14.1	X	106.28407	22.69561	263.56871	10.78252	0.2216373	0.23406734	2.6076072	20	12 20.7	18.5
45334 2000 AX_{81}	14.6	X	126.71370	252.98024	161.52802	2.17753	0.0142379	0.20403810	2.8575589	20	3 5.6	18.5
45335 2000 AA_{83}	15.3	X	125.42712	189.51780	164.81310	4.65083	0.1609319	0.24577900	2.5240980	20	1 2.1	18.7
45336 2000 AC_{83}	14.8	X	100.58946	251.10245	253.99298	8.09245	0.0999115	0.21097324	2.7945881	20	6 9.1	18.8
45337 2000 AK_{83}	15.8	X	173.66137	169.31341	219.80190	1.95247	0.1850979	0.25735152	2.4478505	20	4 3.5	19.6
45338 2000 AT_{85}	13.7	X	198.68048	84.44116	127.08233	15.54224	0.0539743	0.18362847	3.0655568	20	12 15.2	18.4
45339 2000 AV_{85}	15.1	X	5.27560	303.30605	133.50020	5.12559	0.2251130	0.23930009	2.5694538	20	—	—
45340 2000 AG_{86}	14.2	X	332.53718	178.62925	119.79779	10.44879	0.1408922	0.21416015	2.7667948	20	6 19.1	17.4
45341 2000 AX_{86}	14.6	X	274.09536	93.04970	143.54317	6.73646	0.0338567	0.19717843	2.9234552	20	1 21.9	18.9
45342 2000 AP_{87}	14.5	X	226.54343	16.55104	188.12107	1.13436	0.0781217	0.18578452	3.0417933	20	—	—
45343 2000 AJ_{88}	15.3	X	319.72148	249.59705	148.46481	4.16411	0.1081337	0.22704272	2.6611192	20	10 23.6	18.2
45344 2000 AK_{90}	13.8	X	127.15772	199.48418	131.87550	11.41892	0.1065938	0.19160820	2.9798426	20	—	—
45345 2000 AD_{91}	14.4	X	224.02176	2.55479	152.40174	1.87131	0.0405436	0.17932506	3.1144072	20	11 5.9	18.9
45346 2000 AL_{91}	14.0	X	246.16644	192.26866	335.27996	6.76189	0.0629834	0.18263581	3.0766547	20	12 14.1	18.4
45347 2000 AS_{91}	14.0	X	80.74551	294.26082	298.58613	6.46148	0.0299823	0.17001570	3.2270823	20	8 22.7	18.6
45348 2000 AZ_{91}	15.1	X	34.49743	248.19260	128.76745	12.69863	0.1857260	0.23436286	2.6054147	20	—	—
45349 2000 AP_{93}	15.5	X	14.95764	293.80287	106.23933	4.23372	0.1708853	0.29052738	2.2577612	20	—	—
45350 2000 AD_{95}	13.6	X	287.86535	184.19986	314.30311	7.48022	0.0906469	0.18460600	3.0547254	20	12 31.9	17.5
45351 2000 AF_{96}	14.3	X	204.34354	272.97964	135.11953	9.85299	0.1622126	0.21097841	2.7945424	20	5 28.6	19.0
45352 2000 AC_{97}	13.5	X	327.83134	284.12897	130.46879	12.03588	0.1861254	0.22808754	2.6529863	20	12 4.1	16.2
45353 2000 AZ_{98}	14.8	X	146.59514	345.82479	105.41508	3.52874	0.1357059	0.26449281	2.4035886	20	5 25.7	18.3
45354 2000 AS_{99}	14.7	X	318.93572	251.74759	97.86061	7.10180	0.1417436	0.27646763	2.3336722	20	8 18.6	16.8
45355 2000 AF_{100}	14.6	X	198.31997	8.50751	137.45335	6.12450	0.0134196	0.27916680	2.3186055	20	10 17.1	17.5
45356 2000 AA_{102}	15.2	X	276.77839	263.08412	106.63212	6.86604	0.1671052	0.27228249	2.3575246	20	6 25.7	18.0
45357 2000 AC_{102}	15.6	X	254.60979	220.68277	136.94582	5.98803	0.2562920	0.26946924	2.3739045	20	5 3.5	19.3
45358 2000 AM_{102}	15.5	X	123.53887	181.94710	198.52074	6.05127	0.1991722	0.30120625	2.2040768	20	1 28.8	18.3
45359 2000 AN_{102}	15.1	X	243.25324	269.43636	105.29958	10.65736	0.1397621	0.26795923	2.3828145	20	5 26.7	18.6
45360 2000 AW_{102}	14.6	X	283.95477	174.84677	104.28867	7.11339	0.0991232	0.25983909	2.4322025	20	3 15.1	17.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45361 2000 AZ_{102}	15.0	X	252.00685	286.19080	108.93049	7.22954	0.1359763	0.27069737	2.3667190	20	7 2.9	18.0
45362 2000 AH_{103}	14.0	X	333.76518	271.43973	213.09676	8.21761	0.0859015	0.19544175	2.9407481	20	—	—
45363 2000 AF_{104}	13.8	X	35.44073	297.34242	239.44557	16.63867	0.1107362	0.20890043	2.8130438	20	4 17.2	17.3
45364 2000 AW_{104}	16.0	X	276.03104	170.67399	209.99902	6.05247	0.1222765	0.27141994	2.3625167	20	7 16.9	18.9
45365 2000 AM_{106}	14.4	X	309.99372	243.47264	249.68764	13.79571	0.0374773	0.23947073	2.5682330	20	—	—
45366 2000 AN_{107}	13.0	X	214.38559	56.91672	131.51955	12.21216	0.0480588	0.18517678	3.0484450	20	12 6.6	17.6
45367 2000 AG_{108}	14.7	X	267.09350	237.85709	115.34425	10.23939	0.1970944	0.21748576	2.7385174	20	5 19.5	18.9
45368 2000 AU_{109}	14.9	X	254.39324	89.84434	245.36698	9.49142	0.2527543	0.26212008	2.4180718	20	3 30.5	19.0
45369 2000 AM_{110}	15.3	X	49.36079	133.26658	197.73975	2.62773	0.1889246	0.28073055	2.3099873	20	12 30.2	18.5
45370 2000 AA_{111}	14.2	X	192.27618	107.62156	182.33712	1.74726	0.0810839	0.19516524	2.9435251	20	—	—
45371 2000 AA_{112}	14.2	X	305.97854	314.25593	122.81263	12.59899	0.0405420	0.23057464	2.6338742	20	11 28.4	17.7
45372 2000 AT_{113}	14.4	X	234.97063	201.04512	266.34003	12.71858	0.0951279	0.22456772	2.6806359	20	9 12.5	18.5
45373 2000 AW_{113}	14.5	X	3.49449	220.34282	254.33395	8.71937	0.0388616	0.24244083	2.5472146	20	—	—
45374 2000 AL_{114}	14.5	X	321.87503	242.21088	133.40877	12.39547	0.2092923	0.22679397	2.6630647	20	9 22.7	17.0
45375 2000 AZ_{115}	14.8	X	293.78664	76.33587	275.98052	11.91339	0.2834448	0.26872579	2.3782809	20	6 5.3	17.6
45376 2000 AP_{117}	15.1	X	50.89795	134.20206	256.85973	5.70859	0.1466983	0.23913859	2.5706105	20	—	—
45377 2000 AX_{117}	15.5	X	78.44900	239.04849	138.95270	11.46862	0.1476205	0.24108621	2.5567472	20	—	—
45378 2000 AD_{118}	12.9	X	125.41334	333.92511	246.89393	8.30039	0.0516327	0.17520825	3.1630036	20	10 1.2	17.7
45379 2000 AT_{120}	14.5	X	329.55893	173.82646	211.18820	5.03742	0.1696268	0.22731281	2.6590109	20	10 21.1	16.9
45380 2000 AW_{120}	13.9	X	343.38268	231.73003	155.62892	11.15930	0.0670740	0.17970178	3.1100531	20	11 6.1	18.1
45381 2000 AN_{122}	13.0	X	154.61557	53.19616	178.97726	5.17091	0.1136904	0.18002773	3.1062979	20	11 19.8	17.9
45382 2000 AV_{123}	14.2	X	232.06378	87.78698	160.61333	10.54912	0.0467349	0.19208739	2.9748848	20	—	—
45383 2000 AP_{124}	15.5	X	340.87137	141.93422	257.44713	2.63278	0.1878169	0.27908026	2.3190848	20	12 26.8	17.6
45384 2000 AB_{125}	14.5	X	134.59225	208.97117	216.14769	5.35440	0.0549954	0.20404858	2.8574611	20	4 1.4	18.5
45385 2000 AF_{125}	14.3	X	63.08090	67.63828	279.44101	11.53993	0.1979716	0.23334227	2.6130061	20	—	—
45386 2000 AO_{125}	13.9	X	174.79987	314.81134	294.56301	9.16244	0.0484122	0.18419731	3.0592422	20	—	—
45387 2000 AW_{125}	13.6	X	336.65993	207.24710	139.00548	8.56133	0.0385469	0.22018132	2.7161207	20	9 8.9	17.0
45388 2000 AB_{127}	13.7	X	323.44329	202.79411	305.57104	9.65948	0.0551970	0.19068331	2.9894704	20	—	—
45389 2000 AP_{128}	13.5	X	57.88414	323.59840	305.26022	16.20536	0.0612884	0.16989557	3.2286033	20	9 6.9	18.3
45390 2000 AW_{128}	13.3	X	210.06862	347.88365	316.53070	11.05618	0.0069456	0.19496847	2.9455052	20	2 1.1	17.2
45391 2000 AA_{129}	14.5	X	318.53553	231.67473	281.32907	8.04957	0.0312901	0.19117147	2.9843792	20	—	—
45392 2000 AR_{129}	14.1	X	75.03730	346.10815	296.02349	12.63710	0.1542825	0.22294041	2.6936646	20	11 7.3	18.3
45393 2000 AU_{130}	14.7	X	60.25997	245.69053	129.67028	6.57990	0.2896221	0.24297285	2.5434950	20	—	—
45394 2000 AO_{132}	14.1	X	204.94318	176.56932	3.04777	5.56301	0.0771063	0.17996501	3.1070196	20	11 7.7	18.7
45395 2000 AQ_{134}	14.8	X	98.57486	276.43472	349.04438	3.84267	0.0487551	0.22808111	2.6530362	20	11 5.1	18.6
45396 2000 AS_{138}	14.4	X	281.92662	40.68052	83.63327	6.07772	0.1579064	0.23880806	2.5729819	20	12 14.0	17.1
45397 2000 AW_{138}	14.5	X	61.13663	295.12479	74.20200	14.47778	0.0841160	0.24485697	2.5304304	20	—	—
45398 2000 AH_{139}	14.5	X	307.92433	221.89164	185.97140	7.73022	0.0463634	0.23388487	2.6089633	20	10 21.8	17.6
45399 2000 AW_{139}	15.1	X	121.95655	202.30500	137.67938	5.61851	0.1517459	0.29738874	2.2228988	20	—	—
45400 2000 AW_{140}	14.1	X	185.98245	355.80469	211.66915	6.91451	0.1081657	0.17938328	3.1137333	20	11 20.5	18.9
45401 2000 AX_{140}	14.8	X	190.16723	224.63739	199.34025	5.94312	0.2105350	0.26180154	2.4200328	20	6 1.9	18.8
45402 2000 AZ_{140}	14.3	X	114.62988	192.99778	151.16017	14.66687	0.1009598	0.23906005	2.5711735	20	—	—
45403 2000 AL_{141}	13.0	X	205.41961	252.13703	276.95548	11.26595	0.1206928	0.22529803	2.6748399	20	10 27.5	17.3
45404 2000 AP_{141}	14.7	X	120.18124	307.69805	259.25590	6.67148	0.0742777	0.17043957	3.2217297	20	9 9.5	19.6
45405 2000 AY_{141}	14.7	X	335.22024	215.71188	183.63027	4.82696	0.2245574	0.27789625	2.3256673	20	12 20.2	16.4
45406 2000 AG_{142}	14.5	X	264.35436	133.27873	297.96271	12.34990	0.1561166	0.22243070	2.6977782	20	8 26.5	18.3
45407 2000 AJ_{142}	13.9	X	213.43902	322.49549	154.07760	13.13966	0.0980091	0.22012683	2.7165689	20	9 6.1	17.9
45408 2000 AO_{142}	13.2	X	312.86752	253.53267	270.34777	8.70790	0.0367686	0.19004287	2.9961830	20	—	—
45409 2000 AT_{143}	13.7	X	242.96315	301.54085	295.07794	9.67879	0.0603687	0.18978160	2.9989322	20	—	—
45410 2000 AA_{144}	13.3	X	12.48960	154.05325	287.39316	9.12314	0.0892207	0.18781348	3.0198465	20	—	—
45411 2000 AN_{144}	13.4	X	0.30425	96.39544	313.72395	12.10759	0.1476329	0.23054197	2.6341230	20	—	—
45412 2000 AN_{147}	14.7	X	201.03516	242.99861	113.53277	5.16451	0.2219625	0.20995619	2.8036056	20	3 23.3	19.5
45413 2000 AY_{147}	14.9	X	240.68703	215.48244	146.71565	6.73075	0.1459617	0.26196758	2.4190101	20	5 6.6	18.5
45414 2000 AE_{149}	15.3	X	320.42649	180.21296	197.88842	7.93823	0.1297198	0.27662738	2.3327737	20	10 5.1	17.3
45415 2000 AN_{149}	14.3	X	140.93624	128.97017	138.26402	12.93809	0.1512095	0.23486361	2.6017101	20	12 26.9	18.7
45416 2000 AX_{151}	15.5	X	116.40627	297.47606	106.88200	6.40103	0.1579122	0.30482083	2.1866182	20	2 18.4	18.0
45417 2000 AZ_{151}	14.7	X	93.68473	259.94945	145.39455	4.80439	0.1150143	0.25468689	2.4648944	20	1 17.5	17.6
45418 2000 AV_{155}	16.0	X	336.43843	196.20099	282.35771	1.21534	0.1175261	0.24125678	2.5555420	20	—	—
45419 2000 AV_{158}	15.0	X	334.41753	142.05269	300.60621	13.04043	0.0549457	0.23459238	2.6037150	20	—	—
45420 2000 AG_{159}	15.0	X	210.28737	352.23466	52.56402	6.15692	0.0397978	0.21284242	2.7782027	20	6 3.6	18.9
45421 2000 AL_{159}	14.1	X	158.40802	352.58209	309.73654	9.88885	0.0377626	0.19099391	2.9862285	20	—	—
45422 2000 AG_{162}	14.4	X	150.40456	297.32330	74.23974	3.09917	0.0349785	0.19878186	2.9077131	20	2 14.3	18.5
45423 2000 AR_{162}	13.3	X	291.91789	108.97069	331.22762	11.99456	0.1375273	0.22537759	2.6742104	20	10 22.9	16.6
45424 2000 AY_{164}	14.9	X	323.79881	190.04200	262.11401	11.26239	0.1151105	0.23401280	2.6080123	20	—	—
45425 2000 AY_{166}	13.8	X	151.26747	345.34765	192.36093	11.55116	0.1349508	0.17242192	3.1969884	20	9 10.2	18.9
45426 2000 AZ_{166}	14.7	X	127.00869	142.52420	213.42774	10.46195	0.2491987	0.24601644	2.5224736	20	1 15.3	18.6
45427 2000 AA_{167}	13.7	X	207.32721	58.33529	169.27930	14.83687	0.1556043	0.18524696	3.0476750	20	12 30.6	18.6
45428 2000 AN_{167}	15.1	X	317.03372	272.73848	166.47340	11.66526	0.1947409	0.23215955	2.6218732	20	12 16.8	17.8
45429 2000 AO_{169}	15.1	X	266.38230	33.01914	113.00402	14.55770	0.0950884	0.23637639	2.5905978	20	12 25.5	18.3
45430 2000 AW_{169}	15.0	X	89.76986	165.56318	136.38861	8.70084	0.1950959	0.23755990	2.5819864	20	12 25.2	19.3
45431 2000 AR_{170}	15.3	X	257.93639	169.58513	181.47540	6.75381	0.1481547	0.26590794	2.3950533	20	5 9.9	18.7
45432 2000 AQ_{172}	15.6	X	274.69895	204.61239	191.73024	6.47539	0.1304489	0.27240780	2.3568016	20	8 5.4	18.4
45433 2000 AA_{173}	15.5	X	179.51763	204.59108	187.32671	6.09330	0.1186271	0.25907303	2.4369947	20	4 11.6	19.0
45434 2000 AX_{173}	15.6	X	255.62958	156.64052	185.85205	7.30115	0.2324082	0.26466202	2.4025640	20	4 16.2	19.3
45435 2000 AF_{174}	15.5	X	30.37695	183.77669	161.37683	7.14319	0.1537775	0.28161613	2.3051421	20	12 22.7	18.5
45436 2000 AD_{176}	14.4	X	114.14672	51.28398	132.31600	13.91560	0.1732259	0.21905884	2.7253913	20	8 22.7	18.7
45437 2000 AF_{177}	14.7	X	220.02728	300.25490	221.13105	10.82687	0.1193453	0.23105663	2.6302100	20	11 8.3	18.2
45438 2000 AJ_{177}	15.1	X	274.57354	178.78019	192.62121	6.46192	0.1180993	0.26904838	2.3763795	20	7 2.4	18.0
45439 2000 AO_{177}	14.4	X	142.11204	314.69634	173.24785	6.75794	0.1945666	0.21423753	2.7661285	20	7 8.8	19.1
45440 2000 AQ_{177}	13.5	X	214.25558	330.44246	243.58477	10.70263	0.1314145	0.23506861	2.6001972	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45441 2000 AX_{177}	14.4	X	157.29599	278.27107	184.91214	8.67708	0.1179810	0.21419705	2.7664769	20	6 19.6	18.9
45442 2000 AK_{179}	15.4	X	208.88385	269.59372	224.36029	8.30303	0.0499942	0.22445410	2.6815405	20	9 25.6	19.3
45443 2000 AR_{179}	13.5	X	40.53222	312.59326	257.24133	12.15741	0.1364115	0.20955786	2.8071573	20	6 17.1	16.8
45444 2000 AD_{180}	14.3	X	125.38877	137.96858	239.44341	10.28266	0.1075816	0.24756879	2.5119180	20	1 21.0	17.9
45445 2000 AR_{181}	13.2	X	222.12994	339.96023	254.43904	12.57482	0.1904157	0.18776682	3.0203468	20	—	—
45446 2000 AX_{186}	14.4	X	70.03034	154.88707	178.91004	13.55259	0.0620734	0.23943466	2.5684909	20	12 31.9	18.3
45447 2000 AH_{188}	14.1	X	240.33624	228.10128	180.02461	12.10362	0.0218070	0.22106742	2.7088579	20	7 17.6	18.1
45448 2000 AJ_{188}	14.8	X	321.61056	198.88325	152.31021	11.76167	0.1287143	0.27441797	2.3452781	20	8 24.9	16.8
45449 2000 AQ_{188}	14.7	X	226.24715	285.00595	145.91901	10.89881	0.2304386	0.27016023	2.3698550	20	7 11.1	18.4
45450 2000 AC_{191}	13.7	X	7.81166	145.31686	236.57680	14.34516	0.1409936	0.23396922	2.6083362	20	12 23.4	17.0
45451 2000 AJ_{191}	14.4	X	6.97220	166.84674	222.04884	11.60495	0.2162795	0.23532678	2.5982952	20	—	—
45452 2000 AZ_{191}	15.3	X	231.10490	142.10691	222.82791	10.50818	0.2901449	0.26323141	2.4112611	20	4 17.3	19.6
45453 2000 AB_{193}	13.1	X	281.20376	128.50597	257.54667	20.48527	0.0526603	0.17099750	3.2147179	20	7 28.3	17.9
45454 2000 AC_{193}	14.5	X	274.40586	336.84778	155.95263	16.45241	0.1190444	0.23218302	2.6216965	20	12 17.0	17.9
45455 2000 AB_{195}	13.8	X	279.86966	282.13073	217.82349	8.92722	0.0475625	0.18473310	3.0533241	20	12 25.7	18.1
45456 2000 AD_{195}	13.8	X	180.52146	49.87117	252.52804	12.62112	0.1798710	0.24132343	2.5550715	20	—	—
45457 2000 AL_{195}	14.1	X	44.62916	8.57022	223.21509	11.96279	0.0945195	0.21196597	2.7858557	20	7 15.4	17.9
45458 2000 AZ_{195}	14.6	X	22.10472	213.06089	243.08021	8.08385	0.0425992	0.19280974	2.9674500	20	—	—
45459 2000 AM_{196}	13.8	X	196.53962	243.84170	277.69177	14.48671	0.1358628	0.17564612	3.1577447	20	9 27.4	19.2
45460 2000 AS_{197}	14.0	X	194.55208	152.98901	270.88932	12.99182	0.1456956	0.26098703	2.4250653	20	6 6.8	17.8
45461 2000 AW_{197}	14.0	X	245.36191	135.53299	254.81844	8.71922	0.1534691	0.21518169	2.7580312	20	6 14.6	18.1
45462 2000 AZ_{197}	13.4	X	254.27105	220.30074	283.20731	16.80202	0.1204056	0.18071107	3.0984623	20	11 14.3	18.0
45463 2000 AL_{198}	13.8	X	150.05696	74.11786	160.66149	16.48754	0.0452783	0.17827045	3.1266779	20	11 20.9	18.7
45464 2000 AV_{198}	13.6	X	69.78042	169.97652	187.25738	10.33639	0.0759993	0.18394347	3.0620560	20	—	—
45465 2000 AN_{200}	13.9	X	272.23289	19.06928	134.55139	13.69433	0.1750163	0.23911172	2.5708031	20	—	—
45466 2000 AZ_{201}	13.2	X	346.41789	227.74162	265.92582	8.63915	0.0367061	0.19032229	2.9932497	20	—	—
45467 2000 AK_{203}	13.1	X	355.54477	118.20486	282.77632	10.85379	0.1743269	0.22787709	2.6546195	20	—	—
45468 2000 AL_{203}	12.8	X	289.74730	131.81883	311.71855	21.02244	0.0875412	0.17457604	3.1706353	20	10 12.3	17.5
45469 2000 AY_{203}	13.6	X	81.23366	138.44406	273.57939	8.58563	0.0470114	0.23912700	2.5706935	20	1 2.6	16.6
45470 2000 AZ_{203}	13.6	X	286.24751	218.05256	306.80685	13.94736	0.0708194	0.23273015	2.6175859	20	—	—
45471 2000 AG_{204}	15.0	X	317.90076	192.36823	140.98003	9.57018	0.1602977	0.21867432	2.7285852	20	7 9.6	18.1
45472 2000 AJ_{208}	16.1	X	332.75388	200.69307	114.29160	3.17733	0.2235659	0.27306296	2.3530303	20	7 11.8	17.3
45473 2000 AG_{212}	14.8	X	296.72024	67.62997	307.82144	1.60857	0.1935867	0.21809276	2.7334338	20	7 27.9	18.0
45474 2000 AW_{215}	14.3	X	76.97281	245.11911	179.40243	1.99100	0.1043808	0.19504670	2.9447176	20	1 27.9	18.1
45475 2000 AN_{216}	15.1	X	141.85153	198.15936	73.70882	2.45019	0.1553850	0.24015010	2.5633871	20	—	—
45476 2000 AU_{226}	14.9	X	212.41622	90.72026	286.73320	2.12176	0.1017432	0.20907364	2.8114899	20	4 27.9	19.2
45477 2000 AA_{227}	14.6	X	321.71306	29.59109	311.80178	11.26652	0.1588191	0.21805543	2.7337457	20	7 30.2	17.2
45478 2000 AS_{230}	15.1	X	204.71657	272.96701	138.67826	4.57012	0.0950037	0.21230349	2.7829023	20	6 3.9	19.3
45479 2000 AZ_{231}	14.6	X	259.12213	260.71031	100.57674	6.94445	0.0580523	0.21302100	2.7766497	20	6 6.3	18.4
45480 2000 AH_{233}	14.2	X	288.06631	59.03065	298.82609	6.60373	0.0805892	0.21598049	2.7512266	20	7 7.6	17.8
45481 2000 AK_{233}	13.4	X	358.78358	255.30618	132.41811	11.46970	0.1673087	0.22638785	2.6662486	20	12 20.6	16.5
45482 2000 AU_{233}	15.3	X	321.77063	261.96917	103.25987	7.44096	0.1459252	0.27851733	2.3222086	20	9 22.4	17.3
45483 2000 AP_{235}	14.2	X	77.06053	207.95845	119.04353	6.74894	0.1423348	0.18447463	3.0561755	20	12 28.1	18.8
45484 2000 AV_{235}	14.8	X	260.32615	15.38904	225.18426	1.56300	0.0274391	0.19675186	2.9276792	20	1 11.7	19.1
45485 2000 AS_{236}	13.4	X	289.15744	109.45590	300.11683	12.60818	0.1466052	0.22128451	2.7070859	20	9 3.4	16.8
45486 2000 AF_{237}	13.7	X	156.49351	348.26352	176.80227	12.75086	0.0976037	0.21576001	2.7531006	20	9 4.2	18.0
45487 2000 AR_{237}	13.2	X	10.04763	94.23783	333.35840	12.48788	0.1595400	0.23333358	2.6130711	20	—	—
45488 2000 AD_{238}	15.2	X	277.57379	182.83230	109.15618	4.87710	0.1267600	0.26122862	2.4235699	20	3 19.2	18.5
45489 2000 AW_{239}	13.6	X	83.78040	75.06558	297.52863	14.57396	0.1889716	0.23755200	2.5820437	20	—	—
45490 2000 AV_{240}	14.4	X	219.95001	222.87673	217.57389	21.16028	0.0564873	0.22177974	2.7030545	20	7 25.4	18.8
45491 2000 AB_{241}	14.8	X	285.45507	319.39793	172.04580	14.25696	0.0944618	0.23703379	2.5858056	20	—	—
45492 2000 AD_{241}	14.4	X	283.24888	237.98593	178.58190	14.85398	0.1214911	0.22915219	2.6447626	20	9 14.3	17.6
45493 2000 AE_{241}	13.5	X	265.24329	292.33388	216.76435	9.13706	0.1338417	0.18522252	3.0479431	20	12 7.6	17.5
45494 2000 AT_{242}	14.5	X	264.52237	241.82946	294.55036	0.86389	0.0484930	0.18668766	3.0319751	20	—	—
45495 2000 AF_{243}	13.8	X	21.19615	102.29481	280.53374	13.20386	0.1456199	0.23063631	2.6334047	20	—	—
45496 2000 AO_{245}	13.3	X	35.46495	266.59448	264.14219	8.28270	0.1191880	0.19973962	2.8984106	20	4 9.6	16.9
45497 2000 AB_{248}	13.9	X	273.64594	160.20295	1.78637	14.23110	0.1169924	0.24063758	2.5599241	20	—	—
45498 2000 BH	14.8	X	219.18604	173.20364	285.11448	0.91304	0.0735569	0.22235526	2.6983883	20	8 21.8	18.5
45499 2000 BV_{2}	14.3	X	103.80378	13.93754	302.57509	13.68834	0.1177717	0.23403185	2.6078708	20	—	—
45500 Motegi	14.2	X	254.03842	63.46799	74.31519	2.57956	0.1410174	0.17995823	3.1070977	20	11 7.1	18.3
45501 2000 BQ_{3}	14.3	X	168.66887	337.14031	115.66602	5.64301	0.0721078	0.21042892	2.7994052	20	6 17.4	18.5
45502 2000 BZ_{8}	12.5	X	136.65849	147.11239	84.93187	16.64411	0.0517003	0.17610517	3.1522548	20	11 5.4	17.4
45503 2000 BE_{15}	13.4	X	330.29777	27.76492	90.35572	13.35892	0.0889120	0.18698236	3.0287885	20	—	—
45504 2000 BX_{15}	13.9	X	317.04296	111.69811	321.41013	14.49720	0.1224141	0.23290869	2.6162481	20	12 5.2	17.1
45505 2000 BE_{17}	15.8	X	198.03278	302.80074	101.63691	2.79739	0.2087956	0.26192050	2.4193000	20	5 14.9	19.7
45506 2000 BN_{17}	15.1	X	72.37472	296.12082	83.22736	5.42570	0.1704340	0.24107857	2.5568013	20	—	—
45507 2000 BM_{18}	14.9	X	308.68693	319.35519	89.71100	3.53464	0.1116591	0.22720533	2.6598493	20	10 19.6	17.8
45508 2000 BN_{18}	14.6	X	131.80317	347.62672	94.93837	3.36662	0.0339283	0.20660310	2.8338585	20	4 20.2	18.6
45509 2000 BZ_{22}	14.3	X	352.60078	204.98597	140.48949	11.76613	0.0961375	0.22219263	2.6997049	20	10 7.8	17.6
45510 2000 BB_{23}	14.0	X	221.74280	328.15336	304.31694	9.67346	0.0701875	0.19264880	2.9691024	20	1 6.2	18.5
45511 2000 BC_{23}	13.7	X	68.47320	15.52085	200.56405	1.19213	0.0853146	0.16409988	3.3041814	20	7 26.0	18.3
45512 2000 BD_{23}	14.2	X	296.57014	164.96874	311.26446	8.90839	0.0520647	0.18314613	3.0709368	20	12 18.9	18.3
45513 2000 BR_{23}	13.6	X	287.34573	306.42030	93.45529	28.25160	0.1741772	0.17445282	3.1721281	20	8 19.6	18.2
45514 2000 BV_{23}	14.9	X	29.53964	6.37664	343.74238	14.23191	0.0646218	0.22940771	2.6427984	20	11 27.6	18.7
45515 2000 BF_{25}	13.4	X	101.90899	132.73289	108.46344	2.22377	0.1349809	0.17349568	3.1837840	20	10 11.8	18.2
45516 2000 BE_{28}	14.9	X	79.51088	254.33408	136.46661	13.95332	0.1066850	0.24090665	2.5580176	20	—	—
45517 2000 BE_{31}	14.8	X	355.84184	287.22597	166.42856	2.34943	0.0507016	0.18845118	3.0130301	20	—	—
45518 2000 BO_{33}	14.5	X	243.07539	120.15970	107.47580	3.18310	0.0336780	0.19023891	2.9941243	20	—	—
45519 2000 BS_{33}	14.1	X	124.04626	153.97528	127.99628	18.03236	0.0822092	0.18120126	3.0928718	20	12 18.9	19.0
45520 2000 BS_{35}	14.4	X	130.61499	331.35387	312.18499	11.46565	0.1491222	0.23398279	2.6082353	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45521 2000 BP_{39}	14.4	X	79.16656	149.81663	140.83710	1.52349	0.1107506	0.17764156	3.1340530	20	11 13.5	19.0
45522 2000 BP_{47}	14.5	X	217.75338	245.93150	39.66925	2.58189	0.0200046	0.19692173	2.9259953	20	1 17.9	18.7
45523 2000 BU_{47}	14.3	X	44.47469	342.89996	302.81722	0.63243	0.1596740	0.17187660	3.2037470	20	10 2.2	18.5
45524 2000 CL_{2}	13.7	X	102.97054	297.10377	123.81652	12.98169	0.0082369	0.19520919	2.9430832	20	2 14.7	17.8
45525 2000 CC_{4}	14.9	X	77.41165	192.78912	220.81482	2.29019	0.2162157	0.29560141	2.2318502	20	1 6.6	16.4
45526 2000 CG_{4}	15.5	X	228.26571	219.82795	161.99868	2.29225	0.2147954	0.26390293	2.4071689	20	5 12.3	19.2
45527 2000 CN_{5}	14.0	X	192.42111	24.50282	277.84874	16.61404	0.1691635	0.24503375	2.5292133	20	1 6.0	18.0
45528 2000 CF_{9}	14.2	X	47.80148	272.09071	124.93209	10.72610	0.1242462	0.19124431	2.9836213	20	—	—
45529 2000 CJ_{11}	13.8	X	97.58288	22.95099	282.17716	12.74124	0.1616082	0.23122047	2.6289674	20	—	—
45530 2000 CP_{12}	13.9	X	155.05764	139.20759	163.48079	10.05095	0.0629389	0.18971750	2.9996077	20	—	—
45531 2000 CM_{14}	14.7	X	310.52199	91.66433	273.52322	6.66471	0.0768497	0.21987045	2.7186803	20	8 18.9	18.2
45532 2000 CE_{21}	15.4	X	222.08364	210.07727	163.24042	6.47486	0.1466236	0.25818101	2.4426047	20	5 1.3	19.1
45533 2000 CH_{23}	13.9	X	92.87055	41.29467	296.80217	11.47867	0.3049708	0.23517309	2.5994270	20	—	—
45534 2000 CD_{25}	14.3	X	259.93370	219.93886	158.29009	9.81769	0.1715103	0.21511956	2.7585622	20	6 14.1	18.4
45535 2000 CK_{25}	14.6	X	201.82837	121.59238	168.72585	8.75574	0.0369723	0.19251327	2.9704958	20	1 4.9	19.0
45536 2000 CK_{27}	13.5	X	260.29184	125.07612	160.35723	10.32012	0.0525869	0.15152483	3.4845512	20	3 8.5	18.6
45537 2000 CG_{28}	14.1	X	56.82372	250.41330	153.13709	11.97401	0.0724724	0.18936752	3.0033023	20	—	—
45538 2000 CG_{29}	14.4	X	126.87169	208.19735	154.03961	11.57492	0.1301658	0.19308566	2.9646223	20	1 17.4	18.8
45539 2000 CM_{32}	14.7	X	228.51492	112.00170	223.45723	1.25006	0.0737283	0.20430555	2.8550646	20	3 26.2	18.9
45540 2000 CY_{33}	14.4	X	63.81520	248.95323	148.27045	14.21941	0.1630738	0.23787763	2.5796868	20	—	—
45541 2000 CW_{35}	14.3	X	21.52476	76.60433	279.67440	9.11553	0.2979734	0.23006006	2.6378002	20	—	—
45542 2000 CE_{36}	13.9	X	133.53730	276.27811	324.77141	12.08823	0.1444072	0.22229773	2.6988538	20	11 12.5	18.5
45543 2000 CQ_{36}	13.5	X	243.32380	179.19954	161.81662	14.52349	0.1883792	0.20388713	2.8589694	20	4 11.7	18.2
45544 2000 CS_{36}	13.9	X	266.98207	189.38140	288.41050	2.81475	0.1582129	0.17839303	3.1252454	20	10 25.6	18.2
45545 2000 CA_{38}	14.2	X	131.19189	133.74223	132.20016	3.81235	0.1348194	0.17927767	3.1149560	20	12 6.9	19.3
45546 2000 CE_{41}	14.8	X	72.99052	218.31259	146.70843	16.49734	0.0879122	0.18505883	3.0497402	20	—	—
45547 2000 CB_{43}	14.8	X	18.88096	84.22038	297.75888	7.72001	0.1449194	0.23142277	2.6274350	20	—	—
45548 2000 CF_{43}	14.5	X	35.44952	49.51704	285.97054	9.77535	0.0566380	0.22558436	2.6725760	20	11 16.1	18.2
45549 2000 CY_{44}	14.2	X	126.93525	333.23597	224.87370	3.60741	0.0475963	0.21789670	2.7350732	20	9 11.6	18.1
45550 2000 CX_{46}	14.1	X	133.53710	30.57823	198.74798	6.77350	0.1252659	0.17370401	3.1812379	20	10 26.9	19.2
45551 2000 CF_{47}	14.6	X	103.18766	205.81878	179.72592	10.12686	0.3148772	0.24520726	2.5280200	20	2 4.3	18.1
45552 2000 CQ_{47}	13.6	X	43.74946	84.58907	283.52657	8.48360	0.1408063	0.18227179	3.0807497	20	—	—
45553 2000 CO_{48}	14.2	X	90.25038	66.75654	302.26775	13.10759	0.2207045	0.23785946	2.5798182	20	—	—
45554 2000 CX_{48}	14.1	X	149.34542	270.35117	159.62756	15.25070	0.1317911	0.20576935	2.8415083	20	5 5.5	18.8
45555 2000 CF_{50}	14.8	X	219.72159	221.05055	177.35138	8.84190	0.2469195	0.26088458	2.4257001	20	5 24.9	19.0
45556 2000 CM_{51}	13.8	X	227.87234	260.91967	225.45456	4.39880	0.1162897	0.17396111	3.1781027	20	9 24.5	18.6
45557 2000 CV_{51}	14.2	X	109.02198	177.52015	160.25534	7.41717	0.0268014	0.18511715	3.0490996	20	—	—
45558 2000 CR_{52}	13.9	X	152.51640	25.20221	323.19039	9.35072	0.1014790	0.19231083	2.9725800	20	1 27.0	18.4
45559 2000 CB_{53}	13.9	X	289.27582	271.17675	159.62428	13.89071	0.0982623	0.17491043	3.1665930	20	10 9.7	18.1
45560 2000 CW_{53}	14.6	X	134.66774	61.88774	303.68473	12.12006	0.2050323	0.24355263	2.5394568	20	1 31.8	18.5
45561 2000 CA_{56}	14.5	X	285.51107	339.82532	147.24344	2.06984	0.0510425	0.18208959	3.0828044	20	12 17.1	18.5
45562 2000 CD_{56}	14.1	X	139.05250	25.04649	326.27466	12.40071	0.1763297	0.24173091	2.5521993	20	1 18.8	17.9
45563 2000 CS_{56}	13.8	X	43.33556	118.68594	188.95920	0.84707	0.1275875	0.17307826	3.1889010	20	10 23.9	18.1
45564 2000 CV_{56}	14.3	X	50.87173	253.36499	126.54136	10.98991	0.1163396	0.18427811	3.0583479	20	—	—
45565 2000 CD_{57}	15.1	X	189.61672	334.74306	55.95382	4.04904	0.1758999	0.25691434	2.4506267	20	4 20.8	19.1
45566 2000 CK_{58}	12.8	X	257.68161	336.24767	153.08229	25.38592	0.1444537	0.17497266	3.1658422	20	11 5.9	17.7
45567 2000 CQ_{60}	13.8	X	297.98372	179.98262	276.95579	7.75604	0.0438792	0.17900730	3.1180917	20	11 25.8	18.1
45568 2000 CL_{62}	13.2	X	330.29001	235.36424	179.30663	16.37134	0.1319810	0.17798609	3.1300072	20	11 20.4	17.2
45569 2000 CK_{63}	13.5	X	87.33993	184.59177	199.60951	9.69562	0.0561404	0.18747852	3.0234424	20	—	—
45570 2000 CQ_{63}	13.6	X	287.69263	151.13623	307.24777	4.97139	0.0299998	0.22451657	2.6810430	20	11 25.6	17.2
45571 2000 CZ_{64}	14.3	X	170.02170	91.39754	240.33226	12.00558	0.2281239	0.24328374	2.5413276	20	1 22.2	18.7
45572 2000 CR_{71}	13.1	X	284.08958	346.35224	213.02846	9.86732	0.0016480	0.18937864	3.0031847	20	—	—
45573 2000 CZ_{72}	14.9	X	290.51526	89.23186	279.75649	6.40533	0.1511262	0.26697425	2.3886717	20	7 18.6	17.5
45574 2000 CE_{73}	14.1	X	358.78178	21.05075	318.41607	11.62063	0.2533770	0.22287752	2.6941713	20	10 17.1	16.9
45575 2000 CC_{75}	14.7	X	253.27194	232.59642	169.43459	23.47716	0.2775170	0.26627063	2.3928779	20	6 25.6	18.9
45576 2000 CD_{75}	13.9	X	68.84555	41.02423	20.46885	9.75931	0.0436303	0.19256266	2.9699878	20	1 8.5	18.0
45577 2000 CT_{76}	14.6	X	52.24712	358.93942	77.28395	2.32141	0.1185239	0.19248801	2.9707556	20	1 8.6	18.2
45578 2000 CL_{77}	14.3	X	100.13953	94.63726	144.09938	6.78075	0.0923138	0.17058544	3.2198928	20	10 3.7	19.1
45579 2000 CE_{80}	14.1	X	310.68759	255.12877	157.50529	9.79338	0.0710534	0.17434090	3.1734856	20	10 19.9	18.3
45580 Reneracine	14.7	X	167.37253	116.28050	344.23035	3.81951	0.0187290	0.21200931	2.7854760	20	6 24.9	18.6
45581 2000 CN_{82}	14.6	X	213.02707	115.31331	328.71288	8.81441	0.1286801	0.21567571	2.7538179	20	7 23.2	18.8
45582 2000 CH_{83}	14.3	X	265.83468	15.98175	343.03411	3.06129	0.1094712	0.21076551	2.7964240	20	6 3.2	18.2
45583 2000 CK_{87}	13.4	X	235.04048	255.21520	137.83000	8.35467	0.2319319	0.21272058	2.7792634	20	6 1.6	18.0
45584 2000 CY_{88}	14.3	X	297.83744	315.24591	152.15857	22.51435	0.0249762	0.17855180	3.1233925	20	12 13.6	19.0
45585 2000 CA_{89}	13.2	X	50.49678	176.56714	150.11909	23.22452	0.0747841	0.17339636	3.1849998	20	11 23.2	18.1
45586 2000 CC_{91}	13.8	X	220.21642	174.59484	169.96887	2.13392	0.0837331	0.20080085	2.8881895	20	3 28.8	18.2
45587 2000 CT_{91}	14.0	X	229.61143	353.29189	145.10696	1.09722	0.1436953	0.17493427	3.1663053	20	10 9.8	18.6
45588 2000 CP_{92}	14.2	X	321.13820	268.77113	154.24520	7.17838	0.1203267	0.22604243	2.6689642	20	11 29.3	17.2
45589 2000 CM_{97}	13.7	X	297.02653	29.67767	19.88201	0.60443	0.1361657	0.17134666	3.2103493	20	9 15.4	17.8
45590 2000 CU_{101}	13.4	X	281.82626	287.69837	151.75124	10.08237	0.0659043	0.17433734	3.1735288	20	10 14.3	17.8
45591 2000 CQ_{103}	13.1	X	146.58572	65.22509	171.41646	18.91157	0.0462138	0.17643481	3.1483272	20	11 18.8	18.1
45592 2000 CS_{103}	13.3	X	311.78463	286.97299	251.04067	8.91272	0.0383338	0.19067785	2.9895275	20	—	—
45593 2000 CT_{103}	13.8	X	333.13258	260.11287	196.50985	10.30323	0.1086350	0.18471503	3.0535563	20	—	—
45594 2000 CJ_{111}	15.4	X	27.12825	261.53221	133.88012	12.00555	0.2000090	0.23475808	2.6024897	20	—	—
45595 2000 CK_{111}	14.3	X	45.96954	313.18806	92.01375	3.18035	0.1043796	0.18872127	3.0101547	20	—	—
45596 2000 CF_{112}	14.4	X	34.64410	109.75390	272.61741	8.60696	0.1383211	0.23172209	2.6251719	20	—	—
45597 2000 CK_{120}	13.8	X	64.30341	161.22881	195.57097	5.40818	0.2267953	0.18470898	3.0535899	20	—	—
45598 2000 CN_{120}	14.8	X	48.80878	340.12458	329.08579	1.57353	0.1637638	0.22580321	2.6708488	20	11 16.7	18.6
45599 2000 DJ_{3}	13.8	X	87.14133	163.39238	145.87185	9.10638	0.0234526	0.17788473	3.1311962	20	12 5.5	18.4
45600 2000 DD_{4}	13.6	X	50.22650	308.12170	353.20584	11.38802	0.1611917	0.22123494	2.7074903	20	11 3.3	17.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45601 2000 DE_{5}	14.1	X	120.55061	249.29774	122.81191	10.30747	0.0815328	0.19319051	2.9635496	20	1 16.5	18.3
45602 2000 DX_{17}	12.8	X	114.82180	285.31465	330.40052	21.16167	0.0406060	0.17157231	3.2075339	20	10 22.3	17.9
45603 2000 DC_{18}	14.2	X	186.88416	307.15102	21.15299	2.60243	0.0950192	0.19557486	2.9394136	20	2 5.7	18.7
45604 2000 DH_{24}	14.0	X	273.52134	346.76676	332.32133	13.64881	0.0965073	0.20616956	2.8378298	20	4 17.3	18.3
45605 2000 DM_{28}	13.7	X	91.52338	308.96568	340.11417	5.16595	0.1133329	0.17568132	3.1573229	20	11 22.6	18.6
45606 2000 DE_{32}	13.9	X	51.07065	149.97917	145.93163	5.77967	0.1204310	0.17109774	3.2134623	20	10 20.0	18.3
45607 2000 DG_{36}	14.3	X	45.68831	146.30265	151.76878	16.51190	0.0945173	0.17070756	3.2183570	20	10 14.3	18.9
45608 2000 DZ_{41}	14.2	X	253.03419	145.63785	39.20954	0.55466	0.0428205	0.18360646	3.0658019	20	—	—
45609 2000 DN_{46}	13.9	X	193.24324	149.25341	168.88980	9.35826	0.0931780	0.19305206	2.9649663	20	1 28.9	18.6
45610 2000 DJ_{48}	14.6	X	216.82461	13.27408	352.75796	1.49699	0.1091103	0.20433595	2.8547814	20	4 18.4	19.0
45611 2000 DV_{54}	14.2	X	324.18198	197.50015	189.57144	1.18247	0.0652435	0.17256959	3.1951644	20	10 4.1	18.4
45612 2000 DB_{59}	14.6	X	137.77942	172.18306	213.02884	1.38050	0.1096538	0.19597378	2.9354233	20	2 23.1	18.9
45613 2000 DJ_{59}	14.2	X	101.52438	109.88288	305.02304	0.86456	0.0978386	0.19544782	2.9406872	20	2 16.6	18.2
45614 2000 DA_{63}	14.2	X	53.95093	114.65454	277.15538	1.14305	0.1099260	0.18540179	3.0459780	20	—	—
45615 2000 DG_{63}	15.4	X	236.59509	236.46875	173.90307	9.23195	0.1570700	0.21338443	2.7734962	20	6 30.0	19.7
45616 2000 DN_{66}	14.6	X	75.59522	80.81250	353.06966	2.00891	0.0688920	0.19421385	2.9531301	20	2 3.3	18.4
45617 2000 DY_{71}	14.1	X	103.28411	175.03788	165.22121	9.95258	0.1327706	0.18256445	3.0774564	20	—	—
45618 2000 DO_{72}	14.0	X	301.98476	42.04440	354.29021	9.74246	0.0790075	0.16979941	3.2298220	20	9 12.8	18.2
45619 2000 DS_{78}	14.0	X	302.57610	287.19541	160.35465	3.03002	0.0729725	0.17742960	3.1365485	20	11 19.5	18.0
45620 2000 DY_{80}	14.3	X	15.72464	326.65968	125.86416	12.35142	0.0624534	0.19039710	2.9924656	20	—	—
45621 2000 DL_{87}	14.2	X	31.83722	263.12999	118.22133	12.26502	0.0854494	0.18275634	3.0753018	20	—	—
45622 2000 DN_{87}	14.9	X	271.09123	262.92287	123.51159	12.81198	0.1798124	0.21680738	2.7442268	20	7 6.8	18.7
45623 2000 DT_{93}	14.1	X	136.99110	96.24413	131.89560	10.17256	0.0589059	0.17465028	3.1697368	20	10 30.1	19.0
45624 2000 DY_{93}	14.4	X	164.29649	237.95139	88.40344	2.85462	0.0844233	0.19200380	2.9757481	20	1 10.8	18.9
45625 2000 DE_{95}	13.7	X	127.11134	357.55479	349.10535	9.72750	0.0993878	0.18987913	2.9979052	20	—	—
45626 2000 DF_{95}	14.1	X	66.99980	182.33160	100.20758	2.83222	0.0254927	0.17262998	3.1944192	20	10 9.5	18.5
45627 2000 DY_{97}	14.2	X	337.04959	255.96719	135.71913	13.83858	0.1976212	0.22655824	2.6649116	20	11 22.4	17.0
45628 2000 DD_{99}	15.1	X	186.48401	21.95912	23.59354	1.89481	0.0849191	0.20652984	2.8345286	20	5 6.9	19.4
45629 2000 DT_{99}	13.2	X	9.23227	237.78290	115.49807	10.07695	0.0745862	0.17426661	3.1743873	20	10 31.5	17.5
45630 2000 DO_{101}	13.7	X	262.18029	347.03322	128.98222	11.64354	0.0355730	0.17611919	3.1520875	20	11 8.6	18.3
45631 2000 DY_{105}	13.7	X	309.37868	265.51557	149.00994	20.96603	0.1058907	0.17433558	3.1735502	20	10 20.8	18.0
45632 2000 DS_{106}	13.5	X	359.20269	229.15209	139.04187	12.94793	0.0825406	0.17324847	3.1868120	20	11 5.7	17.8
45633 2000 EY_{1}	14.9	X	168.36175	253.11818	116.74442	3.12452	0.1000014	0.19881660	2.9073744	20	3 7.7	19.3
45634 2000 EH_{11}	14.4	X	293.97881	216.44298	128.37010	9.76157	0.1863267	0.21197200	2.7858029	20	6 12.2	18.0
45635 2000 EY_{11}	13.7	X	114.57694	213.79995	98.95195	11.19584	0.0234555	0.18338415	3.0682791	20	—	—
45636 2000 EG_{12}	13.9	X	75.53328	278.24269	103.83070	11.44619	0.1248333	0.18915331	3.0055693	20	—	—
45637 2000 EW_{12}	13.8	X	329.84864	208.23125	84.32353	9.46329	0.0974224	0.15884757	3.3766211	20	6 8.6	18.2
45638 2000 EK_{20}	14.0	X	312.56300	148.13236	226.86901	12.16043	0.2045653	0.22023885	2.7156477	20	8 19.3	17.0
45639 2000 EP_{20}	13.4	X	225.59464	323.98729	192.74470	24.16849	0.0805987	0.17693225	3.1424235	20	11 5.5	18.2
45640 2000 ED_{21}	14.0	X	55.32328	202.85919	210.92118	12.14875	0.1512788	0.19004859	2.9961228	20	—	—
45641 2000 EK_{21}	15.0	X	23.79772	199.02649	227.99707	12.51833	0.1214490	0.23551249	2.5969291	20	—	—
45642 2000 EU_{34}	13.9	X	58.99181	290.61982	102.55844	12.10374	0.1447318	0.18556244	3.0442198	20	—	—
45643 2000 EG_{37}	13.2	X	253.16260	123.56612	344.18442	4.61592	0.0941951	0.17263376	3.1943725	20	10 3.9	17.7
45644 2000 EU_{37}	14.1	X	328.28866	296.63882	155.86387	5.65483	0.1460471	0.18117735	3.0931438	20	—	—
45645 2000 EY_{41}	13.7	X	12.10768	39.70931	359.93505	1.16798	0.2014282	0.17992703	3.1074568	20	—	—
45646 2000 EE_{45}	13.6	X	196.42033	29.70654	325.65861	3.61132	0.2255557	0.19555176	2.9396450	20	3 15.9	18.7
45647 2000 EF_{46}	14.2	X	236.88168	117.06157	351.44744	2.68404	0.1675502	0.17108881	3.2135741	20	9 7.9	19.2
45648 2000 ED_{47}	13.2	X	292.70891	288.45017	185.31579	6.45612	0.1166853	0.17776773	3.1325699	20	12 3.9	17.2
45649 2000 EN_{49}	13.8	X	89.63097	244.38054	133.11278	11.86136	0.1282837	0.18612943	3.0380343	20	—	—
45650 2000 EV_{49}	14.0	X	339.44656	228.13735	138.61694	14.70295	0.1544150	0.22279918	2.6948028	20	10 19.5	17.1
45651 2000 EK_{60}	14.7	X	310.10463	43.35001	353.52627	3.42146	0.2619877	0.22044041	2.7139921	20	9 14.8	17.0
45652 2000 EK_{61}	14.2	X	242.51546	134.52914	267.96058	2.02271	0.0396786	0.16019322	3.3576851	20	7 9.0	19.1
45653 2000 EL_{62}	13.1	X	271.16905	141.19817	169.30050	10.17373	0.0588660	0.15171476	3.4816424	20	4 20.8	18.2
45654 2000 EV_{71}	15.8	X	157.71004	125.52387	267.26053	1.08079	0.0611129	0.20140576	2.8824036	20	3 19.9	20.1
45655 2000 EW_{71}	15.2	X	107.59206	221.57711	154.77201	13.99556	0.1974757	0.24246733	2.5470291	20	1 13.4	18.6
45656 2000 EN_{74}	14.2	X	25.86101	279.45010	62.30443	7.52313	0.0829322	0.21769990	2.7367212	20	11 15.8	17.8
45657 2000 EK_{76}	13.9	X	323.34846	267.69017	116.94936	8.98651	0.1959299	0.22260579	2.6963633	20	10 10.4	16.5
45658 2000 EA_{80}	13.9	X	69.00463	38.33090	358.27281	10.14520	0.1123351	0.18889998	3.0082559	20	—	—
45659 2000 EL_{84}	13.5	X	113.64535	239.17626	148.48399	11.07492	0.1251225	0.19232946	2.9723880	20	2 1.6	17.7
45660 2000 EU_{84}	13.6	X	348.33792	187.71875	211.96263	8.51048	0.0598361	0.17810793	3.1285797	20	11 24.9	17.8
45661 2000 EX_{84}	13.8	X	144.94496	86.39072	264.55439	12.21935	0.2314843	0.24215548	2.5492153	20	1 24.4	17.9
45662 2000 EY_{84}	13.9	X	189.68496	8.23261	210.55794	11.13613	0.0609113	0.17990799	3.1076761	20	12 10.7	18.6
45663 2000 EF_{85}	13.4	X	275.65493	252.23510	276.82155	9.65526	0.0764010	0.18457564	3.0550604	20	—	—
45664 2000 EC_{88}	13.2	X	208.15147	72.79137	257.42747	11.82626	0.1352007	0.19712566	2.9239770	20	2 21.5	18.1
45665 2000 EM_{88}	13.5	X	337.60761	271.96032	237.83365	8.79209	0.0395155	0.18983820	2.9983361	20	—	—
45666 2000 EX_{91}	13.7	X	327.16508	244.38897	194.49111	16.49972	0.0996927	0.17875110	3.1210704	20	12 13.7	17.9
45667 2000 EG_{93}	13.4	X	182.48316	308.71160	260.37668	8.18122	0.0508596	0.17522448	3.1628082	20	11 20.7	18.1
45668 2000 EU_{94}	13.6	X	301.16500	81.39349	328.98019	13.55748	0.1922504	0.22041038	2.7142386	20	9 19.9	16.5
45669 2000 ET_{96}	13.9	X	211.92311	301.96434	212.37316	12.98845	0.1555365	0.17138290	3.2098967	20	10 7.6	19.1
45670 2000 EK_{103}	13.3	X	288.63131	18.66888	93.92625	18.73496	0.1771431	0.18013706	3.1050410	20	11 23.6	17.2
45671 2000 EA_{104}	13.0	X	56.22914	199.93291	255.22809	9.40013	0.0767987	0.18995983	2.9970561	20	1 31.9	17.1
45672 2000 EE_{109}	13.5	X	131.68059	76.92917	267.08593	14.60653	0.1841555	0.18918304	3.0052545	20	1 7.2	18.1
45673 2000 ES_{111}	14.7	X	59.50733	146.65276	150.07800	1.79048	0.1646867	0.17330902	3.1860697	20	11 5.2	19.3
45674 2000 EY_{111}	13.9	X	105.82428	241.68892	106.60425	3.63796	0.0864983	0.18748937	3.0233258	20	—	—
45675 2000 EG_{112}	13.8	X	323.86536	104.16319	297.04422	12.94283	0.2119345	0.22463690	2.6800855	20	10 25.0	16.6
45676 2000 EG_{117}	14.3	X	283.40056	51.73837	358.65672	7.00469	0.2319049	0.21947642	2.7219333	20	8 20.3	17.5
45677 2000 EJ_{120}	13.8	X	220.16045	15.20105	133.84942	22.42379	0.0440242	0.17543360	3.1602943	20	10 31.8	18.8
45678 2000 EQ_{127}	13.4	X	94.75590	300.15264	150.61934	13.79596	0.1078762	0.19811988	2.9141865	20	3 28.4	17.5
45679 2000 EZ_{127}	14.4	X	281.35896	2.47297	90.42630	2.57891	0.0698258	0.17457002	3.1707082	20	10 27.8	18.7
45680 2000 EF_{130}	13.0	X	272.05207	277.13703	151.74023	7.24791	0.0570499	0.17035048	3.2228529	20	9 16.9	17.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45681 2000 ET_{131}	14.0	X	255.12643	297.69354	165.70086	13.14425	0.0594907	0.17218573	3.1999113	20	10 9.5	18.5
45682 2000 EX_{131}	13.3	X	4.03730	72.61449	9.42449	10.82890	0.1099215	0.18462639	3.0545005	20	—	—
45683 2000 EO_{135}	14.5	X	107.83591	280.63541	62.50387	6.38994	0.2536224	0.22922168	2.6442281	20	—	—
45684 2000 EE_{137}	13.6	X	101.03426	313.28149	282.57839	13.23710	0.0573115	0.16982920	3.2294444	20	9 17.8	18.7
45685 Torrycoppin	13.7	X	146.74610	179.64132	132.02390	18.77275	0.2472274	0.17807615	3.1289518	20	—	—
45686 2000 EM_{139}	13.6	X	121.87229	176.01493	184.06084	9.69619	0.0656179	0.18927261	3.0043063	20	1 1.5	18.1
45687 Pranverahyseni	13.1	X	328.66431	203.76559	176.00737	16.27623	0.1035677	0.17380647	3.1799876	20	10 1.5	16.9
45688 2000 EV_{142}	14.7	X	55.54962	152.31596	239.04181	10.87663	0.1869248	0.23668410	2.5883519	20	—	—
45689 2000 EC_{144}	14.0	X	8.63371	224.43849	251.57559	9.68387	0.0966177	0.19093275	2.9868662	20	—	—
45690 2000 EL_{146}	14.0	X	40.66346	117.01904	278.80021	12.18894	0.1878630	0.23365173	2.6106985	20	—	—
45691 2000 EF_{148}	13.5	X	30.07571	185.84513	184.49374	9.47583	0.0734905	0.17420125	3.1751814	20	12 14.9	18.0
45692 2000 EJ_{148}	14.0	X	355.51309	221.79941	185.14085	10.68580	0.1603754	0.22515926	2.6759388	20	—	—
45693 2000 EB_{150}	13.7	X	151.30731	326.77972	107.03128	17.26506	0.2610660	0.20355998	2.8620317	20	5 19.9	18.9
45694 2000 EC_{150}	13.7	X	216.04693	105.94287	271.10719	21.01018	0.3056536	0.25786465	2.4446021	20	4 14.7	18.6
45695 2000 ET_{150}	14.5	X	164.71732	213.41502	155.52033	2.37351	0.1148808	0.19565328	2.9386281	20	3 3.1	18.9
45696 2000 EM_{167}	13.5	X	265.71355	65.76797	96.21654	10.68614	0.0410912	0.18278960	3.0749288	20	—	—
45697 2000 EP_{174}	15.0	X	253.66507	141.86744	191.73461	1.07881	0.1263386	0.20661576	2.8337428	20	4 15.7	19.2
45698 2000 EG_{197}	15.5	X	84.89976	282.00321	127.40462	4.74075	0.2959447	0.24376560	2.5379775	20	2 11.0	18.1
45699 2000 EO_{199}	14.7	X	359.36624	177.98704	220.59989	10.98841	0.1246248	0.23092354	2.6312205	20	12 29.3	18.0
45700 Levi–Setti	14.6	X	72.71975	98.24403	288.48832	11.45992	0.1859937	0.23716674	2.5848392	20	—	—
45701 2000 FE_{11}	13.7	X	333.07739	6.17051	85.48169	12.71580	0.0919521	0.18367832	3.0650022	20	—	—
45702 2000 FJ_{15}	14.1	X	21.56120	145.24807	190.06890	23.62162	0.1887924	0.26401102	2.4065119	20	11 29.8	17.5
45703 2000 FH_{19}	14.6	X	302.85397	299.79023	115.88332	9.23711	0.3299454	0.22291536	2.6938664	20	9 20.2	16.9
45704 2000 FZ_{19}	14.4	X	282.27752	280.66143	132.60107	13.28263	0.1598776	0.21810843	2.7333028	20	9 3.6	17.8
45705 2000 FD_{31}	14.0	X	157.87120	213.50958	67.88796	8.87172	0.1776429	0.22861908	2.6488725	20	—	—
45706 2000 FT_{31}	13.5	X	68.79150	283.01123	90.10325	11.85922	0.1504543	0.18307131	3.0717735	20	—	—
45707 2000 FZ_{31}	13.7	X	330.63096	336.50846	85.44708	13.52651	0.1370631	0.17757727	3.1348094	20	11 29.3	17.3
45708 2000 FD_{35}	14.3	X	281.73027	231.36260	170.62494	7.63060	0.1474918	0.21411632	2.7671723	20	8 15.8	17.9
45709 2000 FR_{36}	13.5	X	140.66975	331.65837	172.14553	12.66644	0.0242766	0.15863179	3.3796825	20	7 14.0	18.6
45710 2000 FD_{40}	14.2	X	151.86743	288.63691	50.93737	9.45342	0.1832979	0.23354450	2.6114975	20	1 18.6	18.4
45711 2000 FD_{43}	14.4	X	335.61226	58.20821	42.39775	6.23291	0.0607611	0.23077865	2.6323217	20	—	—
45712 2000 FR_{44}	13.9	X	25.60766	263.14579	141.82048	9.95324	0.0667891	0.18054610	3.1003494	20	—	—
45713 2000 FK_{51}	14.8	X	319.76607	294.51108	99.50423	0.12537	0.1436142	0.16912606	3.2383890	20	10 1.1	18.5
45714 2000 FV_{58}	14.0	X	139.39545	192.83231	158.71238	10.65879	0.1046541	0.18865116	3.0109005	20	1 15.8	18.6
45715 2000 FR_{66}	14.8	X	84.51982	43.02189	328.85172	4.53410	0.3114534	0.23494854	2.6010830	20	—	—
45716 2000 GK_{8}	14.0	X	278.06459	54.86652	7.56011	0.41760	0.1277039	0.17101576	3.2144891	20	9 5.6	18.4
45717 2000 GZ_{11}	14.7	X	353.21071	210.90071	196.24926	4.97099	0.1563073	0.17806038	3.1291366	20	12 18.5	18.4
45718 2000 GO_{21}	14.3	X	35.69630	140.06288	272.37835	0.33406	0.2471459	0.18441425	3.0568425	20	—	—
45719 2000 GR_{26}	14.2	X	343.81792	58.89877	41.60191	3.85077	0.1853948	0.18364122	3.0654149	20	—	—
45720 2000 GZ_{33}	14.1	X	16.71241	222.45764	197.37036	9.07242	0.1307389	0.18073609	3.0981763	20	—	—
45721 2000 GZ_{42}	13.2	X	100.23454	309.14644	48.00401	1.02375	0.0754202	0.13259943	3.8086840	20	—	—
45722 2000 GA_{56}	13.8	X	274.75828	235.55051	37.29880	9.37293	0.0584483	0.19255073	2.9701104	20	3 9.1	18.1
45723 2000 GN_{58}	14.1	X	328.72218	234.92607	211.90989	11.07613	0.1499799	0.17730852	3.1379762	20	12 25.5	17.9
45724 2000 GJ_{68}	13.8	X	202.56559	297.91114	42.54393	10.97166	0.1075813	0.19094007	2.9867898	20	3 11.0	18.6
45725 2000 GJ_{77}	14.6	X	192.11603	281.62237	50.08365	4.29877	0.1216666	0.23559679	2.5963095	20	2 12.0	18.6
45726 2000 GL_{83}	14.1	X	339.04160	260.39157	152.40919	9.51409	0.1117467	0.17814343	3.1281639	20	12 1.3	18.1
45727 2000 GQ_{83}	13.7	X	50.98315	212.25510	126.83070	10.33814	0.0722988	0.17495543	3.1660500	20	12 4.7	18.3
45728 2000 GC_{86}	14.0	X	200.88462	53.17501	188.16773	24.93672	0.3004074	0.17859775	3.1228568	20	12 26.3	19.8
45729 2000 GB_{89}	13.6	X	241.48614	248.55018	169.72089	9.18594	0.1512093	0.20972698	2.8056480	20	7 15.4	17.9
45730 2000 GS_{106}	13.6	X	193.43617	32.81118	222.40951	10.39174	0.0319425	0.17857941	3.1230706	20	—	—
45731 2000 GM_{124}	14.1	X	121.95346	204.77031	74.31620	13.06612	0.1781640	0.21869930	2.7283775	20	12 20.8	18.6
45732 2000 GL_{136}	13.6	X	234.73760	184.08330	112.88896	11.55771	0.0937629	0.18805985	3.0172085	20	2 17.9	18.3
45733 2000 GV_{139}	13.7	X	66.95444	220.02416	169.28499	10.68038	0.0864828	0.18114228	3.0935431	20	—	—
45734 2000 GN_{140}	13.6	X	10.66282	228.47340	166.14335	6.30685	0.1527497	0.17444677	3.1722015	20	12 28.2	17.6
45735 2000 GC_{159}	13.5	X	122.69334	62.95729	245.19679	13.91510	0.1791532	0.17727126	3.1384159	20	—	—
45736 2000 GA_{170}	14.4	X	63.98383	141.92826	256.39686	11.83752	0.2202009	0.23811046	2.5780049	20	—	—
45737 Benita	13.5	X	57.87164	124.24954	181.27794	10.18259	0.0431842	0.17274419	3.1930110	20	10 29.3	18.0
45738 2000 HY_{19}	13.2	X	281.41473	278.29574	197.45742	13.78738	0.1192513	0.17171857	3.2057123	20	11 18.7	17.5
45739 2000 HR_{25}	12.5	X	47.21651	337.92774	37.33051	7.36013	0.3186499	0.12354934	3.9924771	20	—	—
45740 2000 HG_{27}	14.1	X	218.18027	149.25053	192.79200	13.11004	0.1137176	0.19223837	2.9733269	20	3 21.5	18.9
45741 2000 HT_{33}	14.4	X	213.31581	267.58826	356.73964	1.74044	0.0678573	0.18180654	3.0860032	20	—	—
45742 2000 HJ_{44}	14.9	X	48.92157	271.67948	60.82735	9.94782	0.2761589	0.26433372	2.4045529	20	—	—
45743 2000 HR_{53}	13.7	X	174.75787	323.83003	57.71728	11.02410	0.0906750	0.19097125	2.9864648	20	4 1.3	18.4
45744 2000 HU_{57}	14.2	X	93.63421	223.33047	58.14319	10.18047	0.1423520	0.21539835	2.7561814	20	11 26.2	18.5
45745 2000 HU_{84}	13.8	X	2.82053	230.55951	256.99375	11.10252	0.2162098	0.23863687	2.5742123	20	—	—
45746 2000 JW_{14}	13.9	X	261.36878	200.59441	75.59747	6.45057	0.0737963	0.18804503	3.0173670	20	2 23.9	18.3
45747 2000 JR_{38}	14.7	X	120.03556	109.24976	236.60472	9.47307	0.0385535	0.22772130	2.6558300	20	—	—
45748 2000 JD_{62}	15.1	X	330.15973	205.12409	83.94965	3.12945	0.0869687	0.24674009	2.5175392	20	6 6.1	17.9
45749 2000 JR_{64}	13.7	X	315.19556	120.83032	342.96905	16.25723	0.2019853	0.18013548	3.1050591	20	12 25.5	17.3
45750 2000 JC_{65}	13.8	X	209.73947	136.85053	187.21532	8.77857	0.1549872	0.18547749	3.0451492	20	2 20.1	18.9
45751 2000 JH_{66}	13.9	X	261.43411	94.21996	172.72157	11.45435	0.1887967	0.18540165	3.0459796	20	1 28.5	18.9
45752 2000 JY_{70}	13.4	X	167.22619	73.53522	268.82612	8.73307	0.1168560	0.18919780	3.0050982	20	2 1.4	18.1
45753 2000 JL_{72}	14.3	X	299.85360	45.58484	191.17678	12.92818	0.0177465	0.18882490	3.0090532	20	2 23.4	18.6
45754 2000 KC_{14}	15.1	X	159.21571	320.96905	65.33998	4.32453	0.1462457	0.23788971	2.5795995	20	3 19.5	19.1
45755 2000 KL_{18}	14.3	X	288.76586	175.73596	160.07347	2.06856	0.1079557	0.19854607	2.9100147	20	6 3.9	18.1
45756 2000 KV_{26}	14.7	X	255.55151	122.01918	64.57115	8.25297	0.0867011	0.22469645	2.6796120	20	—	—
45757 2000 KH_{29}	15.0	X	156.90357	321.58489	24.95692	1.70005	0.0809249	0.23041097	2.6351213	20	1 21.6	18.9
45758 2000 KN_{29}	13.9	X	121.34434	59.59326	257.98804	4.70799	0.1223835	0.17146393	3.2088853	20	—	—
45759 2000 KQ_{41}	14.5	X	31.12475	126.89761	184.87704	3.12985	0.0464066	0.20977018	2.8052628	20	10 8.2	18.0
45760 2000 KY_{43}	14.8	X	236.00894	240.44368	92.78283	8.96520	0.1751880	0.28689110	2.2767989	20	3 23.9	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45761 2000 KF_{45}	14.6	X	22.07895	244.40832	125.73393	3.78408	0.1065853	0.21668990	2.7452186	20	12 19.7	18.1
45762 2000 KK_{76}	14.8	X	223.67881	241.79164	114.30370	6.56882	0.1496787	0.24120355	2.5559180	20	4 12.6	18.8
45763 2000 KB_{77}	15.0	X	140.76482	174.32815	99.57424	4.85869	0.0371235	0.22005575	2.7171539	20	—	—
45764 2000 LV	14.7	X	57.67321	64.93262	277.42425	6.71246	0.3158166	0.26226119	2.4172043	20	—	—
45765 2000 LJ_{3}	13.7	X	53.22510	127.83566	188.51326	8.70431	0.1540188	0.21101120	2.7942529	20	11 28.1	17.7
45766 2000 LX_{5}	13.5	X	359.80038	99.40976	55.53629	10.10998	0.0261702	0.18442561	3.0567170	20	2 4.6	17.8
45767 2000 LU_{17}	13.7	X	221.90735	98.07495	224.58644	11.66772	0.2082042	0.18304101	3.0721125	20	2 24.7	19.1
45768 2000 LF_{28}	15.0	X	359.40214	79.89910	249.61800	3.70279	0.1698084	0.29868362	2.2164696	20	10 18.1	16.7
45769 2000 LP_{36}	14.1	X	60.59010	207.22282	132.32316	13.13569	0.1541201	0.21636670	2.7479517	20	—	—
45770 2000 NM_{2}	14.3	X	333.93987	116.73564	186.08689	1.46157	0.2119377	0.24488446	2.5302410	20	6 22.2	16.2
45771 2000 NE_{5}	14.5	X	250.12853	328.11552	333.95445	6.76955	0.1408591	0.27892955	2.3199201	20	2 24.9	17.8
45772 2000 NR_{16}	15.3	X	32.95722	223.89863	103.95958	5.75329	0.1645666	0.30390503	2.1910088	20	12 10.2	17.9
45773 2000 NL_{22}	14.3	X	106.11642	47.54243	285.24541	9.38224	0.1358665	0.26362657	2.4088510	20	—	—
45774 2000 NH_{24}	13.8	X	95.83869	237.05988	95.08717	13.40566	0.1803545	0.21934433	2.7230259	20	—	—
45775 2000 NP_{27}	14.8	X	237.57396	151.89377	115.05080	4.77303	0.1549755	0.22711571	2.6605490	20	1 6.3	19.0
45776 2000 NZ_{28}	14.7	X	306.53505	334.83209	284.51703	0.99208	0.1763719	0.18688415	3.0298496	20	3 10.6	18.9
45777 2000 OZ_{4}	14.4	X	237.42898	0.60511	297.52456	12.34734	0.1437014	0.22883715	2.6471895	20	2 9.9	18.7
45778 2000 OG_{5}	14.6	X	314.07066	56.61196	290.72051	6.86936	0.1086611	0.24453013	2.5326847	20	7 31.6	17.2
45779 2000 OR_{6}	15.0	X	132.31870	14.03469	234.35124	3.90487	0.1534211	0.26075709	2.4264907	20	11 30.7	18.7
45780 2000 OA_{12}	15.3	X	233.34103	355.60393	280.70719	2.75157	0.0347570	0.22794165	2.6541182	20	1 18.5	19.0
45781 2000 OD_{12}	14.2	X	185.84487	255.91764	291.35886	5.25599	0.0502200	0.20981790	2.8048374	20	11 3.2	18.3
45782 2000 OE_{14}	15.0	X	84.20281	74.14753	286.76097	2.74162	0.1019267	0.26648580	2.3915896	20	—	—
45783 2000 OV_{16}	14.6	X	77.78762	166.00780	185.94244	2.37034	0.2084949	0.26287235	2.4134563	20	—	—
45784 2000 OZ_{17}	14.6	X	298.46304	304.11972	22.30944	3.45733	0.2038541	0.24119210	2.5559989	20	5 19.4	17.7
45785 2000 OT_{19}	15.3	X	242.91864	136.34503	178.16162	3.81952	0.1358835	0.28306731	2.2972570	20	3 4.2	18.5
45786 2000 OE_{20}	14.7	X	159.14427	96.04029	168.76117	9.25712	0.1093135	0.21496090	2.7599194	20	—	—
45787 2000 OJ_{24}	14.4	X	359.17797	54.94925	343.94607	6.10508	0.1195896	0.25982590	2.4322848	20	—	—
45788 2000 OH_{25}	14.9	X	111.69995	235.01388	108.13921	6.21989	0.1339816	0.26845968	2.3798523	20	—	—
45789 2000 OZ_{26}	14.6	X	51.25777	193.71011	159.53235	3.09397	0.1946584	0.25913392	2.4366129	20	—	—
45790 2000 ON_{42}	15.2	X	267.94805	66.36598	253.32437	5.99189	0.1354837	0.28500196	2.2868490	20	4 5.7	18.3
45791 2000 OD_{45}	14.8	X	232.84266	351.01753	318.45584	9.97052	0.2344304	0.27838315	2.3229548	20	2 13.3	18.6
45792 2000 OF_{45}	15.3	X	148.24091	12.19979	307.07895	6.14016	0.1305038	0.26659476	2.3909379	20	—	—
45793 2000 OL_{48}	15.5	X	308.10073	203.97079	119.64943	2.90895	0.1905823	0.28849077	2.2683746	20	6 4.2	17.5
45794 2000 OM_{48}	15.0	X	134.09831	239.13688	89.59560	2.28770	0.2013807	0.26609471	2.3939324	20	—	—
45795 2000 OY_{49}	15.0	X	71.81190	190.70932	175.62884	6.52184	0.1512862	0.26096135	2.4252243	20	—	—
45796 2000 OG_{54}	14.6	X	157.06459	326.61966	306.61300	1.26269	0.2088755	0.16730832	3.2618028	20	—	—
45797 2000 PK_{1}	15.7	X	222.34808	100.98263	332.46662	6.87626	0.0965706	0.29292175	2.2454409	20	7 27.6	18.6
45798 2000 PH_{16}	15.0	X	176.68610	267.20593	323.12287	8.37906	0.0829261	0.21333033	2.7739650	20	12 15.6	19.3
45799 2000 PZ_{18}	15.5	X	173.40120	342.18887	340.43394	5.21659	0.0247178	0.27286589	2.3541631	20	—	—
45800 2000 PB_{22}	14.0	X	173.82210	312.22476	359.33050	13.85381	0.2564337	0.17283053	3.1919469	20	1 17.4	19.7
45801 2000 PF_{28}	14.9	X	139.24460	193.86268	84.32266	7.30327	0.1303541	0.26167756	2.4207971	20	—	—
45802 2000 PV_{29}	8.0	X	65.77399	89.89185	173.26491	1.18150	0.0145287	0.00340586	43.7507270	20	8 23.6	24.4
45803 2000 QH_{1}	14.8	X	342.68227	314.09723	343.45079	10.99684	0.1800390	0.24308442	2.5427166	20	7 10.5	17.2
45804 2000 QP_{2}	15.7	X	185.35348	182.13108	152.57238	6.65246	0.1237253	0.27549207	2.3391782	20	2 2.2	19.0
45805 2000 QU_{18}	15.7	X	2.74129	2.94789	149.85948	5.25727	0.0509622	0.27450907	2.3447592	20	1 14.9	18.3
45806 2000 QN_{20}	15.7	X	210.00897	336.42458	340.76842	5.40762	0.1532390	0.27603276	2.3361226	20	2 6.4	19.3
45807 2000 QY_{20}	15.4	X	269.86662	28.39487	333.68438	6.22764	0.1113024	0.28873846	2.2670771	20	6 13.9	18.2
45808 2000 QG_{24}	16.3	X	191.26222	32.83229	151.51953	2.01396	0.0317380	0.30353909	2.1927694	20	11 30.3	18.8
45809 2000 QH_{28}	15.9	X	94.99853	330.89929	349.18404	5.29777	0.0197139	0.30908426	2.1664639	20	—	—
45810 2000 QP_{32}	14.9	X	233.27458	239.99138	67.35016	6.46453	0.1054521	0.27865537	2.3214417	20	2 19.6	18.3
45811 2000 QN_{38}	15.4	X	168.22899	315.37750	160.42970	1.64778	0.0528797	0.24266432	2.5456504	20	7 17.9	19.0
45812 2000 QV_{39}	15.8	X	178.41703	186.70056	183.07371	0.94744	0.0367398	0.27934240	2.3176337	20	3 6.3	18.7
45813 2000 QA_{45}	15.3	X	178.24042	104.80956	147.13336	5.96464	0.1187874	0.26465513	2.4026057	20	—	—
45814 2000 QJ_{61}	15.8	X	89.44006	122.72624	130.32064	4.49157	0.1628045	0.30178083	2.2012783	20	11 4.8	19.0
45815 2000 QF_{67}	15.1	X	224.66066	273.94770	40.99893	7.29526	0.1477464	0.27770040	2.3267606	20	2 19.6	18.8
45816 2000 QO_{72}	15.0	X	2.78914	286.18892	322.70361	3.63862	0.1242689	0.23942459	2.5685630	20	6 3.7	17.6
45817 2000 QM_{78}	15.4	X	193.48458	270.33246	331.29085	6.41409	0.0872086	0.26325323	2.4111279	20	—	—
45818 2000 QG_{79}	15.6	X	135.93550	32.81453	178.66866	4.87179	0.0869975	0.30053727	2.2073464	20	10 25.9	18.6
45819 2000 QL_{101}	15.6	X	256.19123	354.75549	17.84740	11.89687	0.0984651	0.28725138	2.2748947	20	6 10.4	18.7
45820 2000 QQ_{102}	15.3	X	320.26533	229.22306	71.07490	4.91718	0.1481324	0.23797772	2.5789634	20	5 28.5	18.1
45821 2000 QS_{114}	15.8	X	44.41303	96.16639	144.02442	5.03536	0.0854513	0.29178158	2.2512867	20	8 5.0	18.2
45822 2000 QQ_{116}	12.3	X	232.58461	271.09561	91.94599	7.29886	0.1895117	0.08198420	5.2478643	20	5 1.2	19.8
45823 2000 QC_{120}	15.2	X	300.02336	56.97670	198.15067	6.37749	0.1075918	0.27945859	2.3169913	20	2 23.6	18.1
45824 2000 QB_{122}	15.3	X	252.47429	31.57100	269.35169	3.25771	0.1661800	0.27903755	2.3193215	20	2 22.5	18.7
45825 2000 QW_{123}	15.1	X	1.03591	272.31109	188.50788	21.52656	0.1010324	0.36116887	1.9528213	20	—	—
45826 2000 QX_{128}	15.5	X	98.80765	7.63435	310.63343	4.67749	0.0883147	0.30856151	2.1689101	20	—	—
45827 2000 QV_{149}	15.5	X	141.79929	64.02042	267.15930	3.51868	0.1525973	0.26752653	2.3853831	20	—	—
45828 2000 QK_{157}	15.3	X	177.51191	320.62245	265.70555	5.73869	0.0957053	0.26034884	2.4290267	20	12 20.7	18.6
45829 2000 QR_{166}	14.6	X	21.70291	315.40182	320.43632	11.73596	0.2321601	0.19679872	2.9272145	20	8 27.7	17.8
45830 2000 QW_{181}	14.7	X	29.83616	65.32395	7.39710	4.38885	0.1165505	0.30585403	2.1816910	20	—	—
45831 2000 QW_{184}	15.2	X	232.76118	193.17282	71.23759	4.15326	0.1375283	0.22452675	2.6809620	20	—	—
45832 2000 QK_{186}	15.5	X	330.25656	155.29557	107.30099	6.21266	0.1401082	0.28754508	2.2733454	20	4 21.8	17.7
45833 2000 QX_{188}	15.6	X	13.09808	164.32271	65.70900	4.15106	0.0512512	0.28708330	2.2757826	20	5 23.0	17.7
45834 2000 QU_{229}	15.8	X	276.99302	214.29513	14.21503	4.93860	0.1447170	0.27347490	2.3506668	20	—	—
45835 2000 RZ	15.5	X	109.18491	131.83476	214.82371	1.59196	0.0681457	0.31350899	2.1460313	20	—	—
45836 2000 RT_{21}	15.7	X	283.68887	39.51106	316.35839	5.34433	0.0687537	0.28920588	2.2646337	20	7 4.2	18.2
45837 2000 RD_{27}	14.9	X	97.62236	323.92796	325.87758	14.21617	0.1375935	0.25623814	2.4549362	20	12 18.2	18.9
45838 2000 RV_{30}	14.6	X	64.42966	55.02353	283.11867	5.43613	0.1479805	0.25664037	2.4523704	20	—	—
45839 2000 RQ_{37}	15.6	X	127.19694	173.78725	237.96191	20.80715	0.0793014	0.36972809	1.9225653	20	2 8.9	18.2
45840 2000 RU_{44}	14.9	X	141.79063	66.88211	339.14801	10.68786	0.2994826	0.22265064	2.6960012	20	4 2.3	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
45841 2000 RX_{55}	15.6	X	204.43683	260.29542	330.52290	2.11340	0.1220551	0.26351388	2.4095376	20	—	—
45842 2000 RC_{66}	15.4	X	263.11133	164.79939	157.36900	8.27127	0.2264336	0.28178553	2.3042181	20	3 28.9	18.9
45843 2000 RL_{73}	16.1	X	17.08576	76.79009	188.97593	5.68703	0.0894725	0.29017581	2.2595845	20	7 27.6	18.4
45844 2000 RN_{74}	14.7	X	222.73595	331.40148	289.95893	5.75410	0.1389822	0.22297094	2.6934187	20	—	—
45845 2000 RM_{75}	15.4	X	165.96874	10.23572	301.37104	6.04285	0.1252783	0.26681002	2.3896518	20	—	—
45846 2000 RA_{96}	15.3	X	160.37405	86.65746	188.19308	2.50324	0.1530501	0.26248252	2.4158453	20	—	—
45847 2000 RC_{96}	15.8	X	194.31801	297.30375	346.20380	2.13919	0.1631405	0.26835970	2.3804433	20	—	—
45848 2000 SY_{11}	15.2	X	259.96309	48.02562	337.97415	5.46682	0.1508876	0.29279581	2.2460848	20	6 29.7	18.1
45849 2000 SG_{98}	15.6	X	355.54951	21.30171	216.42177	4.38093	0.0330261	0.28267693	2.2993715	20	5 5.9	18.0
45850 2000 SH_{209}	12.5	X	88.81908	350.00890	130.10262	10.29573	0.1006195	0.12621268	3.9361114	20	4 30.1	18.2
45851 2000 SH_{239}	15.4	X	317.76195	114.51655	44.81476	2.70734	0.1516507	0.26291784	2.4131780	20	—	—
45852 2000 SG_{259}	14.8	X	78.70764	349.89593	177.17515	6.41115	0.1842845	0.22903078	2.6456973	20	6 23.4	18.4
45853 2000 SN_{263}	16.1	X	107.96348	282.20213	308.06527	1.82519	0.1289176	0.29871153	2.2163315	20	10 19.4	19.1
45854 2000 SR_{285}	15.9	X	358.81185	280.58356	350.71561	6.22831	0.0884322	0.28661770	2.2782465	20	7 3.9	18.1
45855 2000 TA_{2}	15.1	X	225.28384	328.40716	334.03706	1.61121	0.2218884	0.27331586	2.3515786	20	1 31.4	19.1
45856 2000 TO_{38}	13.0	X	191.03059	52.66206	45.62587	11.52300	0.1021769	0.18923957	3.0046560	20	7 19.2	17.8
45857 2000 TH_{61}	13.5	X	298.74737	163.93195	69.45792	14.63979	0.1339258	0.22365814	2.6878988	20	2 3.3	17.4
45858 2000 UP_{7}	14.7	X	324.18187	359.59505	175.55474	2.55253	0.1049987	0.26354464	2.4093502	20	—	—
45859 2000 UG_{13}	15.0	X	200.97777	254.10715	1.63662	8.47500	0.2396290	0.25968170	2.4331851	20	—	—
45860 2000 UG_{27}	15.0	X	212.03033	251.20228	114.01940	5.30973	0.1647950	0.27680622	2.3317688	20	4 10.1	18.7
45861 2000 UZ_{37}	14.2	X	230.40447	130.17470	173.13327	0.86467	0.1056788	0.17066315	3.2189153	20	2 19.9	19.3
45862 2000 UQ_{51}	13.9	X	181.08102	217.37677	179.55327	3.15654	0.1614073	0.12484126	3.9648852	20	4 25.1	20.1
45863 2000 UQ_{81}	14.9	X	284.11882	241.90553	219.82457	4.62614	0.0994149	0.29475426	2.2361245	20	12 10.9	16.9
45864 2000 UO_{97}	14.1	X	142.60985	201.44009	275.48436	5.87936	0.1040634	0.27971859	2.3155553	20	6 22.7	17.2
45865 2000 UT_{97}	15.1	X	269.97928	316.25211	8.70429	7.22244	0.1461753	0.28018144	2.3130045	20	4 15.5	18.2
45866 2000 UX_{109}	14.3	X	338.15425	186.95930	170.18004	9.46499	0.1037220	0.19095195	2.9866660	20	9 19.6	17.7
45867 2000 VS_{17}	15.5	X	119.53598	116.23588	191.67794	3.26477	0.2241202	0.30762133	2.1733271	20	—	—
45868 2000 VB_{20}	14.3	X	216.45533	163.45858	137.49100	2.14573	0.1046943	0.16881313	3.2423898	20	2 4.2	19.3
45869 2000 VG_{34}	15.3	X	203.87676	288.71696	210.02174	3.47972	0.0714374	0.28992208	2.2609026	20	10 5.4	18.2
45870 2000 VW_{37}	14.9	X	42.17714	137.77100	283.03675	3.82788	0.1180447	0.30492316	2.1861289	20	—	—
45871 2000 VD_{38}	14.1	X	168.02257	90.84960	100.98903	14.62649	0.0970716	0.23589995	2.5940847	20	10 30.5	18.3
45872 2000 VR_{49}	15.9	X	133.75842	52.19248	269.52402	1.42970	0.1655465	0.30942167	2.1648887	20	—	—
45873 2000 VK_{61}	15.6	X	243.78123	348.33251	297.42573	32.36631	0.0177221	0.41915772	1.7682801	20	1 13.9	16.8
45874 2000 WM_{3}	15.3	X	79.22087	217.38154	168.91689	23.15346	0.0955361	0.35995995	1.9571912	20	—	—
45875 2000 WJ_{19}	12.9	X	144.77155	359.76563	98.63555	18.01941	0.1181072	0.17537476	3.1610012	20	6 3.2	17.9
45876 2000 WD_{27}	14.6	X	249.57246	134.55132	97.60917	4.53367	0.1006245	0.30448917	2.1882057	20	—	—
45877 2000 WR_{29}	13.9	X	169.66085	241.08524	289.15971	29.11706	0.2965909	0.23080302	2.6321364	20	9 4.6	19.3
45878 2000 WX_{29}	14.6	X	149.36262	110.10308	296.70302	17.87678	0.0997054	0.36638910	1.9342281	20	3 7.1	17.3
45879 2000 WR_{33}	16.0	X	186.96598	351.59222	161.04563	5.37360	0.0898882	0.28912751	2.2650430	20	10 3.4	19.0
45880 2000 WG_{49}	15.4	X	352.07298	284.26383	281.47951	18.22857	0.0749681	0.36560997	1.9369751	20	2 15.5	17.5
45881 2000 WD_{55}	14.5	X	193.76029	234.97416	314.05033	6.05152	0.1478756	0.23805086	2.5784352	20	11 10.1	18.5
45882 2000 WX_{61}	15.2	X	61.02947	248.73443	287.50220	4.25227	0.1731627	0.26858080	2.3791368	20	6 9.8	17.9
45883 2000 WL_{87}	15.0	X	114.60072	138.10588	70.37432	6.99616	0.1151641	0.28271241	2.2991791	20	9 29.4	18.3
45884 2000 WB_{93}	15.5	X	123.77044	290.08360	250.72900	2.76346	0.1201535	0.28347208	2.2950696	20	8 28.2	18.9
45885 2000 WX_{95}	14.4	X	318.91279	168.28750	272.34629	3.64363	0.0451866	0.29812387	2.2192431	20	—	—
45886 2000 WL_{115}	14.9	X	230.00578	184.31022	10.80389	4.16416	0.0565348	0.30098491	2.2051573	20	—	—
45887 2000 WS_{117}	15.2	X	233.59284	286.42758	63.28541	6.85638	0.2024880	0.27517598	2.3409692	20	4 8.7	19.0
45888 2000 WL_{130}	15.4	X	78.66757	323.28239	252.37163	4.39955	0.1514236	0.28160434	2.3052064	20	8 26.2	18.5
45889 2000 WU_{130}	14.7	X	22.21892	298.03098	66.62635	3.40677	0.0639112	0.19796328	2.9157232	20	12 2.0	18.5
45890 2000 WS_{169}	15.2	X	33.59193	250.68726	259.32259	0.21813	0.0351234	0.31486158	2.1398809	20	2 21.9	17.1
45891 2000 WG_{178}	15.3	X	72.13531	235.80235	279.72562	5.69896	0.0476045	0.27136866	2.3628143	20	5 4.5	18.1
45892 2000 WR_{179}	14.3	X	285.46083	34.03070	168.29427	15.08863	0.0942008	0.25305004	2.4755124	20	—	—
45893 2000 XL_{7}	14.3	X	260.51898	324.94623	358.26966	7.23232	0.1571595	0.27554997	2.3388505	20	4 1.2	17.4
45894 2000 XW_{15}	14.5	X	349.10375	23.36423	315.61185	13.46767	0.1741351	0.24349201	2.5398783	20	9 20.2	17.1
45895 2000 XV_{25}	15.5	X	178.35066	280.56765	346.69892	5.90114	0.1297033	0.30386812	2.1911862	20	—	—
45896 2000 XT_{27}	14.8	X	93.95044	243.23899	19.14730	8.38060	0.0927506	0.29034431	2.2587102	20	11 10.6	17.9
45897 2000 XB_{28}	15.3	X	200.29103	305.21701	26.11044	6.70313	0.1390116	0.26648850	2.3915735	20	2 17.6	19.0
45898 2000 XQ_{49}	14.1	X	32.62322	150.32758	336.79505	17.77502	0.0737407	0.36032936	1.9558533	20	1 10.1	16.1
45899 2000 XS_{49}	14.9	X	144.18535	35.68939	90.27899	13.47829	0.1007365	0.27232634	2.3572716	20	7 6.5	18.3
45900 2000 YG_{10}	14.9	X	146.39755	129.07932	293.38026	19.64165	0.0888752	0.36651463	1.9337864	20	3 22.8	17.7
45901 2000 YH_{16}	13.8	X	201.13689	251.40073	312.63038	16.55739	0.1339745	0.23919379	2.5702150	20	12 9.9	17.8
45902 2000 YJ_{18}	15.0	X	283.97705	53.18843	41.64969	4.17177	0.1130651	0.24243829	2.5472325	20	11 12.4	17.8
45903 2000 YL_{18}	15.0	X	74.96124	238.93160	270.26720	8.87146	0.1260093	0.26608294	2.3940031	20	5 13.1	17.8
45904 2000 YV_{29}	13.8	X	186.24263	340.52134	116.83350	13.31836	0.1235595	0.22494780	2.6776155	20	7 11.8	17.8
45905 2000 YF_{34}	15.8	X	289.92342	317.48203	247.62224	4.84303	0.1062965	0.30494780	2.1860112	20	—	—
45906 2000 YW_{34}	13.1	X	231.18904	242.20612	344.85172	8.83675	0.2215909	0.19096968	2.9864810	20	—	—
45907 2000 YC_{35}	15.2	X	146.94456	67.41424	122.91836	4.97874	0.0827677	0.28050778	2.3112102	20	10 8.3	18.4
45908 2000 YE_{51}	15.3	X	108.78581	102.41355	87.70570	5.81021	0.1391375	0.27905217	2.3192405	20	8 29.5	18.7
45909 2000 YE_{53}	15.7	X	323.05696	247.44541	299.92203	5.91116	0.0730768	0.30962501	2.1639407	20	—	—
45910 2000 YN_{57}	15.5	X	346.67037	51.93603	123.70208	5.47318	0.1076976	0.20915497	2.8107610	20	1 28.7	18.9
45911 2000 YX_{63}	15.5	X	204.05616	124.58624	118.37766	4.03402	0.1606969	0.29889671	2.2154160	20	—	—
45912 2000 YZ_{64}	16.2	X	88.29368	323.34518	267.50217	5.85842	0.2096463	0.28105276	2.3082215	20	10 1.9	19.8
45913 2000 YV_{67}	15.4	X	81.81009	195.65454	297.62175	6.02750	0.1528609	0.26491297	2.4010465	20	5 4.0	18.4
45914 2000 YE_{68}	14.5	X	186.30929	87.71665	133.21904	15.34591	0.1371570	0.23889544	2.5723544	20	12 16.8	18.7
45915 2000 YN_{68}	15.3	X	242.84586	337.08124	170.03149	6.90294	0.1102057	0.28932678	2.2640028	20	12 5.3	17.9
45916 2000 YU_{68}	15.7	X	322.86146	148.32044	291.89811	3.65820	0.0828659	0.29238012	2.2482132	20	—	—
45917 2000 YE_{91}	15.9	X	86.82740	330.81713	264.78207	4.96527	0.1257649	0.28187011	2.3037572	20	9 28.8	19.1
45918 2000 YT_{96}	15.8	X	358.85579	259.87827	300.35174	1.44219	0.1538421	0.26341650	2.4101314	20	3 8.7	18.0
45919 2000 YZ_{103}	14.9	X	8.48085	82.79323	123.06377	10.90395	0.0681891	0.26284589	2.4136183	20	4 15.8	17.8
45920 2000 YP_{104}	13.5	X	77.71081	96.10985	135.72121	12.01129	0.1504864	0.22306389	2.6926705	20	9 14.2	17.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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45921 2000 YU_{104}	13.7	X	293.68395	179.09972	125.62764	10.15598	0.1347260	0.21356233	2.7719557	20	4 30.1	17.6
45922 2000 YN_{105}	15.4	X	184.66891	47.58202	99.97074	4.75379	0.0707097	0.28047118	2.3114112	20	9 25.5	18.5
45923 2000 YV_{107}	14.5	X	256.63506	14.18726	57.10389	2.83359	0.0666930	0.18481964	3.0523709	20	8 31.8	18.7
45924 2000 YZ_{108}	15.1	X	344.04881	351.03362	74.36366	3.32396	0.0556884	0.29738540	2.2229155	20	—	—
45925 2000 YK_{111}	15.8	X	343.12139	153.68367	71.08301	3.49661	0.1625432	0.26515560	2.3995815	20	3 16.6	18.0
45926 2000 YT_{112}	15.5	X	111.09548	148.75312	92.40886	6.99564	0.0912337	0.28677475	2.2774146	20	11 5.7	18.7
45927 2000 YR_{113}	15.3	X	350.50492	290.80242	316.71347	6.18685	0.1626727	0.26946577	2.3739249	20	5 1.2	17.4
45928 2000 YB_{116}	15.0	X	239.11124	268.28854	330.71344	6.71687	0.1286163	0.25114242	2.4880322	20	—	—
45929 2000 YP_{116}	14.6	X	200.28232	100.13070	120.03045	14.50589	0.1057070	0.24278106	2.5448344	20	—	—
45930 2000 YQ_{117}	15.6	X	98.57996	103.03088	106.08054	5.06700	0.0958955	0.27869919	2.3211983	20	9 7.9	18.8
45931 2000 YF_{121}	15.2	X	266.75734	255.27249	283.03709	6.74700	0.0241904	0.29966691	2.2116184	20	—	—
45932 2000 YT_{121}	13.7	X	114.53530	329.20304	119.08784	14.22863	0.1287820	0.22505062	2.6767999	20	4 22.9	17.8
45933 2000 YU_{128}	15.4	X	79.93774	169.97114	35.52892	5.09632	0.2084690	0.22284258	2.6944529	20	8 20.5	19.3
45934 2000 YK_{129}	15.7	X	317.70675	349.90825	50.91008	1.67398	0.1155685	0.23890130	2.5723124	20	10 25.2	18.4
45935 2000 YU_{132}	14.2	X	182.85785	260.44965	299.78507	11.72477	0.1289181	0.23372794	2.6101310	20	11 12.8	18.4
45936 2000 YB_{133}	13.6	X	160.21840	120.42042	149.56674	10.64372	0.0711909	0.18915905	3.0055085	20	—	—
45937 2000 YD_{133}	13.7	X	176.49947	287.19719	327.75490	3.08950	0.2148486	0.18648984	3.0341189	20	12 31.2	18.8
45938 2001 AV_{4}	15.3	X	192.34003	173.17645	261.16122	5.88365	0.0709955	0.27581287	2.3373641	20	6 21.4	18.3
45939 2001 AE_{7}	15.7	X	66.03977	24.82893	137.82641	6.98732	0.0602934	0.27055896	2.3675260	20	5 12.4	18.5
45940 2001 AZ_{10}	15.4	X	143.78773	92.48032	134.73869	8.00855	0.0905281	0.28877603	2.2668805	20	11 23.5	18.7
45941 2001 AM_{13}	15.1	X	178.76371	353.16049	258.30481	6.44054	0.1607757	0.24427596	2.5344412	20	—	—
45942 2001 AX_{13}	15.3	X	254.25762	128.25960	108.33001	10.09315	0.0835845	0.25500960	2.4628145	20	—	—
45943 2001 AU_{16}	15.5	X	246.81231	238.72969	297.98914	5.37502	0.1407485	0.29479615	2.2359127	20	—	—
45944 2001 AW_{16}	14.5	X	335.85286	77.43944	125.46652	11.34806	0.2078827	0.25835402	2.4415141	20	1 23.7	17.0
45945 2001 AM_{17}	15.2	X	123.98500	174.70582	356.63165	2.83746	0.1617123	0.27518667	2.3409086	20	8 19.7	18.6
45946 2001 AU_{17}	15.0	X	257.43665	187.54328	312.45194	7.48213	0.1286723	0.23860387	2.5744496	20	11 27.9	18.2
45947 2001 AY_{17}	15.6	X	24.05588	140.18891	325.42437	3.81367	0.1255476	0.30370997	2.1919468	20	—	—
45948 2001 AP_{18}	14.7	X	284.59003	34.85172	152.81513	11.95308	0.0888977	0.24702019	2.5156357	20	—	—
45949 2001 AS_{23}	14.4	X	110.62959	117.59912	129.02170	14.96659	0.0645702	0.23388680	2.6089489	20	11 5.0	18.5
45950 2001 AL_{25}	15.7	X	83.06545	298.06632	138.23195	23.90976	0.1064173	0.35925137	1.9597639	20	1 21.1	17.4
45951 2001 AE_{29}	15.1	X	90.41566	168.80073	67.05800	8.18179	0.1364315	0.28550032	2.2841870	20	10 11.5	18.4
45952 2001 AS_{31}	15.2	X	97.92169	147.28351	315.08804	5.92978	0.0697011	0.26810897	2.3819272	20	3 29.9	18.3
45953 2001 AZ_{33}	15.1	X	129.64452	115.32057	54.03340	4.74344	0.2091257	0.27791856	2.3255429	20	8 26.8	18.9
45954 2001 AP_{38}	15.0	X	179.20310	213.70824	224.61353	22.26977	0.1376983	0.27345705	2.3507691	20	6 9.4	18.9
45955 2001 AK_{40}	14.8	X	147.65591	159.71403	85.50865	6.21826	0.1623763	0.24007933	2.5638909	20	12 7.1	18.8
45956 2001 AG_{41}	14.8	X	250.26784	330.86113	312.60156	10.08419	0.2393579	0.25803329	2.4435368	20	1 29.4	18.9
45957 2001 AQ_{44}	15.4	X	13.14593	89.01214	72.14971	3.15637	0.1409895	0.25935894	2.4352034	20	2 11.2	17.6
45958 2001 AF_{45}	15.0	X	31.62577	158.13534	129.88838	24.57464	0.1337197	0.27902512	2.3193904	20	10 12.4	18.3
45959 2001 AA_{51}	15.9	X	160.31856	324.10394	289.48101	3.96985	0.1450434	0.29477186	2.2360355	20	—	—
45960 2001 BX	15.6	X	297.63096	349.07478	327.69092	19.41809	0.0732501	0.37365565	1.9090692	20	5 17.5	18.0
45961 2001 BA_{6}	15.6	X	81.57983	150.50485	51.82255	6.51497	0.1125730	0.27476450	2.3433058	20	8 10.2	18.7
45962 2001 BM_{11}	15.9	X	240.63510	97.92143	270.24348	17.53213	0.1094457	0.37370684	1.9088949	20	5 10.9	18.5
45963 2001 BX_{14}	15.5	X	212.52234	261.05602	319.37292	2.81280	0.1238917	0.24320248	2.5418937	20	—	—
45964 2001 BE_{15}	15.6	X	168.40336	41.32803	132.42313	2.83230	0.0358021	0.28312039	2.2969698	20	10 12.7	18.4
45965 2001 BP_{20}	15.2	X	355.11908	196.87680	89.33874	7.16956	0.1260166	0.27496871	2.3421455	20	7 21.3	17.2
45966 2001 BS_{23}	15.7	X	139.03519	300.47521	306.07583	6.24165	0.1209957	0.29048942	2.2579579	20	12 10.2	19.0
45967 2001 BF_{24}	16.1	X	127.71479	265.43848	299.88653	3.36820	0.0928287	0.28304643	2.2973699	20	10 2.8	19.3
45968 2001 BG_{25}	14.5	X	58.63052	108.40965	125.83694	8.79982	0.0617143	0.22612853	2.6682866	20	8 8.2	18.0
45969 2001 BC_{26}	15.3	X	292.71926	109.55675	146.89439	6.56099	0.1267191	0.26165139	2.4209586	20	2 17.4	18.5
45970 2001 BZ_{27}	16.6	X	295.14367	13.04779	159.34083	3.26152	0.0838634	0.30144196	2.2029277	20	—	—
45971 2001 BF_{29}	16.0	X	81.54449	313.73354	301.86173	4.36756	0.1114731	0.28454655	2.2892883	20	10 18.8	19.1
45972 2001 BU_{30}	15.4	X	138.13294	20.31350	255.53851	6.13565	0.1674684	0.29363257	2.2418156	20	—	—
45973 2001 BP_{33}	15.3	X	347.88947	267.85906	298.86090	2.94170	0.1645655	0.26003076	2.4310072	20	2 24.8	17.6
45974 2001 BG_{35}	15.7	X	252.28845	331.97455	153.83108	7.60676	0.0752886	0.28786257	2.2716735	20	11 25.5	18.4
45975 2001 BV_{40}	14.3	X	288.43209	167.68356	317.85738	21.88665	0.0105895	0.23864954	2.5741211	20	—	—
45976 2001 BT_{41}	14.0	X	106.28303	138.26949	168.21493	16.58695	0.1082956	0.18533344	3.0467269	20	12 29.8	19.0
45977 2001 BU_{44}	15.1	X	122.00015	356.35630	122.53803	6.60807	0.1817740	0.26710855	2.3878710	20	6 9.8	18.8
45978 2001 BY_{44}	14.0	X	351.65652	173.38010	144.94842	13.59269	0.1897711	0.22060875	2.7126112	20	8 29.5	16.4
45979 2001 BZ_{46}	15.4	X	10.66426	332.57459	239.03994	8.83418	0.1644826	0.26551375	2.3974232	20	4 19.9	17.5
45980 2001 BT_{48}	14.9	X	191.29719	309.54450	270.10107	12.62380	0.1184771	0.24129223	2.5552918	20	12 20.9	18.5
45981 2001 BW_{50}	14.4	X	130.22053	165.62577	118.82055	15.21044	0.1637449	0.23913913	2.5706066	20	—	—
45982 2001 BE_{51}	14.9	X	140.29190	33.27547	200.78153	12.56471	0.1243025	0.23381863	2.6094560	20	11 17.4	19.0
45983 2001 BF_{54}	15.8	X	194.58095	31.75702	139.33626	4.77825	0.1131446	0.28627221	2.2800791	20	11 4.0	18.9
45984 2001 BK_{56}	15.2	X	142.17186	285.49946	332.58535	9.78272	0.2469585	0.23774783	2.5806256	20	12 15.6	19.9
45985 2001 BW_{59}	16.3	X	279.26404	265.82084	239.69510	4.30737	0.1010443	0.29469237	2.2364376	20	—	—
45986 2001 BC_{66}	15.2	X	83.26765	103.61655	128.46615	7.06815	0.0725109	0.27535863	2.3399339	20	9 17.5	18.3
45987 2001 BF_{66}	13.7	X	198.80521	107.98521	143.41504	12.14490	0.0692289	0.19105087	2.9856349	20	—	—
45988 2001 BK_{66}	14.7	X	70.47942	83.62709	142.46481	13.73007	0.0844573	0.22063239	2.7124175	20	8 15.9	18.3
45989 2001 BA_{67}	14.1	X	265.63206	311.03374	298.61492	15.54013	0.2603675	0.20031742	2.8928344	20	1 7.7	19.0
45990 2001 BT_{69}	14.7	X	39.28297	226.50341	120.23279	6.62019	0.1424343	0.28773142	2.2723637	20	—	—
45991 2001 BQ_{70}	14.4	X	255.22594	8.61754	293.84529	12.32887	0.1973951	0.26125177	2.4234267	20	2 22.8	18.3
45992 2001 BX_{70}	16.2	X	287.87644	11.73536	163.40410	3.69262	0.0419630	0.30141102	2.2030784	20	—	—
45993 2001 BE_{71}	15.9	X	167.94545	73.55605	129.92285	7.43076	0.0576667	0.28751992	2.2734780	20	11 21.6	19.0
45994 2001 BQ_{71}	15.9	X	38.17314	69.10932	139.76079	4.95925	0.0883841	0.26987392	2.3715308	20	6 7.2	18.5
45995 2001 BB_{72}	14.8	X	203.59333	286.79509	247.49428	10.53656	0.2000550	0.23554453	2.5966936	20	10 27.8	19.1
45996 2001 BY_{72}	14.9	X	205.58425	272.98704	288.23510	10.26088	0.1248945	0.23892311	2.5721558	20	12 12.5	18.6
45997 2001 BO_{73}	16.1	X	214.14369	353.79084	147.63240	3.34046	0.0471547	0.28506520	2.2865107	20	10 27.2	19.0
45998 2001 BZ_{75}	15.0	X	107.17927	351.69296	236.81708	5.38045	0.1317104	0.22939835	2.6428703	20	10 5.9	19.1
45999 2001 BE_{77}	15.9	X	322.09865	354.87117	107.33278	5.19361	0.1172587	0.29305278	2.2447716	20	—	—
46000 2001 BO_{79}	15.5	X	255.92224	176.09144	136.98740	6.84370	0.1189840	0.26493769	2.4008972	20	3 22.2	18.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46001 2001 CG_1	16.0	X	92.46015	105.36088	118.49926	5.80604	0.0813740	0.27862252	2.3216241	20	9 19.4	19.1
46002 2001 CB_3	15.7	X	151.81410	253.63918	347.61766	7.16689	0.0753026	0.28905615	2.2654157	20	12 19.2	18.8
46003 2001 CF_3	15.7	X	30.16080	156.45701	124.54391	5.96562	0.1348207	0.27669125	2.3324147	20	9 22.1	18.2
46004 2001 CF_4	15.3	X	107.63028	297.81921	334.87309	19.64621	0.1631385	0.28572982	2.2829637	20	12 11.8	19.3
46005 2001 CR_7	14.4	X	50.22019	139.41380	127.60843	9.53937	0.1867006	0.22545603	2.6735900	20	10 3.1	18.0
46006 2001 CB_{11}	15.8	X	331.52565	161.90333	52.12575	3.01178	0.1466074	0.26015208	2.4302513	20	2 12.5	18.4
46007 2001 CG_{12}	15.9	X	202.77191	31.33641	121.51644	7.88793	0.0725895	0.28592538	2.2819226	20	10 27.1	19.0
46008 2001 CY_{12}	14.2	X	145.00669	119.86971	124.65385	13.85492	0.1463140	0.23688469	2.5868906	20	12 6.0	18.6
46009 2001 CE_{13}	15.6	X	26.95573	260.03741	100.11180	5.54194	0.1950310	0.29183163	2.2510293	20	—	—
46010 2001 CU_{16}	15.4	X	157.93439	181.56496	85.55272	5.92870	0.1976569	0.24194964	2.5506610	20	—	—
46011 2001 CM_{19}	15.1	X	351.52399	67.63125	139.58593	4.68371	0.0388435	0.21199498	2.7856016	20	3 24.3	18.6
46012 2001 CM_{26}	14.2	X	219.87458	27.96468	130.61348	11.24734	0.0355929	0.18390881	3.0624407	20	11 10.3	18.7
46013 2001 CP_{26}	14.0	X	238.15417	48.23511	152.20635	10.90723	0.0412378	0.19105963	2.9855437	20	—	—
46014 2001 CF_{27}	15.4	X	287.89715	144.62214	61.85580	6.67480	0.1428860	0.25304730	2.4755303	20	—	—
46015 2001 CJ_{36}	15.1	X	43.44805	88.11204	94.85836	7.40660	0.0624728	0.26556283	2.3971278	20	5 6.9	17.8
46016 2001 CP_{41}	15.9	X	345.18887	122.37198	163.76789	4.94926	0.1274179	0.27149837	2.3620617	20	6 28.2	18.1
46017 2001 DP_3	15.1	X	163.07286	109.55813	48.71819	6.82075	0.1522827	0.18024756	3.1037718	20	9 3.6	20.2
46018 2001 DX_6	15.1	X	166.35080	294.13667	167.50961	2.65766	0.0384833	0.22215493	2.7000103	20	6 25.6	18.9
46019 2001 DT_9	14.4	X	60.86505	181.01939	118.45621	14.04821	0.0284177	0.23394345	2.6085277	20	11 8.1	18.2
46020 2001 DL_{11}	16.1	X	79.18336	132.58888	136.49527	3.65877	0.1016303	0.28188165	2.3036943	20	11 5.3	19.2
46021 2001 DZ_{14}	15.4	X	108.86581	32.79443	157.78720	11.84017	0.1125776	0.27535685	2.3399440	20	8 24.2	18.6
46022 2001 DE_{16}	15.1	X	212.72147	134.43523	37.78078	6.54487	0.1902743	0.23641571	2.5903105	20	11 5.8	19.1
46023 2001 DN_{16}	15.5	X	69.72870	233.97164	105.92758	7.99524	0.1573358	0.29184617	2.2509545	20	—	—
46024 2001 DC_{18}	13.8	X	50.49812	165.39966	131.45217	18.33211	0.2269101	0.17672352	3.1448974	20	11 10.0	18.6
46025 2001 DQ_{18}	15.0	X	173.88590	108.64390	109.77730	10.39941	0.0678466	0.23654186	2.5893895	20	12 5.6	18.8
46026 2001 DJ_{20}	14.9	X	129.32261	115.10488	119.85089	13.80629	0.1732501	0.23107150	2.6300971	20	11 12.5	19.5
46027 2001 DG_{21}	14.4	X	350.51235	158.07553	126.43579	15.85791	0.2550618	0.21617317	2.7495916	20	7 2.1	16.6
46028 2001 DT_{21}	14.8	X	134.14428	40.06256	111.97773	11.24409	0.1533768	0.22142920	2.7059065	20	7 31.4	19.0
46029 2001 DF_{22}	14.6	X	175.27153	85.80810	112.22388	14.15044	0.0963560	0.23316371	2.6143400	20	11 12.9	18.7
46030 2001 DQ_{25}	15.4	X	339.51603	159.38663	116.17260	3.22433	0.1903935	0.26768786	2.3844246	20	5 24.3	17.1
46031 2001 DB_{29}	15.5	X	330.72966	187.22583	111.84497	3.29348	0.2027242	0.26925339	2.3751731	20	6 10.2	17.1
46032 2001 DM_{29}	16.1	X	57.01201	245.34279	69.23221	3.20315	0.0114592	0.28630411	2.2799098	20	11 26.3	18.9
46033 2001 DG_{31}	14.7	X	345.34116	127.82602	141.93745	13.49659	0.1541054	0.21561085	2.7543702	20	6 3.1	17.9
46034 2001 DR_{31}	15.5	X	288.74913	179.88954	107.12503	4.14683	0.1297762	0.26191584	2.4193287	20	3 25.9	18.6
46035 2001 DM_{32}	15.8	X	61.94417	124.41545	138.90938	6.45810	0.0904761	0.27885464	2.3203356	20	10 6.1	18.7
46036 2001 DS_{32}	16.3	X	182.53282	268.30431	88.02641	4.09781	0.0905962	0.31122558	2.1565152	20	2 23.8	19.1
46037 2001 DF_{33}	13.8	X	345.34923	113.31298	170.33737	30.47400	0.3533121	0.21517464	2.7580914	20	6 8.5	16.6
46038 2001 DH_{33}	15.8	X	333.27780	349.80016	119.80759	6.48814	0.0565387	0.29655017	2.2270874	20	—	—
46039 2001 DW_{39}	15.6	X	289.75675	108.20760	175.56611	6.75579	0.1171463	0.26358317	2.4091154	20	3 22.6	18.4
46040 2001 DT_{44}	14.3	X	112.32421	242.25050	16.06110	1.16191	0.1241814	0.18198187	3.0840208	20	11 10.2	19.0
46041 2001 DX_{46}	15.0	X	162.50037	291.92874	316.20961	12.62337	0.1386915	0.23917743	2.5703321	20	12 25.8	19.2
46042 2001 DK_{54}	15.6	X	119.34951	341.46149	147.44607	6.44906	0.0883066	0.26715201	2.3876120	20	6 10.4	18.9
46043 2001 DR_{64}	15.2	X	157.98093	56.40610	174.20638	4.92773	0.2085814	0.23518425	2.5993448	20	11 27.2	19.6
46044 2001 DP_{68}	15.5	X	151.98735	269.16004	310.18603	0.57548	0.0834689	0.23375714	2.6099136	20	11 9.9	19.3
46045 2001 DU_{68}	14.1	X	150.85813	317.01783	174.26221	7.44665	0.0882494	0.17137413	3.2100062	20	7 14.5	19.1
46046 2001 DM_{70}	15.6	X	316.03351	112.84826	149.93791	6.50221	0.0864439	0.26262171	2.4149917	20	4 7.2	18.4
46047 2001 DN_{70}	13.5	X	155.21457	294.88437	348.25060	12.14667	0.3132672	0.18707339	3.0278059	20	—	—
46048 2001 DJ_{71}	15.4	X	345.44152	121.20334	166.70363	2.44119	0.2071142	0.26818413	2.3814822	20	6 28.7	17.0
46049 2001 DL_{73}	16.0	X	78.18165	74.65730	336.29801	3.11843	0.1311945	0.30425715	2.1893180	20	—	—
46050 2001 DM_{74}	14.8	X	252.76842	258.24988	306.01517	1.16688	0.2417864	0.19055731	2.9907880	20	—	—
46051 2001 DQ_{74}	15.0	X	276.21909	342.72302	186.14737	6.11406	0.1738995	0.24150416	2.5537966	20	—	—
46052 2001 DD_{76}	15.6	X	104.08086	198.43212	171.02466	4.01297	0.1940009	0.30347081	2.1930983	20	—	—
46053 Davidpatterson	16.3	X	164.37207	77.03393	337.93020	3.82600	0.0874738	0.31589945	2.1351914	20	4 19.2	19.2
46054 2001 DC_{80}	14.5	X	177.52622	22.11710	186.30729	16.62894	0.1421549	0.18459633	3.0548320	20	11 14.2	19.6
46055 2001 DA_{83}	15.4	X	181.46300	66.78241	145.60037	2.69122	0.0887372	0.23620028	2.5918853	20	12 3.6	19.2
46056 2001 DD_{87}	14.7	X	205.70272	190.36706	305.32396	13.88144	0.0932756	0.22882243	2.6473030	20	9 15.4	18.9
46057 2001 DT_{87}	14.9	X	178.80403	91.60787	160.26226	7.06500	0.1704838	0.24316378	2.5421634	20	—	—
46058 2001 DE_{88}	14.9	X	72.22256	87.48690	204.90105	11.79780	0.1572418	0.22870301	2.6482245	20	11 23.2	18.9
46059 2001 DJ_{88}	15.2	X	105.74282	27.26516	275.94065	7.08338	0.1601071	0.28771002	2.2724764	20	—	—
46060 2001 DL_{88}	14.8	X	115.22440	110.42873	214.03589	9.14969	0.0237746	0.19259588	2.9696463	20	—	—
46061 2001 DC_{90}	14.9	X	220.64530	343.95119	203.26219	14.07853	0.1101154	0.23855847	2.5747762	20	12 14.2	18.7
46062 2001 DT_{91}	14.1	X	18.89400	45.56271	232.35419	10.90820	0.1709953	0.22341908	2.6898158	20	8 17.1	17.3
46063 2001 DV_{91}	15.2	X	342.54582	332.32879	342.99972	8.33043	0.2000968	0.27255691	2.3559419	20	8 13.7	16.7
46064 2001 DH_{92}	13.6	X	121.83439	63.82661	200.89221	14.03867	0.1956760	0.18255623	3.0775488	20	11 30.5	18.9
46065 2001 DB_{93}	15.9	X	1.60047	110.34086	171.42337	5.99539	0.0944151	0.27252486	2.3561266	20	7 22.9	18.2
46066 2001 DV_{95}	15.7	X	298.77046	145.72283	111.31037	3.65316	0.1476978	0.26170126	2.4206509	20	2 23.9	18.7
46067 2001 DY_{99}	13.7	X	23.49741	126.37573	172.88253	15.57616	0.0742881	0.16917089	3.2378169	20	9 7.4	18.1
46068 2001 DM_{100}	16.5	X	234.50932	126.66248	172.93399	1.05989	0.0960591	0.31072367	2.1588369	20	2 4.2	19.3
46069 2001 DY_{100}	15.3	X	313.87638	94.95826	106.85826	9.17720	0.1481441	0.25524067	2.4613278	20	1 1.6	18.6
46070 2001 DV_{101}	15.8	X	176.16259	230.03877	69.34633	6.35685	0.1366356	0.30080861	2.2060188	20	—	—
46071 2001 DQ_{103}	14.7	X	166.10106	3.19212	205.46437	4.67004	0.1304420	0.18440763	3.0569157	20	11 2.8	19.6
46072 2001 EJ	13.6	X	73.53417	77.67111	176.02115	8.38502	0.1456209	0.17294275	3.1905665	20	9 27.5	18.3
46073 2001 EA_1	15.4	X	336.01891	102.48467	87.28706	7.00232	0.0798202	0.25723155	2.4486116	20	1 27.4	18.3
46074 2001 EK_1	14.1	X	57.91395	122.88722	96.63840	9.67350	0.2200920	0.21892567	2.7264964	20	8 13.5	17.7
46075 2001 EK_3	15.6	X	5.43041	323.86817	288.44215	7.76985	0.0921146	0.27018053	2.3697363	20	6 14.5	17.9
46076 2001 EH_4	15.2	X	166.19108	277.27298	136.77284	5.22838	0.0691926	0.21385118	2.7694591	20	4 27.5	19.3
46077 2001 EJ_5	14.3	X	103.87082	154.75016	136.75831	9.14506	0.0779162	0.18457815	3.0550326	20	12 9.3	19.0
46078 2001 ET_6	14.6	X	98.23393	282.65746	45.73319	5.59480	0.1553876	0.23913540	2.5706334	20	—	—
46079 2001 EB_7	15.8	X	94.83179	76.65214	84.00044	3.65500	0.0910003	0.26822869	2.3812184	20	6 22.8	18.7
46080 2001 EV_9	15.3	X	15.58516	113.59882	140.06667	4.46807	0.0716593	0.21704970	2.7421840	20	6 30.9	18.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46081 2001 EB_{10}	14.8	X	278.27629	170.65153	123.02083	2.89215	0.0728213	0.20897893	2.8123393	20	4 2.1	18.6
46082 2001 EC_{10}	15.2	X	52.12914	206.19566	116.24832	3.61831	0.0519829	0.23290497	2.6162759	20	11 24.6	18.7
46083 2001 ED_{10}	13.8	X	338.35068	152.72100	150.78854	9.24847	0.2780970	0.21631154	2.7484189	20	6 26.0	16.1
46084 2001 EU_{10}	14.4	X	88.11198	179.39150	166.51321	10.90164	0.1367302	0.18888164	3.0084506	20	—	—
46085 2001 EL_{11}	14.6	X	66.99252	135.19682	180.23639	14.85801	0.1355340	0.22864055	2.6487068	20	12 13.2	18.8
46086 2001 EN_{11}	14.1	X	165.99024	43.20405	160.64372	13.48026	0.0665736	0.17768466	3.1335462	20	10 31.8	19.0
46087 2001 EQ_{11}	13.9	X	222.12396	32.75021	133.17349	14.13059	0.0832330	0.23277299	2.6172648	20	11 25.6	17.8
46088 2001 EO_{12}	13.8	X	213.82542	80.70752	109.22080	18.04600	0.1598785	0.18866904	3.0107102	20	11 28.2	18.6
46089 2001 EC_{14}	14.2	X	67.01543	202.36029	110.29936	14.31698	0.1435998	0.23376998	2.6098180	20	12 12.6	18.1
46090 2001 EJ_{15}	15.5	X	66.48180	317.38489	12.03945	5.24800	0.1771721	0.28693683	2.2765569	20	—	—
46091 2001 ES_{15}	14.2	X	349.10419	204.46345	118.90088	11.72792	0.1888025	0.21997753	2.7177980	20	9 3.0	16.8
46092 2001 EP_{16}	14.4	X	20.45011	48.18388	202.15297	12.55454	0.1373113	0.21651285	2.7467150	20	7 8.3	17.8
46093 2001 EL_{17}	13.7	X	252.69481	300.87197	147.93542	28.85752	0.2063838	0.22859007	2.6490967	20	9 3.1	17.4
46094 2001 EX_{21}	14.4	X	167.55429	3.26146	206.15054	10.48505	0.0885174	0.18372740	3.0644563	20	11 6.6	19.2
46095 Frédérickoby	14.5	X	87.48541	136.03088	91.22241	10.78856	0.0804120	0.17480637	3.1678496	20	9 7.1	19.2
46096 2001 FB	15.4	X	127.56374	292.42839	172.30703	26.92509	0.1210943	0.36758839	1.9300187	20	5 23.9	18.4
46097 2001 FN_{1}	14.7	X	15.40968	348.81711	343.19716	7.44898	0.1469104	0.27883685	2.3204343	20	11 8.3	17.3
46098 2001 FH_{2}	16.3	X	356.12954	244.57243	265.99902	4.90771	0.0616186	0.30653630	2.1784526	20	—	—
46099 2001 FD_{5}	14.7	X	313.11450	145.13110	177.06378	23.37646	0.2284748	0.27004894	2.3705060	20	6 6.5	17.7
46100 2001 FD_{6}	14.3	X	85.79978	187.70371	62.14269	2.15368	0.1904557	0.17466480	3.1695610	20	10 11.6	19.1
46101 2001 FK_{8}	13.8	X	137.91277	37.17219	216.79147	12.32536	0.0769633	0.17913979	3.1165541	20	11 28.2	18.6
46102 2001 FR_{9}	13.9	X	42.15260	127.95736	258.16912	9.52511	0.1080436	0.19162818	2.9796354	20	—	—
46103 2001 FQ_{12}	14.4	X	340.29994	215.28615	60.02952	2.78864	0.0424469	0.21440945	2.7646496	20	6 5.6	17.9
46104 2001 FR_{12}	14.0	X	51.01501	186.32682	170.23455	12.75370	0.0574652	0.18508561	3.0494460	20	12 24.2	18.5
46105 2001 FQ_{14}	14.4	X	201.70344	289.13177	185.83607	9.29867	0.0473916	0.17389870	3.1788631	20	8 18.6	19.2
46106 2001 FA_{16}	15.6	X	247.83570	189.14779	183.42801	8.16194	0.0816409	0.26747415	2.3856946	20	6 4.4	18.9
46107 2001 FP_{17}	15.1	X	30.18036	180.41751	355.87034	6.44919	0.0822805	0.25965489	2.4333526	20	4 2.6	17.6
46108 2001 FW_{18}	15.5	X	116.72192	57.03627	281.81137	2.03341	0.1828964	0.29361982	2.2418805	20	—	—
46109 2001 FG_{23}	13.6	X	98.82895	183.78288	69.27492	4.41789	0.1477835	0.17375927	3.1805635	20	10 24.2	18.5
46110 2001 FK_{23}	15.6	X	203.69456	323.61159	132.05777	4.48059	0.1172909	0.27275245	2.3548158	20	7 31.2	18.7
46111 2001 FR_{24}	14.7	X	37.76527	320.73897	324.87526	12.11799	0.1629718	0.22350129	2.6891562	20	9 26.7	18.3
46112 2001 FA_{26}	14.2	X	320.03008	112.26546	199.78608	13.00851	0.2017692	0.21295480	2.7772252	20	6 6.9	17.4
46113 2001 FT_{29}	14.5	X	98.63666	152.63013	152.59466	15.24606	0.1313615	0.23395459	2.6084449	20	—	—
46114 2001 FX_{29}	14.4	X	19.78541	31.64017	241.23409	13.09887	0.1716680	0.22006543	2.7170742	20	8 9.9	17.7
46115 2001 FP_{33}	14.1	X	270.47443	338.95212	173.71887	10.89902	0.0481959	0.19069769	2.9893201	20	12 30.6	18.3
46116 2001 FY_{33}	16.2	X	317.94267	289.26977	216.94119	3.92612	0.0967874	0.29974943	2.2112124	20	—	—
46117 2001 FD_{34}	16.0	X	139.99730	11.16468	196.51957	5.23352	0.0785451	0.28206890	2.3026747	20	10 21.7	19.1
46118 2001 FL_{34}	15.3	X	172.36868	307.98865	294.99766	5.22444	0.1060048	0.29053268	2.2577338	20	—	—
46119 2001 FU_{34}	15.0	X	215.00423	161.62010	155.81669	2.88682	0.1977308	0.25458745	2.4655362	20	2 11.7	18.9
46120 2001 FY_{34}	15.2	X	326.57246	146.17913	163.61175	8.02076	0.2675741	0.26800653	2.3825341	20	6 8.5	17.1
46121 2001 FB_{36}	14.8	X	12.50106	282.03884	354.47770	5.72542	0.0804706	0.22008285	2.7169308	20	7 31.2	18.0
46122 2001 FJ_{37}	15.2	X	174.42884	32.06437	190.17783	6.98149	0.1473197	0.23504504	2.6003711	20	12 4.2	19.3
46123 2001 FW_{37}	14.4	X	60.92439	352.19807	184.50842	18.77373	0.0343186	0.21479656	2.7613270	20	5 21.8	18.4
46124 2001 FU_{40}	14.9	X	220.75570	236.58741	100.51382	1.65491	0.2096553	0.25760501	2.4462444	20	3 11.6	19.1
46125 2001 FB_{43}	14.6	X	267.57385	20.56938	282.20461	1.29932	0.1305019	0.25833344	2.4416437	20	3 18.1	18.0
46126 2001 FN_{45}	14.4	X	143.56911	106.84290	13.63539	4.71429	0.0301563	0.21597642	2.7512612	20	6 21.7	18.2
46127 2001 FS_{45}	14.4	X	223.42581	260.85299	351.24457	4.34987	0.1174316	0.24425386	2.5345941	20	—	—
46128 2001 FU_{45}	14.8	X	357.68181	4.85207	317.14777	5.23279	0.1807796	0.27415694	2.3467665	20	9 25.8	16.8
46129 2001 FP_{46}	15.3	X	246.86777	187.61590	181.95604	2.67514	0.1072856	0.26566576	2.3965086	20	5 26.1	18.5
46130 2001 FQ_{46}	14.9	X	336.76064	147.13386	189.47950	5.79405	0.0304991	0.22206118	2.7007701	20	8 23.7	18.4
46131 2001 FW_{47}	14.8	X	70.01264	331.18361	213.43252	4.34939	0.1120231	0.21498171	2.7597413	20	6 23.6	18.4
46132 2001 FG_{49}	15.4	X	246.71200	230.28404	283.04534	3.30029	0.2185654	0.23727357	2.5840633	20	11 16.8	18.9
46133 2001 FT_{50}	15.6	X	158.81183	32.58625	356.02085	5.37094	0.0688809	0.25740375	2.4475193	20	3 12.4	18.7
46134 2001 FH_{53}	14.6	X	272.66011	172.38907	46.90040	2.60887	0.0334625	0.19512698	2.9439098	20	—	—
46135 2001 FF_{56}	14.2	X	333.68166	91.39601	213.18081	8.10653	0.1496717	0.21523247	2.7575974	20	6 28.0	17.3
46136 2001 FH_{56}	14.1	X	119.51899	254.69642	302.90146	3.47272	0.1201603	0.17218632	3.1999040	20	9 3.6	19.1
46137 2001 FN_{56}	13.4	X	22.04798	117.98922	202.01512	21.63312	0.0366974	0.17330923	3.1860672	20	9 27.1	17.9
46138 2001 FR_{56}	14.6	X	45.14323	166.84472	175.41283	16.75152	0.2122440	0.22981274	2.6396924	20	12 30.6	18.8
46139 2001 FV_{56}	14.3	X	189.77553	60.57696	156.29681	11.54859	0.1257226	0.18314089	3.0709955	20	12 5.7	19.3
46140 2001 FU_{57}	14.1	X	44.03818	343.95082	239.75824	8.40261	0.0900029	0.21513313	2.7584462	20	7 4.8	17.6
46141 2001 FY_{57}	14.2	X	89.44665	108.80099	113.51148	15.40600	0.0841533	0.16980020	3.2298121	20	9 2.4	19.0
46142 2001 FN_{58}	14.2	X	170.28961	255.06445	221.12815	16.08637	0.1553481	0.17147870	3.2087011	20	7 13.6	19.7
46143 2001 FO_{60}	14.1	X	64.74990	139.15354	109.56519	2.54625	0.0586633	0.17290266	3.1910597	20	8 29.7	18.4
46144 2001 FB_{63}	15.7	X	116.82523	215.67882	124.75486	2.73987	0.0539792	0.24482142	2.5306754	20	—	—
46145 2001 FC_{63}	14.8	X	137.41691	278.26667	88.09161	3.33106	0.1202745	0.20086306	2.8875931	20	2 2.0	19.0
46146 2001 FP_{64}	15.3	X	106.50622	26.86826	153.62173	4.61178	0.1173121	0.22006133	2.7171079	20	8 3.7	19.3
46147 2001 FK_{66}	15.0	X	36.38898	182.08870	151.25321	7.82094	0.0298233	0.23169574	2.6253710	20	11 16.4	18.6
46148 2001 FC_{67}	15.2	X	266.66546	278.17854	43.06169	6.61599	0.1375571	0.26121867	2.4236314	20	4 11.6	18.4
46149 2001 FJ_{67}	13.9	X	154.52018	312.27678	169.67450	15.12976	0.1670119	0.16898847	3.2401467	20	7 9.4	19.5
46150 2001 FY_{67}	15.1	X	146.84379	79.38225	170.38268	15.22609	0.0701982	0.23439449	2.6051803	20	12 13.9	19.2
46151 2001 FS_{68}	13.6	X	116.49815	174.66455	162.65152	11.05464	0.1019323	0.19074820	2.9887924	20	—	—
46152 2001 FV_{68}	15.3	X	142.03898	226.36919	101.82795	4.49791	0.0511233	0.24517445	2.5282455	20	—	—
46153 2001 FH_{69}	15.5	X	329.71552	59.94129	82.44155	4.18077	0.0753036	0.24677216	2.5173210	20	—	—
46154 2001 FL_{70}	14.1	X	150.33654	85.79653	151.22656	4.64803	0.1581964	0.18035151	3.1025791	20	11 21.5	19.2
46155 2001 FS_{70}	15.0	X	30.78016	156.23169	126.71326	3.19042	0.0642088	0.22181988	2.7027284	20	9 4.2	18.4
46156 2001 FR_{72}	14.7	X	307.72739	157.01023	159.81437	5.46723	0.1561224	0.21312851	2.7757159	20	5 30.7	18.2
46157 2001 FZ_{72}	14.9	X	132.69243	96.59031	88.25066	5.45905	0.0380062	0.22300165	2.6931714	20	9 5.6	18.7
46158 2001 FC_{73}	14.4	X	50.78173	218.01408	169.61195	14.06475	0.1853781	0.24040702	2.5615605	20	—	—
46159 2001 FO_{73}	14.6	X	110.06615	98.81537	150.32742	5.51726	0.1073979	0.17644618	3.1481920	20	10 28.3	19.4
46160 2001 FE_{78}	13.6	X	103.31522	37.36793	195.94753	22.34090	0.0678493	0.17194338	3.2029175	20	9 24.6	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46161 2001 FK_{78}	15.1	X	183.33055	328.11067	174.40724	8.76095	0.2176766	0.22560350	2.6724248	20	8 30.9	19.6
46162 2001 FM_{78}	14.7	X	247.68051	335.08263	188.52756	14.41753	0.0289815	0.23455794	2.6039699	20	12 28.7	18.4
46163 2001 FV_{79}	14.9	X	297.60678	4.23769	334.38191	10.62938	0.1022375	0.26753719	2.3853198	20	6 24.3	17.8
46164 2001 FZ_{79}	14.8	X	203.92714	172.25719	319.85273	8.62560	0.0517744	0.22634023	2.6666226	20	9 16.5	18.7
46165 2001 FF_{80}	14.7	X	132.12893	218.30219	290.92200	7.66415	0.2174478	0.21962201	2.7207302	20	7 28.0	19.3
46166 2001 FF_{82}	14.7	X	6.78045	23.68750	235.45671	8.14046	0.1068876	0.21528235	2.7571714	20	6 25.3	17.9
46167 2001 FX_{83}	16.3	X	31.70735	265.20376	12.33481	3.19035	0.0252480	0.27518085	2.3409416	20	8 31.1	18.9
46168 2001 FK_{86}	14.6	X	88.49876	78.51168	130.01060	2.01157	0.2216553	0.16773110	3.2563194	20	8 28.0	19.7
46169 2001 FY_{87}	14.7	X	280.96819	244.13788	73.83265	6.90514	0.0549294	0.21170967	2.7881037	20	5 9.6	18.5
46170 2001 FG_{90}	13.9	X	320.53996	327.26524	180.82638	14.70585	0.1439302	0.24228797	2.5482859	20	—	—
46171 2001 FV_{90}	14.7	X	156.14718	331.65770	180.37175	14.02981	0.1073482	0.22222114	2.6994739	20	8 17.7	19.1
46172 2001 FB_{92}	15.1	X	304.76307	215.42061	81.39478	7.41614	0.1885956	0.26436795	2.4043453	20	4 22.4	17.9
46173 2001 FQ_{92}	14.2	X	56.61065	170.11747	136.77625	15.14890	0.1729544	0.22978947	2.6398706	20	11 29.2	18.3
46174 2001 FB_{93}	14.9	X	307.81962	217.80453	138.76089	13.80562	0.1185558	0.22478844	2.6788808	20	7 31.4	17.9
46175 2001 FR_{93}	15.9	X	101.14132	19.47210	129.08785	7.08885	0.0606673	0.26742460	2.3859892	20	6 10.5	18.9
46176 2001 FX_{94}	15.1	X	40.70543	166.60727	54.93839	9.41954	0.0324803	0.21631855	2.7483595	20	6 20.0	18.7
46177 2001 FW_{97}	13.8	X	42.56877	119.21798	170.53269	18.17589	0.1404788	0.17095197	3.2152887	20	10 3.9	18.1
46178 2001 FA_{98}	13.7	X	139.94304	151.34993	125.94485	12.88107	0.0627732	0.18515219	3.0487149	20	12 28.3	18.3
46179 2001 FD_{98}	14.3	X	305.43655	239.03798	108.33668	10.25644	0.1783610	0.21733940	2.7397467	20	7 4.9	17.4
46180 2001 FX_{101}	15.5	X	214.49385	248.73817	242.22463	5.77939	0.1079568	0.28262182	2.2996704	20	9 30.2	18.5
46181 2001 FM_{113}	14.5	X	164.42546	332.80502	332.14650	10.78186	0.1673237	0.24156339	2.5533791	20	—	—
46182 2001 FD_{119}	15.7	X	12.68761	175.71950	272.87557	5.32485	0.1102520	0.30000374	2.2099626	20	—	—
46183 2001 FH_{119}	14.5	X	157.40877	264.63440	308.05315	12.06931	0.1016174	0.23078776	2.6322524	20	11 1.8	18.8
46184 2001 FM_{120}	15.3	X	83.00227	118.89560	164.33835	11.60525	0.1660228	0.22777037	2.6554486	20	11 24.9	19.6
46185 2001 FF_{124}	14.7	X	58.18048	150.55585	195.72265	9.37453	0.1386174	0.23633329	2.5909127	20	—	—
46186 2001 FS_{124}	15.1	X	228.83194	185.71264	159.42959	3.17815	0.1929000	0.25953213	2.4341198	20	3 28.9	19.0
46187 2001 FW_{126}	14.1	X	13.02511	174.41772	158.23416	12.94598	0.1796293	0.22591891	2.6699369	20	11 4.3	17.3
46188 2001 FW_{134}	14.8	X	249.21477	296.14477	228.36091	11.56537	0.1128332	0.24040898	2.5615466	20	12 22.0	18.1
46189 2001 FN_{135}	14.5	X	195.66906	293.75744	265.40547	15.92697	0.1110000	0.23644127	2.5901238	20	11 29.9	18.3
46190 2001 FV_{135}	15.1	X	253.15098	207.01287	317.77286	15.15809	0.0905467	0.23911620	2.5707709	20	—	—
46191 2001 FS_{140}	14.5	X	292.76976	242.99849	163.69866	10.38254	0.0610072	0.17654289	3.1470421	20	9 16.4	18.8
46192 2001 FG_{141}	15.2	X	349.81217	166.82272	170.16572	9.75033	0.0763710	0.22527841	2.6749952	20	9 16.5	18.4
46193 2001 FW_{141}	14.9	X	243.03368	168.54672	154.27586	2.51117	0.0660067	0.20715544	2.8288189	20	3 28.2	19.0
46194 2001 FR_{143}	15.3	X	259.71312	235.93054	134.20547	6.67898	0.1241176	0.26577349	2.3958610	20	6 10.2	18.4
46195 2001 FM_{144}	14.8	X	326.44096	128.69139	157.29951	4.82223	0.0334746	0.21158781	2.7891741	20	6 1.6	18.4
46196 2001 FH_{145}	14.4	X	354.71560	312.29872	80.73227	9.48557	0.2072359	0.23060592	2.6336360	20	12 27.4	17.0
46197 2001 FK_{146}	15.1	X	53.29698	169.12114	324.73603	9.65766	0.0951797	0.25837394	2.4413886	20	3 10.8	17.9
46198 2001 FS_{147}	14.6	X	81.39125	56.35024	224.83439	14.05283	0.0903705	0.22871572	2.6481263	20	11 11.0	18.3
46199 2001 FX_{147}	14.8	X	124.57009	48.59231	258.82658	8.64253	0.1558184	0.23768468	2.5810827	20	—	—
46200 2001 FE_{148}	14.9	X	79.10626	356.84817	314.35004	10.99929	0.1437375	0.23227087	2.6210354	20	12 21.9	19.0
46201 2001 FS_{148}	15.0	X	187.72648	330.22798	220.64442	12.59070	0.1697977	0.23316011	2.6143670	20	11 6.3	19.2
46202 2001 FR_{151}	14.9	X	82.26756	147.59931	108.75982	15.64678	0.0237665	0.22633930	2.6666298	20	10 10.6	18.9
46203 2001 FB_{153}	15.0	X	315.32470	144.98276	173.68012	9.03128	0.1536116	0.21532048	2.7568459	20	6 15.1	18.3
46204 2001 FC_{155}	14.2	X	40.06327	182.89563	110.02655	2.84824	0.2656755	0.16880495	3.2424946	20	10 22.1	18.4
46205 2001 FV_{155}	14.5	X	125.22177	94.43893	234.72635	13.77330	0.1411931	0.23985726	2.5654732	20	—	—
46206 2001 FS_{156}	14.8	X	213.64117	146.28940	309.94092	10.03762	0.0357184	0.22261907	2.6962561	20	8 15.4	18.6
46207 2001 FF_{158}	15.6	X	304.59062	37.97700	61.73568	7.10848	0.1497669	0.28989711	2.2610324	20	—	—
46208 2001 FB_{160}	14.7	X	84.52829	251.48750	20.53492	0.57343	0.1614265	0.17433784	3.1735227	20	11 1.5	19.5
46209 2001 FK_{160}	13.8	X	110.45844	232.66131	201.31431	16.54553	0.0547268	0.20677269	2.8323088	20	3 12.3	17.8
46210 2001 FX_{160}	15.1	X	339.44771	155.37536	199.72492	7.36525	0.1295911	0.27564911	2.3382897	20	10 7.8	17.3
46211 2001 FO_{161}	14.0	X	157.11366	29.98848	220.18056	9.04342	0.0578101	0.18189358	3.0850187	20	12 13.5	18.7
46212 2001 FD_{162}	14.0	X	260.44536	22.69214	206.36574	11.99023	0.0375347	0.19526424	2.9425300	20	—	—
46213 2001 FN_{162}	14.8	X	74.12731	352.63640	116.77966	12.02592	0.1805363	0.25895133	2.4377581	20	4 1.9	17.8
46214 2001 FX_{166}	14.6	X	49.33917	37.56041	261.93125	9.86870	0.1573509	0.22978672	2.6398917	20	11 3.4	18.3
46215 2001 FX_{170}	14.8	X	89.13760	291.49826	209.85168	10.86446	0.0966922	0.21041272	2.7995489	20	5 21.0	18.6
46216 2001 FK_{171}	14.6	X	100.53762	128.94829	135.09542	15.57875	0.0942261	0.22973536	2.6402850	20	11 16.3	18.8
46217 2001 FK_{176}	15.1	X	107.57045	150.11743	146.39213	15.57546	0.0688583	0.23574696	2.5952069	20	12 28.8	19.1
46218 2001 FV_{177}	14.1	X	50.19393	140.58846	213.61858	10.41187	0.1093561	0.18312328	3.0711923	20	12 26.1	18.6
46219 2001 FB_{187}	15.0	X	18.19444	333.11742	299.72226	9.79348	0.1205777	0.22018239	2.7161119	20	8 5.6	18.1
46220 2001 FW_{189}	14.2	X	55.76162	328.64927	342.91283	0.51407	0.1991242	0.17799998	3.1298444	20	11 23.2	18.7
46221 2001 GP	14.4	X	302.61764	336.49653	212.06192	9.68724	0.0712372	0.19322147	2.9632329	20	—	—
46222 2001 GJ_{5}	13.7	X	70.10310	138.76872	154.57954	14.81751	0.2728509	0.17472239	3.1688645	20	11 27.3	19.0
46223 2001 GV_{7}	15.1	X	255.62624	15.74973	136.57075	8.25747	0.1413344	0.23688188	2.5869110	20	12 11.8	18.3
46224 2001 GN_{10}	14.7	X	138.08056	125.18961	146.45769	1.33447	0.1019824	0.18279967	3.0748158	20	12 19.4	19.4
46225 2001 GV_{10}	14.6	X	85.59844	63.18798	193.64519	5.87030	0.1364297	0.17316000	3.1878973	20	10 13.1	19.3
46226 2001 HP_{2}	13.3	X	157.69488	70.23117	218.96507	8.62743	0.0712528	0.18528136	3.0472978	20	—	—
46227 2001 HQ_{2}	13.5	X	111.74003	98.49355	223.54864	20.92461	0.0965712	0.18275529	3.0753136	20	—	—
46228 2001 HZ_{2}	14.6	X	95.76551	218.61006	40.48079	1.13367	0.1518737	0.17331382	3.1860108	20	10 27.4	19.6
46229 2001 HQ_{3}	14.9	X	170.25806	354.28423	207.34367	13.47662	0.1083985	0.23136867	2.6278446	20	11 6.8	19.0
46230 2001 HZ_{4}	14.4	X	113.88252	60.85277	239.75361	12.34219	0.1875333	0.23200145	2.6230642	20	—	—
46231 2001 HM_{5}	12.7	X	99.39838	354.92242	238.96047	10.70917	0.1069753	0.17096482	3.2151276	20	9 22.3	17.7
46232 2001 HS_{7}	13.9	X	248.10649	111.09489	211.41615	11.14400	0.1848432	0.20160277	2.8805254	20	3 19.7	18.7
46233 2001 HF_{9}	14.8	X	107.86812	142.55102	201.61455	13.08919	0.1909433	0.23645586	2.5900173	20	—	—
46234 2001 HK_{9}	13.5	X	173.30835	122.94192	207.46279	9.55322	0.2276015	0.19123937	2.9836727	20	1 29.1	18.8
46235 2001 HX_{9}	14.2	X	331.02803	46.09720	244.96418	6.89247	0.1658410	0.21301894	2.7766676	20	6 1.9	17.0
46236 2001 HA_{10}	15.1	X	295.65507	293.02161	207.21302	13.87417	0.0759582	0.23749262	2.5824740	20	—	—
46237 2001 HB_{10}	14.1	X	49.46178	104.57115	227.44252	11.59151	0.2725214	0.22904135	2.6456158	20	12 28.8	18.3
46238 2001 HE_{10}	14.9	X	359.66734	24.93645	315.47395	5.81209	0.1443760	0.27626760	2.3347985	20	10 23.5	17.3
46239 2001 HX_{10}	14.3	X	4.70407	248.27517	207.79127	12.68259	0.1258744	0.24208641	2.5497002	20	—	—
46240 2001 HT_{11}	14.8	X	268.67102	304.61271	38.37432	6.37750	0.0106287	0.21201071	2.7854638	20	5 31.0	18.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46241 2001 HG_{12}	14.4	X	191.67042	76.72105	212.12388	8.68234	0.0297711	0.19226305	2.9730725	20	—	—
46242 2001 HQ_{12}	14.3	X	256.31699	297.93089	214.46456	9.89588	0.0322704	0.18234241	3.0799542	20	12 12.9	18.7
46243 2001 HR_{12}	14.5	X	172.43969	283.38912	213.78301	16.32234	0.0871928	0.22059061	2.7127600	20	8 12.6	18.9
46244 2001 HU_{15}	12.8	X	25.97059	260.78506	105.84391	22.76500	0.1752897	0.17580511	3.1558406	20	12 20.9	17.0
46245 2001 HU_{20}	13.7	X	85.76565	109.14671	240.09775	9.37426	0.1115010	0.18136885	3.0909661	20	—	—
46246 2001 HX_{20}	14.1	X	47.12923	88.59259	218.08137	6.36848	0.1685127	0.17231660	3.1982910	20	11 2.2	18.5
46247 2001 HG_{22}	14.4	X	182.61846	294.78985	75.33923	3.26057	0.0573534	0.20189170	2.8777766	20	3 21.6	18.7
46248 2001 HM_{22}	13.5	X	146.58598	94.72994	175.44539	16.80854	0.0936462	0.18069325	3.0986660	20	12 25.2	18.6
46249 2001 HQ_{22}	14.7	X	134.50845	95.94634	111.91626	2.44637	0.1351488	0.17260229	3.1947609	20	10 3.5	19.8
46250 2001 HP_{28}	13.6	X	142.40424	44.90917	229.66114	4.09667	0.1222907	0.17969837	3.1100924	20	12 25.9	18.6
46251 2001 HO_{31}	13.8	X	36.01619	279.47206	129.90733	10.18589	0.0588876	0.18509601	3.0493318	20	—	—
46252 2001 HH_{32}	14.0	X	192.24987	287.77452	215.72110	16.28629	0.1602190	0.17212151	3.2007073	20	9 2.9	19.4
46253 2001 HW_{34}	13.8	X	58.95169	129.96242	227.11424	9.03067	0.0998577	0.17974710	3.1095303	20	—	—
46254 2001 HB_{36}	14.1	X	212.50671	298.55520	235.45702	15.16114	0.1754128	0.17996798	3.1069855	20	10 30.8	19.0
46255 2001 HZ_{36}	13.6	X	58.69785	75.08583	251.40569	9.78311	0.1975953	0.17241198	3.1971113	20	12 12.6	18.3
46256 2001 HR_{40}	14.9	X	155.69840	9.49118	157.44708	15.59762	0.0396456	0.22145820	2.7056702	20	9 7.9	18.8
46257 2001 HF_{44}	13.4	X	99.55227	139.45986	208.43084	22.36723	0.2541561	0.18413919	3.0598859	20	—	—
46258 2001 HE_{45}	14.9	X	358.89047	60.53033	306.40873	3.88387	0.1621563	0.28003095	2.3138331	20	12 7.3	17.1
46259 2001 HR_{45}	14.3	X	329.55597	196.53496	115.91505	10.44117	0.1483785	0.21468740	2.7622629	20	7 2.6	17.2
46260 2001 HC_{46}	13.7	X	315.58612	296.76493	90.66834	11.40479	0.0494470	0.17316395	3.1878489	20	9 29.7	18.2
46261 2001 HA_{47}	14.2	X	131.95190	61.73062	236.10939	14.53993	0.0553969	0.23880576	2.5729984	20	—	—
46262 2001 HX_{47}	14.1	X	115.56789	307.10906	288.27647	11.53380	0.1403037	0.22671416	2.6636896	20	10 19.5	18.5
46263 2001 HH_{48}	13.5	X	200.83523	0.39489	143.78976	17.91681	0.0603600	0.17712872	3.1400994	20	9 28.3	18.3
46264 2001 HB_{50}	14.5	X	269.77770	346.76239	236.46917	7.47912	0.0431879	0.19280989	2.9674484	20	—	—
46265 2001 HC_{51}	14.4	X	130.45325	68.80317	225.47055	10.17881	0.1273000	0.18418517	3.0593766	20	—	—
46266 2001 HE_{52}	14.4	X	190.42258	39.80976	236.71540	8.59100	0.0415376	0.19165803	2.9793260	20	—	—
46267 2001 HR_{55}	14.7	X	25.61786	287.43179	160.13442	11.12187	0.1532492	0.24402082	2.5362076	20	—	—
46268 2001 HJ_{56}	15.3	X	125.16992	66.47872	266.44316	8.83002	0.0131289	0.24240855	2.5474407	20	—	—
46269 2001 HA_{58}	14.4	X	169.73159	199.75512	95.12645	11.57015	0.0783733	0.19065367	2.9897803	20	—	—
46270 2001 HW_{62}	14.0	X	347.51088	291.89937	68.68668	1.90683	0.1292981	0.17046639	3.2213917	20	10 6.7	17.9
46271 2001 HE_{63}	14.7	X	244.68722	12.76967	227.31706	9.58154	0.0452558	0.19151782	2.9807800	20	—	—
46272 2001 HO_{64}	14.5	X	60.56143	265.12736	225.63334	12.19354	0.0387087	0.20415529	2.8564653	20	3 16.3	18.5
46273 2001 HX_{64}	15.2	X	326.89389	7.39110	337.40930	1.38273	0.0954499	0.21909165	2.7251192	20	8 18.7	18.4
46274 2001 JU_{3}	14.3	X	336.81921	168.80827	210.91537	10.56440	0.2038239	0.22232908	2.6986001	20	10 29.3	16.5
46275 2001 JW_{3}	13.7	X	66.49471	155.50195	232.27996	22.80642	0.2102997	0.18487357	3.0517772	20	—	—
46276 2001 JQ_{4}	14.2	X	80.13691	120.96463	181.72048	13.03203	0.0947092	0.22709497	2.6607110	20	12 7.4	18.3
46277 Jeffhall	14.1	X	347.08479	223.27254	125.82609	6.12710	0.1217628	0.16945847	3.2341528	20	9 22.1	18.0
46278 2001 KM	14.1	X	170.13422	308.39834	229.27749	15.80516	0.0695513	0.17282058	3.1920700	20	9 26.3	19.2
46279 2001 KQ_{12}	13.7	X	325.94864	132.39668	235.34156	15.49998	0.2405730	0.21528948	2.7571105	20	9 1.4	16.5
46280 Hollar	14.2	X	265.68755	195.04047	242.18050	11.94541	0.1389982	0.22244688	2.6976474	20	9 7.1	18.1
46281 2001 KR_{19}	15.0	X	329.44103	132.40203	231.65316	6.00903	0.1241764	0.27382424	2.3486671	20	9 28.5	17.1
46282 2001 KU_{26}	14.0	X	34.78627	168.99316	244.95933	11.68092	0.0676281	0.18421486	3.0590479	20	—	—
46283 2001 KE_{29}	14.2	X	263.27784	54.40958	247.06504	8.83481	0.0887093	0.20305788	2.8667478	20	3 17.9	18.6
46284 2001 KU_{33}	15.1	X	263.71281	189.02324	201.89031	9.79130	0.2128345	0.26578183	2.3958108	20	6 29.4	18.6
46285 2001 KD_{36}	13.8	X	359.03378	256.93711	141.87666	6.03679	0.1168662	0.17599168	3.1536098	20	12 13.1	17.8
46286 2001 KR_{37}	14.0	X	123.85917	182.82212	192.19067	9.60112	0.0765131	0.19237066	2.9719636	20	1 21.4	18.5
46287 2001 KJ_{41}	13.9	X	36.76907	174.54015	217.81832	6.80697	0.1031492	0.17999093	3.1067213	20	—	—
46288 2001 KK_{43}	13.9	X	311.59891	12.44878	88.22136	12.01876	0.0464639	0.18223438	3.0811713	20	12 19.9	17.9
46289 2001 KO_{49}	14.6	X	61.61159	55.10228	249.37616	13.04168	0.0882797	0.22299168	2.6932517	20	11 14.9	18.4
46290 2001 KY_{51}	14.9	X	151.16478	325.87266	195.11479	10.53588	0.0393300	0.22106343	2.7088905	20	8 21.9	18.9
46291 2001 KN_{54}	14.5	X	235.72709	70.19840	179.96997	9.66187	0.0338405	0.19304693	2.9650188	20	—	—
46292 2001 KY_{56}	14.0	X	184.09173	116.50707	106.74900	11.87033	0.0265277	0.18144466	3.0901051	20	12 13.8	18.5
46293 2001 KF_{58}	13.8	X	30.38904	244.86154	152.98328	10.46262	0.0943162	0.18194811	3.0844022	20	—	—
46294 2001 KR_{65}	14.5	X	345.30135	264.03311	116.55844	14.16610	0.1969819	0.22551137	2.6731526	20	11 23.3	17.4
46295 2001 KP_{70}	14.0	X	10.97386	244.02159	123.91217	14.48078	0.0678705	0.17617778	3.1513886	20	11 20.9	18.4
46296 2001 KU_{71}	14.6	X	151.85257	310.73891	297.78521	3.18773	0.0327579	0.18020855	3.1042197	20	12 5.8	19.2
46297 2001 MK_{13}	14.2	X	35.41559	19.36657	312.80100	12.69038	0.1834053	0.22454007	2.6808560	20	11 30.8	18.0
46298 2001 MU_{18}	14.0	X	129.03820	197.19499	206.90662	11.07789	0.0988916	0.18620436	3.0372193	20	3 4.8	18.6
46299 2001 MR_{24}	12.9	X	28.32532	158.08922	262.39905	9.37425	0.1748182	0.17521881	3.1628765	20	—	—
46300 2001 MW_{27}	14.2	X	84.72603	278.07058	123.92881	2.71869	0.1618779	0.18122362	3.0926173	20	1 21.6	18.3
46301 2001 OY_{5}	14.1	X	26.99911	203.76057	229.99761	11.19659	0.1677060	0.22628405	2.6670639	20	—	—
46302 2001 OG_{13}	12.6	X	153.72132	295.81903	7.11368	3.82666	0.2320666	0.12494647	3.9626592	20	—	—
46303 2001 OZ_{44}	13.4	X	122.71098	274.78601	279.09463	12.39500	0.0901156	0.21098659	2.7944702	20	8 29.8	17.8
46304 2001 OZ_{62}	13.9	X	224.31674	23.42362	9.78115	15.18963	0.2400137	0.24298663	2.5433988	20	5 16.3	18.4
46305 2001 OW_{71}	13.5	X	243.23918	59.13048	309.72111	4.39604	0.1125664	0.14805601	3.5387674	20	5 19.8	18.9
46306 2001 OW_{102}	14.4	X	157.15093	48.39681	286.85914	14.55865	0.1458779	0.23070685	2.6328678	20	1 13.3	18.3
46307 2001 OX_{104}	14.0	X	354.57090	146.79332	196.99591	1.54326	0.0601501	0.20543154	2.8446225	20	9 28.4	17.3
46308 2001 OZ_{104}	14.0	X	281.57185	228.81666	122.51267	2.96771	0.1107386	0.19631739	2.9319971	20	6 14.0	17.9
46309 2001 QA_{2}	13.9	X	158.10908	80.53920	183.18671	11.68421	0.0649497	0.16888647	3.2414511	20	12 26.8	19.0
46310 2001 QQ_{11}	15.1	X	64.63060	264.74205	122.21254	3.64380	0.0907060	0.22587435	2.6702880	20	—	—
46311 2001 QF_{20}	14.1	X	192.40182	183.01625	186.92695	1.01457	0.0945559	0.18872367	3.0101292	20	3 31.3	18.8
46312 2001 QJ_{25}	15.1	X	119.97956	36.50211	65.25364	1.36567	0.0954446	0.24214796	2.5492681	20	5 5.5	18.6
46313 2001 QO_{25}	13.4	X	228.04581	331.59277	21.87668	11.24471	0.1232484	0.19153714	2.9805796	20	4 14.1	18.0
46314 2001 QK_{29}	15.3	X	136.70375	6.66936	7.45865	2.42107	0.1715061	0.28281638	2.2986156	20	2 6.5	18.4
46315 2001 QR_{30}	14.4	X	182.49796	229.40153	147.50980	3.89644	0.1985418	0.23668416	2.5883515	20	3 30.2	18.8
46316 2001 QH_{31}	15.4	X	324.07755	282.08823	95.18618	5.67060	0.2324286	0.25918187	2.4363123	20	10 9.9	17.0
46317 2001 QN_{53}	14.9	X	1.41264	144.23613	312.33013	11.51060	0.2136582	0.22571887	2.6715141	20	—	—
46318 2001 QO_{74}	14.3	X	83.02700	357.71225	10.35225	3.34548	0.1941571	0.22111448	2.7084735	20	—	—
46319 2001 QP_{74}	14.4	X	110.19881	16.76435	20.38841	2.95711	0.0917840	0.22812814	2.6526715	20	2 1.0	17.8
46320 2001 QY_{74}	14.8	X	356.75775	215.19743	204.73198	5.57928	0.1203983	0.26683337	2.3895124	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46321 2001 QO_{84}	14.1	X	15.65847	106.86082	229.46618	1.49197	0.0640820	0.20602766	2.8391327	20	10 19.7	17.6
46322 2001 QD_{99}	14.0	X	34.33342	12.46321	332.25174	3.84887	0.1569526	0.21134483	2.7913114	20	12 9.3	17.7
46323 2001 QH_{115}	13.6	X	257.62860	1.34427	280.78765	8.18337	0.0372373	0.18652867	3.0336978	20	2 24.6	18.1
46324 2001 QW_{119}	14.6	X	21.79174	315.26436	112.54236	4.72602	0.0460729	0.22388297	2.6860989	20	—	—
46325 2001 QZ_{130}	13.3	X	144.82755	56.90261	283.43406	9.39402	0.0884980	0.17922707	3.1155423	20	1 8.8	17.9
46326 2001 QU_{148}	15.4	X	141.43983	296.55171	78.16529	6.30513	0.1803511	0.28615720	2.2806901	20	2 14.7	18.6
46327 2001 QU_{161}	14.6	X	16.49260	139.75404	65.61219	4.05927	0.0706949	0.19462602	2.9489593	20	4 27.8	18.3
46328 2001 QD_{216}	15.4	X	208.39025	171.57215	37.68559	2.58969	0.0212267	0.22043983	2.7139969	20	—	—
46329 2001 QW_{232}	14.2	X	274.17468	234.75913	315.11861	2.13426	0.1198311	0.17466552	3.1695523	20	—	—
46330 2001 QQ_{234}	14.6	X	354.52078	140.66961	37.30455	1.38099	0.0393934	0.18412070	3.0600908	20	2 22.4	18.5
46331 2001 QB_{264}	14.8	X	346.83836	174.29832	41.38324	10.20428	0.0389374	0.23619995	2.5918877	20	3 28.9	18.1
46332 2001 QD_{276}	13.5	X	152.04660	338.45067	30.81950	10.52313	0.1065930	0.18430495	3.0580509	20	2 25.1	18.3
46333 2001 QS_{276}	13.4	X	147.01369	334.81985	33.35184	9.96778	0.0992898	0.18317670	3.0705951	20	2 17.8	18.2
46334 2001 QA_{296}	14.5	X	203.92661	243.00207	176.95383	13.21646	0.1705299	0.24221801	2.5487766	20	6 10.7	18.8
46335 2001 RF_{57}	15.2	X	171.75207	351.82896	63.48911	2.70415	0.1541594	0.24305435	2.5429264	20	5 5.1	19.2
46336 2001 RG_{67}	14.4	X	81.04629	56.46542	275.93554	4.07915	0.0628802	0.21798429	2.7343404	20	—	—
46337 2001 RE_{76}	14.6	X	290.01385	101.81237	189.61222	9.31879	0.0732818	0.23922128	2.5700181	20	4 11.5	17.8
46338 2001 RF_{80}	14.1	X	142.90047	119.21284	180.40680	1.26313	0.1851204	0.17046804	3.2213710	20	—	—
46339 2001 RU_{81}	14.3	X	85.94292	347.45322	3.65780	3.92238	0.0901601	0.21752278	2.7382066	20	—	—
46340 2001 RG_{86}	15.3	X	138.08398	269.85750	125.79790	1.01155	0.0461586	0.23542994	2.5975361	20	2 25.5	18.8
46341 2001 RE_{89}	15.2	X	158.42098	65.15772	9.40123	12.87438	0.1746714	0.24186078	2.5512856	20	5 13.4	19.5
46342 2001 SC_{53}	13.9	X	206.88612	188.88932	118.08405	2.87870	0.1497935	0.18050104	3.1008654	20	1 31.7	19.0
46343 2001 SY_{56}	14.8	X	324.11812	111.33443	84.40671	4.26514	0.0811437	0.23102690	2.6304357	20	1 22.5	18.0
46344 2001 SR_{58}	15.3	X	5.49994	175.44015	58.19081	2.38597	0.0330220	0.24318809	2.5419940	20	5 16.5	18.3
46345 2001 SP_{110}	15.4	X	199.35933	10.01380	354.33140	7.82705	0.1866965	0.29027556	2.2590668	20	3 23.8	18.9
46346 2001 SX_{112}	14.3	X	177.76204	78.77631	215.97892	10.89642	0.1969077	0.22468734	2.6796844	20	—	—
46347 2001 SV_{123}	14.0	X	102.47502	151.48516	330.33807	9.35386	0.0344202	0.19218862	2.9738400	20	4 28.9	18.4
46348 2001 SC_{136}	14.8	X	266.37301	228.29985	347.13115	0.74511	0.1608557	0.17636193	3.1491946	20	—	—
46349 2001 SM_{140}	14.3	X	266.50525	159.23387	6.44571	2.75728	0.0522508	0.21970361	2.7200565	20	—	—
46350 2001 SH_{180}	14.1	X	291.91244	12.15162	143.20872	10.19992	0.0439776	0.17521746	3.1628928	20	—	—
46351 2001 SD_{226}	14.7	X	256.15505	166.54302	74.44160	2.19442	0.1192272	0.17777788	3.1324507	20	1 2.4	19.4
46352 2001 SZ_{266}	14.8	X	93.45170	76.06505	173.01365	3.66791	0.1479290	0.25692953	2.4505301	20	10 25.8	18.5
46353 2001 TY_{7}	14.3	X	126.50847	230.11541	120.68459	3.54936	0.0803468	0.22381231	2.6866643	20	—	—
46354 2001 TY_{8}	13.2	X	170.16547	343.09645	40.39243	13.98177	0.1833382	0.23276927	2.6172926	20	3 31.2	17.6
46355 2001 TQ_{65}	13.7	X	155.92491	255.96249	37.16990	7.70622	0.0979098	0.16814460	3.2509785	20	—	—
46356 2001 TQ_{75}	15.5	X	304.41880	110.02186	43.95600	7.99144	0.0613995	0.27318181	2.3523478	20	—	—
46357 2001 TG_{77}	14.5	X	194.55670	294.64794	58.32169	15.34049	0.1493278	0.23528912	2.5985724	20	3 18.3	18.9
46358 2001 TO_{79}	15.9	X	69.10689	298.26117	126.74744	4.31495	0.1105760	0.27830296	2.3234009	20	—	—
46359 2001 TQ_{104}	14.4	X	119.09372	165.57576	128.57181	5.01849	0.0716491	0.21522319	2.7576767	20	—	—
46360 2001 TA_{105}	15.4	X	205.90907	165.73441	10.78791	2.62611	0.1570991	0.26035590	2.4289828	20	11 11.5	18.8
46361 2001 TR_{105}	14.0	X	248.84985	51.00198	253.73892	7.23380	0.1668881	0.23483951	2.6018881	20	2 25.7	18.2
46362 2001 TO_{118}	13.7	X	177.89193	97.96015	268.67140	15.32668	0.0606791	0.18316430	3.0707337	20	3 4.1	18.6
46363 2001 UX_{34}	13.8	X	149.65169	232.03433	80.42649	11.24243	0.1258738	0.22323075	2.6913285	20	—	—
46364 2001 UM_{35}	14.0	X	206.11232	285.90934	91.14349	11.84226	0.0655110	0.18623556	3.0368801	20	4 28.8	18.7
46365 2001 UJ_{47}	15.3	X	98.64521	8.19417	135.13619	3.69891	0.0869085	0.24016761	2.5632625	20	6 3.2	18.7
46366 2001 UA_{66}	14.6	X	278.92343	48.99685	250.60795	7.81544	0.1566572	0.23810422	2.5780499	20	3 22.4	18.3
46367 2001 UP_{125}	14.2	X	170.82236	245.42540	155.07272	13.74570	0.1608451	0.23757908	2.5818475	20	4 19.7	18.5
46368 2001 VR_{36}	14.8	X	16.98151	302.30761	68.78293	6.15990	0.1101919	0.26125310	2.4234185	20	12 26.9	17.8
46369 2001 VX_{42}	15.9	X	225.56760	49.91375	55.23755	4.75108	0.0873202	0.30350569	2.1929303	20	9 19.7	18.5
46370 2001 VY_{43}	15.0	X	81.14459	230.97455	70.55114	6.68338	0.0200560	0.25848986	2.4406586	20	12 4.9	18.2
46371 2001 VZ_{45}	14.8	X	183.10394	145.01381	227.04449	5.81408	0.1282051	0.28542015	2.2846147	20	3 16.2	18.2
46372 2001 VG_{67}	14.1	X	236.04880	51.85878	312.72648	2.30025	0.1723084	0.24132345	2.5550714	20	4 29.6	18.2
46373 2001 VA_{123}	14.9	X	342.39839	286.55379	43.27199	15.13547	0.0669603	0.24614048	2.5216261	20	9 6.5	18.1
46374 2001 WZ_{13}	14.7	X	69.96707	156.77488	181.25041	5.34787	0.1950660	0.26514012	2.3996749	20	—	—
46375 2001 WD_{29}	14.4	X	210.06727	198.17247	143.56977	5.70543	0.1363945	0.23382730	2.6093915	20	3 11.8	18.6
46376 2001 XD_{3}	14.7	X	25.43908	34.43319	275.37246	18.12157	0.0903586	0.35935789	1.9593766	20	10 29.2	17.0
46377 2001 XX_{7}	13.7	X	195.52694	324.04996	352.93167	23.13173	0.1841927	0.17658888	3.1464958	20	2 11.1	19.2
46378 2001 XD_{17}	14.8	X	18.79541	201.21112	45.09663	5.64527	0.0994018	0.29302490	2.2449139	20	7 2.8	16.9
46379 2001 XD_{22}	15.8	X	118.74890	44.35085	29.35045	7.16638	0.0964589	0.28187101	2.3037523	20	3 26.5	18.6
46380 2001 XF_{54}	14.6	X	320.16325	180.63455	80.76254	15.74314	0.1477556	0.23541998	2.5976094	20	4 11.6	18.0
46381 2001 XQ_{59}	15.3	X	22.59407	288.11761	149.63886	2.53326	0.1867178	0.26967867	2.3726754	20	—	—
46382 2001 XP_{85}	14.1	X	59.18929	227.92485	117.98411	12.04638	0.2165659	0.26218280	2.4176862	20	—	—
46383 2001 XC_{114}	15.1	X	225.31898	247.21108	48.68492	7.21461	0.1088341	0.27935716	2.3175521	20	1 26.7	18.6
46384 2001 XM_{115}	15.7	X	23.87214	106.98268	59.55622	7.47752	0.0661990	0.27953386	2.3165754	20	3 11.8	18.3
46385 2001 XA_{152}	14.7	X	100.42633	188.98190	85.50199	13.46489	0.1964405	0.25720605	2.4487734	20	12 5.6	18.7
46386 2001 XP_{195}	15.7	X	298.93205	238.57542	146.52733	2.14903	0.1767811	0.30175393	2.2014091	20	9 1.2	17.1
46387 2001 XE_{215}	14.8	X	201.09136	334.37472	136.85943	14.34613	0.1994313	0.24316772	2.5421359	20	8 10.4	18.7
46388 2001 XH_{246}	15.3	X	297.20694	302.45647	177.84637	8.36579	0.1005166	0.26377825	2.4079275	20	—	—
46389 2001 YJ_{45}	15.1	X	72.10912	136.35221	75.93383	6.40708	0.0426266	0.24258900	2.5461773	20	7 26.9	18.4
46390 2001 YT_{96}	15.5	X	189.54200	79.79466	16.28893	4.32224	0.1347503	0.29360393	2.2419615	20	7 17.5	18.8
46391 2001 YJ_{97}	15.5	X	255.43031	169.50664	84.75170	4.75335	0.0956909	0.27805249	2.3247961	20	1 4.3	18.6
46392 Bertola	15.0	X	260.81114	58.16883	136.02226	9.68537	0.2152184	0.26625750	2.3929566	20	—	—
46393 2002 AS_{10}	15.6	X	230.75674	304.75833	110.74135	4.47166	0.1214632	0.29466719	2.2365650	20	7 8.0	18.6
46394 2002 AZ_{10}	15.1	X	209.69229	8.54375	39.79353	2.75708	0.1114300	0.28923658	2.2644735	20	6 3.4	18.2
46395 2002 CT_{4}	15.2	X	345.02328	288.97806	77.78192	4.61050	0.1687400	0.30257943	2.1974033	20	11 21.0	16.8
46396 2002 CD_{39}	14.6	X	41.64256	10.01266	9.39263	1.35560	0.0280709	0.20129244	2.8834853	20	—	—
46397 2002 CE_{102}	15.9	X	49.79040	308.16899	350.44485	3.08195	0.1965865	0.29508860	2.2344352	20	11 22.2	18.9
46398 2002 CQ_{146}	15.3	X	124.19067	12.99363	303.43102	4.43741	0.1980929	0.25469227	2.4648597	20	—	—
46399 2002 CD_{169}	15.2	X	141.65309	227.45250	120.00609	6.80953	0.0410729	0.21153949	2.7895988	20	1 3.1	19.0
46400 2002 CG_{220}	15.8	X	358.38986	158.63687	149.16293	5.63188	0.1805231	0.23580367	2.5947907	20	8 29.9	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46401 2002 CY_{240}	15.1	X	57.66847	164.93797	208.35830	1.33824	0.0828546	0.20174692	2.8791532	20	—	—
46402 2002 DB_{16}	15.4	X	333.32515	139.77411	117.57486	4.31482	0.1188649	0.27391397	2.3481541	20	4 22.3	17.7
46403 2002 EQ_{20}	15.7	X	224.94080	92.39038	166.48789	6.47051	0.0981282	0.25828806	2.4419297	20	—	—
46404 2002 EV_{20}	14.4	X	114.54113	279.37699	195.08161	21.46472	0.0893140	0.22396267	2.6854617	20	5 17.0	18.5
46405 2002 EJ_{28}	15.4	X	284.78201	292.33219	3.42939	1.99461	0.0634841	0.22416444	2.6838500	20	4 11.7	18.8
46406 2002 EQ_{67}	15.8	X	121.55519	25.12221	250.94916	1.97927	0.1126667	0.24758061	2.5118380	20	12 21.5	19.6
46407 2002 EC_{74}	15.3	X	120.26110	281.10114	265.26984	1.60654	0.0738202	0.23415545	2.6069530	20	8 24.0	19.0
46408 2002 FO_{3}	15.2	X	37.75839	226.42123	337.21103	0.68878	0.2310443	0.22338330	2.6901030	20	6 18.5	17.9
46409 2002 FT_{35}	13.9	X	107.47356	144.46031	81.32143	17.89915	0.0644548	0.18429591	3.0581510	20	10 2.9	18.7
46410 2002 GF_{46}	15.4	X	267.62056	109.66912	119.71396	4.62863	0.1507381	0.26209412	2.4182314	20	—	—
46411 2002 GS_{68}	14.6	X	209.56080	44.01620	141.95559	13.75293	0.1048567	0.24385072	2.5373869	20	12 4.3	18.4
46412 2002 GL_{76}	14.3	X	3.92673	213.82606	96.32929	10.48621	0.0763231	0.17537941	3.1609453	20	8 29.4	18.5
46413 2002 GS_{87}	15.4	X	138.44533	206.56513	158.28637	6.80347	0.1646562	0.26021088	2.4298852	20	1 27.9	18.9
46414 2002 GD_{113}	14.3	X	314.04079	291.52019	144.10305	11.26925	0.0847084	0.19336766	2.9617392	20	11 26.7	18.2
46415 2002 GV_{125}	15.4	X	293.77467	140.43793	235.46197	3.27967	0.0467007	0.23535280	2.5981036	20	8 14.9	18.7
46416 2002 HK	15.3	X	22.92058	234.66840	114.80643	4.83625	0.1280463	0.24259974	2.5461022	20	12 4.8	18.5
46417 2002 JV_{4}	14.9	X	146.65290	72.41392	148.67266	2.98744	0.1999627	0.18445380	3.0564056	20	10 31.9	20.0
46418 2002 JS_{12}	15.1	X	103.80620	195.31493	87.74468	7.39221	0.2075645	0.29342417	2.2428770	20	12 24.4	18.8
46419 2002 JO_{21}	16.0	X	55.39136	156.45947	102.02561	7.10130	0.1516911	0.28453385	2.2893565	20	10 2.4	18.9
46420 2002 JH_{23}	15.4	X	70.21205	110.04336	217.11404	16.24076	0.2672258	0.24024602	2.5627048	20	—	—
46421 2002 JC_{33}	15.4	X	340.61672	177.11899	64.88222	7.32165	0.0742352	0.27055152	2.3675695	20	4 18.1	18.0
46422 2002 JO_{33}	15.5	X	124.05652	12.27626	191.26156	1.94347	0.1136381	0.28825986	2.2695858	20	9 29.7	18.5
46423 2002 JR_{34}	15.9	X	196.17758	140.68183	102.58357	1.52766	0.1285682	0.30364081	2.1922797	20	—	—
46424 2002 JZ_{35}	14.6	X	213.89777	352.27712	66.68919	15.77616	0.0606613	0.22427272	2.6829861	20	6 24.9	18.5
46425 2002 JP_{44}	14.7	X	327.40440	189.78455	227.15066	13.62688	0.1474511	0.24553270	2.5257857	20	12 8.3	17.2
46426 2002 JG_{58}	15.8	X	262.10772	247.25479	49.96648	4.97757	0.1447668	0.26529817	2.3987218	20	3 5.9	19.2
46427 2002 JS_{59}	14.1	X	24.81559	78.18211	253.49705	4.07193	0.1661661	0.17758570	3.1347101	20	11 2.8	18.1
46428 2002 JO_{63}	15.3	X	214.72935	76.33951	91.97040	2.10912	0.1321120	0.24245310	2.5471287	20	11 11.8	18.8
46429 2002 JP_{63}	16.1	X	357.87009	250.22413	81.26442	1.69317	0.1097951	0.28483348	2.2877507	20	10 8.4	18.1
46430 2002 JV_{63}	16.4	X	82.40278	234.30362	91.72687	2.38496	0.1717313	0.29545298	2.2325976	20	—	—
46431 2002 JL_{65}	14.5	X	41.09796	130.80958	151.40205	5.76483	0.1554372	0.17437964	3.1730155	20	9 24.6	18.6
46432 2002 JR_{65}	15.3	X	9.30471	161.89556	104.22321	3.51011	0.1655800	0.22225311	2.6992151	20	7 15.9	17.9
46433 2002 JQ_{67}	15.3	X	58.70745	69.98183	269.03529	5.68669	0.2631401	0.29452609	2.2372793	20	—	—
46434 2002 JK_{143}	14.5	X	280.41220	320.68065	80.25999	14.86452	0.1872793	0.23040928	2.6351342	20	8 13.7	18.0
46435 2002 KY_{4}	15.0	X	123.55164	84.79677	152.52381	3.01774	0.1537807	0.23620586	2.5918445	20	11 6.4	19.2
46436 2002 LH_{5}	13.0	X	209.78570	60.39480	271.70674	14.26948	0.3762838	0.20020036	2.8939619	20	2 20.6	18.9
46437 2002 LL_{5}	15.5	X	351.14284	260.90900	83.06348	3.59431	0.2591980	0.27847508	2.3224435	20	11 4.5	17.1
46438 2002 LZ_{7}	15.9	X	100.74159	197.53049	110.60902	7.92931	0.1672867	0.29582964	2.2307022	20	—	—
46439 2002 LX_{12}	14.5	X	135.46687	99.49046	240.28961	7.46455	0.2801218	0.24566755	2.5248613	20	1 8.7	18.5
46440 2002 LS_{27}	15.5	X	269.40927	207.02574	180.48031	5.32455	0.0515057	0.28105336	2.3082182	20	7 30.0	18.1
46441 Mikepenston	14.2	X	9.82779	124.80722	275.27076	12.09900	0.1697574	0.23174962	2.6249641	20	—	—
46442 Keithtritton	12.8	X	67.74611	353.97954	274.98633	15.92330	0.1148113	0.17085541	3.2165000	20	9 26.0	17.8
46443 2002 LW_{43}	14.4	X	307.95265	111.93310	245.85202	10.78354	0.1307217	0.21929124	2.7234654	20	7 27.7	17.8
46444 2089 P–L	15.5	X	333.90639	219.54082	227.30761	2.35193	0.1730167	0.26591866	2.3949889	20	—	—
46445 2102 P–L	15.5	X	66.71120	325.14210	335.77701	3.92482	0.1866288	0.28165625	2.3049232	20	12 9.6	18.9
46446 2110 P–L	15.9	X	70.75509	23.57634	299.22395	1.91324	0.1464291	0.23289667	2.6163381	20	12 27.4	19.6
46447 2208 P–L	15.7	X	343.40080	212.59874	225.03385	4.51490	0.2552210	0.23261297	2.6184649	20	—	—
46448 2829 P–L	14.6	X	313.95826	6.06974	165.81561	3.60197	0.1266951	0.25264616	2.4781499	20	—	—
46449 3036 P–L	15.5	X	233.30493	106.20722	301.51285	6.08323	0.1543241	0.29274543	2.2463425	20	6 26.4	18.6
46450 3039 P–L	14.8	X	252.04413	150.33787	246.97094	6.88665	0.2260000	0.21044092	2.7992988	20	6 22.0	19.0
46451 3050 P–L	13.9	X	100.13940	75.18161	314.98579	8.61039	0.1289597	0.18716783	3.0267874	20	1 22.3	17.9
46452 3097 P–L	14.1	X	322.67369	359.09193	293.58771	7.04216	0.2014035	0.21083907	2.7957735	20	5 11.9	17.2
46453 4013 P–L	14.6	X	269.24582	136.35851	205.33195	7.34152	0.2442308	0.21029983	2.8005507	20	4 28.9	18.9
46454 4029 P–L	15.5	X	203.40355	341.69543	355.35322	6.82152	0.2074237	0.25614413	2.4555368	20	2 27.0	19.6
46455 4054 P–L	14.5	X	128.04239	87.81589	219.27736	4.33156	0.1508183	0.21836162	2.7311895	20	—	—
46456 4140 P–L	14.2	X	207.29146	200.33658	186.25273	13.64225	0.1718211	0.24154045	2.5535408	20	5 3.4	18.4
46457 4166 P–L	14.4	X	30.53373	200.34272	204.30208	9.22396	0.0095123	0.18489589	3.0515316	20	—	—
46458 4244 P–L	16.0	X	245.94575	63.71397	211.77477	5.94247	0.1909244	0.25614325	2.4555424	20	1 17.3	20.1
46459 4540 P–L	15.0	X	54.23842	132.07722	175.81949	15.75792	0.0590256	0.18190392	3.0849018	20	11 1.7	19.5
46460 4798 P–L	16.3	X	26.22110	281.77003	12.60183	3.00837	0.1756356	0.27956375	2.3164103	20	10 10.1	18.6
46461 6105 P–L	14.6	X	191.54602	152.06719	198.57380	11.98688	0.1108864	0.20675565	2.8324644	20	3 3.4	19.1
46462 6179 P–L	15.5	X	70.96586	331.56804	316.25473	2.30195	0.1160570	0.23193380	2.6235742	20	11 10.1	19.2
46463 6290 P–L	16.3	X	214.51484	40.46378	206.46210	3.63509	0.1527950	0.30246840	2.1979411	20	—	—
46464 6602 P–L	16.2	X	124.31475	2.98497	11.50180	6.56110	0.1371143	0.30345679	2.1931659	20	1 15.2	18.8
46465 6617 P–L	14.9	X	47.50452	87.31612	18.60770	6.47638	0.1067492	0.25416783	2.4682491	20	1 28.4	17.5
46466 6622 P–L	14.8	X	176.35974	1.67549	159.85897	3.05155	0.1112008	0.27964544	2.3159591	20	9 29.7	17.9
46467 6730 P–L	14.9	X	157.60703	96.38478	181.52383	1.79316	0.0737876	0.18544490	3.0455060	20	—	—
46468 6887 P–L	15.4	X	192.14655	157.81995	30.92812	2.30907	0.0356818	0.21580290	2.7527358	20	11 16.4	19.4
46469 9572 P–L	15.4	X	336.86722	313.23435	74.14031	4.04923	0.1750901	0.26408121	2.4060855	20	11 22.9	17.4
46470 9607 P–L	13.4	X	276.57391	165.15943	3.91576	9.59697	0.0768095	0.18550719	3.0448242	20	—	—
46471 1160 T–1	13.6	X	312.19095	264.72410	187.54540	24.89306	0.2759880	0.17538678	3.1608568	20	11 26.3	17.1
46472 2155 T–1	14.1	X	9.76342	41.14684	71.08219	1.72209	0.1166954	0.17805492	3.1292005	20	—	—
46473 3066 T–1	15.5	X	284.78820	280.13768	354.78952	4.75951	0.1944806	0.26034211	2.4290686	20	2 24.1	18.8
46474 3109 T–1	15.5	X	292.84334	32.45372	246.54522	2.89478	0.1321362	0.26126278	2.4233586	20	3 16.2	18.6
46475 3204 T–1	14.5	X	185.47853	56.21899	351.73400	5.97185	0.0961709	0.26352300	2.4094821	20	5 5.6	18.1
46476 4208 T–1	16.1	X	303.32065	343.26394	138.06768	2.25801	0.1140679	0.29454564	2.2371803	20	—	—
46477 4266 T–1	16.1	X	283.02359	95.65763	146.68166	2.45825	0.1674955	0.25875371	2.4389992	20	1 14.4	19.5
46478 1097 T–2	14.8	X	18.84255	69.78876	300.00578	1.83674	0.0807713	0.21268564	2.7795678	20	12 9.9	18.3
46479 1150 T–2	15.8	X	320.85819	259.28317	44.82343	1.21613	0.1961705	0.26983783	2.3717423	20	5 27.6	17.9
46480 1170 T–2	14.9	X	328.16672	253.68032	187.12756	11.45545	0.1438922	0.23408721	2.6074597	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46481 1198 T–2	15.0	X	272.61102	86.69772	302.92459	1.05025	0.0574218	0.22829111	2.6514090	20	8 2.4	18.3
46482 1460 T–2	14.6	X	266.86350	24.42368	187.99049	6.66630	0.2081725	0.19776714	2.9176506	20	—	—
46483 1549 T–2	14.9	X	66.38773	147.97218	198.01633	4.88787	0.0233883	0.21425180	2.7660056	20	12 31.9	18.8
46484 2245 T–2	15.7	X	333.05712	92.69584	186.14775	2.45416	0.1752287	0.26897736	2.3767978	20	5 16.6	17.7
46485 2279 T–2	14.6	X	180.23632	233.55516	163.34817	1.90276	0.1243366	0.20224477	2.8744264	20	4 21.2	19.0
46486 3113 T–2	15.1	X	10.69793	350.20839	32.76923	3.88572	0.1699842	0.23383157	2.6093597	20	—	—
46487 3322 T–2	15.1	X	139.76092	88.60418	169.78280	14.31695	0.0376029	0.23481618	2.6020604	20	12 17.1	19.0
46488 3335 T–2	15.2	X	53.67514	341.00766	65.87604	3.59600	0.1689383	0.23747271	2.5826184	20	—	—
46489 4156 T–2	15.3	X	82.64076	230.94796	68.42705	1.47775	0.1292078	0.23415479	2.6069579	20	12 9.6	19.1
46490 4164 T–2	15.5	X	150.54903	44.36076	56.31014	3.16724	0.1487371	0.26661894	2.3907934	20	6 11.4	19.0
46491 5070 T–2	13.5	X	152.03139	28.63627	259.71940	6.94922	0.1310890	0.17345852	3.1842387	20	—	—
46492 1023 T–3	15.4	X	295.61928	292.29178	273.09093	5.89914	0.1016843	0.28536287	2.2849204	20	—	—
46493 1032 T–3	13.7	X	306.97470	209.94780	323.04016	10.38506	0.0457595	0.19126413	2.9834152	20	—	—
46494 1088 T–3	14.7	X	12.12158	70.32929	347.33898	9.23395	0.0649157	0.23413677	2.6070917	20	—	—
46495 1123 T–3	14.6	X	168.46153	315.53635	339.28784	8.18129	0.0621223	0.19066084	2.9897053	20	—	—
46496 1157 T–3	14.1	X	85.73295	124.97044	263.82954	8.80747	0.0963612	0.19086345	2.9875891	20	—	—
46497 2214 T–3	15.1	X	54.15188	324.64145	246.83440	5.88066	0.0915026	0.27014516	2.3699431	20	7 6.8	17.8
46498 2240 T–3	15.5	X	235.12930	327.63802	254.84618	4.65472	0.1120083	0.30581736	2.1818654	20	—	—
46499 2409 T–3	16.2	X	342.43669	298.36351	333.33416	2.08551	0.1498098	0.27042220	2.3683242	20	5 27.2	18.2
46500 2610 T–3	15.5	X	71.29855	206.03125	313.05147	1.90100	0.1285234	0.26703380	2.3883166	20	5 23.4	18.1
46501 2616 T–3	15.0	X	135.48117	267.74951	245.31203	5.42085	0.0409511	0.27103810	2.3647351	20	7 28.0	18.2
46502 3084 T–3	16.7	X	209.06672	299.32513	36.36351	0.97957	0.1635019	0.31190197	2.1533963	20	2 24.8	19.8
46503 3191 T–3	16.0	X	231.55347	20.50633	39.28921	7.38832	0.1123649	0.27100668	2.3649178	20	7 16.7	19.3
46504 3194 T–3	15.1	X	212.47141	246.06567	41.46446	6.63518	0.1202574	0.26294404	2.4130176	20	1 4.0	18.8
46505 3195 T–3	15.1	X	68.23116	80.78404	188.17168	11.15899	0.1705983	0.22987867	2.6391876	20	10 22.9	18.9
46506 3387 T–3	16.2	X	223.58567	291.08169	8.40067	1.63955	0.2091203	0.31125440	2.1563821	20	1 22.9	19.5
46507 3479 T–3	15.8	X	75.42715	200.11101	189.37988	4.12191	0.2892230	0.23664265	2.5886542	20	—	—
46508 3554 T–3	14.8	X	191.03493	94.47530	194.94124	9.01467	0.0543654	0.19162964	2.9796204	20	—	—
46509 4149 T–3	15.8	X	354.38557	151.30308	134.30951	2.93858	0.1941210	0.27239205	2.3568924	20	7 20.1	17.1
46510 4323 T–3	15.9	X	227.35868	293.86784	125.20400	6.01799	0.0554036	0.27092706	2.3653811	20	7 15.7	18.9
46511 4356 T–3	14.5	X	72.59867	242.31536	164.01671	11.12894	0.1013779	0.19096679	2.9865112	20	—	—
46512 1951 QD	14.4	X	224.98899	295.96931	125.49697	8.67979	0.2263348	0.20974587	2.8054795	20	6 26.9	19.1
46513 Ampzing	15.8	X	133.00074	312.72686	174.29875	21.99657	0.0692634	0.37320814	1.9105950	20	6 25.5	18.6
46514 Lasswitz	15.4	X	102.73229	1.00580	239.01606	23.80179	0.2022811	0.28131895	2.3067652	20	10 27.6	19.4
46515 1978 VW_5	16.0	X	33.65645	120.27129	214.70292	2.19821	0.2109209	0.28268875	2.2993074	20	12 21.5	18.9
46516 1978 VQ_6	14.8	X	78.63504	68.21227	27.76552	2.20975	0.0748707	0.19680769	2.9271255	20	3 6.8	18.6
46517 1978 VM_7	15.2	X	158.85464	89.67265	240.69452	6.46815	0.2844157	0.24328367	2.5413282	20	1 17.5	19.6
46518 1978 VH_{10}	14.5	X	151.10465	310.60829	85.11101	3.15515	0.0712325	0.19810736	2.9143093	20	3 19.5	18.8
46519 1979 ME_3	14.3	X	343.06310	226.46571	162.69352	6.16397	0.1248181	0.17242358	3.1969679	20	11 6.6	18.2
46520 1979 MJ_3	14.8	X	241.42486	261.82676	174.26191	5.42456	0.0349171	0.21809867	2.7333844	20	8 24.6	18.5
46521 1979 MM_7	16.8	X	209.89685	101.43139	160.94404	3.46458	0.1882796	0.30180626	2.2011546	20	—	—
46522 1979 MS_7	15.1	X	334.41449	75.73161	252.07613	4.48050	0.1351186	0.21682932	2.7440417	20	8 3.5	18.1
46523 1979 OH_{10}	14.0	X	71.99699	210.28895	152.20264	12.09049	0.0906024	0.17702970	3.1412701	20	—	—
46524 1979 QH_2	15.3	X	267.13072	91.42054	300.83908	1.49902	0.1895168	0.21407697	2.7675113	20	7 7.9	19.2
46525 1980 UG_1	14.3	X	60.46092	80.08013	231.43463	12.21256	0.2783096	0.22477393	2.6789962	20	12 15.3	18.7
46526 1981 EN_5	15.6	X	66.39712	230.72814	244.65611	5.16840	0.0941349	0.25224421	2.4807819	20	3 6.9	18.5
46527 1981 EE_7	15.9	X	156.90645	303.54194	310.44931	6.17730	0.1927082	0.29105304	2.2550419	20	—	—
46528 1981 EB_8	15.1	X	140.94356	113.51154	319.60840	7.62498	0.1615229	0.25531749	2.4608341	20	4 23.9	19.0
46529 1981 ED_9	15.6	X	73.27302	185.26899	255.91284	4.38392	0.1068623	0.30099991	2.2050840	20	1 23.6	17.5
46530 1981 EE_{10}	15.8	X	157.84278	3.73369	296.90275	2.96683	0.1200882	0.29527071	2.2335164	20	—	—
46531 1981 EV_{11}	16.1	X	140.70650	109.97731	213.32196	7.38735	0.0506424	0.29619962	2.2288442	20	—	—
46532 1981 EN_{13}	14.8	X	305.85326	270.85149	260.98922	4.36413	0.0820590	0.29734552	2.2231143	20	—	—
46533 1981 EO_{23}	16.0	X	77.74469	170.54096	250.36229	0.97544	0.1065503	0.29986750	2.2106320	20	1 2.4	17.7
46534 1981 EU_{27}	16.0	X	125.14682	95.13373	171.17377	6.16639	0.2566114	0.28925126	2.2643968	20	12 20.6	20.0
46535 1981 EB_{36}	15.5	X	109.12463	109.25023	3.83510	2.12464	0.1606975	0.25561394	2.4589311	20	5 14.9	18.9
46536 1981 EJ_{40}	14.3	X	274.88928	57.20164	346.14015	32.60043	0.3234742	0.21229627	2.7829654	20	7 27.6	18.8
46537 1981 EV_{45}	15.2	X	250.74000	338.79949	294.21855	2.63582	0.1598701	0.19825722	2.9128405	20	1 28.3	19.8
46538 1981 UC_{26}	13.8	X	81.93257	228.25844	159.23137	3.82007	0.1252255	0.18412964	3.0599917	20	—	—
46539 Viktortikhonov	13.9	X	117.94716	86.63621	328.50129	9.77366	0.0212574	0.24676697	2.5173564	20	2 19.9	17.2
46540 1983 LD	15.5	X	1.21068	6.83837	239.25356	18.99073	0.0396357	0.37220513	1.9140259	20	5 26.8	16.8
46541 1984 SM_6	14.3	X	307.70190	245.51022	168.74102	11.93345	0.1368040	0.19249838	2.9706490	20	10 15.5	17.8
46542 1987 AD	14.3	X	64.27966	139.85620	281.12895	29.78174	0.2078901	0.23834644	2.5763030	20	1 5.7	16.6
46543 1987 DL_6	14.7	X	180.49754	187.15419	351.48185	7.34284	0.1368342	0.28310121	2.2970735	20	10 22.0	18.1
46544 1988 QO	15.8	X	64.58009	33.55854	271.22305	3.54549	0.2515985	0.28342231	2.2953383	20	12 18.9	19.2
46545 1988 RY_{12}	14.8	X	274.91953	64.23303	276.76560	2.53708	0.1575718	0.20986886	2.8043834	20	5 14.9	18.7
46546 1988 VM_5	14.8	X	316.39616	269.11367	119.75734	2.21073	0.2726736	0.21391514	2.7689070	20	9 16.1	17.0
46547 1989 GE_3	14.2	X	13.74494	112.96112	343.55526	3.63112	0.2012667	0.18378638	3.0638007	20	—	—
46548 1989 SK_1	14.9	X	19.73750	279.00897	56.88745	4.60825	0.2218234	0.22466479	2.6798637	20	11 21.5	18.0
46549 1989 SA_2	15.1	X	345.54352	285.29414	57.47736	6.39996	0.1711760	0.22173102	2.7034504	20	9 24.4	17.8
46550 1989 SZ_{13}	14.7	X	318.68247	62.22818	306.51406	11.78710	0.0895647	0.22028222	2.7152912	20	9 3.2	18.1
46551 1989 TC_4	14.9	X	13.80971	238.49027	137.96753	2.33335	0.1754169	0.22619160	2.6677906	20	12 29.1	18.0
46552 1990 RM_1	14.5	X	347.19241	332.39345	359.62803	13.16306	0.1932612	0.22983758	2.6395022	20	9 12.9	16.7
46553 1990 RW_{14}	16.0	X	113.58406	222.81515	130.86435	4.79428	0.2527956	0.24235429	2.5478210	20	—	—
46554 1990 SZ_8	14.3	X	312.03181	289.47911	32.92561	8.20085	0.1511164	0.19239714	2.9716909	20	6 13.0	18.0
46555 1990 VH_3	14.7	X	32.03785	165.19559	266.58926	3.57295	0.2746267	0.23729617	2.5838992	20	—	—
46556 1991 FU_3	14.7	X	322.36031	191.18514	15.85664	4.74878	0.0755725	0.30291478	2.1957813	20	1 24.0	17.1
46557 1991 FW_3	13.4	X	28.46287	135.99465	172.53354	5.28984	0.0154571	0.21639327	2.7477268	20	9 27.7	17.1
46558 1991 GY_5	16.1	X	245.38361	352.26321	203.01030	6.45206	0.1359326	0.29317388	2.2441534	20	—	—
46559 1991 PC_1	15.4	X	254.95925	327.46770	345.74497	18.52231	0.0669292	0.36519664	1.9384363	20	3 12.9	17.3
46560 1991 PZ_1	15.6	X	52.01054	165.56799	79.58738	1.72121	0.2155878	0.27436051	2.3456056	20	9 14.4	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46561 1991 *RQ*	15.2	*X*	325.51225	187.30608	151.86694	13.03667	0.2731208	0.27048844	2.3679375	20	7 27.7	16.7
46562 1991 *RV*	15.3	*X*	321.25277	229.32002	127.81053	2.93422	0.2374674	0.27104588	2.3646898	20	8 25.2	16.6
46563 Oken	13.5	*X*	133.16768	318.72636	355.75936	19.50987	0.1821154	0.18033096	3.1028148	20	—	—
46564 1991 RA_{11}	12.2	*X*	280.31090	103.06227	19.85190	17.17187	0.1315136	0.17351703	3.1835229	20	11 18.4	16.5
46565 1991 RF_{17}	15.1	*X*	275.01008	327.42470	36.11197	7.20876	0.1341072	0.26679312	2.3897527	20	6 19.0	18.2
46566 1991 RW_{21}	14.4	*X*	179.29471	71.45152	340.97243	9.85750	0.2566359	0.26137929	2.4226384	20	5 5.0	18.8
46567 1991 RV_{23}	15.3	*X*	347.65033	19.99775	352.21782	7.22408	0.1117131	0.27547067	2.3392994	20	11 14.3	17.8
46568 Stevenlee	14.8	*X*	114.28229	25.06413	12.87147	19.13680	0.0991532	0.35834529	1.9630661	20	1 23.1	17.2
46569 1991 SY_{1}	15.1	*X*	328.41173	297.42834	345.33959	9.30468	0.2167562	0.26774365	2.3840934	20	4 30.7	17.5
46570 1991 TK_{8}	15.0	*X*	328.24824	258.20251	151.46659	6.08017	0.1295711	0.27528467	2.3403530	20	12 9.9	17.2
46571 1991 VG_{1}	15.0	*X*	262.71023	33.17407	29.95516	5.96801	0.2690183	0.26734723	2.3864496	20	8 7.6	18.2
46572 1991 VA_{5}	13.9	*X*	129.88602	33.23768	78.75259	14.42230	0.1722424	0.25805749	2.4433841	20	6 7.2	17.6
46573 1992 AJ_{1}	13.5	*X*	306.65248	306.48500	272.39992	5.06377	0.1087566	0.24616678	2.5214465	20	1 21.1	16.9
46574 1992 DE_{8}	15.4	*X*	76.05561	331.22555	265.22506	3.09041	0.1845358	0.22249124	2.6972888	20	9 17.9	19.5
46575 1992 DS_{9}	14.7	*X*	144.24503	132.48412	171.70759	14.61982	0.1641550	0.23628241	2.5912847	20	—	—
46576 1992 EP_{10}	14.1	*X*	323.45311	39.49700	162.99489	14.77948	0.0499611	0.24445356	2.5332136	20	1 30.2	17.6
46577 1992 EK_{12}	15.0	*X*	115.74190	243.99317	157.65676	11.94522	0.1406418	0.24523409	2.5278356	20	2 16.7	18.4
46578 1992 EC_{14}	15.6	*X*	89.93073	331.33872	270.31547	2.80956	0.1684789	0.22415120	2.6839557	20	10 7.8	19.8
46579 1992 EA_{26}	14.9	*X*	308.87074	157.65157	346.70077	10.46973	0.1521992	0.23791711	2.5794014	20	—	—
46580 Ryouichiirie	13.9	*X*	128.61858	230.70858	27.01821	13.64435	0.1337673	0.22737452	2.6585297	20	11 29.9	18.3
46581 1992 OK_{2}	14.2	*X*	260.65147	4.02393	312.51435	14.10445	0.2692834	0.20344138	2.8631440	20	3 12.6	19.1
46582 1992 RR_{3}	15.8	*X*	87.07898	71.53154	334.99199	6.33725	0.1412032	0.29780124	2.2208457	20	1 3.9	17.8
46583 1992 RW_{3}	14.9	*X*	199.20071	70.26956	278.97823	0.77577	0.0781710	0.19802399	2.9151272	20	3 12.2	19.1
46584 1992 RN_{6}	14.3	*X*	150.57908	338.64040	13.78525	10.29693	0.1173855	0.19266727	2.9689127	20	2 2.7	18.9
46585 1992 RD_{7}	14.2	*X*	133.40985	278.07286	119.53432	3.09079	0.0199725	0.19538189	2.9413487	20	2 24.3	18.2
46586 1992 SH_{6}	16.6	*X*	88.99287	12.10491	7.63506	5.17692	0.1489497	0.29565510	2.2315800	20	—	—
46587 1992 UJ_{1}	15.6	*X*	87.37958	148.08317	217.98105	7.14174	0.2079395	0.29286253	2.2457436	20	—	—
46588 1992 *WR*	14.8	*X*	275.29400	35.01496	55.77709	5.65165	0.1358417	0.28076948	2.3097738	20	10 31.3	16.9
46589 1992 *WU*	14.7	*X*	98.57261	162.50022	232.45621	4.90966	0.1783606	0.29474593	2.2361667	20	1 11.6	17.0
46590 1992 WP_{1}	13.0	*X*	53.24292	324.67030	95.55375	12.91557	0.1196493	0.18478790	3.0527204	20	—	—
46591 1992 WS_{1}	13.4	*X*	328.05012	25.53209	76.18781	6.29022	0.1853538	0.17927228	3.1150185	20	—	—
46592 1992 *YP*	14.8	*X*	11.08442	293.44564	112.87375	5.53688	0.1259095	0.28587874	2.2821708	20	—	—
46593 1992 YP_{1}	14.8	*X*	265.79381	63.92578	73.79212	4.36367	0.0775283	0.28194338	2.3033580	20	12 29.6	17.1
46594 1992 YP_{3}	14.1	*X*	342.76581	262.02750	138.98334	2.83103	0.1585722	0.17269766	3.1935845	20	11 21.8	17.7
46595 Kita–Kyushu	15.7	*X*	261.72773	73.92921	4.85870	2.90766	0.2039497	0.27608892	2.3358058	20	9 7.5	18.5
46596 Tobata	14.8	*X*	258.72735	7.94136	112.82012	6.95183	0.1395121	0.27742316	2.3283105	20	11 16.0	17.4
46597 1993 DK_{2}	15.3	*X*	174.39496	247.59684	340.44436	28.00159	0.3342749	0.23777912	2.5803993	20	11 22.9	20.7
46598 1993 FT_{2}	13.8	*X*	290.84618	91.64039	3.12908	21.04975	0.2864029	0.27716812	2.3297386	20	11 4.3	15.8
46599 1993 FP_{10}	15.4	*X*	186.22386	304.37871	134.26699	3.22741	0.1434770	0.26312033	2.4119397	20	6 18.1	19.2
46600 1993 FG_{14}	15.0	*X*	207.99217	201.51077	35.72681	8.38404	0.1636678	0.24255889	2.5463880	20	—	—
46601 1993 FV_{15}	15.6	*X*	296.79438	131.78663	104.07129	4.20803	0.0231533	0.25215991	2.4813347	20	2 13.2	18.7
46602 1993 FP_{34}	13.7	*X*	164.60662	248.10898	28.45344	6.83086	0.0296482	0.16965396	3.2316678	20	—	—
46603 1993 FY_{41}	15.3	*X*	166.01120	67.75111	15.43714	1.90075	0.1179238	0.26129925	2.4231331	20	6 2.8	18.8
46604 1993 FH_{56}	15.7	*X*	73.18972	40.17436	80.84126	5.12008	0.0226807	0.21847989	2.7302039	20	3 24.4	19.3
46605 1993 HQ_{1}	16.1	*X*	264.14625	199.28306	6.29828	19.10320	0.0699660	0.35462428	1.9767742	20	—	—
46606 1993 LK_{2}	15.4	*X*	79.66310	312.03776	101.89620	6.74217	0.1838070	0.24528097	2.5275135	20	1 20.6	18.1
46607 1993 OY_{12}	13.3	*X*	244.59219	301.38355	286.48220	13.75561	0.0775871	0.23919356	2.5702167	20	—	—
46608 1993 RA_{2}	14.6	*X*	77.39255	167.67822	166.15579	4.42895	0.3232315	0.22798680	2.6537677	20	—	—
46609 1993 SQ_{1}	13.7	*X*	335.78194	341.43072	29.40348	9.75966	0.1859942	0.21940735	2.7225044	20	10 12.8	16.1
46610 Bésixdouze	15.4	*X*	283.61061	211.68620	172.07876	2.40493	0.1805413	0.28800394	2.2709301	20	7 26.1	17.7
46611 1993 TH_{4}	14.4	*X*	273.37290	37.40821	350.17337	3.32905	0.1046214	0.21321954	2.7749259	20	7 23.9	18.0
46612 1993 TS_{16}	14.8	*X*	204.32600	271.53498	159.95517	2.78055	0.0353511	0.21089252	2.7953011	20	7 2.1	18.7
46613 1993 TA_{17}	14.6	*X*	253.89899	181.14847	182.67703	7.51978	0.2233565	0.21039415	2.7997136	20	5 14.6	19.0
46614 1993 TV_{27}	14.4	*X*	287.72710	348.57221	97.48189	2.53005	0.0403791	0.22085805	2.7105696	20	11 9.7	17.8
46615 1993 TT_{32}	15.0	*X*	198.33417	223.76677	100.20963	4.08115	0.0364890	0.19955258	2.9002214	20	2 11.0	19.1
46616 1994 *AM*	13.1	*X*	174.61538	312.46537	277.16360	14.65218	0.2031003	0.17838214	3.1253726	20	11 29.9	18.4
46617 1994 BD_{1}	15.2	*X*	92.86438	45.71822	7.45826	6.46380	0.1453739	0.30240834	2.1982321	20	1 24.9	17.3
46618 1994 CF_{16}	14.2	*X*	278.45224	12.26228	117.94877	8.19195	0.0888052	0.17680940	3.1438790	20	12 7.0	18.4
46619 1994 CR_{16}	15.9	*X*	70.30363	186.57999	29.88880	2.62037	0.1568120	0.27452051	2.3446941	20	8 20.3	18.8
46620 1994 EL_{1}	14.2	*X*	131.86067	317.56066	112.66352	4.93368	0.1387115	0.30447167	2.1882896	20	4 11.8	17.1
46621 1994 EC_{7}	15.1	*X*	321.18000	79.60718	36.28936	5.78587	0.1131599	0.29236253	2.2483033	20	—	—
46622 1994 EF_{7}	15.5	*X*	156.16465	137.76632	52.17730	5.72530	0.0895318	0.28158916	2.3052893	20	10 17.3	18.8
46623 1994 GV_{10}	14.9	*X*	130.34652	119.51229	59.55488	9.97693	0.1396477	0.27552646	2.3389836	20	9 9.3	18.6
46624 1994 JV_{4}	15.8	*X*	321.62966	302.98778	176.24738	0.88650	0.1760567	0.28940290	2.2636058	20	—	—
46625 1994 *LM*	15.9	*X*	287.11122	37.98787	263.61299	19.82886	0.0509592	0.37090467	1.9184973	20	4 6.4	18.4
46626 1994 PL_{23}	14.8	*X*	38.00651	59.08868	36.23455	1.22192	0.1491650	0.24387352	2.5372287	20	—	—
46627 1994 PG_{24}	15.0	*X*	234.09644	305.87640	139.42924	1.77889	0.1491649	0.26455368	2.4032199	20	8 17.4	18.4
46628 1994 PD_{27}	15.5	*X*	74.37337	65.61088	344.31909	9.89776	0.1608351	0.24390125	2.5370364	20	1 4.0	18.3
46629 1994 PS_{38}	13.1	*X*	87.11770	45.81947	303.90992	1.69804	0.2458409	0.12539721	3.9531576	20	—	—
46630 1994 SA_{11}	16.1	*X*	47.62653	274.49704	101.25635	1.23980	0.1018175	0.23618087	2.5920273	20	—	—
46631 1994 TQ_{3}	13.4	*X*	167.13981	323.79241	19.31603	12.92086	0.1190920	0.24444084	2.5333014	20	2 3.5	17.4
46632 RISE	16.0	*X*	113.39899	172.52291	191.82658	1.26234	0.1068883	0.24140983	2.5544618	20	—	—
46633 1994 VH_{1}	13.9	*X*	268.26364	54.35361	86.90231	4.11389	0.0594512	0.23039578	2.6352371	20	12 23.8	17.2
46634 1994 VR_{2}	13.6	*X*	348.27373	124.86052	42.19096	12.93632	0.0951090	0.24267471	2.5455777	20	1 17.2	16.9
46635 1994 WK_{2}	13.6	*X*	177.52035	38.04484	104.48855	9.79953	0.2246126	0.21808284	2.7335166	20	8 29.5	18.4
46636 1994 WD_{3}	14.8	*X*	14.52776	318.79946	72.62324	13.59862	0.1671902	0.23095726	2.6309644	20	—	—
46637 1994 WJ_{12}	13.4	*X*	139.24536	122.31321	271.06580	9.03630	0.2305898	0.24426920	2.5344880	20	3 8.6	17.6
46638 1995 BO_{3}	14.8	*X*	324.67033	290.87118	158.96443	3.91811	0.1840136	0.22588108	2.6702350	20	—	—
46639 1995 BN_{4}	13.6	*X*	320.84496	108.92170	333.74384	10.77433	0.1674981	0.22404600	2.6847958	20	12 25.9	16.5
46640 1995 *DU*	13.8	*X*	39.29851	100.33354	351.98713	10.09127	0.0466571	0.19239049	2.9717594	20	1 7.6	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46641 1995 *EY*	14.9	X	355.31445	143.44645	324.69501	4.45714	0.2729123	0.23005884	2.6378095	20	—	—
46642 1995 FU_{4}	14.7	X	22.83135	318.09805	159.97309	11.67951	0.0564307	0.19285814	2.9669535	20	1 14.0	18.7
46643 Yanase	13.9	X	86.82985	215.14139	220.30242	10.10345	0.0909340	0.19190893	2.9767287	20	2 18.9	18.2
46644 Lagia	16.3	X	20.03257	68.98040	264.05117	6.09470	0.1334570	0.28207371	2.3026485	20	11 17.8	18.8
46645 1995 OP_{1}	14.3	X	75.30207	211.46049	339.54947	4.54782	0.1185226	0.19461045	2.9491166	20	7 10.4	18.3
46646 1995 OC_{8}	15.6	X	141.03032	109.85503	192.90173	3.93650	0.1916696	0.29265540	2.2468031	20	—	—
46647 1995 QP_{3}	15.3	X	10.97227	333.54685	35.70888	5.34904	0.1924590	0.28295367	2.2978720	20	—	—
46648 1995 *SY*	15.9	X	68.48658	110.68550	140.41384	5.21279	0.0961518	0.27702087	2.3305641	20	9 27.5	18.9
46649 1995 SN_{4}	14.6	X	113.13311	324.06637	30.70212	5.25582	0.1430133	0.29158746	2.2522857	20	—	—
46650 1995 SR_{19}	15.7	X	182.81507	85.50121	14.01971	2.50458	0.1655692	0.26689342	2.3891539	20	7 12.3	19.4
46651 1995 SV_{26}	16.4	X	341.98908	93.95427	191.70806	2.10147	0.1920212	0.27010065	2.3702035	20	6 16.4	18.1
46652 1995 SV_{30}	15.9	X	73.76785	48.04967	355.76272	4.52210	0.1597315	0.21260141	2.7803019	20	1 1.3	19.2
46653 1995 SE_{33}	15.2	X	66.94082	10.42676	349.40485	6.91227	0.1378853	0.28776651	2.2721790	20	—	—
46654 1995 UB_{8}	14.4	X	276.43378	28.72104	65.34985	4.13996	0.1228544	0.27658923	2.3329882	20	11 7.6	16.5
46655 1995 UR_{9}	16.0	X	4.33591	34.39059	205.42057	5.06581	0.1040043	0.26706501	2.3881305	20	5 24.5	18.2
46656 1995 WT_{6}	15.0	X	179.70260	146.31905	312.87632	5.22986	0.1125317	0.26546678	2.3977060	20	7 9.9	18.6
46657 1995 WM_{17}	16.1	X	276.23455	18.42715	2.73072	2.41157	0.2086413	0.26995227	2.3710719	20	7 4.8	18.9
46658 1995 YH_{12}	15.6	X	226.58489	342.93618	76.09731	3.10856	0.1680615	0.26685401	2.3893892	20	7 1.9	19.0
46659 1996 BB_{5}	14.8	X	35.71627	282.55064	7.19451	6.99486	0.1640745	0.22160951	2.7044385	20	10 4.5	18.1
46660 1996 BM_{17}	14.7	X	56.44562	49.92630	43.60724	4.93109	0.1308141	0.24618202	2.5213424	20	1 29.7	17.4
46661 1996 CP_{1}	14.8	X	13.62619	6.10801	95.74390	6.58039	0.1159747	0.24152071	2.5536800	20	—	—
46662 1996 *DO*	14.4	X	267.97844	146.32657	349.98545	3.45769	0.1159280	0.23112994	2.6296538	20	12 9.6	17.5
46663 1996 DR_{2}	15.1	X	81.66780	336.63842	331.45864	4.34268	0.0701769	0.23058847	2.6337689	20	12 12.6	18.9
46664 1996 EK_{10}	15.7	X	337.80655	257.72754	154.99051	3.21794	0.0630044	0.23037715	2.6353792	20	12 10.2	18.8
46665 1996 *FD*	13.7	X	43.32666	95.66295	31.81561	14.40325	0.1283136	0.24160026	2.5531193	20	3 1.5	16.7
46666 1996 FX_{21}	14.9	X	267.50868	185.98454	35.74392	2.63564	0.0568759	0.19457353	2.9494897	20	—	—
46667 1996 HM_{2}	14.0	X	221.53266	99.70027	48.81048	2.67701	0.1408814	0.22469056	2.6796588	20	10 21.2	17.8
46668 1996 HM_{10}	14.5	X	276.89388	258.26785	214.22946	12.24946	0.2228270	0.22708475	2.6607908	20	11 5.6	17.4
46669 Wangyongzhi	14.5	X	168.52604	120.15912	158.94765	13.04079	0.1056788	0.18566609	3.0430866	20	—	—
46670 1996 *NU*	12.5	X	206.57792	23.46133	156.85874	17.58191	0.0837792	0.17384205	3.1795537	20	11 14.5	17.5
46671 1996 NW_{3}	15.0	X	66.72634	277.23829	21.07513	0.04136	0.1736919	0.17108083	3.2136740	20	11 15.0	19.8
46672 1996 *OA*	14.1	X	78.37764	262.31861	100.48758	3.84956	0.1205674	0.18074723	3.0980491	20	—	—
46673 1996 OL_{2}	14.1	X	316.85680	144.63588	261.14819	8.87383	0.1554274	0.17048441	3.2211647	20	10 6.7	18.1
46674 1996 PY_{8}	13.4	X	181.30469	294.67887	333.47492	5.59612	0.0624158	0.18069535	3.0986419	20	—	—
46675 1996 *QO*	14.1	X	88.10105	227.64314	100.50224	2.80175	0.1696936	0.17577493	3.1562018	20	—	—
46676 1996 RF_{29}	12.0	X	94.90968	73.09786	173.61888	11.52520	0.1160277	0.08416574	5.1567864	20	9 27.6	19.1
46677 1996 TK_{6}	13.9	X	79.05492	191.17592	162.82177	11.24193	0.1245587	0.17701306	3.1414671	20	—	—
46678 1996 TZ_{8}	12.8	X	62.47654	62.27883	281.78814	20.60733	0.0533854	0.17090509	3.2158767	20	12 19.8	17.4
46679 1996 TE_{30}	16.2	X	282.65340	163.28590	39.15129	5.54868	0.1247904	0.30170814	2.2016318	20	—	—
46680 1996 *YV*	15.4	X	237.22629	6.13084	123.92981	4.95781	0.0744603	0.28255478	2.3000341	20	11 8.1	18.1
46681 1997 AN_{5}	14.8	X	23.52113	350.60318	61.96780	5.64711	0.1260112	0.29102568	2.2551833	20	—	—
46682 1997 AV_{5}	14.9	X	176.74070	249.51591	304.28054	3.47090	0.0951189	0.28079939	2.3096098	20	11 11.1	18.1
46683 1997 AK_{8}	16.0	X	32.19777	63.90735	144.00633	3.70495	0.1840776	0.26404431	2.4063096	20	6 7.5	18.1
46684 1997 AX_{8}	16.1	X	92.77661	218.96723	136.06173	4.95269	0.1467287	0.29181413	2.2511193	20	—	—
46685 1997 AG_{13}	14.7	X	165.57635	67.92616	69.10789	6.50491	0.1205680	0.27356986	2.3501228	20	8 17.5	18.3
46686 Anitasohus	15.6	X	132.68667	34.60084	325.49897	5.00095	0.1608761	0.30081238	2.2060004	20	1 9.8	18.3
46687 1997 AP_{18}	15.7	X	104.91380	96.86151	76.69811	3.10887	0.1424855	0.27072497	2.3665581	20	7 31.4	18.9
46688 1997 AB_{19}	15.3	X	18.21098	100.88293	173.67526	2.19368	0.2067411	0.27042440	2.3683114	20	8 29.6	17.1
46689 Hakuryuko	15.0	X	206.14355	39.25179	131.42369	6.17807	0.0730075	0.28298012	2.2977288	20	11 21.9	18.0
46690 1997 AN_{23}	15.4	X	40.09830	118.38918	309.42701	3.99025	0.0843808	0.29483504	2.2357161	20	—	—
46691 1997 BK_{3}	15.5	X	170.39657	121.11219	50.57816	1.40082	0.1516691	0.27678099	2.3319105	20	10 4.1	19.0
46692 Taormina	15.1	X	55.79142	32.97001	113.91747	7.97513	0.0817725	0.26115348	2.4240347	20	4 8.6	17.9
46693 1997 CK_{4}	14.7	X	126.13419	171.50803	64.37282	7.48118	0.0630974	0.27832038	2.3233040	20	11 11.7	17.8
46694 1997 CS_{9}	16.2	X	266.21702	101.52143	337.68875	6.90655	0.0724580	0.27777593	2.3263389	20	10 4.2	18.9
46695 1997 CX_{13}	15.8	X	358.94821	132.14852	119.62899	5.54369	0.0969021	0.26519494	2.3993442	20	6 2.3	18.1
46696 1997 CF_{20}	15.5	X	160.83733	158.07966	347.19197	6.29067	0.0580122	0.27156220	2.3616915	20	8 22.1	18.6
46697 1997 CM_{20}	15.6	X	106.90465	64.09416	74.36869	3.19066	0.1476365	0.26471342	2.4022530	20	6 14.8	18.9
46698 1997 CT_{25}	15.5	X	93.78994	222.96652	115.79765	7.39211	0.1538630	0.28925682	2.2643678	20	—	—
46699 1997 CL_{26}	14.9	X	106.20725	94.13363	73.26111	5.10088	0.1528796	0.26723432	2.3871217	20	7 25.5	18.3
46700 1997 CK_{27}	15.5	X	319.80437	345.91003	107.30025	5.49162	0.0953123	0.28688945	2.2768076	20	—	—
46701 1997 CP_{29}	15.2	X	147.94056	9.86925	148.47948	5.78029	0.0634793	0.27281709	2.3544438	20	8 23.4	18.3
46702 Linapucci	15.5	X	304.22028	297.33306	147.04989	6.05884	0.1388592	0.28357963	2.2944892	20	12 18.1	17.4
46703 1997 *EC*	14.9	X	32.84302	252.48822	133.23185	6.49323	0.1262881	0.28538633	2.2847952	20	—	—
46704 1997 EL_{5}	15.4	X	322.22656	175.64555	172.65797	2.47609	0.2334167	0.26925839	2.3751437	20	8 9.9	16.7
46705 1997 EE_{37}	15.9	X	225.37819	359.75965	113.57222	5.01071	0.0974074	0.27770305	2.3267458	20	9 25.6	18.9
46706 1997 ET_{41}	16.0	X	329.09014	166.95043	277.01699	1.89211	0.1435305	0.28644652	2.2791540	20	—	—
46707 1997 FH_{3}	16.0	X	127.16032	283.59345	187.48458	7.68698	0.0508499	0.26141713	2.4224046	20	5 22.6	19.2
46708 1997 FP_{4}	15.2	X	229.15440	292.14741	307.30723	2.14737	0.1397787	0.24399483	2.5363877	20	—	—
46709 1997 GU_{6}	14.8	X	318.47997	269.43231	23.51474	8.09034	0.1082857	0.25848094	2.4407148	20	5 17.7	17.6
46710 1997 GB_{7}	14.4	X	102.03448	179.55771	46.99648	3.30520	0.0128808	0.26910856	2.3760252	20	9 25.1	17.4
46711 1997 GW_{7}	15.4	X	126.89940	29.50403	70.17238	3.41058	0.1427223	0.25883297	2.4385013	20	5 16.0	18.9
46712 1997 GY_{14}	14.9	X	220.93981	21.05560	4.45853	7.22946	0.1187289	0.26163694	2.4210477	20	5 13.6	18.5
46713 1997 GO_{19}	15.5	X	120.19824	201.40872	303.59985	1.39310	0.0672004	0.26431162	2.4046870	20	6 30.7	18.5
46714 1997 HF_{7}	14.9	X	323.23720	10.64099	54.66868	1.45961	0.1775551	0.27747086	2.3280437	20	12 28.2	16.5
46715 1997 HE_{13}	14.9	X	20.49166	226.94283	52.43498	0.34446	0.1478541	0.17861843	3.1226156	20	8 18.2	18.7
46716 1997 *NX*	15.2	X	37.92971	146.23996	155.52094	14.99145	0.0909523	0.22240633	2.6979752	20	10 17.2	18.9
46717 1997 NY_{5}	14.3	X	331.04271	43.54943	301.23176	6.40537	0.1017973	0.21516691	2.7581575	20	8 22.9	17.5
46718 1997 NK_{6}	14.5	X	15.24403	101.58128	178.70754	7.42966	0.0982016	0.21530294	2.7569956	20	8 7.7	17.9
46719 Plantade	14.9	X	6.54715	116.16806	188.14195	7.24911	0.1231062	0.21723974	2.7405845	20	8 29.7	17.9
46720 Pierostroppa	15.4	X	148.51505	358.90013	324.45364	3.62336	0.2750391	0.18948451	3.0020661	20	1 8.4	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46721 1997 QW_3	14.8	X	74.02930	266.21242	109.37970	1.26016	0.2685252	0.18256500	3.0774502	20	—	—
46722 Ireneadler	13.7	X	63.11772	28.69017	354.98369	8.83134	0.0290809	0.18379339	3.0637228	20	—	—
46723 1997 RS_2	14.8	X	129.06177	311.81093	342.81121	7.63365	0.0219141	0.18204380	3.0833213	20	—	—
46724 1997 SU_7	14.1	X	316.06788	94.15246	354.18871	10.51108	0.1248401	0.17627680	3.1502083	20	12 4.8	18.1
46725 1997 SS_{13}	13.8	X	107.12481	56.93862	350.69480	9.35529	0.0977429	0.19019312	2.9946048	20	2 17.4	18.0
46726 1997 SA_{22}	14.4	X	149.73436	54.33087	328.76993	4.54028	0.2104986	0.19317868	2.9636705	20	3 11.3	19.4
46727 Hidekimatsuyama	13.5	X	223.19974	20.95868	315.75371	0.98681	0.1015431	0.19705622	2.9246638	20	3 20.9	18.1
46728 1997 SJ_{29}	14.0	X	65.35935	170.73847	288.77671	9.30990	0.0727288	0.19430560	2.9522004	20	2 17.9	18.0
46729 1997 SJ_{31}	15.2	X	167.21729	309.63616	334.12918	0.69643	0.0304750	0.18611578	3.0381829	20	—	—
46730 1997 TY_{16}	13.5	X	254.31961	319.20488	194.16403	16.94506	0.1000311	0.17658625	3.1465269	20	12 1.9	18.1
46731 Prieurblanc	13.9	X	233.12322	290.13723	0.17154	9.67988	0.0842841	0.19223994	2.9733107	20	2 9.5	18.5
46732 1997 TD_{19}	14.2	X	232.91230	145.07953	169.54697	2.22707	0.1040978	0.19531664	2.9420037	20	3 4.5	18.6
46733 1997 TA_{20}	14.6	X	113.09115	44.98872	217.81740	4.65727	0.1338309	0.17377195	3.1804087	20	11 15.9	19.7
46734 1997 TL_{25}	13.7	X	270.43957	328.70401	188.51462	22.28611	0.1025544	0.18186410	3.0853521	20	12 26.3	18.3
46735 1997 UG_1	13.4	X	129.00272	0.95782	33.21056	10.08847	0.0846125	0.19018583	2.9946813	20	2 27.4	17.9
46736 1997 UD_{21}	14.5	X	24.67192	359.60029	344.62049	4.64758	0.1430885	0.17298333	3.1900676	20	11 13.2	18.7
46737 Anpanman	14.0	X	185.39113	141.03097	74.03311	2.15978	0.1269376	0.17513345	3.1639041	20	11 26.3	19.1
46738 1997 VF_1	13.7	X	199.99164	23.81004	3.69557	15.55956	0.3022172	0.20059251	2.8901890	20	4 20.2	19.2
46739 1997 WH_{10}	14.9	X	223.31772	295.26781	135.34887	3.02172	0.0080949	0.20350572	2.8625405	20	7 27.7	18.9
46740 1997 WQ_{14}	15.7	X	135.17218	226.38185	250.73673	5.45506	0.1604089	0.28594698	2.2818077	20	6 18.8	19.1
46741 1997 WM_{15}	14.8	X	23.76475	281.82558	119.16744	2.05123	0.1758365	0.17748196	3.1359316	20	—	—
46742 1997 WQ_{15}	14.7	X	41.13540	152.04294	213.11453	4.76086	0.1726320	0.17571656	3.1569007	20	—	—
46743 1997 WE_{36}	13.6	X	333.49062	348.18682	49.68050	5.78117	0.1104327	0.16977468	3.2301357	20	10 30.9	17.4
46744 1997 WP_{38}	14.0	X	88.08447	90.58261	294.76111	0.81310	0.1876087	0.18304588	3.0720580	20	1 9.3	18.0
46745 1997 WK_{47}	14.1	X	162.60127	325.62937	65.68569	3.86812	0.1462009	0.19248791	2.9707567	20	3 31.2	18.9
46746 1998 BX_{24}	15.1	X	111.37886	44.70327	149.37925	5.47902	0.2042521	0.23884248	2.5727347	20	9 5.6	19.2
46747 1998 DF_9	15.9	X	313.72168	109.27286	69.60320	5.00130	0.0633656	0.30550939	2.1833314	20	—	—
46748 1998 DN_{23}	16.1	X	77.75130	43.55886	184.82537	2.57628	0.2292784	0.27866645	2.3213801	20	9 22.9	19.4
46749 1998 DM_{33}	14.7	X	354.37043	262.39156	333.25614	12.57201	0.2345662	0.22749333	2.6576040	20	4 13.8	17.2
46750 1998 EL_{14}	14.8	X	29.15457	214.37969	3.35626	12.73909	0.2427901	0.22846452	2.6500671	20	6 24.9	17.6
46751 1998 FD_{30}	14.7	X	234.13727	72.28289	215.59611	4.01141	0.1737781	0.30683137	2.1770557	20	1 17.2	18.1
46752 1998 FM_{35}	15.3	X	65.77841	121.73641	3.35598	3.07181	0.0304654	0.26846233	2.3798366	20	3 12.8	17.9
46753 1998 FL_{41}	16.2	X	114.40647	258.60654	355.10762	3.46197	0.1664068	0.28757662	2.2731792	20	11 24.6	19.8
46754 1998 FX_{49}	16.3	X	3.03340	236.62980	353.70304	1.23196	0.0970582	0.31620769	2.1338035	20	5 3.3	17.8
46755 1998 FL_{50}	15.1	X	234.43334	294.40511	11.90162	6.51533	0.2311032	0.30781647	2.1724084	20	2 11.1	18.7
46756 1998 FP_{55}	15.7	X	336.03764	121.31326	83.39635	2.33087	0.1331816	0.26562619	2.3967466	20	2 7.1	18.3
46757 1998 FX_{57}	15.3	X	257.99561	110.53866	205.22953	4.48120	0.2165057	0.31165780	2.1545209	20	3 11.3	18.7
46758 1998 FQ_{59}	15.9	X	282.46897	54.22996	132.76716	3.38841	0.1235205	0.30145363	2.2028709	20	—	—
46759 1998 FK_{65}	15.1	X	170.27242	64.68087	216.08487	4.83949	0.1776470	0.29606954	2.2294970	20	—	—
46760 1998 FK_{67}	14.8	X	21.39352	168.78833	148.70125	5.99806	0.1661415	0.28294178	2.2979363	20	11 6.7	17.4
46761 1998 FC_{71}	15.6	X	175.51274	58.26992	199.51704	2.45153	0.1142462	0.29466712	2.2365654	20	—	—
46762 1998 FM_{78}	15.1	X	210.94918	247.18598	70.91537	4.34621	0.1565600	0.30585516	2.1816857	20	2 5.7	18.4
46763 1998 FE_{79}	14.6	X	15.62462	54.56857	41.88513	12.70634	0.2466262	0.25970021	2.4330695	20	—	—
46764 1998 FE_{95}	16.1	X	186.10934	130.88165	105.95753	8.11731	0.1350297	0.29501538	2.2348049	20	—	—
46765 1998 FN_{109}	14.5	X	275.46299	320.09012	282.56407	4.48026	0.0362903	0.30675356	2.1774238	20	1 13.2	16.9
46766 1998 FU_{115}	16.0	X	243.14901	301.20152	301.19203	3.80855	0.0593913	0.30202708	2.2000816	20	—	—
46767 1998 FX_{115}	16.0	X	353.13419	248.07869	302.81275	5.35709	0.1065204	0.30989723	2.1626733	20	2 9.5	18.1
46768 1998 FK_{122}	16.2	X	235.50258	14.36716	200.93281	3.10779	0.0970991	0.29807189	2.2195011	20	—	—
46769 1998 HJ_2	16.0	X	181.33299	185.88000	122.62214	3.53182	0.1543780	0.30038594	2.2080877	20	—	—
46770 1998 HY_5	16.0	X	145.37051	214.54225	168.10015	5.66132	0.0876999	0.30686126	2.1769143	20	2 12.5	18.6
46771 1998 HM_7	14.6	X	18.29334	280.59941	56.48093	23.55560	0.2992077	0.28117755	2.3075385	20	12 14.6	17.7
46772 1998 HD_8	15.3	X	289.22091	38.36895	161.92556	4.29294	0.0589981	0.30125845	2.2038222	20	—	—
46773 1998 HZ_{12}	15.1	X	141.48367	160.06465	107.23699	5.76518	0.2761031	0.29141958	2.2531506	20	—	—
46774 1998 HO_{30}	14.7	X	273.38353	255.17587	75.72055	3.39164	0.2059909	0.31509962	2.1388031	20	4 20.6	17.5
46775 1998 HC_{42}	15.9	X	110.43198	263.90421	67.04681	7.15788	0.2058247	0.29350711	2.2424544	20	—	—
46776 1998 HN_{49}	15.1	X	97.09800	35.51987	215.51178	3.46613	0.1159713	0.28206808	2.3026791	20	11 1.6	18.3
46777 1998 HO_{51}	15.5	X	138.38404	174.51766	98.67628	3.74297	0.0972403	0.29055967	2.2575939	20	—	—
46778 1998 HR_{51}	15.2	X	298.38974	167.67725	82.10149	2.89097	0.1216514	0.30916116	2.1661047	20	2 10.9	17.9
46779 1998 HY_{51}	15.6	X	357.12740	225.59663	57.42691	5.11146	0.2411893	0.27267503	2.3552615	20	7 29.3	16.9
46780 1998 HH_{52}	14.4	X	221.82054	327.70234	35.63849	7.11907	0.2384236	0.31156601	2.1549441	20	4 10.6	18.0
46781 1998 HH_{86}	16.4	X	188.11634	43.17281	216.68772	6.03362	0.0886654	0.29558540	2.2319308	20	—	—
46782 1998 HJ_{98}	15.3	X	239.10997	270.52203	357.19688	3.42368	0.0938476	0.30224358	2.1990309	20	—	—
46783 1998 HU_{101}	15.9	X	111.75767	4.98526	240.07117	6.43713	0.2093307	0.28308153	2.2971800	20	11 12.7	19.6
46784 1998 HK_{117}	15.7	X	153.33515	185.62604	79.54586	7.32787	0.1030419	0.29172674	2.2515688	20	—	—
46785 1998 HQ_{117}	15.6	X	271.22177	107.25898	133.40216	5.19819	0.1376109	0.30356038	2.1926669	20	—	—
46786 1998 HH_{125}	15.5	X	257.16674	57.76444	152.16286	8.37538	0.0679373	0.29805211	2.2195993	20	—	—
46787 1998 HL_{129}	14.8	X	285.29837	77.65170	347.12476	7.39640	0.2372674	0.24485836	2.5304209	20	9 13.8	17.4
46788 1998 HP_{139}	14.8	X	279.81478	233.54636	340.16898	3.62859	0.0764310	0.30270780	2.1967821	20	—	—
46789 1998 HG_{141}	15.6	X	135.06110	169.74718	99.18831	6.14547	0.1262358	0.29007981	2.2600829	20	—	—
46790 1998 HG_{149}	15.1	X	123.17484	70.41339	265.33915	4.68761	0.2088001	0.29294975	2.2452979	20	—	—
46791 1998 HW_{149}	14.7	X	121.46796	205.84926	22.09170	5.96452	0.1095243	0.28245842	2.3005572	20	10 27.5	18.1
46792 1998 HK_{153}	14.9	X	117.38526	108.25482	146.36865	13.92416	0.2977465	0.24132227	2.5550797	20	11 28.6	19.8
46793 Phinney	14.8	X	129.63813	297.26140	1.78735	6.55758	0.1818243	0.29143883	2.2530515	20	—	—
46794 1998 JW_2	15.0	X	86.97811	132.42142	121.24269	6.12807	0.1154548	0.28133908	2.3066552	20	10 27.6	18.3
46795 1998 JW_4	15.9	X	65.02014	226.95632	17.37618	5.38504	0.2228251	0.27737310	2.3285907	20	9 30.2	18.9
46796 Mamigasakigawa	14.5	X	101.23865	153.98246	96.45890	8.05447	0.0823953	0.28188603	2.3036704	20	11 5.9	17.8
46797 1998 KA_4	15.2	X	160.38348	207.76592	80.55715	7.96008	0.1568838	0.29314084	2.2443220	20	—	—
46798 1998 KU_4	14.6	X	37.32986	272.83113	75.10242	7.72591	0.1503033	0.28433433	2.2904274	20	—	—
46799 1998 KY_8	14.5	X	87.23068	99.26537	151.10547	7.96711	0.1671646	0.28041366	2.3117273	20	10 28.2	18.0
46800 1998 KH_{27}	14.2	X	239.94508	191.44627	167.15799	3.44743	0.1567371	0.31172349	2.1542182	20	4 26.8	17.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46801 1998 KP_{29}	16.3	X	279.53114	46.85223	147.71923	5.19369	0.1266052	0.29904451	2.2146860	20	—	—
46802 1998 KX_{30}	16.0	X	143.05120	306.51544	232.15636	2.84172	0.1163383	0.28026094	2.3125671	20	9 14.7	19.4
46803 1998 KL_{33}	15.5	X	238.96136	147.56574	49.90611	6.75601	0.0807461	0.29350792	2.2424503	20	—	—
46804 1998 KH_{34}	15.5	X	111.05165	95.07558	134.15442	4.85987	0.1204565	0.28135973	2.3065423	20	10 21.4	18.8
46805 1998 KX_{34}	15.5	X	110.51624	45.26087	206.28642	7.28008	0.0928128	0.28339906	2.2954638	20	11 16.4	18.8
46806 1998 KJ_{39}	15.7	X	348.81787	233.07137	66.38850	6.56827	0.2083685	0.27165076	2.3611782	20	8 2.6	17.3
46807 1998 KT_{45}	15.6	X	10.62053	241.80475	63.01681	4.85629	0.2571403	0.27406985	2.3472637	20	10 14.2	17.6
46808 1998 KX_{45}	15.6	X	108.35854	179.12552	121.59960	2.83043	0.1716513	0.28687126	2.2769039	20	—	—
46809 1998 KD_{47}	15.2	X	171.99394	50.80891	229.12799	3.98335	0.1466102	0.29275289	2.2463043	20	—	—
46810 1998 KK_{47}	15.1	X	135.74910	179.44105	90.32609	7.46794	0.1705381	0.28726770	2.2748085	20	—	—
46811 1998 KY_{47}	14.8	X	204.99054	138.12118	132.71733	4.68739	0.1267024	0.29600886	2.2298017	20	—	—
46812 1998 KO_{64}	15.6	X	286.77886	75.20909	89.42084	4.91773	0.0722458	0.29533858	2.2331742	20	—	—
46813 1998 KQ_{64}	15.1	X	51.61159	211.64770	107.71825	7.52997	0.2226001	0.28146347	2.3059755	20	12 22.0	18.4
46814 1998 KS_{64}	15.7	X	73.40581	98.04899	154.99755	3.26252	0.1863165	0.27845468	2.3225569	20	10 17.2	19.0
46815 1998 MG_{3}	15.5	X	90.50466	139.77330	98.10486	3.31760	0.2032519	0.27889221	2.3201272	20	10 16.9	19.1
46816 1998 MR_{13}	14.7	X	26.70402	31.39071	265.23205	12.29875	0.2067692	0.27488183	2.3426390	20	10 13.0	17.6
46817 1998 MG_{16}	16.1	X	274.99759	224.74198	150.05420	2.74575	0.2245893	0.26448368	2.4036439	20	6 20.7	19.0
46818 1998 MZ_{24}	14.1	X	356.00993	100.13694	260.84450	21.51401	0.3312524	0.27616178	2.3353949	20	12 21.8	16.2
46819 1998 MH_{27}	14.2	X	58.28783	183.49246	100.53072	6.49308	0.1788362	0.27718935	2.3296197	20	11 10.1	17.4
46820 1998 MK_{28}	15.7	X	311.37195	51.69765	260.69936	1.70956	0.1753577	0.26609702	2.3939186	20	5 25.7	18.0
46821 1998 MV_{31}	14.6	X	49.76647	169.23774	95.25273	12.30862	0.1762873	0.27409811	2.3471023	20	10 8.6	17.9
46822 1998 MQ_{32}	14.1	X	16.44971	54.68056	279.00013	12.42806	0.2006956	0.23075796	2.6324791	20	11 8.7	17.3
46823 1998 MN_{35}	14.9	X	92.47915	183.38433	105.61539	2.73099	0.0568401	0.28108810	2.3080280	20	12 11.5	17.9
46824 Tambora	15.5	X	358.35515	333.98662	265.13870	5.40779	0.0852523	0.26418639	2.4054468	20	5 10.5	18.1
46825 1998 OJ_{2}	14.7	X	336.28124	139.15990	151.07286	5.95990	0.0506589	0.26299317	2.4127171	20	6 21.6	17.4
46826 1998 OC_{7}	15.0	X	286.78792	134.91532	162.67595	8.12172	0.1170332	0.25909567	2.4368527	20	4 8.8	18.2
46827 1998 OJ_{7}	14.6	X	289.49409	110.80854	225.74767	5.26876	0.1549492	0.26304591	2.4123946	20	5 29.5	17.5
46828 1998 OU_{10}	14.8	X	293.97387	190.41059	139.19129	7.64004	0.1343451	0.26361217	2.4089387	20	5 31.2	17.7
46829 McMahon	15.0	X	286.95202	25.63500	334.88973	5.59325	0.1809763	0.26498491	2.4006119	20	6 25.4	17.8
46830 1998 PU	14.6	X	295.48858	31.71184	332.10111	6.11188	0.2059419	0.26574765	2.3960162	20	7 11.4	17.0
46831 1998 QH	14.9	X	355.88472	300.06028	335.52338	7.43592	0.1019409	0.26447240	2.4037122	20	7 4.3	17.3
46832 1998 QQ_{1}	14.9	X	215.34840	254.21170	156.09112	4.46939	0.1908330	0.26049883	2.4280942	20	6 7.6	18.8
46833 1998 QB_{8}	15.2	X	259.60192	97.01622	222.81403	5.39188	0.1461520	0.25921377	2.4361125	20	3 28.7	18.8
46834 1998 QL_{11}	15.3	X	263.78726	162.14979	163.73681	0.30505	0.1525885	0.25991890	2.4317046	20	4 11.1	18.4
46835 1998 QR_{11}	15.3	X	307.73544	27.69072	280.01975	3.54454	0.1977926	0.26370916	2.4083480	20	5 7.1	18.0
46836 1998 QM_{12}	14.6	X	31.33990	74.72315	182.68420	7.59839	0.1082982	0.26835286	2.3804838	20	8 8.8	17.4
46837 1998 QB_{13}	14.7	X	238.86239	334.59067	147.75420	6.90081	0.0712599	0.27632431	2.3344791	20	10 30.6	17.6
46838 1998 QS_{13}	15.6	X	283.93654	345.70984	336.15852	0.69787	0.2247847	0.26187939	2.4195532	20	4 19.3	18.9
46839 1998 QB_{14}	15.4	X	184.60730	207.27313	181.51277	5.76025	0.2398482	0.25488615	2.4636096	20	4 14.8	19.6
46840 1998 QZ_{17}	14.6	X	223.46816	275.86472	218.38006	4.94369	0.0701893	0.27510860	2.3413514	20	10 22.6	17.5
46841 1998 QE_{19}	15.4	X	160.23274	144.01657	136.44313	11.08692	0.0956564	0.24144429	2.5542187	20	—	—
46842 1998 QK_{20}	15.3	X	173.38566	124.22461	236.76964	3.16550	0.0593389	0.25153120	2.4854678	20	2 20.8	18.9
46843 1998 QO_{22}	15.0	X	295.00880	311.89077	33.25319	3.73113	0.2063264	0.26485310	2.4014083	20	6 10.1	17.5
46844 1998 QW_{22}	14.5	X	339.51971	71.60609	13.99696	3.86701	0.0911411	0.28256631	2.2999716	20	—	—
46845 1998 QB_{24}	14.7	X	262.93578	127.57423	272.53274	5.69745	0.1154366	0.26598499	2.3945907	20	7 26.9	17.7
46846 1998 QN_{24}	14.9	X	112.84666	196.00048	182.52029	5.95520	0.0711359	0.24552630	2.5258295	20	1 3.7	18.2
46847 1998 QM_{26}	16.1	X	249.55769	241.53637	143.97575	2.79807	0.1827419	0.26307730	2.4122027	20	6 10.4	19.4
46848 1998 QQ_{35}	14.8	X	241.62361	5.53281	34.47499	2.58257	0.2021479	0.26239547	2.4163796	20	6 18.6	18.5
46849 1998 QD_{36}	15.4	X	110.40979	172.39143	159.84831	8.20347	0.1712384	0.23983048	2.5656641	20	—	—
46850 1998 QO_{37}	14.9	X	195.82040	75.12218	181.88352	6.44373	0.2188225	0.24392398	2.5368788	20	—	—
46851 1998 QN_{39}	15.4	X	229.58445	278.98443	49.65273	2.77332	0.1964737	0.25477299	2.4643391	20	3 9.9	19.5
46852 1998 QC_{41}	13.8	X	23.07614	310.96752	328.18570	9.60393	0.1238285	0.22296107	2.6934982	20	8 24.8	16.9
46853 1998 QC_{42}	14.9	X	320.27306	270.13748	11.55352	6.75594	0.1998209	0.26197091	2.4189896	20	4 19.5	17.5
46854 1998 QY_{42}	14.1	X	96.30629	38.06654	160.21300	10.74283	0.1375060	0.26708993	2.3879819	20	8 21.7	17.4
46855 1998 QR_{44}	15.1	X	239.44220	149.86552	157.09131	4.28104	0.1769278	0.25363699	2.4716918	20	2 20.8	19.1
46856 1998 QK_{45}	15.2	X	244.25499	105.43058	215.76798	5.52480	0.1836748	0.25535206	2.4606120	20	3 11.4	19.2
46857 1998 QN_{45}	14.5	X	147.09921	346.93584	188.36909	12.04447	0.1108822	0.26926379	2.3751119	20	9 13.1	18.0
46858 1998 QB_{50}	14.5	X	344.74319	257.59339	10.64930	8.10051	0.1086745	0.26226297	2.4171934	20	5 27.9	17.1
46859 1998 QB_{51}	15.3	X	283.63067	136.17736	153.56984	5.11503	0.1788492	0.25737999	2.4476700	20	3 15.2	18.5
46860 1998 QP_{60}	14.9	X	228.47034	127.98585	247.97769	5.67070	0.1225417	0.25912928	2.4366420	20	5 10.7	18.6
46861 1998 QJ_{73}	14.4	X	273.00718	279.13739	204.53623	11.73448	0.1039317	0.23233785	2.6205316	20	12 3.6	17.7
46862 1998 QP_{74}	14.4	X	332.13954	287.93323	218.66111	12.32927	0.0963787	0.24279257	2.5447539	20	—	—
46863 1998 QE_{75}	14.5	X	166.30154	230.91837	317.04803	14.49926	0.0741697	0.22782312	2.6550387	20	10 8.7	18.7
46864 1998 QV_{86}	14.4	X	292.85120	252.82431	227.33477	14.32208	0.1201576	0.23335490	2.6129119	20	12 27.3	17.5
46865 1998 QZ_{86}	15.4	X	203.20312	159.50578	226.90968	11.54647	0.1885775	0.25563285	2.4588098	20	4 25.8	19.4
46866 1998 QW_{87}	14.9	X	75.25701	185.62309	221.68881	14.09717	0.1060222	0.24197491	2.5504834	20	—	—
46867 1998 QN_{91}	14.4	X	175.64020	333.32927	1.25033	14.46549	0.2241561	0.24592524	2.5230972	20	2 7.3	18.8
46868 1998 QM_{93}	13.9	X	207.14791	293.40094	27.27442	15.83808	0.1691481	0.24591336	2.5231784	20	2 17.7	18.3
46869 1998 QC_{97}	15.5	X	322.96955	69.91212	250.28099	5.79336	0.1157817	0.26625671	2.3929613	20	7 7.8	17.9
46870 1998 QC_{100}	14.8	X	284.12182	158.77117	126.81651	6.22183	0.1793702	0.25663612	2.4523975	20	3 11.6	18.3
46871 1998 QF_{100}	14.8	X	308.07605	294.79440	154.48143	12.22505	0.1604213	0.23030502	2.6359294	20	12 12.7	17.7
46872 1998 QP_{101}	14.4	X	252.28216	57.82949	42.66276	3.75731	0.0548495	0.22650376	2.6653389	20	10 10.4	17.8
46873 1998 QZ_{101}	14.9	X	201.28475	101.14695	156.85018	9.90623	0.0280557	0.24081467	2.5586689	20	—	—
46874 1998 QC_{103}	14.8	X	27.63339	329.23599	56.90323	3.34137	0.2068359	0.23300832	2.6155022	20	—	—
46875 1998 QD_{104}	13.8	X	47.62404	324.08348	137.10786	8.21030	0.2267608	0.24261390	2.5460031	20	1 30.9	15.8
46876 1998 QV_{104}	14.8	X	17.02701	311.82444	70.26789	5.31701	0.1514075	0.23141780	2.6274727	20	—	—
46877 1998 RU	15.6	X	260.13422	76.45001	338.32903	6.75467	0.0880963	0.26744452	2.3858707	20	8 19.9	18.3
46878 1998 RD_{4}	14.6	X	110.27744	317.58351	350.55235	17.55397	0.2503622	0.23691033	2.5867039	20	—	—
46879 1998 RZ_{4}	15.4	X	181.72957	358.70571	177.83488	22.76436	0.0655749	0.36232556	1.9486630	20	11 18.6	18.1
46880 1998 RC_{5}	15.0	X	50.00685	81.91576	350.71573	6.09571	0.2362466	0.24047800	2.5610564	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46881 1998 RU_{5}	14.6	X	60.48737	229.85019	176.45933	9.83440	0.0885471	0.23861096	2.5743986	20	—	—
46882 1998 RL_{9}	15.5	X	241.32260	158.47084	161.60783	5.80760	0.0474569	0.25480589	2.4641269	20	3 20.8	18.9
46883 1998 RT_{15}	15.1	X	132.24892	340.32474	323.20949	8.51811	0.1186226	0.23837944	2.5760652	20	—	—
46884 1998 RY_{16}	15.1	X	206.65718	272.31671	108.90617	3.37470	0.2067632	0.25706983	2.4496384	20	4 23.9	19.1
46885 1998 RR_{18}	15.5	X	39.69318	239.91872	144.82239	3.10498	0.1952977	0.23575819	2.5951245	20	—	—
46886 1998 RU_{29}	15.4	X	145.77817	306.25165	15.04657	4.36790	0.1155459	0.24263121	2.5458820	20	—	—
46887 1998 RV_{29}	15.1	X	75.43014	355.18802	4.72710	7.48257	0.1052524	0.23769827	2.5809843	20	—	—
46888 1998 RG_{37}	14.7	X	228.19359	185.18170	234.77799	4.84709	0.1917730	0.26138639	2.4225945	20	7 1.8	18.3
46889 1998 RD_{43}	15.2	X	287.84535	46.86775	309.07118	3.89485	0.0830314	0.21789830	2.7350597	20	7 4.3	18.7
46890 1998 RK_{48}	14.8	X	226.96083	330.03443	212.32430	3.93058	0.1263384	0.23389227	2.6089082	20	12 12.7	18.3
46891 1998 RV_{50}	15.4	X	11.52030	170.22212	222.46571	2.48388	0.1016749	0.23228738	2.6209112	20	—	—
46892 1998 RJ_{51}	15.3	X	62.26567	88.31090	269.84940	4.15989	0.0475617	0.23489127	2.6015058	20	—	—
46893 1998 RF_{52}	14.7	X	51.05795	41.27951	12.83446	12.70313	0.1700320	0.23913229	2.5706556	20	—	—
46894 1998 RG_{52}	15.3	X	356.97754	27.33347	49.47232	5.34332	0.2836964	0.23355640	2.6114088	20	—	—
46895 1998 RX_{52}	15.3	X	93.64654	228.94225	44.67352	3.71445	0.1303170	0.23037956	2.6353609	20	11 18.5	19.1
46896 1998 RR_{53}	15.8	X	89.45565	99.85708	206.03009	7.27951	0.2003459	0.23385618	2.6091766	20	12 28.4	20.1
46897 1998 RP_{55}	15.0	X	161.36203	13.73630	296.40697	4.69500	0.0058428	0.24099383	2.5574006	20	—	—
46898 1998 RW_{57}	15.6	X	136.37458	241.36246	113.20832	1.77094	0.1120257	0.24394949	2.5367019	20	1 9.4	19.1
46899 1998 RF_{60}	15.3	X	358.26273	108.26963	319.03477	3.38883	0.2264393	0.23253613	2.6190418	20	—	—
46900 1998 RG_{60}	15.8	X	93.45422	158.79454	212.57843	4.21359	0.2684914	0.23961907	2.5671730	20	—	—
46901 1998 RQ_{60}	14.8	X	341.22444	68.99098	266.28437	4.07896	0.0591046	0.22140391	2.7061126	20	8 27.9	18.2
46902 1998 RY_{60}	14.0	X	151.61356	336.76468	346.72089	13.61640	0.1740338	0.24243358	2.5472654	20	—	—
46903 1998 RQ_{61}	14.8	X	11.22561	103.65681	329.27998	3.95517	0.1556658	0.23539214	2.5978141	20	—	—
46904 1998 RG_{63}	15.6	X	116.44555	205.29438	136.02778	5.67885	0.2617311	0.24045695	2.5612059	20	—	—
46905 1998 RT_{63}	14.1	X	0.51485	351.64994	159.20720	12.10557	0.1138691	0.24524856	2.5277361	20	1 8.3	17.2
46906 1998 RG_{66}	14.6	X	61.55355	261.66008	190.66756	12.16780	0.1283404	0.24408897	2.5357355	20	1 31.9	17.7
46907 1998 RQ_{70}	14.4	X	241.17573	336.01045	156.22371	11.79517	0.1209902	0.22743306	2.6580735	20	10 30.4	18.1
46908 1998 RV_{71}	15.0	X	313.00695	43.78163	109.67257	1.59370	0.0749641	0.23959145	2.5673702	20	—	—
46909 1998 RF_{72}	14.1	X	207.77065	92.16299	178.21434	14.95153	0.0833456	0.24266272	2.5456616	20	—	—
46910 1998 RM_{72}	15.4	X	188.69263	181.45561	152.51764	2.23298	0.0607392	0.24754619	2.5120709	20	2 5.8	18.9
46911 1998 RW_{72}	15.9	X	103.11563	292.57673	23.02727	1.87548	0.2233047	0.23600483	2.5933161	20	—	—
46912 1998 RY_{72}	14.8	X	313.41133	257.99141	176.84971	2.47279	0.1122671	0.22859546	2.6490550	20	12 1.7	17.6
46913 1998 RD_{74}	15.3	X	53.21674	99.41052	256.48991	4.17259	0.1397301	0.23260241	2.6185442	20	—	—
46914 1998 RX_{74}	14.7	X	306.07020	142.59549	315.00179	1.41165	0.1635586	0.22934857	2.6432527	20	12 18.5	17.1
46915 1998 RK_{75}	13.3	X	203.84470	150.32547	13.62469	11.45707	0.1052599	0.22639603	2.6661844	20	10 22.8	17.2
46916 1998 RG_{77}	15.5	X	45.63566	262.53364	149.62417	6.43399	0.0523173	0.23834545	2.5763101	20	—	—
46917 1998 SA	14.5	X	176.86748	130.31617	196.85985	4.30055	0.2420597	0.24516935	2.5282805	20	1 25.2	18.8
46918 1998 SC	13.3	X	49.71350	175.22429	46.30866	9.98333	0.2126886	0.21695613	2.7429724	20	8 4.5	16.9
46919 1998 SN_{3}	14.9	X	195.45708	23.15149	90.52072	5.97807	0.1164709	0.21835810	2.7312189	20	8 12.9	19.1
46920 1998 SX_{12}	14.2	X	7.56072	242.49159	149.11336	27.54461	0.0243277	0.22825717	2.6516718	20	12 22.9	18.3
46921 1998 SW_{13}	14.3	X	204.60154	155.99872	149.63829	15.95339	0.2358648	0.20408293	2.8571405	20	1 24.8	19.4
46922 1998 ST_{19}	15.0	X	66.07379	315.21068	196.65037	1.46107	0.1134773	0.25638290	2.4540120	20	5 3.2	17.6
46923 1998 SG_{24}	14.7	X	238.17936	352.87467	61.69566	3.91442	0.0782023	0.26346252	2.4098508	20	7 21.2	17.8
46924 1998 SP_{26}	16.1	X	80.44549	72.75415	269.64141	0.60890	0.1607878	0.23513138	2.5997344	20	—	—
46925 1998 SS_{27}	12.9	X	130.38115	351.15666	304.88899	27.61539	0.0488968	0.23367350	2.6105363	20	—	—
46926 1998 SR_{33}	14.8	X	24.39921	65.31170	348.05277	12.83679	0.3303350	0.23385642	2.6091749	20	—	—
46927 1998 SP_{54}	15.4	X	58.85827	261.47296	188.65757	4.22454	0.2235560	0.24282759	2.5445092	20	2 7.1	17.7
46928 1998 SJ_{57}	14.3	X	260.07577	11.12664	169.71181	13.73925	0.1080952	0.23763853	2.5814169	20	—	—
46929 1998 SO_{57}	14.9	X	14.58418	18.25263	70.61872	2.39476	0.1108954	0.23870372	2.5737316	20	—	—
46930 1998 SV_{58}	14.8	X	333.23373	262.11724	174.11399	5.66948	0.1742692	0.23060407	2.6336501	20	—	—
46931 1998 SW_{59}	15.5	X	137.65711	228.03962	149.72607	5.87268	0.2496789	0.24564600	2.5250089	20	2 23.8	19.4
46932 1998 SZ_{60}	15.8	X	83.48136	141.26628	162.40459	5.43673	0.2094680	0.23276544	2.6173214	20	12 21.8	20.1
46933 1998 SP_{62}	14.8	X	240.05284	22.44403	21.31243	5.82217	0.0594146	0.21546532	2.7556103	20	7 8.7	18.8
46934 1998 SN_{63}	15.3	X	61.53472	207.27971	195.81433	2.41607	0.1737659	0.23899123	2.5716671	20	—	—
46935 1998 SL_{65}	14.5	X	268.24599	254.15755	126.20365	4.09606	0.0349028	0.26095575	2.4252591	20	7 20.2	17.2
46936 1998 SN_{67}	14.3	X	300.29077	70.12069	40.49903	15.64362	0.1676901	0.22852934	2.6495660	20	12 23.8	17.2
46937 1998 SA_{71}	14.3	X	27.12656	288.64641	183.43527	9.58511	0.1302117	0.24059405	2.5602328	20	—	—
46938 1998 SP_{71}	15.0	X	316.51811	309.27515	106.14224	1.60651	0.0499490	0.22610851	2.6684441	20	11 10.9	18.2
46939 1998 SM_{73}	14.7	X	221.86946	302.28956	164.72478	5.39319	0.1226245	0.21928294	2.7235341	20	8 30.4	18.6
46940 1998 SK_{74}	14.7	X	183.43178	332.18542	119.70086	4.56828	0.1510759	0.21178802	2.7874160	20	6 30.9	19.1
46941 1998 SQ_{74}	14.5	X	176.87440	64.20434	76.60441	4.55127	0.0418997	0.21883223	2.7272725	20	8 31.6	18.4
46942 1998 SL_{75}	15.3	X	36.95338	222.31625	98.31304	3.61839	0.2058598	0.22706403	2.6609527	20	11 24.1	18.8
46943 1998 SZ_{99}	14.2	X	351.43786	264.90998	215.91729	12.59137	0.1124608	0.23854900	2.5748443	20	—	—
46944 1998 SO_{102}	14.1	X	110.71213	175.31784	22.32836	8.48143	0.1139026	0.21962979	2.7206659	20	9 3.2	18.2
46945 1998 SB_{107}	14.6	X	312.64276	1.62732	10.31642	6.11596	0.0485169	0.22137418	2.7063548	20	9 7.9	18.1
46946 1998 SR_{111}	13.5	X	245.44166	103.97742	16.76000	13.39995	0.1016886	0.22536388	2.6743188	20	10 18.2	16.9
46947 1998 SZ_{111}	15.4	X	94.21192	300.98875	28.94312	8.03324	0.2023985	0.23579657	2.5948428	20	—	—
46948 1998 SU_{114}	15.2	X	67.92788	221.69412	71.42623	3.60121	0.0857057	0.22728112	2.6592580	20	11 9.9	18.8
46949 1998 SL_{117}	14.0	X	233.87754	355.52257	214.59002	10.09677	0.1041711	0.23616478	2.5921450	20	—	—
46950 1998 SA_{118}	13.6	X	281.42038	67.63811	4.50468	8.63864	0.1066914	0.22343735	2.6896692	20	10 4.0	16.9
46951 1998 SQ_{118}	14.3	X	137.10017	122.37570	194.19982	7.42447	0.2202989	0.23968656	2.5666910	20	—	—
46952 1998 SQ_{119}	15.7	X	153.52955	285.77650	57.80875	2.72431	0.1738094	0.24415145	2.5353028	20	1 21.7	19.6
46953 1998 SB_{121}	14.6	X	246.15225	285.36954	177.24964	6.46224	0.1088867	0.22280798	2.6947318	20	9 25.7	18.3
46954 1998 SL_{121}	14.6	X	192.81424	192.89410	215.97500	11.93553	0.1637432	0.20932160	2.8092692	20	5 17.5	19.2
46955 1998 SS_{121}	15.0	X	261.59767	176.06056	244.95898	4.21494	0.1047749	0.21925887	2.7237334	20	8 19.5	18.6
46956 1998 SQ_{123}	15.6	X	33.49172	192.45653	186.12754	3.28281	0.2333203	0.23190352	2.6238026	20	—	—
46957 1998 SD_{129}	14.4	X	163.93141	61.58847	188.33752	13.42581	0.1764525	0.23415324	2.6069694	20	12 24.5	18.9
46958 1998 SM_{129}	14.8	X	22.11181	149.50196	172.86149	2.48495	0.0761529	0.22422719	2.6833493	20	10 16.6	18.2
46959 1998 SW_{129}	13.9	X	260.69636	94.52194	20.50428	13.11366	0.1440081	0.22517383	2.6758233	20	10 24.6	17.3
46960 1998 ST_{130}	14.0	X	166.16309	321.67590	203.77961	12.67389	0.0210664	0.22124400	2.7074164	20	9 15.7	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
46961 1998 SC_{132}	15.6	X	263.26067	348.27126	304.32380	4.03992	0.1959990	0.29808115	2.2194552	20	2 18.8	19.0
46962 1998 SD_{132}	14.6	X	99.22869	14.77348	317.33828	4.36706	0.1613702	0.23533495	2.5982350	20	—	—
46963 1998 SJ_{132}	14.6	X	217.28380	139.18839	316.11583	4.44968	0.0488038	0.21782098	2.7357069	20	8 17.8	18.5
46964 1998 SE_{134}	14.5	X	22.94007	169.58528	196.54114	4.14681	0.1151623	0.22914095	2.6448492	20	12 20.3	17.8
46965 1998 SN_{134}	14.5	X	235.00102	12.19674	29.76644	5.05640	0.0805934	0.25958275	2.4338034	20	6 28.2	17.9
46966 1998 SP_{134}	14.8	X	250.50968	5.15722	26.33561	3.39794	0.1316793	0.26028313	2.4294355	20	6 26.3	18.1
46967 1998 SR_{134}	14.9	X	165.50425	241.71212	185.89958	4.56668	0.2141442	0.25255090	2.4787731	20	5 17.1	19.1
46968 1998 SJ_{135}	14.6	X	194.44627	148.59204	163.70231	5.16649	0.1751660	0.24591377	2.5231756	20	1 19.6	18.8
46969 1998 SP_{137}	15.0	X	279.49769	346.29391	94.89157	4.99807	0.1820782	0.22335897	2.6902984	20	10 5.7	18.2
46970 1998 SW_{137}	15.0	X	97.49914	61.11310	181.45835	5.95116	0.0365938	0.22279060	2.6948720	20	10 5.2	18.7
46971 1998 SE_{138}	14.4	X	338.97369	293.99035	15.32841	5.60647	0.0863359	0.21675051	2.7447068	20	7 21.3	17.6
46972 1998 SV_{138}	14.4	X	122.93739	330.84293	6.74598	9.53310	0.1155139	0.23849734	2.5752162	20	—	—
46973 1998 SE_{139}	14.8	X	280.67568	220.36326	215.69557	12.27558	0.1259350	0.22304752	2.6928022	20	10 3.9	18.2
46974 1998 SA_{140}	14.8	X	133.12966	78.15112	223.77240	12.12162	0.1917624	0.23659907	2.5889720	20	—	—
46975 1998 SC_{140}	14.4	X	3.18175	218.07365	216.82152	13.64344	0.1491977	0.23294143	2.6160029	20	—	—
46976 1998 SE_{140}	14.6	X	150.21540	345.91940	359.16841	9.30063	0.1077753	0.24245316	2.5471282	20	1 15.3	18.3
46977 Krakow	13.3	X	190.51286	58.65094	24.86589	8.81651	0.2160143	0.21088722	2.7953479	20	6 25.5	18.2
46978 1998 SD_{145}	14.8	X	30.11314	289.54273	50.43322	4.23799	0.1279579	0.22714987	2.6602823	20	11 27.4	18.0
46979 1998 SL_{154}	15.0	X	157.86662	280.57876	180.99758	13.61361	0.1235122	0.21145600	2.7903330	20	6 18.4	19.7
46980 1998 SW_{156}	14.5	X	126.75720	350.91444	336.64729	6.27918	0.1428176	0.23847416	2.5753831	20	—	—
46981 1998 SQ_{160}	14.9	X	273.76950	282.61967	58.87103	4.28361	0.1009060	0.21290128	2.7776905	20	5 22.9	18.5
46982 1998 SP_{161}	14.8	X	212.83678	310.53452	192.07748	12.82357	0.1414146	0.22262788	2.6961849	20	10 3.4	18.8
46983 1998 SX_{161}	15.2	X	136.34832	244.02627	146.55908	3.99091	0.1745239	0.24611680	2.5217879	20	3 2.1	18.8
46984 1998 SU_{162}	15.2	X	323.69544	132.06867	258.89669	1.65378	0.0840238	0.22392793	2.6857394	20	10 17.7	18.4
46985 1998 SA_{163}	14.3	X	197.51670	336.92355	197.97114	5.74720	0.0945979	0.22544182	2.6737023	20	11 2.3	18.2
46986 1998 SR_{163}	16.1	X	101.17146	215.14170	159.77511	4.08112	0.2739365	0.23970572	2.5665542	20	1 15.6	19.3
46987 1998 SC_{167}	14.5	X	241.68503	286.95442	186.80743	26.37172	0.0800638	0.22469214	2.6796463	20	10 9.8	18.1
46988 1998 TJ_{5}	14.7	X	267.56847	276.55579	69.83681	5.64595	0.1115871	0.21126015	2.7920573	20	5 20.3	18.7
46989 1998 TO_{5}	14.3	X	8.44165	213.34528	211.53264	11.15956	0.1653079	0.23177005	2.6248098	20	—	—
46990 1998 TY_{6}	14.2	X	13.58968	223.40774	103.78253	8.75043	0.2331453	0.22351912	2.6890132	20	11 5.3	17.3
46991 1998 TU_{17}	16.8	X	93.06353	303.24698	83.36120	1.12387	0.1540934	0.24145864	2.5541175	20	—	—
46992 1998 TZ_{17}	12.4	X	218.15898	177.11125	342.61748	13.76788	0.0969191	0.22648745	2.6654669	20	10 30.7	16.4
46993 1998 TF_{18}	14.9	X	66.78073	217.44619	204.07838	4.52882	0.1919489	0.23942667	2.5685481	20	1 9.3	17.5
46994 1998 TE_{27}	14.8	X	260.16050	208.31514	205.12125	0.81501	0.1035805	0.21649219	2.7468897	20	8 9.1	18.3
46995 1998 TO_{28}	14.7	X	167.45954	277.93638	27.90780	10.34892	0.2430226	0.24146853	2.5540478	20	—	—
46996 1998 TR_{28}	14.4	X	30.38612	93.81859	248.05935	1.58423	0.0829907	0.22628017	2.6670944	20	11 23.5	17.8
46997 1998 TL_{29}	14.4	X	95.17427	72.07627	221.22986	9.41002	0.1253366	0.18317531	3.0706107	20	12 5.2	19.2
46998 1998 TM_{30}	15.1	X	70.01599	155.32535	222.57444	2.62664	0.2167353	0.23566529	2.5958064	20	—	—
46999 1998 TA_{32}	14.3	X	143.12658	1.50918	279.22123	2.87900	0.0556999	0.23273366	2.6175597	20	—	—
47000 1998 TH_{32}	14.6	X	204.96732	212.40300	218.95384	11.93107	0.1292410	0.21206573	2.7849820	20	6 25.7	19.1
47001 1998 TA_{35}	14.8	X	259.85516	8.61099	46.91838	4.11657	0.0812531	0.21762944	2.7373119	20	8 17.3	18.5
47002 Harlingten	15.3	X	240.48596	12.15738	0.60412	2.33427	0.2093673	0.25706731	2.4496544	20	5 11.2	19.0
47003 1998 UF_{7}	14.3	X	58.94841	181.15835	186.27607	15.04687	0.1215731	0.23056469	2.6339499	20	—	—
47004 1998 UZ_{7}	15.6	X	3.05885	224.57715	204.86825	13.15712	0.2695131	0.23082591	2.6319624	20	—	—
47005 Chengmaolan	15.0	X	335.32150	78.19117	272.10942	1.76602	0.2053323	0.22154288	2.7049808	20	9 8.2	17.2
47006 1998 UL_{10}	15.4	X	115.66234	89.39626	220.81775	10.96975	0.1764660	0.23438643	2.6052400	20	—	—
47007 1998 UL_{16}	15.1	X	128.47678	266.94587	69.11786	5.04789	0.2721424	0.23904241	2.5713000	20	—	—
47008 1998 UW_{16}	14.7	X	67.69204	206.33239	188.51507	31.36264	0.2186068	0.23622981	2.5916693	20	—	—
47009 1998 UY_{16}	14.7	X	90.09185	231.05319	149.62258	17.97302	0.2792544	0.23799079	2.5788690	20	1 8.9	17.9
47010 1998 UD_{20}	14.4	X	3.28652	210.55102	130.42821	5.26491	0.1909179	0.17695457	3.1421592	20	10 16.7	18.0
47011 1998 UQ_{23}	15.3	X	13.64514	210.64135	182.62108	11.27549	0.0768595	0.23147761	2.6270201	20	—	—
47012 1998 UZ_{26}	15.0	X	143.82507	190.29525	157.01098	4.80684	0.2706036	0.24254256	2.5465023	20	1 25.1	19.0
47013 1998 UZ_{27}	13.8	X	156.68048	108.16520	140.04798	6.20135	0.0905496	0.22936802	2.6431033	20	12 19.7	17.8
47014 1998 UJ_{40}	13.6	X	242.51868	324.72489	234.18845	11.20436	0.1137901	0.23404938	2.6077406	20	—	—
47015 1998 VW	14.5	X	343.70524	17.08904	56.68785	13.71446	0.2849521	0.22919068	2.6444666	20	—	—
47016 1998 VU_{3}	14.8	X	329.56264	117.67324	56.06224	2.37073	0.1628247	0.19232094	2.9724758	20	—	—
47017 1998 VE_{4}	14.1	X	110.13804	191.71142	213.10206	3.98806	0.1264581	0.24090005	2.5580643	20	2 11.4	17.4
47018 1998 VT_{4}	15.3	X	328.03567	321.20546	252.88870	1.05123	0.0545023	0.19951369	2.9005983	20	2 27.4	19.2
47019 1998 VM_{5}	14.6	X	103.67114	344.23803	22.02445	7.71523	0.2040415	0.23812794	2.5778787	20	—	—
47020 1998 VP_{9}	14.6	X	303.92526	102.35387	280.07204	3.26518	0.0950784	0.21973860	2.7197677	20	8 31.8	17.8
47021 1998 VR_{12}	14.9	X	306.26992	302.79942	115.83198	2.45558	0.1522333	0.22374781	2.6871806	20	10 24.2	17.7
47022 1998 VK_{14}	13.7	X	271.51744	226.68368	26.75057	15.36217	0.0404071	0.24447895	2.5330381	20	2 8.5	17.4
47023 1998 VZ_{16}	15.3	X	201.72858	335.02886	89.19286	4.38952	0.1277260	0.21071615	2.7968607	20	6 14.6	19.6
47024 1998 VV_{19}	14.0	X	177.94007	62.88629	186.73736	11.98939	0.1223123	0.23306635	2.6150680	20	—	—
47025 1998 VT_{20}	15.3	X	284.72226	285.50478	62.69804	3.68771	0.1889997	0.21417215	2.7666914	20	6 1.8	18.8
47026 1998 VS_{21}	14.3	X	96.55903	329.56606	291.31196	3.39735	0.0333454	0.22295168	2.6935738	20	10 25.2	18.1
47027 1998 VX_{29}	14.9	X	49.06194	140.75135	267.78025	5.10961	0.2904580	0.23479045	2.6022505	20	—	—
47028 1998 VG_{31}	14.6	X	103.71613	321.76168	9.00789	6.06668	0.0785295	0.23280211	2.6170465	20	—	—
47029 1998 VO_{31}	13.3	X	27.44889	102.47066	301.12204	20.88536	0.0764020	0.17921645	3.1156653	20	—	—
47030 1998 VG_{32}	14.8	X	333.38696	13.12286	80.88147	4.18294	0.1548557	0.27482030	2.3429886	20	—	—
47031 1998 VX_{38}	14.6	X	52.80911	311.74388	107.06019	4.51136	0.2282358	0.23578797	2.5949059	20	—	—
47032 1998 VW_{52}	14.5	X	70.41403	227.49711	148.19168	9.11282	0.1889747	0.23342104	2.6124183	20	—	—
47033 1998 VW_{53}	14.7	X	309.33268	74.84227	297.20669	8.86693	0.0434046	0.21851315	2.7299268	20	8 28.8	18.4
47034 1998 VP_{54}	13.9	X	245.23858	228.94555	263.44851	14.76038	0.0288014	0.17869836	3.1216845	20	11 1.9	18.5
47035 1998 WS	12.7	X	341.55771	94.72034	8.96826	27.49380	0.3948311	0.22778952	2.6552997	20	—	—
47036 1998 WP_{1}	14.0	X	60.26116	337.56585	91.25920	10.90347	0.0823178	0.19009169	2.9956699	20	1 8.7	17.8
47037 1998 WM_{2}	14.7	X	267.28964	323.12615	186.91229	24.20888	0.2162602	0.27098478	2.3650452	20	12 26.4	17.6
47038 Majoni	14.6	X	213.29796	247.71254	210.80020	10.12635	0.2528707	0.21351886	2.7723319	20	7 27.9	19.5
47039 1998 WA_{3}	13.9	X	24.20968	299.70165	124.23562	17.12415	0.1916660	0.18068735	3.0987335	20	—	—
47040 1998 WB_{3}	13.4	X	269.18154	22.34091	103.79819	2.84704	0.1679815	0.17186510	3.2038899	20	11 7.3	17.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47041 1998 WO_3	13.1	X	59.40703	133.97420	271.23144	8.64097	0.0288796	0.18531388	3.0469413	20	—	—
47042 1998 WP_3	14.0	X	114.37942	329.65751	107.61140	3.27313	0.0652093	0.19650792	2.9301016	20	3 28.1	18.1
47043 1998 WX_3	13.8	X	23.34889	286.61189	72.48917	13.58291	0.3057639	0.22769910	2.6560027	20	—	—
47044 Mcpainter	14.7	X	45.69335	27.68053	19.04442	13.00850	0.1593164	0.23475494	2.6025129	20	—	—
47045 Seandaniel	14.5	X	227.26472	301.37684	103.08324	4.85223	0.0985918	0.21037279	2.7999031	20	6 18.7	18.7
47046 1998 WM_9	14.6	X	94.45839	7.90089	51.07277	9.29951	0.1576659	0.24172167	2.5522643	20	2 19.9	17.9
47047 1998 WX_{12}	13.9	X	276.17276	61.28779	317.97994	3.75420	0.1061899	0.21405786	2.7676761	20	7 15.9	17.5
47048 1998 WW_{18}	13.8	X	8.00112	79.12649	241.75457	6.38951	0.0661247	0.21828952	2.7317909	20	9 17.4	17.4
47049 1998 WT_{19}	13.2	X	84.87954	185.78254	290.74839	13.27599	0.1125802	0.23845582	2.5755151	20	4 4.6	16.8
47050 1998 WN_{20}	13.2	X	356.74477	336.40451	214.42411	4.57253	0.1563731	0.19838378	2.9116015	20	2 29.5	16.6
47051 1998 XZ	15.3	X	287.54706	181.17163	215.86049	2.44722	0.1025166	0.21783728	2.7355705	20	8 25.5	18.7
47052 1998 XE_1	15.0	X	45.43456	300.01143	84.30451	3.23972	0.0972557	0.23145531	2.6271888	20	—	—
47053 1998 XH_1	14.1	X	66.72993	59.32091	110.74075	1.98567	0.1032297	0.20452013	2.8530672	20	5 29.2	17.9
47054 1998 XX_1	14.3	X	7.26305	211.23322	67.12474	10.19280	0.1292494	0.21371948	2.7705967	20	7 28.8	17.5
47055 1998 XH_5	12.6	X	275.81872	1.09373	112.08785	12.63216	0.0554310	0.17490265	3.1666869	20	11 19.1	17.1
47056 1998 XP_7	13.9	X	201.94991	315.54106	234.28480	12.62916	0.0854608	0.17879834	3.1205206	20	11 17.1	18.3
47057 1998 XM_{12}	14.1	X	64.77631	85.82214	265.79551	10.75662	0.2422678	0.23052830	2.6342271	20	—	—
47058 1998 XC_{15}	14.4	X	259.58330	167.93851	233.50373	8.34692	0.1529450	0.21351082	2.7724015	20	7 14.1	18.4
47059 1998 XX_{20}	13.7	X	266.77000	62.24863	282.57330	12.11383	0.1947506	0.20486048	2.8499064	20	5 2.5	18.1
47060 1998 XX_{33}	14.9	X	286.97798	356.55505	70.13922	2.95139	0.2167852	0.21964572	2.7205344	20	9 20.4	17.8
47061 1998 XZ_{43}	13.2	X	130.52811	31.99253	68.78684	13.61637	0.0838536	0.20177500	2.8788861	20	5 17.5	17.4
47062 1998 XH_{52}	13.8	X	3.24223	101.40794	304.93537	12.76899	0.1639865	0.17950143	3.1123668	20	—	—
47063 1998 XX_{52}	13.5	X	219.23951	253.20267	93.47983	3.28337	0.0919901	0.19845800	2.9108756	20	3 31.5	18.0
47064 1998 XT_{53}	14.5	X	338.92662	310.14033	54.92943	10.29554	0.1238698	0.21745816	2.7387491	20	10 11.7	17.6
47065 1998 XC_{55}	14.1	X	191.03953	299.17455	83.08097	3.28746	0.0164233	0.20098190	2.8864547	20	4 14.9	18.1
47066 1998 XN_{57}	14.2	X	5.19198	241.82137	144.04335	2.84028	0.2111573	0.22534321	2.6744823	20	—	—
47067 1998 XB_{62}	15.7	X	52.52116	124.80200	191.05628	1.66648	0.3001049	0.22673378	2.6635359	20	12 16.3	19.9
47068 1998 XJ_{62}	14.4	X	255.60883	189.12647	229.07055	18.33484	0.1837757	0.21680377	2.7442573	20	7 22.8	18.7
47069 1998 XC_{73}	13.3	X	26.87470	154.12928	333.59618	13.83454	0.1561784	0.19057165	2.9906381	20	2 6.2	16.6
47070 1998 XF_{77}	14.6	X	302.39681	268.46096	143.95106	13.43428	0.1612123	0.21885427	2.7270893	20	10 9.4	17.7
47071 1998 XO_{77}	14.0	X	33.65269	296.98670	98.23949	13.50390	0.1646890	0.23082303	2.6319843	20	—	—
47072 1998 XM_{79}	13.9	X	126.95406	295.70989	183.74457	13.02229	0.0701547	0.20466145	2.8517537	20	6 4.8	18.3
47073 1998 XP_{95}	13.1	X	139.33635	316.10377	138.67916	11.81237	0.1328854	0.20139625	2.8824943	20	5 25.5	17.8
47074 1998 XV_{95}	13.7	X	52.95519	245.13145	195.74671	6.25138	0.0889839	0.18879518	3.0093690	20	1 12.7	17.5
47075 1998 YB	13.6	X	239.28458	27.69560	86.28221	0.16345	0.1344095	0.16983362	3.2293884	20	9 20.9	18.3
47076 1998 YV	14.0	X	307.65829	265.53097	239.83777	0.66313	0.1280534	0.18148059	3.0896973	20	—	—
47077 Yuji	13.3	X	226.33349	317.20728	194.24129	4.29703	0.0506651	0.17424173	3.1746896	20	11 2.2	17.8
47078 1998 YS_2	13.0	X	3.65908	251.60477	121.71512	15.87362	0.0400057	0.16995995	3.2277878	20	11 14.9	17.7
47079 1998 YA_3	14.3	X	306.05631	197.32643	183.00744	1.46744	0.0557407	0.21569208	2.7536786	20	9 6.1	17.8
47080 1998 YA_7	13.8	X	103.45253	323.56370	94.13242	11.61863	0.1648052	0.19611929	2.9339712	20	3 8.1	18.1
47081 1998 YV_9	14.9	X	21.47629	185.01719	230.24517	1.49566	0.2082555	0.22797077	2.6538921	20	—	—
47082 1998 YA_{15}	14.1	X	196.16867	196.70877	88.64856	9.98299	0.0550729	0.19119052	2.9841809	20	—	—
47083 1998 YG_{22}	13.6	X	238.64423	161.88113	260.67591	5.23200	0.0638720	0.20934300	2.8090777	20	7 28.6	17.7
47084 1999 AQ	14.2	X	101.04358	289.76697	124.24032	11.84957	0.1109805	0.19201818	2.9755995	20	2 19.0	18.4
47085 1999 AW_2	14.6	X	22.21506	337.22373	54.73530	1.43173	0.1772281	0.17931770	3.1144924	20	—	—
47086 Shinseiko	13.5	X	206.59590	211.24126	250.53451	14.44478	0.1977287	0.21013357	2.8020277	20	7 27.7	18.4
47087 1999 AY_3	14.6	X	126.83487	224.19800	345.01125	8.05978	0.0820802	0.25592203	2.4569573	20	10 2.3	18.1
47088 1999 AB_7	14.2	X	33.37301	338.10877	136.56044	11.53118	0.0515978	0.18754571	3.0227203	20	1 25.9	18.1
47089 1999 AC_7	15.2	X	245.00323	358.64644	140.37351	7.56364	0.0785615	0.26382198	2.4076613	20	11 26.3	18.3
47090 1999 AJ_7	14.8	X	123.80497	318.62843	298.36474	12.52752	0.1366429	0.26190463	2.4193977	20	12 2.5	18.7
47091 1999 AP_9	13.8	X	277.46417	86.95487	191.03579	1.58310	0.0372094	0.19537951	2.9413726	20	3 16.8	17.9
47092 1999 AB_{10}	14.2	X	276.57484	291.91086	284.93567	10.72937	0.0274560	0.23119722	2.6291436	20	—	—
47093 1999 AF_{21}	15.3	X	277.68522	314.99335	214.66540	1.95363	0.1044872	0.27104407	2.3647003	20	—	—
47094 1999 AW_{21}	15.0	X	335.78779	69.12542	147.57367	8.76710	0.0208209	0.28392600	2.2926228	20	3 8.3	17.6
47095 1999 AQ_{25}	14.0	X	310.39537	330.56416	138.59812	2.26522	0.1752034	0.17521254	3.1629520	20	12 20.9	17.4
47096 1999 AX_{25}	12.8	X	351.55678	104.48903	302.72732	18.37769	0.1231722	0.17560499	3.1582376	20	12 12.8	16.9
47097 1999 AE_{26}	13.8	X	155.93438	164.04860	41.42863	3.78454	0.0449376	0.17153373	3.2080148	20	10 19.3	18.4
47098 1999 AM_{28}	15.1	X	107.18499	219.82332	54.65445	2.93581	0.0475147	0.22771765	2.6558584	20	11 27.4	18.6
47099 1999 AO_{37}	14.0	X	277.91965	201.40989	273.13833	13.43471	0.2176632	0.22443337	2.6817056	20	11 6.7	17.3
47100 1999 BB_{10}	14.6	X	118.26907	353.49372	324.94264	5.97948	0.0935387	0.26959585	2.3731612	20	—	—
47101 1999 BP_{12}	14.4	X	359.08215	153.77207	6.25794	6.04562	0.0161259	0.28147643	2.3059047	20	1 24.3	17.1
47102 1999 BT_{12}	13.8	X	34.20452	159.03776	237.31132	4.41899	0.1652814	0.17857559	3.1231151	20	—	—
47103 1999 BQ_{28}	14.6	X	16.08573	18.17760	6.08026	0.92439	0.1776385	0.17493350	3.1663145	20	12 27.1	18.4
47104 1999 CD_{18}	12.8	X	244.08337	98.23137	32.05998	10.99653	0.1306556	0.17116974	3.2125611	20	10 17.6	17.5
47105 1999 CJ_{18}	13.1	X	103.66101	347.22820	74.60877	11.21644	0.0929997	0.19128178	2.9832317	20	3 4.4	17.5
47106 1999 CU_{20}	13.9	X	221.46898	336.40896	325.19428	13.99552	0.1134051	0.23496157	2.6009869	20	2 3.7	17.8
47107 1999 CB_{22}	13.6	X	67.95570	37.53454	68.22936	12.46586	0.1665563	0.19152941	2.9806597	20	3 24.2	17.6
47108 1999 CM_{37}	13.8	X	347.97110	355.60187	103.16800	3.21623	0.1507124	0.17913981	3.1165540	20	—	—
47109 1999 CQ_{37}	13.7	X	50.88915	57.89089	339.08720	11.27392	0.0386969	0.17800657	3.1297672	20	—	—
47110 1999 CK_{44}	14.5	X	237.51156	40.48808	42.49111	8.44351	0.2000371	0.20966443	2.8062060	20	8 10.9	18.9
47111 1999 CP_{48}	14.0	X	351.71135	342.50741	101.86711	2.88680	0.2065971	0.17824172	3.1270139	20	—	—
47112 1999 CZ_{54}	12.9	X	208.53033	330.72245	102.71519	6.92681	0.0913895	0.15537005	3.4268191	20	7 3.7	18.0
47113 1999 CD_{57}	13.7	X	352.23279	112.39657	2.31204	2.07794	0.2382296	0.18083663	3.0970278	20	—	—
47114 1999 CP_{61}	12.8	X	164.12433	319.01166	161.92715	9.99293	0.1070850	0.15770048	3.3929754	20	7 15.3	18.2
47115 1999 CH_{62}	13.2	X	39.93721	179.85894	204.05545	10.25862	0.0277573	0.17605140	3.1528966	20	—	—
47116 1999 CL_{64}	13.5	X	89.23325	265.55421	177.41165	11.83888	0.1079468	0.19065461	2.9897704	20	3 8.3	17.6
47117 1999 CE_{72}	13.8	X	298.07542	235.07104	243.84757	6.62549	0.1513939	0.17480464	3.1678704	20	12 13.6	17.6
47118 1999 CP_{72}	14.1	X	197.30894	100.82203	197.60337	11.97054	0.1667522	0.22840447	2.6505316	20	1 6.6	18.7
47119 1999 CM_{81}	13.6	X	55.99359	246.31997	187.77381	12.93191	0.2156183	0.18478073	3.0527994	20	1 21.4	17.3
47120 1999 CP_{84}	13.6	X	220.28422	297.37656	353.48528	14.73574	0.1276659	0.23438380	2.6052595	20	1 23.4	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47121 1999 CG_{85}	14.6	X	60.51161	278.12827	107.47192	6.93745	0.1221804	0.27446678	2.3450001	20	—	—
47122 1999 CZ_{88}	14.1	X	0.09309	54.88576	9.57893	2.93461	0.2399429	0.22552185	2.6730698	20	—	—
47123 1999 CS_{91}	14.1	X	341.85360	49.48967	335.89179	3.95192	0.1111941	0.16943333	3.2344726	20	10 26.1	18.2
47124 1999 CS_{99}	13.4	X	242.32582	181.32527	131.09365	11.84049	0.1440020	0.18940120	3.0029463	20	3 11.8	18.2
47125 1999 CM_{100}	14.1	X	303.64555	0.07208	93.14741	2.52018	0.2022987	0.17283969	3.1918348	20	11 15.0	17.7
47126 1999 CH_{101}	14.0	X	76.25159	280.33625	153.25693	10.63218	0.1065161	0.18546351	3.0453022	20	2 8.9	18.1
47127 1999 CJ_{103}	13.4	X	298.79238	253.82787	276.35189	14.57403	0.1679678	0.18041114	3.1018954	20	—	—
47128 1999 CZ_{115}	13.3	X	338.80688	199.60696	193.12316	6.92898	0.1078466	0.16866097	3.2443396	20	11 2.0	17.3
47129 1999 CR_{118}	14.0	X	128.37240	49.33934	12.01339	10.02002	0.1094889	0.19186650	2.9771676	20	3 29.0	18.4
47130 1999 CT_{127}	14.0	X	186.69151	145.07735	94.24031	13.54928	0.0800544	0.21840862	2.7307977	20	—	—
47131 1999 CA_{133}	14.3	X	295.82904	285.80310	155.09579	1.06473	0.1667944	0.17161114	3.2070500	20	10 20.3	18.0
47132 1999 CD_{154}	13.4	X	296.44330	127.96780	341.83184	11.54898	0.1434497	0.17180297	3.2046623	20	11 26.5	17.6
47133 1999 DH_{5}	13.9	X	153.66587	214.67868	237.64169	13.33925	0.1497720	0.24576637	2.5241844	20	6 3.6	17.8
47134 1999 DB_{6}	13.9	X	97.67915	221.17565	251.82781	12.99493	0.1378688	0.24002010	2.5643127	20	4 26.2	17.5
47135 1999 EX_{2}	15.6	X	118.41869	260.22777	158.78495	23.81025	0.0786892	0.37436065	1.9066717	20	2 15.8	17.3
47136 1999 EA_{3}	12.9	X	275.19204	124.08798	6.23891	14.86347	0.0702193	0.16956504	3.2327975	20	11 28.3	17.5
47137 1999 FJ_{22}	13.4	X	327.43556	126.47622	314.92960	8.25277	0.0993171	0.17313170	3.1882447	20	12 15.4	17.5
47138 1999 FS_{35}	13.6	X	287.25338	272.02051	169.23846	23.42614	0.1514229	0.16869412	3.2439147	20	10 11.6	17.9
47139 1999 GN_{9}	12.7	X	3.35105	98.20536	350.72712	23.13625	0.1580531	0.17590221	3.1546791	20	—	—
47140 1999 GL_{37}	13.5	X	147.48163	34.27261	31.92420	10.40832	0.1010250	0.19218002	2.9739287	20	4 22.9	17.9
47141 1999 HB_{3}	14.9	X	313.90808	68.46332	232.09999	19.51602	0.0585144	0.37619806	1.9004583	20	5 30.3	16.4
47142 1999 LQ_{2}	16.1	X	265.45387	146.52885	228.00241	18.99645	0.0728410	0.37828884	1.8934494	20	7 3.0	18.3
47143 1999 LL_{31}	14.6	X	184.60445	265.35547	143.60782	24.01045	0.1121491	0.36944887	1.9235338	20	5 14.3	17.8
47144 Faulkes	14.6	X	109.31652	293.08874	48.85501	6.29728	0.1240726	0.29512801	2.2342362	20	—	—
47145 1999 RN_{11}	15.6	X	310.38513	296.67129	154.63103	25.84712	0.1334278	0.38723051	1.8641878	20	—	—
47146 1999 RZ_{18}	14.4	X	317.28761	127.55406	172.62376	9.21651	0.0983960	0.18036152	3.1024643	20	5 31.7	18.5
47147 1999 RC_{24}	16.2	X	169.33646	219.02438	134.54612	4.80006	0.1604905	0.30773046	2.1728132	20	2 9.6	19.3
47148 1999 RN_{25}	15.7	X	190.19710	324.53212	7.85475	6.86037	0.1096152	0.30776840	2.1726347	20	2 2.7	18.7
47149 1999 RX_{34}	14.9	X	288.70225	233.72904	82.25551	2.01411	0.1825399	0.31701073	2.1301985	20	4 22.0	17.1
47150 1999 RN_{35}	15.5	X	325.08504	187.00699	182.32320	6.47383	0.1312338	0.28227050	2.3015781	20	10 3.3	17.3
47151 1999 RV_{88}	15.2	X	256.68779	140.13035	325.35409	3.87747	0.1303917	0.28415928	2.2913679	20	10 20.2	17.7
47152 1999 RB_{92}	16.1	X	170.31757	40.29833	352.87970	4.31965	0.0651613	0.31210004	2.1524852	20	3 26.6	18.7
47153 1999 RD_{132}	15.2	X	239.17906	45.04186	191.14040	7.46395	0.1665187	0.25862890	2.4397838	20	—	—
47154 1999 RE_{141}	15.3	X	254.02123	9.28455	343.84058	3.41762	0.1087688	0.22414203	2.6840289	20	5 11.2	19.1
47155 1999 RB_{159}	15.8	X	128.68424	201.09240	141.08978	4.46233	0.1187040	0.25450278	2.4660831	20	—	—
47156 1999 RE_{160}	16.2	X	64.01597	322.87079	95.51711	5.28034	0.1178554	0.30196582	2.2003792	20	—	—
47157 1999 RG_{188}	14.5	X	253.94158	325.06389	152.67537	11.47911	0.0556036	0.19255228	2.9700945	20	10 31.2	18.7
47158 1999 RR_{247}	15.7	X	339.18468	179.77726	140.95402	8.35394	0.1522962	0.27919117	2.3184706	20	8 13.1	17.3
47159 1999 SJ	15.6	X	323.26743	130.13307	169.50749	2.21418	0.2107198	0.27438332	2.3454756	20	5 23.6	17.4
47160 1999 SU_{17}	14.7	X	343.46044	206.83250	83.81616	7.17309	0.2910006	0.23119080	2.6291923	20	6 18.7	16.3
47161 1999 TH_{1}	15.6	X	254.73791	290.64082	211.13160	4.69648	0.0782402	0.28745213	2.2738354	20	12 19.4	18.0
47162 Chicomendez	15.1	X	244.97405	165.74748	36.63950	6.46656	0.1044519	0.29677094	2.2259828	20	—	—
47163 1999 TP_{11}	14.7	X	30.82787	331.46278	70.96296	7.31410	0.0946721	0.29168493	2.2517840	20	—	—
47164 Ticino	14.3	X	111.74641	125.26395	201.50936	10.56078	0.2017317	0.19913884	2.9042371	20	—	—
47165 1999 TM_{14}	16.0	X	81.01840	220.71800	173.56487	2.18655	0.1692078	0.29724989	2.2235910	20	—	—
47166 1999 TT_{18}	15.9	X	134.06471	231.88806	29.25551	8.72402	0.1707707	0.28909269	2.2652248	20	12 22.2	19.6
47167 1999 TP_{27}	14.3	X	173.44799	60.42275	24.90054	2.84515	0.0330325	0.21984811	2.7188644	20	6 12.3	18.0
47168 1999 TE_{30}	15.5	X	295.61088	113.24770	353.14248	3.31249	0.1205581	0.28872777	2.2671331	20	—	—
47169 1999 TH_{32}	15.3	X	298.53833	109.73486	4.05384	5.39302	0.0893203	0.28927268	2.2642850	20	—	—
47170 1999 TE_{33}	16.0	X	1.51284	176.18007	348.30919	2.72380	0.0527732	0.30595982	2.1811881	20	1 24.4	18.1
47171 Lempo	4.7	X	7.80674	294.39384	97.01022	8.42440	0.2245603	0.00398719	39.3874679	20	11 9.6	19.6
47172 1999 TM_{48}	16.6	X	356.82319	37.90759	140.15912	1.95009	0.0650540	0.30766128	2.1731389	20	2 3.2	18.5
47173 1999 TJ_{49}	16.0	X	186.91772	176.60618	43.58356	3.87586	0.0812358	0.29147401	2.2528701	20	—	—
47174 1999 TC_{95}	15.2	X	227.12294	187.26047	79.10919	7.66551	0.1234044	0.30425886	2.1893099	20	—	—
47175 1999 TP_{98}	14.6	X	34.83243	250.36776	60.08371	8.30361	0.1990391	0.28485617	2.2876292	20	11 19.4	17.2
47176 1999 TK_{105}	15.4	X	197.84651	206.71348	346.30609	4.73675	0.0747243	0.28598459	2.2816077	20	12 9.4	18.3
47177 1999 TU_{112}	15.9	X	347.49861	240.07057	273.11279	4.91063	0.0694856	0.30309586	2.1949066	20	—	—
47178 1999 TK_{113}	13.5	X	289.72684	215.19156	1.72715	30.06755	0.1366454	0.20985217	2.8045320	20	1 8.7	18.2
47179 1999 TM_{117}	15.4	X	129.77413	237.12200	354.59680	10.40804	0.0762957	0.28574723	2.2828709	20	11 7.1	18.7
47180 1999 TV_{119}	15.7	X	48.06540	124.08710	326.38952	2.45332	0.0840881	0.30150900	2.2026012	20	—	—
47181 1999 TB_{123}	16.0	X	99.44800	19.25231	2.18037	4.94137	0.1832778	0.29987224	2.2106087	20	—	—
47182 1999 TL_{124}	15.6	X	297.61959	242.54006	165.35445	4.48185	0.0838764	0.28118270	2.3075103	20	10 13.3	17.8
47183 1999 TC_{127}	15.8	X	318.71095	87.95614	143.88716	4.03508	0.1030305	0.31042807	2.1602071	20	2 15.8	18.0
47184 1999 TX_{127}	15.4	X	181.69325	106.92486	231.95129	0.48363	0.0135701	0.25903343	2.4372431	20	1 30.4	18.6
47185 1999 TC_{146}	15.4	X	74.54369	156.70521	354.24221	8.84406	0.1819737	0.26464790	2.4026495	20	5 23.4	18.4
47186 1999 TC_{147}	16.2	X	274.52989	195.83217	44.21331	6.11673	0.0661320	0.30574167	2.1822255	20	1 6.1	19.0
47187 1999 TL_{154}	15.4	X	287.00552	286.96103	193.88609	5.10507	0.0543838	0.28859099	2.2678493	20	—	—
47188 1999 TU_{155}	15.6	X	218.26471	223.87429	80.03060	3.74215	0.1534254	0.30637007	2.1792405	20	1 24.7	18.8
47189 1999 TT_{166}	15.7	X	311.25998	313.28046	231.41117	5.95526	0.1400026	0.30077059	2.2062047	20	—	—
47190 1999 TA_{171}	15.5	X	290.25518	270.95275	195.10096	6.32050	0.0504366	0.28750182	2.2735734	20	12 26.9	18.1
47191 1999 TK_{172}	16.6	X	50.86594	352.83869	70.72139	3.01897	0.1745863	0.29645552	2.2275614	20	—	—
47192 1999 TT_{176}	15.6	X	94.55525	210.47068	2.45284	3.69971	0.0886663	0.27508141	2.3415057	20	9 5.4	18.7
47193 1999 TJ_{178}	16.3	X	165.51974	312.24882	316.83504	4.71131	0.1392732	0.29517466	2.2340009	20	—	—
47194 1999 TK_{178}	15.7	X	166.67070	258.96061	325.84391	5.25843	0.1115094	0.28815110	2.2701568	20	12 11.2	18.9
47195 1999 TG_{179}	16.1	X	299.87493	189.15227	320.95553	2.61550	0.1886151	0.29242779	2.2479688	20	—	—
47196 1999 TZ_{180}	15.7	X	137.80142	192.78653	194.20380	4.14259	0.1133102	0.30315788	2.1946073	20	2 12.4	18.4
47197 1999 TZ_{193}	16.1	X	107.18835	339.24337	343.68470	7.51964	0.1032121	0.29277866	2.2461725	20	—	—
47198 1999 TL_{199}	16.3	X	83.06950	27.90381	289.12043	5.79722	0.1432884	0.28955892	2.2627926	20	—	—
47199 1999 TY_{204}	15.7	X	243.70776	321.64273	4.25740	4.07479	0.2354843	0.31183300	2.1537139	20	3 11.9	19.2
47200 1999 TB_{205}	15.6	X	212.16285	271.25564	256.65964	1.96846	0.1084646	0.28355810	2.2946054	20	11 18.9	18.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47201 1999 TJ_{205}	14.7	X	118.92418	249.56002	14.82312	5.55458	0.0939207	0.28291616	2.2980751	20	12 10.5	18.0
47202 1999 TD_{212}	16.1	X	286.71188	342.66823	231.90663	5.13150	0.0930811	0.30213916	2.1995375	20	—	—
47203 1999 TM_{219}	16.2	X	323.26878	119.91288	342.82911	7.77361	0.0854592	0.29178228	2.2512831	20	—	—
47204 1999 TO_{221}	15.2	X	41.93336	108.93139	144.80588	7.08098	0.1902204	0.27773053	2.3265924	20	9 8.8	17.7
47205 1999 TQ_{234}	15.5	X	248.53327	47.37864	96.51849	4.02466	0.1742374	0.28605692	2.2812230	20	11 27.6	17.7
47206 1999 TU_{243}	16.2	X	66.69698	258.22762	17.47758	7.44053	0.1168144	0.28274033	2.2990277	20	10 29.4	19.1
47207 1999 TB_{248}	15.9	X	128.96216	146.55378	196.55419	6.30731	0.1029152	0.29753222	2.2221842	20	—	—
47208 1999 TL_{253}	16.0	X	47.31169	221.99858	11.86052	6.19346	0.0347947	0.27192009	2.3596188	20	7 23.4	18.8
47209 1999 TM_{257}	16.3	X	15.40829	250.22324	155.46541	3.91103	0.0640959	0.29207316	2.2497881	20	—	—
47210 1999 TB_{273}	15.6	X	121.33381	278.02054	354.05271	6.45785	0.1205624	0.28832996	2.2692179	20	12 24.9	19.1
47211 1999 TX_{290}	15.4	X	141.45366	189.62681	120.05271	4.83890	0.1938791	0.29569850	2.2313617	20	—	—
47212 1999 TN_{291}	15.3	X	171.72412	104.30342	161.90982	5.36989	0.1815499	0.29227864	2.2487336	20	—	—
47213 1999 TC_{293}	15.3	X	260.83434	260.45286	317.16492	3.96840	0.1219855	0.29805001	2.2196098	20	—	—
47214 1999 TD_{293}	15.3	X	166.83502	347.45419	237.31513	9.66717	0.1467812	0.28668184	2.2779067	20	12 8.7	18.5
47215 1999 TZ_{319}	14.1	X	58.02620	243.95267	340.93599	12.62430	0.2161955	0.22717524	2.6600842	20	8 20.7	17.5
47216 1999 UX_{7}	15.0	X	36.61680	174.00378	49.62505	7.01385	0.0635666	0.26812220	2.3818488	20	6 22.7	17.7
47217 1999 UF_{18}	16.0	X	300.13051	40.28059	138.15513	2.30000	0.1025076	0.29944922	2.2126901	20	—	—
47218 1999 UN_{37}	16.0	X	238.91873	132.25220	29.98135	4.38767	0.0442943	0.28977972	2.2616430	20	12 30.2	18.5
47219 1999 UU_{41}	12.9	X	233.19287	353.38596	263.95544	13.86073	0.0736988	0.24317333	2.5420968	20	—	—
47220 1999 UJ_{46}	15.9	X	199.53174	163.29073	297.97160	5.05193	0.1334049	0.27252882	2.3561039	20	8 1.6	19.2
47221 1999 VM_{4}	15.5	X	20.37588	217.36105	56.48191	7.88339	0.1024395	0.27652648	2.3333411	20	8 21.8	18.0
47222 1999 VR_{8}	15.2	X	73.51796	292.71955	87.15298	7.18294	0.1238548	0.29299915	2.2450455	20	—	—
47223 1999 VW_{10}	13.8	X	308.41203	68.81123	113.11786	8.44961	0.1291138	0.29433192	2.2382631	20	—	—
47224 1999 VG_{11}	14.3	X	47.07434	157.25165	70.88461	7.13882	0.0714017	0.26943687	2.3740947	20	7 19.1	17.1
47225 1999 VJ_{12}	16.0	X	150.00987	350.61558	348.44901	4.44037	0.2346600	0.30088255	2.2056574	20	1 11.4	19.2
47226 1999 VE_{19}	14.3	X	35.89934	67.05642	57.20836	6.62485	0.0473080	0.30119524	2.2041305	20	1 23.1	16.6
47227 1999 VS_{24}	15.3	X	160.87564	59.60123	41.08201	2.89459	0.1406420	0.26434652	2.4044753	20	6 21.7	18.9
47228 1999 VP_{26}	15.9	X	283.67716	25.18156	53.07828	4.33892	0.1151096	0.27989246	2.3145963	20	10 29.9	17.9
47229 1999 VT_{27}	15.2	X	241.82211	91.48351	26.83150	7.39490	0.0484789	0.28180682	2.3041021	20	10 30.3	17.8
47230 1999 VT_{28}	16.0	X	40.26068	336.80256	47.17547	4.20523	0.1296936	0.29022118	2.2593489	20	—	—
47231 1999 VJ_{35}	15.5	X	351.30428	186.17048	224.64950	4.76771	0.1512821	0.28585562	2.2822938	20	—	—
47232 1999 VQ_{36}	15.6	X	8.62075	284.44484	61.61925	7.38599	0.1770632	0.28109487	2.3079910	20	11 26.4	18.0
47233 1999 VR_{38}	15.7	X	126.43252	170.12697	148.02734	1.02820	0.1933237	0.29409015	2.2394897	20	—	—
47234 1999 VP_{43}	15.5	X	32.66928	5.58558	19.16137	3.56847	0.0218686	0.29150512	2.2527099	20	—	—
47235 1999 VX_{43}	14.8	X	325.90327	64.49662	33.84422	6.34753	0.1673689	0.29002320	2.2603771	20	—	—
47236 1999 VU_{48}	14.4	X	265.43178	32.83578	17.72504	7.24407	0.1018852	0.27491411	2.3424556	20	8 22.8	17.1
47237 1999 VP_{49}	14.6	X	328.65208	183.73125	32.27108	9.73944	0.1912091	0.25775188	2.4453150	20	2 6.9	17.6
47238 1999 VB_{50}	14.3	X	248.90060	34.27836	33.89155	7.39485	0.0880567	0.27468271	2.3437709	20	8 27.0	17.3
47239 1999 VN_{50}	14.8	X	290.87431	115.08350	39.76798	6.20644	0.1214972	0.24193543	2.5507608	20	—	—
47240 1999 VR_{50}	15.1	X	204.46437	218.71037	280.16988	2.10246	0.1116524	0.27667321	2.3325160	20	9 28.8	18.2
47241 1999 VS_{50}	15.2	X	139.73362	85.23797	17.14163	2.77781	0.1299001	0.26325660	2.4111073	20	5 31.7	18.6
47242 1999 VY_{50}	15.1	X	84.71890	203.92401	222.76042	5.21319	0.1192957	0.30017833	2.2091057	20	1 23.3	17.2
47243 1999 VY_{51}	15.9	X	228.33921	80.14562	24.11193	3.93532	0.0870969	0.27636160	2.3342691	20	9 16.8	18.9
47244 1999 VA_{53}	15.4	X	241.99244	207.23832	217.31443	1.48941	0.1819454	0.27047919	2.3679915	20	7 24.8	18.6
47245 1999 VX_{53}	15.9	X	76.79116	194.54425	33.29339	4.98640	0.0759815	0.27536574	2.3398936	20	9 3.2	18.8
47246 1999 VN_{54}	15.3	X	143.70778	230.11726	39.36091	7.51078	0.1328698	0.29126151	2.2539658	20	—	—
47247 1999 VQ_{56}	16.0	X	86.25733	230.24572	47.82337	6.48628	0.1627606	0.28506250	2.2865252	20	11 28.4	19.3
47248 1999 VK_{57}	15.8	X	160.40405	150.90423	44.64985	4.92396	0.1061455	0.28139401	2.3063550	20	10 27.5	19.2
47249 1999 VY_{57}	14.8	X	112.13924	143.09794	56.86613	3.91264	0.1181860	0.27329961	2.3516718	20	9 12.5	18.1
47250 1999 VW_{58}	15.3	X	217.09144	52.87755	51.01537	1.40874	0.1717625	0.27382926	2.3486384	20	8 21.9	18.6
47251 1999 VS_{60}	15.2	X	201.00517	101.25034	61.66592	2.99382	0.0682828	0.28185360	2.3038471	20	11 3.9	18.1
47252 1999 VJ_{65}	15.7	X	167.58818	303.49324	219.11609	2.82300	0.1041154	0.27592210	2.3367472	20	9 19.7	18.9
47253 1999 VN_{65}	15.7	X	97.81191	68.91831	53.78464	1.97570	0.1422886	0.26057305	2.4276331	20	5 12.1	18.6
47254 1999 VO_{67}	15.5	X	127.93831	336.84691	220.59233	6.56669	0.0555132	0.27589302	2.3369114	20	9 19.3	18.6
47255 1999 VA_{70}	15.8	X	352.12810	209.03840	51.19510	3.30405	0.1367824	0.26843086	2.3800226	20	5 30.8	18.0
47256 1999 VA_{72}	14.7	X	68.54487	46.05997	105.24891	3.15524	0.1204604	0.20606588	2.8387817	20	5 9.9	18.4
47257 1999 VA_{79}	15.0	X	47.83012	318.80278	233.73591	3.77245	0.1448293	0.26542638	2.3979493	20	6 7.1	17.4
47258 1999 VS_{80}	15.6	X	49.72454	115.54157	193.01741	7.13383	0.0718478	0.28169546	2.3047093	20	11 17.5	18.4
47259 1999 VJ_{81}	14.9	X	334.21753	244.14572	117.68552	5.13955	0.1159091	0.22944112	2.6425419	20	9 29.4	17.7
47260 1999 VR_{88}	16.1	X	173.91567	121.47896	209.97095	5.72445	0.1440165	0.30334151	2.1937215	20	1 14.5	19.2
47261 1999 VH_{90}	15.4	X	314.98482	84.72122	74.02717	1.26259	0.1239158	0.29717134	2.2239828	20	—	—
47262 1999 VF_{91}	16.0	X	154.13445	263.41545	32.51074	6.22970	0.1240768	0.29708235	2.2244270	20	—	—
47263 1999 VJ_{92}	15.9	X	269.10578	171.23474	25.61928	4.37933	0.0506609	0.29839516	2.2178978	20	—	—
47264 1999 VV_{93}	15.6	X	187.01294	308.66767	213.80897	3.50354	0.1419448	0.28070422	2.3101318	20	10 9.1	18.8
47265 1999 VT_{97}	16.0	X	135.92330	42.99321	213.51699	6.56860	0.1923283	0.28820735	2.2698614	20	12 17.8	19.6
47266 1999 VY_{98}	15.4	X	37.02149	357.75262	211.26804	1.90825	0.1389826	0.26592936	2.3949246	20	6 11.8	17.6
47267 1999 VU_{112}	15.7	X	132.74174	179.68950	285.40226	0.56031	0.1489955	0.26121801	2.4236355	20	5 29.8	19.3
47268 1999 VJ_{119}	16.0	X	32.12754	205.66555	5.88679	5.16193	0.1737008	0.26758954	2.3850087	20	6 10.4	18.1
47269 1999 VH_{135}	14.5	X	261.47134	343.89289	159.39724	5.78050	0.0972835	0.28689937	2.2767551	20	12 29.6	16.8
47270 1999 VE_{138}	15.3	X	331.65746	1.25446	61.31281	1.92280	0.0844616	0.18796257	3.0182494	20	12 2.2	19.0
47271 1999 VY_{143}	14.6	X	18.63416	213.78191	26.51123	7.23976	0.0986253	0.26859337	2.3790625	20	6 20.6	17.1
47272 1999 VF_{144}	15.6	X	325.58429	183.76966	265.47303	5.44775	0.0423713	0.28862926	2.2676489	20	—	—
47273 1999 VE_{145}	15.8	X	166.29523	169.29355	357.54286	6.48017	0.1273062	0.27600502	2.3362791	20	9 23.8	19.2
47274 1999 VJ_{147}	15.9	X	183.71542	1.64256	214.27173	3.34772	0.0700534	0.23694567	2.5864467	20	12 12.0	19.5
47275 1999 VZ_{147}	16.1	X	136.20294	41.54788	267.02590	2.49225	0.0500814	0.29545100	2.2326076	20	—	—
47276 1999 VN_{151}	15.0	X	295.78633	244.52141	42.15840	4.97370	0.1082734	0.21510837	2.7586579	20	4 9.6	18.7
47277 1999 VL_{154}	16.3	X	84.40204	237.51547	45.95010	3.36020	0.1954415	0.28537816	2.2848388	20	12 6.0	19.9
47278 1999 VU_{157}	15.6	X	310.71674	180.63723	287.80816	1.23427	0.0435329	0.29088213	2.2559251	20	—	—
47279 1999 VS_{160}	15.3	X	140.29428	222.65657	10.27468	5.41383	0.0975540	0.28560829	2.2836112	20	11 22.7	18.6
47280 1999 VJ_{161}	15.4	X	347.29708	258.42500	3.13182	2.19497	0.1933565	0.26738999	2.3861951	20	5 17.5	17.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47281 1999 VS_{162}	15.6	X	27.79203	122.25519	32.45151	7.74537	0.1122895	0.25616027	2.4554337	20	3 4.7	18.1
47282 1999 VG_{167}	15.8	X	350.47690	24.42999	12.21331	3.41526	0.1023150	0.28445677	2.2897700	20	12 29.0	18.1
47283 1999 VF_{173}	15.2	X	42.97658	189.05512	62.93148	7.67674	0.0782153	0.27336601	2.3512910	20	8 21.7	18.0
47284 1999 VO_{173}	15.4	X	336.20581	208.04391	332.13551	3.23108	0.1433839	0.25153823	2.4854215	20	1 5.5	18.2
47285 1999 VU_{173}	15.1	X	97.74254	188.02391	89.07825	6.74721	0.0869415	0.28296804	2.2977942	20	12 4.7	18.3
47286 1999 VH_{176}	15.9	X	276.21713	280.35540	190.63406	5.81667	0.1358400	0.28312619	2.2969384	20	12 3.1	18.1
47287 1999 VR_{177}	15.1	X	164.58594	61.56979	128.06196	5.27178	0.0607093	0.28140978	2.3062688	20	10 28.8	18.2
47288 1999 VQ_{178}	15.4	X	230.34115	38.06249	101.99515	7.51634	0.0503886	0.28289800	2.2981734	20	11 16.5	18.3
47289 1999 VD_{188}	15.7	X	112.63224	155.03716	82.67295	6.19994	0.0778443	0.27945530	2.3170095	20	10 31.6	18.9
47290 1999 VS_{188}	15.4	X	46.45286	235.61709	81.74417	7.57030	0.1219840	0.28271284	2.2991768	20	12 1.8	18.3
47291 1999 VG_{195}	15.0	X	4.82113	120.12084	59.49839	5.27724	0.1469425	0.25816615	2.4426984	20	2 23.9	17.3
47292 1999 VO_{203}	15.7	X	197.74918	326.87372	331.16668	8.04951	0.1907439	0.30286563	2.1960188	20	—	—
47293 Masamitsu	15.8	X	300.92171	254.14594	67.28091	3.29144	0.2321569	0.26907078	2.3762476	20	5 11.5	18.2
47294 Blanský les	14.8	X	323.42284	335.73062	79.69992	4.90902	0.1252836	0.28275400	2.2989536	20	12 10.8	16.7
47295 1999 WV_{1}	15.7	X	191.18445	323.02721	134.22361	2.66779	0.1636009	0.26973409	2.3723503	20	7 16.9	19.4
47296 1999 WD_{2}	15.4	X	220.94249	156.40978	69.55308	4.43770	0.0219990	0.24383184	2.5375179	20	—	—
47297 1999 WN_{2}	14.9	X	327.78685	266.15914	79.18134	3.14342	0.0589676	0.27402501	2.3475197	20	9 1.4	17.3
47298 1999 WX_{2}	16.4	X	139.21723	230.22332	124.37278	1.42889	0.1803020	0.29990957	2.2104252	20	1 12.5	19.0
47299 1999 WJ_{3}	15.1	X	187.79194	163.39048	282.73624	6.67369	0.0235384	0.26726152	2.3869598	20	7 4.1	18.0
47300 1999 WN_{4}	15.2	X	310.74297	107.48019	299.02670	3.96878	0.2153307	0.27975717	2.3153425	20	10 25.8	16.7
47301 1999 WA_{6}	15.3	X	65.53634	346.30165	307.29086	4.61662	0.1128340	0.28356980	2.2945423	20	11 20.6	18.4
47302 1999 WG_{6}	15.0	X	124.09629	19.61710	215.52508	5.96110	0.0746598	0.28033740	2.3121465	20	11 8.5	18.0
47303 1999 WU_{7}	13.5	X	88.63008	156.14465	109.89302	14.28350	0.1314673	0.22657275	2.6647978	20	11 9.4	17.8
47304 1999 WH_{8}	14.9	X	290.83392	231.02929	320.46801	4.42045	0.1323510	0.24520206	2.5280557	20	—	—
47305 1999 WL_{24}	15.5	X	352.87255	86.36381	136.32019	2.77726	0.1393205	0.25999515	2.4312291	20	4 4.3	17.7
47306 1999 XB_{4}	14.8	X	105.61738	74.16055	94.98881	5.97817	0.0383771	0.26821605	2.3812932	20	7 12.3	17.7
47307 1999 XR_{4}	15.5	X	199.40281	4.38530	131.46358	2.52908	0.1679252	0.27489448	2.3425671	20	9 15.5	19.0
47308 1999 XP_{5}	16.3	X	129.61572	287.78341	101.00128	1.84647	0.1730108	0.30263975	2.1971114	20	2 15.1	19.0
47309 1999 XV_{6}	14.8	X	145.75513	317.45587	347.07831	1.49187	0.1270977	0.29365238	2.2417148	20	—	—
47310 1999 XG_{7}	15.1	X	271.96914	159.84913	36.30723	5.33285	0.1107338	0.24451032	2.5328215	20	—	—
47311 1999 XN_{7}	14.9	X	159.38530	345.69791	140.70891	2.71667	0.1677783	0.26708399	2.3880174	20	7 24.6	18.6
47312 1999 XG_{8}	15.3	X	30.51509	144.47466	241.41186	4.78391	0.1707768	0.28703119	2.2760580	20	—	—
47313 1999 XH_{11}	15.3	X	327.48209	139.90094	298.13737	4.91549	0.1265547	0.28645195	2.2791253	20	—	—
47314 1999 XK_{11}	15.3	X	176.78776	247.56112	260.29803	11.04150	0.0858404	0.27509477	2.3414299	20	9 5.6	18.9
47315 1999 XW_{11}	15.4	X	57.00664	32.00438	319.56864	5.74862	0.2038771	0.29017949	2.2595654	20	—	—
47316 1999 XM_{12}	13.7	X	295.77029	300.46650	255.95057	12.58566	0.1476772	0.24300367	2.5432799	20	—	—
47317 1999 XL_{13}	15.6	X	353.32375	238.27326	173.96509	5.98579	0.0644554	0.28650782	2.2788289	20	—	—
47318 1999 XO_{13}	14.0	X	279.04894	313.45665	264.73030	13.27820	0.1195637	0.24404918	2.5360111	20	—	—
47319 1999 XF_{14}	14.8	X	195.91716	247.47129	249.24960	10.77130	0.1480560	0.22287521	2.6941899	20	9 2.9	19.3
47320 1999 XA_{15}	13.9	X	296.94898	217.81131	77.66280	22.44271	0.0895260	0.26384788	2.4075038	20	5 2.3	17.2
47321 1999 XS_{19}	15.7	X	98.62991	144.85360	257.93079	2.78780	0.1216560	0.30199356	2.2002444	20	1 12.7	17.7
47322 1999 XS_{21}	15.2	X	16.65906	106.64965	189.39766	9.24764	0.0975480	0.27452079	2.3446925	20	9 11.1	17.6
47323 1999 XD_{22}	14.6	X	191.28637	353.37276	141.46810	9.80726	0.1023265	0.21940790	2.7224999	20	9 5.3	18.7
47324 1999 XN_{22}	15.5	X	175.41905	18.55352	207.33485	5.67927	0.0141616	0.28706182	2.2758961	20	—	—
47325 1999 XQ_{23}	15.8	X	91.00918	274.97980	95.92565	2.06892	0.1015073	0.29604404	2.2296250	20	—	—
47326 1999 XP_{25}	14.7	X	13.76847	149.27946	75.51381	7.87371	0.0525626	0.26430870	2.4047046	20	5 17.7	17.4
47327 1999 XZ_{25}	15.0	X	112.14405	260.99419	78.98854	8.82011	0.1831009	0.29507198	2.2345191	20	—	—
47328 1999 XZ_{27}	15.2	X	107.86018	120.72525	12.80683	2.37006	0.1629148	0.26350698	2.4095797	20	6 10.9	18.5
47329 1999 XF_{30}	14.9	X	244.71859	3.91062	107.96352	7.50242	0.0750879	0.27783193	2.3260263	20	10 25.0	17.8
47330 1999 XQ_{31}	14.0	X	356.50669	155.82775	124.45228	9.80762	0.1088010	0.21443741	2.7644093	20	7 7.9	17.2
47331 1999 XB_{32}	15.4	X	22.34207	183.65997	247.64105	2.90939	0.1323819	0.23883010	2.5728236	20	—	—
47332 1999 XC_{32}	15.0	X	268.59354	156.43810	260.25693	5.39534	0.1052346	0.26993263	2.3711869	20	8 28.9	18.0
47333 1999 XU_{32}	15.3	X	181.16748	182.93516	241.50962	1.99546	0.1705475	0.26022659	2.4297873	20	5 25.3	19.1
47334 1999 XX_{32}	13.2	X	30.39652	75.56435	289.33870	13.84089	0.1186897	0.23123202	2.6288798	20	12 30.3	16.6
47335 1999 XB_{33}	14.9	X	146.57544	340.42934	112.10327	3.85546	0.2109903	0.25847535	2.4407500	20	5 31.8	18.8
47336 1999 XT_{34}	14.3	X	283.01504	191.87188	298.86338	9.96480	0.1074396	0.23144179	2.6272911	20	12 28.1	17.2
47337 1999 XB_{36}	14.6	X	288.06910	94.99012	319.18006	6.12976	0.0937495	0.27482075	2.3429860	20	9 28.9	17.1
47338 1999 XG_{36}	14.4	X	97.89516	143.82079	51.83948	7.09133	0.0591918	0.26610621	2.3938635	20	8 14.4	17.6
47339 1999 XH_{38}	14.7	X	255.55253	136.66723	80.64531	14.43202	0.0916125	0.24461031	2.5321312	20	—	—
47340 1999 XK_{39}	15.7	X	67.14635	223.03116	157.22513	3.37322	0.1208288	0.29200797	2.2501229	20	—	—
47341 1999 XX_{41}	16.0	X	89.06441	282.49449	33.00445	3.09935	0.1586956	0.28937150	2.2637695	20	—	—
47342 1999 XL_{43}	15.4	X	324.38803	193.93631	284.84777	1.68952	0.1062197	0.24230839	2.5481427	20	—	—
47343 1999 XL_{45}	15.3	X	139.70741	250.19352	68.21974	6.40454	0.2661819	0.29763311	2.2216819	20	—	—
47344 1999 XM_{45}	14.8	X	21.39818	127.54352	67.69196	3.30542	0.1235480	0.26013749	2.4303422	20	4 19.7	17.1
47345 1999 XZ_{47}	15.4	X	22.97446	354.83510	73.96872	4.08872	0.0993022	0.29211233	2.2495870	20	—	—
47346 1999 XJ_{48}	15.1	X	247.35865	100.29691	81.46235	6.53481	0.1054506	0.23966653	2.5668340	20	—	—
47347 1999 XU_{49}	15.4	X	351.56582	6.26745	254.07350	5.35391	0.1189725	0.26594512	2.3948300	20	5 30.6	17.7
47348 1999 XJ_{50}	14.6	X	62.14311	109.33409	67.91273	9.47561	0.1975735	0.21271517	2.7793106	20	6 15.7	18.1
47349 1999 XD_{52}	16.0	X	215.12654	273.71680	57.34095	5.15905	0.1793171	0.30727573	2.1749563	20	2 26.9	19.4
47350 1999 XR_{52}	14.8	X	266.68688	224.77389	264.85642	3.97405	0.0855345	0.28337127	2.2956139	20	12 19.0	17.0
47351 1999 XO_{57}	15.2	X	199.94730	115.30027	84.17360	8.17242	0.0810651	0.23577008	2.5950372	20	12 8.7	18.7
47352 1999 XE_{58}	16.2	X	154.15251	121.38844	209.06887	2.07006	0.1717073	0.29854088	2.2171760	20	—	—
47353 1999 XB_{59}	15.5	X	36.25672	237.14290	59.49920	3.72404	0.1725534	0.27766359	2.3269663	20	10 28.3	18.1
47354 1999 XU_{59}	14.8	X	95.94664	2.37561	248.69691	5.32754	0.1336757	0.27754137	2.3276494	20	10 30.9	18.1
47355 1999 XG_{64}	15.6	X	105.11777	71.57888	80.00574	2.36074	0.1300620	0.26329319	2.4108839	20	6 28.6	19.0
47356 1999 XJ_{64}	16.1	X	79.04868	269.64585	76.37167	1.43160	0.1304704	0.28975635	2.2617647	20	—	—
47357 1999 XK_{64}	15.4	X	69.54807	94.40306	76.47940	7.41173	0.0271657	0.26275679	2.4141639	20	5 22.6	18.2
47358 1999 XX_{66}	14.4	X	243.65733	338.69299	254.81988	12.27231	0.1234376	0.24534972	2.5270413	20	—	—
47359 1999 XJ_{69}	16.0	X	91.25037	273.37367	142.24859	0.44507	0.1271066	0.29883541	2.2157190	20	1 21.3	18.2
47360 1999 XN_{70}	16.3	X	234.64884	264.35443	133.75487	2.16273	0.1253417	0.26787203	2.3833316	20	6 17.1	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47361 1999 XL_{74}	16.4	X	274.93235	312.92788	106.78808	3.40351	0.1847433	0.27547109	2.3392970	20	9 4.7	18.8
47362 1999 XG_{75}	15.3	X	203.63664	241.28606	110.34301	3.38874	0.1852598	0.25868473	2.4394328	20	3 16.1	19.2
47363 1999 XX_{75}	14.6	X	103.03168	358.31373	98.06306	5.39569	0.0588494	0.25606008	2.4560741	20	4 3.2	17.7
47364 1999 XH_{78}	15.0	X	196.77845	294.35773	261.58429	0.99164	0.1196176	0.23360398	2.6110542	20	11 25.7	18.9
47365 1999 XY_{82}	14.9	X	331.18105	356.07433	98.51273	9.13600	0.1621614	0.23740195	2.5831315	20	—	—
47366 1999 XO_{86}	15.5	X	256.44558	231.09501	189.81114	1.79800	0.1949845	0.27138903	2.3626960	20	8 4.9	18.5
47367 1999 XB_{87}	15.2	X	301.80954	258.40152	113.23637	5.67445	0.2197159	0.27204864	2.3588754	20	8 3.3	17.1
47368 1999 XZ_{87}	15.8	X	300.38428	236.82304	173.13677	1.56326	0.1615604	0.27699187	2.3307268	20	10 12.4	17.6
47369 1999 XA_{88}	13.9	X	100.69027	82.78680	112.82922	6.83883	0.0837609	0.26673976	2.3900714	20	8 19.4	17.1
47370 1999 XL_{88}	15.2	X	191.92016	282.24984	144.11638	2.44533	0.1715415	0.26392494	2.4070351	20	6 7.1	19.0
47371 1999 XJ_{90}	14.1	X	279.70202	85.20737	78.56950	2.75866	0.2834955	0.18704910	3.0280680	20	12 26.5	17.5
47372 1999 XW_{90}	15.4	X	154.08343	302.18159	99.13041	2.84163	0.0623621	0.25450821	2.4660479	20	3 24.5	18.7
47373 1999 XT_{91}	14.1	X	186.68803	345.19121	294.96002	14.14723	0.1511955	0.24035947	2.5618983	20	—	—
47374 1999 XX_{91}	14.6	X	152.01248	151.25670	90.66701	11.42061	0.1025211	0.23261142	2.6184766	20	12 7.9	18.5
47375 1999 XT_{94}	14.9	X	166.56698	26.75959	57.82644	1.61302	0.1682182	0.26013370	2.4303658	20	6 6.6	18.8
47376 1999 XW_{94}	13.5	X	353.44521	311.61172	22.15747	5.59566	0.0734003	0.21741157	2.7391403	20	9 17.8	16.9
47377 1999 XY_{94}	14.6	X	268.12533	213.29495	108.43368	14.57741	0.1945698	0.25865800	2.4396008	20	4 13.2	18.5
47378 1999 XN_{96}	15.2	X	303.66756	147.10694	268.46912	2.56081	0.1525322	0.27934849	2.3176001	20	10 28.6	16.9
47379 1999 XB_{97}	14.2	X	110.58490	257.95829	273.14966	5.71180	0.1258613	0.26589905	2.3951067	20	7 30.2	17.5
47380 1999 XC_{98}	13.9	X	315.78355	109.11526	77.17701	4.10928	0.1526346	0.24664201	2.5182066	20	—	—
47381 1999 XQ_{98}	14.9	X	341.31580	36.24109	40.55701	2.75987	0.1261289	0.23763421	2.5814482	20	—	—
47382 1999 XX_{98}	14.4	X	308.75246	174.52944	76.38800	7.37753	0.1052314	0.25561973	2.4588940	20	3 10.6	17.6
47383 1999 XG_{99}	15.5	X	2.14355	345.50332	72.13961	7.55337	0.1616762	0.28663105	2.2781757	20	—	—
47384 1999 XX_{99}	15.3	X	92.50768	288.02872	67.44426	3.98133	0.0983703	0.29032446	2.2588131	20	—	—
47385 1999 XA_{101}	14.4	X	298.49296	353.95061	88.30504	7.61410	0.1406498	0.27977227	2.3152591	20	12 1.6	16.3
47386 1999 XX_{101}	13.3	X	39.22498	285.97471	296.26399	6.11813	0.1040963	0.21211622	2.7845400	20	6 28.5	16.7
47387 1999 XF_{103}	15.4	X	36.21536	251.70777	82.33612	7.77984	0.1479830	0.27897891	2.3196465	20	12 13.6	18.3
47388 1999 XY_{103}	13.4	X	236.62175	115.21367	95.54631	14.26428	0.1425656	0.23581381	2.5947164	20	—	—
47389 1999 XK_{106}	14.9	X	263.47191	223.01259	271.82384	5.09042	0.0997257	0.28639044	2.2794516	20	12 20.5	17.0
47390 1999 XA_{107}	14.9	X	265.48212	333.23480	268.00648	4.51134	0.1208979	0.30194114	2.2004990	20	—	—
47391 1999 XL_{108}	15.5	X	201.07561	299.47951	192.88994	3.83430	0.0864423	0.27647072	2.3336548	20	9 19.3	18.5
47392 1999 XT_{109}	15.8	X	2.91785	316.94555	90.66441	5.09149	0.1932441	0.28789749	2.2714898	20	—	—
47393 1999 XX_{109}	15.9	X	247.71320	311.71763	152.65963	2.45750	0.1606977	0.27809479	2.3245603	20	10 1.6	18.5
47394 1999 XE_{110}	15.6	X	298.22653	233.16794	72.11617	4.59012	0.0983134	0.31466304	2.1407809	20	5 5.6	17.7
47395 1999 XM_{111}	14.8	X	176.11389	106.06570	348.29563	12.30770	0.2129391	0.26296306	2.4129013	20	6 29.7	19.1
47396 1999 XB_{115}	14.2	X	231.50310	217.34561	326.61505	13.21215	0.0921583	0.24016636	2.5632715	20	12 28.7	17.7
47397 1999 XS_{115}	15.0	X	98.65267	302.80326	344.62114	6.42678	0.1207119	0.28700746	2.2761834	20	12 21.1	18.4
47398 1999 XC_{116}	15.3	X	197.82600	99.58002	343.43134	6.53456	0.1093556	0.27000833	2.3707437	20	7 8.9	18.8
47399 1999 XK_{116}	15.0	X	139.87473	257.09014	267.42555	6.55226	0.0611269	0.27299791	2.3534041	20	8 18.8	18.4
47400 1999 XV_{116}	16.1	X	154.81371	345.02343	18.98848	4.73065	0.1724625	0.30398966	2.1906021	20	2 11.5	19.1
47401 1999 XG_{120}	15.2	X	358.40946	238.40006	28.08438	6.50936	0.1257243	0.26860408	2.3789993	20	6 24.1	17.4
47402 1999 XQ_{120}	15.8	X	96.01551	298.77783	32.96743	4.17033	0.1856479	0.29205286	2.2498924	20	—	—
47403 1999 XS_{121}	15.6	X	148.76928	238.07790	23.86049	2.82638	0.1750127	0.28722457	2.2750363	20	—	—
47404 1999 XU_{122}	15.7	X	184.40085	151.00050	334.21326	5.32302	0.0989808	0.27272463	2.3549759	20	8 20.4	18.8
47405 1999 XC_{125}	15.4	X	68.34849	325.35767	10.69737	5.30701	0.0928601	0.28757829	2.2731704	20	—	—
47406 1999 XV_{126}	15.6	X	193.06277	30.55080	37.82402	6.41262	0.0911388	0.26631030	2.3926403	20	6 12.4	19.0
47407 1999 XC_{129}	15.1	X	19.18072	210.79732	352.88023	6.01815	0.0853549	0.26012612	2.4304130	20	4 23.1	17.6
47408 1999 XH_{130}	16.0	X	302.19746	9.88490	20.12788	5.13730	0.1391816	0.27617546	2.3353178	20	9 17.6	18.2
47409 1999 XS_{132}	15.0	X	191.57010	144.13488	335.44663	6.92692	0.0690810	0.27005353	2.3704792	20	8 22.9	18.1
47410 1999 XE_{135}	15.2	X	152.20658	200.47194	139.23742	6.67168	0.2358643	0.29922617	2.2137896	20	1 13.5	18.3
47411 1999 XZ_{136}	16.0	X	28.86002	311.33064	107.42140	6.78064	0.1456693	0.29133097	2.2536075	20	—	—
47412 1999 XD_{140}	15.2	X	169.76531	75.97201	120.99187	3.27088	0.0717549	0.22673745	2.6635072	20	11 2.0	19.1
47413 1999 XR_{144}	15.2	X	11.46577	117.10741	306.60845	4.08802	0.1144339	0.28904150	2.2654923	20	—	—
47414 1999 XN_{147}	15.7	X	336.53551	168.55623	86.87519	0.75173	0.1341683	0.26391228	2.4071121	20	4 21.9	17.8
47415 1999 XD_{154}	14.4	X	101.98427	296.12575	185.61877	3.53216	0.0317434	0.21104735	2.7939338	20	5 2.0	18.1
47416 1999 XE_{160}	15.5	X	103.54865	240.15324	124.52275	5.43750	0.1655703	0.29355261	2.2422227	20	—	—
47417 1999 XL_{160}	14.4	X	49.07515	106.80828	126.32373	6.25795	0.0687254	0.26491660	2.4010245	20	7 27.7	17.2
47418 1999 XB_{165}	14.7	X	327.31554	78.14640	4.30837	4.49088	0.1720011	0.28147604	2.3059069	20	—	—
47419 1999 XT_{165}	14.8	X	244.58746	10.66123	92.66495	4.71829	0.1912871	0.22427549	2.6829640	20	9 15.3	18.6
47420 1999 XB_{166}	14.9	X	351.22745	59.25834	351.47516	8.95081	0.1039521	0.28677685	2.2774035	20	—	—
47421 1999 XN_{166}	15.2	X	302.44726	78.18833	347.97879	6.30213	0.0950151	0.28127579	2.3070012	20	11 13.8	17.6
47422 1999 XK_{168}	15.3	X	342.95490	343.45250	32.50223	7.20752	0.1176905	0.28114718	2.3077047	20	11 15.4	17.6
47423 1999 XR_{168}	15.4	X	194.52688	0.39170	346.14929	4.74798	0.1814014	0.30648847	2.1786792	20	2 26.0	18.7
47424 1999 XE_{169}	14.4	X	229.96752	152.55469	43.37392	5.41323	0.0619276	0.23734356	2.5835552	20	—	—
47425 1999 XW_{169}	14.8	X	162.59340	31.38647	57.53235	6.11995	0.0782617	0.26185562	2.4196996	20	6 5.4	18.2
47426 1999 XZ_{169}	15.1	X	287.80260	154.80895	34.68215	4.07737	0.0606296	0.24487917	2.5302775	20	—	—
47427 1999 XA_{172}	14.7	X	107.18133	63.80886	314.26636	6.59509	0.1140749	0.29447826	2.2375215	20	—	—
47428 1999 XK_{172}	15.5	X	7.28726	32.85972	352.28918	3.59649	0.1935946	0.28300792	2.2975783	20	—	—
47429 1999 XN_{172}	13.9	X	223.91221	96.80450	62.91517	7.40150	0.2282018	0.18012095	3.1052261	20	10 22.9	18.8
47430 1999 XK_{173}	14.7	X	80.73290	125.48778	341.58450	5.90067	0.1057905	0.25229955	2.4804191	20	3 20.7	17.7
47431 1999 XZ_{173}	14.4	X	343.58803	343.33382	7.57872	6.47398	0.1496515	0.27387468	2.3483786	20	10 10.4	16.2
47432 1999 XT_{175}	14.1	X	75.96525	100.18238	13.51140	6.86203	0.1086698	0.25187007	2.4832380	20	3 25.3	16.9
47433 1999 XB_{176}	14.5	X	158.15958	31.88964	63.27724	8.75869	0.0922516	0.21197293	2.7857947	20	6 8.7	18.8
47434 1999 XD_{176}	13.8	X	287.05568	101.72012	72.23608	9.46787	0.1228039	0.18946912	3.0022286	20	—	—
47435 1999 XK_{176}	14.0	X	205.97348	200.00670	307.77923	15.01952	0.2248147	0.22357631	2.6885546	20	9 18.2	18.6
47436 1999 XM_{176}	13.8	X	31.01481	328.69830	71.09360	10.07585	0.0693920	0.23635555	2.5907501	20	—	—
47437 1999 XR_{176}	14.4	X	293.03901	22.69746	350.08563	9.51565	0.2359897	0.27052111	2.3677469	20	7 17.3	17.0
47438 1999 XD_{177}	14.5	X	20.83882	62.15161	63.88249	6.57110	0.1007331	0.29348483	2.2425680	20	—	—
47439 1999 XB_{178}	14.3	X	195.59256	307.84121	321.31099	8.61347	0.1434985	0.24037070	2.5618185	20	—	—
47440 1999 XV_{181}	14.9	X	42.85901	346.98907	359.43916	6.95927	0.1992814	0.28652326	2.2787471	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47441 1999 XS_{192}	15.5	X	275.52516	93.74289	351.36447	6.87971	0.0786493	0.27764793	2.3270538	20	10 26.6	18.2
47442 1999 XG_{193}	15.6	X	151.18798	0.42429	42.69957	5.51278	0.1349815	0.30478759	2.1867771	20	3 26.9	18.5
47443 1999 XE_{196}	15.4	X	333.88611	342.55533	357.51524	4.83613	0.2668048	0.27439024	2.3454362	20	9 2.9	16.2
47444 1999 XA_{205}	14.2	X	174.15102	127.61329	21.80589	9.39293	0.1401647	0.22080567	2.7109983	20	9 7.0	18.6
47445 1999 XQ_{206}	14.2	X	100.37219	39.05479	328.79941	13.11308	0.2059899	0.24390144	2.5370351	20	—	—
47446 1999 XM_{211}	15.6	X	285.77817	73.66219	2.30690	8.34880	0.0704589	0.27858582	2.3218280	20	10 31.0	18.1
47447 1999 XW_{213}	15.9	X	34.69028	240.57914	142.19657	3.98251	0.1475297	0.28760016	2.2730551	20	—	—
47448 1999 XN_{214}	15.9	X	194.98193	55.52410	31.75935	3.00052	0.1391821	0.26778420	2.3838527	20	7 9.2	19.6
47449 1999 XM_{215}	15.3	X	50.51144	175.34989	191.61236	5.29343	0.1806688	0.28622587	2.2803252	20	—	—
47450 1999 XD_{218}	14.8	X	258.14965	231.42404	100.46243	7.42728	0.1089969	0.25890030	2.4380785	20	4 21.6	18.2
47451 1999 XR_{221}	15.7	X	121.96086	338.17536	49.14301	6.53626	0.1177261	0.29996959	2.2101304	20	1 27.9	18.3
47452 1999 XY_{221}	15.2	X	344.66626	242.36811	43.03962	6.51423	0.0925467	0.26697722	2.3886540	20	6 27.2	17.7
47453 1999 XB_{222}	15.4	X	223.09255	86.97999	326.47822	4.57047	0.0317457	0.26756450	2.3851574	20	7 5.5	18.4
47454 1999 XL_{222}	14.7	X	328.11168	354.98815	311.37963	5.77502	0.1337462	0.26681272	2.3896357	20	6 25.2	16.9
47455 1999 XK_{227}	15.9	X	180.89030	257.18520	94.14046	1.24337	0.2201117	0.25284824	2.4768294	20	2 25.9	20.0
47456 1999 XZ_{231}	14.0	X	288.90306	68.79783	1.77642	12.32985	0.1784710	0.27507799	2.3415251	20	10 14.1	16.1
47457 1999 XF_{234}	14.8	X	245.42355	33.34994	152.81220	8.04439	0.1630521	0.23943207	2.5685095	20	—	—
47458 1999 XR_{238}	14.1	X	68.72759	267.29282	101.01877	11.40696	0.1367787	0.23553594	2.5967567	20	—	—
47459 1999 XO_{241}	15.4	X	107.83247	0.82256	200.95449	5.78264	0.0410899	0.27182897	2.3601461	20	8 29.2	18.4
47460 1999 XQ_{241}	15.1	X	348.60965	357.36943	111.94564	5.32572	0.1115138	0.24361714	2.5390085	20	—	—
47461 1999 XG_{242}	14.1	X	285.87218	281.87500	47.02653	10.04869	0.1172853	0.26241236	2.4162759	20	5 18.1	17.1
47462 1999 XG_{256}	15.2	X	60.32614	144.18915	324.76700	6.78818	0.0667051	0.25399721	2.4693543	20	2 16.7	18.0
47463 1999 XE_{258}	14.5	X	211.66891	114.76530	359.91420	6.47422	0.1007962	0.27015346	2.3698946	20	9 7.3	17.8
47464 1999 YM_{3}	14.1	X	321.73592	354.71826	182.77176	21.87808	0.0477922	0.24104547	2.5570353	20	—	—
47465 1999 YZ_{4}	15.2	X	11.01688	292.05095	63.99823	3.86777	0.1459694	0.27879136	2.3206867	20	12 8.4	17.5
47466 Mayatoyoshima	14.9	X	277.35748	311.46517	164.54438	23.21479	0.2664849	0.28078909	2.3096662	20	11 27.6	17.4
47467 1999 YF_{13}	14.7	X	148.65100	57.77174	101.14650	7.68113	0.0449634	0.27201191	2.3590878	20	8 27.4	17.9
47468 1999 YS_{13}	14.9	X	267.30100	231.79276	139.82450	3.13222	0.2027945	0.26643870	2.3918715	20	6 9.9	18.2
47469 1999 YT_{20}	15.5	X	90.26465	172.95898	101.32683	2.65521	0.0249946	0.22618989	2.6678040	20	11 5.7	19.2
47470 2000 AF	15.6	X	11.23755	245.44074	168.68752	5.29113	0.1433659	0.28844583	2.2686102	20	—	—
47471 2000 AM	14.7	X	169.21500	181.53927	287.89975	2.90273	0.1652436	0.26376480	2.4080093	20	7 11.7	18.3
47472 2000 AN_{2}	14.5	X	310.22707	97.38468	333.38241	13.51437	0.1039424	0.22909852	2.6451757	20	11 15.4	17.9
47473 2000 AU_{2}	15.1	X	275.41017	331.73678	83.76776	3.41228	0.2058847	0.27308235	2.3529189	20	8 26.0	17.6
47474 2000 AH_{5}	14.8	X	291.39010	263.35116	282.66398	14.23773	0.1149948	0.24207200	2.5498014	20	—	—
47475 2000 AR_{7}	14.6	X	13.23085	13.93780	329.42815	6.67726	0.1329643	0.27901168	2.3194649	20	11 19.8	17.2
47476 2000 AJ_{8}	15.3	X	280.93367	308.22654	71.58171	7.76088	0.1102819	0.27012619	2.3700541	20	7 29.0	18.1
47477 2000 AV_{9}	14.9	X	209.43220	64.00965	61.47801	7.09578	0.0539157	0.27208303	2.3586767	20	9 28.1	18.0
47478 2000 AW_{10}	15.1	X	84.09751	344.83967	342.20519	4.56385	0.1496903	0.28564999	2.2833890	20	—	—
47479 2000 AH_{11}	15.6	X	197.10928	226.64018	273.51998	6.19613	0.0575058	0.27504704	2.3417008	20	9 24.8	18.9
47480 2000 AE_{12}	16.0	X	165.33606	68.95899	357.64614	2.88011	0.1084555	0.30966659	2.1637470	20	5 8.9	19.0
47481 2000 AR_{12}	15.0	X	298.51832	93.77662	65.82903	5.16670	0.0742145	0.24198844	2.5503883	20	—	—
47482 2000 AT_{13}	14.8	X	179.34737	312.05714	278.18975	12.77816	0.1305115	0.23520290	2.5992074	20	12 19.4	18.7
47483 2000 AJ_{17}	13.5	X	86.08994	162.23402	91.36631	14.83352	0.1401202	0.22508954	2.6764913	20	10 24.6	17.8
47484 2000 AC_{18}	15.0	X	141.70318	198.31265	282.05421	5.69146	0.0860814	0.26279879	2.4139067	20	6 24.8	18.3
47485 2000 AO_{22}	13.8	X	44.02068	148.05773	77.97059	10.23681	0.1034383	0.21439717	2.7647552	20	7 11.7	17.2
47486 2000 AG_{25}	16.3	X	166.50135	61.83323	10.66671	1.46065	0.1492576	0.26075276	2.4265176	20	5 21.0	19.9
47487 2000 AK_{30}	15.1	X	272.24580	309.68251	58.68693	2.13746	0.2004677	0.26721847	2.3872161	20	6 11.6	18.0
47488 2000 AZ_{32}	14.3	X	245.11246	137.45809	317.79601	6.91433	0.1174395	0.27251643	2.3561753	20	9 17.4	17.4
47489 2000 AY_{35}	15.3	X	112.09209	282.45812	62.55840	4.93438	0.2084382	0.29224895	2.2488859	20	—	—
47490 2000 AE_{37}	15.7	X	68.98462	5.29413	337.63193	1.24100	0.2294076	0.28571973	2.2830175	20	—	—
47491 2000 AE_{39}	15.1	X	297.69487	81.04736	321.31920	13.24081	0.0585292	0.22404010	2.6848429	20	9 18.9	18.6
47492 2000 AC_{41}	15.2	X	10.84704	335.25154	84.42042	5.62443	0.1614828	0.23688787	2.5868674	20	—	—
47493 2000 AV_{41}	14.9	X	58.68919	17.69593	340.80660	8.45863	0.1848131	0.28311884	2.2969782	20	—	—
47494 Gerhardangl	15.6	X	330.92105	201.22337	264.77194	1.38883	0.1451991	0.23704152	2.5857494	20	—	—
47495 2000 AD_{43}	13.8	X	275.23082	26.36731	116.75524	16.78247	0.1156617	0.23442748	2.6049358	20	—	—
47496 2000 AU_{43}	15.2	X	50.85241	257.85361	97.64905	2.09259	0.1667905	0.28346717	2.2950961	20	—	—
47497 2000 AE_{44}	15.6	X	351.18205	277.38089	47.41666	1.16806	0.2371384	0.27061012	2.3672277	20	9 25.3	17.0
47498 2000 AK_{45}	14.9	X	231.17721	247.02474	269.42215	5.78457	0.0624854	0.28019236	2.3129444	20	12 5.1	17.7
47499 2000 AH_{50}	15.0	X	163.22453	279.16100	127.20385	7.67911	0.1379573	0.25596073	2.4567096	20	4 17.5	18.8
47500 2000 AX_{50}	15.6	X	111.19227	331.62439	44.22568	4.28818	0.0882141	0.24382659	2.5375543	20	1 1.9	18.9
47501 2000 AN_{53}	14.7	X	139.04170	133.11419	106.10593	15.14006	0.0811717	0.22900596	2.6458884	20	11 24.3	18.9
47502 2000 AN_{54}	14.5	X	332.87154	107.81217	104.17050	13.37932	0.0374614	0.20174654	2.8791568	20	3 10.0	18.5
47503 2000 AQ_{54}	16.0	X	258.61539	310.17894	79.63000	2.28401	0.1960832	0.26765985	2.3845910	20	6 25.1	19.2
47504 2000 AJ_{56}	14.8	X	153.35207	77.77465	98.74064	3.36570	0.0715831	0.22067745	2.7120483	20	9 18.7	18.7
47505 2000 AB_{57}	14.9	X	328.43884	245.61280	111.66074	7.03653	0.0591715	0.22162875	2.7042821	20	9 12.8	18.2
47506 2000 AA_{58}	14.1	X	94.35437	113.24469	109.08787	5.91157	0.0149740	0.26770089	2.3843473	20	9 9.9	17.1
47507 2000 AM_{58}	15.2	X	248.77180	287.72454	106.14769	3.56170	0.2120590	0.26633814	2.3924735	20	6 17.1	18.7
47508 2000 AQ_{58}	14.1	X	109.85283	98.95911	108.75308	10.29265	0.0298260	0.21899790	2.7258968	20	9 7.3	18.0
47509 2000 AJ_{60}	15.5	X	342.56661	292.55112	106.54706	1.13023	0.2102748	0.27954439	2.3165172	20	—	—
47510 2000 AL_{60}	14.0	X	36.64134	117.11243	121.21004	10.03987	0.1096976	0.21136867	2.7911016	20	7 17.3	17.4
47511 2000 AN_{60}	13.8	X	173.51176	340.61522	307.21888	12.08306	0.1422169	0.18841012	3.0134678	20	—	—
47512 2000 AY_{60}	15.0	X	304.95312	62.81425	7.77807	1.84032	0.0642283	0.22792654	2.6542355	20	11 12.8	18.2
47513 2000 AS_{66}	14.9	X	229.86737	267.71605	117.97729	13.82165	0.1694785	0.26043828	2.4284705	20	5 25.5	18.8
47514 2000 AW_{66}	13.9	X	355.03837	205.32092	97.28914	10.26281	0.1469171	0.21442499	2.7645161	20	8 10.9	16.9
47515 2000 AB_{69}	15.8	X	351.95243	287.68640	103.06891	6.52037	0.1263654	0.28320908	2.2964902	20	12 25.9	18.2
47516 2000 AQ_{69}	13.7	X	190.90189	75.45301	96.32221	14.19593	0.1240433	0.22891044	2.6466244	20	10 26.4	18.0
47517 2000 AT_{71}	15.0	X	91.10142	158.16612	128.39693	4.08032	0.1621069	0.28256459	2.2999809	20	12 14.1	18.5
47518 2000 AU_{71}	15.7	X	180.74693	228.47782	103.87709	4.54221	0.1728282	0.30158780	2.2022175	20	1 26.5	18.9
47519 2000 AK_{79}	14.2	X	236.16341	213.43117	124.23577	7.98361	0.1506389	0.25878428	2.4388071	20	3 31.9	18.0
47520 2000 AO_{79}	15.2	X	283.43377	283.96696	140.25566	6.74435	0.0753839	0.27522950	2.3406657	20	10 14.8	17.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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47521 2000 AS_{84}	14.8	X	317.05937	268.03429	268.55381	2.68201	0.0884609	0.19485312	2.9466676	20	—	—
47522 2000 AW_{84}	15.7	X	144.62207	313.62851	128.79195	3.57572	0.1504854	0.25804724	2.4434488	20	5 13.7	19.3
47523 2000 AB_{85}	15.2	X	340.82780	309.39192	136.08406	4.86882	0.1127612	0.28459754	2.2890149	20	—	—
47524 2000 AJ_{90}	15.0	X	222.14360	143.44564	284.52608	6.75624	0.0456589	0.21675011	2.7447102	20	7 18.8	18.9
47525 2000 AL_{90}	15.2	X	351.99458	317.55143	187.24997	2.98720	0.0651430	0.24398215	2.5364755	20	—	—
47526 2000 AM_{90}	14.9	X	256.25541	143.41476	208.33282	1.81573	0.2077770	0.26212875	2.4180184	20	4 30.5	18.6
47527 2000 AR_{90}	15.2	X	5.55037	214.13923	266.22174	3.22667	0.0889630	0.24264814	2.5457636	20	—	—
47528 2000 AE_{95}	15.4	X	212.27683	293.95299	128.00079	6.36191	0.0924195	0.26220503	2.4175495	20	6 26.5	18.8
47529 2000 AM_{96}	14.0	X	239.57147	34.90904	131.28419	15.82904	0.0314795	0.22881326	2.6473737	20	12 21.9	17.7
47530 2000 AO_{96}	13.4	X	7.20645	16.33573	333.20273	12.16711	0.1774531	0.22331125	2.6906816	20	11 7.0	16.7
47531 2000 AY_{96}	13.6	X	141.05840	49.73079	107.23693	10.04403	0.0951265	0.21340476	2.7733200	20	8 11.1	17.8
47532 2000 AF_{97}	13.6	X	181.45613	221.26945	345.34199	12.72569	0.1150586	0.22456053	2.6806931	20	11 17.5	17.9
47533 2000 AY_{97}	13.8	X	187.59327	120.74695	1.59868	8.92260	0.1000816	0.21531729	2.7568731	20	8 17.7	18.1
47534 2000 AD_{98}	13.7	X	209.98906	88.13634	82.46386	5.92267	0.1185580	0.17524763	3.1625297	20	10 31.9	18.5
47535 2000 AA_{99}	15.7	X	106.52484	329.72280	73.04788	2.97798	0.1397024	0.30225395	2.1989806	20	1 29.4	18.0
47536 2000 AB_{102}	14.9	X	96.89557	38.34697	97.43585	10.37860	0.1356917	0.26138989	2.4225729	20	5 29.8	18.2
47537 2000 AP_{108}	15.3	X	334.53606	226.25342	167.30873	5.74112	0.0319787	0.22928615	2.6437325	20	11 9.7	18.6
47538 2000 AR_{113}	14.3	X	347.29263	19.58548	125.77664	14.98564	0.1178400	0.24354477	2.5395114	20	—	—
47539 2000 AZ_{113}	13.9	X	151.61567	153.62708	135.43821	15.60985	0.1807391	0.23733350	2.5836282	20	—	—
47540 2000 AK_{115}	14.9	X	140.73947	334.47979	177.98530	4.88882	0.0962854	0.26487255	2.4012908	20	8 5.9	18.4
47541 2000 AX_{115}	15.0	X	53.89674	48.70185	146.38379	8.76056	0.0625119	0.25882335	2.4385617	20	6 9.2	18.1
47542 2000 AN_{118}	15.2	X	243.05903	219.04371	160.73474	7.22219	0.1184009	0.26299386	2.4127129	20	6 3.8	18.6
47543 2000 AP_{118}	15.3	X	141.06268	187.40682	239.47616	5.02752	0.0972933	0.25501837	2.4627580	20	4 12.2	18.7
47544 2000 AW_{118}	15.8	X	216.28090	172.42854	241.89512	3.30170	0.2090396	0.26481842	2.4016179	20	6 12.1	19.5
47545 2000 AZ_{118}	14.8	X	319.80137	322.36808	125.82514	22.34701	0.0241619	0.23251222	2.6192213	20	12 30.8	18.4
47546 2000 AN_{119}	15.1	X	215.56214	245.10399	173.01076	5.89896	0.1175603	0.26387315	2.4073500	20	6 22.9	18.6
47547 2000 AM_{121}	13.9	X	92.63575	351.57616	216.63711	2.13634	0.2358663	0.16569385	3.2829564	20	8 31.7	19.0
47548 2000 AO_{124}	15.1	X	312.80407	299.12037	150.81167	4.12283	0.1880598	0.23250256	2.6192939	20	12 22.5	17.4
47549 2000 AE_{126}	14.3	X	206.45545	326.15251	287.29429	14.43642	0.0934890	0.23684606	2.5871719	20	—	—
47550 2000 AS_{126}	14.3	X	46.41731	316.17268	278.86602	2.44336	0.0162934	0.21341192	2.7732579	20	7 14.8	17.9
47551 2000 AM_{128}	13.2	X	350.71641	91.61380	300.94724	14.87333	0.0352224	0.17890783	3.1192473	20	11 13.8	17.7
47552 2000 AR_{128}	13.3	X	215.47874	318.30447	311.56069	17.54905	0.2434871	0.18769392	3.0211289	20	—	—
47553 2000 AE_{129}	15.3	X	306.22271	238.25551	150.97041	2.65630	0.1969059	0.27302660	2.3532392	20	9 16.3	17.1
47554 2000 AN_{130}	14.5	X	222.67063	295.88064	239.19191	4.05585	0.1051891	0.18060409	3.0996858	20	11 20.0	19.0
47555 2000 AM_{136}	14.1	X	310.55467	55.44845	113.00040	12.67841	0.0996982	0.19082871	2.9879517	20	—	—
47556 2000 AL_{137}	13.0	X	199.32353	200.33109	20.15083	5.26939	0.1221735	0.17827159	3.1266645	20	12 16.4	17.9
47557 2000 AP_{137}	13.9	X	32.24262	189.41200	82.30077	5.52494	0.0305517	0.21224910	2.7833777	20	8 17.7	17.6
47558 2000 AU_{137}	14.0	X	203.81326	190.66367	342.52146	12.54785	0.1072545	0.22244635	2.6976516	20	10 30.1	18.2
47559 2000 AK_{143}	14.0	X	20.73380	48.10644	224.94715	7.24641	0.1879395	0.21395212	2.7685879	20	8 16.5	17.2
47560 2000 AD_{144}	13.9	X	229.46772	19.41273	149.97663	18.12480	0.1087835	0.17827591	3.1266140	20	11 24.3	18.8
47561 2000 AA_{147}	13.5	X	194.12843	328.68223	339.39189	12.91348	0.1510611	0.24325549	2.5415244	20	1 17.7	17.7
47562 2000 AZ_{148}	14.4	X	159.60536	12.10269	139.66196	11.31623	0.0517593	0.27116516	2.3639963	20	8 29.7	17.5
47563 2000 AW_{149}	14.4	X	75.55331	358.00421	168.37485	9.24819	0.0817111	0.21000368	2.8031829	20	6 3.4	18.3
47564 2000 AD_{150}	14.3	X	135.84296	353.33912	236.97997	13.27034	0.1399192	0.22705618	2.6610141	20	11 5.8	18.6
47565 2000 AJ_{150}	14.6	X	286.27406	100.74563	251.12004	12.26825	0.2039082	0.21937581	2.7227654	20	6 6.7	18.2
47566 2000 AU_{150}	14.8	X	234.70058	331.46211	152.88365	10.55808	0.1849452	0.27420757	2.3464777	20	10 10.0	17.9
47567 2000 AL_{154}	14.9	X	282.00360	342.54482	41.16872	6.21723	0.0431086	0.21988614	2.7185510	20	8 11.9	18.5
47568 2000 AW_{155}	15.6	X	78.06722	71.38162	264.47644	5.43668	0.2182995	0.28812797	2.2702783	20	—	—
47569 2000 AP_{159}	14.3	X	176.57718	142.84135	33.05626	5.35703	0.1255646	0.17571256	3.1569486	20	10 4.7	19.3
47570 2000 AM_{162}	14.5	X	266.12117	351.65921	124.83331	14.06795	0.1002869	0.22700760	2.6613936	20	11 17.2	18.1
47571 2000 AT_{162}	14.1	X	187.71132	325.40429	148.16018	9.18269	0.1049298	0.21340196	2.7733442	20	8 2.5	18.3
47572 2000 AK_{167}	15.4	X	8.44687	230.64460	162.51849	11.07673	0.1334185	0.28191020	2.3035388	20	—	—
47573 2000 AV_{170}	15.2	X	344.22893	219.86893	168.97650	5.84470	0.0374722	0.28063711	2.3105001	20	11 29.9	17.9
47574 2000 AF_{171}	14.8	X	115.75538	62.49235	120.31361	14.66154	0.1417359	0.21968600	2.7202018	20	8 21.7	19.0
47575 2000 AL_{172}	15.4	X	192.26270	282.64811	159.54666	7.27659	0.0705028	0.26628174	2.3928113	20	7 1.7	18.8
47576 2000 AW_{172}	17.2	X	80.19248	184.28964	215.79432	5.49179	0.3262954	0.29685870	2.2255440	20	1 10.4	18.6
47577 2000 AD_{173}	15.4	X	23.91858	165.89180	202.65962	6.90201	0.1320891	0.28379495	2.2933285	20	—	—
47578 2000 AT_{174}	15.1	X	90.48665	257.29368	227.22579	8.74538	0.1257134	0.25670657	2.4519488	20	5 2.0	18.0
47579 2000 AW_{174}	14.3	X	166.56499	317.39008	162.86917	6.66364	0.0608739	0.26662527	2.3907556	20	7 22.7	17.6
47580 2000 AQ_{175}	15.5	X	326.53303	159.93714	227.95963	7.60513	0.2671287	0.27934279	2.3176316	20	11 13.2	16.4
47581 2000 AN_{178}	15.4	X	173.79807	146.41153	197.83377	7.15724	0.2671467	0.30078506	2.2061339	20	2 7.3	19.2
47582 2000 AO_{179}	14.3	X	269.52315	27.97038	135.69757	14.08679	0.0941945	0.23566146	2.5958346	20	—	—
47583 2000 AW_{182}	14.8	X	260.50371	358.37917	145.42993	14.78651	0.0414858	0.23155015	2.6264714	20	12 20.2	18.4
47584 2000 AX_{182}	15.1	X	350.00032	207.85917	231.37453	7.37393	0.0766960	0.23577883	2.5949730	20	—	—
47585 2000 AA_{192}	15.2	X	245.56664	259.69180	176.46726	8.71296	0.2131346	0.27150419	2.3620279	20	8 8.5	18.7
47586 2000 AE_{193}	14.6	X	192.92402	3.12072	186.12409	13.60261	0.0273215	0.22883788	2.6471839	20	11 23.8	18.4
47587 2000 AU_{198}	14.8	X	28.06534	108.13082	282.03423	14.13902	0.1107371	0.23283353	2.6168111	20	—	—
47588 2000 AM_{201}	14.8	X	297.43959	286.15295	142.10109	23.30137	0.2959451	0.27875391	2.3208945	20	10 30.1	16.9
47589 2000 AY_{201}	14.9	X	345.74333	276.45844	140.17649	27.71595	0.0645637	0.23321481	2.6139582	20	12 30.4	18.6
47590 2000 AY_{202}	13.9	X	322.85989	217.04561	256.49227	12.39085	0.0953219	0.23281948	2.6169163	20	—	—
47591 2000 AD_{203}	14.3	X	326.28590	213.85867	265.33989	12.12533	0.1421241	0.23376533	2.6098526	20	—	—
47592 2000 AO_{203}	13.2	X	223.98086	150.63923	247.29532	9.12457	0.1302162	0.25674772	2.4516868	20	6 3.9	16.7
47593 2000 AF_{204}	14.0	X	218.21591	55.02442	92.17008	11.11342	0.1345887	0.22281743	2.6946557	20	10 21.4	18.1
47594 2000 AQ_{204}	13.4	X	110.99987	37.38899	201.24168	13.16088	0.1383567	0.22342476	2.6897702	20	10 24.3	17.6
47595 2000 AK_{207}	14.3	X	137.85601	144.74207	76.05232	0.27332	0.1156299	0.17437148	3.1731145	20	10 20.2	19.2
47596 2000 AA_{213}	16.1	X	330.88433	86.39591	219.27332	0.56883	0.1943413	0.26820859	2.3813374	20	6 22.9	17.7
47597 2000 AK_{214}	15.5	X	326.56367	240.01130	158.91649	1.86306	0.0609503	0.22681484	2.6629013	20	11 4.2	18.7
47598 2000 AR_{215}	15.4	X	325.93827	245.92297	111.03602	7.08165	0.0515641	0.22202095	2.7010964	20	9 8.6	18.8
47599 2000 AB_{216}	15.3	X	34.01290	237.82107	143.76240	12.28851	0.2086771	0.23294839	2.6159508	20	—	—
47600 2000 AF_{227}	13.7	X	216.04749	231.20600	319.57791	4.12345	0.1143696	0.17931605	3.1145115	20	11 29.5	18.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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47601 2000 AQ_{227}	14.7	X	99.05768	289.75939	332.51338	3.65759	0.1200271	0.17211114	3.2008359	20	10 29.8	19.6
47602 2000 AC_{231}	14.6	X	355.00917	331.82359	142.97759	13.25498	0.1699841	0.24045543	2.5612167	20	—	—
47603 2000 AV_{232}	15.3	X	252.04227	338.53952	38.87159	3.23122	0.2165804	0.26477142	2.4019022	20	5 28.5	18.9
47604 2000 AF_{236}	14.6	X	189.10735	275.58015	266.24957	10.64253	0.0218020	0.22623922	2.6674162	20	11 5.6	18.5
47605 2000 AT_{237}	13.4	X	254.54541	34.83701	169.88407	12.07402	0.0293370	0.18403809	3.0610064	20	—	—
47606 2000 AA_{238}	14.8	X	206.07321	60.84912	133.55738	7.51983	0.1124570	0.28588708	2.2821264	20	12 17.5	17.7
47607 2000 AN_{242}	13.9	X	302.42796	17.93932	350.77522	12.50267	0.0408230	0.21662645	2.7457546	20	8 21.2	17.4
47608 2000 AE_{243}	12.9	X	200.96092	67.54794	219.78045	9.14257	0.0721871	0.19049404	2.9914503	20	—	—
47609 2000 AN_{251}	14.2	X	183.87173	75.45733	130.06984	2.11526	0.1050708	0.18030357	3.1031290	20	11 16.6	19.1
47610 2000 AY_{254}	15.9	X	158.22666	38.09766	291.66265	1.52616	0.1063697	0.24564802	2.5249951	20	1 2.1	19.2
47611 2000 BL_{1}	15.4	X	250.19714	26.54119	296.67603	1.05556	0.0722179	0.20684273	2.8316693	20	4 4.1	19.4
47612 2000 BO_{4}	14.5	X	347.30881	99.25179	359.13987	10.80092	0.2114508	0.23984739	2.5655435	20	—	—
47613 2000 BP_{12}	14.5	X	154.84763	213.51904	352.70653	1.11018	0.1651737	0.17338485	3.1851406	20	10 18.6	19.6
47614 2000 BO_{14}	13.3	X	178.11651	168.20165	44.47607	7.24169	0.1038567	0.17676070	3.1444564	20	11 17.6	18.0
47615 2000 BT_{22}	14.2	X	168.60779	52.41008	128.39371	1.88211	0.1314709	0.17272415	3.1932579	20	10 2.3	19.3
47616 2000 BC_{26}	13.8	X	201.01019	94.62427	107.09575	2.43648	0.1035355	0.18026516	3.1035698	20	11 29.0	18.4
47617 2000 BC_{27}	14.0	X	111.59970	347.58137	336.33468	12.97313	0.2722654	0.23450981	2.6043261	20	—	—
47618 2000 BD_{27}	14.8	X	292.08792	301.73816	98.71824	7.07485	0.0600841	0.22131374	2.7068475	20	9 17.2	18.3
47619 2000 BW_{28}	14.5	X	79.34430	21.68041	135.02270	16.04691	0.0766910	0.20633244	2.8363362	20	5 28.8	18.7
47620 2000 BA_{29}	14.9	X	60.18194	286.99918	106.06792	8.43571	0.2090809	0.23913713	2.5706209	20	—	—
47621 2000 BO_{29}	13.9	X	210.15170	242.64685	247.44730	5.92058	0.1048009	0.21620274	2.7493408	20	9 14.7	18.1
47622 2000 BQ_{32}	15.4	X	330.37319	168.32957	131.72345	0.97291	0.0479985	0.21334313	2.7738540	20	6 24.6	18.8
47623 2000 BF_{38}	15.3	X	238.41632	174.82953	123.57677	7.07337	0.0714368	0.20078760	2.8883166	20	2 22.9	19.5
47624 2000 BG_{41}	14.8	X	212.82179	185.17992	132.99282	2.50928	0.1712966	0.19927340	2.9029296	20	2 16.5	19.6
47625 2000 BB_{49}	15.3	X	170.52796	213.81828	121.62096	10.19760	0.0583684	0.24590750	2.5232185	20	1 18.2	18.8
47626 2000 BS_{49}	14.9	X	122.22790	27.00439	335.96260	12.14531	0.0916734	0.24640496	2.5198213	20	1 1.2	18.4
47627 2000 CX	14.0	X	224.92856	134.70214	147.28710	6.61266	0.0410111	0.19296235	2.9658851	20	1 20.4	18.4
47628 2000 CJ_{2}	14.4	X	306.03939	337.56362	63.62850	7.03021	0.0627588	0.26987549	2.3715216	20	10 18.1	17.0
47629 2000 CR_{4}	15.2	X	209.91894	220.68291	272.02387	2.70520	0.0445259	0.22448584	2.6812877	20	9 26.9	19.0
47630 2000 CF_{6}	15.2	X	1.62709	132.23709	249.43215	6.09692	0.1208557	0.28062763	2.3105521	20	12 26.3	17.8
47631 2000 CY_{17}	15.1	X	98.69842	6.64386	186.44148	1.50420	0.0125329	0.21518453	2.7580069	20	7 28.2	18.9
47632 2000 CA_{21}	14.7	X	54.82859	317.88666	293.29898	6.35088	0.0201989	0.21652613	2.7466027	20	8 16.4	18.5
47633 2000 CG_{23}	15.2	X	290.17649	218.36616	198.59253	4.12736	0.1083579	0.22398530	2.6852808	20	9 26.9	18.5
47634 2000 CN_{24}	14.9	X	47.54245	198.47863	148.45208	12.54233	0.1835660	0.23002764	2.6380481	20	—	—
47635 2000 CH_{25}	15.4	X	355.11084	262.77590	196.83317	4.48096	0.0944123	0.23742452	2.5829678	20	—	—
47636 2000 CV_{25}	14.8	X	39.66468	67.61640	223.26518	1.90360	0.0235134	0.21955518	2.7212823	20	9 19.7	18.3
47637 2000 CD_{28}	15.2	X	1.02183	304.71843	151.35542	8.12086	0.1076545	0.23750405	2.5823912	20	—	—
47638 2000 CP_{28}	15.0	X	178.30661	282.01895	185.29472	4.13257	0.0630605	0.21329218	2.7742958	20	7 16.3	19.1
47639 2000 CT_{29}	13.9	X	166.03277	52.48520	156.86288	1.85093	0.1524351	0.17466187	3.1695965	20	11 1.9	19.0
47640 2000 CA_{30}	14.8	X	147.94881	256.94902	162.88859	2.29320	0.0571951	0.20343514	2.8632026	20	4 12.3	18.8
47641 2000 CE_{30}	14.6	X	128.46573	95.37698	151.83057	9.80555	0.0509012	0.17569812	3.1571215	20	11 11.4	19.4
47642 2000 CF_{30}	15.4	X	143.37876	286.54476	149.55517	9.16955	0.2091283	0.25551483	2.4595669	20	5 10.3	19.5
47643 2000 CM_{30}	14.6	X	49.75868	289.50281	168.44432	3.65154	0.1343086	0.19574652	2.9376948	20	2 1.4	17.9
47644 2000 CO_{36}	13.2	X	154.89195	31.51830	190.51835	4.14484	0.1643083	0.17307199	3.1889780	20	11 6.8	18.5
47645 2000 CD_{37}	13.3	X	221.09388	129.24279	167.49453	10.53095	0.1016345	0.19221281	2.9735905	20	1 30.8	18.1
47646 2000 CE_{37}	14.0	X	291.90406	33.36522	165.01243	10.90389	0.0345607	0.18947674	3.0021481	20	—	—
47647 2000 CH_{38}	15.2	X	277.89478	260.72271	132.32536	2.51839	0.0564251	0.21853639	2.7297333	20	8 14.0	18.7
47648 2000 CA_{40}	15.2	X	303.51983	226.28290	160.90037	22.10045	0.3045885	0.27174109	2.3606549	20	8 14.7	17.1
47649 2000 CP_{40}	14.4	X	243.13182	73.78690	126.73472	10.48237	0.0889570	0.18397368	3.0617208	20	—	—
47650 2000 CU_{40}	13.3	X	264.71104	298.21985	23.86663	6.19509	0.0651228	0.20405042	2.8574439	20	4 21.1	17.1
47651 2000 CV_{42}	14.5	X	7.02310	56.57832	167.64737	12.64077	0.0214073	0.20630936	2.8365477	20	5 9.9	18.5
47652 2000 CL_{44}	14.2	X	183.25044	4.30392	181.54189	10.14575	0.1287844	0.17502210	3.1652459	20	10 22.9	19.2
47653 2000 CD_{45}	14.2	X	92.89913	65.48829	161.26925	13.15793	0.0746619	0.21649765	2.7468435	20	9 13.0	18.0
47654 2000 CP_{46}	15.3	X	289.45760	246.11246	205.54580	3.27776	0.1478679	0.27626982	2.3347860	20	11 25.5	17.4
47655 2000 CB_{48}	13.9	X	209.71902	63.17546	162.22503	17.08151	0.1800630	0.18130105	3.0917367	20	12 27.8	19.0
47656 2000 CD_{48}	14.4	X	241.12564	198.26058	262.60210	5.88283	0.0858863	0.22122362	2.7075826	20	9 16.5	18.3
47657 2000 CE_{48}	13.9	X	39.92927	318.20457	287.25437	8.15621	0.0996194	0.21068293	2.7971547	20	7 29.8	17.5
47658 2000 CL_{48}	14.7	X	50.74928	299.43702	178.64011	11.61382	0.1327792	0.19786688	2.9166701	20	2 28.1	18.2
47659 2000 CM_{49}	13.7	X	107.80499	181.66580	165.58812	14.66739	0.1649936	0.23577593	2.5949943	20	—	—
47660 2000 CA_{51}	14.4	X	73.64941	198.16610	166.69572	12.20756	0.0326205	0.23303487	2.6153036	20	—	—
47661 2000 CP_{52}	14.0	X	337.61902	73.69420	314.43402	6.73077	0.1639698	0.22473264	2.6793243	20	11 7.6	16.8
47662 2000 CN_{53}	13.7	X	316.63715	311.82988	262.41783	0.72715	0.0341389	0.19541718	2.9409946	20	2 16.1	17.7
47663 2000 CD_{54}	14.5	X	96.92903	191.80302	158.40980	8.43437	0.0786661	0.23436611	2.6053906	20	—	—
47664 2000 CE_{54}	13.5	X	107.03112	341.83634	310.04165	5.50929	0.1102293	0.17716793	3.1396360	20	12 12.3	18.4
47665 2000 CX_{55}	14.3	X	308.14772	235.80749	143.10519	10.43620	0.0819723	0.22009840	2.7168028	20	9 7.5	17.6
47666 2000 CA_{58}	13.8	X	233.90796	300.78967	338.37698	9.44596	0.0651339	0.19184570	2.9773828	20	1 28.3	18.3
47667 2000 CD_{58}	13.2	X	195.18033	136.27593	127.13244	10.43921	0.0512473	0.18301489	3.0724048	20	—	—
47668 2000 CM_{60}	14.2	X	155.84383	73.80915	198.86805	8.93692	0.1174583	0.18164288	3.0878566	20	—	—
47669 2000 CC_{62}	14.5	X	215.23460	212.03289	236.83451	5.26236	0.0166982	0.21371742	2.7706144	20	8 8.1	18.5
47670 2000 CA_{63}	14.0	X	118.25518	19.07957	331.06875	14.42804	0.1346507	0.23561821	2.5961522	20	—	—
47671 2000 CP_{63}	14.4	X	21.57669	248.01212	169.95118	13.78895	0.1158992	0.23299473	2.6156040	20	—	—
47672 2000 CZ_{63}	14.3	X	335.80649	345.19656	321.08305	3.74142	0.0645578	0.20925154	2.8098962	20	7 10.9	17.6
47673 2000 CF_{64}	14.6	X	182.02441	293.40122	211.50480	11.21301	0.0920958	0.21916856	2.7244816	20	9 3.7	18.9
47674 2000 CT_{65}	14.6	X	187.59076	308.71096	140.94198	3.02186	0.0453832	0.21153058	2.7896771	20	7 5.1	18.6
47675 2000 CW_{66}	15.4	X	119.88644	276.85458	173.36229	13.44732	0.1709061	0.25417734	2.4681876	20	5 1.7	19.2
47676 2000 CE_{71}	13.1	X	135.61864	18.31511	313.72308	11.20351	0.1273367	0.18504352	3.0499084	20	—	—
47677 2000 CO_{71}	14.8	X	52.45184	306.68755	168.72650	11.10437	0.1228074	0.24475333	2.5311447	20	2 18.8	17.6
47678 2000 CT_{75}	12.9	X	192.96807	36.19305	191.23731	16.59659	0.1152898	0.17894814	3.1187790	20	12 18.9	18.0
47679 2000 CN_{76}	13.9	X	166.22401	213.07461	21.28653	2.15789	0.1237402	0.17729938	3.1380840	20	11 30.9	18.8
47680 2000 CC_{77}	14.2	X	327.18549	315.72535	163.27364	10.84565	0.0669128	0.18398306	3.0616168	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47681 2000 CZ_{77}	14.8	X	189.49490	124.03504	205.14517	1.19312	0.0632096	0.19494798	2.9457116	20	2 7.2	19.2
47682 2000 CO_{82}	14.3	X	130.88954	328.51427	333.43553	8.98457	0.0237002	0.18373333	3.0643903	20	—	—
47683 2000 CR_{82}	13.9	X	239.25767	229.49580	326.07486	1.56252	0.0592779	0.18352546	3.0667039	20	—	—
47684 2000 CT_{83}	13.6	X	168.73825	55.76923	138.03207	7.22442	0.1148323	0.17346792	3.1841237	20	10 20.2	18.7
47685 2000 CC_{84}	15.1	X	41.10794	232.71712	144.88269	7.56830	0.2009278	0.23296841	2.6158010	20	—	—
47686 2000 CA_{86}	14.2	X	284.71146	140.28412	37.38753	0.35127	0.1127576	0.18663407	3.0325556	20	—	—
47687 2000 CW_{86}	14.2	X	62.90338	60.78187	63.77599	3.50948	0.0350674	0.19897578	2.9058236	20	3 17.6	18.1
47688 2000 CO_{88}	14.6	X	268.17188	16.72769	8.59629	11.59408	0.2720020	0.26441702	2.4040479	20	6 18.9	18.2
47689 2000 CN_{91}	13.6	X	93.10372	52.66035	342.34591	9.74191	0.0874244	0.19112722	2.9848397	20	1 14.0	17.7
47690 2000 CQ_{92}	14.0	X	216.91179	166.82993	358.40927	4.83233	0.1397459	0.17542668	3.1603775	20	10 27.3	19.0
47691 2000 CT_{92}	13.6	X	148.70827	65.97454	28.97569	2.22499	0.0235809	0.20507834	2.8478876	20	5 24.5	17.5
47692 2000 CC_{94}	13.1	X	148.48099	49.18778	351.99265	11.54420	0.1072816	0.19825007	2.9129105	20	3 23.1	17.4
47693 2000 CG_{94}	14.0	X	23.18219	228.50814	169.75151	15.88328	0.1212804	0.22923775	2.6441045	20	—	—
47694 2000 CO_{94}	14.0	X	285.50017	17.30668	158.95639	7.49940	0.0733104	0.18425724	3.0585789	20	—	—
47695 2000 CC_{99}	15.8	X	179.52799	257.41713	148.10116	2.80864	0.1912790	0.25695120	2.4503923	20	4 30.9	19.9
47696 2000 CK_{100}	14.8	X	238.51950	121.84066	135.15513	11.00228	0.0516732	0.19302482	2.9652452	20	1 5.4	19.2
47697 2000 CZ_{101}	15.0	X	154.25645	296.29233	220.87465	5.66262	0.0769999	0.21697327	2.7428279	20	8 21.4	19.1
47698 2000 CG_{109}	14.8	X	320.90726	204.12213	245.95874	9.69540	0.0656524	0.23100049	2.6306362	20	—	—
47699 2000 CP_{116}	14.7	X	261.13215	271.47760	112.11809	13.04159	0.1173572	0.21383552	2.7695942	20	6 29.6	18.7
47700 2000 CQ_{121}	14.7	X	241.92902	155.56109	122.70478	3.04379	0.0398623	0.19778321	2.9174926	20	2 4.2	18.8
47701 2000 DA_{1}	14.4	X	159.40720	183.15430	345.23436	9.15841	0.1215428	0.22045130	2.7139027	20	9 12.5	18.6
47702 2000 DE_{2}	14.5	X	32.33213	202.77043	170.63534	5.76716	0.1190353	0.22556967	2.6726920	20	—	—
47703 2000 DR_{2}	15.4	X	308.93556	294.98679	159.36172	3.13749	0.0869117	0.23089679	2.6314237	20	12 21.5	18.4
47704 2000 DN_{4}	14.4	X	239.94148	6.09096	26.05667	5.94531	0.0215635	0.21148752	2.7900557	20	6 27.2	18.3
47705 2000 DT_{9}	14.9	X	105.90457	157.42015	135.71366	0.28640	0.1280166	0.17839873	3.1251789	20	12 14.2	19.8
47706 2000 DH_{12}	13.8	X	10.47242	255.01653	175.22124	9.63697	0.0872166	0.18264549	3.0765460	20	—	—
47707 2000 DB_{15}	14.3	X	282.25841	279.38616	159.66684	13.29128	0.1508020	0.22316797	2.6918332	20	10 12.6	17.5
47708 2000 DR_{15}	14.0	X	165.97684	209.14639	138.08163	10.33610	0.0686933	0.19221851	2.9735318	20	2 4.8	18.4
47709 2000 DC_{16}	14.1	X	191.43568	138.75851	359.67970	9.31379	0.1320910	0.21696295	2.7429149	20	9 8.0	18.3
47710 2000 DJ_{16}	13.1	X	333.91768	72.30236	8.99199	16.53207	0.1093146	0.17834589	3.1257961	20	12 27.9	17.3
47711 2000 DL_{16}	14.0	X	234.41451	65.88857	10.22694	12.93697	0.1820097	0.21389011	2.7691230	20	8 2.6	18.4
47712 2000 DB_{23}	15.6	X	83.39097	77.17806	335.54953	12.11186	0.1868592	0.24465178	2.5318451	20	1 28.3	18.5
47713 2000 DM_{23}	14.6	X	191.72585	135.93852	156.09470	1.14062	0.1117088	0.19013796	2.9951840	20	—	—
47714 2000 DS_{24}	14.6	X	190.08874	204.03729	98.50052	1.04495	0.1152864	0.19144456	2.9815403	20	1 9.9	19.3
47715 2000 DG_{25}	14.8	X	58.38896	150.45309	159.08399	6.28855	0.0792212	0.22393540	2.6856797	20	11 18.8	18.5
47716 2000 DQ_{25}	14.8	X	256.97452	82.26681	153.38040	11.78777	0.0514770	0.19140812	2.9819188	20	—	—
47717 2000 DU_{28}	14.4	X	190.80721	116.04568	154.57339	2.34487	0.0486760	0.18698099	3.0288034	20	—	—
47718 2000 DV_{29}	15.2	X	213.08506	254.15504	162.69022	4.01053	0.0899199	0.21172605	2.7879599	20	6 19.6	19.5
47719 2000 DC_{30}	15.0	X	160.40012	77.06025	173.52885	2.16680	0.0744998	0.17957913	3.1114690	20	12 16.5	19.8
47720 2000 DR_{34}	14.6	X	30.09435	163.37680	151.56211	12.16399	0.0630527	0.17156588	3.2076140	20	10 9.5	19.0
47721 2000 DS_{34}	15.1	X	304.71740	235.95970	146.65053	6.25579	0.0576377	0.21874048	2.7280350	20	9 8.8	18.4
47722 2000 DZ_{35}	15.0	X	131.34857	163.35568	174.42032	1.06078	0.0743514	0.18833845	3.0142323	20	—	—
47723 2000 DV_{37}	15.3	X	54.27646	270.13808	157.89303	2.68661	0.0478144	0.19082739	2.9879655	20	—	—
47724 2000 DE_{38}	14.7	X	318.13398	46.64125	166.95739	2.13071	0.0332584	0.19636961	2.9314773	20	2 17.2	18.7
47725 2000 DW_{39}	14.5	X	163.39217	0.64712	326.23829	9.40945	0.0257737	0.19083621	2.9878734	20	1 6.9	18.8
47726 2000 DE_{42}	14.6	X	161.29207	183.01505	153.16670	10.19282	0.0695256	0.19192040	2.9766101	20	1 17.1	19.1
47727 2000 DG_{44}	14.4	X	81.38905	63.65372	258.43114	0.73727	0.1452869	0.17825957	3.1268051	20	12 25.6	19.3
47728 2000 DP_{45}	14.8	X	243.49921	186.48411	205.19493	1.59363	0.0708665	0.21121441	2.7924604	20	6 24.3	18.7
47729 2000 DR_{45}	15.0	X	114.33348	210.48978	166.79862	11.92534	0.1378083	0.19263223	2.9692727	20	1 21.8	19.4
47730 2000 DY_{46}	15.1	X	273.08642	246.96203	179.82427	3.41121	0.1036887	0.22074077	2.7115296	20	9 14.7	18.6
47731 2000 DM_{48}	14.3	X	95.49186	140.55184	143.03430	1.75434	0.1556652	0.17334842	3.1855870	20	11 25.2	19.3
47732 2000 DR_{51}	14.4	X	53.30125	223.85652	97.81600	1.93598	0.1637272	0.17392958	3.1784868	20	11 27.3	18.8
47733 2000 DW_{51}	14.3	X	174.77240	222.82981	147.68452	3.16715	0.0760776	0.19887791	2.9067768	20	3 13.5	18.5
47734 2000 DX_{55}	14.9	X	203.85508	288.37341	148.69531	4.00337	0.0687054	0.21151480	2.7898159	20	7 6.5	19.0
47735 2000 DS_{60}	12.3	X	93.47906	264.72083	348.31004	16.33323	0.0656672	0.17004454	3.2267174	20	10 3.5	17.1
47736 2000 DG_{61}	14.2	X	94.86852	262.36257	55.95784	1.37384	0.1591774	0.17805226	3.1292318	20	—	—
47737 2000 DT_{66}	14.7	X	155.68875	192.25260	157.20394	11.90928	0.1290671	0.19261393	2.9694607	20	1 31.5	19.5
47738 2000 DB_{68}	14.8	X	247.16152	257.12612	151.16657	5.09487	0.0693789	0.21299888	2.7768420	20	7 20.8	18.6
47739 2000 DD_{69}	14.9	X	331.66639	255.53501	184.46244	4.67767	0.1963726	0.23098613	2.6307452	20	—	—
47740 2000 DC_{71}	13.6	X	47.18540	136.98271	176.88054	13.99468	0.0744400	0.17098846	3.2148313	20	10 31.0	18.2
47741 2000 DQ_{71}	14.2	X	87.27125	92.80957	345.99304	11.54199	0.0260494	0.19466091	2.9486069	20	2 20.3	18.3
47742 2000 DX_{73}	14.1	X	264.46970	250.87812	255.36374	0.49646	0.1365409	0.17954633	3.1118480	20	11 30.9	18.2
47743 2000 DH_{74}	14.2	X	250.96489	107.75179	341.70535	12.60037	0.1173657	0.21950891	2.7216646	20	9 11.3	17.8
47744 2000 DJ_{75}	13.9	X	185.96690	236.64289	327.71093	3.72142	0.0697373	0.17490462	3.1666631	20	11 16.9	18.8
47745 2000 DE_{77}	13.9	X	45.54747	303.01750	15.12889	0.95565	0.1789362	0.17087445	3.2162611	20	11 15.0	18.4
47746 2000 DY_{77}	14.9	X	269.52748	306.21497	169.76685	3.28274	0.1633954	0.17791338	3.1308600	20	10 28.1	18.9
47747 2000 DH_{81}	14.2	X	43.08845	347.45015	346.05381	11.38955	0.0867985	0.22660956	2.6645093	20	11 27.2	18.0
47748 2000 DF_{82}	14.3	X	242.33274	153.78990	35.66248	4.63720	0.0753901	0.18372550	3.0644774	20	—	—
47749 2000 DX_{82}	14.1	X	224.22311	47.34404	107.60698	8.49581	0.1120760	0.17755060	3.1351232	20	10 31.0	18.8
47750 2000 DM_{85}	14.7	X	150.31909	159.63229	126.70747	13.36054	0.2577692	0.23013127	2.6372560	20	—	—
47751 2000 DO_{85}	15.5	X	29.99221	56.07575	8.60871	8.37634	0.1930380	0.23875040	2.5733962	20	—	—
47752 2000 DD_{87}	14.3	X	202.69742	110.65511	350.39376	16.30758	0.0465564	0.21507574	2.7589369	20	8 13.2	18.4
47753 2000 DY_{92}	14.8	X	195.67448	87.31364	65.22237	3.19543	0.0047395	0.22240718	2.6979683	20	10 11.7	18.3
47754 2000 DE_{94}	14.5	X	227.64004	61.23785	141.83340	10.99345	0.0847322	0.18268793	3.0760695	20	12 31.8	19.0
47755 2000 DL_{94}	15.1	X	58.89189	16.05471	342.62399	14.07080	0.1473858	0.23220102	2.6215610	20	—	—
47756 2000 DO_{96}	15.0	X	265.54262	135.99733	323.36378	3.91209	0.0308160	0.22493672	2.6777034	20	10 27.2	18.7
47757 2000 DD_{98}	15.5	X	72.29136	70.13919	353.60271	13.57931	0.1433030	0.24303844	2.5430373	20	1 20.3	18.5
47758 2000 DV_{98}	14.5	X	281.18774	140.67064	6.16786	9.38946	0.0198996	0.18318211	3.0705347	20	—	—
47759 2000 DR_{99}	14.6	X	224.94254	323.27357	97.39687	6.22280	0.0356776	0.21231729	2.7827817	20	7 14.2	18.4
47760 2000 DQ_{100}	14.5	X	278.70432	56.34431	90.18755	5.48045	0.0236159	0.18209751	3.0827150	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47761 2000 DR_{100}	13.9	X	132.17728	311.60315	13.16816	9.08312	0.1304656	0.18548842	3.0450296	20	—	—
47762 2000 DT_{100}	14.5	X	12.42512	20.69577	56.17271	5.57085	0.1245125	0.23583311	2.5945748	20	—	—
47763 2000 DR_{101}	14.4	X	6.54886	359.59455	6.16741	13.17754	0.1814420	0.22489945	2.6779993	20	12 1.2	17.7
47764 2000 DX_{102}	14.4	X	142.36893	153.89284	135.37653	10.17414	0.0614952	0.18132374	3.0914788	20	—	—
47765 2000 DZ_{102}	13.7	X	146.78039	221.52215	134.28592	11.37304	0.1268655	0.19250282	2.9706032	20	1 30.9	18.3
47766 2000 DP_{103}	13.7	X	55.36901	323.40241	9.76036	13.67748	0.1871313	0.22480822	2.6787237	20	12 27.4	17.9
47767 2000 DR_{103}	14.2	X	24.16657	234.07131	95.87977	4.93428	0.1004965	0.22033756	2.7148366	20	11 2.6	17.6
47768 2000 DD_{104}	14.7	X	344.69238	193.07873	110.06284	5.46631	0.0641387	0.21054751	2.7983540	20	7 20.5	17.9
47769 2000 DK_{104}	13.3	X	74.11074	276.72975	12.40943	13.12248	0.0933717	0.17182962	3.2043310	20	10 30.2	18.0
47770 2000 DN_{104}	14.4	X	229.37601	309.00017	114.51726	8.79911	0.1133309	0.21351946	2.7723267	20	7 14.3	18.4
47771 2000 DC_{105}	14.4	X	85.82350	188.26800	131.95841	11.60882	0.0684703	0.17788643	3.1311762	20	12 21.0	19.1
47772 2000 DO_{107}	14.6	X	106.55392	194.78793	214.77494	1.08017	0.1125742	0.19472836	2.9479260	20	2 18.1	18.7
47773 2000 DV_{108}	13.9	X	196.45578	146.51781	122.40920	10.77457	0.0418953	0.18707368	3.0278029	20	—	—
47774 2000 DC_{110}	14.2	X	96.85469	154.23675	159.04020	10.43223	0.0638288	0.17786565	3.1314200	20	12 23.8	19.0
47775 2000 DX_{115}	13.9	X	304.59925	330.00948	332.97286	14.56231	0.1407802	0.20406143	2.8573412	20	5 1.2	17.9
47776 2000 EX	14.0	X	247.73655	247.32735	188.44157	8.85709	0.1448828	0.21496989	2.7598425	20	8 14.6	18.1
47777 2000 EK_{9}	13.9	X	119.52632	155.76134	110.17450	2.60129	0.1571388	0.17423386	3.1747852	20	11 26.7	19.1
47778 2000 EX_{10}	14.6	X	238.61069	289.11102	42.78646	2.32443	0.1212151	0.20210387	2.8757621	20	3 30.1	19.1
47779 2000 EE_{11}	14.0	X	119.13333	298.35114	5.07831	9.41684	0.0792657	0.18073853	3.0981485	20	—	—
47780 2000 EM_{13}	14.6	X	38.21307	6.00900	233.35440	1.95666	0.0601835	0.21175245	2.7877281	20	7 14.3	18.1
47781 2000 EK_{17}	13.8	X	245.26120	184.93516	341.13951	6.72737	0.1052475	0.17849462	3.1240595	20	12 3.7	18.3
47782 2000 EL_{18}	14.7	X	43.92793	82.39549	79.34434	3.16528	0.0113267	0.20172954	2.8793186	20	4 6.2	18.6
47783 2000 EU_{19}	14.0	X	294.70509	334.57692	54.20809	9.86618	0.1617682	0.21621438	2.7492422	20	8 22.7	17.4
47784 2000 EY_{19}	13.5	X	214.86715	338.10598	159.00605	15.62877	0.0845461	0.16950882	3.2335123	20	9 30.3	18.4
47785 2000 EL_{20}	14.6	X	229.80052	284.83480	207.92051	11.24101	0.1345311	0.22359252	2.6884247	20	10 10.0	18.3
47786 2000 EQ_{20}	12.9	X	338.37832	321.94934	224.11596	14.23844	0.1294808	0.19458791	2.9493443	20	1 24.8	16.9
47787 2000 EW_{24}	14.1	X	288.13908	324.20083	182.44446	7.89318	0.0248461	0.18041173	3.1018887	20	—	—
47788 2000 EB_{26}	13.9	X	257.94548	36.20778	39.39541	1.41150	0.0760947	0.16762095	3.2577457	20	9 3.7	18.5
47789 2000 ED_{26}	15.1	X	167.65282	327.47634	14.69874	5.35727	0.3200769	0.23613625	2.5923538	20	2 12.2	19.8
47790 2000 EJ_{30}	14.1	X	179.61409	213.43923	117.95071	10.70286	0.0526225	0.19296933	2.9658136	20	1 31.1	18.5
47791 2000 EC_{31}	13.9	X	120.44926	229.25770	112.68508	10.49402	0.1423350	0.18603291	3.0390852	20	—	—
47792 2000 EV_{31}	14.3	X	96.97559	17.85571	334.67253	8.22869	0.0483064	0.18618637	3.0374150	20	—	—
47793 2000 EO_{32}	15.2	X	36.78505	38.51238	32.14240	4.26803	0.1941335	0.23922473	2.5699934	20	—	—
47794 2000 EP_{38}	14.3	X	106.60279	29.97086	5.85808	1.63594	0.0849071	0.19052357	2.9911412	20	1 30.1	18.5
47795 2000 ER_{38}	14.0	X	215.17469	293.18366	278.93911	1.24891	0.0385901	0.17911163	3.1168808	20	—	—
47796 2000 EN_{40}	13.5	X	277.15781	142.31138	33.64549	2.14445	0.1014359	0.18282803	3.0744978	20	—	—
47797 2000 EQ_{40}	13.5	X	316.38021	41.64887	167.41489	9.57549	0.0060765	0.19255499	2.9700667	20	2 12.4	17.6
47798 2000 EP_{45}	13.5	X	184.28405	94.35700	188.99668	9.45116	0.0635152	0.18329311	3.0692949	20	—	—
47799 2000 ES_{49}	14.2	X	315.27424	105.39937	1.87077	12.63732	0.1436743	0.22895986	2.6462436	20	—	—
47800 2000 ED_{50}	13.6	X	283.26682	167.82216	10.15831	9.33280	0.0306733	0.18253882	3.0777444	20	—	—
47801 2000 EF_{55}	13.3	X	240.19917	322.78552	172.20327	14.36736	0.1361985	0.17213681	3.2005176	20	10 19.9	18.0
47802 2000 EZ_{56}	14.4	X	274.08399	318.60999	197.46985	5.26821	0.1125476	0.18130323	3.0917119	20	12 29.5	18.4
47803 2000 EK_{58}	14.4	X	345.41168	98.51355	350.55622	8.11017	0.0664588	0.18206426	3.0830903	20	—	—
47804 2000 EP_{59}	15.1	X	11.22666	9.15162	18.38776	2.26590	0.2130404	0.22672472	2.6636069	20	—	—
47805 2000 EY_{60}	13.5	X	54.91645	350.94956	356.92902	20.88489	0.1135517	0.17563714	3.1578523	20	12 24.6	18.5
47806 2000 EV_{65}	14.2	X	16.98164	358.19679	42.24887	0.91747	0.0386785	0.17832078	3.1260895	20	12 30.9	18.4
47807 2000 ED_{67}	14.4	X	51.23590	224.63560	197.74087	9.57361	0.1062266	0.18699628	3.0286382	20	—	—
47808 2000 EG_{67}	14.5	X	3.11538	149.72079	296.40625	2.02437	0.1179921	0.18402844	3.0611134	20	—	—
47809 2000 EA_{78}	15.7	X	286.31541	320.09647	87.97076	3.29607	0.2008382	0.27032630	2.3688843	20	9 3.9	17.9
47810 2000 EE_{79}	14.9	X	122.43421	241.86923	148.13050	16.21962	0.2161664	0.24524233	2.5277789	20	2 20.5	18.6
47811 2000 ER_{79}	14.1	X	112.75107	161.65838	127.73088	6.46353	0.1374952	0.17670584	3.1451072	20	12 16.8	19.2
47812 2000 EW_{79}	14.0	X	236.77171	104.11434	108.41071	3.92085	0.0531077	0.18426526	3.0584901	20	—	—
47813 2000 EK_{84}	13.9	X	347.08198	105.72294	72.34773	2.97477	0.0641594	0.19463391	2.9488796	20	2 9.4	17.8
47814 2000 ED_{85}	14.0	X	358.96846	337.52913	214.17257	10.87923	0.0160335	0.19937591	2.9019344	20	3 12.1	18.0
47815 2000 EP_{85}	14.0	X	191.08457	22.28419	242.77359	8.85333	0.0473976	0.18489340	3.0515590	20	—	—
47816 2000 EE_{86}	14.0	X	206.46760	275.42117	151.50060	9.70150	0.1536157	0.20888246	2.8132051	20	6 21.7	18.6
47817 2000 EW_{89}	14.5	X	82.32812	223.40512	147.74592	9.99125	0.1675306	0.23509003	2.6000392	20	—	—
47818 2000 EA_{91}	13.5	X	269.16404	62.47404	322.70867	8.04176	0.1680692	0.21185516	2.7868271	20	7 5.2	17.4
47819 2000 EJ_{91}	13.7	X	230.73851	319.30311	319.20582	8.69675	0.0857163	0.18948153	3.0020975	20	1 22.4	18.2
47820 2000 EB_{93}	13.9	X	102.46890	220.89766	192.35107	10.64680	0.0881580	0.19281069	2.9674402	20	2 12.2	18.1
47821 2000 EN_{93}	14.6	X	7.28885	203.98907	240.23041	7.45851	0.2043813	0.23558100	2.5964255	20	—	—
47822 2000 EX_{95}	14.4	X	84.18119	209.78037	141.08294	5.54940	0.1995163	0.23160006	2.6260940	20	—	—
47823 2000 EK_{97}	13.9	X	281.82284	265.19709	228.23259	10.11518	0.1332392	0.17794848	3.1304483	20	12 9.6	17.8
47824 2000 ED_{103}	14.1	X	334.82802	180.55974	170.95478	13.57441	0.1321446	0.21572613	2.7533888	20	9 9.4	16.9
47825 2000 EO_{103}	14.2	X	28.94216	281.97818	97.52500	10.44224	0.0840905	0.17994559	3.1072432	20	12 27.1	18.2
47826 2000 EC_{105}	13.2	X	24.37443	307.55337	59.87127	12.10303	0.0583932	0.17409778	3.1764393	20	12 1.2	17.5
47827 2000 EJ_{105}	13.3	X	45.87871	224.39101	111.79997	11.53720	0.1677855	0.17042846	3.2218696	20	12 7.1	17.9
47828 2000 EV_{109}	13.1	X	331.74407	162.25384	184.26830	21.11979	0.0935798	0.16066864	3.3510582	20	8 17.9	17.7
47829 2000 EF_{110}	13.8	X	99.59432	335.02551	23.99270	15.39679	0.1345600	0.23430419	2.6058496	20	—	—
47830 2000 EF_{111}	13.9	X	33.40993	193.31996	146.05305	16.47875	0.1074951	0.17130094	3.2109205	20	11 20.0	18.6
47831 2000 ED_{112}	14.6	X	208.98697	260.66334	213.37468	11.77907	0.1237071	0.21803692	2.7339004	20	8 21.1	19.0
47832 2000 EC_{113}	13.5	X	134.74115	111.49037	191.70945	16.05567	0.0654451	0.18083230	3.0970773	20	—	—
47833 2000 EJ_{114}	14.1	X	126.31193	200.13247	293.92785	0.78419	0.0227999	0.20408447	2.8571261	20	6 16.7	18.1
47834 2000 EN_{114}	13.8	X	277.95083	47.22334	18.16766	23.63238	0.3130557	0.26798692	2.3826504	20	9 5.9	16.8
47835 Stevecoe	13.8	X	294.47269	339.02157	110.78550	14.94288	0.1307979	0.22821772	2.6519773	20	11 22.5	17.0
47836 2000 EU_{116}	13.3	X	235.74151	303.63440	230.40269	8.13012	0.0520840	0.17500811	3.1654145	20	12 9.5	17.7
47837 2000 EB_{118}	13.6	X	265.14251	118.94679	66.56469	12.34882	0.0854814	0.18538455	3.0461669	20	—	—
47838 2000 EP_{119}	13.6	X	285.04227	287.33924	55.77167	10.11015	0.2087050	0.21068073	2.7971741	20	5 23.1	17.2
47839 2000 ES_{119}	13.3	X	210.43938	198.41414	31.51600	10.07584	0.0420945	0.18367598	3.0650282	20	—	—
47840 2000 EW_{119}	14.3	X	7.40137	4.48882	118.46524	12.01613	0.0604127	0.19180018	2.9778539	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47841 2000 EO_{121}	13.5	X	111.61080	295.28733	38.87737	10.78702	0.1573481	0.23487435	2.6016307	20	—	—
47842 2000 EH_{122}	14.3	X	323.96483	3.75919	118.78168	3.09565	0.0413931	0.18494481	3.0509935	20	—	—
47843 2000 EC_{123}	13.3	X	92.45746	294.76714	67.88095	11.63116	0.0630262	0.18305241	3.0719850	20	—	—
47844 2000 EQ_{126}	14.2	X	65.60833	354.51839	14.29482	11.60636	0.0887885	0.18200456	3.0837645	20	—	—
47845 2000 ED_{129}	14.2	X	161.59309	326.99960	7.48459	10.28032	0.1073367	0.18927503	3.0042806	20	1 22.5	18.9
47846 2000 EM_{133}	14.3	X	88.69681	296.11416	141.41701	2.71324	0.0879625	0.19504271	2.9447577	20	2 27.5	18.3
47847 2000 EV_{133}	13.8	X	159.13140	209.63154	123.32971	10.91758	0.1063145	0.18667140	3.0321513	20	1 15.5	18.4
47848 2000 EY_{133}	13.7	X	94.49093	24.72750	11.93005	10.18989	0.1112724	0.18980648	2.9986701	20	1 22.4	17.9
47849 2000 EY_{135}	13.9	X	132.71650	282.42250	83.34420	7.77593	0.1111112	0.18873797	3.0099771	20	1 28.5	18.4
47850 2000 EB_{137}	14.1	X	6.11510	75.77775	16.02315	10.28915	0.0858556	0.18493030	3.0511531	20	—	—
47851 2000 EW_{139}	13.8	X	7.87058	69.95791	72.18097	9.71009	0.0343505	0.19065964	2.9897179	20	1 27.6	17.9
47852 2000 EQ_{140}	14.8	X	201.29638	60.96680	6.22092	7.04514	0.1057482	0.26214236	2.4179348	20	6 19.9	18.5
47853 2000 EA_{144}	13.9	X	92.91625	105.60358	218.63063	11.95467	0.2234291	0.22862804	2.6488033	20	—	—
47854 2000 EY_{150}	14.5	X	251.42509	239.01191	192.90160	8.16024	0.1289488	0.21606082	2.7505447	20	8 16.4	18.5
47855 2000 EU_{153}	14.7	X	72.08391	267.20609	140.38170	3.19892	0.1747069	0.18986988	2.9980025	20	1 10.1	18.3
47856 2000 EO_{154}	14.0	X	190.24582	25.28727	354.10042	2.02961	0.0777887	0.19789021	2.9164409	20	4 8.6	18.5
47857 2000 ET_{155}	14.1	X	343.12558	156.62387	317.39997	11.18796	0.0647130	0.18470576	3.0536253	20	—	—
47858 2000 EB_{158}	13.3	X	39.38287	166.26630	305.78186	8.81288	0.0520565	0.19107372	2.9853969	20	1 30.5	17.3
47859 2000 EJ_{158}	14.5	X	251.11883	230.13674	249.37821	11.77046	0.1230001	0.22208689	2.7005617	20	10 18.5	18.2
47860 2000 EX_{163}	14.2	X	327.65109	359.03434	6.74435	5.08974	0.1727337	0.21753371	2.7381149	20	9 16.5	16.9
47861 2000 EY_{169}	13.2	X	144.12062	236.23455	110.90986	10.82386	0.1554253	0.19030961	2.9933827	20	1 21.6	17.9
47862 2000 ED_{175}	14.3	X	197.65298	243.23184	119.54584	12.66643	0.1316013	0.20112971	2.8850404	20	4 1.2	19.1
47863 2000 EC_{180}	14.2	X	331.09697	308.32215	98.26084	9.59957	0.0284821	0.17753401	3.1353186	20	11 11.7	18.5
47864 2000 EN_{184}	13.8	X	104.15386	233.58722	118.59627	10.85389	0.0964700	0.18403104	3.0610846	20	—	—
47865 2000 FK_{3}	13.6	X	62.70231	356.79372	72.75600	11.04821	0.0802756	0.19055035	2.9908609	20	1 13.4	17.5
47866 2000 FM_{5}	15.4	X	210.91163	115.78401	247.78463	1.01961	0.0824621	0.20380476	2.8597397	20	4 10.6	19.8
47867 2000 FC_{6}	14.1	X	33.51079	181.71893	176.00614	0.78227	0.1480020	0.17165851	3.2064599	20	12 13.5	18.4
47868 2000 FS_{11}	13.7	X	5.67877	39.20365	58.37221	12.89549	0.1290829	0.23749727	2.5824403	20	—	—
47869 2000 FF_{12}	14.1	X	267.26385	76.28188	14.87424	22.04900	0.0767286	0.22278043	2.6949540	20	10 12.1	17.5
47870 2000 FK_{13}	12.7	X	127.45263	114.22520	115.42193	16.03847	0.0771265	0.17007857	3.2262869	20	10 25.2	17.9
47871 2000 FQ_{13}	14.3	X	122.39965	297.65016	105.72378	13.74814	0.1762760	0.24453323	2.5326633	20	3 8.6	18.1
47872 2000 FV_{15}	14.4	X	191.12106	316.51929	141.86444	8.65289	0.1836836	0.21280379	2.7785388	20	7 14.8	19.0
47873 2000 FV_{16}	14.2	X	275.41354	336.51224	122.51180	10.74850	0.0525249	0.17399666	3.1776699	20	11 2.1	18.7
47874 2000 FP_{17}	13.5	X	86.03551	308.19813	53.40510	10.37645	0.0722847	0.18200532	3.0837559	20	—	—
47875 2000 FG_{21}	14.1	X	265.00864	306.93014	92.27907	10.20082	0.1633880	0.21314517	2.7755713	20	7 18.9	18.0
47876 2000 FM_{21}	14.5	X	270.16593	316.24209	70.23283	10.31901	0.1718739	0.21153708	2.7896200	20	7 6.9	18.4
47877 2000 FE_{23}	13.3	X	91.04933	258.47285	107.00486	11.22250	0.1122992	0.18201845	3.0836076	20	—	—
47878 2000 FK_{25}	14.0	X	215.37869	339.02796	193.21623	9.22313	0.0457748	0.17493878	3.1662508	20	11 15.9	18.7
47879 2000 FR_{26}	13.8	X	114.70416	28.87194	10.44240	10.74302	0.0979431	0.19153158	2.9806373	20	2 18.1	18.1
47880 2000 FY_{27}	14.2	X	344.52376	79.36390	313.26182	2.15695	0.2522466	0.22227453	2.6990416	20	12 9.8	16.4
47881 2000 FV_{30}	14.3	X	91.74592	357.67312	38.75522	12.27617	0.1747826	0.23677898	2.5876604	20	1 18.9	17.6
47882 2000 FT_{38}	13.8	X	153.00129	223.20691	99.40443	3.20217	0.0682119	0.18345362	3.0675044	20	—	—
47883 2000 FZ_{39}	14.4	X	314.03243	266.39987	158.03876	8.75444	0.2863622	0.22420871	2.6834967	20	11 11.9	16.3
47884 2000 FN_{40}	14.6	X	273.78334	267.44609	150.13186	9.38654	0.1482730	0.21524379	2.7575007	20	8 26.9	18.2
47885 2000 FB_{42}	14.2	X	310.33299	317.31648	146.09954	8.51576	0.0730260	0.17726540	3.1384851	20	12 19.6	18.3
47886 2000 FT_{42}	13.9	X	326.80325	101.12252	86.38267	2.68902	0.0270253	0.19190526	2.9767667	20	1 29.3	18.0
47887 2000 FY_{42}	14.1	X	237.10025	21.97223	116.05762	5.75790	0.0839314	0.17405483	3.1769618	20	10 27.0	18.8
47888 2000 FC_{46}	13.3	X	13.26785	291.43714	82.49528	9.13201	0.0786914	0.17305739	3.1891574	20	11 28.1	17.4
47889 2000 FL_{47}	13.9	X	277.01910	320.52283	155.20583	12.36806	0.1176725	0.17539063	3.1608105	20	11 15.5	18.3
47890 2000 FB_{49}	13.2	X	204.46537	235.00591	352.46116	15.97654	0.0847505	0.17673304	3.1447844	20	—	—
47891 2000 FO_{65}	14.3	X	21.14993	329.92341	53.90665	1.89410	0.1889114	0.17679879	3.1440047	20	—	—
47892 2000 GT_{5}	14.0	X	224.92540	329.76449	198.94571	4.97910	0.1138200	0.17389214	3.1789431	20	11 13.4	18.7
47893 2000 GY_{11}	13.6	X	72.31481	85.35184	345.02924	9.70246	0.0900865	0.18995432	2.9971140	20	1 30.8	17.6
47894 2000 GS_{21}	15.0	X	254.57493	222.03147	201.56089	1.62961	0.2111589	0.21470047	2.7621508	20	7 30.5	18.8
47895 2000 GZ_{25}	15.7	X	43.09923	61.13943	18.36392	3.03371	0.2767580	0.23889744	2.5723401	20	—	—
47896 2000 GE_{36}	13.7	X	41.82038	17.91664	40.57327	1.77547	0.1348612	0.18337568	3.0683735	20	—	—
47897 2000 GO_{38}	14.5	X	322.40298	238.80449	192.54848	14.51106	0.0923138	0.22339591	2.6900018	20	12 10.5	17.9
47898 2000 GA_{47}	13.7	X	116.99962	242.85194	201.95298	12.16307	0.0866385	0.19692629	2.9259501	20	4 10.7	18.0
47899 2000 GO_{48}	13.9	X	316.97538	276.36678	203.45090	17.95612	0.1442282	0.18077755	3.0977026	20	—	—
47900 2000 GS_{48}	14.5	X	72.30813	60.78626	30.92925	1.45483	0.1469658	0.19261779	2.9694210	20	3 2.9	18.1
47901 2000 GH_{54}	13.7	X	9.99907	7.39965	27.82810	16.04858	0.0708847	0.17405190	3.1769974	20	12 16.2	18.2
47902 2000 GM_{55}	14.4	X	351.50377	258.65648	199.34457	13.11196	0.0888407	0.18120026	3.0928831	20	—	—
47903 2000 GX_{55}	13.7	X	260.81012	316.54109	184.00566	6.29600	0.1010653	0.17497161	3.1658548	20	11 24.2	18.1
47904 2000 GW_{56}	14.0	X	292.26223	10.63343	69.77841	1.84454	0.1694754	0.17215542	3.2002869	20	10 14.1	17.9
47905 2000 GN_{63}	14.0	X	349.92371	292.78015	121.76349	2.68959	0.1542454	0.17504514	3.1649681	20	12 21.2	17.7
47906 2000 GV_{67}	13.3	X	86.99501	316.89800	45.68577	8.75250	0.0754806	0.17874215	3.1211747	20	—	—
47907 2000 GT_{71}	12.7	X	76.34987	265.13863	94.37809	1.74501	0.2920476	0.12477302	3.9663307	20	—	—
47908 2000 GH_{72}	13.7	X	35.54381	213.53590	206.30738	11.73918	0.2555581	0.23081534	2.6320428	20	—	—
47909 2000 GC_{74}	13.2	X	119.35796	219.21275	212.25968	3.77063	0.0930430	0.19358896	2.9594817	20	3 28.2	17.5
47910 2000 GY_{74}	13.6	X	35.80243	330.70325	41.93447	9.44111	0.0614667	0.17259725	3.1948230	20	12 21.9	18.1
47911 2000 GT_{76}	13.6	X	162.05842	358.77733	30.33035	9.97331	0.0853804	0.19219333	2.9737914	20	3 25.8	18.1
47912 2000 GA_{81}	14.5	X	294.08817	218.98744	274.75168	1.27687	0.1725715	0.17975025	3.1094939	20	12 25.4	18.1
47913 2000 GR_{81}	14.1	X	280.35095	42.30365	30.23930	9.85193	0.1430482	0.21669979	2.7451351	20	9 29.9	17.4
47914 2000 GM_{90}	13.4	X	15.68660	329.86168	163.66076	12.36097	0.0533112	0.18871399	3.0102321	20	1 23.7	17.4
47915 2000 GG_{91}	14.0	X	137.83513	2.13789	60.77905	12.14969	0.1587606	0.24558277	2.5254423	20	4 15.9	17.9
47916 2000 GA_{98}	13.7	X	107.00949	190.07076	210.90969	13.16901	0.1097083	0.19037953	2.9926497	20	2 4.6	18.2
47917 2000 GO_{100}	13.7	X	42.87579	61.05795	7.50585	12.56432	0.1608431	0.23410095	2.6073576	20	—	—
47918 2000 GN_{101}	13.1	X	172.54797	52.66992	203.30303	12.02922	0.0369163	0.17844261	3.1246665	20	—	—
47919 2000 GS_{101}	13.7	X	66.93831	173.39407	211.80811	8.66881	0.0546234	0.18234228	3.0799556	20	—	—
47920 2000 GZ_{104}	13.5	X	155.73111	190.82941	107.85699	2.96030	0.1384191	0.17780016	3.1321889	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
47921 2000 GW_{106}	14.0	X	230.35932	261.95536	192.64017	8.87015	0.1370480	0.21311376	2.7758440	20	8 19.6	18.2
47922 2000 GK_{109}	13.6	X	111.22433	254.59034	173.51920	9.94061	0.0787169	0.19246207	2.9710225	20	3 13.4	17.6
47923 2000 GJ_{111}	14.1	X	331.96146	77.25456	324.21767	3.34051	0.0413554	0.17104627	3.2141068	20	10 31.7	18.4
47924 2000 GS_{113}	14.1	X	23.26896	255.26938	214.33000	11.99944	0.1356785	0.18979718	2.9987681	20	1 2.7	17.8
47925 2000 GC_{118}	15.0	X	98.75122	28.51768	345.41418	2.66373	0.2166746	0.23621840	2.5917528	20	1 3.6	18.0
47926 2000 GK_{135}	13.9	X	34.90989	290.36885	154.01632	14.11255	0.1227029	0.23479713	2.6022011	20	—	—
47927 2000 GG_{148}	14.7	X	102.21010	158.85763	178.33322	1.97061	0.1702791	0.18036489	3.1024256	20	—	—
47928 2000 GD_{154}	13.6	X	55.29431	191.40806	226.81523	11.53696	0.0588893	0.18547706	3.0451539	20	—	—
47929 2000 GZ_{156}	14.0	X	169.54370	202.61444	289.11136	8.01434	0.0995905	0.21021787	2.8012785	20	8 5.7	18.4
47930 2000 GK_{159}	13.7	X	160.03122	68.83487	221.87534	16.25657	0.0948874	0.18069320	3.0986666	20	—	—
47931 2000 GG_{167}	14.1	X	144.22772	75.77049	215.81827	12.22186	0.1469624	0.17998057	3.1068405	20	—	—
47932 2000 GN_{171}	6.2	X	14.48073	195.97776	26.11948	10.81473	0.2859130	0.00394549	39.6644781	20	5 28.3	20.8
47933 2000 HS_{7}	14.5	X	305.88780	330.99266	140.95093	1.29358	0.1938890	0.17832461	3.1260447	20	12 16.0	18.0
47934 2000 HU_{7}	13.8	X	317.06123	85.97561	41.80143	15.00473	0.2119963	0.18195756	3.0842955	20	—	—
47935 2000 HR_{11}	14.1	X	60.40607	232.06727	224.70864	11.55367	0.1622305	0.23968259	2.5667194	20	2 8.4	17.1
47936 2000 HS_{29}	13.8	X	102.75535	30.45303	5.21098	5.78683	0.0816577	0.18613403	3.0379843	20	1 26.6	18.0
47937 2000 HB_{44}	14.5	X	358.43014	348.45720	103.63311	3.34905	0.1243014	0.18439993	3.0570008	20	—	—
47938 2000 HL_{45}	14.3	X	166.95474	273.97977	132.53308	2.74787	0.1080836	0.19745226	2.9207518	20	4 20.3	18.9
47939 2000 HO_{58}	14.6	X	207.89356	250.36677	189.62244	7.69091	0.1995907	0.20856724	2.8160390	20	7 5.5	19.4
47940 2000 HE_{59}	13.2	X	316.57489	240.05011	227.64688	15.35521	0.0788018	0.17685358	3.1433553	20	12 30.8	17.5
47941 2000 HU_{61}	13.2	X	69.00725	156.94221	196.70263	2.81170	0.1291489	0.12473049	3.9672324	20	—	—
47942 2000 HW_{76}	13.4	X	251.66576	296.01557	212.84428	13.04627	0.0933283	0.17225856	3.1990094	20	11 22.9	17.9
47943 2000 HS_{77}	13.5	X	323.00276	129.38954	330.32736	8.26732	0.0420373	0.17759106	3.1346471	20	—	—
47944 2000 JK_{12}	13.8	X	99.31849	242.45122	127.61477	2.51710	0.1719091	0.17980307	3.1088849	20	1 3.5	17.9
47945 2000 JY_{18}	13.3	X	0.97340	257.79544	164.45029	22.94617	0.1359107	0.17329352	3.1862597	20	—	—
47946 2000 JB_{52}	12.7	X	311.67479	204.95729	247.68874	21.11797	0.0637683	0.17095872	3.2152041	20	12 6.3	17.0
47947 2000 JT_{72}	14.0	X	254.90047	273.19752	200.16808	21.19870	0.0600912	0.22278197	2.6949416	20	10 29.5	17.5
47948 2000 KD_{32}	13.6	X	66.95921	167.21219	198.22909	17.68096	0.0912063	0.17265401	3.1941228	20	—	—
47949 2000 KW_{34}	13.8	X	148.48791	101.65663	197.50834	3.94969	0.1476437	0.17330125	3.1861649	20	—	—
47950 2000 MP	15.4	X	70.65840	248.42661	247.98080	4.27391	0.2029353	0.23570869	2.5954877	20	5 3.1	18.4
47951 2000 OS_{15}	14.2	X	111.93427	194.41698	295.07786	12.10794	0.0881446	0.23920924	2.5701043	20	5 31.0	17.9
47952 2000 OM_{16}	14.5	X	33.92265	85.19176	301.82282	1.79191	0.1719081	0.26112920	2.4241850	20	—	—
47953 2000 QJ_{27}	15.0	X	53.53701	313.91076	27.74327	1.99190	0.0903968	0.20667116	2.8332363	20	12 18.7	18.9
47954 2000 QF_{40}	15.8	X	82.98342	308.33859	142.32161	7.19887	0.1145402	0.27612014	2.3356297	20	3 1.9	18.4
47955 2000 QZ_{73}	12.0	X	277.53599	99.12660	218.33290	3.24032	0.0676629	0.08556996	5.1002151	20	5 5.5	18.7
47956 2000 QS_{103}	12.0	X	286.33572	297.85583	27.13510	9.68484	0.0667443	0.08482207	5.1301507	20	5 22.4	18.8
47957 2000 QN_{116}	11.7	X	266.73737	154.12830	153.76207	7.57899	0.0855601	0.08120503	5.2813799	20	4 12.9	18.7
47958 2000 QV_{142}	15.5	X	243.06059	313.27398	21.92081	7.09176	0.1373387	0.28094712	2.3088001	20	4 1.6	18.6
47959 2000 QP_{168}	12.3	X	294.46498	15.07113	291.15464	6.02960	0.0662548	0.08548934	5.1034210	20	5 10.9	19.1
47960 2000 RS_{54}	14.8	X	323.34091	319.60569	316.98543	10.39580	0.1901456	0.28215738	2.3021932	20	4 12.3	17.3
47961 2000 RR_{69}	15.4	X	352.11783	319.47979	136.99859	7.26519	0.0833051	0.26084176	2.4259656	20	—	—
47962 2000 RU_{69}	11.9	X	215.21053	4.06868	19.44592	20.09540	0.0900099	0.08136048	5.2746510	20	5 7.2	19.3
47963 2000 SO_{56}	11.8	X	294.85955	104.29311	185.61056	13.23650	0.0295693	0.08158197	5.2650998	20	5 1.0	18.7
47964 2000 SG_{131}	12.0	X	236.20200	99.09916	259.36767	14.00205	0.1413317	0.08290824	5.2087990	20	4 28.2	19.5
47965 2000 SP_{148}	15.3	X	158.98305	30.37770	279.51764	1.27469	0.2023046	0.26566868	2.3964910	20	—	—
47966 2000 SE_{261}	16.5	X	262.42437	71.80139	199.65848	22.00206	0.0793402	0.37135117	1.9169591	20	1 16.6	19.4
47967 2000 SL_{298}	11.8	X	340.39031	4.55163	254.72645	6.45660	0.1146418	0.08289804	5.2092260	20	5 12.8	18.1
47968 2000 TZ_{55}	15.6	X	96.02289	327.23105	87.66504	23.66808	0.0906821	0.36745873	1.9304727	20	1 5.0	17.0
47969 2000 TG_{64}	11.9	X	207.20104	278.39668	110.47173	16.91416	0.0554597	0.08108854	5.2864368	20	5 17.7	19.2
47970 2000 UR_{62}	15.6	X	183.81602	315.80411	346.67455	5.91279	0.1223706	0.26589967	2.3951029	20	—	—
47971 2000 VO_{4}	14.7	X	168.31749	20.44435	80.92564	6.88997	0.2372095	0.18107138	3.0943506	20	6 28.8	20.1
47972 2000 VW_{15}	14.4	X	251.13145	302.78142	98.14616	4.66115	0.1135464	0.18426549	3.0584875	20	7 9.1	18.9
47973 2000 VL_{46}	15.5	X	318.45274	1.83311	321.08079	5.37853	0.1514040	0.28571214	2.2830579	20	7 1.3	17.4
47974 2000 WN_{23}	15.7	X	193.92379	158.51229	169.16216	6.90870	0.1502302	0.26874620	2.3781605	20	2 3.0	19.4
47975 2000 WE_{26}	15.7	X	91.27997	309.03560	258.88403	4.98064	0.1158018	0.28276132	2.2989139	20	8 26.1	18.9
47976 2000 WU_{88}	15.5	X	322.39141	180.10061	34.48026	6.22897	0.1068979	0.31174519	2.1541182	20	1 28.8	17.9
47977 2000 WC_{154}	14.6	X	313.87798	339.75201	337.88300	9.69873	0.1115967	0.18420253	3.0591843	20	6 15.4	18.6
47978 2000 WJ_{166}	14.4	X	306.41086	167.00889	221.73821	9.69154	0.0374471	0.19078138	2.9884458	20	9 12.5	18.5
47979 2000 WD_{179}	13.8	X	93.14759	349.63630	150.81472	24.01000	0.1504176	0.21762283	2.7373673	20	6 5.8	18.2
47980 2000 WM_{179}	15.1	X	320.94229	351.53392	179.01006	7.84984	0.0723633	0.26010755	2.4305286	20	—	—
47981 2000 WG_{183}	14.9	X	4.17091	219.36931	214.00968	1.54370	0.0313844	0.20399728	2.8579402	20	—	—
47982 2000 WQ_{187}	14.1	X	354.91880	267.69008	338.79481	13.48786	0.1182560	0.18007606	3.1057422	20	5 12.3	18.1
47983 2000 XX_{13}	15.0	X	57.19121	91.62407	9.33205	19.30151	0.1081314	0.35777836	1.9651393	20	1 18.1	17.0
47984 2000 XE_{20}	15.2	X	298.94306	275.80497	318.23591	6.92696	0.0645880	0.26732258	2.3865963	20	2 4.2	18.1
47985 2000 XV_{41}	14.1	X	145.41846	242.36827	295.58470	28.78879	0.3149373	0.23145707	2.6271754	20	8 30.3	19.5
47986 2000 YN_{3}	15.7	X	134.69818	343.29013	271.12014	3.93651	0.1159696	0.29631398	2.2282707	20	12 17.4	18.6
47987 2000 YY_{8}	15.3	X	310.23717	126.24678	260.82727	2.71476	0.1157945	0.23748783	2.5825088	20	9 19.3	18.0
47988 2000 YV_{25}	15.0	X	112.46867	323.74994	51.81690	3.81641	0.0466472	0.20665549	2.8333795	20	1 4.3	18.8
47989 2000 YD_{35}	15.5	X	167.01917	87.32641	137.12261	3.04636	0.0837659	0.28757275	2.2731996	20	12 13.9	18.6
47990 2000 YV_{68}	16.1	X	341.80115	12.90230	129.31047	3.53212	0.0884029	0.30223757	2.1990600	20	—	—
47991 2000 YK_{73}	15.2	X	116.58331	191.66737	174.76554	4.07728	0.1098679	0.20965197	2.8063172	20	1 5.7	19.1
47992 2000 YY_{103}	15.5	X	61.17697	144.56545	54.23722	3.28927	0.1613524	0.26843120	2.3800206	20	7 12.3	18.2
47993 2000 YM_{105}	15.0	X	293.21792	238.51214	14.89109	3.39321	0.2154118	0.25625632	2.4548201	20	2 4.2	18.4
47994 2000 YN_{118}	15.4	X	300.74899	121.66673	86.94189	6.62726	0.1329580	0.25492408	2.4633653	20	—	—
47995 2000 YE_{133}	13.4	X	174.63175	84.34761	161.64668	10.00088	0.0762450	0.18737564	3.0245491	20	12 27.0	18.1
47996 2000 YY_{139}	14.9	X	50.86783	253.65920	355.25410	22.75348	0.1790113	0.27604287	2.3360656	20	9 13.5	17.7
47997 2001 AD_{20}	15.5	X	332.21166	176.69488	187.64047	3.66917	0.0954626	0.23765067	2.5813290	20	9 28.2	18.0
47998 2001 AZ_{44}	15.5	X	49.46504	106.54843	97.32708	3.20131	0.1449120	0.26914515	2.3758099	20	6 27.5	18.0
47999 2001 BC_{9}	15.6	X	343.64440	223.12589	3.77304	5.36152	0.1671922	0.26381513	2.4077030	20	3 18.5	17.8
48000 2001 BX_{37}	16.2	X	67.29106	41.83725	201.87800	7.15990	0.1015997	0.27911109	2.3189141	20	9 12.9	19.1