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		°	°	°	°		°				
100001 1982 UC_3	15.7	X	320.57887	288.62758	148.98183	10.73011	0.3695071	0.18277327	3.0751120	20	11 26.4	17.9
100002 1983 QC_1	16.5	X	324.25940	132.72520	241.76437	1.15351	0.1843064	0.26741210	2.3860636	20	10 4.3	18.2
100003 1983 RN_3	15.7	X	43.25153	1.26295	309.27784	3.97594	0.2436984	0.27019229	2.3696675	20	12 1.7	19.0
100004 1983 VA	16.3	X	235.89373	13.27683	76.69153	15.82825	0.7032966	0.23563266	2.5960460	20	7 9.1	22.1
100005 1986 RY	16.2	X	167.89635	351.00435	287.99378	5.76585	0.1416568	0.30170708	2.2016370	20	—	—
100006 1987 DA_7	15.7	X	147.77827	210.87786	309.66431	4.21814	0.3044425	0.33821033	2.0402253	20	9 1.6	19.2
100007 Peters	14.1	X	68.25421	49.67909	310.27790	21.35767	0.0029739	0.17573474	3.1566830	20	—	—
100008 1988 QZ	15.6	X	218.31961	9.58443	335.81399	12.49229	0.3380979	0.26703206	2.3883269	20	3 12.7	20.1
100009 1988 RQ_4	16.5	X	121.51276	161.78894	192.10751	0.79501	0.2251299	0.29063359	2.2572111	20	—	—
100010 1988 RN_{12}	14.6	X	357.26821	309.26611	358.44137	16.91219	0.2663374	0.21523243	2.7575977	20	9 4.9	16.8
100011 1988 VE_3	14.9	X	21.10080	321.67673	42.73409	17.53335	0.3010923	0.21837118	2.7311099	20	—	—
100012 1989 BC_1	14.3	X	110.28781	288.57724	119.10987	27.76926	0.2795475	0.22559983	2.6724538	20	3 17.9	18.8
100013 1989 CD_3	15.2	X	250.46085	217.71474	288.44674	10.99014	0.1506511	0.21138148	2.7909888	20	11 15.4	19.2
100014 1989 SR_4	15.4	X	215.88223	356.19614	43.82428	4.78027	0.1788254	0.24560657	2.5252792	20	5 25.4	19.4
100015 1989 SR_7	15.7	X	164.43045	88.77051	269.30628	4.38884	0.2996718	0.27104307	2.3647061	20	2 21.3	19.8
100016 1989 SD_8	15.6	X	212.78371	67.05984	331.21689	4.57963	0.2576144	0.24511606	2.5286470	20	5 15.7	20.0
100017 1989 TN_2	16.6	X	261.01007	224.65174	175.00222	8.05973	0.2950710	0.28129715	2.3068844	20	6 27.9	20.1
100018 1989 TA_5	16.3	X	119.17476	334.43750	88.75155	3.55006	0.1510555	0.27103470	2.3647548	20	3 21.5	19.5
100019 Gregorianik	15.6	X	219.63467	191.56540	198.19247	2.91838	0.2361522	0.24463144	2.5319854	20	5 13.6	19.8
100020 1990 QH_4	16.0	X	341.47299	358.52034	346.69064	4.48075	0.1894570	0.29683232	2.2256759	20	10 6.1	17.4
100021 1990 QV_7	15.7	X	311.84281	115.08035	235.55275	0.39059	0.2030990	0.26132721	2.4229603	20	7 22.3	17.6
100022 1990 SG_5	16.4	X	128.94739	231.59881	136.87150	2.90241	0.2075730	0.31109504	2.1571184	20	1 20.6	19.0
100023 1990 SH_5	15.8	X	146.77899	352.58145	20.80236	9.51580	0.1661075	0.24679420	2.5171712	20	2 22.9	19.7
100024 1990 SW_6	15.5	X	107.74422	341.67378	29.87459	7.96316	0.2334484	0.24286742	2.5442310	20	1 15.4	18.9
100025 1990 SY_6	15.9	X	292.99153	349.74458	24.55649	6.86961	0.1549344	0.25991921	2.4317026	20	8 2.5	18.6
100026 1990 ST_9	15.7	X	340.92346	268.12576	49.41507	3.07802	0.1855175	0.26108176	2.4244787	20	8 10.3	17.4
100027 Hannaharendt	16.2	X	342.03771	32.73580	320.01980	1.50773	0.2250285	0.26252757	2.4155689	20	10 13.6	17.8
100028 von Canstein	14.7	X	194.20448	97.86040	215.15483	12.40005	0.2052750	0.17987546	3.1080508	20	1 24.9	20.2
100029 Varnhagen	15.0	X	275.01886	83.87267	315.76786	4.11617	0.1020351	0.19256092	2.9700056	20	8 9.1	18.7
100030 1990 WN_1	15.5	X	227.66170	247.83625	186.59744	6.59177	0.3044990	0.18695934	3.0290372	20	7 7.7	20.9
100031 1991 FM_2	15.0	X	178.34976	312.14028	171.20029	21.93340	0.3879043	0.18225746	3.0809111	20	7 28.9	21.2
100032 1991 GU_6	15.0	X	337.04009	214.04272	20.26200	11.06693	0.0361231	0.23739867	2.5831554	20	4 5.8	18.2
100033 Taize	14.4	X	58.85443	135.68159	42.40733	8.46691	0.1469609	0.17294139	3.1905833	20	6 2.7	18.6
100034 1991 PN_1	15.9	X	329.38273	34.37637	314.47562	4.40180	0.2621293	0.27251952	2.3561574	20	8 31.9	16.8
100035 1991 PO_8	15.1	X	72.64522	26.15342	331.39167	7.28797	0.2790476	0.21409668	2.7673415	20	—	—
100036 1991 PM_{14}	16.3	X	348.54264	229.39556	104.00433	3.29209	0.2398059	0.27338515	2.3511812	20	10 6.5	17.7
100037 1991 RM	15.4	X	7.08352	190.12290	157.23319	12.91581	0.2825057	0.27538404	2.3397900	20	12 13.9	18.2
100038 1991 RD_{13}	15.6	X	275.23264	64.12359	299.07592	2.53396	0.2735142	0.23269972	2.6178141	20	5 27.9	19.4
100039 1991 RO_{16}	16.0	X	17.90312	301.71384	64.23703	3.37295	0.2277328	0.27697253	2.3308353	20	—	—
100040 1991 RQ_{17}	13.9	X	344.55962	75.43407	349.50722	22.58179	0.3687554	0.17493413	3.1663069	20	—	—
100041 1991 RJ_{28}	15.5	X	345.70157	322.31686	150.45421	9.16139	0.0518916	0.21602675	2.7508339	20	—	—
100042 1991 SJ_2	15.6	X	239.00497	14.95861	319.41264	8.26336	0.2203932	0.26232253	2.4168275	20	3 18.7	19.7
100043 1991 SE_3	15.0	X	320.57415	277.20177	195.52356	7.24791	0.0759942	0.17587390	3.1550177	20	—	—
100044 1991 TX	15.1	X	249.06570	285.04152	76.62045	24.17736	0.2825955	0.26405855	2.4062231	20	5 7.5	19.3
100045 1991 TK_1	14.3	X	299.11604	115.71925	336.40677	22.03515	0.2939734	0.27403004	2.3474910	20	12 1.5	16.3
100046 Worms	14.7	X	274.05441	297.26249	224.03658	4.15963	0.0920944	0.24628400	2.5206464	20	—	—
100047 Leobaeck	15.9	X	250.62658	40.83541	280.69129	1.75350	0.2045620	0.26155044	2.4215815	20	3 16.6	19.7
100048 1991 TE_{14}	13.7	X	6.15129	352.12314	11.02069	28.08638	0.1573931	0.17191394	3.2032831	20	10 31.5	17.9
100049 Cesarann	16.9	X	329.20463	308.90848	86.19916	3.29187	0.2014285	0.27253838	2.3560487	20	11 24.0	18.5
100050 Carloshernandez	16.4	X	301.27744	306.60663	83.63797	1.67547	0.2121670	0.23491242	2.6013496	20	8 27.5	19.0
100051 Davidhernandez	16.6	X	282.50200	222.70199	198.03904	5.83549	0.0390547	0.30464371	2.1874657	20	10 15.9	18.9
100052 1991 VP_5	14.2	X	28.25346	37.23987	46.46670	36.32115	0.2489497	0.21102322	2.7941468	20	—	—
100053 1992 AR_2	16.2	X	31.06643	296.89682	112.44378	2.10438	0.1830964	0.27611439	2.3356621	20	—	—
100054 1992 BG_4	16.6	X	167.18405	59.17369	101.01040	5.38824	0.0783983	0.29754328	2.2221291	20	9 23.9	19.6
100055 1992 BK_4	15.4	X	53.30780	41.74260	22.90048	2.79260	0.0775427	0.24356255	2.5393879	20	—	—
100056 1992 DZ_3	15.0	X	18.64420	21.61555	337.82341	10.25537	0.2113192	0.23143702	2.6273272	20	12 21.4	18.4
100057 1992 DE_{10}	14.9	X	159.08613	81.07070	180.00710	12.66390	0.1523978	0.23321782	2.6139357	20	—	—
100058 1992 EH	16.9	X	312.39480	327.24843	175.19994	23.94157	0.0782695	0.37580499	1.9017833	20	—	—
100059 1992 EE_4	15.5	X	209.66429	222.02097	0.49454	7.30907	0.1533949	0.23493791	2.6011615	20	—	—
100060 1992 ET_4	15.7	X	157.31063	204.76475	350.43000	13.37630	0.1874879	0.22730086	2.6591040	20	10 9.9	20.2
100061 1992 EL_5	15.2	X	205.51323	15.50583	79.16276	4.95270	0.0966763	0.18868920	3.0104958	20	7 29.0	19.8
100062 1992 EH_9	16.0	X	196.21414	39.18473	113.55641	6.57918	0.1793093	0.22799199	2.6537275	20	9 30.2	20.3
100063 1992 EY_{13}	15.1	X	178.06733	304.10221	331.44718	14.35420	0.0891159	0.23657742	2.5891300	20	—	—
100064 1992 EL_{20}	15.9	X	349.56850	7.44317	106.39090	5.43430	0.0706226	0.23954136	2.5677281	20	—	—
100065 1992 ES_{25}	15.4	X	116.88338	77.71558	156.17589	0.99721	0.1914448	0.19138112	2.9821992	20	10 22.6	20.3
100066 1992 EV_{25}	15.5	X	196.32125	11.15741	162.81367	14.54372	0.1903651	0.22917813	2.6445631	20	10 26.0	19.9
100067 1992 EY_{26}	15.4	X	309.56028	277.92410	153.69827	5.78618	0.2119839	0.23350149	2.6118182	20	11 19.0	17.6
100068 1992 EH_{28}	15.1	X	211.93370	72.82703	160.49443	4.73737	0.1836861	0.23535469	2.5980897	20	—	—
100069 1992 ED_{29}	15.7	X	192.56707	7.66133	220.26087	2.35145	0.1189775	0.23338728	2.6126703	20	12 30.5	19.4
100070 1992 EX_{29}	16.1	X	218.00871	293.78112	152.30491	9.32163	0.2273022	0.25979698	2.4324653	20	7 22.6	20.0
100071 1992 ET_{30}	15.7	X	275.38615	70.24040	185.94243	4.76021	0.1167283	0.24381303	2.5376483	20	1 30.2	19.5
100072 1992 EY_{30}	15.8	X	307.17304	196.46255	292.28202	2.70459	0.0610322	0.23612541	2.5924331	20	—	—
100073 1992 EV_{31}	15.3	X	209.32895	24.54634	163.93377	33.76871	0.1846981	0.23119327	2.6291736	20	11 27.5	20.0
100074 1992 OB_2	15.9	X	188.81653	28.14093	301.34337	3.23046	0.2206226	0.23199543	2.6231095	20	2 7.2	20.4
100075 1992 PS_1	14.5	X	65.58703	88.06248	314.26560	6.45980	0.2941570	0.22434220	2.6824320	20	—	—
100076 1992 PT_1	16.4	X	167.26119	121.12636	146.32479	6.79367	0.2482105	0.29682112	2.2257319	20	—	—
100077 Tertzakian	15.4	X	180.73923	28.77743	343.06806	14.14517	0.2132933	0.23250523	2.6192738	20	3 19.1	20.0
100078 1992 RZ_2	15.0	X	152.17234	40.58205	340.88538	17.43762	0.2132434	0.23094514	2.6310564	20	3 8.2	19.3
100079 1992 RZ_4	15.5	X	158.37124	226.44762	169.22847	13.75630	0.2230232	0.23237112	2.6202815	20	4 3.8	19.9
100080 1992 RY_6	15.0	X	5.38326	140.96733	156.93785	8.13771	0.2157922	0.21048039	2.7989488	20	8 28.5	17.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100081 1992 SU_8	15.6	X	318.60988	209.73149	17.81532	3.08306	0.0482500	0.19794641	2.9158889	20	3 5.3	19.4
100082 1992 SA_{10}	16.0	X	264.85990	335.32516	26.14228	1.27302	0.0219246	0.20383707	2.8594375	20	6 18.7	20.0
100083 1992 SA_{13}	15.1	X	72.30184	347.55704	22.32984	8.82395	0.2891513	0.22058075	2.7128408	20	—	—
100084 1992 SY_{13}	16.0	X	306.20023	326.55872	10.61687	10.20836	0.2595387	0.27815903	2.3242024	20	6 6.3	18.5
100085 1992 UY_4	17.8	X	152.99138	42.14172	305.22929	2.64209	0.6188532	0.22817437	2.6523132	20	2 20.8	23.6
100086 1992 UG_7	16.8	X	352.94782	301.31378	33.59553	1.25961	0.1654440	0.28114774	2.3077016	20	10 9.6	18.4
100087 1993 BW_9	15.1	X	172.71492	192.69562	99.94181	4.68204	0.0524792	0.17745833	3.1362099	20	—	—
100088 1993 DC	16.0	X	147.71007	4.80406	69.88493	10.10597	0.4287773	0.26656786	2.3910988	20	5 20.3	20.7
100089 1993 FW_2	14.9	X	179.85964	255.30093	25.17644	7.62078	0.0782016	0.17123534	3.2117405	20	—	—
100090 1993 FX_5	15.1	X	357.59807	350.34290	80.07559	2.48330	0.1598088	0.17167684	3.2062317	20	—	—
100091 1993 FT_6	16.2	X	235.62462	22.47136	158.67539	7.78971	0.1987654	0.24102608	2.5571725	20	12 13.7	19.7
100092 1993 FK_8	16.3	X	228.42577	108.40052	52.01441	4.21558	0.1521086	0.23881071	2.5729628	20	11 13.8	19.8
100093 1993 FL_{10}	15.5	X	256.56921	46.82091	174.25582	12.93567	0.0882131	0.24638475	2.5199591	20	—	—
100094 1993 FJ_{13}	14.3	X	271.98410	345.60022	33.14017	10.72778	0.1131699	0.19199402	2.9758491	20	7 7.9	18.6
100095 1993 FN_{13}	15.9	X	26.90062	120.88846	153.61259	6.72942	0.1212601	0.26393401	2.4069800	20	8 30.9	18.3
100096 1993 FG_{18}	16.0	X	24.63003	116.91472	133.20406	6.85692	0.0888273	0.26148698	2.4219732	20	7 15.3	18.6
100097 1993 FK_{19}	15.2	X	184.13471	303.67918	53.53966	6.90322	0.0428464	0.21657842	2.7461606	20	3 7.5	19.2
100098 1993 FZ_{19}	14.7	X	114.63883	103.81040	46.67592	10.90035	0.0416757	0.18881882	3.0091179	20	6 24.9	19.1
100099 1993 FG_{21}	15.2	X	121.21141	207.77106	304.76952	0.91246	0.0231476	0.18932715	3.0037293	20	7 4.1	19.4
100100 1993 FB_{25}	15.1	X	223.68818	204.43106	301.23135	0.94160	0.2367443	0.16526456	3.2886392	20	10 1.2	20.4
100101 1993 FZ_{28}	16.2	X	176.62740	318.25174	311.50742	3.85089	0.1965538	0.24152428	2.5536548	20	—	—
100102 1993 FU_{30}	16.0	X	102.56965	163.53410	51.41354	3.59484	0.1126604	0.26633005	2.3925220	20	9 20.2	19.3
100103 1993 FC_{33}	16.7	X	126.60892	93.52321	130.95513	3.17515	0.1214808	0.26942479	2.3741657	20	10 28.7	20.2
100104 1993 FQ_{33}	16.4	X	302.22448	70.93244	54.15889	3.18956	0.1608129	0.27941780	2.3172168	20	—	—
100105 1993 FK_{35}	15.1	X	349.11993	284.84994	36.13856	4.78814	0.1094477	0.19227296	2.9729703	20	8 21.9	18.6
100106 1993 FW_{35}	15.0	X	57.33282	78.67567	179.76938	10.97144	0.0585483	0.19332287	2.9621967	20	9 1.6	19.1
100107 1993 FH_{39}	15.3	X	131.22379	133.01526	120.61400	3.18208	0.0225013	0.20096375	2.8866285	20	11 23.7	19.4
100108 1993 FF_{45}	16.6	X	133.46241	160.13122	25.21928	2.74165	0.1609471	0.26750799	2.3854933	20	9 15.7	20.3
100109 1993 FN_{46}	15.3	X	257.98945	40.76787	181.21081	5.42014	0.0773038	0.17390132	3.1788311	20	—	—
100110 1993 FV_{47}	16.7	X	90.95667	215.15933	44.02803	1.11414	0.1806852	0.26846391	2.3798273	20	11 8.4	20.2
100111 1993 FA_{51}	14.9	X	316.85894	324.82716	188.07422	13.45841	0.1358830	0.17420819	3.1750970	20	—	—
100112 1993 FM_{57}	16.1	X	232.52561	104.85975	109.36294	5.34388	0.2203950	0.24278927	2.5447769	20	—	—
100113 1993 FW_{73}	16.0	X	357.69872	55.84924	215.75921	3.75973	0.1903148	0.25949737	2.4343373	20	7 1.9	17.7
100114 1993 FQ_{82}	14.5	X	32.92799	252.73901	35.35083	5.92717	0.0561945	0.15759391	3.3945049	20	9 6.1	19.2
100115 1993 HA_3	15.8	X	343.02841	243.45618	107.22978	4.98337	0.2327967	0.26624892	2.3930080	20	10 19.2	17.4
100116 1993 KG_1	15.7	X	152.55277	167.97265	205.50942	9.20949	0.1762297	0.24726620	2.5139668	20	2 22.6	19.7
100117 1993 KM_1	15.3	X	333.98424	51.54532	173.55455	5.19495	0.0583067	0.17914616	3.1164803	20	3 23.1	19.3
100118 1993 LG_1	14.7	X	51.36677	10.26155	265.14545	23.67005	0.1814064	0.26363620	2.4087923	20	10 7.4	18.5
100119 1993 OB	13.9	X	24.38644	84.00352	281.07207	21.44528	0.2969014	0.26332581	2.4106848	20	—	—
100120 1993 OW_4	15.4	X	82.72120	233.67311	113.74272	16.45032	0.1637695	0.23213105	2.6220878	20	—	—
100121 1993 OP_7	15.4	X	66.31545	173.89472	120.06002	13.30255	0.1848815	0.22682902	2.6627903	20	11 24.4	19.6
100122 Alpes Maritimes	14.7	X	231.71766	183.09981	167.84919	6.02911	0.1676136	0.17224236	3.1992099	20	4 14.2	19.8
100123 1993 QU_5	15.7	X	232.55957	168.43564	168.23510	8.23662	0.2286170	0.24483730	2.5305659	20	3 20.7	20.0
100124 1993 QD_7	16.3	X	75.62166	22.56847	353.58274	5.48034	0.1939164	0.30484654	2.1864953	20	—	—
100125 1993 QG_7	15.4	X	139.50220	206.10331	105.98792	2.21856	0.1054382	0.23266360	2.6180850	20	—	—
100126 1993 QK_7	15.2	X	110.73214	301.42526	346.22383	13.19685	0.1536224	0.22811732	2.6527554	20	12 23.3	19.7
100127 1993 QA_8	16.2	X	328.39243	193.42554	118.03147	3.58590	0.1864946	0.25239943	2.4797647	20	6 26.8	18.3
100128 1993 QK_8	15.7	X	105.78835	309.84355	346.62555	3.42349	0.1304899	0.22803182	2.6534185	20	12 27.8	19.8
100129 1993 RQ_1	17.1	X	49.23930	279.19977	189.86715	2.31100	0.1479423	0.27355820	2.3501895	20	1 31.1	19.2
100130 1993 RD_3	15.0	X	60.44763	162.79584	189.34347	15.34384	0.2891064	0.22717051	2.6601211	20	—	—
100131 1993 RU_5	16.6	X	252.94365	111.75895	318.33921	1.44111	0.1477597	0.28967039	2.2622121	20	8 23.4	19.2
100132 1993 RR_8	15.5	X	330.91585	170.17135	188.25520	4.73899	0.1224548	0.21885611	2.7270741	20	9 12.4	18.4
100133 Demosthenes	14.2	X	191.79873	298.71000	357.83092	2.56338	0.2079612	0.12549238	3.9511588	20	1 14.3	20.6
100134 1993 RT_{14}	15.0	X	49.81350	257.49324	356.19922	12.63865	0.1619689	0.21703594	2.7422999	20	9 7.5	18.6
100135 1993 RR_{16}	16.7	X	191.84073	23.30280	319.17415	1.09859	0.1868261	0.24011293	2.5636517	20	2 23.8	20.8
100136 1993 SM_4	15.5	X	63.21543	336.87038	357.81826	5.21516	0.2355879	0.22690986	2.6621578	20	—	—
100137 1993 SD_7	14.8	X	16.33406	49.58065	359.33904	9.39065	0.2836383	0.18904959	3.0066686	20	—	—
100138 1993 SN_{14}	15.6	X	347.90683	331.41513	352.63954	3.43083	0.1700096	0.21743816	2.7389170	20	8 27.9	18.3
100139 1993 TS	15.3	X	225.28310	352.37540	10.07410	9.50570	0.2563369	0.24432236	2.5341204	20	4 11.8	19.6
100140 1993 TP_2	16.6	X	248.64609	59.54730	330.82961	2.59841	0.2583957	0.28450945	2.2894874	20	6 6.8	20.1
100141 1993 TH_5	16.1	X	121.62546	131.86222	283.23019	3.75281	0.0673270	0.23621461	2.5917805	20	3 1.9	19.8
100142 1993 TK_6	16.4	X	210.58597	164.71493	4.78494	5.85014	0.0912021	0.29489020	2.2354373	20	11 22.7	19.2
100143 1993 TD_{11}	15.9	X	162.42920	97.77741	262.20081	2.12543	0.1827246	0.23700119	2.5860428	20	2 18.7	20.1
100144 1993 TM_{14}	16.7	X	239.58350	5.01172	36.43623	0.77600	0.2196696	0.28510184	2.2863148	20	6 16.9	20.1
100145 1993 TW_{14}	16.1	X	295.78593	157.46525	191.74484	3.27843	0.1087486	0.21290726	2.7776386	20	7 1.9	19.5
100146 1993 TQ_{15}	15.7	X	76.64171	312.32865	20.28071	10.66233	0.0929028	0.22597566	2.6694898	20	—	—
100147 1993 TV_{15}	16.2	X	198.38548	315.91605	26.29696	4.02173	0.2276549	0.24018766	2.5631199	20	3 1.8	20.7
100148 1993 TT_{16}	15.6	X	265.77404	254.25702	167.42307	5.65869	0.0909361	0.21607140	2.7504549	20	8 29.5	19.0
100149 1993 TM_{17}	16.0	X	177.67535	143.22765	186.18667	3.71712	0.0872004	0.23594136	2.5937812	20	1 21.5	19.9
100150 1993 TN_{17}	16.2	X	223.27431	213.03361	58.50253	3.49667	0.1071827	0.30922999	2.1657832	20	—	—
100151 1993 TT_{17}	16.1	X	171.32371	342.46524	25.94039	2.21751	0.2034263	0.23912321	2.5707207	20	3 10.1	20.4
100152 1993 TN_{19}	15.6	X	81.54528	306.52744	25.25576	6.22860	0.1243357	0.22647636	2.6655539	20	—	—
100153 1993 TF_{20}	15.9	X	190.28883	217.83815	108.52861	1.84227	0.1476547	0.23739020	2.5832168	20	2 2.9	19.8
100154 1993 TS_{23}	15.8	X	308.45376	165.32469	186.90662	12.78831	0.1600869	0.21446755	2.7641503	20	7 17.4	19.3
100155 1993 TG_{25}	16.3	X	146.40191	10.91534	45.64691	4.45377	0.1934616	0.23967487	2.5667745	20	4 15.7	20.3
100156 1993 TD_{26}	16.0	X	264.54012	142.94764	192.94394	14.13101	0.1255395	0.24561915	2.5251930	20	5 1.3	19.5
100157 1993 TU_{26}	16.0	X	64.52151	331.22964	102.11636	3.39732	0.1598529	0.23266632	2.6180646	20	1 20.5	18.8
100158 1993 TF_{27}	16.4	X	122.53273	250.38825	84.69331	3.41031	0.2094262	0.26848254	2.3797172	20	—	—
100159 1993 TP_{27}	14.9	X	101.26044	49.17873	97.74469	3.47569	0.1667498	0.24361249	2.5390408	20	6 21.7	18.4
100160 1993 TS_{27}	15.6	X	149.97993	28.90697	34.11515	14.76392	0.0829923	0.24125192	2.5555764	20	4 19.2	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100161 1993 TV_{28}	15.6	X	227.32031	224.85474	92.70055	3.25965	0.0630488	0.20256441	2.8714017	20	3 5.7	19.8
100162 1993 TS_{30}	14.9	X	15.21472	207.78475	187.56348	12.28235	0.1464667	0.22453274	2.6809143	20	—	—
100163 1993 TN_{32}	15.8	X	155.40996	237.45588	173.36988	7.16711	0.1782590	0.24005597	2.5640572	20	4 16.6	19.9
100164 1993 TV_{38}	15.4	X	129.85434	165.37076	181.46160	9.67473	0.2444215	0.23276786	2.6173032	20	1 9.5	19.5
100165 1993 TN_{41}	15.4	X	268.29992	260.40376	163.43220	5.58583	0.0232092	0.21690893	2.7433703	20	9 16.2	19.1
100166 1993 UU_{1}	16.4	X	287.28113	305.11438	348.61997	2.61576	0.2116197	0.24443439	2.5333460	20	3 20.1	20.0
100167 1993 UN_{2}	16.1	X	87.91351	190.93453	312.14474	3.44267	0.1815416	0.23987333	2.5653586	20	6 1.9	19.5
100168 1993 UN_{4}	16.4	X	244.94209	207.29357	158.58215	6.40698	0.2520006	0.24620758	2.5211679	20	5 5.8	20.5
100169 1993 UW_{4}	15.9	X	120.80007	277.84714	148.19763	4.97966	0.2146032	0.23707519	2.5855046	20	4 5.9	19.8
100170 1993 UE_{8}	15.2	X	6.92884	313.58656	100.56012	6.12595	0.2125677	0.18765159	3.0215832	20	—	—
100171 1993 UJ_{8}	16.2	X	137.39729	247.81424	81.65318	7.49106	0.1448375	0.26836250	2.3804268	20	—	—
100172 1993 WL	15.8	X	49.40916	328.83513	244.99384	3.75338	0.0968622	0.24538836	2.5267760	20	7 2.7	18.7
100173 1993 XZ	16.2	X	97.71265	311.05414	74.68728	3.19476	0.2038815	0.26708215	2.3880283	20	1 9.1	18.7
100174 1994 AJ_{2}	15.5	X	69.62483	27.71333	316.26168	3.84844	0.1184091	0.21922066	2.7240499	20	—	—
100175 1994 AX_{4}	14.8	X	49.58274	262.53831	90.30597	2.48494	0.1399559	0.18035878	3.1024957	20	12 28.0	19.0
100176 1994 AD_{5}	15.4	X	227.30715	249.54466	48.61912	1.22130	0.0501558	0.19177792	2.9780843	20	2 12.1	19.6
100177 1994 AH_{5}	15.4	X	290.67881	301.56943	302.43884	2.74864	0.0829880	0.19193507	2.9764585	20	2 13.8	19.5
100178 1994 AW_{5}	16.8	X	310.75990	22.04159	336.54873	0.91607	0.2161853	0.28393049	2.2925986	20	8 3.8	18.3
100179 1994 AQ_{6}	15.1	X	138.56519	303.98799	113.40326	13.57873	0.1012855	0.23398154	2.6082446	20	4 6.9	19.1
100180 1994 AR_{9}	15.5	X	54.22231	58.97230	45.29968	2.18523	0.0512337	0.19077642	2.9884977	20	2 11.3	19.3
100181 1994 AN_{10}	16.4	X	249.13692	201.39307	101.27894	6.92668	0.2131718	0.30576644	2.1821077	20	2 19.6	19.9
100182 1994 AX_{10}	16.9	X	170.67711	48.59843	357.94877	3.46173	0.1571314	0.27308185	2.3529218	20	4 20.6	20.6
100183 1994 AA_{11}	16.3	X	84.25612	350.87104	38.23033	3.42038	0.1112131	0.22407394	2.6845726	20	—	—
100184 1994 AE_{12}	16.1	X	143.30113	183.72103	104.70770	3.22208	0.0592923	0.21937345	2.7227850	20	—	—
100185 1994 AC_{13}	17.3	X	56.83358	139.40900	45.53843	2.54550	0.1656448	0.27216498	2.3582032	20	6 14.7	19.7
100186 1994 BL_{2}	16.3	X	220.66029	12.13677	291.50935	1.76846	0.1938056	0.26677076	2.3898863	20	1 29.8	20.3
100187 1994 BT_{4}	17.2	X	146.05016	25.20766	88.67996	2.83705	0.1308109	0.27659136	2.3329762	20	6 23.8	20.5
100188 1994 CM_{1}	15.5	X	47.05001	327.55965	190.22853	3.10817	0.1540417	0.19334152	2.9620062	20	4 20.2	19.0
100189 1994 CK_{3}	15.4	X	141.79211	196.44478	166.88850	6.07161	0.1123304	0.22645901	2.6656900	20	1 28.1	19.3
100190 1994 CE_{4}	15.7	X	71.96387	291.57264	152.47230	3.89867	0.1525750	0.22752779	2.6573357	20	2 16.3	18.7
100191 1994 CX_{5}	16.9	X	159.10678	126.33867	287.66392	1.62785	0.1811807	0.27191817	2.3596299	20	4 20.6	20.7
100192 1994 CZ_{5}	15.4	X	167.48710	336.63429	136.43764	23.68448	0.2585662	0.27835366	2.3231188	20	7 15.7	19.6
100193 1994 CC_{7}	16.6	X	127.03185	43.73323	74.71702	1.00335	0.0510368	0.27267595	2.3552562	20	5 31.4	19.3
100194 1994 CK_{11}	14.6	X	305.15195	72.74016	346.56189	11.25333	0.3161033	0.17621588	3.1509344	20	9 15.9	17.9
100195 1994 CR_{12}	15.0	X	258.38821	61.29387	144.37537	18.60816	0.2559739	0.17961863	3.1110127	20	—	—
100196 1994 CL_{16}	14.7	X	50.45436	354.94598	112.58367	3.16608	0.2353053	0.18975957	2.9991643	20	3 1.2	17.9
100197 1994 CQ_{17}	16.3	X	58.11967	184.86741	0.47558	7.88231	0.1414271	0.27078096	2.3662319	20	6 12.4	19.0
100198 1994 EA_{1}	14.7	X	313.00564	84.38604	353.46159	15.80417	0.2458288	0.17739078	3.1370060	20	11 2.5	18.2
100199 1994 EF_{4}	14.3	X	77.53303	15.16556	356.80721	9.72687	0.1116386	0.18002499	3.1063295	20	—	—
100200 1994 EL_{4}	16.4	X	95.15450	280.21794	177.62211	2.63447	0.1770752	0.26770783	2.3843061	20	4 9.6	19.4
100201 1994 FD	17.0	X	278.17805	108.99896	15.58905	20.22245	0.0641555	0.36247293	1.9481348	20	—	—
100202 1994 GB	16.4	X	237.61959	280.34100	190.53414	22.81209	0.1002399	0.35845727	1.9626572	20	10 24.3	18.2
100203 1994 GF_{3}	16.5	X	94.97666	71.09172	18.77597	2.11003	0.1988038	0.26481372	2.4016464	20	4 1.6	19.2
100204 1994 GT_{3}	14.9	X	260.73735	130.80198	27.04909	4.65608	0.1317299	0.17464179	3.1698394	20	12 9.0	19.1
100205 1994 GB_{7}	16.2	X	31.31821	183.64546	21.40490	2.84642	0.1382716	0.26764870	2.3846572	20	5 24.3	18.3
100206 1994 HW	15.2	X	181.86745	89.37984	202.04351	10.95147	0.0573357	0.17813991	3.1282051	20	—	—
100207 1994 HB_{1}	16.4	X	219.35455	202.12569	194.91224	4.16862	0.1261488	0.26990624	2.3713415	20	5 29.6	19.9
100208 1994 JD_{2}	15.5	X	290.39193	28.77267	190.95686	3.61862	0.0866774	0.18237282	3.0796117	20	1 15.9	19.9
100209 1994 JG_{5}	16.6	X	59.82953	315.40087	200.86163	2.17410	0.1282293	0.26489349	2.4011642	20	5 1.4	18.9
100210 1994 LD_{1}	15.0	X	338.82521	306.60121	7.51751	16.11510	0.4082161	0.18949091	3.0019985	20	6 25.0	17.3
100211 1994 PF_{1}	15.7	X	138.53950	147.17764	119.59111	24.72056	0.0684465	0.35813087	1.9638495	20	—	—
100212 1994 PV_{3}	15.0	X	217.73443	36.14683	329.83281	14.37700	0.2208524	0.17888584	3.1195029	20	4 8.7	20.6
100213 1994 PD_{4}	15.5	X	220.21477	22.60094	350.19788	0.08428	0.1998126	0.17961912	3.1110072	20	4 26.3	20.7
100214 1994 PJ_{4}	16.6	X	309.30519	178.50836	227.18471	1.29218	0.1239221	0.26875341	2.3781180	20	10 24.0	18.8
100215 1994 PV_{5}	14.8	X	279.88303	120.41321	236.12097	1.28434	0.1120548	0.18451395	3.0557413	20	6 17.9	19.0
100216 1994 PQ_{6}	17.2	X	63.42034	264.71291	31.49832	0.48867	0.2176257	0.27204637	2.3588886	20	12 2.1	20.7
100217 1994 PL_{7}	15.0	X	186.25158	41.86055	332.73907	6.96862	0.1954197	0.17623728	3.1506792	20	3 29.8	20.4
100218 1994 PV_{7}	16.1	X	94.97463	221.14709	106.97594	0.80107	0.1563771	0.23914542	2.5705615	20	—	—
100219 1994 PG_{8}	17.2	X	337.88233	240.31155	138.01335	3.08351	0.2432497	0.26832062	2.3806745	20	11 21.8	18.7
100220 1994 PT_{10}	14.8	X	322.25660	333.12569	337.88960	8.69819	0.0563713	0.18491039	3.0513721	20	6 26.4	18.9
100221 1994 PP_{12}	15.7	X	167.95136	122.95876	204.54776	1.99343	0.0452596	0.24650743	2.5191230	20	1 3.7	19.0
100222 1994 PU_{12}	16.2	X	76.22796	172.27027	190.99058	3.09470	0.1788414	0.23952630	2.5678358	20	—	—
100223 1994 PZ_{12}	14.9	X	217.70280	168.09305	160.73468	13.53591	0.1662885	0.17636644	3.1491409	20	3 5.9	20.0
100224 1994 PO_{13}	15.8	X	127.40788	85.69797	287.18984	2.26248	0.1660265	0.24588416	2.5233782	20	1 28.6	19.3
100225 1994 PS_{13}	14.5	X	243.05442	80.76956	321.29699	7.90553	0.0761167	0.18420381	3.0591702	20	7 6.7	19.0
100226 1994 PJ_{16}	15.6	X	200.77070	45.21480	323.84415	2.85341	0.2039523	0.21508491	2.7588585	20	4 3.3	20.2
100227 1994 PR_{16}	15.8	X	15.74451	141.05419	248.90722	1.97812	0.0619182	0.23615305	2.5922309	20	—	—
100228 1994 PH_{17}	16.5	X	11.12074	0.38242	333.65789	1.88535	0.2257294	0.26890617	2.3772173	20	11 17.5	18.8
100229 Jeanbailly	13.9	X	92.69795	197.20802	163.92902	4.75480	0.2391290	0.12561986	3.9484851	20	1 3.7	19.4
100230 1994 PN_{18}	15.4	X	242.31057	75.76995	300.68205	1.15470	0.2021745	0.18139187	3.0907047	20	5 19.7	20.4
100231 Monceau	14.4	X	83.81559	13.44777	7.90867	2.78274	0.2935202	0.12498954	3.9617488	20	1 24.7	19.8
100232 1994 PU_{23}	16.1	X	90.41472	9.82452	349.43841	2.02548	0.1069755	0.24063704	2.5599279	20	—	—
100233 1994 PL_{24}	14.4	X	231.18032	9.78162	332.03047	27.04299	0.1176098	0.17898379	3.1183648	20	3 22.4	19.6
100234 1994 PS_{24}	14.8	X	219.23849	315.98067	60.41577	2.12402	0.1595821	0.18010024	3.1054642	20	5 2.1	19.6
100235 1994 PX_{24}	16.4	X	33.31748	287.03970	93.57752	1.97206	0.1830079	0.23673318	2.5879942	20	—	—
100236 1994 PS_{27}	16.2	X	276.29940	354.43344	67.10742	2.30461	0.1205650	0.26681516	2.3896211	20	9 19.0	18.7
100237 1994 PG_{31}	15.7	X	100.34203	39.82833	260.07441	3.94715	0.2368571	0.23786683	2.5797649	20	—	—
100238 1994 PY_{31}	16.1	X	56.77299	90.94919	202.39450	4.83146	0.1608234	0.27040756	2.3684097	20	11 15.4	19.3
100239 1994 PE_{32}	15.0	X	161.92266	113.64023	286.51614	3.97661	0.1469126	0.17546602	3.1599051	20	4 7.3	20.2
100240 1994 PV_{33}	14.6	X	218.89041	57.06917	298.75867	4.54020	0.1993722	0.17876795	3.1208743	20	4 3.1	19.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100241 1994 PK_{35}	16.1	X	273.60628	44.44431	266.43309	1.95869	0.1819384	0.25720328	2.4487909	20	3 28.9	19.6
100242 1994 PS_{35}	16.3	X	331.53996	161.96834	208.21133	1.48183	0.2291132	0.26737384	2.3862912	20	10 17.9	17.8
100243 1994 PO_{37}	16.2	X	65.01591	158.65719	199.21273	1.85998	0.2438477	0.27632439	2.3344786	20	—	—
100244 1994 QB	14.7	X	239.03962	215.47471	111.53043	24.61970	0.2885298	0.17716291	3.1396954	20	3 23.1	20.6
100245 1994 RT_{2}	16.4	X	274.47396	159.83921	167.87257	4.78313	0.1881624	0.25858598	2.4400538	20	4 22.8	19.7
100246 1994 RD_{3}	16.1	X	331.45305	27.82397	331.13098	6.26659	0.1265704	0.26689910	2.3891201	20	9 23.1	18.3
100247 1994 RA_{7}	16.7	X	293.84156	255.20257	219.68315	1.80392	0.0339653	0.27336526	2.3512953	20	—	—
100248 1994 RB_{13}	16.2	X	115.54516	197.28333	176.25217	3.56623	0.1105783	0.24543808	2.5264347	20	1 6.9	19.4
100249 1994 RW_{13}	15.5	X	158.68265	248.01674	186.03310	11.17798	0.1844626	0.17560600	3.1582256	20	5 19.9	20.9
100250 1994 RN_{15}	16.4	X	118.48521	94.63618	157.84462	5.07774	0.2029049	0.27402937	2.3474948	20	11 27.3	20.3
100251 1994 RC_{17}	14.6	X	194.49788	50.38804	335.87820	10.62265	0.1073841	0.17818623	3.1276630	20	4 17.8	19.7
100252 1994 RY_{25}	15.0	X	189.95952	240.91244	189.77115	9.32447	0.0749106	0.18159011	3.0884548	20	6 12.4	19.8
100253 1994 SB_{2}	15.4	X	263.63016	258.93528	72.34399	2.31895	0.2411571	0.17988732	3.1079142	20	4 12.7	20.2
100254 1994 SG_{4}	15.8	X	72.88543	254.74201	5.82881	4.27418	0.0812525	0.22793681	2.6541557	20	10 3.9	19.4
100255 1994 SJ_{5}	16.0	X	198.80745	220.98341	11.21494	11.64299	0.1389936	0.23845465	2.5755235	20	—	—
100256 1994 SU_{5}	15.5	X	349.92662	160.55376	179.89203	6.56829	0.1045137	0.18835648	3.0140399	20	9 15.4	19.2
100257 1994 SF_{9}	16.0	X	346.12737	190.87978	177.04922	2.48728	0.0440309	0.22900631	2.6458857	20	10 22.6	19.2
100258 1994 SW_{10}	15.1	X	170.26558	227.57564	146.79043	1.97328	0.1952288	0.17269387	3.1936312	20	3 19.9	20.5
100259 1994 TX_{4}	16.2	X	219.87205	174.29543	21.14368	5.20258	0.1354322	0.23531714	2.5983661	20	12 19.3	19.8
100260 1994 TF_{5}	16.6	X	285.56323	240.56079	181.12053	4.95990	0.2004816	0.26452323	2.4034043	20	9 20.4	18.7
100261 1994 TR_{6}	15.8	X	64.70002	154.67736	172.85856	3.57279	0.2338908	0.23448755	2.6044909	20	—	—
100262 1994 TV_{10}	15.9	X	292.11983	72.88850	200.65944	10.62461	0.1095975	0.25284763	2.4768334	20	3 11.5	19.4
100263 1994 TL_{11}	15.2	X	329.66814	224.83007	196.93067	15.79460	0.1702095	0.23143006	2.6273799	20	12 15.7	18.1
100264 1994 TS_{11}	16.0	X	250.03385	179.19738	56.40275	1.74913	0.0256054	0.24118298	2.5560633	20	—	—
100265 1994 TH_{14}	15.2	X	231.56016	341.39248	70.52832	1.71566	0.1812498	0.18045449	3.1013986	20	6 24.1	20.1
100266 Sadamisaki	15.7	X	339.07023	186.43995	180.00580	13.01849	0.2226374	0.22689714	2.6622573	20	10 18.9	17.9
100267 JAXA	15.4	X	209.92089	233.39435	21.39169	3.56087	0.1737255	0.24168372	2.5525315	20	—	—
100268 Rosenthal	15.5	X	265.21488	355.34733	22.54641	11.75155	0.1682305	0.25848905	2.4406637	20	6 19.9	19.0
100269 1994 UM_{6}	14.4	X	346.59684	232.43768	16.48150	11.13436	0.2099681	0.17824529	3.1269721	20	4 27.2	17.8
100270 1994 VQ	15.7	X	232.79921	39.74608	8.52477	1.48621	0.1702002	0.25634708	2.4542406	20	6 23.6	19.3
100271 1994 VP_{1}	15.4	X	78.76102	160.80538	252.35436	6.97957	0.1769899	0.23952108	2.5678731	20	1 16.3	18.2
100272 1994 VX_{6}	14.1	X	269.21116	298.27161	66.55785	9.87106	0.3506791	0.18080728	3.0973630	20	5 16.2	19.1
100273 1994 WO_{1}	15.9	X	327.26285	318.11064	68.94912	8.64734	0.2479119	0.26405537	2.4062424	20	11 6.9	17.3
100274 1994 WU_{5}	16.9	X	162.35993	227.91612	211.88896	2.59032	0.0899532	0.25198843	2.4824603	20	5 24.9	20.4
100275 1994 WW_{12}	15.3	X	356.39410	148.94033	286.09824	11.60745	0.0842346	0.19064608	2.9898596	20	—	—
100276 1994 XV	15.8	X	251.66178	219.91349	231.46021	21.04370	0.3715818	0.25966378	2.4332971	20	8 7.2	20.2
100277 1994 XB_{5}	15.9	X	169.02844	264.51249	226.15467	8.80633	0.1997174	0.25423112	2.4678395	20	8 4.1	20.2
100278 1994 YN	14.4	X	158.64833	292.38170	100.98586	13.58279	0.2741398	0.24534514	2.5270727	20	4 8.1	19.1
100279 1994 YL_{4}	17.2	X	317.50350	169.30957	326.27719	0.76638	0.1300295	0.26915809	2.3757337	20	—	—
100280 1995 BQ_{1}	15.8	X	97.56713	349.01418	121.15863	4.59908	0.1603324	0.24242309	2.5473389	20	4 29.9	19.3
100281 1995 BX_{7}	16.8	X	136.53809	200.23012	357.07651	2.03519	0.1241055	0.29292329	2.2454331	20	10 5.3	20.1
100282 1995 BZ_{7}	16.0	X	304.92577	314.53459	93.41195	2.36840	0.0492852	0.21907642	2.7252454	20	10 14.3	19.4
100283 1995 BU_{8}	15.1	X	316.27485	65.32198	53.35442	1.96059	0.1182044	0.18889360	3.0083237	20	—	—
100284 1995 BC_{14}	17.1	X	72.56575	135.71556	255.75686	1.53733	0.1279117	0.30957907	2.1641548	20	—	—
100285 1995 CG_{3}	15.1	X	320.95860	105.39237	149.09629	8.84163	0.1136862	0.20192502	2.8774600	20	4 5.0	18.8
100286 1995 CY_{4}	15.7	X	330.60518	79.76164	238.91338	1.33379	0.0915405	0.21085189	2.7956602	20	7 17.6	19.0
100287 1995 CK_{5}	17.2	X	247.41695	155.14340	262.26918	2.66570	0.0931153	0.29185573	2.2509054	20	8 5.2	19.9
100288 1995 CZ_{5}	16.0	X	258.35651	17.31821	291.72863	4.32087	0.2714970	0.24021408	2.5629320	20	3 3.5	20.2
100289 1995 CD_{6}	16.5	X	223.82282	22.09184	284.81001	2.90892	0.1533367	0.23654279	2.5893827	20	2 8.8	20.7
100290 1995 CL_{6}	16.1	X	205.52249	219.99592	149.72995	6.13643	0.1438992	0.24354094	2.5395381	20	4 11.4	20.1
100291 1995 CM_{8}	15.8	X	156.63342	302.12601	146.52012	13.75576	0.1769040	0.24474849	2.5311781	20	6 5.4	20.1
100292 Harmandir	15.4	X	16.19721	143.84652	20.35843	4.71374	0.1732521	0.23593440	2.5938322	20	2 26.2	17.7
100293 1995 DY_{7}	15.5	X	178.18068	155.99644	163.72836	18.01050	0.1990454	0.22968041	2.6407062	20	1 16.9	20.1
100294 1995 DM_{9}	15.1	X	105.85938	235.83535	77.25693	1.86882	0.1911000	0.18087944	3.0965391	20	—	—
100295 1995 EC_{5}	15.6	X	80.50137	25.70087	134.39543	2.89055	0.0056506	0.20295936	2.8676754	20	5 20.6	19.6
100296 1995 FB	15.2	X	191.89432	324.31172	349.76003	14.14609	0.1121767	0.23006540	2.6377594	20	1 24.3	19.4
100297 1995 FU_{2}	15.7	X	263.50536	224.01597	112.53439	3.17135	0.0718077	0.20299206	2.8673675	20	5 8.9	19.8
100298 1995 FY_{6}	17.3	X	202.62463	41.90614	143.41784	3.96801	0.0491044	0.29703034	2.2246866	20	12 12.8	20.0
100299 1995 FR_{7}	15.4	X	199.93821	256.94943	120.27322	5.96257	0.2441911	0.23928901	2.5695331	20	4 14.9	19.9
100300 1995 FS_{7}	15.8	X	204.95316	173.54658	112.51048	5.19684	0.0678040	0.22797448	2.6538633	20	—	—
100301 1995 FH_{12}	15.5	X	330.61045	131.00408	13.02484	9.82999	0.1078157	0.18855220	3.0119539	20	—	—
100302 1995 FQ_{14}	16.1	X	148.27110	194.61137	173.69027	12.14878	0.1910244	0.23102998	2.6304123	20	2 16.3	20.3
100303 1995 FD_{15}	15.0	X	298.10851	163.75948	33.79521	10.58297	0.0155141	0.18949881	3.0019150	20	1 8.9	19.4
100304 1995 FJ_{20}	17.6	X	191.18569	101.58643	81.11287	1.81563	0.1017896	0.29541700	2.2327789	20	11 16.9	20.6
100305 1995 GN_{1}	15.4	X	219.31641	337.07197	25.35053	17.11927	0.2071741	0.23797120	2.5790106	20	4 11.5	19.5
100306 1995 GH_{2}	15.8	X	63.24913	80.43877	49.13644	4.79876	0.0948040	0.23623357	2.5916418	20	3 28.6	18.9
100307 1995 GJ_{8}	15.6	X	254.07587	64.94342	198.68946	3.81313	0.1685538	0.22895345	2.6462930	20	1 15.5	19.8
100308 ČAS	16.0	X	276.57147	104.60623	30.45641	6.04923	0.0743882	0.29752887	2.2222009	20	—	—
100309 Misuzukaneko	15.6	X	116.76690	53.61321	57.81559	3.92069	0.1798657	0.24351855	2.5396937	20	5 24.2	19.3
100310 1995 HK_{3}	15.9	X	314.26109	18.79752	128.53263	3.02313	0.0206134	0.22329792	2.6907887	20	—	—
100311 1995 HZ_{3}	15.8	X	108.27068	239.89389	90.82429	4.65907	0.1839912	0.21808356	2.7335106	20	—	—
100312 1995 LQ	16.4	X	359.13271	56.52632	252.38109	2.33307	0.1681586	0.27714616	2.3298617	20	9 7.8	18.4
100313 1995 LD_{1}	16.0	X	32.36281	169.64249	149.25164	4.08560	0.1534485	0.24586506	2.5235089	20	11 12.9	19.1
100314 1995 MK_{1}	14.9	X	262.03996	101.34935	196.51442	11.07316	0.1035545	0.19160915	2.9798327	20	3 13.5	19.3
100315 1995 MZ_{1}	15.1	X	108.81094	250.79478	121.51562	10.36228	0.2959723	0.22012522	2.7165822	20	1 28.3	19.0
100316 1995 MM_{2}	16.2	X	174.09362	175.62601	174.67855	4.84648	0.2496982	0.29960718	2.2119123	20	2 15.4	19.8
100317 1995 MJ_{3}	15.4	X	6.46938	283.98208	155.65105	7.38946	0.0461626	0.21974617	2.7197052	20	—	—
100318 1995 MN_{4}	15.2	X	63.98415	166.71923	179.86219	7.61600	0.1331872	0.16891066	3.2411416	20	—	—
100319 1995 MY_{4}	16.1	X	54.77786	156.19302	128.43736	7.66410	0.1154810	0.28588920	2.2821152	20	10 31.9	19.1
100320 1995 MF_{5}	15.9	X	283.12637	33.56910	192.73767	6.65681	0.1532707	0.18209167	3.0827809	20	1 7.3	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100321 1995 MG_8	17.2	X	359.84921	121.89681	149.26079	7.41284	0.1063286	0.27835370	2.3231186	20	7 4.4	19.4
100322 1995 MJ_8	16.3	X	329.48460	139.91852	172.03754	6.59221	0.1318317	0.27457600	2.3443782	20	7 6.7	18.6
100323 1995 OY_1	16.2	X	311.42532	116.94888	202.73466	7.41206	0.2405973	0.27341696	2.3509989	20	5 26.3	18.4
100324 1995 OH_3	16.4	X	114.30739	203.77433	142.59491	5.65427	0.1654343	0.29240532	2.2480840	20	—	—
100325 1995 OC_4	15.7	X	247.54298	28.73060	315.36141	3.29223	0.0981252	0.26737244	2.3862995	20	4 20.8	19.1
100326 1995 OR_4	15.5	X	331.37785	188.57708	138.64682	2.70207	0.0751883	0.19509191	2.9442626	20	7 30.6	19.0
100327 1995 QX	14.0	X	150.16351	117.85321	174.26319	26.66910	0.2765093	0.17201323	3.2020502	20	—	—
100328 1995 QF_4	16.3	X	168.65839	60.13263	320.28537	3.30007	0.1356614	0.29944378	2.2127169	20	3 12.7	19.3
100329 1995 QW_8	14.5	X	181.68953	325.02708	306.83160	15.16346	0.0653876	0.17379893	3.1800795	20	—	—
100330 1995 QY_8	15.3	X	2.50757	325.89283	174.49995	10.01407	0.0338816	0.17895523	3.1186965	20	1 16.9	19.7
100331 1995 QV_9	16.4	X	140.28167	255.48874	357.08247	6.71705	0.0965470	0.28364413	2.2941414	20	12 18.7	19.7
100332 1995 QW_{11}	16.7	X	328.88181	293.64332	261.54311	1.49671	0.1398448	0.25700644	2.4500412	20	1 13.8	19.4
100333 1995 SN_5	15.6	X	68.74090	261.31480	14.48841	24.15094	0.3116760	0.28269913	2.2992511	20	11 13.0	19.7
100334 1995 SZ_{10}	16.7	X	212.82544	357.60377	11.69513	2.69367	0.2092968	0.26327146	2.4110166	20	4 12.2	20.5
100335 1995 SC_{12}	15.4	X	31.13234	69.37836	176.12864	9.86841	0.0441703	0.19143365	2.9816537	20	7 8.4	19.6
100336 1995 SQ_{18}	17.2	X	59.68813	331.89896	301.65323	0.47828	0.0382957	0.31573107	2.1359504	20	10 13.1	19.5
100337 1995 SY_{36}	14.7	X	224.56238	151.31458	179.80078	9.91448	0.1114280	0.18304844	3.0720294	20	3 16.2	19.4
100338 1995 ST_{39}	15.2	X	250.09412	94.41260	352.20590	10.63118	0.0824142	0.19752381	2.9200464	20	9 10.5	19.1
100339 1995 SP_{40}	15.0	X	129.75755	226.11976	149.11531	3.35323	0.0739233	0.17723483	3.1388459	20	1 31.9	19.7
100340 1995 SQ_{41}	15.0	X	129.65451	212.81661	138.42477	1.95969	0.1764034	0.17377316	3.1803940	20	1 16.1	19.8
100341 1995 ST_{44}	16.1	X	298.78534	175.54199	193.18248	3.98902	0.3080597	0.27263665	2.3554825	20	7 4.1	18.3
100342 1995 SH_{51}	16.5	X	94.75849	36.67863	9.51363	5.10390	0.0009948	0.29351314	2.2424237	20	—	—
100343 1995 SJ_{51}	17.2	X	46.31409	292.93857	3.43436	2.23470	0.2090842	0.27855870	2.3219787	20	11 13.9	20.3
100344 1995 SY_{51}	16.2	X	298.30915	264.52547	14.06248	5.31559	0.1759525	0.26420898	2.4053097	20	3 18.4	19.2
100345 1995 ST_{61}	16.4	X	131.50094	204.09043	163.76619	5.63427	0.2186590	0.29531079	2.2333142	20	1 26.0	19.3
100346 1995 SA_{68}	15.3	X	176.68017	188.82980	173.97896	27.10062	0.1486797	0.21992207	2.7182549	20	3 5.8	19.7
100347 1995 SE_{69}	16.1	X	314.96223	341.00906	350.56751	6.65584	0.1349525	0.27241501	2.3567600	20	7 10.8	18.4
100348 1995 SJ_{72}	14.6	X	118.88587	133.59842	219.63594	10.58450	0.2173925	0.17495357	3.1660724	20	1 10.4	19.6
100349 1995 SM_{78}	16.4	X	256.07630	56.01144	196.89936	6.04326	0.1120550	0.29563279	2.2316923	20	—	—
100350 1995 SP_{82}	15.6	X	303.43201	71.79040	178.13804	0.57693	0.1098887	0.18033149	3.1028087	20	3 5.7	19.8
100351 1995 SU_{88}	17.4	X	17.05848	199.49728	356.47049	0.64182	0.1287202	0.26129370	2.4231674	20	4 10.7	19.7
100352 1995 TD_1	15.3	X	160.82578	316.10448	118.15125	2.38187	0.1338574	0.18241873	3.0790950	20	5 19.0	20.2
100353 1995 TC_2	16.4	X	212.55043	166.95677	200.29108	1.67458	0.2251320	0.26237248	2.4165207	20	4 9.3	20.5
100354 1995 TR_4	17.3	X	61.34843	324.75554	208.53654	1.81789	0.1304472	0.26284187	2.4136429	20	5 29.7	20.0
100355 1995 TO_6	16.5	X	7.60408	98.50513	15.61439	3.03938	0.1583162	0.28819835	2.2699087	20	—	—
100356 1995 TC_7	16.8	X	265.87668	333.00230	349.32200	2.25606	0.2177712	0.26449573	2.4035709	20	3 31.4	20.5
100357 1995 TF_{11}	15.3	X	197.52764	168.26495	212.80045	3.56139	0.0414572	0.18221243	3.0814187	20	4 20.2	19.9
100358 1995 UK_2	14.7	X	131.47086	221.70862	221.14870	10.92782	0.1425015	0.17874596	3.1211302	20	4 30.9	19.6
100359 1995 UK_8	16.2	X	142.85637	18.01340	33.99749	8.19282	0.2035534	0.29735426	2.2230707	20	4 5.4	19.4
100360 1995 UE_{12}	16.6	X	339.44518	85.90851	3.85445	2.55124	0.1246857	0.24401102	2.5362754	20	—	—
100361 1995 UC_{14}	16.0	X	212.79600	146.67798	191.09239	0.47679	0.2046751	0.26042312	2.4285648	20	3 4.9	19.9
100362 1995 UJ_{14}	15.8	X	30.19446	54.66395	249.71021	3.18152	0.2211358	0.27659717	2.3329435	20	11 5.8	18.6
100363 1995 US_{14}	16.4	X	321.25448	352.28247	316.73293	1.62327	0.2124692	0.26912049	2.3759550	20	6 2.6	18.3
100364 1995 UF_{22}	16.2	X	358.96609	308.63503	19.57822	2.48979	0.2121968	0.27588515	2.3369558	20	10 16.9	18.1
100365 1995 UE_{32}	16.3	X	150.53922	274.95071	59.86886	5.99074	0.2032899	0.29298756	2.2451047	20	1 3.6	19.4
100366 1995 UZ_{39}	16.7	X	88.98345	145.40775	223.44910	3.75180	0.1646189	0.28971476	2.2619811	20	—	—
100367 1995 UY_{40}	16.5	X	207.85457	156.92805	221.74731	4.82173	0.2054896	0.26384585	2.4075161	20	4 19.7	20.6
100368 1995 UG_{41}	17.1	X	94.36084	204.08438	208.13349	8.58755	0.1472152	0.29390072	2.2404518	20	1 23.1	19.5
100369 1995 UX_{45}	16.5	X	144.29939	101.96529	217.44651	6.54210	0.1951278	0.29141455	2.2531766	20	—	—
100370 1995 UJ_{51}	16.2	X	196.50186	153.14698	171.46613	3.42358	0.1940041	0.25806785	2.4433187	20	2 4.3	20.2
100371 1995 UO_{52}	16.7	X	348.75464	71.67891	203.29347	4.52755	0.1612113	0.26993293	2.3711851	20	6 16.5	18.6
100372 1995 UR_{54}	16.3	X	17.19379	174.92443	109.79783	3.75320	0.1651413	0.27066758	2.3668926	20	9 7.9	18.6
100373 1995 UV_{69}	16.7	X	160.09596	47.18159	233.75547	5.72047	0.0979324	0.28660262	2.2783264	20	—	—
100374 1995 UX_{69}	15.9	X	275.91406	73.63408	288.58042	2.09133	0.1342816	0.18779052	3.0200927	20	6 16.9	20.1
100375 1995 UY_{72}	17.4	X	62.15951	299.50702	140.82372	2.15605	0.1220210	0.29279695	2.2460790	20	1 6.3	19.2
100376 1995 UT_{73}	15.8	X	273.47500	304.05631	194.40650	4.81330	0.0611061	0.24051721	2.5607781	20	12 30.1	18.9
100377 1995 VH	14.0	X	194.79810	161.97459	254.53031	12.48085	0.1995961	0.18153869	3.0890380	20	5 27.1	19.2
100378 1995 VD_6	16.2	X	227.89444	38.04360	65.75491	0.96862	0.0783520	0.23113105	2.6296454	20	9 9.9	19.7
100379 1995 VZ_6	16.2	X	97.02743	206.85515	216.61549	1.76332	0.1818318	0.25252480	2.4789439	20	2 26.3	19.2
100380 1995 VS_{10}	15.3	X	188.43828	293.38798	68.82796	5.96368	0.1777119	0.21911172	2.7249528	20	3 19.9	19.9
100381 1995 VB_{13}	15.4	X	277.59527	324.15071	59.41126	9.55448	0.1329473	0.18967217	3.0000855	20	7 18.9	19.6
100382 1995 VF_{13}	16.0	X	239.12328	176.06107	134.08817	2.93220	0.2012100	0.26013672	2.4303470	20	2 23.1	19.8
100383 1995 VD_{15}	17.0	X	325.67655	272.60545	228.35297	0.43122	0.1544637	0.24462315	2.5320427	20	—	—
100384 1995 VH_{15}	16.7	X	344.34039	53.85892	258.78628	0.42688	0.1958366	0.27033939	2.3688078	20	8 10.6	18.0
100385 1995 VP_{15}	16.6	X	302.32929	227.49193	60.58942	3.04417	0.1970671	0.26267845	2.4146438	20	4 3.1	19.4
100386 1995 WZ_2	16.2	X	205.66638	326.82545	64.59825	3.90146	0.2155150	0.26215715	2.4178439	20	5 4.6	20.1
100387 1995 WJ_4	14.6	X	246.43365	15.64925	75.47181	8.43313	0.1668714	0.19024711	2.9940382	20	9 2.9	19.1
100388 1995 WW_7	14.2	X	226.61462	137.03966	257.22602	12.49785	0.2511560	0.18318361	3.0705179	20	5 23.7	19.4
100389 1995 WU_8	16.3	X	113.15381	262.78564	62.96161	6.73594	0.1502430	0.28540148	2.2847143	20	—	—
100390 1995 WK_{13}	16.1	X	180.01759	161.43828	101.34539	6.07784	0.1397670	0.28493897	2.2871860	20	—	—
100391 1995 WO_{17}	16.5	X	300.43491	17.69390	315.94004	1.73084	0.2008094	0.26894814	2.3769699	20	6 3.1	18.9
100392 1995 WR_{17}	16.9	X	267.93075	140.93053	0.70426	2.63079	0.1762260	0.27976767	2.3152845	20	12 26.3	19.0
100393 1995 WZ_{30}	16.0	X	263.52959	22.44695	63.80192	3.47953	0.1349803	0.23291503	2.6162006	20	9 26.5	19.3
100394 1995 WX_{32}	16.5	X	63.24136	321.86020	83.83428	3.88655	0.1705445	0.28853060	2.2681658	20	—	—
100395 1995 WG_{38}	16.4	X	271.75006	116.94074	28.59784	7.79977	0.1596749	0.24052782	2.5607028	20	12 25.9	19.3
100396 1995 YH_5	16.2	X	327.72977	128.81824	77.98710	6.18778	0.0483791	0.25398203	2.4694528	20	2 13.7	19.3
100397 1995 YK_5	14.9	X	218.24796	280.24946	70.79793	10.66561	0.0863237	0.17904546	3.1176487	20	4 9.4	19.8
100398 1995 YA_7	16.6	X	160.68858	54.46445	178.43269	2.16341	0.1607438	0.27813726	2.3243236	20	12 10.6	20.1
100399 1995 YM_7	15.6	X	0.92087	215.11719	155.31820	3.36390	0.0306819	0.19563636	2.9387975	20	11 7.9	19.5
100400 1995 YX_7	16.3	X	330.74651	89.86277	236.71736	4.76843	0.2027066	0.27052822	2.3677054	20	7 27.2	18.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100401 1995 YS_{17}	15.7	X	268.39969	270.23504	135.58056	3.20002	0.1701144	0.18865945	3.0108123	20	7 28.5	20.0
100402 1995 YP_{20}	16.2	X	183.53946	9.71055	244.08954	3.37660	0.1856834	0.23628816	2.5912426	20	—	—
100403 1996 AD	15.1	X	290.14386	130.31525	296.65774	21.54359	0.2456544	0.27152191	2.3619252	20	9 15.4	18.0
100404 1996 AC_{1}	16.1	X	102.21103	158.39192	294.41882	17.51111	0.0908937	0.37319722	1.9106323	20	3 5.7	18.3
100405 1996 AG_{5}	16.3	X	6.09989	5.42511	37.71315	2.87854	0.0270594	0.23488081	2.6015830	20	—	—
100406 1996 AU_{5}	14.7	X	134.48118	341.32197	95.64307	6.24414	0.1379511	0.17285119	3.1916931	20	4 29.0	19.7
100407 1996 AH_{6}	16.4	X	19.96655	303.29448	65.41831	3.25129	0.1806905	0.27490529	2.3425057	20	—	—
100408 1996 AV_{6}	15.5	X	132.67597	4.65226	92.50520	6.06357	0.0749598	0.21468657	2.7622701	20	5 14.3	19.5
100409 1996 AX_{8}	16.0	X	86.11063	20.03113	153.15507	3.28356	0.0238166	0.21727950	2.7402502	20	6 16.8	19.7
100410 1996 AZ_{10}	16.3	X	131.06160	87.35734	151.05239	4.46063	0.1096685	0.26907719	2.3762099	20	11 19.6	19.8
100411 1996 AF_{11}	16.4	X	275.25200	278.54119	258.27067	2.49634	0.1874770	0.23737571	2.5833220	20	—	—
100412 1996 AT_{11}	16.3	X	52.05915	106.71724	241.95534	5.87804	0.1372206	0.27424267	2.3462775	20	—	—
100413 1996 AF_{18}	16.0	X	274.98314	171.97565	234.78678	2.02904	0.1924070	0.22651717	2.6652337	20	8 6.8	19.5
100414 1996 AJ_{18}	15.6	X	220.62215	61.12247	284.23073	5.58388	0.1552825	0.21286263	2.7780269	20	3 22.6	20.1
100415 1996 BO_{14}	16.0	X	250.11094	105.33832	40.82751	4.61300	0.0917414	0.23098331	2.6307666	20	11 30.1	19.3
100416 Syang	16.0	X	135.78564	87.34788	319.17177	17.31633	0.1196798	0.37045314	1.9200558	20	2 26.3	18.1
100417 Philipglass	15.8	X	314.02603	319.75138	131.14167	5.35480	0.1430280	0.23557818	2.5964463	20	12 27.3	18.3
100418 1996 EF_{9}	16.4	X	74.78782	245.60893	150.97455	4.81465	0.1888720	0.24080328	2.5587496	20	—	—
100419 1996 EP_{10}	16.0	X	10.82926	279.64037	356.34537	2.45959	0.1633439	0.25613576	2.4555903	20	8 8.3	18.3
100420 1996 EA_{11}	16.0	X	327.92980	166.18896	111.70900	1.68183	0.0323773	0.21258408	2.7804530	20	5 23.3	19.5
100421 1996 FF_{4}	15.1	X	107.38018	191.87242	28.01636	10.45802	0.1192017	0.22309302	2.6924361	20	9 28.1	19.1
100422 1996 GP_{7}	15.2	X	350.49546	256.36810	40.66105	5.34920	0.0465905	0.21286213	2.7780311	20	7 22.6	18.7
100423 1996 GG_{14}	16.3	X	98.32783	260.28834	57.20014	2.88279	0.1804378	0.26681425	2.3896266	20	—	—
100424 1996 GS_{18}	14.6	X	103.68940	245.46205	51.35100	4.28653	0.0902401	0.18333486	3.0688290	20	12 14.5	19.3
100425 1996 HM	16.5	X	227.96954	98.64906	170.93302	4.90309	0.2798160	0.23406734	2.6076072	20	—	—
100426 1996 HB_{7}	16.0	X	79.84726	259.55165	139.67983	4.73281	0.2382184	0.23749842	2.5824320	20	1 10.2	18.7
100427 1996 HQ_{10}	15.4	X	37.76290	88.15285	211.91524	11.54492	0.2106992	0.21571717	2.7534651	20	10 27.7	19.0
100428 1996 HT_{11}	15.0	X	229.91678	114.59903	42.38941	1.32184	0.1415681	0.18485617	3.0519688	20	11 2.8	19.5
100429 1996 HB_{15}	14.9	X	40.16883	230.13501	45.46032	6.79612	0.0754393	0.21468953	2.7622446	20	9 11.1	18.5
100430 1996 HK_{18}	15.1	X	155.07339	320.78424	51.12073	14.42214	0.1495777	0.23829019	2.5767084	20	3 3.5	19.4
100431 1996 HU_{20}	14.9	X	161.50825	343.40070	208.11918	2.94497	0.1833218	0.18021212	3.1041787	20	10 7.8	20.2
100432 1996 HX_{23}	16.0	X	305.00584	192.80624	63.49727	6.98863	0.1481104	0.24197346	2.5504936	20	3 7.2	19.3
100433 Hyakusyuko	15.6	X	268.93023	70.43856	206.10109	8.78088	0.3393299	0.23706286	2.5855942	20	1 28.1	20.3
100434 Jinyilian	15.5	X	161.33303	202.62090	105.17086	17.12674	0.2028048	0.22802633	2.6534611	20	—	—
100435 1996 LK_{2}	16.1	X	210.04575	128.46407	182.74717	7.88663	0.1672093	0.23536694	2.5979996	20	1 31.7	20.5
100436 1996 NN_{1}	15.6	X	43.02189	5.07913	298.62317	23.07016	0.2138800	0.29450398	2.2373913	20	11 21.2	19.1
100437 1996 OY	15.7	X	244.88971	12.91453	249.77894	13.90270	0.0951985	0.23044837	2.6348362	20	1 8.4	19.8
100438 1996 PC_{3}	15.3	X	196.29378	98.52158	329.42228	25.94085	0.3636773	0.23590474	2.5940496	20	6 6.5	20.8
100439 1996 PU_{5}	15.2	X	83.89460	235.24648	141.29875	12.83596	0.2954792	0.22047775	2.7136857	20	—	—
100440 1996 PJ_{6}	16.3	X	207.54403	178.62253	191.72340	1.99452	0.2371189	0.27557312	2.3387195	20	4 8.4	20.3
100441 1996 PZ_{7}	16.9	X	206.46767	53.46017	300.22203	0.47210	0.1679535	0.31638450	2.1330085	20	3 15.6	20.0
100442 1996 QV	16.7	X	81.49270	22.69413	316.24240	1.95183	0.2006659	0.25873710	2.4391036	20	—	—
100443 1996 RS	15.1	X	146.41405	17.61847	349.11271	12.64164	0.2981524	0.22634055	2.6666200	20	2 25.1	19.6
100444 1996 RK_{1}	15.9	X	35.48053	12.31263	37.53163	2.12594	0.2117244	0.21611739	2.7500646	20	—	—
100445 1996 RA_{4}	16.5	X	187.21890	62.90074	240.43729	5.20661	0.2072644	0.30883591	2.1676252	20	—	—
100446 1996 RC_{4}	16.9	X	184.46609	258.95813	179.47495	29.49203	0.2269004	0.44332349	1.7034219	20	6 17.8	20.2
100447 1996 RB_{5}	16.4	X	61.99596	124.53997	215.16395	4.02218	0.2001708	0.29686553	2.2255099	20	—	—
100448 1996 RE_{5}	14.8	X	12.45384	69.10193	354.57145	12.68087	0.1595698	0.21542391	2.7559634	20	—	—
100449 1996 RJ_{9}	15.1	X	71.57455	9.18169	347.00535	8.16648	0.1987616	0.21685906	2.7437909	20	—	—
100450 1996 RN_{11}	15.6	X	77.35713	294.60765	153.05606	7.47713	0.0851091	0.22756308	2.6570609	20	2 19.8	19.0
100451 1996 RR_{15}	15.2	X	29.54863	325.36893	178.22088	12.07139	0.1116573	0.18611165	3.0382278	20	2 26.9	18.9
100452 1996 RY_{27}	17.6	X	189.45722	100.88034	242.30032	0.93996	0.3176321	0.31235113	2.1513315	20	2 20.2	21.5
100453 1996 SA_{4}	16.2	X	325.70980	357.82438	347.86804	7.57602	0.1910638	0.28734459	2.2744027	20	8 25.6	17.6
100454 1996 SA_{6}	16.4	X	152.85401	197.67368	184.70560	3.83595	0.1609898	0.26867675	2.3785703	20	3 4.1	19.8
100455 1996 SB_{6}	15.5	X	270.05402	6.01430	13.00129	2.76901	0.1240898	0.24001349	2.5643598	20	7 5.5	18.8
100456 Chichn Itza	15.7	X	112.37018	107.48640	228.42199	6.60871	0.2019293	0.21785118	2.7354542	20	—	—
100457 1996 TJ_{3}	15.2	X	215.03935	287.86643	19.38880	1.60183	0.0965326	0.18495184	3.0509162	20	2 9.2	20.0
100458 1996 TP_{3}	15.6	X	157.13111	41.29642	357.97122	23.77250	0.2394069	0.27087844	2.3656641	20	3 30.3	19.7
100459 1996 TB_{5}	14.8	X	60.22879	191.94930	202.72426	16.77712	0.1911304	0.17545530	3.1600337	20	—	—
100460 1996 TN_{7}	16.2	X	275.90985	204.32125	164.93873	9.43597	0.1334393	0.28086670	2.3092408	20	6 29.5	19.2
100461 1996 TP_{7}	14.3	X	107.35203	316.89157	3.73951	17.27941	0.1974958	0.17467490	3.1694389	20	—	—
100462 1996 TV_{9}	16.7	X	237.59500	246.80690	153.42423	4.46299	0.1465046	0.27849431	2.3223366	20	6 21.3	19.9
100463 1996 TU_{14}	15.2	X	124.32122	167.26499	206.52339	10.13553	0.1462171	0.22210271	2.7004334	20	1 24.5	19.2
100464 1996 TE_{15}	15.0	X	58.88804	354.22943	41.04889	5.31350	0.1655187	0.17425787	3.1744935	20	—	—
100465 1996 TM_{16}	15.9	X	291.38297	111.32407	226.54065	7.33311	0.2410679	0.19925391	2.9031188	20	5 20.4	19.9
100466 1996 TD_{18}	15.1	X	5.11825	191.35167	231.87607	3.27567	0.0406042	0.17050464	3.2209100	20	—	—
100467 1996 TD_{19}	16.5	X	13.14530	332.25169	19.25624	1.58506	0.2092291	0.29060511	2.2573586	20	12 19.2	18.9
100468 1996 TO_{23}	16.4	X	66.23120	310.67411	11.86734	5.78345	0.1793348	0.29487951	2.2354913	20	—	—
100469 1996 TO_{28}	14.6	X	254.94355	90.37421	62.04362	8.47743	0.1613568	0.20973542	2.8055727	20	11 29.3	18.1
100470 1996 TY_{28}	16.3	X	248.05307	33.47910	56.61163	8.42256	0.0932861	0.28562987	2.2834962	20	9 28.0	19.1
100471 1996 TK_{29}	16.5	X	71.67401	278.56009	225.71471	0.58876	0.1244923	0.26965538	2.3728119	20	5 1.9	18.9
100472 1996 TA_{34}	15.4	X	138.06828	297.15652	28.01576	9.67166	0.2433203	0.21918290	2.7243628	20	—	—
100473 1996 TO_{34}	16.6	X	134.87073	130.27320	20.12379	2.47756	0.1487766	0.27710534	2.3300905	20	8 2.4	20.0
100474 1996 TB_{35}	15.4	X	339.70040	142.66586	324.69782	9.70275	0.0716975	0.21737476	2.7394495	20	—	—
100475 1996 TZ_{36}	12.6	X	352.58880	164.47844	229.20633	2.27744	0.0401331	0.08083474	5.2974965	20	11 1.3	19.3
100476 1996 TK_{37}	15.4	X	178.27017	98.64315	207.92991	1.90937	0.0779187	0.17781376	3.1320293	20	1 3.3	20.0
100477 1996 TM_{39}	16.5	X	71.13285	262.78621	21.00058	5.34836	0.1734356	0.29283906	2.2458636	20	11 22.4	19.7
100478 1996 TW_{59}	14.5	X	27.14919	44.35047	339.51485	11.56507	0.1069939	0.21331681	2.7740822	20	—	—
100479 1996 TT_{60}	14.7	X	43.33126	68.73239	327.00180	6.34797	0.1008572	0.21631576	2.7483831	20	—	—
100480 1996 UK	16.1	X	143.37043	136.23377	209.51485	10.83431	0.4590693	0.22329717	2.6907947	20	2 4.7	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100481 1996 UJ_1	16.5	X	210.42172	315.02363	66.13526	2.42983	0.2889831	0.27423746	2.3463071	20	4 23.3	20.5
100482 1996 UT_2	15.5	X	126.74157	313.70895	282.24816	5.65882	0.2226582	0.21166482	2.7884975	20	11 3.6	20.4
100483 NAOJ	15.8	X	102.72983	23.88203	30.48498	4.16006	0.2094562	0.22260213	2.6963929	20	3 2.9	19.4
100484 1996 UL_4	14.5	X	170.62578	309.71066	33.82584	11.93328	0.1379070	0.18335981	3.0685506	20	2 15.4	19.6
100485 Russelldavies	16.2	X	319.28358	137.72251	45.62582	5.91841	0.2934691	0.34314479	2.0206191	20	—	—
100486 1996 VH_1	15.0	X	143.99914	126.16777	233.74532	7.34375	0.0188126	0.17870224	3.1216393	20	1 21.6	19.6
100487 1996 VO_2	16.4	X	118.06329	34.63973	226.35706	4.22711	0.1530859	0.29074396	2.2566398	20	12 8.4	19.7
100488 1996 VS_{11}	15.1	X	133.33525	275.90037	0.80991	11.31455	0.1580097	0.21326399	2.7745402	20	12 27.6	19.8
100489 1996 VW_{13}	16.8	X	180.35870	221.12403	213.59646	1.70665	0.1840831	0.27395826	2.3479010	20	6 6.9	20.6
100490 1996 VB_{14}	16.1	X	75.22864	59.82147	222.19231	4.39771	0.1019061	0.20448914	2.8533555	20	11 1.8	20.2
100491 1996 VE_{31}	17.3	X	194.23491	228.73685	106.36318	6.59379	0.2238524	0.30932328	2.1653477	20	2 13.4	20.7
100492 1996 VC_{34}	16.3	X	70.05010	265.68207	58.55976	6.66060	0.1552034	0.29325487	2.2437402	20	—	—
100493 1996 VK_{37}	17.1	X	101.53618	94.43936	200.50526	2.38307	0.2677503	0.29476489	2.2360708	20	—	—
100494 1996 VF_{39}	15.0	X	16.91594	105.17487	316.86424	5.44140	0.1911786	0.21163254	2.7887810	20	—	—
100495 1996 WH	14.3	X	167.44264	217.97736	54.64580	10.92620	0.1276553	0.17128362	3.2111369	20	—	—
100496 1996 WJ	16.2	X	190.96335	104.69435	243.87914	1.33459	0.1858443	0.26797575	2.3827166	20	2 27.6	20.1
100497 1996 XB	15.2	X	129.74241	351.60560	4.56035	2.34138	0.1074958	0.17756819	3.1349162	20	1 14.3	19.7
100498 1996 XK	15.8	X	118.16626	287.86564	7.92080	6.42008	0.2140347	0.29587953	2.2304514	20	—	—
100499 1996 XP	16.4	X	205.51511	302.78864	65.82832	2.44823	0.1951520	0.27107934	2.3644952	20	4 6.4	20.2
100500 1996 XZ_{16}	16.8	X	109.40029	66.59265	57.90945	3.04380	0.1316817	0.27005266	2.3704842	20	5 27.5	20.0
100501 1996 XA_{19}	15.9	X	206.00174	25.53803	72.73881	11.68995	0.1778609	0.27832966	2.3232524	20	8 5.1	19.6
100502 1996 XZ_{22}	16.7	X	331.00781	141.10134	183.51367	7.21531	0.1411567	0.28048567	2.3113316	20	7 29.9	18.9
100503 1996 XD_{25}	16.3	X	270.79066	176.30761	64.56819	3.20545	0.1502528	0.25556104	2.4592704	20	1 2.7	19.8
100504 1997 AU_8	17.0	X	16.72029	10.87923	161.66688	1.43620	0.1311123	0.25909692	2.4368449	20	3 5.5	19.1
100505 1997 AA_9	14.6	X	287.66129	75.90175	303.68464	6.32935	0.1021385	0.19011190	2.9954576	20	7 30.9	18.3
100506 1997 AG_9	15.5	X	227.05935	119.76467	304.54264	8.44531	0.1140487	0.18798168	3.0180449	20	7 12.1	20.0
100507 1997 AG_{12}	17.0	X	208.20744	152.84088	226.23725	1.53622	0.2143060	0.26763090	2.3847629	20	4 20.4	21.1
100508 1997 AY_{14}	14.1	X	191.34294	50.70251	300.98867	20.76806	0.0306116	0.17576142	3.1563636	20	2 28.4	19.1
100509 1997 AH_{15}	15.2	X	113.94401	93.44683	110.64858	22.29608	0.2243585	0.27369421	2.3494109	20	10 4.7	19.6
100510 1997 AO_{18}	16.2	X	286.23073	47.90316	96.69926	6.09047	0.0931238	0.28966879	2.2622204	20	—	—
100511 1997 AY_{18}	14.9	X	345.92623	202.81580	136.14901	11.61852	0.1020300	0.19240672	2.9715923	20	9 10.4	18.5
100512 1997 AN_{20}	15.5	X	31.25919	67.04800	218.31424	1.66281	0.0878736	0.19005479	2.9960577	20	9 5.2	19.4
100513 1997 AL_{21}	15.6	X	54.87926	75.02994	32.37486	6.56590	0.0968213	0.25781673	2.4449050	20	2 11.4	18.3
100514 1997 AB_{24}	16.8	X	214.31814	115.66548	251.54313	1.07989	0.2391788	0.26862355	2.3788843	20	4 9.6	20.9
100515 1997 AM_{24}	15.2	X	354.67832	314.57438	276.86518	0.82946	0.0278290	0.18105641	3.0945211	20	4 29.8	19.5
100516 1997 BA	15.2	X	229.21233	45.02446	118.05732	13.30416	0.2117705	0.24012596	2.5635590	20	11 15.2	19.1
100517 1997 BD	15.1	X	110.05663	116.27452	41.52328	2.42863	0.0142797	0.18463025	3.0544579	20	6 25.5	19.4
100518 1997 BL	15.1	X	273.19939	13.90107	100.00579	7.64258	0.1960348	0.24171934	2.5522807	20	11 11.8	17.9
100519 Bombig	15.7	X	208.56515	333.78903	149.17730	5.03396	0.2372798	0.23618203	2.5920188	20	8 28.9	20.1
100520 1997 BU_2	15.6	X	249.83210	66.64180	117.15199	6.72438	0.1775201	0.24417095	2.5351678	20	—	—
100521 1997 BX_5	14.8	X	114.52247	311.03928	123.07823	6.97169	0.0589580	0.17739368	3.1369718	20	3 26.4	19.3
100522 1997 CA	15.1	X	206.37012	146.43294	303.31045	3.21216	0.1107866	0.18679343	3.0308305	20	7 21.7	19.6
100523 1997 CT_2	16.6	X	38.88581	195.14391	180.49111	2.16990	0.2091178	0.24648679	2.5192636	20	—	—
100524 1997 CV_5	15.9	X	240.82700	81.67538	30.88024	3.78033	0.2060773	0.23801114	2.5787220	20	9 21.4	19.4
100525 1997 CX_8	14.7	X	221.33502	31.53103	330.00721	21.55535	0.1186981	0.17903328	3.1177900	20	4 6.9	20.0
100526 1997 CK_9	16.0	X	225.35742	250.45726	138.51645	6.62860	0.0770535	0.26702981	2.3883404	20	5 30.7	19.4
100527 1997 CB_{10}	16.9	X	208.43292	72.72111	323.34548	0.63805	0.1884678	0.26997011	2.3709675	20	5 12.9	20.5
100528 1997 CZ_{10}	15.4	X	174.02093	273.52542	126.83372	3.82147	0.0847599	0.18067775	3.0988432	20	4 20.4	20.2
100529 1997 CA_{11}	16.3	X	289.40725	163.92730	124.90011	7.82024	0.1008769	0.26392910	2.4070099	20	4 4.1	19.4
100530 1997 CE_{12}	16.3	X	143.46866	318.89839	144.15562	7.37597	0.2037600	0.26700390	2.3884949	20	6 11.6	20.2
100531 1997 CP_{12}	16.6	X	127.55788	295.90061	121.80681	1.98475	0.1788353	0.26052187	2.4279511	20	3 27.1	20.0
100532 1997 CB_{17}	15.7	X	237.16202	99.88010	352.20425	6.51809	0.1081727	0.23457855	2.6038173	20	9 2.6	19.2
100533 1997 CH_{17}	16.6	X	30.78391	102.70438	271.33757	2.67949	0.2054082	0.28755529	2.2732916	20	—	—
100534 1997 CM_{22}	16.2	X	234.38551	221.15707	143.86483	0.39334	0.1727746	0.26903716	2.3764456	20	4 28.8	19.9
100535 1997 CR_{22}	16.1	X	299.18088	6.46352	311.58284	3.83089	0.1883223	0.26945435	2.3739920	20	5 9.5	18.9
100536 1997 CD_{28}	15.5	X	230.05708	103.29317	348.82070	3.66433	0.1602549	0.23365107	2.6107034	20	8 18.3	19.4
100537 1997 EL_4	15.0	X	172.46702	333.12352	46.70769	0.78794	0.1992696	0.17249530	3.1960817	20	3 27.8	20.4
100538 1997 ET_{10}	15.4	X	200.35214	43.67821	7.36619	9.62165	0.1174096	0.17924499	3.1153346	20	5 25.7	20.4
100539 1997 EN_{13}	15.3	X	277.70398	31.50109	320.10991	5.97422	0.1282323	0.18334137	3.0687563	20	6 5.7	19.7
100540 1997 EK_{20}	16.0	X	113.43149	69.27170	254.31123	5.57355	0.1653874	0.28679000	2.2773339	20	—	—
100541 1997 EG_{25}	15.9	X	294.78412	294.01829	47.43400	7.25742	0.1470459	0.26796411	2.3827856	20	6 14.6	18.6
100542 1997 ES_{25}	15.1	X	112.39416	104.97625	29.30437	14.22914	0.1393395	0.22230551	2.6987908	20	6 11.8	19.3
100543 1997 ES_{26}	15.5	X	78.99205	113.98899	26.03283	0.99912	0.1191895	0.17497240	3.1658453	20	5 9.1	19.9
100544 1997 ET_{28}	16.7	X	108.70568	249.73948	352.88420	2.00423	0.1470768	0.27345205	2.3507977	20	11 2.6	20.2
100545 1997 ED_{30}	14.9	X	281.55793	1.16699	358.69702	14.12234	0.2582739	0.22434691	2.6823946	20	5 30.3	19.0
100546 1997 EU_{32}	15.9	X	274.56898	141.54005	59.13304	2.63810	0.1041805	0.29065165	2.2571176	20	—	—
100547 1997 EQ_{35}	15.9	X	96.53344	28.83514	137.29529	3.41364	0.1151129	0.26750166	2.3855310	20	7 6.2	19.0
100548 1997 EA_{36}	15.1	X	288.35016	28.97252	119.32362	2.26586	0.0909606	0.24600287	2.5225664	20	—	—
100549 1997 EK_{38}	14.8	X	173.14772	296.30588	139.97997	1.64633	0.1707383	0.18360583	3.0658089	20	6 2.2	19.8
100550 1997 EM_{41}	15.0	X	288.23402	200.18105	323.04340	11.06889	0.1093177	0.24656831	2.5187083	20	—	—
100551 1997 EM_{42}	14.5	X	291.71478	6.74200	323.78639	9.27191	0.0270985	0.18228984	3.0805463	20	6 12.1	18.9
100552 1997 FK_2	15.1	X	43.51728	307.00227	150.29531	25.23483	0.2820934	0.21447111	2.7641197	20	1 28.6	17.5
100553 Dariofo	16.5	X	249.41018	165.28656	33.08811	9.80434	0.1631182	0.41342851	1.7845790	20	—	—
100554 1997 GJ	15.7	X	250.55571	166.55078	48.19847	1.97397	0.1023303	0.24489415	2.5301743	20	—	—
100555 1997 GY_1	16.3	X	25.63230	319.86736	191.87678	3.58009	0.1394769	0.25537729	2.4604499	20	2 20.3	18.7
100556 1997 GS_2	15.7	X	61.84331	117.11804	12.73575	3.51114	0.1329881	0.21495272	2.7599895	20	4 1.2	18.7
100557 1997 GW_3	16.0	X	86.43995	67.13692	186.23158	3.27725	0.2142026	0.26998891	2.3708574	20	10 31.4	19.6
100558 1997 GE_9	16.3	X	52.61014	12.87743	289.30262	1.81668	0.1624342	0.27217733	2.3581318	20	11 21.6	19.4
100559 1997 GO_9	15.7	X	190.77952	286.13962	335.10467	3.63056	0.0938216	0.24213362	2.5493687	20	—	—
100560 1997 GA_{12}	16.0	X	133.93367	46.08212	203.00253	4.34081	0.1577095	0.23371230	2.6102474	20	11 28.9	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100561 1997 GN_{18}	15.8	X	128.37632	90.73184	58.36178	3.02607	0.0180161	0.22243206	2.6977672	20	7 10.1	19.3
100562 1997 GW_{19}	16.4	X	171.06672	339.61240	200.84635	1.98188	0.1268806	0.27450313	2.3447930	20	10 16.6	19.9
100563 1997 GW_{26}	16.7	X	90.19991	94.11070	166.47511	1.21577	0.0946611	0.27362412	2.3498121	20	11 3.5	19.9
100564 1997 GU_{27}	14.7	X	227.38512	21.32463	355.70473	15.40432	0.0501929	0.17888000	3.1195709	20	5 13.6	19.5
100565 1997 GC_{29}	16.4	X	176.88513	286.96505	339.42632	0.35418	0.1694660	0.24104723	2.5570229	20	—	—
100566 1997 GF_{33}	16.0	X	177.33171	314.10784	213.07658	3.12022	0.1601511	0.23134735	2.6280061	20	9 28.1	20.1
100567 1997 GM_{36}	16.4	X	63.19949	324.68247	223.22009	3.32041	0.1576990	0.26068099	2.4269629	20	6 27.5	19.3
100568 1997 GV_{37}	16.6	X	155.92484	170.37722	28.48301	2.50101	0.1696475	0.27415228	2.3467931	20	10 23.5	20.3
100569 1997 HR	15.7	X	159.39432	265.30981	41.43202	4.73240	0.0577787	0.24232407	2.5480328	20	—	—
100570 1997 HU_{1}	16.1	X	112.48583	121.13509	222.10619	0.38548	0.1256716	0.24277138	2.5449020	20	—	—
100571 1997 HH_{2}	17.0	X	32.05901	176.25729	131.45082	3.01524	0.2210802	0.26659081	2.3909616	20	11 12.4	19.9
100572 1997 HJ_{2}	15.8	X	49.85420	153.80686	95.10651	4.61697	0.1042639	0.22124147	2.7074370	20	8 23.3	19.2
100573 1997 HR_{2}	16.9	X	27.23764	172.21169	130.45045	3.06763	0.2343651	0.26536485	2.3983199	20	10 31.9	19.6
100574 1997 HS_{2}	16.2	X	39.28255	224.96986	125.57915	3.35571	0.2033194	0.27282220	2.3544144	20	—	—
100575 1997 HD_{3}	17.5	X	181.39004	205.08397	29.07106	1.70462	0.0706169	0.28097270	2.3086599	20	—	—
100576 1997 HJ_{10}	16.2	X	61.23680	11.99344	53.03234	5.28204	0.0959781	0.28826071	2.2695813	20	—	—
100577 1997 HM_{10}	16.5	X	325.57796	85.18642	204.32489	1.91330	0.2208528	0.25748475	2.4470061	20	5 10.5	18.8
100578 1997 HY_{10}	15.5	X	225.52350	91.23504	36.04168	9.60940	0.2594710	0.23281127	2.6169779	20	9 20.1	19.7
100579 1997 HS_{11}	15.7	X	122.72115	275.05633	37.33762	13.50321	0.1927110	0.23602217	2.5931891	20	—	—
100580 1997 HM_{16}	16.8	X	80.42817	24.84702	210.92709	0.70645	0.1440095	0.26872763	2.3782700	20	9 24.5	20.1
100581 1997 HA_{17}	16.6	X	99.10725	57.05347	174.60210	4.30932	0.1275683	0.22559842	2.6724649	20	10 2.9	20.5
100582 1997 HC_{17}	16.1	X	184.27078	91.88897	175.92614	4.02411	0.1941153	0.23850014	2.5751960	20	—	—
100583 1997 JY_{9}	16.3	X	159.26506	351.51869	166.14355	9.71948	0.1454872	0.26853194	2.3794254	20	9 3.4	19.9
100584 1997 JJ_{14}	16.4	X	42.74799	129.91613	151.14475	2.34923	0.1892279	0.26615350	2.3935799	20	10 16.3	19.4
100585 1997 LN_{9}	15.7	X	158.65225	266.97067	73.57630	11.56726	0.1737295	0.24299812	2.5433187	20	1 24.3	19.7
100586 1997 LP_{15}	16.1	X	321.33655	172.27665	124.38574	3.47551	0.1722232	0.25706984	2.4496383	20	5 22.1	18.4
100587 1997 MH	15.9	X	344.71896	139.59417	212.96087	5.62663	0.1324792	0.26670798	2.3902612	20	10 11.9	18.0
100588 1997 MV_{3}	15.1	X	123.79070	237.71381	108.85009	5.54605	0.2403964	0.23482794	2.6019735	20	1 3.3	18.6
100589 1997 MV_{8}	15.7	X	257.25423	356.51493	296.55062	12.60317	0.1676119	0.24495230	2.5297738	20	2 17.9	19.8
100590 1997 NP_{1}	14.6	X	166.81193	353.50176	131.59055	36.56879	0.1282016	0.21300871	2.7767566	20	7 27.6	19.1
100591 1997 NW_{2}	15.2	X	343.91971	169.80591	287.77444	7.55883	0.1026753	0.18729927	3.0253711	20	—	—
100592 1997 NN_{5}	15.6	X	318.28814	244.68123	99.13587	8.14962	0.2493456	0.26078816	2.4262980	20	7 19.2	17.4
100593 1997 OH_{1}	16.0	X	270.66940	311.29757	64.50106	1.77259	0.2451915	0.25253556	2.4788735	20	6 13.0	19.3
100594 1997 OH_{2}	16.4	X	283.25253	187.29283	185.58478	2.18559	0.1935885	0.25437227	2.4669265	20	7 4.5	19.3
100595 1997 PA_{2}	15.7	X	203.37979	271.83921	36.44798	2.28328	0.0952691	0.19572904	2.9378698	20	1 29.1	20.3
100596 Perrett	14.9	X	5.30788	115.89117	337.53367	10.37149	0.1872174	0.18715031	3.0269763	20	—	—
100597 1997 PY_{4}	16.3	X	237.59495	36.67669	287.19757	13.01081	0.1932371	0.24421253	2.5348801	20	3 4.1	20.7
100598 1997 QO_{1}	16.0	X	123.22823	117.54070	336.73935	18.81330	0.0630948	0.37479999	1.9051814	20	4 6.1	18.3
100599 1997 QV_{4}	17.1	X	315.85938	306.28234	262.60895	1.62995	0.0870052	0.28191030	2.3035382	20	1 17.7	19.8
100600 1997 RX_{1}	14.9	X	286.06084	44.79576	30.36019	4.69237	0.1480613	0.17035675	3.2227738	20	9 30.9	18.9
100601 1997 RF_{4}	14.7	X	317.65089	294.49822	26.65102	8.06598	0.1780742	0.20646192	2.8351502	20	6 17.9	18.0
100602 1997 RD_{9}	15.6	X	287.94682	131.45730	316.21897	3.36247	0.2248898	0.17476143	3.1683926	20	10 6.7	19.6
100603 1997 RN_{9}	15.6	X	216.32671	2.69743	32.89711	13.12523	0.1766373	0.24625762	2.5208263	20	5 18.3	19.8
100604 Lundy	15.8	X	149.82244	14.44730	17.17826	4.37703	0.1184791	0.23775834	2.5805496	20	3 13.3	19.5
100605 1997 SR_{1}	16.1	X	251.46405	163.93045	178.16855	3.74708	0.1757434	0.24559433	2.5253631	20	4 17.7	19.9
100606 1997 SU_{2}	15.1	X	51.17278	96.14313	255.23216	10.91189	0.1944717	0.22131161	2.7068649	20	—	—
100607 1997 SB_{4}	16.4	X	74.95778	168.65330	164.70155	1.36121	0.3074048	0.22314399	2.6920260	20	—	—
100608 1997 SQ_{6}	16.3	X	149.26282	259.61767	350.64853	0.87879	0.1410105	0.22525635	2.6751698	20	12 12.1	20.5
100609 1997 ST_{6}	15.3	X	62.11046	77.33549	351.25850	9.30973	0.0779066	0.18995338	2.9971239	20	1 12.5	19.3
100610 1997 ST_{18}	15.9	X	86.98129	209.75266	22.29608	0.65319	0.0808658	0.21412747	2.7670763	20	9 12.6	19.7
100611 1997 SR_{19}	15.8	X	172.64469	322.93663	335.91549	2.37140	0.1654190	0.18869153	3.0104709	20	—	—
100612 1997 SL_{25}	14.9	X	49.60285	175.87698	178.70301	13.37303	0.2002892	0.22220521	2.6996029	20	—	—
100613 1997 SM_{31}	16.7	X	161.46203	92.22555	356.55128	8.33568	0.2286620	0.24486315	2.5303879	20	6 7.7	21.2
100614 1997 SX_{34}	15.1	X	345.12084	167.09659	188.74828	12.14812	0.3431206	0.21533018	2.7567631	20	10 26.2	16.7
100615 1997 TX_{1}	16.6	X	307.71909	60.02532	343.61414	2.75678	0.2052187	0.30048386	2.2076080	20	10 22.3	17.7
100616 1997 TN_{2}	16.1	X	215.31910	330.77152	10.47570	14.01632	0.2034845	0.24089030	2.5581333	20	3 15.4	20.4
100617 1997 TQ_{2}	14.9	X	177.53737	238.37899	359.01134	5.07892	0.1350989	0.17957812	3.1114806	20	12 14.6	19.9
100618 1997 TJ_{11}	14.6	X	21.71882	315.11941	353.41266	9.56457	0.2305174	0.21469569	2.7621918	20	10 14.8	17.8
100619 1997 TK_{14}	12.5	X	213.20964	305.36427	187.53142	18.04139	0.0798767	0.08446731	5.1445052	20	9 10.0	19.6
100620 1997 TM_{20}	15.3	X	287.41142	125.59178	29.51711	15.64611	0.0442860	0.18002707	3.1063056	20	—	—
100621 1997 TX_{23}	15.1	X	89.25656	129.84829	237.51416	0.64092	0.1337707	0.18305953	3.0719053	20	—	—
100622 1997 TK_{26}	16.2	X	190.79767	169.17154	217.00740	11.44104	0.2997447	0.24137324	2.5547200	20	4 15.2	20.9
100623 1997 TP_{27}	15.5	X	323.22724	299.70684	171.54156	5.40502	0.1369402	0.18221133	3.0814312	20	—	—
100624 1997 TR_{28}	12.6	X	302.26342	214.35419	187.23150	4.37500	0.1255009	0.08269514	5.2177435	20	8 31.9	19.1
100625 1997 UZ	15.2	X	330.71701	94.86719	267.81191	2.65684	0.1082176	0.21248857	2.7812862	20	9 16.4	18.5
100626 1997 UE_{2}	14.8	X	110.28570	51.97406	33.30109	6.40137	0.2644308	0.23494661	2.6010972	20	4 23.6	18.6
100627 1997 UD_{3}	15.3	X	0.00708	171.62369	213.71144	8.00254	0.1579271	0.21895144	2.7262824	20	12 14.9	18.5
100628 1997 UX_{3}	15.7	X	69.81194	147.47643	227.69967	7.94512	0.3631645	0.22508941	2.6764923	20	—	—
100629 1997 UL_{5}	15.9	X	98.26862	269.25095	29.20974	9.49777	0.1438709	0.26424869	2.4050687	20	12 31.3	19.7
100630 1997 UQ_{7}	16.2	X	228.69436	349.27260	35.74839	6.93037	0.1223349	0.28840248	2.2688375	20	5 22.2	19.3
100631 1997 UH_{8}	15.6	X	253.80737	82.43635	236.95477	1.72561	0.2273469	0.19960686	2.8996956	20	3 19.3	20.4
100632 1997 UZ_{12}	15.7	X	114.50117	236.86971	166.49517	0.40838	0.1277592	0.18946793	3.0022412	20	2 22.9	19.9
100633 1997 UX_{13}	15.0	X	356.03409	355.50281	60.05392	10.84636	0.1370994	0.17565566	3.1576304	20	12 30.7	18.9
100634 1997 UE_{24}	17.2	X	119.49843	4.35914	324.13205	2.71886	0.1897598	0.31347638	2.1461801	20	—	—
100635 1997 UQ_{24}	16.0	X	152.13413	64.11434	315.52504	1.82725	0.1418672	0.23806496	2.5783333	20	3 1.2	20.0
100636 1997 UY_{26}	15.3	X	297.19769	42.27355	38.61297	14.27696	0.2477353	0.25867910	2.4394681	20	11 6.5	17.1
100637 1997 VF_{2}	15.2	X	155.15728	8.71364	59.28469	14.36954	0.1502155	0.23893848	2.5720455	20	5 6.7	19.2
100638 1997 VS_{2}	14.7	X	74.50939	82.09307	276.57341	7.80724	0.1832097	0.18367029	3.0650915	20	—	—
100639 1997 VV_{3}	15.1	X	180.46434	334.08268	61.63622	15.06586	0.1521007	0.23854524	2.5748714	20	4 23.1	19.3
100640 1997 VY_{3}	15.2	X	52.48149	97.25371	241.93382	7.96415	0.2584250	0.26316427	2.4116712	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100641 1997 VO_4	15.8	X	151.28270	332.95995	35.20210	29.93410	0.1601937	0.23434712	2.6055313	20	3 7.7	20.5
100642 1997 VV_4	15.4	X	167.58234	177.31164	205.23150	2.08778	0.2259301	0.23734392	2.5835526	20	3 23.9	19.7
100643 1997 VZ_5	15.6	X	89.08262	17.97964	72.00074	6.45192	0.2219375	0.23114500	2.6295396	20	4 3.4	19.1
100644 1997 VV_6	15.3	X	124.33295	213.15486	216.70747	7.09670	0.1704624	0.23525804	2.5988012	20	4 6.9	19.2
100645 1997 VP_8	15.6	X	171.25446	353.61222	18.13382	2.67035	0.2391098	0.23681679	2.5873850	20	3 15.5	20.0
100646 1997 WR	15.3	X	117.22606	14.52827	50.30117	3.79225	0.1509688	0.23315206	2.6144272	20	3 24.1	18.9
100647 1997 WS_2	16.5	X	358.51587	297.18462	73.66466	2.87408	0.1671333	0.30073218	2.2063925	20	12 20.4	18.5
100648 1997 WZ_2	16.3	X	142.96539	1.44711	72.91918	4.60852	0.1559741	0.28028168	2.3124530	20	5 1.2	19.6
100649 1997 WF_4	16.6	X	51.37537	218.22358	221.59852	2.12974	0.0825996	0.22868826	2.6483384	20	—	—
100650 1997 WN_4	15.8	X	54.22479	359.62800	52.73585	2.92281	0.1497642	0.22594660	2.6697188	20	—	—
100651 1997 WU_{10}	16.3	X	153.19910	302.16337	35.45246	6.86795	0.0635261	0.23016713	2.6369821	20	1 4.7	20.0
100652 1997 WN_{11}	15.8	X	173.27366	0.16448	46.75970	3.45136	0.1398994	0.23993447	2.5649227	20	4 25.6	19.8
100653 1997 WD_{12}	16.0	X	141.89860	198.65969	207.21151	3.78291	0.1821964	0.23537368	2.5979500	20	3 27.0	20.0
100654 1997 WM_{12}	16.0	X	239.96891	67.98011	248.96827	2.65009	0.1223309	0.23911069	2.5708104	20	3 8.1	19.9
100655 1997 WJ_{14}	15.6	X	77.84146	300.37809	126.41940	2.06568	0.0844260	0.18595420	3.0399426	20	1 31.4	19.7
100656 1997 WD_{17}	15.5	X	137.20140	246.92308	249.29313	6.20860	0.1783833	0.24461958	2.5320673	20	7 14.8	19.6
100657 1997 WT_{18}	15.7	X	127.96986	26.00781	67.75684	9.08919	0.1297723	0.23799032	2.5788724	20	5 9.6	19.5
100658 1997 WH_{20}	15.7	X	165.32731	355.51441	204.93864	3.49719	0.1530455	0.21173993	2.7878380	20	10 26.3	20.3
100659 1997 WM_{20}	16.5	X	266.89704	119.31812	108.69677	2.20469	0.0384906	0.22833901	2.6510381	20	—	—
100660 1997 WL_{21}	15.2	X	118.40700	259.41758	153.44694	2.53499	0.2272113	0.23197188	2.6232871	20	3 18.6	19.1
100661 1997 WZ_{26}	16.2	X	98.42615	346.04530	85.56629	7.21945	0.2259097	0.22910347	2.6451376	20	3 23.8	19.9
100662 1997 WM_{28}	15.8	X	263.93212	317.58454	150.55786	2.40380	0.1836948	0.21158168	2.7892280	20	10 13.9	19.4
100663 1997 WN_{30}	14.5	X	332.61032	304.28327	76.10882	5.67374	0.1039561	0.16871459	3.2436523	20	10 9.2	18.5
100664 1997 WZ_{35}	15.1	X	94.87283	5.74920	39.83776	6.48093	0.1809643	0.22886972	2.6469383	20	2 6.6	18.5
100665 1997 WT_{36}	15.4	X	127.50838	355.84958	85.27915	7.65804	0.2483667	0.23580371	2.5947905	20	5 5.2	19.6
100666 1997 WO_{37}	15.4	X	14.06896	256.13936	104.79071	3.18247	0.1975062	0.25957032	2.4338811	20	12 22.5	18.2
100667 1997 WH_{40}	16.1	X	328.22624	230.22227	180.67467	0.95423	0.1707604	0.25765215	2.4459460	20	12 7.5	18.0
100668 1997 WH_{44}	16.4	X	90.08801	34.24376	83.92856	5.15661	0.1802994	0.27774184	2.3265292	20	5 2.5	19.2
100669 1997 WK_{50}	15.9	X	167.69854	146.87317	229.47294	3.06294	0.3020876	0.23717438	2.5847836	20	3 18.9	20.6
100670 1997 WV_{50}	15.5	X	70.66621	21.20806	7.18585	3.26655	0.0920689	0.22399398	2.6852114	20	—	—
100671 1997 WN_{57}	15.0	X	333.63050	161.05829	191.09051	10.49070	0.3342152	0.21210359	2.7846505	20	8 27.1	16.8
100672 1997 WF_{58}	16.2	X	224.18152	281.27944	74.18663	5.05905	0.2507061	0.24237681	2.5476631	20	4 6.4	20.6
100673 1997 XY	15.7	X	179.51076	95.55058	324.27802	3.51079	0.2283657	0.23962822	2.5671076	20	5 17.3	20.2
100674 1997 XX_1	14.4	X	249.84513	282.31596	114.64657	6.91312	0.1657557	0.24602026	2.5224475	20	6 27.8	18.0
100675 Chuyanakahara	14.9	X	133.29985	186.99875	243.34831	4.57352	0.2571904	0.23319807	2.6140832	20	4 24.5	19.2
100676 1997 XO_5	16.3	X	198.34982	255.10346	102.92521	5.35827	0.2874785	0.23907512	2.5710654	20	3 21.5	21.1
100677 1997 XO_6	15.8	X	47.47092	229.92411	197.88749	1.19366	0.1036875	0.22616236	2.6680205	20	—	—
100678 1997 XV_9	15.6	X	177.12267	293.13939	51.12360	12.35555	0.2488458	0.23414419	2.6070366	20	2 22.4	20.4
100679 1997 XV_{10}	16.3	X	198.03582	155.93876	251.41029	5.42435	0.1983965	0.28728645	2.2747096	20	5 17.5	20.0
100680 1997 XW_{10}	15.3	X	150.58531	158.17397	242.30534	2.72317	0.1786138	0.23566133	2.5958355	20	3 27.8	19.4
100681 1997 YD_1	15.3	X	144.61791	251.74933	287.27661	22.71029	0.2920746	0.28685395	2.2769955	20	9 6.5	20.0
100682 1997 YE_1	14.5	X	126.01991	23.56531	331.75300	14.05689	0.0749157	0.22419257	2.6836255	20	—	—
100683 1997 YW_1	14.5	X	48.27375	55.13662	18.87516	9.64725	0.3149575	0.18397103	3.0617503	20	1 24.9	17.4
100684 1997 YX_1	15.1	X	176.10574	1.99545	111.28734	3.85704	0.2296383	0.24256614	2.5463373	20	7 21.5	19.3
100685 1997 YH_2	16.7	X	349.90889	29.64296	99.71985	5.33960	0.1176447	0.30890277	2.1673124	20	—	—
100686 1997 YA_3	15.7	X	82.24288	313.84846	99.89616	12.63362	0.1691177	0.22523710	2.6753222	20	1 27.1	18.9
100687 1997 YF_4	15.2	X	84.82582	299.56905	123.40945	3.11980	0.0736833	0.22702473	2.6612598	20	1 27.8	18.5
100688 1997 YU_5	15.8	X	303.76888	174.36550	280.82562	6.96606	0.2716515	0.21207908	2.7848651	20	11 23.2	18.2
100689 1997 YW_6	14.9	X	159.16783	283.21884	107.54121	12.52157	0.3180058	0.23381857	2.6094564	20	4 6.9	19.8
100690 1997 YY_6	16.8	X	153.04931	335.18821	72.52376	8.23300	0.3186644	0.23677049	2.5877223	20	4 19.7	21.5
100691 1997 YF_7	16.8	X	51.59006	347.97353	108.14728	4.51950	0.2182756	0.27127666	2.3633485	20	1 23.6	18.1
100692 1997 YJ_7	15.0	X	188.42704	313.50877	93.60306	12.89382	0.2188645	0.23799369	2.5788480	20	5 13.6	19.5
100693 1997 YP_9	14.8	X	132.95829	132.17284	277.10868	11.77514	0.1764977	0.23065502	2.6332623	20	3 16.4	19.1
100694 1997 YH_{11}	15.4	X	109.33427	82.70668	359.41453	3.57751	0.2164280	0.23558934	2.5963643	20	4 12.1	19.0
100695 1997 YK_{11}	16.5	X	201.12095	184.14761	319.36244	7.38828	0.0489302	0.29362155	2.2418717	20	10 8.5	19.3
100696 1997 YJ_{14}	15.3	X	162.15263	149.88543	308.90071	3.04799	0.2371940	0.23802394	2.5786296	20	6 22.1	19.7
100697 1997 YB_{15}	16.7	X	154.62910	349.19587	97.10124	3.33931	0.1069268	0.28051120	2.3111914	20	5 25.8	19.9
100698 1997 YK_{15}	15.4	X	227.19030	236.19034	89.50877	1.88940	0.2117272	0.18854214	3.0120610	20	3 7.9	20.5
100699 1997 YR_{17}	15.2	X	52.06235	346.80198	67.98793	2.31736	0.1786275	0.17732992	3.1377238	20	—	—
100700 1997 YX_{17}	16.5	X	170.18205	110.82235	308.59965	6.42720	0.0719248	0.27890607	2.3200503	20	5 2.0	19.7
100701 1998 AC_1	15.6	X	267.84303	141.15262	332.02886	6.95488	0.1179422	0.29605334	2.2295783	20	11 24.7	17.9
100702 1998 AK_1	16.5	X	216.08733	255.36309	114.94836	3.07477	0.2531177	0.28196172	2.3032581	20	4 15.8	20.4
100703 1998 AL_3	15.4	X	298.26843	328.16246	114.60491	9.01794	0.2057056	0.20974171	2.8055166	20	11 5.1	18.4
100704 1998 BG	15.1	X	38.59362	122.05102	352.52298	12.45466	0.1240686	0.22740415	2.6582988	20	2 2.4	18.1
100705 1998 BO_5	15.9	X	8.04429	74.68139	303.14385	2.64201	0.1054349	0.21070012	2.7970025	20	12 7.6	19.2
100706 1998 BQ_7	14.8	X	167.83502	254.58194	135.30015	11.94348	0.2729917	0.23299278	2.6156186	20	4 8.7	19.6
100707 1998 BW_{14}	15.4	X	3.64957	335.26311	70.79341	4.52555	0.0918741	0.21091505	2.7951021	20	—	—
100708 1998 BL_{17}	15.2	X	96.00621	78.50656	331.58541	7.87787	0.0878880	0.22202968	2.7010256	20	1 30.7	18.8
100709 1998 BP_{17}	16.9	X	51.07362	73.45008	125.13382	3.98675	0.1719007	0.27603041	2.3361359	20	6 27.2	19.3
100710 1998 BU_{17}	16.6	X	190.10567	230.26853	34.38037	1.60919	0.2089265	0.29996745	2.2101409	20	—	—
100711 1998 BD_{19}	16.4	X	140.48555	95.59983	11.27734	5.44039	0.2153935	0.28021576	2.3128156	20	6 13.3	20.1
100712 1998 BW_{19}	16.8	X	346.45341	22.93437	296.23640	4.26571	0.1446291	0.28822115	2.2697890	20	8 27.1	18.6
100713 1998 BG_{20}	15.4	X	143.97684	209.17137	295.21442	3.86590	0.0464619	0.19636817	2.9314916	20	7 23.7	19.6
100714 1998 BM_{20}	14.4	X	156.55466	194.50928	118.31997	13.96545	0.1059303	0.17521830	3.1628826	20	—	—
100715 1998 BK_{21}	15.9	X	4.53359	358.87587	15.19896	0.41407	0.0985264	0.20955409	2.8071910	20	11 26.6	19.4
100716 1998 BF_{23}	15.4	X	357.61208	145.97392	331.10840	6.19432	0.2655191	0.21871740	2.7282269	20	—	—
100717 1998 BL_{23}	16.0	X	246.66250	76.35288	333.89988	9.69036	0.1104154	0.28493168	2.2872250	20	7 24.6	18.9
100718 1998 BR_{24}	15.1	X	107.36521	342.59738	145.94603	3.79085	0.2247519	0.23323788	2.6137858	20	6 11.1	19.0
100719 1998 BU_{26}	16.6	X	201.82782	223.56643	307.97179	7.10251	0.0814096	0.29548210	2.2324510	20	11 15.0	19.6
100720 1998 BA_{28}	14.3	X	355.37498	359.35029	301.72771	7.26245	0.0971403	0.15399460	3.4471940	20	7 29.3	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100721 1998 BD_{29}	16.5	X	255.75458	91.08224	321.50771	4.40302	0.1486147	0.28816319	2.2700934	20	8 1.9	19.1
100722 1998 BB_{30}	16.0	X	324.37969	16.79423	129.26923	3.00290	0.1001503	0.30604933	2.1807628	20	—	—
100723 1998 BM_{35}	16.6	X	94.63313	301.13085	134.85970	6.82440	0.1904205	0.27060140	2.3672785	20	3 13.1	19.4
100724 1998 BM_{38}	15.7	X	190.22986	115.22055	109.58260	1.60715	0.0115688	0.21240570	2.7820095	20	12 30.9	19.5
100725 1998 BO_{43}	14.8	X	46.58581	121.67815	331.63374	12.07564	0.1814265	0.22198667	2.7013744	20	1 21.9	17.6
100726 1998 BY_{43}	15.1	X	317.93863	16.10088	93.16149	10.46430	0.1824605	0.21408056	2.7674805	20	—	—
100727 1998 BF_{45}	14.4	X	126.96848	272.37271	136.13455	11.40605	0.1528431	0.18241733	3.0791108	20	3 20.2	19.2
100728 1998 CK	15.9	X	331.60419	135.15131	312.69428	5.56360	0.0294870	0.21414846	2.7668955	20	—	—
100729 1998 CX	15.4	X	116.18627	107.40789	253.94130	5.00460	0.0318567	0.21799136	2.7342813	20	—	—
100730 1998 CE_{2}	15.7	X	120.13731	324.01442	293.72026	4.75524	0.2479506	0.29172347	2.2515856	20	12 6.6	19.7
100731 Ara Pacis	14.6	X	11.44822	254.65114	160.61262	12.91670	0.1585528	0.21321998	2.7749221	20	—	—
100732 Blankavalois	15.2	X	77.36338	86.72369	36.92296	14.05573	0.1142922	0.22926499	2.6438951	20	4 14.5	18.5
100733 Annafalcká	16.7	X	151.75636	355.76273	131.01861	6.16030	0.1034221	0.28293514	2.2979723	20	7 16.6	20.0
100734 Annasvídnická	15.6	X	69.89553	1.79120	71.25436	2.30726	0.1665047	0.18028538	3.1033377	20	2 9.7	19.5
100735 Alpomořanská	16.8	X	12.02717	275.34212	259.90468	3.98353	0.1258247	0.26970717	2.3725082	20	2 25.3	19.1
100736 1998 DD_{7}	14.9	X	224.19108	142.86953	159.23643	14.46508	0.0325728	0.18016582	3.1047105	20	2 14.3	19.4
100737 1998 DR_{9}	16.6	X	244.54530	7.56532	7.23062	7.04786	0.1373917	0.28116143	2.3076267	20	5 24.2	19.8
100738 1998 DB_{12}	16.0	X	20.16592	186.58250	137.07085	4.17224	0.2321659	0.28501122	2.2867994	20	11 23.9	18.6
100739 1998 DA_{14}	16.3	X	139.64282	335.92735	180.75446	2.03031	0.1697797	0.28005260	2.3137138	20	8 15.2	19.9
100740 1998 DP_{22}	15.6	X	91.20073	83.84351	317.53061	10.50593	0.2066785	0.22331301	2.6906675	20	1 29.9	18.9
100741 1998 DS_{23}	15.6	X	56.77173	78.85969	8.19043	8.09848	0.2864594	0.22396910	2.6854102	20	2 17.2	18.0
100742 1998 DW_{25}	17.2	X	323.92985	186.64489	49.80516	1.94947	0.1479743	0.26920834	2.3754380	20	3 1.0	19.9
100743 1998 DC_{30}	16.2	X	166.93850	93.10575	185.34535	6.96485	0.2585287	0.30034017	2.2083120	20	—	—
100744 1998 DU_{36}	15.9	X	274.29112	142.68712	313.01108	3.68815	0.1075022	0.29241268	2.2480463	20	11 10.6	18.1
100745 1998 ET_{3}	15.7	X	108.38160	133.84298	114.90692	7.22946	0.1881832	0.28594736	2.2818057	20	11 16.6	19.4
100746 1998 ED_{4}	16.4	X	82.49566	90.42506	131.93125	2.49901	0.1694898	0.28065632	2.3103946	20	9 14.4	19.6
100747 1998 EO_{4}	17.0	X	303.39012	113.84300	138.85931	5.04644	0.1325297	0.31257932	2.1502843	20	2 18.9	19.5
100748 1998 EW_{4}	16.6	X	355.45514	115.42627	149.68241	5.23406	0.2188744	0.27747594	2.3280153	20	6 16.3	18.0
100749 1998 EN_{5}	16.3	X	127.75190	69.04233	108.02096	6.65549	0.0590345	0.27991315	2.3144822	20	8 27.1	19.4
100750 1998 EX_{8}	14.8	X	54.75188	99.70819	37.84321	11.39976	0.2147381	0.22499457	2.6772444	20	4 13.6	17.5
100751 1998 EQ_{13}	15.7	X	313.20481	59.87798	75.58847	3.41637	0.0461525	0.30048948	2.2075804	20	—	—
100752 1998 EF_{20}	16.0	X	32.97309	349.01533	154.41870	6.47394	0.0900355	0.26840471	2.3801772	20	2 19.7	18.5
100753 1998 FN_{1}	15.0	X	76.86314	357.69003	134.97406	5.33241	0.1782690	0.22711113	2.6605848	20	5 6.3	18.4
100754 1998 FP_{2}	16.5	X	351.72243	104.83905	184.56907	23.62740	0.0852900	0.41021404	1.7938896	20	7 27.9	18.4
100755 1998 FO_{3}	15.5	X	112.09365	255.64381	152.66068	4.20056	0.0763369	0.22279896	2.6948046	20	2 14.8	19.1
100756 1998 FM_{5}	16.2	X	190.73096	311.91245	176.59390	11.54645	0.5531951	0.28851178	2.2682644	20	8 10.3	21.1
100757 1998 FA_{7}	17.3	X	183.03931	30.49216	90.43430	0.85431	0.1494155	0.28461519	2.2889203	20	8 11.4	20.6
100758 1998 FH_{7}	15.8	X	83.30861	256.82572	359.62413	5.63745	0.1323366	0.28609050	2.2810445	20	10 25.0	19.0
100759 1998 FG_{9}	14.7	X	339.07223	166.70048	36.30918	14.20316	0.1119075	0.17493482	3.1662986	20	3 4.6	18.9
100760 1998 FN_{10}	16.7	X	14.82564	215.10277	300.89897	1.87075	0.1312806	0.26561889	2.3967905	20	2 4.4	18.8
100761 1998 FT_{10}	16.2	X	9.79134	289.38259	355.78368	6.95728	0.1986962	0.27704993	2.3304012	20	8 30.9	17.9
100762 1998 FX_{14}	14.8	X	61.23475	186.67567	347.10295	5.63890	0.0789192	0.18369501	3.0648165	20	5 20.9	19.0
100763 1998 FK_{18}	15.8	X	42.06016	99.61468	336.82553	3.70928	0.0532401	0.30560608	2.1828709	20	—	—
100764 1998 FR_{23}	15.9	X	139.75289	106.52138	117.79531	2.91199	0.1003307	0.28929846	2.2641505	20	11 13.9	19.1
100765 1998 FZ_{23}	16.1	X	242.28520	118.85973	2.81499	4.14163	0.1054774	0.29142392	2.2531283	20	10 28.1	18.5
100766 1998 FX_{24}	15.6	X	163.84673	120.75762	328.47421	6.47901	0.3865782	0.23691073	2.5867010	20	6 13.7	20.7
100767 1998 FE_{26}	16.6	X	102.24087	6.67487	161.11121	2.69912	0.0968295	0.27849619	2.3223261	20	7 13.7	19.6
100768 1998 FN_{27}	15.1	X	37.92921	1.82612	186.46670	14.27987	0.1044438	0.18366302	3.0651723	20	5 12.8	19.1
100769 1998 FU_{29}	16.4	X	98.05085	348.76219	224.52256	3.07503	0.1622997	0.28210522	2.3024770	20	9 16.4	19.8
100770 1998 FG_{31}	16.1	X	101.47516	207.92827	21.11503	5.75438	0.1641218	0.28410578	2.2916555	20	10 12.4	19.4
100771 1998 FA_{32}	16.4	X	136.81679	266.78470	345.01327	7.77827	0.1015240	0.29128805	2.2538289	20	12 15.3	19.8
100772 1998 FN_{34}	15.2	X	348.32423	270.34879	213.21951	3.47446	0.2264830	0.21637050	2.7479196	20	—	—
100773 1998 FU_{34}	16.3	X	43.17182	212.31142	345.96182	3.95594	0.1469176	0.27360132	2.3499426	20	6 7.1	18.6
100774 1998 FV_{37}	16.3	X	43.69971	64.54519	165.56168	4.74164	0.1471549	0.27730542	2.3289695	20	7 27.9	18.8
100775 1998 FL_{42}	14.8	X	342.44903	29.93894	194.53407	7.95173	0.1942516	0.17866210	3.1221069	20	3 19.6	18.4
100776 1998 FY_{46}	16.2	X	20.88743	161.68196	354.17357	3.62226	0.0852577	0.26637812	2.3922342	20	2 18.3	18.7
100777 1998 FL_{52}	16.8	X	60.76042	337.75140	157.15332	2.45820	0.1713879	0.26965102	2.3728376	20	4 8.2	19.1
100778 1998 FX_{52}	16.5	X	126.21918	85.93902	174.44464	3.27122	0.1171754	0.28997736	2.2606152	20	12 15.3	19.9
100779 1998 FJ_{53}	16.3	X	173.36335	35.19028	193.72942	6.33747	0.1215458	0.29237652	2.2482316	20	12 24.0	19.5
100780 1998 FU_{55}	16.3	X	39.12696	41.03454	64.89513	3.43170	0.1598331	0.26391225	2.4071123	20	1 9.4	18.3
100781 1998 FX_{56}	15.1	X	347.93117	261.41061	178.53181	4.28333	0.3065582	0.21198454	2.7856930	20	—	—
100782 1998 FC_{57}	16.0	X	184.75834	1.96511	180.04334	8.02946	0.1912005	0.28928281	2.2642322	20	10 31.7	19.4
100783 1998 FZ_{57}	16.1	X	293.85283	129.77179	331.24454	2.00774	0.1466746	0.29429501	2.2384503	20	12 26.7	17.9
100784 1998 FM_{61}	15.7	X	339.62874	264.89418	0.38714	4.40822	0.2105888	0.27085039	2.3658275	20	5 1.3	17.4
100785 1998 FA_{62}	16.2	X	270.67104	309.38965	331.92733	4.10080	0.1516832	0.30926363	2.1656261	20	2 15.8	19.1
100786 1998 FZ_{69}	16.5	X	138.40786	355.23782	160.66801	5.98848	0.1829019	0.28053642	2.3110529	20	8 13.3	20.1
100787 1998 FW_{70}	15.9	X	13.75120	224.74929	17.36040	6.99977	0.1927722	0.27258098	2.3558032	20	6 23.2	17.7
100788 1998 FC_{72}	15.5	X	264.24483	328.90446	229.11871	3.37406	0.1436831	0.21133189	2.7914254	20	—	—
100789 1998 FK_{74}	16.8	X	89.80447	24.53271	12.04161	1.41973	0.1265360	0.30775463	2.1726995	20	—	—
100790 1998 FQ_{74}	15.1	X	123.87970	307.51162	156.05142	10.11698	0.0575088	0.18394030	3.0620912	20	5 12.4	19.7
100791 1998 FW_{75}	15.5	X	11.00863	310.96349	342.98863	12.28861	0.2406723	0.27841311	2.3227881	20	9 20.3	17.3
100792 1998 FZ_{75}	16.3	X	52.66306	58.71709	210.66571	5.99293	0.1168954	0.28245762	2.3005615	20	10 2.9	19.1
100793 1998 FJ_{76}	15.8	X	157.47672	90.07704	48.66111	7.45755	0.1313970	0.28086202	2.3092664	20	8 12.2	19.3
100794 1998 FK_{76}	16.6	X	118.83143	104.73116	103.07336	4.81660	0.1093534	0.28308266	2.2971739	20	10 1.6	19.9
100795 1998 FS_{76}	16.4	X	35.40999	218.66126	43.65926	7.95560	0.1927291	0.27733974	2.3287774	20	9 14.8	19.0
100796 1998 FM_{77}	15.7	X	47.56046	148.89216	63.59924	6.15053	0.0842928	0.27450980	2.3447551	20	6 27.5	18.3
100797 1998 FP_{78}	14.4	X	215.70961	267.97101	38.21974	13.89606	0.1010598	0.17219189	3.1998350	20	2 15.5	19.6
100798 1998 FG_{79}	16.2	X	99.65933	84.95255	99.17820	4.81741	0.0562984	0.27736787	2.3286200	20	7 29.3	19.2
100799 1998 FX_{79}	15.9	X	214.01029	17.75782	98.22595	3.53184	0.1293358	0.28485412	2.2876402	20	9 11.0	18.9
100800 1998 FZ_{89}	14.9	X	78.66447	81.96524	24.35511	11.51798	0.2246434	0.22642868	2.6659281	20	4 9.2	18.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100801 1998 FW_{90}	15.6	X	327.36747	22.97517	50.15878	5.79084	0.1105877	0.29598150	2.2299391	20	—	—
100802 1998 FK_{93}	15.2	X	184.36696	355.56001	92.61767	7.42498	0.3170649	0.23786102	2.5798069	20	6 25.2	20.0
100803 1998 FP_{98}	15.2	X	303.97942	289.57696	253.46752	6.68778	0.2430496	0.21554296	2.7549485	20	—	—
100804 1998 FM_{105}	16.2	X	93.28964	240.76697	323.68067	5.88251	0.1517604	0.27975889	2.3153329	20	8 29.5	19.3
100805 1998 FX_{105}	15.8	X	308.23844	222.11294	241.10545	4.89479	0.1252626	0.29608155	2.2294367	20	—	—
100806 1998 FD_{107}	15.7	X	27.47987	302.66547	345.21918	11.14854	0.2272226	0.27895757	2.3197648	20	10 7.3	18.4
100807 1998 FA_{115}	15.9	X	149.15801	269.00890	314.25277	4.99010	0.1585631	0.24291112	2.5439259	20	11 10.6	20.0
100808 1998 FP_{116}	16.2	X	219.24392	6.88808	263.40132	3.40940	0.2052492	0.30053879	2.2073390	20	—	—
100809 1998 FW_{117}	16.6	X	252.89224	242.93762	342.03022	4.82648	0.2253328	0.30005992	2.2096868	20	—	—
100810 1998 FW_{119}	16.7	X	59.91122	108.49972	126.65748	1.85743	0.1880784	0.27927212	2.3180226	20	9 6.8	19.6
100811 1998 FB_{120}	16.3	X	96.77398	123.06269	70.14864	2.57985	0.1690672	0.27995388	2.3142577	20	8 22.1	19.5
100812 1998 FK_{123}	15.7	X	78.27340	286.11661	194.61513	11.15295	0.1533166	0.22614645	2.6681457	20	4 16.8	19.0
100813 1998 FE_{124}	15.1	X	323.00277	342.88595	109.87390	7.69923	0.1479996	0.20965895	2.8062549	20	—	—
100814 1998 FA_{125}	16.5	X	15.77252	147.12596	104.18610	4.06940	0.2015567	0.27378033	2.3489182	20	7 16.1	18.2
100815 1998 FQ_{125}	14.8	X	325.88913	154.31014	314.05680	7.13043	0.1771426	0.21145260	2.7903630	20	—	—
100816 1998 FT_{129}	16.5	X	320.09820	74.35285	66.68952	2.94836	0.1574455	0.25848292	2.4407023	20	—	—
100817 1998 FM_{133}	16.4	X	58.05154	110.39182	16.73202	4.13613	0.1079045	0.26892898	2.3770828	20	3 13.6	18.7
100818 1998 FW_{133}	16.9	X	92.81048	139.67948	25.17149	1.14527	0.1452946	0.27603364	2.3361176	20	7 4.6	19.9
100819 1998 FX_{133}	15.6	X	43.34160	84.37877	148.41011	1.06078	0.2431784	0.18771071	3.0209487	20	8 8.3	19.4
100820 1998 FM_{139}	16.0	X	23.44204	202.35612	359.88140	5.45365	0.0825800	0.27082636	2.3659674	20	4 28.2	18.5
100821 1998 FA_{140}	16.5	X	132.58262	95.38684	184.51759	3.34262	0.0667699	0.29357291	2.2421194	20	—	—
100822 1998 FG_{140}	16.1	X	330.01563	212.13695	316.74767	4.52035	0.0777698	0.26199368	2.4188495	20	—	—
100823 1998 FS_{140}	15.6	X	17.76832	265.42665	196.24974	9.49684	0.1997544	0.21769594	2.7367545	20	—	—
100824 1998 FF_{142}	16.3	X	358.68836	68.19475	192.52720	5.56081	0.1202350	0.27388390	2.3483259	20	6 15.6	18.5
100825 1998 FW_{145}	16.2	X	68.83354	161.34399	74.03422	5.35032	0.2042660	0.27976090	2.3153219	20	9 22.9	19.4
100826 1998 HH_{2}	16.6	X	75.81835	273.37786	186.56205	1.60221	0.1542069	0.26963883	2.3729091	20	3 9.6	19.1
100827 1998 HU_{2}	16.0	X	341.16625	249.10782	109.92487	5.01366	0.2432828	0.23399604	2.6081368	20	10 17.3	18.0
100828 1998 HM_{6}	15.9	X	96.07188	124.00484	177.97525	6.74588	0.2504461	0.28718998	2.2752189	20	—	—
100829 1998 HW_{8}	16.6	X	171.21547	335.63933	158.50915	5.27828	0.0423610	0.27995136	2.3142716	20	8 19.2	19.4
100830 1998 HV_{9}	14.9	X	149.26486	324.96469	133.21232	4.56728	0.1205399	0.18488253	3.0516786	20	6 5.5	19.7
100831 1998 HW_{9}	16.0	X	53.52455	163.48326	106.15632	3.64951	0.1868396	0.27964377	2.3159683	20	10 17.6	19.0
100832 1998 HS_{10}	16.3	X	124.49296	216.94739	52.68750	4.04620	0.1865563	0.28921260	2.2645986	20	12 24.4	20.0
100833 1998 HW_{10}	14.8	X	240.63304	260.24961	52.70962	5.56561	0.1217065	0.17704213	3.1411231	20	3 13.1	19.7
100834 1998 HS_{12}	16.6	X	288.77873	314.17246	119.37107	4.16846	0.1035852	0.28766149	2.2727320	20	11 5.8	18.8
100835 1998 HA_{14}	15.7	X	97.82624	135.03442	74.33852	26.34980	0.1445260	0.27994743	2.3142933	20	9 27.8	19.7
100836 1998 HF_{14}	14.7	X	298.43643	187.97868	113.82711	5.86309	0.1338600	0.18105418	3.0945464	20	5 2.2	18.9
100837 1998 HG_{15}	16.1	X	177.68243	259.61543	77.69654	5.98839	0.2192356	0.30057187	2.2071770	20	2 3.0	19.6
100838 1998 HB_{16}	16.5	X	142.55272	126.93171	67.38442	6.91185	0.0868142	0.28384052	2.2930831	20	10 9.9	19.7
100839 1998 HW_{18}	16.7	X	188.46826	310.16987	207.33809	5.41441	0.1844551	0.28719148	2.2752110	20	10 1.3	20.1
100840 1998 HD_{19}	16.7	X	208.00822	50.25268	224.65922	3.83672	0.2166795	0.29964432	2.2117295	20	—	—
100841 1998 HU_{19}	15.4	X	113.96260	21.98906	191.14849	23.61599	0.1327873	0.28377162	2.2934542	20	10 1.9	18.7
100842 1998 HX_{19}	15.2	X	326.51948	130.56020	8.30639	6.29890	0.1502418	0.21326126	2.7745639	20	—	—
100843 1998 HH_{21}	16.6	X	1.82691	153.94813	59.55605	1.47726	0.1550070	0.26921203	2.3754164	20	4 5.5	18.5
100844 1998 HH_{23}	15.1	X	359.57018	52.15435	150.50764	3.42772	0.0452354	0.17897304	3.1184897	20	3 31.8	19.3
100845 1998 HY_{23}	16.3	X	166.23087	6.36778	249.56734	2.31236	0.1230626	0.29364530	2.2417509	20	—	—
100846 1998 HW_{25}	15.6	X	71.52596	323.28224	40.97592	6.41480	0.1358652	0.29670777	2.2262987	20	—	—
100847 1998 HN_{26}	16.3	X	72.19743	82.71765	90.93173	4.62120	0.1713786	0.27196166	2.3593784	20	6 23.1	19.0
100848 1998 HE_{29}	15.7	X	41.25413	195.08644	6.38791	7.58510	0.0846600	0.27248983	2.3563286	20	5 28.9	18.4
100849 1998 HN_{29}	16.3	X	115.78958	158.12640	13.75112	7.38690	0.0439071	0.27851562	2.3222181	20	8 3.4	19.3
100850 1998 HV_{31}	15.5	X	103.65821	349.03945	220.14451	24.94638	0.1700367	0.27952720	2.3166122	20	9 11.9	19.5
100851 1998 HB_{33}	16.1	X	352.92229	32.64318	210.48283	3.93510	0.0956402	0.27084768	2.3658433	20	5 7.5	18.4
100852 1998 HY_{33}	15.7	X	16.02480	53.53994	211.45496	8.66601	0.2514313	0.27408156	2.3471968	20	8 13.9	17.7
100853 1998 HH_{34}	15.6	X	70.73710	268.58846	192.15412	7.90599	0.3303829	0.22400467	2.6851260	20	4 7.4	18.7
100854 1998 HU_{35}	15.9	X	201.92481	130.19906	135.01743	3.25678	0.1641700	0.25381498	2.4705362	20	—	—
100855 1998 HH_{37}	16.0	X	347.92420	266.30548	295.45419	1.28841	0.1489657	0.26575252	2.3959870	20	2 19.4	18.4
100856 1998 HX_{43}	16.2	X	0.89084	134.06515	67.45839	2.18628	0.1324750	0.26736216	2.3863607	20	3 18.2	18.4
100857 1998 HZ_{43}	15.2	X	308.07738	119.49950	37.66179	8.54375	0.1480444	0.21213601	2.7843669	20	—	—
100858 1998 HB_{44}	14.6	X	309.77474	212.02393	35.38636	11.66053	0.1202040	0.17642782	3.1484103	20	3 15.1	18.9
100859 1998 HR_{46}	15.2	X	290.47764	221.61754	36.73758	11.60984	0.1680063	0.21903211	2.7256130	20	2 22.5	19.3
100860 1998 HA_{52}	16.1	X	296.92471	55.52157	202.93967	5.47626	0.1959077	0.26362660	2.4088508	20	2 13.2	19.4
100861 1998 HX_{53}	14.8	X	125.79750	350.19820	186.03615	11.15281	0.0442958	0.19075935	2.9886760	20	8 8.9	19.4
100862 1998 HF_{54}	15.0	X	305.95225	32.25579	198.61193	4.87999	0.1082334	0.17399984	3.1776312	20	2 14.3	19.4
100863 1998 HQ_{54}	16.3	X	27.70734	217.50792	339.78824	4.78323	0.1375548	0.27011287	2.3701320	20	5 2.5	18.4
100864 1998 HW_{54}	15.7	X	99.15324	225.82860	298.80811	2.64811	0.2332214	0.18619205	3.0373532	20	7 17.9	20.5
100865 1998 HA_{58}	16.7	X	75.65792	148.97563	61.91895	2.17996	0.1190672	0.27748277	2.3279771	20	8 13.9	19.6
100866 1998 HM_{60}	15.8	X	19.68893	283.92188	301.03792	2.93762	0.1946923	0.22654303	2.6650309	20	6 6.9	18.3
100867 1998 HC_{61}	16.7	X	120.51632	231.27831	25.15504	3.21302	0.2054960	0.28634816	2.2796759	20	12 4.1	20.5
100868 1998 HE_{61}	16.2	X	75.91250	20.53946	212.06475	11.03012	0.1516109	0.27908689	2.3190481	20	9 14.1	19.5
100869 1998 HQ_{71}	14.7	X	316.57511	264.52306	50.80912	10.69111	0.0728483	0.18518868	3.0483144	20	6 20.7	18.7
100870 1998 HM_{78}	16.1	X	79.11998	187.56986	353.48406	2.07337	0.1493761	0.27436686	2.3455693	20	7 10.5	18.9
100871 1998 HH_{81}	17.1	X	115.38106	24.09207	199.18073	2.01227	0.1153957	0.28295113	2.2978857	20	10 15.9	20.4
100872 1998 HS_{81}	14.8	X	87.46803	142.93548	45.04842	6.62350	0.1331425	0.18655797	3.0333802	20	7 24.3	19.2
100873 1998 HT_{82}	16.6	X	56.16614	309.24455	299.57937	1.37818	0.1785270	0.27775418	2.3264603	20	9 18.1	19.3
100874 1998 HG_{83}	14.7	X	250.17669	189.85893	81.39217	6.82015	0.1779142	0.17043552	3.2217807	20	1 28.9	19.9
100875 1998 HW_{84}	15.9	X	11.89194	175.66144	64.72766	5.16689	0.1196001	0.27160508	2.3614430	20	6 9.3	18.1
100876 1998 HK_{86}	16.8	X	116.85136	13.33719	219.14299	8.88305	0.1743511	0.28374924	2.2935748	20	10 31.7	20.3
100877 1998 HN_{86}	14.6	X	44.84124	349.54426	222.44787	7.70179	0.1231182	0.18375377	3.0641631	20	6 23.9	18.5
100878 1998 HJ_{90}	17.2	X	33.38127	98.25814	134.20028	2.88618	0.1644141	0.27329868	2.3516771	20	7 16.3	19.4
100879 1998 HC_{91}	16.6	X	65.38930	98.47720	120.12588	3.75664	0.1967553	0.27605407	2.3360024	20	8 22.8	19.5
100880 1998 HM_{93}	14.7	X	288.96907	287.26348	346.56170	4.60529	0.1457853	0.17589032	3.1548213	20	3 12.3	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100881 1998 HK_{98}	16.4	X	64.22507	236.12418	16.35865	5.23757	0.2094350	0.27830233	2.3234045	20	10 8.1	19.3
100882 1998 HK_{101}	16.9	X	44.33516	124.75241	114.78817	3.19794	0.1362197	0.27507474	2.3415436	20	8 11.8	19.3
100883 1998 HY_{101}	16.4	X	59.37909	52.11665	214.15375	2.80063	0.2129018	0.27836280	2.3230680	20	10 21.1	19.5
100884 1998 HB_{102}	15.8	X	231.86639	179.23208	42.86514	7.47874	0.1630773	0.29605563	2.2295669	20	—	—
100885 1998 HV_{106}	15.9	X	32.45577	33.48509	123.50573	7.46453	0.2478259	0.26756116	2.3851773	20	3 24.2	17.4
100886 1998 HR_{108}	15.8	X	48.84631	162.82556	102.73965	7.40037	0.1894940	0.27856066	2.3219678	20	10 8.6	18.8
100887 1998 HB_{116}	14.6	X	343.48400	177.02170	78.28206	11.23590	0.1837968	0.18106618	3.0944097	20	5 7.9	18.1
100888 1998 HH_{117}	16.2	X	348.73631	201.64519	71.60725	7.83255	0.1026442	0.27219994	2.3580013	20	6 15.2	18.4
100889 1998 HU_{117}	15.9	X	176.03415	107.37456	106.88421	5.72389	0.1089325	0.28945362	2.2633414	20	12 9.3	18.9
100890 1998 HS_{122}	16.2	X	133.33275	161.72716	89.95988	7.11935	0.1539064	0.28712339	2.2755707	20	12 10.4	19.6
100891 1998 HJ_{124}	15.6	X	31.56725	64.17284	177.49696	7.99541	0.2660619	0.27308480	2.3529048	20	8 13.8	17.8
100892 1998 HM_{125}	16.0	X	28.16953	53.81358	159.35497	6.92838	0.1345622	0.27021473	2.3695363	20	6 1.7	18.3
100893 1998 HH_{130}	14.6	X	49.63454	53.13670	186.72478	11.56891	0.0423866	0.18974328	2.9993359	20	7 25.1	18.9
100894 1998 HK_{145}	16.0	X	9.34161	189.93462	75.54607	7.32852	0.1642210	0.27312955	2.3526479	20	7 21.4	17.9
100895 1998 HN_{146}	15.0	X	309.98246	71.94427	186.27632	19.68197	0.1433337	0.17778834	3.1323278	20	3 19.4	19.2
100896 1998 JT_{3}	14.7	X	358.13234	75.31539	126.82257	6.42758	0.1023736	0.17469249	3.1692262	20	3 29.0	18.7
100897 Piatra Neamt	16.6	X	259.52814	311.31643	356.89754	1.46826	0.1595729	0.30762897	2.1732911	20	3 9.8	19.7
100898 1998 JG_{4}	16.3	X	332.54523	50.19455	192.68432	2.44941	0.1537563	0.26585318	2.3953822	20	3 22.9	18.5
100899 1998 KC_{6}	16.4	X	323.08909	148.49298	145.67423	2.96669	0.1889413	0.26420021	2.4053629	20	5 18.7	18.7
100900 1998 KU_{6}	16.0	X	327.42908	77.80910	196.03765	5.45017	0.1825524	0.31219410	2.1520528	20	4 22.4	17.4
100901 1998 KZ_{6}	16.1	X	306.18515	209.65500	85.77661	5.00906	0.1850805	0.26679097	2.3897656	20	4 22.0	18.7
100902 1998 KS_{8}	15.8	X	317.19234	35.71577	143.72828	6.77876	0.1289365	0.30212122	2.1996246	20	—	—
100903 1998 KU_{8}	16.1	X	16.80657	75.94976	152.18550	6.56473	0.1108667	0.26960130	2.3731293	20	5 31.7	18.5
100904 1998 KW_{10}	15.2	X	249.09655	239.52172	125.93119	11.18820	0.0935049	0.18100191	3.0951422	20	5 27.7	19.9
100905 1998 KY_{11}	14.5	X	350.79462	20.64748	182.39645	15.79724	0.0335055	0.17285723	3.1916188	20	3 20.2	18.9
100906 1998 KF_{15}	16.6	X	212.44462	31.36674	237.12132	5.53313	0.1666164	0.29813717	2.2191771	20	—	—
100907 1998 KP_{16}	15.2	X	344.59390	173.61646	52.12684	4.48718	0.1930572	0.22144380	2.7057876	20	3 23.1	17.9
100908 1998 KH_{17}	16.1	X	37.57762	71.54629	219.98323	22.37611	0.4263308	0.27481088	2.3430422	20	11 25.6	19.8
100909 1998 KV_{22}	16.4	X	30.90441	62.38605	156.71657	3.02531	0.1765340	0.27132311	2.3630787	20	6 21.6	18.4
100910 1998 KR_{23}	15.6	X	144.55489	28.09799	117.92636	5.06642	0.1292174	0.27734221	2.3287636	20	8 5.3	19.0
100911 1998 KF_{26}	16.5	X	341.35483	88.91672	177.27987	4.85924	0.2220990	0.26872636	2.3782775	20	5 9.2	18.2
100912 1998 KU_{26}	13.7	X	106.28846	34.44189	37.69655	23.81202	0.1257906	0.17494971	3.1661190	20	3 30.6	18.5
100913 1998 KJ_{28}	16.3	X	89.86043	193.80513	48.40842	7.88505	0.1909766	0.28016258	2.3131083	20	10 21.1	19.7
100914 1998 KZ_{29}	16.1	X	215.80074	194.86714	69.12036	3.18217	0.1665339	0.25299276	2.4758860	20	—	—
100915 1998 KH_{49}	16.0	X	269.10234	51.08492	196.07544	7.87769	0.1640101	0.25801364	2.4436609	20	1 5.9	19.8
100916 1998 KU_{50}	14.2	X	326.38852	154.26723	101.34311	17.04352	0.0921853	0.17724175	3.1387642	20	4 24.9	18.6
100917 1998 KX_{51}	15.9	X	67.02116	44.97538	155.89475	10.15986	0.2043519	0.27355910	2.3501844	20	7 29.6	19.0
100918 1998 KF_{52}	15.7	X	359.22390	154.41105	114.13450	10.15675	0.1894240	0.27055881	2.3675270	20	7 2.0	17.2
100919 1998 KU_{54}	15.5	X	286.97525	122.04185	166.09138	10.63094	0.2264134	0.26274195	2.4142548	20	3 9.5	18.9
100920 1998 KT_{56}	16.2	X	103.19682	195.89019	79.59459	6.08062	0.1565103	0.28592569	2.2819209	20	12 11.7	19.6
100921 1998 KZ_{60}	15.8	X	317.27393	143.36543	135.35925	9.44024	0.1665255	0.26645696	2.3917622	20	4 21.3	18.5
100922 1998 KR_{61}	15.3	X	114.71447	122.00322	128.04714	11.86935	0.2798834	0.28295702	2.2978538	20	11 26.1	19.6
100923 1998 LU_{1}	16.6	X	26.38586	175.10514	100.17823	3.65289	0.1936844	0.27402543	2.3475173	20	9 16.3	19.0
100924 Luctuymans	16.6	X	0.17573	66.50750	231.82151	1.72329	0.2006742	0.27367491	2.3495213	20	8 27.2	18.3
100925 1998 LV_{3}	15.6	X	331.57137	276.44250	62.81906	3.82811	0.2491617	0.27403331	2.3474723	20	8 25.8	16.7
100926 1998 MQ	16.6	X	27.18810	138.75638	221.10915	24.23867	0.4074179	0.41398161	1.7829891	20	—	—
100927 1998 MN_{1}	14.9	X	233.32917	135.13819	172.67286	4.70484	0.1366822	0.17107885	3.2136987	20	2 25.5	20.0
100928 1998 MM_{5}	16.0	X	81.75244	24.24808	342.59820	4.60754	0.2502294	0.23817450	2.5775428	20	—	—
100929 1998 MQ_{6}	16.0	X	197.36409	79.58032	290.31265	5.84680	0.1033551	0.21223274	2.7835208	20	3 31.6	20.5
100930 1998 MG_{9}	16.4	X	19.97443	140.88274	171.83740	5.98622	0.2128956	0.27611998	2.3356306	20	11 3.4	18.9
100931 1998 MP_{11}	16.0	X	345.03655	40.26801	224.04532	11.41676	0.2728086	0.26721919	2.3872118	20	5 7.2	17.3
100932 1998 MV_{22}	15.5	X	95.51565	216.34039	236.94234	22.36245	0.0520541	0.26259168	2.4151758	20	3 5.1	19.1
100933 1998 MK_{30}	15.6	X	211.75873	156.20459	203.00679	5.50244	0.4375790	0.25472986	2.4646172	20	3 25.5	20.6
100934 Marthanussbaum	16.3	X	341.15061	198.22972	72.70746	3.50604	0.1671844	0.26605592	2.3941651	20	5 22.3	18.0
100935 1998 MA_{42}	15.3	X	83.00276	60.68916	282.17919	4.40795	0.3157805	0.28518858	2.2858512	20	—	—
100936 Mekong	16.0	X	315.65187	358.29647	283.48461	2.60467	0.1311874	0.26381593	2.4076982	20	4 23.2	18.5
100937 1998 MH_{43}	15.9	X	300.54359	136.64432	200.35021	1.74153	0.2302862	0.26639115	2.3921561	20	6 3.5	18.3
100938 1998 MC_{44}	15.2	X	235.12721	57.95999	276.78870	7.54825	0.2969796	0.21289830	2.7777165	20	3 14.2	20.3
100939 1998 MG_{46}	16.2	X	141.20729	25.13647	288.03101	6.31158	0.2284169	0.28931551	2.2640616	20	—	—
100940 Maunder	15.2	X	92.89465	144.25600	111.39391	15.85930	0.1666463	0.23355344	2.6114309	20	11 6.2	19.6
100941 1998 MD_{48}	16.2	X	243.31498	33.81764	260.16414	1.58656	0.1949165	0.25548886	2.4597336	20	2 6.9	20.2
100942 1998 OQ_{3}	16.4	X	256.20054	58.79792	273.65387	5.46480	0.0610462	0.26089409	2.4256411	20	4 19.9	19.8
100943 1998 OH_{4}	16.1	X	256.07774	191.53688	152.78326	6.73584	0.1478783	0.26099853	2.4249941	20	4 29.8	19.6
100944 1998 OT_{7}	16.3	X	315.75482	50.93114	228.40468	1.76157	0.1817960	0.26201388	2.4187251	20	4 12.2	18.7
100945 1998 OE_{8}	16.1	X	196.90745	330.34382	313.82235	5.25718	0.1199094	0.29227271	2.2487640	20	—	—
100946 1998 OD_{10}	16.3	X	291.17809	325.63486	317.18009	1.45458	0.1729621	0.25913280	2.4366199	20	3 14.4	19.4
100947 1998 OS_{12}	14.6	X	339.04068	58.95240	319.63473	12.63877	0.2199327	0.22772066	2.6558350	20	10 28.1	17.2
100948 1998 OF_{13}	16.1	X	355.14779	155.49371	158.50514	2.59009	0.2149245	0.26964070	2.3728981	20	9 13.2	17.6
100949 1998 OJ_{14}	17.1	X	8.39363	212.55627	103.94624	2.65385	0.2484331	0.27166430	2.3610997	20	10 24.8	19.2
100950 1998 PA	16.0	X	306.81204	191.54598	155.85024	3.45878	0.1988522	0.26720867	2.3872745	20	7 7.1	18.3
100951 1998 QC_{3}	15.7	X	333.36720	148.58433	137.30322	14.06841	0.2253505	0.26466520	2.4025448	20	5 26.2	18.0
100952 1998 QR_{5}	15.8	X	23.04527	100.03718	318.26024	18.47294	0.3043797	0.28002297	2.3138770	20	—	—
100953 1998 QB_{6}	15.9	X	12.67765	186.78000	199.80970	3.36674	0.1875280	0.22907369	2.6453669	20	—	—
100954 1998 QR_{6}	15.5	X	33.37527	282.00846	62.90479	1.09850	0.1899523	0.22770187	2.6559811	20	12 17.5	18.8
100955 1998 QJ_{9}	15.8	X	48.22489	121.09973	257.60985	5.09494	0.2275559	0.28237792	2.3009944	20	—	—
100956 1998 QF_{10}	16.0	X	356.17498	63.62185	255.60997	1.76961	0.2234862	0.27086280	2.3657552	20	9 24.8	17.7
100957 1998 QX_{11}	16.2	X	300.10521	184.74509	160.16035	8.14946	0.2822985	0.26557755	2.3970393	20	6 6.2	18.9
100958 1998 QD_{12}	16.2	X	86.20581	195.02887	178.86372	6.41519	0.1810377	0.28677947	2.2773896	20	—	—
100959 1998 QO_{12}	15.0	X	214.35193	228.30897	172.67944	8.54011	0.1565322	0.21562170	2.7542777	20	5 28.6	19.5
100960 1998 QS_{12}	15.1	X	77.55715	186.07343	163.07812	8.70347	0.2089149	0.23789886	2.5795333	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
100961 1998 QL_{13}	15.4	X	249.88044	42.37368	331.54468	8.91026	0.2270729	0.21682246	2.7440996	20	5 18.7	20.0
100962 1998 QV_{13}	16.2	X	101.40929	175.78067	147.03961	7.41554	0.2287494	0.28420978	2.2910964	20	—	—
100963 1998 QW_{14}	14.5	X	281.79104	9.26528	296.06564	10.98014	0.1548111	0.21496803	2.7598584	20	4 1.7	18.6
100964 1998 QL_{16}	15.2	X	305.34176	205.62568	168.38719	12.22779	0.1889215	0.22328519	2.6908910	20	8 9.9	18.1
100965 1998 QG_{17}	15.9	X	44.79077	28.81532	335.45252	6.41060	0.1384885	0.28083887	2.3093933	20	—	—
100966 1998 QP_{18}	16.2	X	335.97105	166.67435	152.58494	8.68231	0.2079779	0.26768122	2.3844640	20	7 28.4	17.9
100967 1998 QF_{20}	16.0	X	27.58939	138.55728	244.51180	4.67075	0.2100690	0.27932376	2.3177368	20	—	—
100968 1998 QL_{20}	16.1	X	328.72185	104.11333	239.77224	2.53806	0.2366114	0.26861518	2.3789338	20	8 20.0	17.3
100969 1998 QV_{21}	16.2	X	205.21005	162.97054	200.50238	2.10436	0.1932366	0.25500516	2.4628430	20	3 30.4	20.3
100970 1998 QZ_{21}	15.7	X	109.50994	63.07270	282.47857	2.58588	0.1882347	0.24111809	2.5565219	20	—	—
100971 1998 QE_{22}	15.3	X	137.87512	47.01434	244.24488	2.64205	0.2471148	0.24056542	2.5604359	20	—	—
100972 1998 QP_{22}	15.8	X	273.62593	298.90461	69.69149	3.69534	0.1865242	0.26424241	2.4051068	20	6 15.9	18.8
100973 1998 QZ_{23}	15.6	X	283.90799	203.02346	183.05829	7.72523	0.2148708	0.22089087	2.7103011	20	7 17.3	19.2
100974 1998 QG_{24}	15.9	X	1.66802	175.48054	200.29961	3.89541	0.2837281	0.22945867	2.6424071	20	12 27.8	18.7
100975 1998 QB_{25}	16.6	X	51.21846	174.49144	148.77517	3.17848	0.1897980	0.27740925	2.3283884	20	12 21.9	19.9
100976 1998 QK_{25}	14.7	X	349.99544	17.09666	338.34869	8.85277	0.2104055	0.22702247	2.6612774	20	10 19.7	17.2
100977 1998 QJ_{26}	15.8	X	335.14409	138.58994	163.49929	11.06652	0.2235993	0.26553642	2.3972868	20	6 24.2	17.8
100978 1998 QB_{27}	16.7	X	168.78905	334.76484	306.44104	18.27486	0.0907139	0.37789904	1.8947512	20	—	—
100979 1998 QH_{27}	15.4	X	0.77724	73.06026	320.19432	22.59859	0.2462023	0.27503563	2.3417655	20	—	—
100980 1998 QJ_{27}	15.6	X	54.53634	356.94811	327.34630	17.86151	0.1194817	0.36686963	1.9325387	20	—	—
100981 1998 QK_{27}	16.3	X	310.92496	5.66835	308.74557	2.00477	0.1720306	0.26504719	2.4002358	20	5 28.3	18.8
100982 1998 QU_{28}	15.9	X	324.22543	154.71685	240.76283	4.52389	0.0953469	0.27394464	2.3479788	20	11 7.3	18.0
100983 1998 QQ_{29}	16.1	X	291.08672	58.63163	191.36184	6.04118	0.0988861	0.25397857	2.4694752	20	2 10.1	19.6
100984 1998 QQ_{30}	15.6	X	122.07862	196.62430	120.55754	6.15350	0.2212300	0.24050939	2.5608336	20	—	—
100985 1998 QW_{30}	15.2	X	24.96846	139.52389	176.30242	2.50647	0.2405938	0.18258889	3.0771817	20	10 27.7	19.0
100986 1998 QB_{33}	16.5	X	67.94521	84.94499	216.09626	2.20730	0.1709372	0.27728208	2.3291003	20	12 9.2	19.7
100987 1998 QR_{33}	15.6	X	98.08525	138.42977	230.91134	4.47396	0.2894458	0.24106614	2.5568892	20	1 6.2	18.6
100988 1998 QU_{33}	15.3	X	0.10092	49.35323	280.46960	1.93608	0.1914722	0.22601781	2.6691579	20	10 3.6	17.9
100989 1998 QA_{34}	16.1	X	300.20570	39.03200	316.99334	1.98213	0.2139422	0.26578967	2.3957637	20	7 5.5	18.4
100990 1998 QF_{36}	16.1	X	79.04390	35.69801	319.07464	6.65667	0.1536569	0.28336553	2.2956448	20	—	—
100991 1998 QG_{36}	16.6	X	114.36378	348.02122	314.31053	4.43707	0.2171456	0.28340532	2.2954300	20	—	—
100992 1998 QD_{37}	16.2	X	19.43117	108.26022	248.94841	3.93508	0.1708412	0.27587025	2.3370400	20	12 25.3	19.0
100993 1998 QG_{39}	15.0	X	318.38786	11.22022	344.25994	8.90455	0.3077329	0.22224806	2.6992559	20	7 26.2	17.3
100994 1998 QH_{39}	16.2	X	115.99946	197.52696	136.57170	6.77204	0.2258902	0.28618669	2.2805333	20	—	—
100995 1998 QA_{40}	16.1	X	212.18725	168.80479	164.13956	5.22121	0.2457984	0.25275288	2.4774523	20	2 27.5	20.4
100996 1998 QB_{41}	15.8	X	149.94062	178.62447	182.85079	3.81820	0.1397680	0.24735073	2.5133940	20	2 3.8	19.4
100997 1998 QF_{41}	16.6	X	116.22890	205.11928	164.94708	6.34443	0.2150632	0.28892467	2.2661029	20	1 10.7	19.4
100998 1998 QH_{41}	16.2	X	95.08886	163.08568	160.38766	2.70056	0.2523031	0.28268565	2.2993242	20	—	—
100999 1998 QC_{43}	15.7	X	41.21108	265.19907	141.83277	4.16807	0.1895168	0.28311803	2.2969825	20	—	—
101000 1998 QT_{43}	16.0	X	317.14002	269.76821	59.18763	3.40091	0.2017389	0.26558461	2.3969967	20	6 28.9	18.1
101001 1998 QD_{46}	16.2	X	90.33336	35.77916	317.35953	1.84285	0.1648218	0.28422815	2.2909977	20	—	—
101002 1998 QE_{46}	16.8	X	135.54157	228.67736	159.47238	6.08956	0.2027839	0.29297308	2.2451787	20	2 25.1	19.8
101003 1998 QW_{46}	16.3	X	43.98053	90.78619	276.85889	3.98951	0.2401710	0.27912409	2.3188421	20	—	—
101004 1998 QY_{46}	16.2	X	114.74911	343.41147	356.13127	4.28184	0.2303240	0.24064082	2.5599011	20	—	—
101005 1998 QD_{47}	16.1	X	63.33939	358.34635	24.33404	4.53326	0.1734377	0.28368710	2.2939097	20	—	—
101006 1998 QG_{47}	15.5	X	64.86925	322.36053	10.27387	6.44208	0.2180526	0.23408333	2.6074885	20	—	—
101007 1998 QM_{48}	15.6	X	75.97281	40.13655	321.97434	5.98352	0.1906425	0.28288299	2.2982547	20	—	—
101008 1998 QO_{48}	16.6	X	158.02938	166.77765	176.87124	4.53489	0.1483440	0.29172204	2.2515930	20	1 15.9	19.7
101009 1998 QQ_{48}	15.7	X	34.90995	87.53733	328.66587	6.42403	0.1376684	0.28338777	2.2955247	20	—	—
101010 1998 QX_{48}	16.0	X	72.71457	216.53963	154.54924	4.47913	0.2236728	0.28324646	2.2962882	20	—	—
101011 1998 QS_{49}	15.7	X	210.18532	288.65761	57.14970	2.93476	0.1872854	0.25355359	2.4722338	20	3 14.8	19.7
101012 1998 QJ_{50}	15.7	X	170.67089	28.18783	3.15359	5.54911	0.1309157	0.29842003	2.2177746	20	3 29.8	18.9
101013 1998 QV_{52}	15.0	X	327.66953	20.94190	303.06134	8.37847	0.2242266	0.22030406	2.7151118	20	7 9.1	17.5
101014 1998 QL_{54}	16.2	X	82.28852	128.67744	208.11892	4.20175	0.1967979	0.28092847	2.3089023	20	—	—
101015 1998 QE_{55}	15.3	X	35.60277	346.85657	351.93604	16.95345	0.2048043	0.22938964	2.6429372	20	12 13.9	19.3
101016 1998 QP_{55}	15.2	X	16.02569	308.64610	27.16373	2.80473	0.2029133	0.22506518	2.6766844	20	11 12.4	18.2
101017 1998 QR_{56}	16.9	X	315.23876	72.72133	338.80133	0.74429	0.1742973	0.27215645	2.3582524	20	11 14.9	18.7
101018 1998 QB_{57}	15.0	X	313.49024	194.43332	171.97182	26.83617	0.0274948	0.22258817	2.6965056	20	8 31.2	18.6
101019 1998 QQ_{57}	16.5	X	67.37656	126.30572	192.64214	1.36261	0.1743130	0.23239751	2.6200831	20	12 22.0	20.4
101020 1998 QF_{59}	15.6	X	233.35601	79.72089	354.75586	3.60374	0.2052398	0.21784484	2.7355072	20	7 24.1	19.8
101021 1998 QR_{59}	15.9	X	268.78616	40.16818	344.33973	4.13562	0.1729462	0.21805461	2.7337525	20	7 2.8	19.6
101022 1998 QA_{60}	16.5	X	191.05991	107.90685	161.19192	5.11755	0.1899326	0.24293301	2.5437731	20	—	—
101023 1998 QB_{61}	14.5	X	75.71546	51.00157	305.19002	9.54592	0.1008729	0.19314544	2.9640105	20	—	—
101024 1998 QO_{61}	15.7	X	197.83211	276.31266	82.44075	3.60913	0.2156586	0.25449512	2.4661325	20	3 20.5	19.9
101025 1998 QJ_{63}	16.1	X	159.06990	109.44614	214.84332	5.48614	0.1501412	0.24375231	2.5380698	20	—	—
101026 1998 QT_{63}	16.2	X	177.15555	106.44119	221.69731	5.99914	0.1406132	0.29349089	2.2425371	20	1 14.6	19.5
101027 1998 QL_{71}	15.5	X	56.58090	197.21159	201.76265	7.00662	0.2901979	0.28334940	2.2957320	20	—	—
101028 1998 QZ_{74}	14.8	X	252.41810	166.83325	225.86755	11.67780	0.1410432	0.21734896	2.7396664	20	6 26.2	18.9
101029 1998 QJ_{75}	15.4	X	130.00624	323.40001	286.33883	9.13962	0.1768750	0.27856273	2.3219563	20	12 2.5	19.2
101030 1998 QF_{76}	14.7	X	112.52758	78.74591	217.71062	9.08645	0.2268398	0.23663936	2.5886782	20	—	—
101031 1998 QU_{76}	15.8	X	351.64589	99.08362	276.64076	5.43663	0.1267149	0.27350819	2.3504760	20	11 30.1	18.1
101032 1998 QM_{80}	15.5	X	64.92936	173.79316	182.56014	13.92749	0.3232849	0.23609081	2.5926864	20	—	—
101033 1998 QR_{82}	14.9	X	200.96090	108.24663	272.28706	7.83838	0.1708307	0.21098828	2.7944552	20	4 16.1	19.6
101034 1998 QT_{82}	15.8	X	3.48423	47.53980	219.01897	5.97857	0.1862067	0.26603192	2.3943091	20	7 7.7	17.7
101035 1998 QL_{83}	15.7	X	237.00702	64.15392	234.53540	6.67249	0.1199113	0.25257204	2.4786348	20	2 8.9	19.6
101036 1998 QF_{87}	14.6	X	292.79887	162.63195	221.95393	8.46000	0.2373750	0.22077247	2.7112700	20	7 24.1	17.9
101037 1998 QX_{90}	16.1	X	55.67673	183.63839	156.70790	7.28251	0.2873739	0.27821972	2.3238644	20	—	—
101038 1998 QA_{96}	15.4	X	298.71564	71.71208	309.78747	24.97131	0.4191974	0.17382465	3.1797658	20	7 2.1	19.7
101039 1998 QM_{97}	15.4	X	26.85879	164.84196	177.52249	14.50685	0.2629695	0.23043223	2.6349592	20	12 18.0	19.2
101040 1998 QJ_{98}	14.9	X	155.77318	125.14093	171.76321	13.53276	0.1981881	0.24057351	2.5603786	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101041 1998 QV_{98}	14.8	X	177.67986	166.29328	305.63424	25.05991	0.2246558	0.26067096	2.4270252	20	7 23.3	18.8
101042 1998 QN_{99}	15.8	X	205.10066	157.85269	144.51979	4.43863	0.1892735	0.29381781	2.2408733	20	1 11.9	19.5
101043 1998 QP_{99}	15.9	X	299.43496	273.95695	131.26776	3.13817	0.1717193	0.26944412	2.3740521	20	9 30.6	17.8
101044 1998 QU_{99}	16.4	X	28.28227	279.47865	97.04623	3.04118	0.2223870	0.27782086	2.3260880	20	—	—
101045 1998 QN_{100}	15.4	X	118.90009	38.65379	4.77099	5.09674	0.1856111	0.29187972	2.2507820	20	2 25.8	18.2
101046 1998 QQ_{100}	15.3	X	9.46852	350.76788	32.03944	3.51275	0.0393517	0.23157731	2.6262660	20	12 13.1	18.7
101047 1998 QU_{100}	16.1	X	288.20486	291.26444	53.99026	2.92632	0.1952786	0.26266867	2.4147038	20	6 1.7	18.8
101048 1998 QM_{101}	16.1	X	88.59506	296.82437	109.45745	3.56297	0.1060265	0.28933802	2.2639442	20	1 2.2	18.1
101049 1998 QD_{105}	16.2	X	318.60466	170.86326	134.25854	11.34609	0.1733671	0.26294595	2.4130059	20	5 31.7	18.8
101050 1998 QM_{105}	16.2	X	359.45532	13.07729	28.52165	5.93919	0.2126445	0.27648369	2.3335819	20	—	—
101051 1998 QK_{106}	16.1	X	356.07075	256.01868	34.69319	4.71666	0.2381809	0.26688786	2.3891872	20	8 9.0	17.5
101052 1998 QK_{109}	16.6	X	136.58873	322.92598	339.59549	5.64936	0.1287132	0.28585494	2.2822975	20	—	—
101053 1998 QN_{110}	15.4	X	311.02950	13.73624	309.54967	8.49114	0.1396877	0.21947631	2.7219342	20	6 15.9	18.7
101054 1998 QP_{110}	16.5	X	147.89179	107.37854	249.45084	2.60757	0.2059960	0.24688365	2.5165631	20	2 2.6	20.3
101055 1998 RL	16.1	X	56.20751	142.84041	177.03408	5.13403	0.2002412	0.27659768	2.3329407	20	12 23.7	19.6
101056 1998 RF_{1}	15.6	X	10.47876	23.73115	329.82363	5.96792	0.2257365	0.27395620	2.3479128	20	12 15.9	18.3
101057 1998 RD_{3}	15.0	X	87.81748	350.61928	11.25081	13.62575	0.3092524	0.23786265	2.5797951	20	—	—
101058 1998 RN_{3}	15.4	X	289.51754	84.32272	348.23753	21.17757	0.5158582	0.17735754	3.1373980	20	8 12.4	19.9
101059 1998 RR_{3}	17.0	X	240.34533	118.09973	168.53059	25.64086	0.0143355	0.38574175	1.8689813	20	1 13.6	19.5
101060 1998 RE_{4}	15.6	X	13.57024	353.57009	350.01731	13.78646	0.2377606	0.27320315	2.3522253	20	12 6.2	18.6
101061 1998 RL_{4}	15.8	X	163.36201	264.26126	354.48239	22.68028	0.1959749	0.28280356	2.2986851	20	—	—
101062 1998 RF_{5}	16.1	X	69.51362	220.33326	78.48168	4.48299	0.1306609	0.27514388	2.3411513	20	12 3.5	19.4
101063 1998 RB_{6}	15.3	X	63.72218	196.80289	169.32813	8.41202	0.1528446	0.23680619	2.5874622	20	—	—
101064 1998 RG_{8}	15.5	X	276.06943	354.97333	19.26002	3.45435	0.1862728	0.21702363	2.7424036	20	6 26.0	19.2
101065 1998 RV_{11}	15.9	X	18.69333	114.11774	180.10126	8.52759	0.2212488	0.26856418	2.3792349	20	10 3.7	18.1
101066 1998 RP_{13}	15.9	X	73.38169	341.90368	326.06267	0.38971	0.1463023	0.23298179	2.6157008	20	12 12.0	19.8
101067 1998 RJ_{14}	15.5	X	213.35247	44.85846	341.37232	4.63733	0.0765295	0.21337121	2.7736107	20	5 10.5	19.8
101068 1998 RO_{14}	15.8	X	299.45389	317.45123	357.77343	1.22591	0.1988349	0.21710688	2.7417025	20	5 7.0	19.3
101069 1998 RX_{14}	15.7	X	125.29576	99.39219	318.41195	6.43719	0.2230224	0.29666684	2.2265035	20	3 23.4	18.8
101070 1998 RY_{15}	16.3	X	348.53006	213.95558	182.08226	5.32276	0.2219655	0.27416192	2.3467381	20	—	—
101071 1998 RE_{17}	15.8	X	259.26067	129.28810	188.25605	3.37032	0.1924396	0.25795565	2.4440271	20	3 21.9	19.6
101072 1998 RN_{18}	16.2	X	114.17395	129.49485	200.47529	3.60465	0.2190676	0.24010775	2.5636885	20	—	—
101073 1998 RU_{18}	16.2	X	140.34967	253.36557	139.63435	3.13516	0.1845830	0.29471786	2.2363086	20	3 6.2	19.2
101074 1998 RY_{19}	15.6	X	24.23357	61.91656	293.34420	5.39875	0.1565180	0.27643429	2.3338599	20	12 27.3	18.3
101075 1998 RN_{20}	15.5	X	344.34522	188.68235	151.88219	4.33940	0.2886392	0.22509662	2.6764352	20	9 23.8	17.1
101076 1998 RM_{21}	15.8	X	115.65250	43.53696	261.07130	0.54433	0.0771961	0.19072844	2.9889988	20	—	—
101077 1998 RH_{22}	15.8	X	295.93256	227.77030	183.53648	12.32309	0.1696812	0.22525803	2.6751565	20	9 20.7	18.6
101078 1998 RF_{24}	16.1	X	306.39365	166.44255	140.20733	7.29316	0.2331901	0.26270879	2.4144579	20	5 1.5	18.9
101079 1998 RW_{24}	16.1	X	260.97564	36.79329	245.64355	5.51339	0.1078309	0.25317709	2.4746842	20	2 14.8	19.7
101080 1998 RB_{25}	15.2	X	219.65080	238.83844	182.64294	9.33782	0.2650684	0.21506851	2.7589987	20	6 19.8	20.2
101081 1998 RU_{25}	16.7	X	105.88356	195.19768	146.63103	5.22554	0.1865186	0.28541347	2.2846503	20	—	—
101082 1998 RO_{26}	15.7	X	348.12106	277.89954	73.73449	2.16687	0.2176062	0.22592711	2.6698723	20	10 15.7	18.0
101083 1998 RK_{27}	15.1	X	359.63901	147.34564	179.67311	13.99587	0.3120993	0.17986681	3.1081504	20	10 3.4	17.7
101084 1998 RV_{28}	16.2	X	59.83778	12.68603	8.07512	5.61742	0.1767634	0.28290336	2.2981444	20	—	—
101085 1998 RL_{29}	16.0	X	300.64782	235.50463	85.19890	3.88944	0.1986120	0.26272325	2.4143694	20	5 16.5	18.7
101086 1998 RG_{31}	14.7	X	311.30747	117.71284	242.06378	3.86575	0.1332918	0.17570700	3.1570153	20	8 2.7	18.6
101087 1998 RC_{32}	15.4	X	201.44769	46.66929	325.74305	8.11464	0.1575808	0.20932998	2.8091942	20	4 6.4	20.1
101088 1998 RD_{32}	15.9	X	62.39568	188.04543	204.90302	4.65743	0.1474575	0.28432175	2.2904949	20	—	—
101089 1998 RR_{32}	15.7	X	162.55441	292.19219	340.28811	3.25236	0.1488948	0.23985249	2.5655071	20	—	—
101090 1998 RG_{33}	15.7	X	193.53342	56.41298	9.14433	8.18239	0.2921998	0.21198791	2.7856635	20	6 2.9	20.9
101091 1998 RW_{33}	16.3	X	73.42428	359.73538	31.77164	5.92711	0.1629790	0.28572567	2.2829858	20	—	—
101092 1998 RE_{35}	16.7	X	335.84641	246.88152	121.74308	1.92750	0.2034014	0.27084854	2.3658383	20	10 27.5	18.4
101093 1998 RE_{36}	16.2	X	35.13823	40.49696	290.74926	1.63415	0.2343907	0.27543952	2.3394758	20	12 19.8	19.2
101094 1998 RJ_{36}	16.0	X	51.37568	65.01069	260.51189	2.48564	0.2469792	0.23160361	2.6260672	20	12 21.8	19.9
101095 1998 RX_{36}	16.1	X	10.21993	42.23646	314.34512	6.02909	0.1414001	0.27413194	2.3469092	20	12 5.3	18.8
101096 1998 RL_{37}	15.9	X	147.40065	38.01436	303.94030	4.36379	0.1970905	0.24459672	2.5322250	20	1 15.5	19.6
101097 1998 RB_{39}	16.1	X	93.78117	182.35285	147.35006	4.40093	0.2409858	0.28264621	2.2995381	20	—	—
101098 1998 RG_{39}	16.2	X	66.49214	123.55133	156.64981	9.77225	0.2205361	0.27469010	2.3437289	20	11 18.5	19.9
101099 1998 RK_{41}	15.0	X	137.92164	31.36439	340.19439	11.28568	0.0431268	0.20126302	2.8837663	20	2 1.7	19.1
101100 1998 RM_{41}	16.3	X	124.73053	316.30752	338.75714	7.14171	0.1803891	0.23753012	2.5822023	20	—	—
101101 1998 RO_{41}	16.6	X	140.51603	117.57359	202.11622	2.89332	0.1797575	0.28724100	2.2749495	20	—	—
101102 1998 RW_{41}	16.0	X	109.60479	89.64758	204.77141	4.31568	0.2567188	0.23641757	2.5902969	20	—	—
101103 1998 RA_{42}	15.8	X	6.76063	161.60245	227.41121	3.82818	0.3132842	0.18487776	3.0517311	20	—	—
101104 1998 RC_{42}	15.9	X	306.79766	133.24447	242.34308	3.44810	0.1274438	0.22232380	2.6986428	20	8 23.3	19.0
101105 1998 RS_{42}	16.0	X	340.21085	115.46016	289.14736	5.34603	0.1412810	0.27487914	2.3426542	20	12 25.1	18.3
101106 1998 RA_{43}	15.9	X	114.80481	207.67001	200.10068	8.98025	0.1247991	0.24683100	2.5169210	20	2 18.8	19.4
101107 1998 RE_{45}	15.6	X	339.29232	353.28758	342.47973	3.94392	0.0849454	0.22241128	2.6979351	20	8 28.0	18.8
101108 1998 RS_{45}	16.2	X	34.12229	60.45041	205.66938	3.27984	0.1912060	0.26821923	2.3812744	20	9 10.8	18.7
101109 1998 RZ_{45}	15.8	X	60.93699	107.90861	194.78753	4.44467	0.0785541	0.22908279	2.6452968	20	11 13.3	19.4
101110 1998 RV_{48}	16.0	X	98.51900	183.01854	235.23438	1.91166	0.0767299	0.24636517	2.5200927	20	2 5.9	19.1
101111 1998 RZ_{48}	15.4	X	294.98141	170.65944	196.03518	2.80621	0.2465670	0.21950431	2.7217027	20	7 2.9	18.6
101112 1998 RG_{51}	15.9	X	99.89423	24.31882	264.85925	4.05093	0.2685141	0.23452531	2.6042114	20	12 21.3	20.4
101113 1998 RM_{51}	16.3	X	230.46621	194.93097	124.78211	2.64346	0.2132171	0.25352352	2.4724293	20	2 27.6	20.4
101114 1998 RW_{51}	15.4	X	146.04173	45.23618	238.78421	3.26403	0.1127155	0.23770210	2.5809566	20	—	—
101115 1998 RX_{51}	15.3	X	40.33234	110.98719	187.54147	14.12440	0.0696227	0.22564999	2.6720578	20	10 10.2	18.6
101116 1998 RD_{52}	15.8	X	343.30187	228.91523	115.42293	4.24439	0.1270642	0.22396440	2.6854478	20	9 19.3	18.6
101117 1998 RA_{53}	16.3	X	45.81403	216.84294	167.15844	5.10168	0.2175236	0.23514083	2.5996648	20	—	—
101118 1998 RJ_{53}	16.4	X	281.21974	42.64918	291.07574	1.67793	0.1948887	0.26065774	2.4271073	20	5 6.2	19.6
101119 1998 RK_{53}	16.4	X	79.62088	43.24352	347.27155	9.95169	0.1340473	0.28572988	2.2829634	20	—	—
101120 1998 RO_{53}	15.9	X	94.48675	7.98943	315.29651	3.88048	0.1513445	0.28114411	2.3077215	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101121 1998 RO_{54}	15.8	X	115.75586	131.56793	250.34128	3.77948	0.1494422	0.28926151	2.2643434	20	1 15.9	18.3
101122 1998 RR_{54}	16.3	X	331.00774	155.51962	222.24719	5.91441	0.1413872	0.27054702	2.3675957	20	10 25.2	18.4
101123 1998 RH_{55}	15.6	X	160.50638	331.64262	329.55078	6.98777	0.1611436	0.24140794	2.5544752	20	—	—
101124 1998 RD_{56}	15.9	X	32.96327	344.89508	334.66464	6.09295	0.2015759	0.22789281	2.6544974	20	11 14.4	19.4
101125 1998 RO_{56}	16.6	X	337.91149	105.08631	196.69455	6.37479	0.2527919	0.26514268	2.3996595	20	6 27.7	18.2
101126 1998 RC_{57}	16.2	X	106.38471	131.49255	181.84733	5.22476	0.1828385	0.28202893	2.3028922	20	—	—
101127 1998 RE_{57}	16.9	X	291.62543	145.76675	173.90203	4.85824	0.2171459	0.26091206	2.4255298	20	4 29.2	20.0
101128 1998 RX_{57}	16.0	X	339.85975	136.86613	155.55350	4.37681	0.1746209	0.26377571	2.4079429	20	6 23.8	17.9
101129 1998 RU_{58}	16.5	X	51.17433	71.67709	212.62737	1.31296	0.2004637	0.27216275	2.3582161	20	11 2.0	19.6
101130 1998 RQ_{59}	15.8	X	129.44519	57.28553	272.39011	2.08117	0.1317925	0.24022779	2.5628345	20	—	—
101131 1998 RW_{59}	15.4	X	37.05192	158.90023	191.88393	12.73362	0.1760156	0.23084713	2.6318011	20	12 27.3	19.3
101132 1998 RP_{60}	16.0	X	278.00253	149.43559	274.21236	3.93021	0.1277357	0.26826997	2.3809741	20	9 20.1	18.5
101133 1998 RR_{60}	16.0	X	310.65405	161.09303	270.23814	4.01413	0.2050477	0.27245298	2.3565411	20	12 6.9	17.6
101134 1998 RV_{60}	16.0	X	99.15425	138.30833	225.11257	5.42078	0.1993960	0.28505158	2.2865836	20	—	—
101135 1998 RZ_{60}	16.2	X	335.13317	193.05747	215.86970	4.95305	0.1820406	0.27349373	2.3505589	20	12 26.3	18.3
101136 1998 RF_{64}	15.2	X	270.73541	90.29613	5.58271	17.43084	0.0579229	0.22719980	2.6598925	20	10 22.8	18.8
101137 1998 RV_{64}	16.7	X	30.67723	98.32033	241.53251	0.32436	0.2733650	0.27512531	2.3412566	20	12 30.9	19.8
101138 1998 RY_{65}	16.5	X	64.22156	114.06048	186.01092	5.25532	0.2372731	0.27557700	2.3386976	20	12 10.6	20.1
101139 1998 RA_{66}	16.0	X	150.30941	173.69982	184.25641	9.25071	0.0861126	0.29094162	2.2556176	20	1 17.5	19.1
101140 1998 RY_{67}	16.4	X	20.52537	69.94288	279.67357	1.25076	0.2211998	0.22852639	2.6495888	20	12 11.6	19.6
101141 1998 RR_{68}	16.0	X	145.14944	29.38722	345.34067	1.63925	0.1809779	0.24649733	2.5191918	20	2 20.6	19.9
101142 1998 RQ_{69}	16.2	X	32.54302	334.43383	24.21076	2.76115	0.1872273	0.23105143	2.6302495	20	—	—
101143 1998 RS_{69}	15.5	X	309.18439	45.32085	10.08460	7.76930	0.1811182	0.22571037	2.6715812	20	10 20.5	18.0
101144 1998 RT_{69}	15.5	X	134.92487	335.96683	11.06023	7.33326	0.1966526	0.24292000	2.5438639	20	1 10.5	19.3
101145 1998 RD_{70}	15.9	X	235.57499	4.61859	86.45882	3.22581	0.1676481	0.26576977	2.3958833	20	8 26.2	19.2
101146 1998 RK_{70}	15.3	X	323.86655	340.90319	78.40959	5.04102	0.2707313	0.18256291	3.0774737	20	11 11.3	17.9
101147 1998 RS_{70}	16.0	X	155.18675	247.65661	35.13806	6.72133	0.1874901	0.28495542	2.2870980	20	—	—
101148 1998 RV_{70}	16.2	X	73.86594	217.20731	87.40464	4.39628	0.2205802	0.27731968	2.3288897	20	12 23.3	19.9
101149 1998 RY_{70}	15.7	X	71.12608	318.81927	38.47486	5.39065	0.1492154	0.23573156	2.5953199	20	—	—
101150 1998 RN_{71}	16.0	X	57.41360	49.16293	20.97073	6.06692	0.0546905	0.28777093	2.2721558	20	—	—
101151 1998 RB_{72}	15.8	X	153.61787	202.44195	165.53886	5.25186	0.1050660	0.24708978	2.5151633	20	2 12.7	19.3
101152 1998 RD_{72}	16.4	X	345.70600	329.27916	61.89150	1.25867	0.2151789	0.27311907	2.3527080	20	12 25.9	18.5
101153 1998 RP_{72}	14.0	X	286.55829	171.18217	178.84788	9.03300	0.1861182	0.12515871	3.9581781	20	6 7.5	19.6
101154 1998 RE_{74}	15.7	X	28.41541	87.57318	308.68457	3.96631	0.1580517	0.27885710	2.3203219	20	—	—
101155 1998 RM_{74}	15.9	X	81.21431	157.03698	205.39608	7.17162	0.1613417	0.28243346	2.3006927	20	—	—
101156 1998 RQ_{74}	15.8	X	75.96259	189.76799	197.06462	7.57614	0.2130017	0.23844499	2.5755931	20	—	—
101157 1998 RN_{76}	15.2	X	110.27300	284.02800	37.12113	4.33982	0.2729051	0.23795763	2.5791086	20	—	—
101158 1998 RA_{77}	16.4	X	120.97419	272.25992	33.03806	4.76932	0.2852501	0.28376060	2.2935136	20	—	—
101159 1998 RU_{77}	16.0	X	51.24971	132.03488	156.24226	5.30840	0.2830077	0.27319562	2.3522685	20	11 19.1	19.5
101160 1998 RW_{77}	15.5	X	127.76035	151.33713	172.58918	14.77043	0.1373112	0.23917860	2.5703238	20	—	—
101161 1998 RJ_{78}	16.4	X	330.12716	324.64205	87.32961	3.59216	0.1653916	0.27324813	2.3519672	20	12 18.9	18.2
101162 1998 RS_{78}	16.2	X	90.10395	325.67838	46.10086	4.95952	0.1949868	0.28470477	2.2884401	20	—	—
101163 1998 RR_{79}	16.1	X	116.10367	293.82864	48.45366	3.35048	0.2484845	0.23992109	2.5650181	20	—	—
101164 1998 RD_{80}	15.6	X	100.87077	231.08588	116.87829	4.93215	0.2350900	0.23844633	2.5755834	20	—	—
101165 1998 SS	15.4	X	226.50011	212.20748	190.86337	2.08972	0.0877208	0.21271058	2.7793505	20	6 17.1	19.5
101166 1998 ST_{1}	16.0	X	6.76520	304.94098	94.17694	5.02134	0.1631221	0.27676448	2.3320033	20	—	—
101167 1998 SW_{2}	15.0	X	71.42680	64.77686	297.93725	24.32793	0.1692826	0.28155039	2.3055009	20	—	—
101168 1998 SX_{2}	16.1	X	46.73164	78.33391	202.57585	9.79694	0.2595310	0.27113247	2.3641863	20	11 1.1	19.2
101169 1998 SR_{3}	15.8	X	53.15054	287.68941	19.27300	6.66535	0.2186078	0.27337274	2.3512524	20	12 4.7	19.3
101170 1998 SU_{3}	16.1	X	326.05134	16.00545	22.66063	2.39934	0.2101082	0.27021200	2.3695523	20	11 20.7	17.6
101171 1998 SA_{4}	16.0	X	274.45806	16.48028	39.28808	2.14193	0.1589795	0.26515739	2.3995707	20	8 31.4	18.5
101172 1998 SF_{4}	15.9	X	63.31901	329.69348	2.98337	4.22177	0.1509927	0.23173459	2.6250775	20	—	—
101173 1998 SY_{4}	16.1	X	227.75979	238.59274	114.35856	2.99238	0.2178723	0.25490463	2.4634906	20	4 6.4	20.1
101174 1998 SZ_{4}	16.0	X	0.33148	245.67854	125.70090	3.27929	0.1743620	0.27294147	2.3537285	20	12 16.4	18.5
101175 1998 SO_{6}	15.8	X	74.55996	239.85374	334.94968	4.59744	0.0127736	0.22022667	2.7157478	20	7 26.9	19.4
101176 1998 SE_{7}	16.2	X	44.06022	61.20236	201.42641	0.45075	0.1977276	0.26931267	2.3748246	20	9 23.3	19.0
101177 1998 SM_{8}	15.8	X	249.71887	275.02395	185.81507	1.97869	0.1641815	0.26819911	2.3813935	20	9 26.3	18.8
101178 1998 SY_{8}	16.1	X	20.13472	97.99130	150.87441	1.30961	0.0289704	0.21443616	2.7644200	20	6 27.9	19.7
101179 1998 SA_{9}	16.1	X	358.76516	1.33893	61.76153	0.93151	0.1826301	0.18682674	3.0304703	20	—	—
101180 1998 SH_{9}	15.4	X	277.62520	234.65420	186.24607	4.80918	0.0911926	0.22220135	2.6996342	20	9 15.1	18.8
101181 1998 SZ_{9}	14.9	X	62.13666	193.38018	248.15312	24.89604	0.1870250	0.28920048	2.2646619	20	1 7.6	17.1
101182 1998 SY_{10}	15.7	X	103.13547	112.80171	213.66184	3.31774	0.2541071	0.23900825	2.5715450	20	—	—
101183 1998 SR_{11}	16.4	X	41.99674	174.23554	112.04379	4.78267	0.1396139	0.27021372	2.3695422	20	10 16.9	19.3
101184 1998 SP_{12}	14.9	X	28.58526	120.45439	289.45506	24.79999	0.1941409	0.28020963	2.3128493	20	—	—
101185 1998 SS_{12}	15.9	X	297.13586	190.68143	263.90307	19.85272	0.0585218	0.36574036	1.9365147	20	—	—
101186 1998 SD_{13}	16.3	X	76.06285	125.92710	146.28295	7.10505	0.1110779	0.27137932	2.3627524	20	11 6.1	19.6
101187 1998 SV_{13}	16.1	X	86.31986	353.79888	32.62818	4.13748	0.2669409	0.24118926	2.5560190	20	1 8.7	18.8
101188 1998 SP_{14}	15.7	X	232.04626	215.44473	130.51806	10.11455	0.3086202	0.21138688	2.7909413	20	4 1.1	20.8
101189 1998 SW_{19}	16.4	X	2.55321	219.48704	192.38309	0.61492	0.1781031	0.23374422	2.6100098	20	—	—
101190 1998 SJ_{23}	16.2	X	70.84290	215.73591	154.05215	6.86865	0.1407159	0.28253277	2.3001535	20	—	—
101191 1998 SL_{23}	14.7	X	87.72690	130.80653	164.12316	13.39587	0.1660924	0.23216649	2.6218209	20	12 13.1	19.1
101192 1998 SO_{23}	15.7	X	127.07319	177.54331	157.09240	10.10716	0.1660916	0.24056472	2.5604409	20	—	—
101193 1998 SY_{23}	16.0	X	35.13407	308.20747	68.15184	3.83057	0.1992712	0.27850357	2.3222851	20	—	—
101194 1998 SO_{24}	16.4	X	31.55704	255.30874	126.24988	3.39294	0.2025872	0.27861882	2.3216447	20	—	—
101195 1998 SV_{25}	15.9	X	158.26786	262.14118	68.32926	4.54247	0.1758674	0.28898574	2.2657837	20	1 3.6	19.0
101196 1998 SM_{26}	15.2	X	327.24770	70.87812	318.14032	1.06335	0.1800267	0.17897519	3.1184646	20	10 7.9	18.7
101197 1998 SH_{27}	16.0	X	285.26417	298.85983	96.99396	6.00735	0.2084373	0.26364413	2.4087440	20	8 11.3	18.5
101198 1998 SK_{30}	16.8	X	183.82662	240.28280	19.20139	1.52515	0.1090588	0.23808051	2.5782211	20	—	—
101199 1998 SG_{32}	15.5	X	274.25072	83.73760	2.96357	6.11112	0.1553022	0.22569419	2.6717089	20	10 5.9	18.8
101200 1998 SH_{32}	17.0	X	211.06093	101.34399	198.72701	21.38879	0.0693700	0.38161415	1.8824339	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101201 1998 SS_{33}	16.3	X	45.29588	94.93690	203.50449	9.75491	0.2588532	0.27330691	2.3516299	20	11 22.6	19.6
101202 1998 SN_{36}	16.0	X	184.55175	260.91630	7.79172	5.24937	0.1640038	0.24029372	2.5623656	20	—	—
101203 1998 SH_{39}	15.8	X	41.66134	68.68307	358.97462	1.93587	0.0674158	0.24048311	2.5610202	20	—	—
101204 1998 SV_{42}	16.5	X	28.03010	181.82188	134.21809	4.37530	0.2072349	0.27180001	2.3603137	20	11 17.6	19.3
101205 1998 SV_{46}	15.9	X	24.26804	293.83163	26.99449	3.87219	0.0627320	0.22319197	2.6916402	20	10 15.2	19.3
101206 1998 SX_{46}	16.0	X	188.45010	199.22917	195.31499	2.08650	0.0635076	0.20685875	2.8315232	20	4 25.9	20.1
101207 1998 SB_{47}	15.3	X	283.73952	178.35956	202.03552	5.57809	0.0576382	0.21688966	2.7435328	20	8 2.6	18.9
101208 1998 SF_{48}	15.7	X	329.34425	5.29645	13.11593	7.09481	0.1409408	0.26877216	2.3780074	20	10 21.3	17.7
101209 1998 SL_{48}	15.5	X	159.62426	119.83045	21.80665	9.16615	0.0906169	0.21515881	2.7582267	20	8 13.7	19.8
101210 1998 SW_{50}	15.2	X	48.31251	26.82428	16.03793	5.63358	0.0842925	0.19017087	2.9948383	20	—	—
101211 1998 SF_{51}	16.2	X	6.75075	168.34069	204.23274	6.10753	0.1263909	0.27286560	2.3541648	20	12 20.1	18.9
101212 1998 SK_{51}	15.7	X	51.06610	340.60810	13.64266	12.25566	0.1959711	0.23158645	2.6261969	20	—	—
101213 1998 SZ_{51}	15.2	X	171.50397	2.54788	282.87777	0.95962	0.0770690	0.19492224	2.9459709	20	—	—
101214 1998 SF_{52}	15.9	X	162.49380	213.43552	356.27718	3.75834	0.1087149	0.22948416	2.6422115	20	11 6.5	20.1
101215 1998 SC_{53}	15.7	X	129.56644	102.50322	19.65763	4.26461	0.0523192	0.20967867	2.8060789	20	6 7.9	19.8
101216 1998 SG_{53}	16.2	X	39.48238	45.84426	25.53927	4.76607	0.1784134	0.19150256	2.9809383	20	—	—
101217 1998 SG_{54}	15.4	X	154.61952	304.30217	356.69190	12.33997	0.1554728	0.24085251	2.5584009	20	—	—
101218 1998 SR_{54}	15.2	X	78.56394	92.55025	187.99521	12.18039	0.1725520	0.22959120	2.6413902	20	11 17.7	19.3
101219 1998 SM_{55}	15.3	X	221.82222	36.12184	2.76647	3.17142	0.1741002	0.21334543	2.7738341	20	5 29.9	19.8
101220 1998 ST_{57}	15.9	X	236.45878	212.23427	100.47086	2.23389	0.1867291	0.25282708	2.4769676	20	2 25.7	19.8
101221 1998 SB_{62}	16.2	X	130.54818	46.70441	316.09500	5.89537	0.1371035	0.28910725	2.2651488	20	1 9.2	19.0
101222 1998 SQ_{62}	16.1	X	40.24635	224.68329	199.13369	10.24117	0.1162190	0.23753579	2.5821612	20	—	—
101223 1998 SW_{62}	16.1	X	47.33447	313.57492	8.00383	6.47718	0.1283292	0.27372994	2.3492064	20	12 5.7	19.3
101224 1998 ST_{64}	15.7	X	318.76854	302.85807	92.41329	3.53609	0.1697812	0.26910095	2.3760700	20	10 28.6	17.4
101225 1998 SO_{65}	15.5	X	77.43317	254.79471	88.54603	4.70261	0.1638761	0.27939917	2.3173198	20	—	—
101226 1998 SY_{66}	15.7	X	115.68800	201.48333	123.51198	4.92350	0.1810373	0.23674438	2.5879125	20	—	—
101227 1998 SX_{68}	16.2	X	126.16859	221.14546	129.02897	6.83996	0.1324762	0.28834501	2.2691390	20	—	—
101228 1998 SN_{69}	16.2	X	66.40661	6.87051	297.67869	7.85518	0.1726137	0.27604635	2.3360459	20	12 11.7	19.6
101229 1998 SJ_{71}	15.7	X	5.09507	318.37739	24.46058	6.56452	0.2480964	0.27111585	2.3642829	20	11 23.8	18.0
101230 1998 SV_{72}	16.0	X	92.24388	242.50967	81.56668	2.36302	0.1769756	0.27954763	2.3164993	20	—	—
101231 1998 SZ_{74}	15.7	X	34.64610	201.94796	119.87516	3.44696	0.2039516	0.22690174	2.6622214	20	11 22.6	19.1
101232 1998 SU_{75}	15.8	X	126.32869	161.75040	244.42532	4.73176	0.1339454	0.24719850	2.5144258	20	3 3.2	19.3
101233 1998 SF_{76}	16.1	X	283.55068	127.57708	270.38556	5.73076	0.1077633	0.26770473	2.3843244	20	8 24.6	18.8
101234 1998 SE_{77}	15.7	X	97.47708	74.73339	230.36084	4.37571	0.1262600	0.23427894	2.6060368	20	12 30.7	19.7
101235 1998 SB_{78}	16.8	X	23.99528	122.12028	272.57901	2.05826	0.1717430	0.27902443	2.3193942	20	—	—
101236 1998 SV_{78}	16.2	X	181.94757	96.42552	221.41284	2.85102	0.1459533	0.24624702	2.5208987	20	1 13.9	20.0
101237 1998 SE_{79}	16.2	X	58.12440	270.49938	139.10029	7.07491	0.0991946	0.28559904	2.2836606	20	—	—
101238 1998 SQ_{79}	15.6	X	83.09859	324.88277	6.41766	14.46279	0.1577382	0.23522288	2.5990602	20	—	—
101239 1998 SD_{80}	16.1	X	312.05396	92.93713	311.77768	3.53161	0.1540579	0.27073778	2.3664835	20	10 25.7	18.2
101240 1998 SG_{81}	16.3	X	149.08382	22.37167	312.08715	1.14520	0.1353560	0.24350707	2.5397736	20	1 1.6	20.0
101241 1998 SZ_{81}	16.0	X	24.68276	241.86306	202.94486	5.96093	0.0602465	0.28539251	2.2847622	20	—	—
101242 1998 SO_{82}	15.5	X	319.55801	22.23223	339.69616	7.54813	0.1769321	0.22187543	2.7022773	20	8 24.8	18.1
101243 1998 SW_{82}	16.4	X	95.17215	76.34578	245.28211	3.82854	0.2375436	0.28140947	2.3062705	20	—	—
101244 1998 SS_{83}	16.0	X	119.51792	173.86583	213.35532	1.20045	0.1782388	0.24470801	2.5314572	20	2 8.2	19.5
101245 1998 SD_{84}	15.8	X	169.71182	129.25603	170.64091	7.96441	0.1116071	0.24223309	2.5486708	20	—	—
101246 1998 SS_{87}	16.5	X	353.07770	117.13926	283.75561	1.73064	0.1752472	0.27500177	2.3419578	20	—	—
101247 1998 SV_{87}	16.1	X	265.95682	210.20205	202.84357	6.38606	0.1102436	0.26553777	2.3972786	20	8 18.8	19.2
101248 1998 ST_{88}	16.1	X	75.48653	161.97683	198.97090	7.25231	0.1000331	0.23700088	2.5860450	20	—	—
101249 1998 SQ_{89}	16.1	X	108.04483	301.54510	359.91141	4.49652	0.1638568	0.23544181	2.5974488	20	—	—
101250 1998 SR_{91}	15.9	X	306.43913	78.42931	319.86889	4.18186	0.1480199	0.26877103	2.3780140	20	10 2.9	18.0
101251 1998 SE_{92}	15.3	X	319.82993	332.40818	341.71606	4.71254	0.0506890	0.21580774	2.7526947	20	6 28.5	18.9
101252 1998 SO_{92}	16.0	X	145.03823	163.89400	216.13450	2.62203	0.0919151	0.24696338	2.5160215	20	2 16.6	19.5
101253 1998 SG_{93}	15.8	X	48.17712	10.72654	8.49327	2.58338	0.1861248	0.18919723	3.0051041	20	—	—
101254 1998 SK_{93}	16.1	X	44.98115	79.16045	5.88180	6.33487	0.1042768	0.28709190	2.2757371	20	—	—
101255 1998 SY_{93}	16.6	X	300.33097	254.03424	135.61343	1.86303	0.1906182	0.26733058	2.3865486	20	9 2.8	18.5
101256 1998 SA_{95}	15.1	X	97.76485	227.51253	43.41378	6.19137	0.2577047	0.23210986	2.6222473	20	11 27.2	19.5
101257 1998 SE_{95}	16.2	X	43.84102	243.05741	56.30700	5.14570	0.1639574	0.27257639	2.3558297	20	11 8.3	19.0
101258 1998 SF_{97}	15.7	X	63.08181	335.58343	29.14527	3.68388	0.2818485	0.28071418	2.3100771	20	—	—
101259 1998 SA_{98}	15.7	X	47.69395	332.45089	24.45395	4.86049	0.0775671	0.23237316	2.6202661	20	—	—
101260 1998 SU_{98}	15.4	X	263.60941	341.42523	18.08858	2.95711	0.0877914	0.21422764	2.7662136	20	6 4.3	19.2
101261 1998 SS_{102}	16.6	X	227.59260	295.37237	36.42531	2.53801	0.1860726	0.25306136	2.4754386	20	3 12.3	20.5
101262 1998 SU_{104}	15.6	X	51.86133	283.75826	40.87028	8.67919	0.0935409	0.27516416	2.3410362	20	12 10.9	18.7
101263 1998 SU_{105}	16.7	X	65.95470	236.40358	127.43615	1.72134	0.2109630	0.28081910	2.3095017	20	—	—
101264 1998 SW_{105}	15.0	X	349.67426	221.07309	178.15725	11.29770	0.1467580	0.18349916	3.0669969	20	12 4.6	18.8
101265 1998 SX_{105}	16.5	X	38.83525	353.88125	45.77593	3.37066	0.2040080	0.23494597	2.6011020	20	—	—
101266 1998 SJ_{107}	16.1	X	141.57178	101.20852	201.15115	2.90905	0.1939274	0.23895011	2.5719621	20	—	—
101267 1998 SU_{107}	16.4	X	307.92123	113.24279	271.47289	1.80005	0.1661379	0.26744040	2.3858952	20	9 13.1	18.4
101268 1998 SJ_{110}	15.7	X	340.00218	177.70026	246.70427	2.89942	0.2164565	0.27476642	2.3432949	20	—	—
101269 1998 SS_{110}	15.7	X	76.86663	75.02951	245.07949	2.36813	0.2385020	0.23277292	2.6172653	20	—	—
101270 1998 SQ_{111}	16.2	X	122.86891	353.53056	17.62381	8.05115	0.1492281	0.28843773	2.2686527	20	1 13.6	19.0
101271 1998 SU_{111}	16.1	X	228.15781	279.64813	161.84758	2.86734	0.1778471	0.26246320	2.4159639	20	8 1.1	19.5
101272 1998 SN_{113}	15.8	X	9.16523	174.18367	143.12457	5.85228	0.1468192	0.22361613	2.6882354	20	9 29.9	18.7
101273 1998 SO_{113}	15.2	X	91.50655	158.79736	168.22569	12.77823	0.1315418	0.23472968	2.6026996	20	—	—
101274 1998 SC_{114}	16.4	X	350.51369	299.88557	68.27377	3.52302	0.2491172	0.27162088	2.3613514	20	12 5.8	18.4
101275 1998 SF_{115}	15.0	X	302.42173	354.72354	14.48576	9.64108	0.1532374	0.21956741	2.7211812	20	8 8.7	18.3
101276 1998 SN_{115}	15.6	X	115.20202	298.73067	13.49856	14.19007	0.1395789	0.23569922	2.5955573	20	—	—
101277 1998 SS_{115}	15.6	X	48.07560	1.65825	358.97079	6.40019	0.1827156	0.27787413	2.3257908	20	—	—
101278 1998 SS_{116}	15.4	X	133.41089	37.91010	274.54840	4.28297	0.2351307	0.23893553	2.5720667	20	—	—
101279 1998 SX_{116}	16.3	X	35.17930	47.26232	264.93836	4.49960	0.2477132	0.27236651	2.3570398	20	11 26.0	19.4
101280 1998 SD_{117}	16.1	X	118.37455	76.71352	284.61368	3.99740	0.1546393	0.28647122	2.2790230	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101281 1998 SP_{117}	16.3	X	331.97013	160.39821	249.49519	2.57528	0.1642301	0.27257225	2.3558536	20	12 19.1	18.1
101282 1998 SC_{118}	16.5	X	2.60844	104.53035	245.69181	1.25156	0.2085448	0.27135034	2.3629206	20	11 24.8	18.8
101283 1998 SJ_{118}	14.1	X	166.75674	116.01158	16.13310	32.34173	0.2696892	0.21345869	2.7728529	20	8 23.9	19.6
101284 1998 SH_{119}	15.2	X	323.74052	315.24226	65.46798	1.42311	0.2090473	0.17712049	3.1401966	20	9 18.2	18.3
101285 1998 SC_{124}	15.6	X	282.54114	39.06503	23.71847	9.69562	0.1097047	0.22256541	2.6966895	20	9 25.7	18.9
101286 1998 SF_{124}	15.8	X	155.86197	300.91944	19.76671	12.36666	0.2807732	0.24300128	2.5432966	20	1 6.6	20.2
101287 1998 SP_{124}	16.1	X	67.09269	187.41356	180.33133	4.54352	0.2214072	0.23535024	2.5981224	20	—	—
101288 1998 SA_{125}	15.5	X	12.93468	205.25903	118.98335	2.86996	0.1544309	0.22442356	2.6817837	20	10 16.8	18.5
101289 1998 SL_{125}	16.3	X	308.85464	6.05915	63.97852	4.22222	0.2275363	0.27125847	2.3634541	20	11 29.3	17.4
101290 1998 SO_{125}	16.1	X	111.38362	292.28785	72.86054	4.58143	0.1748496	0.24079123	2.5588349	20	1 1.8	19.4
101291 1998 SP_{125}	16.1	X	103.05878	224.22213	156.91199	6.06722	0.1466435	0.28669343	2.2778453	20	—	—
101292 1998 SM_{126}	16.3	X	125.45884	145.33137	146.24174	7.03574	0.0942769	0.28009641	2.3134725	20	—	—
101293 1998 SS_{126}	15.3	X	86.01502	139.34753	170.23095	14.83146	0.1339586	0.23205237	2.6226804	20	12 25.4	19.6
101294 1998 SW_{126}	15.7	X	232.42858	216.14289	153.76174	8.66124	0.2358889	0.21145544	2.7903380	20	5 2.9	20.5
101295 1998 SB_{127}	15.6	X	165.76988	249.80156	52.77944	7.15134	0.1431345	0.28685700	2.2769793	20	—	—
101296 1998 SE_{127}	15.8	X	81.61812	346.30981	47.80914	6.54385	0.2107802	0.23964064	2.5670189	20	1 1.9	18.6
101297 1998 SZ_{127}	16.8	X	351.78894	262.69125	84.49700	3.06818	0.2177966	0.26983358	2.3717671	20	11 1.0	18.6
101298 1998 SE_{128}	16.2	X	298.09494	292.63451	125.27173	2.89046	0.1911704	0.26887543	2.3773984	20	10 15.7	18.1
101299 1998 SL_{129}	15.9	X	18.16682	195.92568	173.52527	2.54778	0.1760670	0.27475197	2.3433771	20	—	—
101300 1998 SV_{129}	16.1	X	221.43564	164.51399	184.02359	2.74861	0.2227638	0.25344874	2.4729156	20	3 25.1	20.2
101301 1998 SH_{130}	15.4	X	133.99066	302.93104	18.30205	15.15823	0.1421572	0.23876587	2.5732849	20	—	—
101302 1998 SA_{131}	15.2	X	125.28497	260.57731	5.72749	9.54562	0.0048991	0.22900380	2.6459050	20	12 5.5	19.0
101303 1998 SE_{133}	16.2	X	27.95921	37.21151	279.32238	1.71706	0.1799207	0.27083306	2.3659284	20	11 11.6	18.9
101304 1998 SJ_{133}	16.2	X	314.76453	35.31795	338.76416	1.99412	0.1735559	0.26679475	2.3897430	20	9 11.2	18.0
101305 1998 SL_{133}	16.1	X	276.93303	193.84933	235.14484	1.95529	0.2089967	0.26672823	2.3901403	20	9 13.5	18.6
101306 1998 SM_{133}	15.8	X	244.85685	254.27608	208.86069	4.30068	0.1982915	0.26640782	2.3920564	20	9 16.0	19.0
101307 1998 SU_{133}	15.9	X	296.51737	10.67742	5.94273	2.72885	0.1725610	0.21899674	2.7259064	20	8 2.7	19.0
101308 1998 SX_{133}	14.9	X	216.37062	51.59150	17.87221	25.46945	0.1685723	0.21362596	2.7714052	20	7 6.1	19.9
101309 1998 SZ_{135}	16.3	X	308.73113	256.02861	123.39034	3.09103	0.1936676	0.26675614	2.3899736	20	9 5.2	18.2
101310 1998 SJ_{136}	16.7	X	345.33103	247.87992	94.16323	3.42372	0.1960662	0.26831596	2.3807020	20	10 6.0	18.5
101311 1998 SA_{138}	16.3	X	3.46485	162.29159	186.06179	5.68100	0.1730259	0.27085104	2.3658237	20	11 18.8	18.6
101312 1998 SO_{138}	15.6	X	5.15127	217.20663	199.90161	11.25341	0.2056592	0.23141560	2.6274894	20	—	—
101313 1998 SA_{142}	15.2	X	301.76653	270.04560	80.26805	5.92437	0.1745778	0.21764368	2.7371925	20	7 3.5	18.3
101314 1998 SD_{142}	16.3	X	350.50233	320.10045	65.92527	6.20838	0.0937856	0.27279429	2.3545750	20	12 8.5	18.6
101315 1998 SL_{143}	15.2	X	319.98097	184.06368	195.28013	9.01057	0.2146241	0.22234570	2.6984656	20	9 15.7	17.7
101316 1998 SS_{145}	16.4	X	42.48337	303.01082	22.03265	2.64729	0.2201926	0.27371986	2.3492641	20	12 17.6	19.5
101317 1998 SD_{149}	16.2	X	214.68413	272.07269	86.97059	3.15155	0.2071139	0.25441374	2.4666584	20	4 3.4	20.2
101318 1998 SJ_{151}	16.6	X	50.19813	320.55445	17.94679	5.51275	0.1837413	0.23136678	2.6278589	20	12 29.3	20.4
101319 1998 SW_{152}	17.0	X	21.15871	33.29834	341.60189	4.28309	0.2303062	0.27593416	2.3366791	20	—	—
101320 1998 SY_{153}	16.1	X	314.31887	72.16640	48.77273	7.55067	0.2136324	0.27882836	2.3204813	20	—	—
101321 1998 SP_{154}	15.4	X	347.64855	31.21589	319.77956	3.59453	0.1239490	0.22375626	2.6871129	20	10 2.8	18.3
101322 1998 SA_{155}	15.4	X	13.43835	127.48650	214.08849	3.10262	0.2252287	0.22666786	2.6640523	20	11 20.8	18.3
101323 1998 SO_{155}	16.2	X	22.30082	234.14484	72.39071	5.28100	0.1428514	0.26974605	2.3722802	20	10 16.5	18.8
101324 1998 SC_{157}	16.5	X	122.96662	290.90497	15.73452	3.10217	0.2441441	0.28305625	2.2973168	20	—	—
101325 1998 SO_{159}	15.4	X	11.12107	256.07377	83.80109	2.72261	0.1167626	0.17953603	3.1119669	20	10 19.5	19.2
101326 1998 SS_{159}	16.5	X	219.34375	221.30708	125.30872	3.56809	0.1756548	0.25293446	2.4762665	20	3 24.2	20.4
101327 1998 SW_{161}	16.6	X	20.43819	292.95075	82.64024	3.04381	0.2138594	0.27560593	2.3385339	20	—	—
101328 1998 SJ_{162}	16.4	X	324.82832	190.73335	206.92691	4.87123	0.3186080	0.26961181	2.3730676	20	11 26.9	17.1
101329 1998 SZ_{162}	14.8	X	310.36172	157.88626	199.24927	14.00766	0.1203385	0.17244933	3.1966497	20	7 27.6	19.2
101330 1998 SS_{163}	15.0	X	327.30464	347.52878	42.65425	13.29999	0.1675195	0.22375542	2.6871197	20	10 25.1	17.6
101331 Sjöström	15.9	X	200.36988	222.07955	29.22715	21.87254	0.0514244	0.37279658	1.9120010	20	—	—
101332 1998 SB_{168}	15.8	X	31.64251	0.71814	311.66013	7.26043	0.1319624	0.27137060	2.3628030	20	10 31.5	18.7
101333 1998 SC_{168}	15.1	X	87.66849	200.22314	131.18256	8.83937	0.2215977	0.23657867	2.5891209	20	—	—
101334 1998 SE_{169}	16.7	X	154.87447	123.44572	177.88877	11.87406	0.2579232	0.28673093	2.2776467	20	—	—
101335 1998 SK_{171}	16.5	X	354.97192	230.40918	189.11083	1.81179	0.2139301	0.27442429	2.3452421	20	—	—
101336 1998 TN_{1}	15.5	X	342.29539	294.00421	34.16932	5.86487	0.0892703	0.21871004	2.7282881	20	8 24.5	18.7
101337 1998 TD_{2}	15.0	X	59.42894	42.78704	17.30333	10.64998	0.0953577	0.19347319	2.9606622	20	—	—
101338 1998 TM_{2}	15.8	X	28.40779	185.25958	238.51957	4.17880	0.0785010	0.23514604	2.5996264	20	—	—
101339 1998 TS_{2}	16.1	X	76.70714	352.01092	327.09733	2.08711	0.1341237	0.23029918	2.6359740	20	12 27.3	19.9
101340 1998 TN_{4}	15.5	X	269.43161	313.11390	327.93148	1.34317	0.0259024	0.20598310	2.8395421	20	3 11.2	19.5
101341 1998 TA_{7}	15.6	X	104.03903	354.06650	6.90906	9.65577	0.0893980	0.24065865	2.5597746	20	—	—
101342 1998 TA_{10}	14.7	X	41.60758	305.09616	36.35176	8.09642	0.1484457	0.18243649	3.0788952	20	12 5.6	19.0
101343 1998 TL_{10}	15.7	X	290.38193	274.51840	179.97444	0.16084	0.1757300	0.27046575	2.3680700	20	11 26.5	17.7
101344 1998 TG_{12}	15.5	X	269.25951	200.23718	208.25239	4.35761	0.1297664	0.21785051	2.7354597	20	8 9.4	19.1
101345 1998 TQ_{12}	16.0	X	71.46306	286.36404	33.38560	7.39479	0.1117409	0.27454482	2.3445557	20	12 30.6	19.4
101346 1998 TY_{15}	14.5	X	250.27385	269.85831	217.57883	22.57726	0.2474821	0.17763251	3.1341594	20	10 2.9	19.4
101347 1998 TZ_{15}	15.8	X	22.81438	53.09359	227.13209	6.31974	0.0951251	0.26343330	2.4100290	20	8 24.9	18.6
101348 1998 TG_{17}	15.5	X	314.87094	90.28954	225.26023	4.39358	0.2570862	0.26198144	2.4189248	20	5 22.9	17.5
101349 1998 TA_{19}	16.4	X	200.03406	91.96740	347.52656	1.56172	0.1780325	0.25757746	2.4464188	20	7 1.4	20.1
101350 1998 TE_{20}	15.2	X	8.67244	285.15146	27.68236	11.29009	0.0686433	0.22009244	2.7168519	20	9 16.1	18.6
101351 1998 TM_{29}	15.4	X	163.07055	138.74670	354.92563	1.25254	0.1250374	0.16824888	3.2496351	20	7 31.9	20.4
101352 1998 TT_{33}	16.3	X	11.11577	304.14191	63.08353	3.86357	0.2497071	0.27308191	2.3529214	20	—	—
101353 1998 TC_{34}	16.1	X	7.91655	275.06854	95.73975	3.45227	0.2236586	0.27297173	2.3535545	20	—	—
101354 1998 TB_{35}	15.3	X	99.20421	316.37256	45.26400	5.31357	0.2409069	0.23826354	2.5769005	20	—	—
101355 1998 TS_{35}	16.3	X	256.18056	135.73163	278.41861	1.42354	0.1950482	0.26195715	2.4190743	20	7 25.7	19.5
101356 1998 TD_{36}	15.9	X	111.27645	0.01577	15.07682	1.88597	0.1205485	0.19613822	2.9337823	20	1 14.6	19.9
101357 1998 TL_{37}	16.2	X	49.17298	346.15149	44.77759	14.05193	0.1757961	0.23388268	2.6089795	20	—	—
101358 1998 TQ_{37}	15.9	X	109.80235	288.58163	49.01283	5.42762	0.1442156	0.23785214	2.5798711	20	—	—
101359 1998 TD_{38}	15.3	X	101.67440	316.81549	44.32009	13.32742	0.1829303	0.23769521	2.5810065	20	—	—
101360 1998 UH	14.2	X	340.54089	29.74737	323.11798	25.49394	0.3410900	0.17613433	3.1519068	20	9 3.1	16.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101361 1998 *UJ*	15.4	*X*	336.98423	128.33314	335.67916	24.45824	0.2298373	0.27589886	2.3368784	20	—	—
101362 1998 *UP*	16.5	*X*	34.79731	145.07794	228.23487	5.02727	0.2059925	0.27697965	2.3307953	20	—	—
101363 1998 *UQ*	15.7	*X*	42.86897	303.77786	37.17504	9.92331	0.3338926	0.27731425	2.3289201	20	—	—
101364 1998 *US*	15.2	*X*	19.15437	54.81147	226.05724	12.78297	0.2903634	0.26817834	2.3815164	20	9 21.4	17.6
101365 1998 *UT*	16.1	*X*	271.41031	228.98808	306.77517	18.25242	0.0467716	0.37371310	1.9088736	20	—	—
101366 1998 *UY*	15.0	*X*	344.24910	4.22533	36.22118	6.59518	0.0720357	0.18090279	3.0962728	20	11 19.8	18.9
101367 1998 UB_1	16.1	*X*	206.63396	151.51076	202.03437	0.50412	0.2207915	0.20535865	2.8452956	20	3 21.9	21.1
101368 1998 UW_2	15.6	*X*	148.28222	327.51517	22.33471	5.63362	0.1812797	0.24292465	2.5438314	20	1 26.2	19.5
101369 1998 UY_3	15.8	*X*	136.31281	325.96753	239.84173	4.11894	0.1209368	0.22220924	2.6995703	20	10 5.6	20.1
101370 1998 UM_4	16.1	*X*	320.05067	156.21882	173.45621	4.85289	0.2419465	0.26697752	2.3886522	20	6 29.7	18.1
101371 1998 UT_5	16.3	*X*	286.01631	320.57529	105.28731	3.29653	0.1841108	0.26731727	2.3866278	20	10 3.5	18.5
101372 1998 UD_6	15.4	*X*	115.16875	183.70671	85.61437	5.40648	0.0753019	0.22802432	2.6534766	20	12 2.0	19.3
101373 1998 UV_8	16.7	*X*	50.86886	187.72109	204.50581	1.73961	0.2142892	0.28040697	2.3117641	20	—	—
101374 1998 UT_9	15.8	*X*	254.43070	247.19615	199.77595	1.62697	0.0571327	0.22372573	2.6873574	20	9 23.3	19.3
101375 1998 UA_{10}	16.1	*X*	298.44067	223.77182	269.13562	2.34453	0.0288438	0.23242646	2.6198656	20	—	—
101376 1998 UY_{10}	15.8	*X*	217.59716	13.89215	41.34603	9.48786	0.1458632	0.21177619	2.7875198	20	6 17.3	20.3
101377 1998 UB_{12}	16.1	*X*	332.76137	218.74271	182.98061	2.72294	0.0372639	0.22520583	2.6755698	20	11 16.1	19.5
101378 1998 UP_{12}	16.5	*X*	117.05869	297.98156	30.95734	2.25321	0.1470198	0.23662718	2.5887670	20	—	—
101379 1998 UE_{16}	16.0	*X*	304.77871	26.58617	62.81376	7.22231	0.1935808	0.27192920	2.3595661	20	12 21.5	17.6
101380 1998 UT_{17}	16.2	*X*	43.84361	4.50620	332.31741	1.64491	0.2265961	0.27495395	2.3422293	20	—	—
101381 1998 UU_{19}	15.7	*X*	30.03059	136.32091	234.00529	11.01993	0.1835477	0.27551679	2.3390383	20	—	—
101382 1998 UN_{21}	15.8	*X*	56.52307	262.98778	61.89351	7.58299	0.1428741	0.27560487	2.3385399	20	12 23.8	19.1
101383 Karloff	15.6	*X*	32.86679	49.98624	303.32394	13.39462	0.1184569	0.27401228	2.3475924	20	12 30.6	18.6
101384 1998 UW_{23}	15.9	*X*	72.54222	290.62074	124.26881	5.98640	0.2340767	0.23963089	2.5670885	20	1 17.9	18.3
101385 1998 UB_{24}	16.0	*X*	91.78489	277.19202	95.05271	6.04661	0.1515878	0.28385906	2.2929832	20	—	—
101386 1998 UW_{26}	15.4	*X*	105.88192	228.92013	113.91362	4.95813	0.2096161	0.23672865	2.5880272	20	—	—
101387 1998 UE_{28}	15.2	*X*	87.68114	183.94882	225.09819	12.69646	0.2945519	0.24023658	2.5627720	20	2 9.2	18.6
101388 1998 UA_{31}	15.3	*X*	340.69692	202.19594	89.84102	24.21829	0.2001708	0.26158350	2.4213774	20	6 22.9	16.9
101389 1998 UQ_{33}	15.7	*X*	124.36707	299.60521	70.14824	6.33178	0.2626961	0.24320897	2.5418485	20	2 4.9	19.5
101390 1998 UV_{33}	15.7	*X*	7.79442	111.95688	248.16250	5.49696	0.1392912	0.27269937	2.3551214	20	12 6.5	18.3
101391 1998 UM_{34}	16.3	*X*	15.99722	283.42929	64.58574	5.94156	0.2642860	0.27335372	2.3513615	20	12 22.2	19.1
101392 1998 UW_{34}	16.2	*X*	231.21419	216.70237	226.73614	3.99288	0.1607699	0.26257993	2.4152478	20	8 8.0	19.8
101393 1998 UD_{36}	16.4	*X*	14.35618	41.13257	14.56489	1.22417	0.1911487	0.27796792	2.3252676	20	—	—
101394 1998 UL_{38}	16.0	*X*	273.20894	346.07266	77.97307	3.75310	0.1666810	0.26591120	2.3950337	20	9 10.6	18.6
101395 1998 UB_{39}	16.0	*X*	24.54778	356.97855	33.41495	7.65126	0.2073123	0.27693754	2.3310316	20	—	—
101396 1998 UE_{39}	16.9	*X*	304.52981	314.60021	100.40342	0.18330	0.2023384	0.26882556	2.3776925	20	10 23.3	18.5
101397 1998 UG_{39}	16.2	*X*	358.61117	331.76077	42.31240	3.19936	0.2110485	0.27233208	2.3572384	20	12 23.1	18.5
101398 1998 UR_{39}	15.5	*X*	91.39368	161.08307	223.01248	3.02092	0.1829266	0.23928307	2.5695756	20	—	—
101399 1998 UV_{39}	14.6	*X*	28.18611	309.27768	28.62144	12.30680	0.1383062	0.18066835	3.0989507	20	11 10.8	18.7
101400 1998 UQ_{41}	16.3	*X*	148.11904	271.22381	91.19536	4.92229	0.1857137	0.24461091	2.5321271	20	2 10.2	20.2
101401 1998 *VD*	16.1	*X*	349.87996	352.79564	36.29978	3.31353	0.2252913	0.27154786	2.3617747	20	—	—
101402 1998 VG_1	15.8	*X*	98.62356	274.04190	61.74428	8.42183	0.2991493	0.28175859	2.3043650	20	—	—
101403 1998 VS_2	15.7	*X*	278.01267	335.46866	48.30004	4.55277	0.1000845	0.21515131	2.7582908	20	7 26.6	19.3
101404 1998 VY_2	15.1	*X*	25.48619	86.42791	51.87309	9.50448	0.0534128	0.19640961	2.9310792	20	2 16.9	19.0
101405 1998 VJ_3	13.0	*X*	309.46957	157.31608	234.28238	6.54941	0.0722408	0.08387058	5.1688782	20	9 2.9	19.7
101406 1998 VL_3	15.8	*X*	169.67136	21.97483	43.14452	2.19774	0.0688300	0.20627838	2.8368317	20	5 13.4	19.9
101407 1998 VQ_3	16.0	*X*	354.78534	294.20003	51.59785	3.02154	0.0987468	0.22110319	2.7085657	20	10 8.4	19.0
101408 1998 VC_6	16.2	*X*	309.81779	141.96425	262.29441	1.32220	0.2044080	0.26719628	2.3873483	20	10 16.9	18.0
101409 1998 VQ_6	15.5	*X*	32.66131	83.82424	322.63862	4.31602	0.2000272	0.27809934	2.3245349	20	—	—
101410 1998 VZ_6	16.5	*X*	312.18446	212.77682	182.22687	2.27976	0.1887158	0.26649796	2.3915169	20	10 9.3	18.0
101411 1998 VO_7	16.1	*X*	107.44170	297.74929	63.15093	7.80391	0.2200256	0.28538764	2.2847882	20	—	—
101412 1998 VS_7	14.7	*X*	298.78332	15.57397	28.96930	12.46725	0.1851621	0.22179750	2.7029102	20	9 19.3	17.7
101413 1998 VG_9	16.3	*X*	3.41449	325.39465	54.41395	6.39506	0.2382000	0.27350885	2.3504722	20	—	—
101414 1998 VJ_9	16.6	*X*	348.27517	327.49205	79.37217	6.43404	0.1894304	0.27389321	2.3482727	20	—	—
101415 1998 VB_{12}	16.1	*X*	138.62916	182.29404	168.42673	5.99125	0.2813920	0.24266469	2.5456479	20	1 25.3	20.2
101416 1998 VN_{12}	15.2	*X*	86.64281	148.11032	172.37887	4.86731	0.2033677	0.23241118	2.6199804	20	—	—
101417 1998 VG_{13}	16.4	*X*	286.88432	247.36087	186.63734	0.80492	0.1144312	0.26852467	2.3794683	20	10 25.8	18.8
101418 1998 VW_{15}	16.5	*X*	358.94445	191.97444	191.47236	3.19192	0.1552026	0.27260150	2.3556850	20	12 27.6	18.9
101419 1998 VV_{16}	16.0	*X*	70.97000	218.08658	152.55797	4.45093	0.2061074	0.23510200	2.5999510	20	—	—
101420 1998 VE_{17}	16.2	*X*	28.90698	167.26707	195.25774	5.60488	0.1933027	0.27462291	2.3441112	20	—	—
101421 1998 VS_{17}	14.2	*X*	357.79040	328.10264	38.85590	17.88811	0.1950319	0.17918409	3.1160405	20	11 7.3	17.5
101422 1998 VV_{18}	15.9	*X*	87.49595	74.83317	255.53263	4.93665	0.1852225	0.27852382	2.3221725	20	—	—
101423 1998 VA_{19}	15.4	*X*	178.29522	110.47962	222.00171	6.56121	0.1804455	0.24458781	2.5322865	20	1 28.7	19.6
101424 1998 VA_{20}	15.4	*X*	224.14808	6.48302	79.24452	5.29840	0.2095794	0.21452494	2.7636573	20	7 29.0	19.9
101425 1998 VH_{20}	15.9	*X*	24.02860	199.49552	190.67431	4.18952	0.1708005	0.23056094	2.6339785	20	—	—
101426 1998 VZ_{20}	15.9	*X*	23.53861	193.16614	223.38722	4.58911	0.2399641	0.23271252	2.6177181	20	—	—
101427 1998 VA_{25}	15.8	*X*	39.56692	114.85963	209.10217	6.81552	0.1051828	0.27050886	2.3678183	20	11 26.8	18.8
101428 1998 VE_{30}	15.9	*X*	354.73099	229.87591	198.87240	8.85466	0.2312785	0.22955999	2.6416296	20	—	—
101429 1998 VF_{31}	17.2	*X*	59.46902	310.55722	221.30855	31.29580	0.1002985	0.52377844	1.5241848	20	5 10.4	16.7
101430 1998 VE_{32}	15.4	*X*	226.47847	100.42951	237.57278	26.98083	0.2899276	0.38954923	1.8567830	20	2 23.1	19.2
101431 1998 VX_{32}	15.4	*X*	183.86468	291.21170	54.46699	3.09193	0.1342089	0.24504104	2.5291630	20	2 20.2	19.4
101432 Adamwest	15.4	*X*	126.53492	288.01839	68.86476	16.56554	0.2804506	0.24293890	2.5437319	20	1 25.0	19.5
101433 1998 VR_{33}	15.0	*X*	28.01195	186.91170	229.08408	21.47945	0.0509584	0.23240073	2.6200589	20	—	—
101434 1998 VU_{33}	15.4	*X*	313.57414	249.27683	58.75661	2.46988	0.0774029	0.21061438	2.7977616	20	6 6.8	18.9
101435 1998 VC_{36}	16.2	*X*	33.74465	278.80415	87.39094	3.28284	0.2497115	0.27530655	2.3402290	20	—	—
101436 1998 VF_{36}	16.3	*X*	349.02141	112.69125	272.59524	1.67491	0.2300040	0.27097790	2.3650852	20	12 25.2	18.4
101437 1998 VL_{38}	15.7	*X*	46.04027	316.67902	49.45552	2.09273	0.1329435	0.23111663	2.6297548	20	—	—
101438 1998 VE_{39}	15.7	*X*	267.16896	144.86728	300.56879	4.65441	0.1952479	0.26653564	2.3912915	20	9 22.3	18.4
101439 1998 VH_{39}	16.0	*X*	345.55398	29.41470	345.46623	5.36172	0.1453501	0.26972864	2.3723823	20	11 17.5	18.2
101440 1998 VO_{41}	16.8	*X*	270.61339	215.93700	207.52194	1.67315	0.1857825	0.26378801	2.4078680	20	8 29.8	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101441 1998 VB_{42}	16.6	X	350.72161	131.52429	235.65465	1.31366	0.2308098	0.27050049	2.3678672	20	12 1.3	18.5
101442 1998 VP_{42}	16.1	X	309.28179	339.42342	43.53979	5.76802	0.1717458	0.22042571	2.7141127	20	9 7.2	19.0
101443 1998 VA_{43}	15.4	X	54.05079	241.14731	45.48847	13.03438	0.1730963	0.22342408	2.6897757	20	10 28.4	19.0
101444 1998 VS_{43}	15.4	X	239.96515	351.75509	106.34368	5.42172	0.0401023	0.25934950	2.4352625	20	9 30.5	18.5
101445 1998 VG_{47}	14.8	X	293.26353	169.23154	59.35341	14.02782	0.1342873	0.24215148	2.5492434	20	1 16.9	18.6
101446 1998 VY_{47}	15.5	X	163.25007	286.68582	225.49724	5.12508	0.0530297	0.21582526	2.7525456	20	8 25.0	19.6
101447 1998 VY_{50}	15.6	X	347.75961	283.66731	75.03447	12.83338	0.2066813	0.26829466	2.3808280	20	11 10.7	17.6
101448 1998 VF_{54}	16.2	X	65.52527	354.42003	355.97781	5.87762	0.2041986	0.27765638	2.3270066	20	—	—
101449 1998 VQ_{55}	15.8	X	108.52529	150.51997	234.55401	8.63482	0.2320537	0.28693619	2.2765603	20	1 21.8	18.6
101450 1998 VN_{56}	16.2	X	282.52970	113.30224	318.50987	1.53425	0.1789210	0.26696403	2.3887327	20	10 3.8	18.5
101451 1998 VW_{56}	15.4	X	15.01310	64.67618	297.78644	5.57808	0.1797517	0.27280925	2.3544890	20	12 27.2	18.0
101452 1998 WS_{1}	16.1	X	200.30259	200.47047	218.54270	2.05393	0.2179616	0.25314990	2.4748614	20	6 3.6	20.2
101453 1998 WN_{2}	14.4	X	127.74088	131.73265	312.53916	12.14694	0.1594638	0.24156943	2.5533366	20	4 22.6	18.5
101454 1998 WZ_{2}	15.6	X	36.74906	243.15814	66.69503	3.18361	0.2143891	0.26915504	2.3757517	20	11 19.8	18.5
101455 1998 WN_{4}	16.1	X	355.78637	338.62587	98.62999	23.92876	0.0894274	0.36789488	1.9289467	20	—	—
101456 1998 WY_{4}	14.3	X	260.88393	276.16213	161.05751	16.29557	0.2753786	0.17174020	3.2054432	20	8 11.3	19.2
101457 1998 WF_{6}	15.7	X	342.98511	293.79333	55.87649	13.49479	0.2336511	0.26674331	2.3900502	20	10 20.3	17.4
101458 1998 WJ_{6}	15.9	X	136.71323	326.12577	60.87484	4.05043	0.2941996	0.24456427	2.5324490	20	3 10.9	20.1
101459 1998 WD_{7}	16.4	X	253.37324	44.65327	35.25971	2.53662	0.1842453	0.26312545	2.4119084	20	8 30.3	19.3
101460 1998 WH_{7}	16.2	X	351.01635	154.68801	254.20146	5.96113	0.0982315	0.27276951	2.3547176	20	—	—
101461 1998 WU_{7}	16.1	X	318.87472	12.38228	14.04249	6.89675	0.1655071	0.26716168	2.3875544	20	10 11.6	17.9
101462 1998 WW_{7}	16.2	X	359.60925	148.95378	233.34412	3.21854	0.1868686	0.27123970	2.3635632	20	12 31.7	18.6
101463 1998 WM_{11}	15.8	X	358.41001	285.32776	118.48071	3.83933	0.1029442	0.27328777	2.3517397	20	—	—
101464 1998 WS_{11}	15.5	X	41.43998	275.87187	108.72773	4.49421	0.0424506	0.23049190	2.6345045	20	—	—
101465 1998 WL_{12}	16.0	X	116.67022	86.77482	263.96581	3.13031	0.3015473	0.28468823	2.2885287	20	—	—
101466 1998 WJ_{15}	12.2	X	293.65452	323.66822	82.00935	11.93510	0.0799147	0.08249839	5.2260360	20	9 6.3	19.1
101467 1998 WG_{16}	15.4	X	252.87659	158.85984	226.96268	6.31671	0.1235040	0.25762464	2.4461202	20	6 22.1	18.7
101468 1998 WJ_{16}	16.0	X	119.74718	150.15000	209.65865	3.36671	0.2525508	0.23946472	2.5682760	20	1 15.4	19.6
101469 1998 WU_{16}	15.3	X	40.04947	105.31756	236.30417	13.20898	0.1091346	0.22569228	2.6717239	20	12 9.5	18.9
101470 1998 WV_{16}	14.8	X	100.48230	230.44293	64.74086	15.71900	0.0411485	0.22647707	2.6655483	20	12 13.7	18.6
101471 1998 WX_{16}	15.7	X	8.10251	166.60399	232.45874	5.78328	0.1622858	0.22818966	2.6521947	20	—	—
101472 1998 WL_{18}	15.9	X	331.72760	343.84291	30.43842	6.26450	0.2433488	0.26734356	2.3864714	20	10 26.7	17.3
101473 1998 WM_{20}	15.0	X	104.56082	106.03217	237.73421	11.30919	0.2277657	0.23603614	2.5930868	20	—	—
101474 1998 WQ_{21}	15.2	X	188.94601	341.21062	46.13877	7.08225	0.0789057	0.20426303	2.8554608	20	4 18.4	19.5
101475 1998 WF_{22}	16.1	X	235.44334	233.52561	176.78919	2.59377	0.1729143	0.25805746	2.4433842	20	6 28.7	19.8
101476 1998 WY_{22}	16.2	X	332.71059	16.96966	39.77903	4.39159	0.2025573	0.27109767	2.3643886	20	—	—
101477 1998 WO_{25}	14.5	X	74.87139	261.81704	42.25348	9.02237	0.1195867	0.18165433	3.0877269	20	11 24.9	19.1
101478 1998 WN_{27}	16.1	X	41.69092	106.53241	236.12771	2.22034	0.1265312	0.22797117	2.6538890	20	12 15.9	19.7
101479 1998 WC_{29}	16.3	X	200.62345	298.76298	230.76987	2.86803	0.0323025	0.22422049	2.6834027	20	11 4.6	20.0
101480 1998 WH_{32}	15.4	X	155.71271	286.68831	65.89180	13.12287	0.1981840	0.24265709	2.5457010	20	2 9.7	19.7
101481 1998 WN_{33}	15.8	X	203.62766	308.91747	128.09955	3.28646	0.1615135	0.25589660	2.4571200	20	7 2.2	19.5
101482 1998 WT_{33}	15.3	X	326.91040	224.27436	229.09381	23.79810	0.1337416	0.22846077	2.6500961	20	—	—
101483 1998 WQ_{34}	15.2	X	247.21330	316.00698	51.19896	7.66262	0.1403487	0.21007355	2.8025614	20	5 19.0	19.5
101484 1998 WF_{35}	15.9	X	135.86543	34.80486	38.60863	2.69259	0.0807540	0.20368555	2.8608554	20	4 17.4	20.1
101485 1998 WH_{36}	16.9	X	154.40081	287.50904	44.90053	8.46237	0.1861171	0.24175785	2.5520097	20	1 10.9	21.0
101486 1998 WJ_{38}	15.2	X	355.31676	353.68051	56.58489	7.09310	0.0777763	0.18271462	3.0757699	20	12 19.2	19.1
101487 1998 WB_{40}	15.9	X	31.38856	267.52916	60.86386	22.89917	0.3402577	0.27250413	2.3562461	20	12 22.4	19.5
101488 1998 WM_{42}	14.6	X	82.40052	146.25891	231.00091	6.87805	0.1170712	0.18987982	2.9978980	20	—	—
101489 1998 WW_{43}	15.5	X	357.11007	176.27397	239.93224	2.30969	0.0950470	0.22805489	2.6532395	20	—	—
101490 1998 WX_{43}	16.0	X	226.65462	189.30436	224.22575	2.13352	0.1759446	0.25689616	2.4507423	20	6 23.5	19.6
101491 1998 XA	16.0	X	109.46734	306.85218	85.65788	13.76574	0.3098499	0.24080988	2.5587028	20	2 27.6	20.0
101492 1998 XT_{1}	12.1	X	304.71486	176.80603	230.00326	21.93436	0.0582262	0.08388974	5.1680911	20	9 11.9	19.0
101493 1998 XB_{3}	16.2	X	26.00495	248.65681	125.17315	7.48801	0.1839688	0.27255724	2.3559401	20	—	—
101494 1998 XD_{3}	15.6	X	112.41215	291.25946	80.87329	5.96382	0.2015916	0.23853685	2.5749318	20	1 16.9	19.0
101495 1998 XJ_{3}	15.0	X	104.49287	279.36584	173.76578	7.73873	0.1113452	0.19683450	2.9268597	20	4 11.2	19.1
101496 1998 XM_{3}	15.0	X	134.13443	338.94425	32.85697	8.68252	0.3978569	0.24233466	2.5479586	20	3 1.2	19.6
101497 1998 XB_{6}	16.1	X	150.64117	311.54505	103.54827	3.08360	0.0452152	0.20204944	2.8762786	20	4 9.4	20.3
101498 1998 XC_{7}	15.5	X	290.72857	294.94971	208.66149	2.81023	0.0114248	0.18511806	3.0490896	20	—	—
101499 1998 XS_{7}	15.7	X	329.72620	265.63930	52.54796	3.76806	0.0719288	0.21485970	2.7607860	20	7 18.3	19.1
101500 1998 XP_{8}	15.3	X	205.09019	193.52791	150.19988	3.43091	0.1891857	0.20233157	2.8736042	20	3 10.6	20.2
101501 1998 XR_{8}	16.7	X	336.51675	149.81244	104.68293	5.13190	0.1213938	0.29674187	2.2261281	20	4 22.3	18.7
101502 1998 XZ_{9}	16.3	X	30.02840	230.68223	74.36325	3.80374	0.1726605	0.26701263	2.3884428	20	10 29.3	19.0
101503 1998 XL_{10}	15.3	X	10.15038	333.07132	81.54916	13.14086	0.1787177	0.22962635	2.6411206	20	—	—
101504 1998 XK_{13}	16.2	X	335.87755	306.93931	74.64067	3.84626	0.2035825	0.26877282	2.3780035	20	11 16.7	18.0
101505 1998 XM_{16}	14.3	X	152.38657	352.26359	92.32274	27.68138	0.2173568	0.20204021	2.8763661	20	6 1.0	19.4
101506 1998 XP_{17}	15.6	X	329.94771	339.80487	116.09322	2.54798	0.1886881	0.27271279	2.3550441	20	—	—
101507 1998 XG_{18}	15.8	X	234.30868	166.22247	237.66744	3.49197	0.0696846	0.21104473	2.7939569	20	6 29.1	19.9
101508 1998 XB_{20}	16.3	X	37.67493	22.91063	75.60047	2.98464	0.2009200	0.19159954	2.9799323	20	1 18.1	19.3
101509 1998 XN_{20}	15.9	X	206.96470	259.14764	279.92603	6.66106	0.1239168	0.21764253	2.7372022	20	11 11.0	20.0
101510 1998 XH_{22}	15.4	X	60.23196	96.07670	232.95796	12.13024	0.1331532	0.22856134	2.6493187	20	12 20.8	19.3
101511 1998 XH_{23}	15.6	X	252.40075	97.40590	284.59358	0.67272	0.0867629	0.21116152	2.7929266	20	6 20.5	19.3
101512 1998 XU_{25}	15.8	X	8.41298	309.22208	102.83740	0.63346	0.2088152	0.18445188	3.0564267	20	—	—
101513 1998 XV_{25}	15.9	X	176.51591	285.62194	80.13306	1.59289	0.1090954	0.20041203	2.8919239	20	3 10.8	20.5
101514 1998 XK_{26}	16.0	X	177.89093	37.88154	246.37441	20.38590	0.0534265	0.37044462	1.9200853	20	—	—
101515 1998 XG_{27}	14.6	X	37.00197	205.03347	268.37902	28.16555	0.0957374	0.23603777	2.5930748	20	1 14.4	17.8
101516 1998 XW_{28}	14.7	X	52.08881	134.88030	239.02893	2.79172	0.1228385	0.18492741	3.0511849	20	—	—
101517 1998 XT_{42}	15.7	X	254.16945	50.28191	19.22481	6.76062	0.1302507	0.26009926	2.4305803	20	8 26.8	18.8
101518 1998 XF_{45}	14.9	X	209.05151	193.40876	304.83941	6.54867	0.2147469	0.26076181	2.4264614	20	9 18.5	18.7
101519 1998 XP_{50}	14.5	X	47.06100	276.41269	92.49811	11.82117	0.2652008	0.22786505	2.6547129	20	—	—
101520 1998 XA_{52}	15.0	X	247.50227	106.56925	331.99571	10.30907	0.2176047	0.25985203	2.4321217	20	8 15.5	18.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101521 1998 XU_{58}	15.5	X	337.17283	183.72488	189.61812	1.14374	0.2993892	0.26718274	2.3874289	20	11 18.5	16.4
101522 1998 XJ_{63}	15.4	X	305.98580	109.32176	287.63577	6.84123	0.1705012	0.26558127	2.3970168	20	9 24.2	17.7
101523 1998 XD_{65}	15.2	X	192.27431	126.03406	348.84195	8.69829	0.1809418	0.25762587	2.4461124	20	8 11.2	19.1
101524 1998 XK_{65}	15.6	X	225.75673	40.00320	8.61270	2.13963	0.2055802	0.25646334	2.4534988	20	6 13.5	19.4
101525 1998 XM_{65}	15.3	X	85.95370	301.77560	50.95863	8.35025	0.2038007	0.23335940	2.6128783	20	—	—
101526 1998 XB_{66}	16.2	X	276.31547	97.26502	342.96612	1.00954	0.1511736	0.26571589	2.3962072	20	10 9.8	18.5
101527 1998 XM_{76}	15.0	X	342.19078	300.29154	102.65401	12.56646	0.1921215	0.22400557	2.6851188	20	12 14.2	17.7
101528 1998 XS_{83}	15.0	X	73.66701	254.00541	153.61640	12.66970	0.2009983	0.19082881	2.9879506	20	1 15.5	18.7
101529 1998 XH_{93}	14.3	X	158.14100	96.25916	267.44077	12.65949	0.2267499	0.24132368	2.5550697	20	2 17.2	18.8
101530 1998 XO_{97}	16.2	X	248.97472	340.70829	76.88097	4.02186	0.1606783	0.26009733	2.4305923	20	7 27.4	19.5
101531 1998 XT_{97}	16.5	X	37.69202	317.30163	63.53543	3.58126	0.2131723	0.27613285	2.3355580	20	—	—
101532 1998 XS_{99}	16.4	X	332.89918	345.28970	38.82629	3.37940	0.1766603	0.26841192	2.3801346	20	11 10.2	18.1
101533 1998 YK_{9}	15.7	X	30.27967	169.23423	249.25119	1.43109	0.2944423	0.18561253	3.0436721	20	—	—
101534 1998 YC_{10}	14.7	X	311.22394	131.03725	73.31608	6.89004	0.0740048	0.19288684	2.9666592	20	1 24.6	18.8
101535 1998 YQ_{13}	16.0	X	39.42606	51.23739	262.25617	1.58793	0.2194239	0.26944443	2.3740502	20	11 28.3	18.9
101536 1998 YE_{14}	16.2	X	41.84420	215.92082	138.45273	3.00382	0.2307405	0.27460598	2.3442075	20	—	—
101537 1998 YX_{14}	15.6	X	109.85013	285.95095	83.40191	9.66263	0.1827527	0.23847300	2.5753914	20	1 6.9	18.9
101538 1998 YO_{15}	15.7	X	62.18679	3.72145	38.59884	1.23685	0.1442162	0.18506036	3.0497233	20	—	—
101539 1998 YE_{16}	16.7	X	14.69701	280.96026	167.61751	1.12980	0.2219401	0.18399779	3.0614533	20	—	—
101540 1998 YO_{16}	15.9	X	320.58457	159.01989	287.08353	5.20254	0.1943820	0.26879643	2.3778642	20	—	—
101541 1998 YM_{17}	16.0	X	257.23625	198.45793	122.91119	4.20627	0.1316582	0.24339534	2.5405508	20	4 3.3	19.6
101542 1998 YK_{18}	16.0	X	285.49656	231.84202	134.90396	3.27955	0.1982753	0.26024296	2.4296854	20	6 28.6	18.9
101543 1998 YK_{21}	15.5	X	325.94991	252.24762	138.65408	1.09146	0.1454623	0.17092088	3.2156786	20	10 8.5	19.0
101544 1998 YS_{21}	14.7	X	275.22839	173.37314	293.98167	4.76257	0.1373559	0.17285066	3.1916997	20	10 24.8	19.0
101545 1998 YH_{23}	15.7	X	319.87947	279.93864	67.96795	5.01745	0.2556216	0.26239352	2.4163916	20	7 31.6	17.2
101546 1998 YZ_{26}	14.7	X	313.87040	290.04212	86.45650	14.00689	0.1911606	0.21723607	2.7406154	20	9 8.7	17.8
101547 1998 YM_{27}	14.7	X	292.34715	106.61128	347.24138	15.81637	0.2263942	0.17577941	3.1561481	20	10 16.7	18.7
101548 1998 YS_{29}	15.1	X	226.40305	84.48505	7.93625	9.11227	0.2043096	0.25650796	2.4532143	20	8 14.6	18.9
101549 1998 YY_{29}	15.0	X	63.44969	309.32133	103.73384	25.45219	0.0653326	0.36812831	1.9281312	20	—	—
101550 1999 AE	15.5	X	17.75437	141.76369	265.93994	3.97826	0.2268785	0.27329911	2.3516747	20	—	—
101551 1999 AH_{1}	16.3	X	237.23294	224.04697	131.87922	3.72739	0.1310691	0.24622447	2.5210526	20	4 25.7	20.0
101552 1999 AP_{1}	15.2	X	31.33001	45.53191	70.38568	10.05534	0.1578967	0.19275991	2.9679614	20	1 29.1	18.6
101553 1999 AB_{4}	16.3	X	339.69669	235.23924	315.73230	18.69778	0.0880508	0.37347609	1.9096811	20	1 12.1	18.1
101554 1999 AL_{4}	16.0	X	0.75442	86.12829	310.14718	21.86496	0.3328693	0.27423819	2.3463030	20	—	—
101555 1999 AO_{5}	14.7	X	54.27335	123.09869	334.20791	12.16854	0.1371052	0.23433153	2.6056469	20	2 3.9	17.4
101556 1999 AW_{5}	15.8	X	177.33467	36.55063	77.67210	7.78459	0.1265072	0.25148019	2.4858039	20	7 27.4	19.7
101557 1999 AW_{6}	15.0	X	125.53721	27.70207	142.20956	3.52117	0.0755553	0.25199283	2.4824314	20	8 10.7	18.3
101558 1999 AE_{8}	14.0	X	77.07918	213.52438	338.63750	11.54450	0.0353599	0.24719495	2.5144499	20	7 5.4	17.4
101559 1999 AJ_{9}	14.9	X	325.49320	252.70133	206.21934	2.18543	0.1840457	0.17895099	3.1187458	20	—	—
101560 1999 AA_{12}	15.8	X	22.03061	148.81516	271.12791	1.15849	0.0609865	0.18029022	3.1032822	20	—	—
101561 1999 AA_{14}	15.6	X	203.78252	263.16166	73.64427	0.74591	0.0167239	0.19247025	2.9709383	20	3 4.2	19.7
101562 1999 AD_{14}	15.1	X	230.47281	338.09071	301.96072	13.23798	0.2258435	0.23293381	2.6160600	20	1 13.6	19.5
101563 1999 AK_{15}	15.4	X	48.02733	130.38177	312.25674	2.37865	0.0829805	0.18678530	3.0309184	20	1 9.0	19.2
101564 1999 AV_{17}	15.4	X	111.13456	350.20128	304.16529	3.89145	0.0872084	0.21947046	2.7219825	20	12 26.8	19.6
101565 1999 AD_{21}	14.9	X	242.42765	85.47142	354.76346	4.97990	0.0854160	0.25770586	2.4456062	20	8 30.5	17.9
101566 1999 AO_{21}	15.4	X	286.63783	35.92638	158.16459	6.57467	0.1857312	0.22789219	2.6545022	20	—	—
101567 1999 AW_{22}	14.3	X	292.07254	218.20259	21.20494	28.87610	0.1693266	0.23456748	2.6038993	20	2 7.6	18.7
101568 1999 AK_{30}	16.1	X	325.86441	278.59088	222.13991	0.62263	0.0346583	0.22862467	2.6488294	20	—	—
101569 1999 AH_{31}	16.4	X	79.24816	271.83090	128.65427	3.10572	0.2293979	0.27846017	2.3225264	20	—	—
101570 1999 AJ_{38}	14.3	X	129.27117	71.44632	27.79131	12.81398	0.2081559	0.24586804	2.5234885	20	5 20.9	18.5
101571 1999 AF_{39}	15.2	X	25.36778	44.43859	342.91743	8.89178	0.1966422	0.27589976	2.3368733	20	—	—
101572 1999 BF	15.3	X	243.56999	115.50136	345.42310	5.25130	0.1729127	0.25988611	2.4319091	20	9 15.2	18.5
101573 1999 BQ	15.0	X	121.52890	225.16388	294.13287	8.01036	0.0140009	0.25166765	2.4845693	20	7 15.9	18.2
101574 1999 BA_{1}	13.5	X	237.22323	165.81894	50.52613	29.51237	0.0858124	0.17491368	3.1665537	20	—	—
101575 1999 BD_{2}	15.3	X	341.49973	299.26358	164.91741	21.80387	0.2599359	0.27447646	2.3449449	20	—	—
101576 1999 BM_{2}	15.6	X	104.32160	292.67937	143.26198	15.58911	0.1395502	0.23726049	2.5841582	20	3 23.3	19.2
101577 1999 BV_{2}	14.3	X	293.04965	307.47255	351.49583	12.66116	0.1436573	0.24151920	2.5536906	20	4 9.4	17.8
101578 1999 BM_{3}	16.4	X	325.47017	69.66336	310.84558	5.30137	0.1343879	0.26180299	2.4200238	20	10 12.4	18.7
101579 1999 BR_{4}	15.5	X	53.42776	328.48277	145.68738	0.49599	0.1082153	0.23468611	2.6030217	20	2 20.5	18.5
101580 1999 BZ_{5}	15.9	X	68.46154	285.21536	152.55128	5.01665	0.1985707	0.23468396	2.6030376	20	2 6.9	18.6
101581 1999 BY_{7}	14.2	X	331.13951	98.44887	295.65150	17.42467	0.2242233	0.17254143	3.1955121	20	10 9.8	17.9
101582 1999 BZ_{8}	15.4	X	168.87200	9.85829	126.83579	9.57978	0.1313755	0.25279455	2.4771801	20	8 16.7	19.2
101583 1999 BF_{10}	14.9	X	72.09187	352.68887	137.46466	7.21420	0.1008536	0.23974547	2.5662706	20	4 13.8	18.1
101584 1999 BP_{10}	16.5	X	4.61920	16.20269	145.56914	2.36220	0.1653978	0.27939408	2.3173479	20	1 17.1	18.5
101585 1999 BL_{11}	15.5	X	270.41170	262.87592	332.22284	12.19615	0.0769921	0.22944016	2.6425493	20	1 8.4	19.4
101586 1999 BN_{11}	16.8	X	168.78431	82.78673	324.27957	18.23272	0.1032024	0.38031654	1.8867133	20	3 31.5	19.5
101587 1999 BE_{12}	16.1	X	235.16436	83.60595	16.99323	7.64462	0.2041295	0.25850348	2.4405729	20	9 3.4	19.6
101588 1999 BH_{12}	14.7	X	235.18068	256.17928	313.20538	15.41703	0.1995055	0.17571818	3.1568812	20	—	—
101589 1999 BP_{14}	15.8	X	171.65799	26.68833	131.61489	6.94899	0.0953401	0.25638232	2.4540157	20	9 19.9	19.4
101590 1999 BU_{20}	15.5	X	158.02166	158.12992	326.05402	5.55555	0.0893757	0.25207296	2.4819053	20	7 19.3	19.2
101591 1999 BB_{21}	16.2	X	104.83350	127.27572	295.66891	5.36613	0.1407292	0.28543422	2.2845396	20	2 24.2	18.8
101592 1999 BN_{24}	15.0	X	245.49635	232.56939	243.15848	8.46439	0.1951349	0.26219988	2.4175811	20	10 1.8	18.3
101593 1999 BU_{25}	15.1	X	76.01671	338.72126	159.91586	5.80493	0.2062255	0.24196555	2.5505491	20	5 16.9	18.3
101594 1999 BE_{26}	15.6	X	5.72442	278.74788	194.60466	4.21712	0.1701990	0.22939565	2.6428911	20	—	—
101595 1999 BJ_{26}	15.1	X	359.45191	347.33556	80.37541	2.54367	0.1221217	0.17924769	3.1153033	20	—	—
101596 1999 BR_{27}	16.0	X	162.40755	258.73072	254.56235	6.41718	0.1739663	0.25921796	2.4360862	20	8 27.7	20.1
101597 1999 BA_{30}	15.1	X	175.46127	267.50252	41.46208	0.80099	0.1974116	0.18519008	3.0482991	20	1 8.7	20.2
101598 1999 BC_{33}	16.3	X	248.22228	211.15924	112.11151	6.84613	0.1287705	0.24329984	2.5412156	20	3 28.7	20.1
101599 1999 BD_{34}	14.5	X	320.88263	271.74603	241.44184	15.03015	0.2025238	0.18132157	3.0915035	20	—	—
101600 1999 BX_{34}	13.5	X	225.35051	161.86706	58.95797	28.43514	0.1475529	0.17484270	3.1674107	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101601 1999 CM	14.7	X	155.37005	111.77379	93.08484	16.63429	0.2897069	0.21099554	2.7943911	20	10 28.6	20.1
101602 1999 CT_1	13.6	X	307.53282	124.98403	355.18254	15.78364	0.1568813	0.17577815	3.1561632	20	—	—
101603 1999 CB_2	15.0	X	96.32663	141.32420	12.46295	6.61925	0.1769966	0.24378075	2.5378724	20	6 26.9	18.7
101604 1999 CR_3	16.2	X	160.13808	337.49532	134.33818	33.01025	0.1938786	0.38794895	1.8618856	20	7 13.5	19.1
101605 1999 CZ_5	14.1	X	265.55805	96.08057	328.50654	19.12579	0.1270268	0.25894067	2.4378250	20	8 30.7	17.0
101606 1999 CK_6	15.3	X	91.73063	92.65221	321.41675	21.29415	0.0933694	0.23372443	2.6101571	20	1 30.5	18.7
101607 1999 CN_6	14.3	X	302.75181	304.45912	330.98126	27.26736	0.1247223	0.24088045	2.5582031	20	3 16.3	18.0
101608 1999 CB_7	16.3	X	292.29080	335.18123	128.57513	24.55387	0.0602263	0.35727704	1.9669771	20	—	—
101609 1999 CD_7	14.6	X	320.22825	304.21040	138.76422	27.54404	0.2243962	0.17521198	3.1629587	20	12 10.4	18.4
101610 1999 CW_7	16.2	X	247.50910	125.30437	344.85689	14.60651	0.2873788	0.39954635	1.8256798	20	10 4.3	17.6
101611 1999 CL_8	15.1	X	320.24233	29.78130	146.94884	14.55086	0.1911908	0.22785788	2.6547687	20	—	—
101612 1999 CS_8	12.4	X	61.36712	221.36651	66.42852	26.26428	0.0907080	0.08384573	5.1698991	20	10 16.1	19.4
101613 1999 CX_8	15.7	X	106.38771	26.73918	55.21968	4.17116	0.2305057	0.23768665	2.5810685	20	4 12.4	19.3
101614 1999 CY_8	15.0	X	270.85845	44.30345	15.40829	8.07959	0.1443532	0.25456910	2.4656547	20	9 3.5	17.9
101615 1999 CD_9	15.5	X	346.90212	359.61848	156.76826	14.17347	0.0850535	0.23061093	2.6335978	20	1 2.1	19.0
101616 1999 CL_9	14.8	X	298.98393	171.29543	10.64287	11.65882	0.1556362	0.22725315	2.6594762	20	—	—
101617 1999 CM_9	15.0	X	29.26975	120.35207	83.69827	12.29489	0.0794512	0.19496190	2.9455714	20	5 17.9	18.8
101618 1999 CN_9	15.5	X	331.77510	66.11098	19.68235	9.42897	0.2346571	0.26800776	2.3825269	20	—	—
101619 1999 CG_{12}	14.8	X	244.84427	334.16556	158.52925	26.06705	0.2043894	0.26123613	2.4235234	20	11 1.2	18.4
101620 1999 CN_{14}	15.0	X	354.91521	31.42963	153.33799	13.30980	0.1359264	0.23407210	2.6075718	20	2 14.9	17.8
101621 1999 CH_{16}	15.9	X	111.96075	152.95882	321.01928	3.50717	0.2181727	0.24394225	2.5367522	20	5 26.0	19.8
101622 1999 CP_{16}	14.7	X	261.58865	263.46104	328.88541	13.88724	0.0446214	0.23009034	2.6375687	20	—	—
101623 1999 CH_{18}	14.4	X	288.01927	138.99697	343.79127	13.82582	0.0778107	0.26782821	2.3835916	20	—	—
101624 1999 CV_{18}	14.4	X	298.82387	30.39502	66.31730	13.32571	0.1618144	0.17498640	3.1656765	20	11 16.9	18.3
101625 1999 CP_{20}	14.8	X	16.34005	198.85286	38.95560	4.81672	0.0868892	0.24574721	2.5243156	20	6 10.8	17.5
101626 1999 CN_{21}	15.9	X	357.09037	136.94281	16.26836	2.33936	0.1527473	0.27883929	2.3204207	20	—	—
101627 1999 CV_{21}	14.0	X	332.29563	168.92991	330.93311	13.50040	0.2230801	0.18198760	3.0839561	20	—	—
101628 1999 CO_{22}	14.6	X	335.46049	350.92783	116.68991	18.64024	0.1719635	0.17970596	3.1100048	20	—	—
101629 1999 CV_{24}	15.6	X	166.97688	112.10387	31.70663	7.45339	0.0581168	0.30001535	2.2099056	20	9 2.5	18.5
101630 1999 CD_{26}	15.8	X	338.13996	252.29433	306.83569	1.77883	0.0857379	0.23530108	2.5984843	20	2 13.6	18.8
101631 1999 CM_{29}	15.5	X	105.02167	134.59002	341.93450	3.18381	0.1141401	0.24231547	2.5480931	20	5 7.9	19.0
101632 1999 CP_{32}	14.7	X	35.50191	26.54697	42.39826	4.73373	0.1977881	0.18331394	3.0690625	20	—	—
101633 1999 CA_{34}	15.8	X	260.72717	30.32829	128.62358	1.59221	0.0907007	0.22023390	2.7156884	20	12 29.1	19.0
101634 1999 CN_{36}	14.5	X	328.78702	307.75425	128.49598	28.42357	0.2175505	0.17557702	3.1585731	20	12 18.9	18.2
101635 1999 CY_{37}	14.2	X	206.95832	291.14977	326.94743	15.05947	0.2077342	0.17612079	3.1520684	20	—	—
101636 1999 CO_{42}	14.7	X	44.80091	20.84658	103.80049	1.93209	0.2476655	0.18918309	3.0052539	20	3 15.1	17.6
101637 1999 CA_{43}	15.4	X	159.00376	292.45527	145.18978	14.60094	0.0503103	0.24340504	2.5404832	20	5 20.4	19.3
101638 1999 CL_{45}	14.5	X	283.14765	14.61970	140.53287	18.05687	0.1289383	0.17559420	3.1583671	20	—	—
101639 1999 CP_{45}	14.2	X	327.45693	87.29297	335.27652	21.00062	0.0563711	0.17054832	3.2203600	20	11 13.8	19.0
101640 1999 CG_{48}	15.0	X	75.09745	5.81007	146.39750	14.47981	0.1130818	0.24120866	2.5558819	20	5 22.0	18.6
101641 1999 CU_{48}	15.2	X	39.40314	54.58918	77.29147	3.31649	0.1697128	0.23490742	2.6013865	20	2 27.2	17.6
101642 1999 CK_{51}	14.9	X	319.75263	251.40315	349.92108	9.12832	0.3420976	0.18493849	3.0510630	20	2 12.8	18.8
101643 1999 CU_{51}	14.4	X	300.12685	141.10313	352.14900	15.15958	0.1693617	0.17572724	3.1567728	20	—	—
101644 1999 CC_{52}	15.3	X	119.97955	58.42559	46.03275	6.57321	0.1538803	0.24257648	2.5462649	20	5 15.4	19.0
101645 1999 CM_{56}	16.1	X	54.74218	152.04953	350.26547	13.71620	0.1890896	0.23761168	2.5816113	20	4 7.7	19.0
101646 1999 CQ_{56}	15.3	X	79.30693	24.11246	119.36127	6.71879	0.1985114	0.24073920	2.5592036	20	5 26.9	18.6
101647 1999 CP_{57}	14.8	X	311.89471	304.51320	151.79482	14.11794	0.2832597	0.17488674	3.1668790	20	12 1.7	18.0
101648 1999 CX_{58}	15.8	X	307.50820	151.88867	47.95636	4.48078	0.1242697	0.27523261	2.3406481	20	—	—
101649 1999 CO_{62}	13.6	X	348.96234	115.55849	308.64240	15.36384	0.2122840	0.17781864	3.1319720	20	—	—
101650 1999 CU_{62}	15.2	X	157.74685	286.28039	168.88888	2.61945	0.1111189	0.20061392	2.8899834	20	6 9.7	19.8
101651 1999 CU_{66}	14.8	X	355.23506	216.47141	284.04275	9.46156	0.0861129	0.18410278	3.0602893	20	1 3.9	18.6
101652 1999 CD_{67}	14.4	X	292.57487	327.98569	196.90160	12.09585	0.1243909	0.17851462	3.1238261	20	—	—
101653 1999 CK_{68}	14.1	X	93.82574	140.68943	321.44813	11.54751	0.0985943	0.23910217	2.5708715	20	3 28.0	17.7
101654 1999 CE_{71}	15.2	X	90.07128	174.02628	291.56786	5.09516	0.2100908	0.23969051	2.5666628	20	4 17.2	18.7
101655 1999 CV_{71}	15.5	X	100.05449	109.23078	306.97195	12.43992	0.0997679	0.23412503	2.6071788	20	2 9.7	19.0
101656 1999 CC_{73}	15.1	X	96.58546	259.10305	208.96120	5.49014	0.2671722	0.24102795	2.5571593	20	5 9.4	18.8
101657 1999 CC_{76}	14.5	X	248.80103	318.71855	320.89312	13.97717	0.0888439	0.23272928	2.6175925	20	2 5.5	18.3
101658 1999 CG_{76}	15.8	X	315.42135	192.94831	260.03687	1.48591	0.1749940	0.26700819	2.3884693	20	—	—
101659 1999 CJ_{80}	14.6	X	239.39366	164.16047	229.47972	6.61480	0.0543081	0.24735244	2.5133825	20	6 24.7	18.0
101660 1999 CK_{80}	14.5	X	294.45803	252.40949	261.72232	7.05156	0.1861430	0.17663550	3.1459421	20	—	—
101661 1999 CS_{84}	15.2	X	283.91252	93.60532	55.36287	10.27758	0.1437702	0.26974602	2.3722804	20	—	—
101662 1999 CU_{84}	15.9	X	304.03327	5.46211	75.55952	11.14260	0.2321330	0.26665059	2.3906043	20	12 2.6	17.3
101663 1999 CW_{84}	15.3	X	259.06775	3.31418	56.27787	6.25731	0.0838102	0.30307200	2.1950218	20	9 2.9	17.7
101664 1999 CS_{88}	15.0	X	58.51620	47.63190	64.16495	11.01878	0.0732337	0.19025861	2.9939176	20	3 4.9	19.1
101665 1999 CV_{89}	15.1	X	48.94250	113.21404	355.08424	11.87044	0.1300388	0.23514963	2.5996000	20	2 10.7	18.0
101666 1999 CT_{92}	14.3	X	272.82882	277.39609	341.04634	14.24467	0.0758498	0.23432625	2.6056861	20	2 9.6	18.0
101667 1999 CX_{94}	14.9	X	227.10320	133.69201	6.24824	6.55867	0.0715433	0.26040387	2.4286844	20	10 30.5	18.0
101668 1999 CR_{95}	14.5	X	335.10283	328.44460	124.26378	6.89773	0.1321302	0.17654449	3.1470231	20	—	—
101669 1999 CC_{96}	15.5	X	332.16624	350.84644	63.28356	6.46108	0.1812331	0.26541586	2.3980127	20	12 24.8	17.6
101670 1999 CV_{96}	15.2	X	328.63992	171.84573	347.81712	8.51613	0.0663024	0.22868245	2.6483832	20	—	—
101671 1999 CB_{100}	14.9	X	314.43563	345.04902	127.48421	13.14707	0.1797938	0.17567230	3.1574309	20	—	—
101672 1999 CC_{101}	15.3	X	87.68451	113.90867	358.00907	13.24055	0.1572945	0.23872256	2.5735962	20	4 12.8	18.7
101673 1999 CE_{104}	15.1	X	263.18614	36.10187	186.98923	0.87695	0.1101863	0.18029786	3.1031946	20	—	—
101674 1999 CU_{106}	14.4	X	288.86807	291.81662	160.60709	32.41504	0.1136585	0.17148966	3.2085643	20	11 5.5	19.1
101675 1999 CO_{107}	14.5	X	241.11690	287.09941	257.34865	10.95602	0.1992782	0.17331981	3.1859375	20	12 8.0	18.9
101676 1999 CY_{107}	14.6	X	339.79139	322.10235	151.86597	10.37802	0.0576219	0.17939169	3.1136359	20	—	—
101677 1999 CK_{108}	15.0	X	250.09969	64.12608	173.82726	6.81310	0.1788194	0.22686039	2.6625449	20	—	—
101678 1999 CO_{108}	14.9	X	95.50735	345.23074	165.35919	13.56453	0.1136277	0.24457231	2.5323935	20	6 13.7	18.6
101679 1999 CR_{108}	14.0	X	7.85887	90.05675	266.93209	15.09281	0.3684015	0.21664745	2.7455772	20	12 23.0	17.0
101680 1999 CQ_{109}	15.1	X	6.24820	290.43966	246.49956	4.04604	0.1378069	0.23566926	2.5957773	20	2 22.3	17.7

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		°	°	°	°		°				
101681 1999 CH_{110}	15.0	X	25.54589	29.63106	208.19952	11.79243	0.0877717	0.24506435	2.5290027	20	6 26.3	18.1
101682 1999 CN_{110}	15.1	X	163.19756	358.09913	229.68960	9.27558	0.1453617	0.21478571	2.7614200	20	11 26.6	19.6
101683 1999 CX_{111}	15.3	X	18.43214	26.00830	183.76798	11.81224	0.1254499	0.24046111	2.5611764	20	5 8.9	18.1
101684 1999 CZ_{111}	14.7	X	33.29438	238.59922	275.29888	10.37357	0.1122135	0.23650052	2.5896912	20	3 6.1	17.8
101685 1999 CA_{114}	13.6	X	357.25550	125.48613	308.96818	15.16267	0.2067081	0.17825361	3.1268748	20	—	—
101686 1999 CX_{114}	16.3	X	252.67657	260.17996	203.63251	4.82983	0.0812160	0.30524908	2.1845726	20	10 26.9	18.6
101687 1999 CA_{117}	15.3	X	239.64177	209.68221	293.40949	8.13225	0.0962203	0.21533969	2.7566819	20	11 6.1	19.3
101688 1999 CX_{117}	14.6	X	69.43505	243.36096	256.13210	7.67604	0.1118857	0.23826644	2.5768796	20	4 18.7	17.9
101689 1999 CS_{119}	15.3	X	90.95230	38.62402	83.58252	14.31817	0.1071810	0.24113941	2.5563712	20	5 3.1	18.8
101690 1999 CA_{120}	15.4	X	354.13333	25.11191	40.13706	10.70685	0.1968036	0.27052158	2.3677442	20	—	—
101691 1999 CO_{120}	14.3	X	355.10110	13.86208	79.04997	19.58747	0.2075154	0.18190466	3.0848935	20	—	—
101692 1999 CM_{122}	14.5	X	342.07519	30.08008	82.87389	18.85699	0.1916402	0.18089584	3.0963521	20	—	—
101693 1999 CQ_{125}	15.3	X	215.73010	95.31978	18.77184	12.60970	0.1741566	0.25653303	2.4530544	20	9 5.8	19.1
101694 1999 CR_{125}	13.9	X	86.49328	64.46089	73.27661	14.19252	0.0930682	0.24181011	2.5516420	20	5 13.2	17.2
101695 1999 CC_{132}	15.4	X	134.05904	235.07518	141.18656	4.91931	0.0871278	0.23414189	2.6070537	20	1 31.9	19.1
101696 1999 CD_{132}	14.6	X	47.37432	248.40911	141.08960	4.37615	0.0941341	0.17873610	3.1212450	20	—	—
101697 1999 CV_{137}	16.3	X	255.43437	290.55214	147.84818	4.06785	0.1619493	0.25754326	2.4466354	20	9 2.0	19.3
101698 1999 CZ_{137}	16.1	X	320.40483	25.32220	207.24321	0.07162	0.0833147	0.18950803	3.0018176	20	3 9.4	20.1
101699 1999 CN_{147}	15.4	X	224.44445	342.67138	19.53062	1.11434	0.1090334	0.24020899	2.5629681	20	4 20.3	19.3
101700 1999 CO_{149}	15.5	X	169.56717	237.79444	347.56113	3.85699	0.0179463	0.21436568	2.7650260	20	12 5.9	19.5
101701 1999 CU_{149}	15.7	X	219.72712	12.27568	348.31018	2.49501	0.1691980	0.23884090	2.5727460	20	4 9.7	19.9
101702 1999 CV_{149}	15.7	X	212.70105	97.09572	159.61453	1.53357	0.1094747	0.17535187	3.1612762	20	—	—
101703 1999 CA_{150}	15.2	X	178.24703	68.46058	358.65199	2.57811	0.1289021	0.24338530	2.5406206	20	5 25.2	19.1
101704 1999 CK_{150}	14.6	X	315.31865	320.61302	167.36554	27.02762	0.1446038	0.17560073	3.1582888	20	—	—
101705 1999 CK_{152}	15.7	X	349.29336	93.53830	343.80450	0.67400	0.1601809	0.17717676	3.1395318	20	—	—
101706 1999 CB_{153}	15.3	X	199.73408	9.33341	323.29199	12.66450	0.1788701	0.23618684	2.5919836	20	2 18.3	19.6
101707 1999 CY_{153}	14.8	X	299.14248	141.19962	10.21450	13.65750	0.1893582	0.22325084	2.6911670	20	—	—
101708 1999 CV_{155}	16.2	X	339.55861	246.02555	284.66957	2.41386	0.1745543	0.27682600	2.3316577	20	—	—
101709 1999 CF_{157}	16.5	X	165.69968	90.30463	336.26685	5.01442	0.2245255	0.24406697	2.5358879	20	5 13.8	20.8
101710 1999 DQ	14.7	X	358.24441	299.09005	161.52612	17.49229	0.0839223	0.17965606	3.1105807	20	—	—
101711 1999 DT_{1}	15.1	X	46.66964	114.90973	332.33430	15.16160	0.1181998	0.23185772	2.6241481	20	1 7.6	18.2
101712 1999 DU_{2}	14.8	X	24.47929	210.47924	32.18948	3.70702	0.0706989	0.24593751	2.5230133	20	7 1.4	17.6
101713 Marston	14.9	X	336.31142	357.35104	114.04478	2.59276	0.2090242	0.17881137	3.1203691	20	—	—
101714 1999 DQ_{4}	15.3	X	83.86448	124.07128	306.14081	2.54026	0.1913186	0.23442153	2.6049800	20	2 20.7	18.5
101715 1999 DT_{4}	14.6	X	262.34016	346.73856	219.26287	14.32390	0.1936739	0.17793019	3.1306627	20	—	—
101716 1999 DJ_{6}	14.0	X	196.45136	34.91943	326.15851	12.10598	0.1128768	0.23807320	2.5782738	20	3 16.8	18.1
101717 1999 DR_{7}	14.6	X	272.49135	186.62896	2.40841	12.69346	0.1291699	0.22319894	2.6915842	20	—	—
101718 1999 EB	14.6	X	105.29086	125.04416	355.75551	8.68756	0.1274169	0.24136380	2.5547866	20	5 14.2	18.3
101719 1999 EF	14.8	X	2.10985	314.26229	157.73010	7.37748	0.2398607	0.18200708	3.0837360	20	—	—
101720 1999 EP_{1}	16.8	X	199.14112	197.28607	226.39734	0.81369	0.1528618	0.24673880	2.5175479	20	6 10.7	20.5
101721 Emanuelfritsch	14.7	X	287.63093	40.64790	178.04688	14.21314	0.1172895	0.17892706	3.1190239	20	1 7.6	19.5
101722 Pursell	13.9	X	23.85743	69.22967	6.19811	21.17801	0.1912911	0.17795717	3.1303463	20	—	—
101723 Finger	16.1	X	107.73011	17.31017	132.45012	3.67104	0.1345969	0.24369716	2.5384527	20	6 29.0	19.8
101724 1999 ED_{6}	13.9	X	120.52022	355.76562	17.66352	28.67170	0.1250171	0.22423075	2.6833208	20	2 1.4	18.3
101725 1999 EG_{6}	15.6	X	99.24821	137.78897	14.98937	13.27756	0.1654511	0.24139374	2.5545753	20	6 27.5	19.6
101726 1999 EJ_{6}	15.0	X	50.41198	293.65286	182.09858	2.78496	0.1759380	0.23390824	2.6087895	20	2 23.9	17.4
101727 1999 ED_{7}	16.1	X	70.49667	103.82317	9.02266	22.09787	0.0735189	0.37354220	1.9094558	20	3 2.9	17.9
101728 1999 EW_{7}	15.8	X	239.84359	356.82624	346.23771	8.32161	0.1392264	0.23925588	2.5697703	20	4 7.1	19.8
101729 1999 EG_{9}	15.5	X	171.86071	9.86724	340.55878	13.90890	0.2820299	0.23467653	2.6030926	20	2 22.4	20.0
101730 1999 EX_{9}	16.8	X	119.62075	83.95199	331.18679	3.41584	0.1412522	0.23527671	2.5986637	20	3 10.8	20.5
101731 1999 EN_{10}	15.9	X	90.77957	192.06951	322.11325	1.88882	0.1110334	0.24217027	2.5491115	20	6 10.6	19.1
101732 1999 EV_{11}	14.9	X	52.38652	122.06255	56.42087	5.78061	0.0856511	0.24011259	2.5636541	20	5 15.9	17.9
101733 1999 ER_{12}	15.3	X	70.45733	82.59000	20.16039	11.84160	0.1855496	0.23511182	2.5998786	20	3 18.3	18.2
101734 1999 FU_{1}	14.2	X	210.61879	102.72377	171.07588	15.95415	0.1840587	0.17684325	3.1434778	20	—	—
101735 1999 FG_{2}	14.3	X	8.66023	79.87636	349.45455	16.92276	0.1468468	0.17619675	3.1511624	20	—	—
101736 1999 FH_{3}	15.9	X	113.74341	309.67639	175.02364	2.43215	0.1456089	0.23990986	2.5650981	20	6 4.1	19.6
101737 1999 FN_{3}	15.8	X	110.11839	336.69106	13.35470	19.71808	0.0727479	0.35995743	1.9572004	20	—	—
101738 1999 FY_{4}	16.1	X	235.51911	231.43556	185.46974	3.51390	0.1447238	0.29285502	2.2457820	20	7 12.3	19.0
101739 1999 FS_{6}	15.5	X	197.82646	201.95629	23.23668	6.01149	0.1474141	0.21425551	2.7659738	20	12 25.8	19.8
101740 1999 FC_{7}	13.9	X	133.56080	337.17654	23.13111	14.30904	0.1978951	0.22256442	2.6966974	20	2 1.3	18.3
101741 1999 FH_{7}	14.9	X	246.66430	102.98396	14.44028	22.17661	0.2584424	0.25914026	2.4365731	20	10 1.5	18.1
101742 1999 FO_{7}	14.8	X	327.48035	88.22095	349.42354	23.22097	0.3435218	0.26756848	2.3851338	20	—	—
101743 1999 FN_{8}	16.7	X	52.05532	169.95621	359.86904	19.46446	0.0581398	0.37698000	1.8978294	20	4 12.2	18.3
101744 1999 FO_{8}	14.9	X	108.97386	288.01577	194.64273	29.14875	0.1260069	0.23996782	2.5646851	20	5 24.6	19.0
101745 1999 FR_{8}	16.8	X	280.65072	38.69055	183.07254	22.45055	0.0528070	0.36559094	1.9370423	20	—	—
101746 1999 FO_{10}	14.7	X	291.11653	153.17329	359.27078	10.75806	0.1175163	0.17374321	3.1807594	20	—	—
101747 1999 FL_{11}	14.2	X	234.43096	271.76749	350.47322	15.51018	0.2380637	0.17696067	3.1420870	20	1 3.5	19.8
101748 1999 FL_{13}	16.1	X	78.86600	295.29324	173.16256	5.39129	0.0717219	0.23517755	2.5993942	20	3 18.0	19.3
101749 1999 FW_{16}	17.0	X	117.62832	335.60877	353.37318	4.90082	0.0163945	0.31395123	2.1440155	20	—	—
101750 1999 FA_{17}	15.0	X	306.78396	68.91396	170.01846	7.32547	0.1271230	0.18528727	3.0472330	20	2 21.7	19.0
101751 1999 FQ_{17}	15.9	X	262.11291	20.37333	170.85166	1.12927	0.1314541	0.17256394	3.1952341	20	—	—
101752 1999 FQ_{18}	14.3	X	235.38735	152.32090	11.31769	8.82321	0.2089959	0.21474355	2.7617814	20	11 11.2	18.4
101753 1999 FT_{19}	15.8	X	90.96239	293.59121	177.41271	14.20698	0.1332455	0.23665207	2.5885855	20	4 19.2	19.2
101754 1999 FL_{20}	15.5	X	222.89001	246.23434	356.77700	4.31260	0.0841234	0.22186754	2.7023413	20	—	—
101755 1999 FN_{23}	14.6	X	267.05068	10.24515	176.80777	15.25602	0.2020649	0.17556427	3.1587260	20	—	—
101756 1999 FQ_{24}	15.7	X	317.60739	208.04309	359.68219	6.60543	0.0499211	0.27580671	2.3373989	20	1 27.8	18.6
101757 1999 FA_{25}	15.2	X	99.05137	297.55191	169.31469	11.82618	0.2308436	0.23827578	2.5768123	20	5 8.3	19.0
101758 1999 FL_{29}	14.7	X	297.73226	9.71467	177.17159	18.23292	0.1636795	0.17722495	3.1389626	20	—	—
101759 1999 FA_{30}	14.1	X	68.88533	110.43090	24.79501	14.50821	0.1038568	0.23541994	2.5976096	20	4 13.6	17.1
101760 1999 FY_{36}	14.7	X	306.89440	222.50214	327.86264	13.69734	0.0765870	0.22817387	2.6523171	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101761 1999 FJ_{37}	14.5	X	273.30474	264.96100	254.38307	3.96308	0.1555559	0.17417467	3.1755044	20	12 24.9	18.6
101762 1999 FO_{37}	14.4	X	105.14363	127.85190	325.18648	7.05090	0.2016417	0.23931789	2.5693263	20	4 16.8	18.2
101763 1999 FJ_{48}	14.8	X	338.91864	34.93425	161.39710	12.19974	0.1034144	0.18579068	3.0417260	20	2 15.9	18.7
101764 1999 FK_{49}	14.5	X	163.99803	245.30812	11.89611	11.33385	0.1130329	0.16994783	3.2279413	20	12 24.4	19.8
101765 1999 FO_{49}	15.5	X	289.08669	53.47913	155.69449	12.20137	0.1360857	0.22709475	2.6607127	20	—	—
101766 1999 FX_{49}	15.2	X	325.34412	205.41660	1.70726	9.00650	0.1745714	0.23126210	2.6286519	20	1 27.2	18.6
101767 1999 FJ_{50}	14.8	X	330.52124	141.85815	348.35819	9.25444	0.1550977	0.17812174	3.1284179	20	—	—
101768 1999 FS_{50}	14.8	X	304.50153	223.84933	344.30103	12.67595	0.1201890	0.22893507	2.6464346	20	1 9.6	18.6
101769 1999 FF_{52}	14.1	X	172.33193	36.76068	353.90202	14.59345	0.1847582	0.23844102	2.5756217	20	4 2.0	18.4
101770 1999 FL_{56}	14.7	X	274.92406	78.47465	69.29391	5.52993	0.1094139	0.17243757	3.1967950	20	12 18.6	18.8
101771 1999 FB_{58}	14.9	X	162.39029	72.94935	344.13117	14.34052	0.0985363	0.23971123	2.5665149	20	4 18.9	19.0
101772 1999 FY_{59}	14.5	X	336.18137	214.53750	350.04364	12.86305	0.0937852	0.23303360	2.6153131	20	2 20.5	17.8
101773 1999 FO_{62}	15.0	X	31.87161	303.71022	174.60173	6.38341	0.1828810	0.18399687	3.0614635	20	2 1.4	18.2
101774 1999 FR_{62}	15.6	X	235.37107	27.15675	174.19097	12.42005	0.0834292	0.21838110	2.7310271	20	—	—
101775 1999 GT	16.0	X	90.73333	318.84070	202.33327	3.69781	0.1816281	0.24120188	2.5559298	20	6 30.1	19.5
101776 1999 GF_{3}	14.6	X	307.10036	277.59927	185.07781	12.20814	0.1281032	0.17086817	3.2163399	20	12 9.4	18.7
101777 Robhoskins	14.8	X	275.73004	168.77478	27.95542	11.68887	0.1121943	0.22306770	2.6926397	20	—	—
101778 1999 GZ_{6}	14.4	X	220.40364	238.12801	36.25416	29.02795	0.1832623	0.22226196	2.6991434	20	—	—
101779 1999 GJ_{8}	15.5	X	307.85510	202.11524	1.71877	6.00122	0.2042199	0.22684598	2.6626576	20	—	—
101780 1999 GP_{8}	15.9	X	147.07900	93.45170	64.03401	5.31702	0.1367474	0.29372120	2.2413647	20	8 27.3	19.3
101781 Gojira	14.2	X	203.71235	248.19082	181.39294	15.30834	0.1395989	0.24351394	2.5397258	20	6 23.3	18.5
101782 1999 GF_{10}	17.0	X	131.83077	99.81118	10.29652	7.05835	0.1444281	0.28860663	2.2677674	20	6 2.9	20.3
101783 1999 GV_{13}	15.0	X	328.20429	109.78215	8.72051	4.76111	0.1422707	0.17545827	3.1599981	20	—	—
101784 1999 GQ_{14}	14.7	X	178.70862	292.57763	22.68780	5.51994	0.1733793	0.17518924	3.1632324	20	1 19.7	20.0
101785 1999 GE_{16}	16.0	X	256.15414	219.71175	26.21889	3.28330	0.1829042	0.27069437	2.3667365	20	—	—
101786 1999 GY_{17}	14.2	X	243.47012	161.82889	59.01907	14.70913	0.1283739	0.22097250	2.7096335	20	—	—
101787 1999 GD_{26}	14.9	X	66.08474	79.30774	23.56712	14.57841	0.0569816	0.23028666	2.6360695	20	2 27.1	18.4
101788 1999 GN_{33}	13.6	X	150.13249	26.73147	32.08499	13.57378	0.1470741	0.23454224	2.6040861	20	4 18.7	17.6
101789 1999 GE_{35}	14.7	X	250.35636	331.67832	205.78151	9.84746	0.2120384	0.21787414	2.7352620	20	12 19.4	18.3
101790 1999 GR_{36}	13.8	X	73.27762	151.93108	343.74996	12.62935	0.1805500	0.23760846	2.5816347	20	4 26.8	17.2
101791 1999 GV_{44}	14.5	X	179.07944	299.12449	76.18233	8.50856	0.0169895	0.23244870	2.6196984	20	3 23.1	18.2
101792 1999 GC_{45}	14.0	X	341.78520	45.20078	48.76680	16.76688	0.1328731	0.17239293	3.1973468	20	—	—
101793 1999 GN_{48}	15.5	X	353.70159	153.80000	29.02812	4.49486	0.1826265	0.23127403	2.6285615	20	2 7.6	18.2
101794 1999 GK_{50}	14.8	X	165.91137	133.80055	327.61923	4.78445	0.1417809	0.24485659	2.5304331	20	6 27.6	18.8
101795 1999 HX_{2}	15.0	X	234.12512	156.52887	135.57238	19.45487	0.5487448	0.17675824	3.1444856	20	1 23.8	21.5
101796 1999 HN_{3}	14.1	X	239.05273	339.47567	53.83852	15.73969	0.1033449	0.24408547	2.5357597	20	6 16.0	17.8
101797 1999 HR_{3}	16.7	X	111.39967	283.26690	177.21102	22.29392	0.0939233	0.37668699	1.8988135	20	4 18.5	18.7
101798 1999 HL_{4}	15.5	X	61.98361	343.57441	62.40733	1.79820	0.2348500	0.21991875	2.7182822	20	—	—
101799 1999 HE_{5}	14.9	X	164.23950	82.52452	211.03680	11.20702	0.1298467	0.21602800	2.7508233	20	—	—
101800 1999 HU_{7}	15.5	X	131.58104	299.97668	51.61040	2.97957	0.0555156	0.22051694	2.7133641	20	—	—
101801 1999 HS_{8}	15.6	X	8.12870	271.78372	250.91189	1.46016	0.1275050	0.23043506	2.6349377	20	2 8.9	18.5
101802 1999 HV_{8}	15.2	X	111.61961	94.11746	20.46505	12.63832	0.1266532	0.23827228	2.5768375	20	5 13.1	18.9
101803 1999 JH	15.9	X	112.31428	155.25484	21.66651	24.81868	0.0614438	0.38497586	1.8714593	20	9 2.3	18.5
101804 1999 JR_{4}	16.4	X	127.20217	201.89293	46.54474	8.57931	0.0864661	0.29971432	2.2113852	20	12 1.9	19.4
101805 1999 JT_{4}	15.9	X	18.27849	76.12237	49.09678	22.00718	0.0928230	0.36479095	1.9398732	20	—	—
101806 1999 JX_{4}	16.0	X	21.79954	263.06303	236.35004	19.15164	0.0867503	0.36700604	1.9320598	20	—	—
101807 1999 JJ_{5}	14.8	X	78.76481	273.43988	232.20136	26.40647	0.3407884	0.23788836	2.5796092	20	6 14.7	18.8
101808 1999 JO_{5}	15.5	X	252.24729	189.78193	57.45189	23.36133	0.0418756	0.36202219	1.9497514	20	—	—
101809 1999 JW_{5}	16.6	X	70.17478	274.85949	218.56682	19.67353	0.0764763	0.37201352	1.9146831	20	3 20.7	18.6
101810 1999 JA_{6}	14.1	X	229.91218	117.82106	117.68096	26.24194	0.1623722	0.16980487	3.2297529	20	—	—
101811 1999 JQ_{6}	14.8	X	301.50942	95.93835	21.29330	22.20638	0.3218836	0.27147905	2.3621737	20	—	—
101812 1999 JD_{7}	15.3	X	346.56327	104.32654	81.09150	12.96163	0.0653133	0.22790423	2.6544087	20	2 16.4	18.8
101813 Elizabethmarston	15.9	X	152.15041	312.95897	47.97519	22.89300	0.1028293	0.36258351	1.9477386	20	1 20.3	18.6
101814 1999 JD_{8}	15.5	X	247.83652	62.63849	215.90032	24.39618	0.4667283	0.17518293	3.1633083	20	1 12.9	22.0
101815 1999 JB_{12}	15.8	X	295.93915	309.26279	221.56492	19.81233	0.0636090	0.35863647	1.9620034	20	—	—
101816 1999 JN_{12}	14.5	X	285.05292	334.94693	138.43014	9.57440	0.1918313	0.21297922	2.7770129	20	11 24.2	17.7
101817 1999 JP_{12}	14.7	X	344.46039	355.15751	116.91465	10.45177	0.1450842	0.21973277	2.7198158	20	—	—
101818 1999 JD_{13}	16.6	X	187.54483	54.37740	219.96490	5.67384	0.2671139	0.30374347	2.1917857	20	—	—
101819 1999 JK_{13}	13.2	X	223.30830	71.99277	76.76623	23.67130	0.2313953	0.21321115	2.7749987	20	10 23.3	17.9
101820 1999 JC_{14}	15.9	X	67.27282	38.27279	68.80527	23.08725	0.0691354	0.36738604	1.9307273	20	2 16.4	18.2
101821 1999 JJ_{14}	15.7	X	305.89330	304.53341	247.34281	18.92357	0.0538319	0.36158656	1.9513172	20	—	—
101822 1999 JE_{17}	16.5	X	112.26816	134.05187	97.60720	8.07800	0.0808612	0.29507738	2.2344918	20	10 27.6	19.6
101823 1999 JC_{20}	15.9	X	117.13421	340.56861	289.46221	2.32564	0.1677717	0.25405397	2.4689866	20	12 12.2	19.8
101824 1999 JF_{22}	14.5	X	175.69187	123.06681	350.31262	6.53326	0.1736608	0.24496426	2.5296915	20	7 23.7	18.6
101825 1999 JB_{23}	15.9	X	236.03998	16.02560	201.62154	1.85895	0.1438480	0.26426317	2.4049808	20	—	—
101826 1999 JY_{23}	14.3	X	252.92731	98.59682	36.28908	12.82993	0.0682260	0.21008613	2.8024495	20	11 16.5	18.2
101827 1999 JM_{24}	15.2	X	349.70066	288.44398	234.69281	5.24850	0.1306304	0.22660073	2.6645785	20	1 9.5	18.4
101828 1999 JM_{26}	15.1	X	289.57932	95.87977	57.17156	9.79605	0.0653679	0.21690350	2.7434161	20	—	—
101829 1999 JW_{28}	15.4	X	50.93157	124.44445	36.86102	13.35146	0.1342230	0.23416142	2.6069087	20	4 26.0	18.2
101830 1999 JR_{31}	14.8	X	320.71337	95.59845	49.87424	12.32921	0.1040843	0.22017873	2.7161420	20	—	—
101831 1999 JO_{40}	14.7	X	84.41501	75.55550	57.29578	13.98256	0.0775824	0.23383327	2.6093471	20	5 1.3	18.0
101832 1999 JL_{55}	15.5	X	145.51383	209.65738	101.80423	7.16654	0.1079966	0.26126102	2.4233695	20	—	—
101833 1999 JO_{55}	14.5	X	306.63942	102.17475	193.40995	9.72377	0.2176729	0.18633354	3.0358154	20	4 21.3	18.3
101834 1999 JF_{56}	15.3	X	158.67291	44.36425	206.82253	7.32869	0.1613982	0.20965163	2.8063202	20	12 18.2	19.9
101835 1999 JP_{56}	14.8	X	121.02648	93.92589	231.38860	12.28900	0.1399359	0.21265826	2.7798064	20	—	—
101836 1999 JL_{59}	15.5	X	277.76311	99.26325	100.74060	6.56184	0.0850084	0.26591955	2.3949836	20	—	—
101837 1999 JQ_{60}	15.9	X	41.28519	201.17268	82.54520	5.52006	0.2552420	0.24319008	2.5419801	20	10 25.1	19.2
101838 1999 JT_{62}	15.7	X	54.54879	220.27389	86.56786	14.05662	0.1463050	0.24790332	2.5096577	20	11 25.5	19.3
101839 1999 JE_{65}	16.1	X	284.62635	172.43140	53.37780	3.21603	0.1541098	0.27195063	2.3594422	20	—	—
101840 1999 JU_{65}	15.8	X	210.42760	235.28534	43.81590	5.63415	0.2222792	0.26695326	2.3887969	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
101841 1999 JM_{67}	14.0	X	235.23062	172.71452	46.86000	12.33352	0.0763958	0.17102259	3.2144035	20	—	—
101842 1999 JL_{69}	15.0	X	18.48197	294.88140	214.73605	9.92445	0.1725515	0.23043645	2.6349271	20	2 4.4	17.8
101843 1999 JN_{70}	14.5	X	280.01542	59.88870	63.27930	9.80693	0.1112450	0.21254232	2.7808172	20	12 5.8	17.9
101844 1999 JL_{72}	16.5	X	155.27191	69.40802	150.57868	4.42874	0.0994963	0.30054658	2.2073008	20	11 27.3	19.5
101845 1999 JL_{74}	15.1	X	332.13866	106.43551	67.18183	14.59501	0.0969082	0.22489354	2.6780462	20	1 3.1	18.6
101846 1999 JB_{88}	14.1	X	210.75383	178.28577	89.45956	16.09176	0.1761853	0.17192612	3.2031318	20	—	—
101847 1999 JG_{90}	15.9	X	304.79165	114.30755	121.07842	11.96386	0.0966000	0.22810245	2.6528707	20	2 15.9	19.4
101848 1999 JV_{90}	16.8	X	203.45601	139.26022	153.43924	4.89869	0.1839058	0.31330112	2.1469804	20	—	—
101849 1999 JJ_{91}	14.6	X	304.82484	121.12948	132.02769	14.40075	0.1793736	0.18267912	3.0761684	20	3 3.9	18.8
101850 1999 JT_{91}	14.4	X	47.98885	15.97636	85.58593	12.81208	0.1436247	0.22590325	2.6700602	20	1 31.9	17.4
101851 1999 JU_{96}	14.7	X	322.10144	173.48405	89.54260	12.47345	0.1055671	0.18566474	3.0431015	20	4 23.3	18.8
101852 1999 JY_{97}	15.6	X	53.61402	112.84424	142.71744	14.62836	0.0848236	0.24317091	2.5421137	20	9 6.8	18.9
101853 1999 JU_{107}	16.2	X	50.17625	175.11885	66.10220	7.04314	0.0788228	0.28925869	2.2643581	20	8 18.4	18.9
101854 1999 JO_{115}	16.6	X	224.43818	57.33669	224.64853	3.47037	0.1158502	0.31501188	2.1392002	20	—	—
101855 1999 JG_{118}	15.7	X	257.67379	157.89038	88.59807	3.47660	0.1378754	0.26869111	2.3784855	20	—	—
101856 1999 JA_{121}	14.7	X	270.45585	201.76581	81.86787	12.78128	0.1717188	0.18024732	3.1037746	20	3 6.4	19.6
101857 1999 JZ_{125}	14.8	X	51.64343	243.49207	13.72088	7.17056	0.2751917	0.19710103	2.9242205	20	9 27.7	18.9
101858 1999 KE_{8}	15.0	X	30.03177	249.95733	309.88954	4.37253	0.2420886	0.18882761	3.0090245	20	5 27.9	18.1
101859 1999 LA	16.6	X	291.17564	161.64118	244.51742	7.18044	0.0805543	0.29504328	2.2346640	20	9 27.6	19.1
101860 1999 LN_{2}	16.6	X	246.67914	56.31842	213.47419	21.19128	0.0629938	0.36326364	1.9453068	20	—	—
101861 1999 LA_{4}	16.1	X	293.39020	352.90023	244.46637	20.95495	0.0326421	0.36455166	1.9407220	20	1 13.2	18.6
101862 1999 LH_{4}	16.7	X	201.39491	68.50745	123.14781	24.87272	0.0769147	0.35120822	1.9895717	20	—	—
101863 1999 LZ_{5}	16.1	X	178.10184	68.68811	180.12546	23.13637	0.2342406	0.30374964	2.1917560	20	—	—
101864 1999 LF_{7}	15.1	X	355.82458	175.14118	129.17190	3.97656	0.0200748	0.18891867	3.0080575	20	8 5.3	19.2
101865 1999 LG_{11}	17.0	X	162.55565	118.02969	171.35386	5.52875	0.2327088	0.30574852	2.1821929	20	—	—
101866 1999 LM_{15}	16.1	X	80.96447	280.53198	212.04835	21.50768	0.0866761	0.37141456	1.9167410	20	4 15.2	17.5
101867 1999 LR_{15}	15.4	X	327.03072	167.03218	114.03726	25.40573	0.1969502	0.27982843	2.3149493	20	5 16.2	18.2
101868 1999 LE_{35}	16.2	X	191.61929	47.09181	230.23984	6.07701	0.0790718	0.26390995	2.4071263	20	—	—
101869 1999 MM	19.2	X	10.90646	268.78494	110.95549	4.76514	0.6106696	0.47612214	1.6242659	20	—	—
101870 1999 NV	13.9	X	246.14785	264.60616	127.63270	16.68117	0.3666473	0.17933965	3.1142382	20	6 1.1	19.5
101871 1999 NV_{1}	15.3	X	315.48177	25.07151	291.27315	22.24500	0.1233605	0.27619540	2.3352054	20	6 19.9	17.9
101872 1999 NO_{4}	16.3	X	55.51874	181.92544	94.32264	5.22006	0.1286449	0.28834761	2.2691253	20	10 22.9	19.1
101873 1999 NC_{5}	16.4	X	354.00654	295.27954	128.80111	45.79005	0.3930508	0.34096299	2.0292298	20	—	—
101874 1999 NM_{8}	16.2	X	112.21713	130.40900	148.32976	5.82731	0.1792260	0.29549865	2.2323676	20	12 26.1	19.8
101875 1999 NA_{9}	16.0	X	78.53185	156.95108	122.01795	6.87823	0.1859223	0.29121722	2.2541943	20	11 27.1	19.4
101876 1999 NJ_{15}	15.5	X	352.62641	228.50102	105.85877	5.53068	0.1469681	0.23942608	2.5685523	20	9 28.5	18.1
101877 1999 NA_{16}	16.0	X	279.76933	31.11644	284.06964	5.74154	0.1634161	0.27500269	2.3419525	20	4 10.4	19.3
101878 1999 NR_{23}	16.7	X	80.63882	144.93234	156.29134	0.60244	0.1835895	0.29441222	2.2378561	20	12 25.8	20.2
101879 1999 NP_{26}	15.7	X	348.08463	30.98103	277.57384	2.55157	0.1578898	0.28280580	2.2986729	20	8 13.0	17.3
101880 1999 NJ_{29}	15.4	X	307.15127	188.33491	121.68247	14.82959	0.2486279	0.23036908	2.6354407	20	5 9.6	18.9
101881 1999 NO_{30}	16.2	X	192.69888	243.26868	57.58923	2.02968	0.1595800	0.30878914	2.1678441	20	—	—
101882 1999 NK_{36}	16.0	X	155.49187	208.58986	101.78119	7.52021	0.1863194	0.30446240	2.1883340	20	—	—
101883 1999 NT_{36}	15.3	X	213.67808	21.84075	318.35322	12.05029	0.2171176	0.26734556	2.3864595	20	3 4.4	19.4
101884 1999 ND_{38}	16.6	X	293.05250	249.14847	52.78684	2.95821	0.2056642	0.27451623	2.3447184	20	4 7.0	19.5
101885 1999 NV_{40}	13.6	X	227.06892	58.47799	324.91885	16.45406	0.2171101	0.17795525	3.1303688	20	5 7.6	19.2
101886 1999 NU_{41}	13.6	X	215.62707	19.62314	333.43462	16.18701	0.1841270	0.17379295	3.1801525	20	3 25.2	19.0
101887 1999 NG_{42}	16.1	X	292.71498	30.01344	314.18911	2.30143	0.1887561	0.27826265	2.3236253	20	6 8.5	18.7
101888 1999 NM_{42}	16.2	X	207.44345	43.83361	307.39637	4.87686	0.2498555	0.26726224	2.3869555	20	3 14.1	20.3
101889 1999 NE_{55}	13.5	X	220.56553	101.22850	267.74602	20.59735	0.0967946	0.17599059	3.1536228	20	4 23.3	18.7
101890 1999 NK_{55}	13.0	X	181.50947	92.19700	299.53593	27.73337	0.2166256	0.17191669	3.2032489	20	4 2.4	19.0
101891 1999 NL_{55}	14.0	X	332.24416	5.38536	264.29252	14.42877	0.1439781	0.18105296	3.0945604	20	5 5.5	17.9
101892 1999 NV_{64}	16.3	X	180.01782	311.78463	344.89219	2.19625	0.1896465	0.30621747	2.1799644	20	—	—
101893 1999 PJ	16.1	X	212.12474	169.42695	151.91842	3.16401	0.2320282	0.26412764	2.4058035	20	2 13.1	20.1
101894 1999 PD_{2}	14.5	X	227.61172	290.27982	147.35815	12.80794	0.2709307	0.18029688	3.1032057	20	7 13.9	19.8
101895 1999 PE_{3}	15.9	X	188.81974	212.83146	223.02880	1.15118	0.1173819	0.27364363	2.3497004	20	6 17.8	19.4
101896 1999 PM_{3}	16.6	X	14.89037	29.81928	314.48839	3.49552	0.1694083	0.28772677	2.2723882	20	12 3.8	19.1
101897 1999 PO_{4}	14.6	X	4.52868	20.77797	348.97866	19.15516	0.3014491	0.23956530	2.5675571	20	—	—
101898 1999 PQ_{6}	16.6	X	135.76700	150.02741	140.46890	5.38982	0.1728401	0.29884677	2.2156628	20	—	—
101899 1999 PT_{8}	16.4	X	147.55648	212.16820	110.88337	3.46907	0.2331208	0.25599958	2.4564611	20	—	—
101900 1999 QH	14.7	X	96.40510	283.71449	22.85386	5.79594	0.1494952	0.29484300	2.2356758	20	—	—
101901 1999 QD_{2}	17.3	X	226.16997	122.91832	154.02475	23.28587	0.0607387	0.45029533	1.6857937	20	—	—
101902 Gisellaluccone	15.7	X	237.59671	68.64805	351.39837	3.70884	0.1184870	0.27599039	2.3363617	20	7 23.5	18.7
101903 1999 RR	14.1	X	209.74175	332.95268	85.39485	6.99084	0.1685170	0.17671969	3.1449429	20	6 12.5	19.1
101904 1999 RD_{1}	16.0	X	4.83250	335.68453	40.18734	2.47192	0.1693161	0.28880076	2.2667511	20	—	—
101905 1999 RN_{1}	16.4	X	124.22880	133.78065	278.16649	1.44989	0.2010438	0.26000298	2.4311803	20	3 16.9	19.9
101906 1999 RX_{1}	15.5	X	174.34492	347.08302	346.92393	2.10725	0.2078361	0.25856340	2.4401959	20	1 29.7	19.5
101907 1999 RC_{3}	14.0	X	158.05032	69.46074	3.77978	10.83477	0.1362810	0.17032506	3.2231735	20	5 11.5	19.2
101908 1999 RG_{4}	14.4	X	215.78665	54.11163	307.62051	16.27246	0.1751602	0.17464987	3.1697417	20	4 2.2	19.9
101909 1999 RU_{6}	16.5	X	213.59912	275.68876	161.57448	5.20932	0.1513378	0.27514703	2.3411334	20	7 13.8	19.9
101910 1999 RR_{8}	15.7	X	145.60392	317.14321	170.79399	6.43290	0.1457836	0.27383552	2.3486026	20	7 12.1	19.3
101911 1999 RN_{9}	14.5	X	278.12530	198.00239	166.51939	22.86472	0.1425927	0.18054611	3.1003493	20	6 22.5	19.3
101912 1999 RK_{10}	16.5	X	275.85150	189.68505	158.48109	1.98727	0.2394871	0.27537675	2.3398312	20	5 13.7	19.5
101913 1999 RT_{10}	16.5	X	264.56940	166.43938	221.85678	1.32702	0.2173635	0.27723427	2.3293680	20	6 27.5	19.6
101914 1999 RW_{10}	16.6	X	337.72150	156.63091	195.65000	1.45073	0.1898832	0.28377620	2.2934296	20	10 6.4	18.1
101915 1999 RV_{12}	16.3	X	70.75213	169.01792	202.47476	5.46194	0.1672516	0.29739313	2.2228770	20	—	—
101916 1999 RN_{13}	15.9	X	173.40523	251.80576	139.88410	1.00927	0.2125452	0.26522358	2.3991715	20	4 7.9	19.9
101917 1999 RB_{14}	14.4	X	230.12942	23.37873	346.79973	15.70057	0.2278928	0.17543835	3.1602373	20	4 23.3	19.9
101918 1999 RC_{14}	16.1	X	341.45695	299.92887	142.50710	3.62005	0.0611142	0.29525663	2.2335874	20	—	—
101919 1999 RL_{14}	16.2	X	319.40973	210.60969	166.93914	3.31030	0.1844227	0.28297946	2.2977324	20	10 3.7	17.6
101920 1999 RD_{15}	15.8	X	174.42272	90.96770	348.94009	7.16178	0.0838115	0.27203708	2.3589423	20	6 6.4	19.3

Planet		H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
		m		°	°	°	°		°				
101921	1999 RT_{15}	14.1	X	203.50844	50.29011	347.82223	8.97786	0.0961706	0.17525316	3.1624632	20	5 13.2	19.1
101922	1999 RG_{16}	16.0	X	146.07716	67.02193	181.10495	5.75760	0.1590938	0.29413245	2.2392749	20	12 18.8	19.4
101923	1999 RC_{18}	15.9	X	147.66383	211.07558	184.41394	2.24180	0.2102911	0.26173704	2.4204304	20	3 20.7	19.8
101924	1999 RD_{18}	16.0	X	346.47006	202.54241	173.45247	6.15647	0.1434681	0.28642196	2.2792844	20	11 29.6	18.1
101925	1999 RK_{18}	15.8	X	306.99266	289.56227	0.98905	10.93775	0.2169836	0.27339406	2.3511301	20	4 5.6	18.5
101926	1999 RT_{18}	14.0	X	270.74498	22.95381	339.00261	9.03234	0.2841666	0.17905842	3.1174982	20	5 18.3	19.0
101927	1999 RN_{19}	14.4	X	243.41415	334.92634	22.58684	0.81002	0.1761190	0.17605473	3.1528568	20	4 30.5	19.5
101928	1999 RY_{19}	16.1	X	4.38087	51.88012	302.05964	3.32621	0.1648559	0.28619490	2.2804897	20	11 29.8	18.3
101929	1999 RP_{20}	14.5	X	185.27554	62.84916	346.55281	16.68023	0.1588815	0.17209397	3.2010488	20	5 4.5	20.0
101930	1999 RU_{20}	16.1	X	229.36612	147.86568	202.91199	3.16263	0.1926069	0.26796638	2.3827721	20	4 4.0	19.8
101931	1999 RZ_{20}	16.7	X	247.57545	2.60823	343.28339	6.61344	0.3128228	0.27020684	2.3695824	20	4 3.7	20.8
101932	1999 RN_{21}	16.1	X	180.22868	206.89195	67.33651	2.10347	0.1669612	0.30104523	2.2048627	20	—	—
101933	1999 RS_{21}	16.1	X	66.49231	206.79744	149.45267	5.36049	0.1226049	0.29443056	2.2377632	20	—	—
101934	1999 RS_{22}	16.1	X	286.49718	10.32778	329.10491	5.15528	0.2215940	0.27439074	2.3454333	20	5 15.6	19.1
101935	1999 RV_{22}	15.5	X	199.89813	103.59389	329.08980	5.44442	0.0576063	0.27314075	2.3525835	20	6 29.8	18.8
101936	1999 RW_{22}	15.9	X	96.76890	67.11830	303.75613	3.15341	0.1411928	0.25195676	2.4826683	20	—	—
101937	1999 RD_{23}	15.2	X	43.20296	53.86851	174.17146	23.50301	0.1716635	0.27608910	2.3358048	20	7 26.3	18.3
101938	1999 RK_{23}	15.0	X	82.58270	67.50561	171.27796	23.67121	0.2166702	0.28390349	2.2927440	20	10 13.7	18.6
101939	1999 RN_{23}	16.5	X	103.49081	220.21201	111.84908	1.81521	0.1697486	0.29689721	2.2253516	20	—	—
101940	1999 RW_{23}	15.9	X	339.74901	339.72389	21.13761	6.00178	0.2331471	0.28331461	2.2959199	20	10 30.3	17.1
101941	1999 RX_{23}	15.8	X	108.95205	260.67242	33.61562	5.31661	0.2269109	0.29454479	2.2371846	20	—	—
101942	1999 RP_{24}	15.9	X	42.89003	214.84920	110.47547	0.40918	0.1342950	0.28788941	2.2715323	20	12 10.5	18.7
101943	1999 RS_{24}	15.5	X	249.40514	118.75835	193.18364	10.29610	0.2532649	0.26710799	2.3878743	20	2 27.6	19.6
101944	1999 RU_{24}	15.6	X	338.99580	203.46937	229.04541	3.59353	0.2202735	0.24201528	2.5501997	20	—	—
101945	1999 RP_{25}	14.4	X	209.73654	89.58794	356.13739	23.06900	0.4094513	0.17425720	3.1745016	20	7 9.2	20.8
101946	1999 RR_{26}	14.8	X	268.86658	29.00603	343.63941	9.38685	0.0920491	0.17947761	3.1126422	20	6 28.3	19.3
101947	1999 RS_{26}	16.0	X	88.75041	299.43801	225.13795	2.31976	0.0406482	0.27172362	2.3607561	20	6 12.1	18.7
101948	1999 RT_{26}	16.4	X	137.44087	283.54836	90.87825	2.43360	0.1872180	0.25783223	2.4448070	20	2 12.5	19.8
101949	1999 RX_{26}	16.4	X	141.73014	226.50294	55.18990	1.76951	0.1818160	0.29635654	2.2280574	20	—	—
101950	1999 RB_{29}	14.4	X	173.00290	85.94372	343.06512	30.54040	0.2212781	0.17210283	3.2009388	20	5 12.3	20.4
101951	1999 RK_{31}	15.9	X	256.25789	14.77600	1.26417	4.81562	0.1625456	0.27304013	2.3531614	20	6 7.0	19.2
101952	1999 RY_{31}	16.0	X	101.61129	209.87765	59.36864	7.93017	0.3153877	0.29131919	2.2536683	20	12 8.3	20.0
101953	1999 RM_{32}	16.0	X	243.15885	23.82759	356.27025	6.89072	0.1220578	0.27232684	2.3572687	20	6 1.2	19.3
101954	1999 RY_{33}	15.3	X	254.25055	100.16550	189.72943	24.52058	0.3429907	0.17449079	3.1716680	20	2 5.6	21.3
101955	Bennu	20.9	X	57.60071	66.33785	2.00730	6.03412	0.2036909	0.82499202	1.1259079	20	—	—
101956	1999 RS_{36}	15.7	X	246.20040	221.85926	189.26730	4.93228	0.1401563	0.27519214	2.3408776	20	7 16.7	18.9
101957	1999 RT_{36}	15.4	X	262.77098	69.05774	359.72913	12.83522	0.2531859	0.23040375	2.6351764	20	8 16.8	19.1
101958	1999 RS_{37}	15.7	X	354.87144	108.72599	265.02077	12.28398	0.1686821	0.24056332	2.5604509	20	11 28.2	18.3
101959	1999 RH_{38}	15.5	X	270.97489	355.25156	18.96755	5.92025	0.1533444	0.27447926	2.3449290	20	6 26.4	18.5
101960	Molau	16.9	X	346.27304	150.75562	172.05092	0.37468	0.2248571	0.28095090	2.3087794	20	9 8.6	17.8
101961	1999 RL_{39}	15.9	X	176.33185	252.14107	87.97314	7.63315	0.2423193	0.30568564	2.1824921	20	2 6.5	19.4
101962	1999 RV_{39}	15.5	X	183.43065	9.88558	354.56793	7.93320	0.1643409	0.26141037	2.4224464	20	3 12.4	19.1
101963	1999 RG_{40}	16.8	X	318.29290	26.43421	300.02440	1.94716	0.1875037	0.27796034	2.3253098	20	6 30.4	18.4
101964	1999 RU_{41}	16.1	X	359.63760	179.89701	174.74574	4.68477	0.2578769	0.23704480	2.5857256	20	11 24.1	18.6
101965	1999 RY_{41}	13.6	X	216.83605	169.83610	217.24616	6.21266	0.3415550	0.12529200	3.9553705	20	5 5.5	20.4
101966	1999 RO_{43}	15.6	X	131.11492	288.51555	328.15981	4.11005	0.1061332	0.29385964	2.2406607	20	12 16.2	18.9
101967	1999 RQ_{43}	15.8	X	245.44373	134.23377	184.58679	4.19541	0.3005332	0.31484774	2.1399436	20	2 28.4	19.5
101968	1999 RC_{45}	15.9	X	199.78040	258.61188	148.07440	8.89561	0.1743678	0.27010486	2.3701789	20	5 21.9	19.8
101969	1999 RJ_{45}	14.8	X	93.51368	243.62889	125.12817	15.07227	0.4451034	0.20347210	2.8628558	20	1 29.6	18.9
101970	1999 RR_{46}	14.9	X	276.96600	230.89170	139.76164	9.65122	0.1323776	0.23186385	2.6241018	20	7 1.4	18.3
101971	1999 RG_{48}	16.1	X	184.51423	77.65414	178.99797	4.01969	0.1339344	0.30222044	2.1991431	20	—	—
101972	1999 RN_{48}	15.4	X	307.56730	35.68056	314.65756	3.84952	0.3195617	0.23216160	2.6218577	20	6 18.7	18.2
101973	1999 RT_{48}	16.4	X	157.18781	161.20743	182.76517	5.48108	0.1785110	0.26014788	2.4302775	20	1 22.3	20.1
101974	1999 RC_{49}	16.2	X	253.92024	39.40152	333.76041	3.13359	0.2507600	0.27489582	2.3425595	20	5 20.4	19.9
101975	1999 RB_{50}	15.9	X	259.14940	182.70868	228.25616	3.92635	0.2524717	0.27893745	2.3198763	20	7 16.7	19.1
101976	1999 RS_{51}	16.5	X	139.89597	167.35367	203.34920	4.41919	0.1722372	0.30734429	2.1746329	20	1 31.1	19.4
101977	1999 RA_{52}	15.9	X	185.65284	340.14908	340.63271	2.27965	0.1675560	0.30873522	2.1680965	20	1 15.3	19.0
101978	1999 RZ_{52}	16.0	X	98.00133	13.49192	334.91148	4.42983	0.1434053	0.29974137	2.2112521	20	—	—
101979	1999 RG_{53}	14.9	X	268.35872	86.18490	272.91315	3.97147	0.1890321	0.18048834	3.1010108	20	5 26.5	19.5
101980	1999 RX_{54}	15.9	X	194.64208	344.66111	286.43890	2.90112	0.1532556	0.30439531	2.1886555	20	—	—
101981	1999 RB_{56}	16.0	X	46.94087	220.36831	116.11874	6.03040	0.2146040	0.24413472	2.5354187	20	12 29.6	19.6
101982	1999 RH_{58}	16.7	X	196.63997	347.90285	336.24268	8.07504	0.2192344	0.26250809	2.4156885	20	2 5.9	20.7
101983	1999 RL_{59}	16.1	X	143.52294	146.68636	150.90927	6.20582	0.0610200	0.29949663	2.2124566	20	—	—
101984	1999 RB_{61}	15.5	X	167.45280	219.91243	121.60974	3.30466	0.0848132	0.21322354	2.7748911	20	1 29.2	19.6
101985	1999 RE_{61}	16.2	X	16.15213	63.41048	271.95706	4.32966	0.1144474	0.28724148	2.2749470	20	11 13.3	18.7
101986	1999 RS_{62}	16.6	X	283.97601	335.26559	346.40882	3.71689	0.1885514	0.27369324	2.3494164	20	4 22.7	19.5
101987	1999 RZ_{62}	15.6	X	284.46724	92.06444	308.51982	4.98753	0.2551023	0.23232370	2.6206380	20	8 3.2	18.6
101988	1999 RG_{64}	14.8	X	249.13213	251.28943	124.16076	6.06824	0.1971502	0.17863294	3.1224466	20	5 27.1	19.7
101989	1999 RK_{65}	16.2	X	90.69911	310.60278	314.95927	6.45728	0.1001884	0.28874758	2.2670294	20	11 11.1	19.4
101990	1999 RF_{67}	16.4	X	137.23078	266.75355	341.39708	2.46678	0.1493068	0.29318767	2.2440830	20	12 10.3	19.7
101991	1999 RK_{67}	16.3	X	197.07952	161.50454	171.17682	10.39574	0.2173885	0.26286867	2.4134789	20	2 13.6	20.4
101992	1999 RT_{67}	14.4	X	187.16957	64.32100	330.91641	20.91006	0.1462732	0.17240482	3.1971998	20	4 15.3	20.0
101993	1999 RJ_{70}	16.1	X	192.78726	219.78257	183.69750	4.62127	0.1831832	0.26891704	2.3771532	20	5 9.7	20.0
101994	1999 RX_{70}	16.4	X	1.32450	220.02594	173.87354	6.96849	0.1876520	0.24239504	2.5475354	20	—	—
101995	1999 RZ_{71}	16.3	X	155.17364	329.52045	14.20143	4.93476	0.1905556	0.25818354	2.4425887	20	1 24.1	20.0
101996	1999 RE_{72}	16.0	X	69.08342	201.48168	141.42458	7.14804	0.1325552	0.29417740	2.2390468	20	—	—
101997	1999 RU_{75}	15.7	X	169.03832	198.09091	219.73319	4.77565	0.1022962	0.26773405	2.3841503	20	5 2.9	19.0
101998	1999 RJ_{76}	15.9	X	144.99621	74.53557	172.26910	7.08021	0.1254437	0.29290464	2.2455284	20	12 17.5	19.2
101999	1999 RM_{76}	15.9	X	252.16025	192.57640	171.21360	5.38205	0.2566643	0.27240875	2.3567961	20	5 8.2	19.6
102000	1999 RX_{76}	16.3	X	22.75737	243.34361	129.93609	5.71297	0.1625973	0.24309096	2.5426710	20	—	—

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102001 1999 RG_{79}	14.5	X	352.68421	262.49084	358.58093	10.50076	0.0142537	0.17833293	3.1259475	20	6 2.9	19.0
102002 1999 RR_{80}	16.1	X	230.82624	210.22960	206.64949	5.67371	0.0975077	0.27595047	2.3365870	20	7 11.0	19.2
102003 1999 RX_{80}	15.7	X	139.56458	203.01319	321.25192	6.42879	0.0470740	0.27922262	2.3182965	20	8 20.7	18.5
102004 1999 RC_{81}	15.4	X	28.48246	101.70521	10.06773	8.84307	0.0940178	0.25631431	2.4544498	20	1 1.5	18.2
102005 1999 RS_{81}	16.2	X	134.07509	350.44345	335.91686	7.03528	0.1833623	0.30087232	2.2057074	20	—	—
102006 1999 RA_{82}	16.4	X	191.05520	335.92331	317.06583	4.34141	0.1746409	0.30492992	2.1860966	20	—	—
102007 1999 RB_{82}	15.7	X	104.99396	329.35219	287.01871	4.24643	0.1625563	0.28926636	2.2643180	20	11 19.4	19.1
102008 1999 RD_{82}	16.1	X	1.46653	135.73544	270.96066	3.77924	0.1752135	0.24344632	2.5401961	20	—	—
102009 1999 RF_{82}	14.8	X	253.57156	80.14624	291.53443	4.31645	0.1729703	0.17772668	3.1330522	20	5 27.8	19.6
102010 1999 RE_{84}	16.0	X	352.96192	72.50220	2.90350	3.44070	0.2665652	0.24435553	2.5338910	20	—	—
102011 1999 RR_{84}	15.8	X	24.86042	357.12542	337.67121	8.25386	0.1704863	0.28697458	2.2763573	20	12 3.8	18.7
102012 1999 RV_{85}	16.0	X	62.54949	341.99414	8.80960	6.87402	0.1994881	0.29356806	2.2421441	20	—	—
102013 1999 RX_{85}	16.0	X	348.46487	256.27179	135.67739	4.49715	0.1751530	0.28760179	2.2730465	20	12 30.9	18.1
102014 1999 RH_{86}	16.2	X	291.63741	170.60526	139.38240	7.00885	0.1324829	0.27195489	2.3594175	20	4 30.5	19.2
102015 1999 RK_{87}	16.9	X	73.85626	338.53155	336.83222	0.62165	0.2242133	0.29194146	2.2504646	20	—	—
102016 1999 RY_{87}	16.0	X	75.94887	285.76241	2.76397	5.79672	0.1648399	0.28888022	2.2663354	20	12 1.8	19.4
102017 1999 RD_{89}	16.4	X	87.34946	162.76244	178.14713	9.01812	0.2383268	0.29578256	2.2309389	20	—	—
102018 1999 RD_{90}	14.4	X	245.64336	273.61968	43.43986	5.86143	0.1417771	0.17181135	3.2045581	20	3 21.2	19.5
102019 1999 RH_{90}	15.9	X	293.52906	215.91616	142.93481	7.22043	0.0888154	0.27687413	2.3313875	20	7 19.5	18.6
102020 1999 RK_{90}	16.3	X	303.70923	289.39180	118.80965	4.94742	0.1799630	0.28294503	2.2979187	20	10 19.9	18.0
102021 1999 RV_{92}	16.1	X	144.68957	53.96902	15.79271	5.82038	0.1690765	0.26417678	2.4055051	20	4 26.2	19.8
102022 1999 RX_{92}	15.2	X	128.67777	16.33087	14.29639	5.22602	0.1108578	0.25833997	2.4416026	20	2 15.0	18.4
102023 1999 RA_{93}	16.2	X	296.14542	158.26848	162.01163	7.25521	0.2493526	0.27407621	2.3472273	20	5 1.6	19.0
102024 1999 RY_{94}	16.5	X	37.42401	356.84102	350.39526	1.19404	0.1752919	0.28938842	2.2636813	20	—	—
102025 1999 RC_{97}	16.6	X	340.78393	139.14572	178.19742	6.01193	0.1335404	0.27913111	2.3188032	20	8 9.2	18.5
102026 1999 RF_{97}	16.3	X	207.80174	358.28670	41.93996	1.72045	0.1938395	0.26973914	2.3723207	20	5 17.6	20.1
102027 1999 RC_{98}	15.4	X	111.70588	123.53063	15.33059	9.55778	0.1688777	0.26865526	2.3786972	20	6 23.5	19.0
102028 1999 RL_{98}	16.7	X	215.48045	10.62207	1.10228	0.86944	0.1970019	0.26788131	2.3832766	20	4 17.9	20.6
102029 1999 RV_{99}	16.3	X	11.62593	122.20508	202.35852	6.72794	0.1638999	0.28669198	2.2778530	20	10 31.1	18.4
102030 1999 RJ_{100}	16.1	X	98.34697	272.55781	354.23206	6.62932	0.0938180	0.29078004	2.2564532	20	11 21.6	19.3
102031 1999 RC_{105}	15.9	X	48.62106	226.21380	140.21390	6.75813	0.1861449	0.29212731	2.2495101	20	—	—
102032 1999 RC_{106}	15.5	X	182.06163	2.43630	281.56859	5.02084	0.1946025	0.30291777	2.1957668	20	—	—
102033 1999 RU_{107}	14.1	X	173.95646	289.13044	178.62695	26.88740	0.1176892	0.17940386	3.1134951	20	7 9.3	19.6
102034 1999 RW_{107}	14.4	X	97.21418	131.70326	259.66263	6.77195	0.1101030	0.16021164	3.3574277	20	1 19.7	19.2
102035 1999 RG_{108}	14.9	X	353.68816	87.06382	229.20102	10.48037	0.1481579	0.18577371	3.0419113	20	8 16.4	18.6
102036 1999 RT_{108}	16.3	X	97.37085	78.11754	274.87550	5.32728	0.1292983	0.29831076	2.2183161	20	—	—
102037 1999 RU_{108}	16.0	X	53.80387	12.57864	260.21564	4.87739	0.1531416	0.28419512	2.2911752	20	10 13.9	19.0
102038 1999 RU_{109}	16.0	X	211.58971	170.07518	226.79900	5.89170	0.1119263	0.26953927	2.3734933	20	5 21.5	19.2
102039 1999 RT_{110}	15.4	X	55.33297	337.42543	316.06611	9.79020	0.2288236	0.28572262	2.2830020	20	11 22.0	18.9
102040 1999 RG_{112}	13.7	X	201.51991	114.61532	279.60470	14.69213	0.2553999	0.17503167	3.1651305	20	5 1.4	19.4
102041 1999 RT_{112}	16.3	X	63.22968	122.04227	199.54484	4.64073	0.1943994	0.29301120	2.2449839	20	—	—
102042 1999 RB_{114}	15.9	X	131.62090	336.81542	291.42334	7.40120	0.1234953	0.29447899	2.2375178	20	12 31.6	19.1
102043 1999 RU_{114}	16.1	X	329.05862	202.65678	206.58490	6.52265	0.0959454	0.28855205	2.2680534	20	12 11.9	18.3
102044 1999 RH_{115}	16.2	X	51.90681	327.23506	349.23393	4.48235	0.1734828	0.29033996	2.2587327	20	12 14.6	19.4
102045 1999 RQ_{115}	14.5	X	276.13869	356.58607	330.67619	17.04159	0.2005296	0.17911520	3.1168394	20	4 15.8	19.5
102046 1999 RG_{118}	16.1	X	244.91017	204.62117	172.11938	3.21745	0.2453801	0.27382828	2.3486440	20	5 18.6	19.8
102047 1999 RO_{120}	14.1	X	273.60010	32.20859	318.36511	14.08085	0.1660007	0.18054677	3.1003417	20	5 22.3	18.8
102048 1999 RJ_{121}	16.5	X	187.99018	184.51046	146.47342	3.74559	0.1679714	0.26257695	2.4152661	20	2 3.9	20.2
102049 1999 RM_{121}	14.9	X	207.86507	83.27392	344.24873	12.72075	0.3435240	0.17509664	3.1643476	20	6 13.9	20.9
102050 1999 RP_{122}	15.8	X	122.95413	201.20850	178.56486	6.55217	0.1339702	0.25914804	2.4365244	20	1 24.6	19.0
102051 1999 RR_{122}	15.7	X	103.25940	161.43535	346.81914	2.73758	0.0268785	0.22537942	2.6741958	20	6 6.1	19.3
102052 1999 RA_{125}	15.4	X	268.96183	132.17945	198.70591	0.54457	0.2017961	0.17738750	3.1370447	20	4 21.2	19.9
102053 1999 RB_{125}	16.5	X	118.14273	47.92159	322.32505	1.63647	0.2304635	0.25553267	2.4594524	20	1 22.3	19.6
102054 1999 RC_{125}	14.3	X	209.44318	33.43134	339.14059	17.40314	0.1348287	0.17329852	3.1861984	20	4 11.7	19.6
102055 1999 RH_{126}	15.2	X	5.85882	78.02958	302.99486	5.71799	0.1846275	0.29010986	2.2599269	20	—	—
102056 1999 RM_{126}	15.5	X	65.00875	5.63836	319.86758	11.76172	0.2263561	0.24546015	2.5262833	20	—	—
102057 1999 RL_{129}	16.0	X	80.31725	1.66045	336.01803	6.25742	0.1242833	0.29604628	2.2296138	20	—	—
102058 1999 RT_{129}	15.2	X	282.05966	191.29030	117.10515	2.31912	0.1677119	0.22519015	2.6756941	20	4 10.9	19.0
102059 1999 RM_{131}	16.3	X	97.34229	136.30047	237.51892	6.37612	0.2076025	0.30107097	2.2047370	20	—	—
102060 1999 RZ_{131}	15.9	X	69.30483	67.58227	249.85263	4.38018	0.1498553	0.29248883	2.2476561	20	—	—
102061 1999 RC_{132}	15.6	X	315.71156	141.40603	229.70093	3.54719	0.3050382	0.23380300	2.6095723	20	8 11.9	17.5
102062 1999 RN_{132}	14.1	X	266.10327	350.24519	318.42286	16.33787	0.2486674	0.17631984	3.1496957	20	3 11.5	19.4
102063 1999 RR_{134}	14.5	X	291.60812	28.98335	314.90612	7.91582	0.1654599	0.18172454	3.0869316	20	6 8.8	18.8
102064 1999 RW_{134}	14.8	X	218.24804	77.91184	287.61776	2.99365	0.2342933	0.17396262	3.1780844	20	4 13.5	20.2
102065 1999 RC_{136}	16.2	X	176.14366	207.23747	123.85244	3.41361	0.1725795	0.26030501	2.4292993	20	1 25.1	19.9
102066 1999 RV_{137}	16.0	X	146.99145	321.78266	341.95453	5.06304	0.1855126	0.30138946	2.2031835	20	—	—
102067 1999 RF_{138}	16.4	X	229.78135	13.42208	15.06368	2.06991	0.3694849	0.22342314	2.6897832	20	5 11.9	21.2
102068 1999 RC_{139}	15.8	X	344.86625	195.18343	192.27243	5.00292	0.1622723	0.28842569	2.2687158	20	12 16.3	17.9
102069 1999 RF_{139}	16.5	X	267.09654	131.57237	237.91291	1.35179	0.2259982	0.27577361	2.3375859	20	6 3.0	19.5
102070 1999 RH_{139}	16.5	X	274.95934	158.41163	165.69530	2.37686	0.2285365	0.27307837	2.3529418	20	4 11.7	19.6
102071 1999 RK_{139}	16.2	X	67.25299	219.66550	161.59176	7.43742	0.1329833	0.29875453	2.2161189	20	—	—
102072 1999 RE_{140}	14.2	X	280.75105	291.87271	312.51444	16.83144	0.0732078	0.16845734	3.2469536	20	2 6.6	18.9
102073 1999 RT_{140}	16.0	X	13.49270	201.34592	180.46411	2.64457	0.1075414	0.29184454	2.2509629	20	—	—
102074 1999 RN_{143}	15.7	X	186.45178	207.62645	175.64219	8.62106	0.3132487	0.26468236	2.4024409	20	4 10.3	20.2
102075 1999 RC_{144}	15.9	X	207.34558	103.20303	320.48487	6.05138	0.0998787	0.27326447	2.3518734	20	6 23.1	19.2
102076 1999 RL_{144}	15.9	X	50.81537	37.32481	261.60628	4.94519	0.1866130	0.28790805	2.2714343	20	11 21.5	18.9
102077 1999 RL_{146}	16.6	X	277.47616	127.37168	227.71567	3.31880	0.1808041	0.27562173	2.3384445	20	6 3.3	19.3
102078 1999 RS_{147}	14.4	X	217.88232	78.86772	313.22150	10.83439	0.1261113	0.17637046	3.1490930	20	5 19.1	19.6
102079 1999 RV_{147}	15.8	X	135.38385	7.06234	279.51438	4.12762	0.1315776	0.29731308	2.2232759	20	—	—
102080 1999 RP_{148}	15.9	X	247.13588	350.74573	325.57664	6.90082	0.1200640	0.26797810	2.3827027	20	3 12.0	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102081 1999 RB_{149}	16.1	X	173.78161	10.85236	335.10291	3.09453	0.2114818	0.26116691	2.4239516	20	2 12.4	19.9
102082 1999 RK_{149}	14.9	X	226.01600	188.14665	143.22389	3.29998	0.1730074	0.17239843	3.1972789	20	3 16.4	20.1
102083 1999 RO_{149}	15.3	X	162.31832	282.55014	342.46472	3.40759	0.1619463	0.29901281	2.2148425	20	—	—
102084 1999 RF_{150}	15.2	X	237.64905	187.34660	162.31862	6.08734	0.1906487	0.17504278	3.1649966	20	4 16.5	20.3
102085 1999 RK_{150}	14.6	X	262.44973	328.44882	341.25240	18.33500	0.2720490	0.17578072	3.1561324	20	3 11.3	19.9
102086 1999 RT_{150}	16.0	X	142.70160	348.79788	35.25549	2.38972	0.2084618	0.26059875	2.4274735	20	3 2.9	19.6
102087 1999 RT_{151}	14.7	X	239.02161	285.59733	131.08189	5.84074	0.2812909	0.17863788	3.1223890	20	6 27.8	20.0
102088 1999 RA_{152}	16.4	X	322.40281	186.62004	143.08537	3.56135	0.2523620	0.27931121	2.3178063	20	7 5.5	17.8
102089 1999 RK_{152}	16.1	X	176.03583	57.91436	178.99970	3.29626	0.1496615	0.29693068	2.2251843	20	—	—
102090 1999 RP_{153}	16.1	X	158.06234	197.14363	189.50901	10.16144	0.2732347	0.26213199	2.4179986	20	3 22.3	20.1
102091 1999 RL_{154}	16.7	X	285.04742	99.38865	224.78057	1.58620	0.2180339	0.27388022	2.3483470	20	4 24.4	19.6
102092 1999 RD_{155}	14.7	X	204.76766	73.74278	334.64427	15.69896	0.2413706	0.17463714	3.1698958	20	5 20.1	20.5
102093 1999 RH_{155}	14.0	X	303.05964	281.38222	313.96181	10.86170	0.2128890	0.17122310	3.2118936	20	2 3.4	18.4
102094 1999 RH_{156}	14.6	X	259.88916	10.69932	298.14015	4.31219	0.1679748	0.17417732	3.1754722	20	3 18.5	19.6
102095 1999 RK_{156}	15.1	X	92.49397	141.19745	273.43139	2.34210	0.1873154	0.25681004	2.4512902	20	2 8.1	17.9
102096 1999 RX_{156}	16.5	X	322.31240	75.79113	247.92279	1.17596	0.2338983	0.27857496	2.3218883	20	6 27.6	18.1
102097 1999 RZ_{157}	15.7	X	281.31668	332.20380	51.54590	3.42446	0.1550554	0.27873856	2.3209797	20	7 27.8	18.2
102098 1999 RJ_{158}	16.3	X	227.31704	284.76844	17.16138	2.93879	0.1735276	0.26388888	2.4072544	20	2 4.3	20.1
102099 1999 RW_{158}	16.4	X	178.13192	178.09571	133.33062	2.37899	0.1963735	0.25826204	2.4420937	20	1 4.7	20.2
102100 1999 RG_{159}	16.0	X	303.68526	228.44642	144.66161	6.08781	0.2689946	0.23217748	2.6217382	20	7 24.9	18.6
102101 1999 RZ_{159}	16.0	X	241.26208	8.08268	64.54079	3.39484	0.1277588	0.27927019	2.3180333	20	8 14.7	18.9
102102 1999 RK_{160}	16.3	X	176.31247	317.33252	23.87660	4.07275	0.2131125	0.30838276	2.1697481	20	2 5.5	19.6
102103 1999 RA_{161}	16.3	X	310.90653	292.84433	2.41755	6.46422	0.1126016	0.27213463	2.3583785	20	5 6.9	19.0
102104 1999 RV_{161}	16.8	X	175.52104	285.88602	38.61758	2.85388	0.1878248	0.25946026	2.4345694	20	1 18.2	20.7
102105 1999 RA_{163}	14.4	X	200.06540	247.31448	180.92307	17.70976	0.1880473	0.17635362	3.1492935	20	6 15.6	19.9
102106 1999 RB_{163}	15.6	X	30.04956	65.83319	315.07344	5.24129	0.2929918	0.24406529	2.5358995	20	—	—
102107 1999 RL_{164}	15.7	X	65.03537	235.64150	186.27304	6.05268	0.2417688	0.25315495	2.4748284	20	1 8.9	17.8
102108 1999 RZ_{165}	15.3	X	70.38973	333.78832	151.91495	1.65196	0.1304589	0.26422436	2.4052163	20	4 4.7	17.8
102109 1999 RD_{166}	16.9	X	88.72833	318.41613	7.01079	3.60071	0.2743442	0.29555777	2.2320699	20	—	—
102110 1999 RV_{166}	14.5	X	241.74465	293.08297	10.63911	11.21497	0.1181501	0.17077351	3.2175283	20	3 4.8	19.5
102111 1999 RQ_{167}	15.2	X	238.80929	39.20870	20.25516	5.84496	0.1904159	0.27600767	2.3362641	20	7 15.2	18.6
102112 1999 RR_{167}	16.3	X	67.56169	279.41282	6.18934	6.24649	0.1279051	0.28798288	2.2710408	20	11 14.4	19.5
102113 1999 RZ_{167}	15.2	X	313.55175	35.73877	356.95494	8.13941	0.1126038	0.28408275	2.2917794	20	10 14.6	17.3
102114 1999 RW_{168}	13.4	X	119.39746	122.95358	343.07129	13.49195	0.1120179	0.17179829	3.2047205	20	5 8.6	18.5
102115 1999 RZ_{168}	15.4	X	347.56946	26.66566	333.45426	2.30991	0.1509637	0.28482922	2.2877735	20	11 5.4	17.4
102116 1999 RM_{170}	16.2	X	99.66972	242.19730	169.02898	2.41356	0.1873179	0.25694485	2.4504327	20	2 14.1	19.1
102117 1999 RW_{170}	16.3	X	322.79572	226.66210	158.47194	4.37080	0.2302688	0.23574348	2.5952324	20	10 8.8	18.1
102118 1999 RX_{170}	16.0	X	118.82871	250.38792	165.14686	12.15236	0.1824322	0.26004542	2.4309158	20	3 14.9	19.2
102119 1999 RO_{171}	16.3	X	91.90607	19.28359	1.43785	7.77327	0.2249227	0.25268193	2.4779161	20	—	—
102120 1999 RO_{172}	14.2	X	225.74477	60.55156	6.40619	11.67023	0.1499591	0.27577076	2.3376020	20	7 17.3	17.8
102121 1999 RL_{174}	16.5	X	295.03914	168.53281	108.69677	2.17968	0.1746510	0.26979697	2.3719817	20	3 12.1	19.4
102122 1999 RG_{175}	16.0	X	109.98397	16.50135	354.46713	5.43696	0.1437716	0.25435238	2.4670551	20	—	—
102123 1999 RP_{175}	14.5	X	252.75797	326.66183	341.01579	5.77713	0.1000362	0.17164918	3.2065762	20	3 18.0	19.3
102124 1999 RB_{177}	16.0	X	358.85716	227.41310	181.56944	3.31481	0.2122329	0.24296342	2.5435608	20	—	—
102125 1999 RQ_{177}	16.6	X	101.17013	148.25014	162.91396	5.78694	0.1805044	0.29503842	2.2346885	20	—	—
102126 1999 RW_{177}	16.3	X	68.58799	269.30235	3.91164	6.61250	0.1638968	0.28664100	2.2781230	20	11 2.9	19.5
102127 1999 RY_{177}	16.3	X	46.19994	147.83399	161.25527	9.82885	0.2184873	0.28801043	2.2708960	20	12 5.7	19.6
102128 1999 RC_{178}	16.0	X	19.85037	277.26269	109.14495	2.38430	0.2111732	0.24354237	2.5395281	20	—	—
102129 1999 RM_{179}	15.7	X	322.68602	341.86317	46.42908	5.19522	0.1300721	0.28455318	2.2892528	20	10 29.5	17.4
102130 1999 RT_{179}	16.5	X	196.38236	187.50817	121.58659	5.96082	0.2305646	0.26038962	2.4287731	20	1 18.0	20.6
102131 1999 RX_{179}	16.1	X	278.57682	242.84762	112.82174	6.32444	0.1290954	0.27529690	2.3402837	20	6 14.7	18.8
102132 1999 RH_{180}	15.7	X	203.94673	306.15321	98.80953	7.48489	0.1433541	0.27042924	2.3682831	20	5 23.8	19.3
102133 1999 RB_{181}	16.5	X	322.92146	302.09314	67.77635	1.72758	0.2237683	0.28203862	2.3028394	20	9 28.5	17.5
102134 1999 RD_{181}	16.5	X	269.32485	253.62578	55.14536	2.00647	0.1930416	0.26964305	2.3728843	20	3 21.3	20.0
102135 1999 RN_{182}	16.6	X	288.58032	330.51068	323.46769	1.66898	0.2082879	0.27073938	2.3664741	20	3 19.9	19.9
102136 1999 RO_{182}	15.4	X	56.75870	194.84328	334.66377	5.83949	0.0565683	0.26852743	2.3794520	20	5 1.9	18.2
102137 1999 RR_{182}	16.1	X	168.82012	146.93923	180.36449	7.58089	0.2003644	0.30552191	2.1832718	20	1 8.9	19.4
102138 1999 RS_{182}	15.9	X	191.37030	97.24423	261.33394	1.05051	0.2233715	0.26373550	2.4081876	20	3 12.2	19.8
102139 1999 RO_{183}	15.9	X	209.20243	33.63330	4.29273	6.97518	0.1060200	0.27046089	2.3680983	20	5 18.2	19.5
102140 1999 RS_{184}	15.6	X	286.21844	269.01691	116.46239	5.18049	0.1510629	0.27881385	2.3205619	20	8 8.2	18.0
102141 1999 RT_{184}	15.3	X	156.87558	307.75365	102.24058	4.94760	0.1346496	0.26475191	2.4020202	20	4 14.0	18.9
102142 1999 RB_{185}	16.2	X	335.78851	253.34601	114.96471	5.38163	0.2758282	0.23572306	2.5953823	20	10 20.8	17.8
102143 1999 RC_{186}	16.4	X	201.53839	263.63018	131.39262	2.06130	0.1950106	0.26897315	2.3768226	20	5 6.2	20.2
102144 1999 RA_{188}	15.9	X	136.13097	336.69089	1.30111	6.87297	0.1543776	0.25455180	2.4657664	20	—	—
102145 1999 RQ_{188}	16.1	X	18.67801	328.19998	54.45066	2.52970	0.1801847	0.24323714	2.5416522	20	—	—
102146 1999 RW_{191}	16.3	X	297.61637	91.37994	342.87412	3.51214	0.2392452	0.23761705	2.5815724	20	10 20.6	18.4
102147 1999 RC_{192}	15.6	X	194.18416	177.69349	260.83400	6.72345	0.1611292	0.27333990	2.3514407	20	6 25.3	19.2
102148 1999 RA_{195}	15.4	X	164.76960	186.93672	273.93604	12.48198	0.1351157	0.27338487	2.3511828	20	6 26.0	18.9
102149 1999 RH_{197}	15.9	X	145.92895	99.62574	233.06315	5.16171	0.2280862	0.30302427	2.1952523	20	—	—
102150 1999 RQ_{197}	13.8	X	271.91822	289.34404	336.24947	25.16626	0.2467304	0.17141143	3.2095405	20	2 8.8	19.1
102151 1999 RA_{198}	16.2	X	34.01240	68.29495	235.35303	5.89568	0.1962638	0.28534366	2.2850230	20	11 8.2	18.7
102152 1999 RL_{201}	14.4	X	211.32313	212.15113	202.69414	18.50257	0.3203052	0.17376782	3.1804591	20	6 3.1	20.3
102153 1999 RM_{201}	16.2	X	184.33509	38.75263	263.98972	6.50215	0.1842855	0.30459855	2.1876819	20	—	—
102154 1999 RK_{203}	15.4	X	76.28111	144.98091	296.46398	13.88225	0.1303566	0.25708878	2.4495180	20	2 8.0	18.2
102155 1999 RV_{203}	15.6	X	344.07984	13.96744	275.09394	8.89165	0.0289435	0.27413248	2.3469061	20	7 3.5	18.1
102156 1999 RV_{204}	15.9	X	7.34170	57.06892	314.89266	13.32364	0.2425682	0.23962530	2.5671284	20	12 30.3	19.0
102157 1999 RV_{206}	14.2	X	211.16803	100.62315	312.13521	15.07375	0.2386257	0.17376092	3.1805433	20	6 2.5	19.8
102158 1999 RC_{209}	15.6	X	222.12261	108.25862	274.32626	4.68331	0.1107864	0.26911527	2.3759857	20	5 12.7	18.9
102159 1999 RY_{213}	16.5	X	133.39951	82.88183	160.57628	2.23504	0.1195849	0.29362382	2.2418602	20	12 1.9	19.7
102160 1999 RG_{216}	15.7	X	323.25854	255.12212	125.61233	4.11504	0.1388957	0.28277554	2.2988369	20	10 20.1	17.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102161 1999 RM_{217}	14.9	X	334.77588	49.75549	319.18661	11.30317	0.1427263	0.28701286	2.2761549	20	10 17.3	17.2
102162 1999 RH_{219}	16.7	X	210.77686	45.08107	289.55609	0.40153	0.1865034	0.26433880	2.4045221	20	2 28.3	20.7
102163 1999 RT_{219}	15.8	X	149.39627	216.61342	92.78144	5.68647	0.1999416	0.30119289	2.2041420	20	—	—
102164 1999 RE_{220}	15.9	X	2.84495	359.72942	289.74163	5.90763	0.1077987	0.27888308	2.3201778	20	8 8.4	18.2
102165 1999 RH_{220}	13.8	X	35.54357	87.54323	330.95120	15.61873	0.2164446	0.15348369	3.4548396	20	—	—
102166 1999 RR_{221}	15.9	X	11.25633	2.97007	320.66194	5.72804	0.1495180	0.28232294	2.3012931	20	10 21.5	18.3
102167 1999 RC_{223}	13.8	X	154.11067	343.79638	316.52463	15.90592	0.1055878	0.15741310	3.3971037	20	—	—
102168 1999 RD_{227}	16.3	X	234.71428	21.31831	287.39189	5.75035	0.1252718	0.26506533	2.4001263	20	2 18.3	20.0
102169 1999 RT_{227}	15.9	X	268.41901	159.00704	135.90427	9.98001	0.2420827	0.26904253	2.3764139	20	2 27.4	19.6
102170 1999 RA_{230}	15.6	X	328.56960	314.06743	63.25436	4.96716	0.1773069	0.28490798	2.2873519	20	10 27.9	17.2
102171 1999 RH_{230}	16.6	X	39.87745	209.02192	109.61958	6.64609	0.1913224	0.28886617	2.2664089	20	12 6.9	19.6
102172 1999 RW_{230}	15.6	X	113.69830	264.80327	62.22289	6.18956	0.2103042	0.29791681	2.2202713	20	—	—
102173 1999 RQ_{233}	16.0	X	160.29673	329.41132	77.05504	6.88136	0.1385004	0.26465876	2.4025837	20	4 13.8	19.6
102174 1999 RG_{234}	15.8	X	2.99185	328.09665	73.81586	6.23618	0.3135491	0.24167350	2.5526035	20	—	—
102175 1999 RK_{234}	16.8	X	82.57915	291.15581	74.00926	4.57324	0.2067868	0.29739228	2.2228812	20	—	—
102176 1999 RV_{235}	15.6	X	334.99099	304.21655	27.95928	15.15034	0.0739615	0.27941170	2.3172505	20	9 1.9	18.3
102177 1999 RS_{236}	15.6	X	202.53085	342.80592	72.50969	7.71167	0.1093702	0.27090850	2.3654892	20	6 5.2	19.0
102178 1999 RD_{237}	15.9	X	198.17782	319.86757	58.87446	6.26794	0.1496562	0.26616098	2.3935351	20	4 14.5	19.6
102179 1999 RX_{237}	15.7	X	146.74706	274.08236	124.13892	9.40075	0.2511062	0.26040977	2.4286478	20	3 30.6	19.8
102180 1999 RV_{238}	15.8	X	8.82217	212.28141	65.95953	7.49004	0.1497921	0.27748869	2.3279440	20	8 11.9	17.9
102181 1999 RT_{240}	15.2	X	357.24934	309.72739	47.27352	14.61197	0.2089747	0.23728856	2.5839544	20	11 13.3	17.7
102182 1999 RN_{241}	15.4	X	176.48878	141.06770	185.75392	5.98190	0.0726671	0.20997356	2.8034511	20	1 19.4	19.7
102183 1999 RL_{242}	16.3	X	351.23640	225.29052	122.96343	5.72407	0.2050411	0.28402806	2.2920736	20	11 5.9	18.2
102184 1999 RX_{242}	16.0	X	29.39135	264.48604	70.88200	6.57646	0.1377980	0.28773499	2.2723450	20	12 7.1	18.4
102185 1999 RJ_{250}	16.6	X	60.02466	101.66479	182.96665	5.25083	0.1721511	0.28585720	2.2822854	20	11 12.6	19.7
102186 1999 RC_{251}	17.3	X	132.97076	89.95181	347.27512	0.90166	0.1668521	0.26464255	2.4026819	20	4 24.5	20.7
102187 1999 RQ_{253}	16.5	X	179.48369	178.34937	178.92579	5.75387	0.1222362	0.26135813	2.4227692	20	2 25.8	20.1
102188 1999 RD_{255}	16.5	X	45.78028	113.98374	155.54109	7.61651	0.2408246	0.28549105	2.2842364	20	10 17.4	19.5
102189 1999 SX_{1}	14.2	X	283.47550	13.22498	323.66718	29.45899	0.2444320	0.17903751	3.1177410	20	4 22.9	19.4
102190 1999 SR_{3}	14.4	X	306.93710	47.74742	344.68147	12.83422	0.3319199	0.22994357	2.6386910	20	8 22.9	16.5
102191 1999 SH_{4}	15.9	X	299.58473	0.82258	293.36243	2.22168	0.2059506	0.27139650	2.3626527	20	4 2.9	18.7
102192 1999 SP_{5}	15.4	X	355.20263	352.31230	23.38288	25.85878	0.1921611	0.28747883	2.2736946	20	12 16.9	18.3
102193 1999 SD_{6}	15.7	X	30.90732	275.96724	113.65487	6.81579	0.2217836	0.24511426	2.5286594	20	—	—
102194 1999 SV_{7}	15.6	X	346.05351	289.03856	104.23886	7.26550	0.1584533	0.28869693	2.2672945	20	12 26.5	17.8
102195 1999 ST_{10}	15.6	X	267.78484	261.72418	100.55143	7.33541	0.1425016	0.27202370	2.3590196	20	6 6.9	18.6
102196 1999 SC_{11}	15.0	X	65.71890	78.23750	55.90080	13.30748	0.0712580	0.26077511	2.4263789	20	4 6.7	18.0
102197 1999 SR_{11}	15.7	X	154.64565	231.09727	181.59244	12.37241	0.1917281	0.26175376	2.4203273	20	4 18.4	19.6
102198 1999 SU_{11}	15.7	X	232.22403	258.29271	161.59581	6.39459	0.1183703	0.27269130	2.3551678	20	7 14.5	19.0
102199 1999 SE_{13}	15.0	X	195.82532	36.22423	56.74660	14.16849	0.2241716	0.22406731	2.6846255	20	7 12.7	19.8
102200 1999 SU_{13}	16.2	X	213.45726	146.11842	185.98088	5.64597	0.1982850	0.26379204	2.4078435	20	2 26.4	20.2
102201 1999 SD_{15}	15.5	X	212.02999	124.94235	310.17410	9.20806	0.2084579	0.22467302	2.6797982	20	7 4.9	19.9
102202 1999 SC_{17}	14.8	X	313.75173	350.31792	292.16806	12.40362	0.1823179	0.22569047	2.6717382	20	4 9.5	18.4
102203 1999 SC_{19}	15.9	X	128.54594	297.26552	107.97725	9.37307	0.1600236	0.25914169	2.4365642	20	3 13.2	19.5
102204 1999 SE_{19}	15.1	X	195.89516	241.32044	123.93275	10.44128	0.2141415	0.21691995	2.7432774	20	3 31.2	19.9
102205 1999 SB_{20}	15.7	X	68.38670	226.51253	82.93732	8.74149	0.1554837	0.28916373	2.2648538	20	12 21.0	18.9
102206 1999 SM_{20}	15.7	X	292.68455	219.21154	103.93034	10.36710	0.1763241	0.27244237	2.3566022	20	5 14.3	18.6
102207 1999 SK_{21}	16.7	X	303.32979	119.06322	351.13774	2.49605	0.0284745	0.24241608	2.5473880	20	—	—
102208 1999 SD_{22}	15.8	X	38.80819	330.15708	56.50891	4.52950	0.1900244	0.24514548	2.5284447	20	—	—
102209 1999 SG_{25}	15.9	X	348.09539	248.25501	183.82436	12.57236	0.1186473	0.24393879	2.5367761	20	—	—
102210 1999 SE_{27}	15.3	X	44.89520	186.24314	243.48741	6.10521	0.1094469	0.25215204	2.4813863	20	—	—
102211 Angelofaggiano	16.2	X	190.36152	192.75465	209.08562	1.69980	0.2335444	0.26541072	2.3980436	20	5 4.4	20.2
102212 1999 TA_{1}	16.4	X	263.22812	177.81297	174.20028	2.70722	0.2175331	0.27143216	2.3624457	20	5 7.6	19.8
102213 1999 TL_{1}	15.3	X	45.77992	192.58258	196.62850	6.28912	0.1990497	0.24559514	2.5253575	20	—	—
102214 1999 TO_{1}	15.3	X	189.12307	350.68089	16.05640	11.28548	0.1680950	0.26254809	2.4154431	20	3 22.2	19.1
102215 1999 TR_{3}	16.2	X	70.11150	81.18011	203.30464	4.74908	0.1694670	0.28602463	2.2813947	20	11 22.4	19.4
102216 1999 TG_{4}	14.6	X	230.32205	60.26443	315.92653	8.75856	0.2394676	0.17801959	3.1296146	20	5 3.1	20.0
102217 1999 TW_{4}	15.0	X	69.05498	334.87356	21.92880	17.89231	0.2097172	0.24555445	2.5256365	20	—	—
102218 1999 TA_{6}	14.3	X	51.61852	27.84808	354.42952	9.53689	0.0804055	0.15320628	3.4590088	20	—	—
102219 1999 TB_{6}	16.4	X	34.63808	236.96717	96.61106	3.85098	0.0878138	0.28608610	2.2810679	20	12 4.0	19.1
102220 1999 TJ_{8}	16.0	X	132.35237	34.32441	35.95857	3.16865	0.1913971	0.26100082	2.4249798	20	4 17.9	19.6
102221 1999 TT_{9}	16.3	X	98.21029	205.24690	205.18853	2.93740	0.2220578	0.25431008	2.4673286	20	2 16.2	19.3
102222 1999 TA_{12}	16.2	X	306.87960	130.68252	208.02574	1.89592	0.2309677	0.27616203	2.3353935	20	6 17.9	18.4
102223 1999 TE_{12}	15.5	X	186.82574	45.56118	59.62978	8.95115	0.1357193	0.22304594	2.6928149	20	7 23.9	19.8
102224 1999 TG_{12}	16.3	X	223.76308	237.26822	151.19051	2.85764	0.1934765	0.26833690	2.3805782	20	5 18.2	20.1
102225 1999 TU_{12}	16.0	X	294.79228	214.28509	178.39258	6.86763	0.2084904	0.27871985	2.3210836	20	8 23.8	18.0
102226 1999 TL_{13}	16.4	X	106.26926	306.47793	38.28162	5.67618	0.2339085	0.29747926	2.2224479	20	—	—
102227 1999 TB_{14}	16.0	X	357.45461	208.92700	183.57562	8.20663	0.1862730	0.23948720	2.5681152	20	12 30.7	18.9
102228 1999 TG_{15}	15.6	X	153.73307	226.61653	203.54708	7.74061	0.1896389	0.21647618	2.7470252	20	5 9.7	20.2
102229 1999 TS_{17}	16.0	X	178.80722	218.82399	202.76119	4.29605	0.1307683	0.26694404	2.3888519	20	5 19.6	19.7
102230 1999 TA_{18}	15.2	X	105.28962	142.13129	237.18561	1.17396	0.1395989	0.20482361	2.8502483	20	1 13.0	18.9
102231 1999 TS_{18}	16.2	X	203.13019	164.77118	163.16084	5.42501	0.1597023	0.26022963	2.4297684	20	2 13.3	20.0
102232 1999 TX_{18}	16.5	X	163.51908	146.39972	211.24758	3.74044	0.2562139	0.30574700	2.1822001	20	2 15.1	20.0
102233 1999 TJ_{19}	15.4	X	23.39558	337.96179	24.70503	3.05926	0.2089235	0.23910990	2.5708161	20	—	—
102234 Olivebyrne	16.4	X	223.59905	359.73751	353.66753	1.94308	0.2202687	0.26671114	2.3902424	20	3 31.9	20.5
102235 1999 TN_{21}	16.1	X	51.82698	311.45949	243.72173	6.11204	0.0623075	0.26521757	2.3992077	20	6 4.8	18.8
102236 1999 TO_{21}	16.3	X	123.09067	94.75497	151.46406	7.53338	0.0938186	0.29196859	2.2503253	20	11 25.9	19.6
102237 1999 TQ_{21}	14.9	X	310.09699	34.10838	55.92504	11.12579	0.0737366	0.19007966	2.9957963	20	12 4.8	18.8
102238 1999 TH_{22}	16.5	X	94.73912	46.67289	43.99352	3.29579	0.1642293	0.25935653	2.4352184	20	3 29.4	19.5
102239 1999 TK_{22}	15.0	X	7.81548	205.24785	19.33826	13.84420	0.0761286	0.22091819	2.7100777	20	5 4.5	18.3
102240 1999 TN_{22}	16.3	X	354.90721	187.46336	48.89547	3.22203	0.1623607	0.26973232	2.3723607	20	4 26.6	18.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102241 1999 TT_{22}	16.4	X	24.23910	184.11756	49.92729	3.52469	0.1228537	0.27257104	2.3558605	20	6 24.7	18.6
102242 1999 TE_{25}	16.1	X	237.40585	209.16197	214.27859	5.21865	0.1218769	0.27428507	2.3460356	20	7 24.8	19.3
102243 1999 TE_{26}	15.1	X	260.01097	24.73470	21.04372	10.85919	0.1024854	0.27506582	2.3415942	20	8 9.4	18.1
102244 1999 TJ_{26}	15.8	X	218.75344	175.89953	220.55960	3.72990	0.1557107	0.26860559	2.3789904	20	5 25.8	19.3
102245 1999 TO_{26}	15.6	X	327.89278	293.42395	17.26567	1.31775	0.1313760	0.27404609	2.3473993	20	7 2.3	17.5
102246 1999 TV_{26}	16.2	X	223.05376	44.10341	336.33928	1.52290	0.2086896	0.26783918	2.3835265	20	5 4.8	20.0
102247 1999 TY_{26}	16.5	X	341.70826	182.72547	217.75251	4.05131	0.1062521	0.28540956	2.2846712	20	12 20.6	18.7
102248 1999 TD_{27}	15.7	X	121.08256	281.82617	21.19461	6.83381	0.2517988	0.29460531	2.2368782	20	—	—
102249 1999 TE_{27}	15.1	X	8.30391	341.11632	26.80259	14.09547	0.1852589	0.23772409	2.5807974	20	12 12.5	18.3
102250 1999 TU_{27}	15.1	X	348.21276	307.41067	35.90642	13.98099	0.1712407	0.23174586	2.6249924	20	10 4.8	17.7
102251 1999 TD_{28}	16.2	X	321.22550	331.74725	5.99850	2.53991	0.1892207	0.27646511	2.3336864	20	7 27.7	17.9
102252 1999 TG_{28}	16.2	X	332.06516	59.10967	266.70722	1.17258	0.2299576	0.27691843	2.3311388	20	7 30.3	17.2
102253 1999 TH_{28}	16.3	X	269.39669	84.55945	262.90848	1.12404	0.2265093	0.27086032	2.3657697	20	5 6.2	19.6
102254 1999 TO_{28}	16.5	X	257.64070	15.84002	302.60854	1.43088	0.1929923	0.26841070	2.3801418	20	3 20.2	20.2
102255 1999 TR_{29}	16.4	X	279.30051	88.69094	204.28635	3.08779	0.1083290	0.26716646	2.3875259	20	3 21.5	19.7
102256 1999 TP_{30}	16.4	X	121.54466	64.88944	318.51234	1.23160	0.2128504	0.25577253	2.4579145	20	2 9.3	19.8
102257 1999 TZ_{30}	16.2	X	201.05667	353.81372	332.13259	2.04354	0.2232674	0.26107526	2.4245189	20	2 10.6	20.4
102258 1999 TR_{31}	16.6	X	167.71140	178.56798	215.19934	2.50306	0.1827317	0.26260922	2.4150682	20	4 3.6	20.3
102259 1999 TK_{32}	16.0	X	322.77980	304.89693	359.46860	3.19218	0.2248230	0.27440139	2.3453726	20	5 26.3	17.9
102260 1999 TM_{33}	16.1	X	163.63675	51.93007	11.22816	6.04557	0.1030211	0.26546447	2.3977199	20	5 2.6	19.5
102261 1999 TF_{34}	16.8	X	310.24802	259.76632	149.42464	4.33582	0.2679013	0.23487758	2.6016069	20	10 11.1	18.6
102262 1999 TJ_{34}	16.4	X	315.54962	184.17156	160.82047	5.04529	0.1868653	0.27795403	2.3253450	20	7 25.0	18.2
102263 1999 TF_{37}	15.8	X	58.48838	236.89398	88.98539	10.24174	0.2312544	0.28891782	2.2661388	20	—	—
102264 1999 TU_{37}	15.8	X	281.18706	209.29378	204.98313	6.95649	0.0915256	0.28236842	2.3010460	20	9 20.6	18.2
102265 1999 TK_{38}	15.7	X	70.39396	302.33652	186.40174	6.15231	0.0621619	0.26267312	2.4146765	20	3 29.3	18.5
102266 1999 TD_{40}	16.2	X	237.92295	353.19891	58.41156	3.74111	0.1675490	0.27379355	2.3488426	20	7 4.9	19.5
102267 1999 TZ_{40}	15.7	X	353.34304	18.92032	34.19001	5.96204	0.2560804	0.24135742	2.5548316	20	—	—
102268 1999 TU_{43}	16.6	X	98.90053	118.68552	357.92217	4.58696	0.1454331	0.26483466	2.4015198	20	5 3.8	19.7
102269 1999 TH_{44}	16.0	X	58.93805	201.18620	309.13324	2.38882	0.0888713	0.26245449	2.4160173	20	4 13.6	18.6
102270 1999 TH_{45}	16.5	X	107.22810	287.38604	216.01682	7.05107	0.1230955	0.26702618	2.3883620	20	6 18.9	19.9
102271 1999 TK_{45}	16.5	X	71.69036	120.69927	339.87905	2.51517	0.1044355	0.25697870	2.4502175	20	2 27.3	19.2
102272 1999 TG_{46}	14.8	X	246.02974	348.73005	16.39479	16.45444	0.1090989	0.17506660	3.1647096	20	5 14.5	19.7
102273 1999 TM_{46}	15.9	X	117.95044	262.31185	26.95548	6.12454	0.1353077	0.29299661	2.2450584	20	—	—
102274 1999 TV_{46}	16.7	X	282.20097	347.44983	23.38966	3.07675	0.1798422	0.27591973	2.3367605	20	7 4.1	19.3
102275 1999 TW_{50}	15.5	X	207.17530	192.87376	189.96564	2.94137	0.0973955	0.22076676	2.7113168	20	4 30.4	19.7
102276 1999 TJ_{53}	16.9	X	255.06673	55.57734	220.73372	5.04193	0.1595846	0.30883479	2.1676304	20	1 21.9	20.3
102277 1999 TY_{54}	17.2	X	47.43942	119.63486	4.26033	2.37995	0.0864508	0.25688398	2.4508197	20	2 19.2	19.9
102278 1999 TH_{55}	16.5	X	287.44174	78.43118	18.54998	3.48409	0.1425633	0.23702301	2.5858840	20	11 15.8	19.4
102279 1999 TS_{57}	16.5	X	34.30456	245.08155	32.26036	6.58390	0.1589099	0.27887998	2.3201950	20	9 27.3	19.1
102280 1999 TE_{59}	16.2	X	160.10526	303.31867	182.19246	4.07873	0.0296072	0.22223682	2.6993470	20	7 18.8	20.1
102281 1999 TM_{59}	16.3	X	326.05893	36.60980	332.30689	4.44857	0.1260392	0.23498964	2.6007797	20	9 21.3	18.9
102282 1999 TX_{62}	16.5	X	269.05403	46.23279	209.59996	1.57654	0.1768716	0.25783976	2.4447594	20	1 16.2	20.2
102283 1999 TG_{63}	15.4	X	210.78001	242.21000	210.59565	12.32532	0.2500911	0.22298744	2.6932858	20	7 19.3	20.3
102284 1999 TM_{63}	15.7	X	344.21958	292.22225	110.12845	1.85593	0.0925539	0.23702757	2.5858509	20	12 10.3	18.5
102285 1999 TP_{63}	16.2	X	138.88460	173.37307	200.21944	4.81291	0.1986058	0.25513082	2.4620343	20	2 12.1	19.8
102286 1999 TR_{65}	16.3	X	113.25223	116.13564	5.83017	1.24028	0.1319064	0.26791481	2.3830779	20	5 28.5	19.6
102287 1999 TB_{66}	15.5	X	319.97432	313.09951	2.31189	5.64334	0.2390259	0.27541493	2.3396150	20	6 4.7	17.4
102288 1999 TR_{69}	15.8	X	173.28435	268.58609	220.80105	2.67601	0.0693321	0.22661832	2.6644406	20	8 8.9	19.8
102289 1999 TS_{71}	16.7	X	123.83649	274.12578	26.19646	5.66032	0.2035667	0.29462291	2.2367891	20	—	—
102290 1999 TH_{74}	17.0	X	93.56487	335.36600	192.60308	3.54191	0.1464268	0.27222354	2.3578650	20	7 9.2	20.2
102291 1999 TT_{74}	16.8	X	46.44024	110.27933	84.36615	2.22309	0.1240430	0.26886143	2.3774810	20	6 4.4	19.1
102292 1999 TX_{75}	16.9	X	324.62465	40.27437	220.21720	5.17293	0.1244068	0.26560468	2.3968760	20	4 8.1	19.5
102293 1999 TK_{79}	16.4	X	299.03881	196.65385	169.37423	2.46243	0.2289126	0.27765539	2.3270121	20	7 16.7	18.5
102294 1999 TW_{79}	16.8	X	343.52211	214.77579	47.92701	2.75867	0.2054778	0.27259112	2.3557448	20	5 8.9	18.5
102295 1999 TM_{81}	16.0	X	71.17580	88.68431	347.30438	5.92125	0.1327045	0.25599950	2.4564615	20	1 28.5	18.6
102296 1999 TF_{83}	16.1	X	25.03040	336.85439	176.62052	4.63261	0.0671860	0.25969297	2.4331147	20	2 21.3	18.6
102297 1999 TH_{85}	15.9	X	87.15894	6.81544	216.73971	11.75097	0.1221574	0.27440719	2.3453395	20	9 10.1	19.3
102298 1999 TO_{86}	16.6	X	209.88705	180.49855	168.82039	9.97701	0.2574948	0.26720656	2.3872870	20	3 15.9	20.7
102299 1999 TV_{86}	16.5	X	317.91967	210.62754	170.99196	3.36609	0.1482978	0.28498063	2.2869631	20	10 8.7	18.0
102300 1999 TS_{87}	16.5	X	208.62097	262.99460	128.35676	2.57821	0.1350848	0.26553820	2.3972760	20	5 10.5	20.2
102301 1999 TO_{90}	15.7	X	309.71907	215.13085	140.07626	5.24219	0.1690923	0.27841207	2.3227939	20	8 1.6	17.5
102302 1999 TK_{91}	16.0	X	346.62373	50.48848	22.56543	6.56295	0.1553002	0.24341216	2.5404337	20	—	—
102303 1999 TQ_{91}	16.0	X	12.04341	287.20376	40.44191	6.50114	0.1484746	0.28380512	2.2932737	20	11 1.3	18.2
102304 1999 TB_{92}	16.0	X	213.59947	223.49695	130.42098	7.00861	0.1241376	0.26543738	2.3978831	20	3 30.3	19.7
102305 1999 TG_{92}	15.6	X	173.24774	342.82679	54.61922	7.40172	0.1205030	0.26462063	2.4028145	20	4 13.7	19.1
102306 1999 TF_{93}	15.2	X	180.99387	327.46667	61.58898	6.86238	0.1264750	0.26452348	2.4034028	20	4 11.3	18.8
102307 1999 TV_{95}	16.4	X	320.56612	194.47770	157.60769	4.81806	0.2593811	0.27940780	2.3172721	20	8 10.8	17.4
102308 1999 TF_{96}	16.0	X	263.07887	12.50387	41.62777	7.58548	0.1835701	0.27694847	2.3309703	20	8 11.0	18.9
102309 1999 TM_{96}	15.7	X	304.89484	15.52709	44.61996	9.28871	0.1434844	0.23604550	2.5930182	20	10 27.7	18.4
102310 1999 TR_{96}	16.2	X	64.00055	197.40184	122.14108	5.97417	0.1866871	0.28979558	2.2615605	20	—	—
102311 1999 TU_{96}	15.3	X	6.77300	322.79342	100.37623	7.17743	0.1872048	0.24431167	2.5341943	20	—	—
102312 1999 TA_{98}	14.4	X	161.06290	86.07081	48.07324	11.54479	0.0604536	0.27458034	2.3443534	20	8 11.2	17.8
102313 1999 TS_{98}	15.7	X	238.57457	293.20893	73.49894	5.34469	0.1963615	0.26954360	2.3734679	20	5 4.3	19.3
102314 1999 TB_{99}	15.9	X	328.90295	144.81379	169.20082	12.60108	0.1136946	0.27502227	2.3418414	20	7 9.9	18.5
102315 1999 TT_{99}	15.4	X	163.76766	286.83841	124.22265	6.73772	0.1338220	0.26369584	2.4084291	20	4 23.1	19.1
102316 1999 TN_{100}	16.5	X	299.30027	158.81433	159.55999	6.77287	0.1984654	0.27341098	2.3510331	20	5 12.2	19.2
102317 1999 TP_{101}	15.7	X	182.44898	282.09383	87.13986	11.79826	0.1888065	0.26194134	2.4191716	20	3 24.2	19.9
102318 1999 TF_{103}	15.4	X	259.96919	225.46962	160.04834	13.56080	0.2610220	0.22453523	2.6808945	20	6 12.9	19.7
102319 1999 TW_{103}	15.9	X	266.99423	24.93374	338.91980	4.87989	0.1604064	0.27267752	2.3552472	20	6 3.8	19.0
102320 1999 TF_{104}	15.9	X	318.28348	81.77685	221.76587	4.56828	0.1911586	0.27324340	2.3519943	20	5 22.7	17.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102321 1999 TL_{105}	15.7	X	354.37636	18.13412	18.62031	13.13781	0.3157542	0.23858296	2.5746000	20	—	—
102322 1999 TS_{105}	16.0	X	27.01911	163.26718	195.05001	2.76993	0.2495926	0.28776360	2.2721943	20	—	—
102323 1999 TR_{106}	14.5	X	211.79321	162.58818	221.13321	7.37701	0.1813512	0.17369741	3.1813185	20	5 3.2	19.6
102324 1999 TZ_{106}	14.2	X	244.46668	73.89455	271.65336	15.28459	0.1431436	0.17524572	3.1625527	20	4 14.8	19.4
102325 1999 TB_{107}	14.6	X	255.82788	141.46770	250.18926	9.87968	0.2109251	0.17989985	3.1077699	20	6 19.9	19.5
102326 1999 TM_{108}	16.1	X	339.73729	77.88471	315.98723	5.47370	0.1777690	0.23895213	2.5719476	20	11 28.1	18.5
102327 1999 TG_{109}	14.1	X	176.12879	205.37653	211.58086	19.24686	0.1249614	0.17275015	3.1929375	20	5 12.7	19.2
102328 1999 TJ_{109}	16.3	X	185.66746	70.25572	227.03085	6.52117	0.0563047	0.30342841	2.1933026	20	—	—
102329 1999 TM_{110}	15.6	X	231.34606	198.37935	208.22479	6.12598	0.1125894	0.27363593	2.3497444	20	6 25.9	18.9
102330 1999 TA_{111}	16.6	X	73.46320	120.63196	225.07906	5.53745	0.1938590	0.29407092	2.2395873	20	—	—
102331 1999 TA_{112}	15.4	X	110.99893	52.53353	229.88637	3.83694	0.1800846	0.29244290	2.2478914	20	12 28.8	18.9
102332 1999 TG_{112}	16.3	X	126.31455	65.42644	349.33851	1.75567	0.2118167	0.25957798	2.4338332	20	3 24.5	19.8
102333 1999 TK_{112}	16.8	X	130.93042	2.49577	314.27455	1.58608	0.1524846	0.29838255	2.2179603	20	—	—
102334 1999 TP_{112}	15.9	X	82.59043	96.83055	212.68063	4.10703	0.2040927	0.29179048	2.2512409	20	—	—
102335 1999 TZ_{112}	14.4	X	208.88164	18.89271	346.12972	14.85696	0.0961892	0.17023157	3.2243535	20	4 6.5	19.6
102336 1999 TA_{114}	15.4	X	118.72672	235.92787	209.90855	5.21857	0.2082669	0.21406606	2.7676054	20	4 27.5	19.7
102337 1999 TN_{114}	15.9	X	315.40283	198.00819	183.71313	3.63750	0.1873930	0.23358996	2.6111587	20	9 15.5	18.3
102338 1999 TD_{115}	16.0	X	323.98072	115.52506	312.09499	4.66490	0.2451749	0.23888947	2.5723973	20	12 20.7	17.8
102339 1999 TH_{115}	15.5	X	28.78498	266.54245	241.47078	5.47475	0.0758274	0.25969029	2.4331315	20	2 17.8	18.3
102340 1999 TE_{116}	16.1	X	165.00715	84.19002	334.59675	2.52452	0.1874821	0.26490299	2.4011068	20	5 2.4	19.9
102341 1999 TR_{118}	16.2	X	301.63832	94.17900	275.48575	2.02742	0.1835861	0.23022716	2.6365237	20	7 30.7	18.8
102342 1999 TO_{120}	16.1	X	283.45442	4.90235	355.17710	7.08800	0.1279169	0.27453628	2.3446043	20	6 29.3	19.0
102343 1999 TP_{120}	16.0	X	227.55474	55.36322	322.72664	2.38750	0.1854466	0.26916083	2.3757175	20	5 7.1	19.7
102344 1999 TA_{121}	16.9	X	180.45545	33.87778	11.99682	2.28824	0.1874721	0.26550743	2.3974613	20	4 30.3	20.9
102345 1999 TQ_{121}	15.9	X	259.34587	259.78828	182.01780	7.90423	0.1593349	0.27972499	2.3155200	20	9 15.2	18.6
102346 1999 TF_{122}	15.9	X	128.76179	170.94318	197.37259	7.28110	0.1206404	0.25480780	2.4641146	20	1 15.6	19.3
102347 1999 TJ_{122}	16.5	X	214.15068	210.59440	176.30004	6.52025	0.2143519	0.26815851	2.3816338	20	5 7.1	20.4
102348 1999 TT_{122}	14.7	X	192.28902	250.14308	187.09571	13.43205	0.2131554	0.17288489	3.1912783	20	6 18.6	20.4
102349 1999 TX_{122}	15.9	X	304.04803	147.52877	197.16724	7.02890	0.1380805	0.27546016	2.3393589	20	7 7.4	18.4
102350 1999 TJ_{123}	15.5	X	129.25479	297.21618	137.65246	3.72133	0.1661756	0.26149126	2.4219468	20	4 19.5	19.1
102351 1999 TY_{123}	16.1	X	232.49625	196.51195	190.43334	5.42935	0.1537933	0.27014505	2.3699437	20	5 28.2	19.6
102352 1999 TY_{126}	17.0	X	29.11101	125.28780	186.95136	1.95557	0.2511877	0.28491139	2.2873336	20	11 22.6	19.7
102353 1999 TQ_{127}	15.6	X	163.97888	12.79478	89.19650	1.73702	0.1773510	0.26824258	2.3811362	20	6 27.3	19.4
102354 1999 TD_{130}	16.5	X	205.46146	3.59960	338.94491	1.16021	0.1188889	0.26345727	2.4098828	20	3 4.9	20.0
102355 1999 TC_{131}	14.7	X	143.66201	231.00690	193.89660	5.82281	0.0781335	0.16876115	3.2430557	20	4 17.2	19.5
102356 1999 TN_{133}	16.1	X	344.49225	85.21174	348.72477	2.58071	0.1347693	0.24295750	2.5436021	20	—	—
102357 1999 TZ_{133}	17.0	X	257.60252	88.21989	228.41049	0.71465	0.1814025	0.26730397	2.3867070	20	3 19.5	20.6
102358 1999 TN_{134}	15.4	X	89.50482	267.55181	0.36179	4.01315	0.1517445	0.23850581	2.5751552	20	11 9.6	19.3
102359 1999 TO_{134}	16.2	X	82.82982	272.10008	3.63073	3.97404	0.0296019	0.23683560	2.5872480	20	10 29.9	19.6
102360 1999 TU_{134}	16.0	X	276.58766	49.52735	337.69131	1.77685	0.1009116	0.22845670	2.6501276	20	7 29.3	19.4
102361 1999 TE_{136}	17.1	X	343.83127	343.73833	278.04162	1.30925	0.0943633	0.31772129	2.1270213	20	5 17.7	18.8
102362 1999 TS_{138}	16.7	X	285.18270	209.28730	227.46164	1.71923	0.1425395	0.23452789	2.6041923	20	10 14.0	19.6
102363 1999 TG_{139}	15.8	X	350.62016	194.83120	354.02030	2.05898	0.1417016	0.25821825	2.4423698	20	2 8.9	18.3
102364 1999 TR_{139}	16.1	X	64.90382	191.52518	341.24374	2.28942	0.1305199	0.26540634	2.3980700	20	6 3.0	18.7
102365 1999 TU_{139}	16.4	X	103.83826	31.85834	211.76714	7.62820	0.0753180	0.28197022	2.3032119	20	10 27.4	19.6
102366 1999 TR_{140}	16.4	X	320.05681	93.76395	312.66010	1.74500	0.1194709	0.23525062	2.5988559	20	11 4.4	19.2
102367 1999 TS_{140}	16.5	X	295.05552	35.40747	13.25816	4.48236	0.2621782	0.23153943	2.6265525	20	9 3.4	19.0
102368 1999 TB_{141}	15.7	X	161.90160	70.32308	4.64070	1.36525	0.0567726	0.21744719	2.7388411	20	5 16.3	19.6
102369 1999 TC_{142}	16.0	X	199.69967	124.42272	192.07770	3.33383	0.2205613	0.26012066	2.4304470	20	1 28.3	20.2
102370 1999 TE_{143}	15.4	X	315.86729	8.51507	16.35246	14.36786	0.1567084	0.23503472	2.6004472	20	9 27.5	18.0
102371 1999 TW_{143}	15.6	X	58.11511	315.73813	355.33011	14.55182	0.1041853	0.23980303	2.5658599	20	11 20.7	19.4
102372 1999 TL_{144}	16.0	X	284.17649	219.30881	205.03801	5.97459	0.0772869	0.28293832	2.2979551	20	10 14.4	18.4
102373 1999 TP_{144}	16.0	X	205.87705	30.43387	9.45160	7.29252	0.1219653	0.26940579	2.3742772	20	5 16.4	19.6
102374 1999 TY_{144}	16.0	X	100.12178	64.66726	351.30009	6.16310	0.1004884	0.25691865	2.4505992	20	2 9.6	19.0
102375 1999 TK_{145}	14.8	X	64.57116	114.69448	189.65655	9.76714	0.1036198	0.19215236	2.9742141	20	11 16.5	19.2
102376 1999 TX_{145}	15.0	X	18.30396	141.16254	31.77693	8.56245	0.1099483	0.26180551	2.4200083	20	3 13.2	17.4
102377 1999 TZ_{145}	16.3	X	326.40933	22.39064	270.73693	1.57657	0.2048871	0.27433589	2.3457459	20	5 19.8	18.3
102378 1999 TA_{146}	16.1	X	121.31685	217.49956	229.36288	2.49408	0.1694193	0.26225619	2.4172350	20	4 25.0	19.5
102379 1999 TR_{146}	15.1	X	97.26992	217.75675	142.14400	2.47355	0.0790720	0.20216342	2.8751974	20	—	—
102380 1999 TE_{150}	15.9	X	35.10564	251.62012	46.36692	6.89214	0.1411109	0.28253554	2.3001385	20	10 24.8	18.5
102381 1999 TU_{151}	15.7	X	247.27518	212.43427	181.46410	7.04280	0.1155017	0.27245358	2.3565376	20	6 27.7	19.0
102382 1999 TZ_{151}	15.7	X	273.70429	324.76718	51.19348	7.23342	0.1269711	0.27416539	2.3467183	20	7 8.0	18.6
102383 1999 TH_{152}	15.9	X	287.75010	193.08723	202.34040	2.16450	0.2273484	0.22975507	2.6401341	20	8 5.0	19.0
102384 1999 TL_{152}	16.0	X	17.32819	233.22770	129.33057	1.69337	0.1885614	0.23894739	2.5719816	20	12 21.9	19.1
102385 1999 TQ_{152}	15.9	X	310.33012	194.66711	178.04839	5.63445	0.2453081	0.23089394	2.6314454	20	8 11.1	18.2
102386 1999 TB_{153}	15.5	X	264.42259	183.98133	169.07914	6.44287	0.1320645	0.27033657	2.3688243	20	5 22.9	18.6
102387 1999 TB_{155}	16.1	X	107.57058	254.14054	21.67168	6.71092	0.1688009	0.28961026	2.2625252	20	12 16.6	19.8
102388 1999 TG_{155}	15.8	X	117.38934	274.41895	179.38279	9.01181	0.1841621	0.26090007	2.4256041	20	5 4.0	19.3
102389 1999 TM_{155}	15.8	X	358.83317	240.72553	61.50632	7.26911	0.1642593	0.27744873	2.3281675	20	9 2.2	17.8
102390 1999 TP_{155}	15.9	X	237.60767	157.73354	191.07496	6.34632	0.1843051	0.26665405	2.3905835	20	4 10.5	19.7
102391 1999 TH_{157}	14.8	X	255.52223	114.92663	1.80458	12.97110	0.2155027	0.23636719	2.5906649	20	10 9.8	18.1
102392 1999 TN_{157}	15.8	X	311.93744	268.73804	197.65027	2.21631	0.0721577	0.24438182	2.5337093	20	—	—
102393 1999 TA_{160}	16.1	X	82.04343	78.44673	329.10654	3.84833	0.1406809	0.25382443	2.4704748	20	1 7.4	18.7
102394 1999 TL_{161}	16.5	X	85.95331	299.52594	351.83033	3.61033	0.1297333	0.28880918	2.2667070	20	12 13.7	19.8
102395 1999 TE_{164}	15.9	X	312.28687	206.36450	139.88300	7.38203	0.1393042	0.27514409	2.3411501	20	7 26.7	18.1
102396 1999 TD_{166}	16.2	X	29.18528	43.18798	225.46177	6.00245	0.0886372	0.27757492	2.3274618	20	8 19.4	18.8
102397 1999 TN_{167}	16.2	X	186.04277	234.21360	198.93315	5.82302	0.0667193	0.27105664	2.3646272	20	6 12.4	19.4
102398 1999 TZ_{168}	16.3	X	109.71906	296.80000	229.08819	6.12638	0.0494420	0.27229792	2.3574356	20	7 13.3	19.4
102399 1999 TG_{169}	16.4	X	169.17649	63.21839	219.37902	3.62791	0.1265080	0.29797590	2.2199778	20	—	—
102400 1999 TW_{169}	16.5	X	185.83901	3.29460	323.56669	1.84256	0.2045844	0.25847354	2.4407614	20	1 30.3	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102401 1999 TY_{169}	15.3	X	225.02201	60.13449	232.02263	3.35725	0.0762081	0.21013851	2.8019838	20	1 28.5	19.6
102402 1999 TS_{171}	15.9	X	204.81501	25.68879	41.05923	7.64701	0.1041641	0.27004276	2.3705422	20	6 23.5	19.3
102403 1999 TB_{172}	16.4	X	163.69818	319.82006	91.66995	1.81088	0.2041108	0.26259607	2.4151489	20	4 24.4	20.2
102404 1999 TJ_{172}	16.2	X	97.78575	160.71759	156.02790	2.22536	0.1933940	0.29230411	2.2486029	20	—	—
102405 1999 TP_{172}	16.3	X	344.33569	209.93945	172.05383	1.76513	0.3017364	0.28399626	2.2922447	20	12 29.5	17.9
102406 1999 TR_{173}	16.9	X	190.52867	304.06473	100.76793	2.24521	0.1832286	0.26529333	2.3987510	20	5 9.1	20.8
102407 1999 TW_{174}	15.9	X	307.58033	232.35773	230.67672	3.32745	0.1018146	0.24290122	2.5439950	20	—	—
102408 1999 TM_{175}	16.3	X	2.90451	50.83881	215.72506	5.82364	0.1254233	0.27381460	2.3487222	20	7 3.3	18.4
102409 1999 TN_{175}	16.2	X	328.78544	113.79590	260.95881	2.46107	0.1201569	0.23305343	2.6151647	20	10 4.7	19.0
102410 1999 TS_{175}	15.6	X	223.25160	41.25495	3.02366	5.97368	0.0291784	0.22202002	2.7011039	20	6 20.9	19.3
102411 1999 TB_{177}	16.4	X	321.22989	40.57956	256.33109	0.69568	0.0273708	0.27028191	2.3691436	20	6 9.5	19.2
102412 1999 TZ_{179}	16.0	X	123.53367	241.93279	175.97823	1.31968	0.1660651	0.25828846	2.4419272	20	3 20.7	19.5
102413 1999 TC_{181}	15.3	X	339.31932	198.19217	185.82762	5.09080	0.2373969	0.23413958	2.6070708	20	11 19.1	17.3
102414 1999 TA_{182}	16.0	X	262.60128	107.00990	356.07276	8.55626	0.1733171	0.23587288	2.5942832	20	10 8.6	19.1
102415 1999 TH_{183}	15.9	X	304.57522	19.07895	83.52936	3.60078	0.0471714	0.24127898	2.5553853	20	12 29.7	18.8
102416 1999 TL_{184}	15.3	X	298.48207	64.49012	263.21617	12.59743	0.0734243	0.27259256	2.3557365	20	6 13.1	17.8
102417 1999 TN_{184}	15.7	X	132.62987	133.59077	251.86447	13.76442	0.0969646	0.25745903	2.4471690	20	2 3.6	19.3
102418 1999 TN_{187}	15.7	X	345.47738	150.52747	309.78493	9.83731	0.1574818	0.24471760	2.5313911	20	—	—
102419 1999 TD_{189}	13.8	X	197.67554	22.22143	4.60027	21.27202	0.0368926	0.16867075	3.2442143	20	4 20.9	18.9
102420 1999 TC_{190}	15.5	X	292.51289	59.85586	349.83416	13.03689	0.1783833	0.23162351	2.6259168	20	9 12.5	18.2
102421 1999 TZ_{190}	15.5	X	204.43188	125.64158	1.51765	14.33654	0.2855339	0.22685972	2.6625501	20	8 30.7	20.2
102422 1999 TW_{191}	16.1	X	41.84354	359.69514	322.77523	6.32146	0.2045737	0.28591169	2.2819955	20	12 14.2	19.3
102423 1999 TJ_{192}	15.2	X	195.88318	93.28689	301.46715	7.03276	0.0778556	0.21739387	2.7392890	20	4 30.7	19.5
102424 1999 TD_{194}	15.7	X	26.41953	48.40571	256.92605	3.45666	0.1757713	0.28091288	2.3089877	20	10 25.5	18.3
102425 1999 TN_{194}	15.9	X	259.70252	35.48778	287.36264	6.84699	0.1934859	0.26647955	2.3916271	20	3 24.9	19.6
102426 1999 TY_{196}	15.3	X	198.26777	121.46097	34.18624	11.37082	0.0313620	0.23207219	2.6225311	20	10 17.9	19.0
102427 1999 TK_{200}	15.9	X	329.45906	49.78505	42.86005	12.17585	0.1987791	0.23885776	2.5726250	20	—	—
102428 1999 TD_{201}	16.2	X	135.76397	17.11245	271.95338	7.37588	0.1718446	0.29692012	2.2252371	20	—	—
102429 1999 TD_{202}	16.3	X	78.79007	31.05169	293.63976	1.55759	0.1326938	0.24298507	2.5434097	20	—	—
102430 1999 TG_{204}	15.8	X	299.43020	311.79200	16.57688	6.99465	0.1272470	0.27052808	2.3677063	20	6 5.4	18.5
102431 1999 TL_{205}	16.6	X	272.21300	45.85328	251.96525	2.64315	0.2310744	0.31434252	2.1422359	20	2 28.9	19.8
102432 1999 TA_{207}	14.0	X	197.84286	175.78802	253.47624	19.70318	0.1998137	0.17367261	3.1816214	20	6 13.6	19.3
102433 1999 TL_{209}	15.6	X	130.10433	60.61359	333.32365	12.42670	0.0660453	0.25506124	2.4624820	20	2 14.5	18.7
102434 1999 TD_{210}	15.0	X	1.28538	94.86430	342.78883	11.10982	0.1799579	0.24185839	2.5513024	20	—	—
102435 1999 TN_{210}	15.2	X	356.60865	55.99187	2.42679	13.49107	0.1567396	0.23901082	2.5715265	20	—	—
102436 1999 TX_{211}	16.1	X	302.13301	12.42431	78.87143	5.43743	0.1899080	0.23730691	2.5838212	20	12 3.1	18.3
102437 1999 TY_{212}	15.8	X	283.82934	86.46294	319.99313	2.56036	0.1413399	0.23127984	2.6285174	20	8 29.4	18.7
102438 1999 TJ_{213}	16.6	X	224.55956	87.69914	262.87360	2.22623	0.1870562	0.26675728	2.3899668	20	3 29.9	20.5
102439 1999 TQ_{213}	16.5	X	208.82060	174.68885	247.21352	3.06604	0.1270001	0.27192744	2.3595763	20	6 20.1	19.7
102440 1999 TW_{213}	16.6	X	180.11431	175.40419	150.93313	1.52079	0.1918364	0.25781717	2.4449022	20	1 24.0	20.4
102441 1999 TX_{213}	16.4	X	281.97876	249.52702	183.92578	3.83940	0.2319307	0.23338071	2.6127192	20	9 19.3	19.0
102442 1999 TZ_{214}	15.0	X	40.76255	252.50680	137.95454	2.87477	0.0922194	0.19721602	2.9230838	20	—	—
102443 1999 TB_{215}	16.1	X	135.95102	36.57026	63.09174	3.43299	0.1402500	0.26486159	2.4013570	20	5 25.3	19.5
102444 1999 TT_{215}	15.8	X	324.29822	292.56784	151.46206	3.76541	0.1701869	0.24011235	2.5636558	20	—	—
102445 1999 TF_{216}	16.0	X	278.16756	0.61274	54.93020	4.32772	0.1988863	0.23055142	2.6340510	20	8 26.5	19.2
102446 1999 TO_{216}	16.2	X	20.95034	275.22540	151.90780	2.24153	0.1158156	0.24644195	2.5195692	20	—	—
102447 1999 TR_{216}	16.2	X	220.68325	0.15090	338.20429	3.67241	0.0063579	0.26201132	2.4187409	20	3 19.6	19.3
102448 1999 TS_{216}	16.6	X	227.42456	359.85299	309.44938	2.40995	0.2037779	0.26191547	2.4193310	20	2 11.4	20.4
102449 1999 TC_{217}	16.5	X	156.94869	247.15038	207.03415	4.12593	0.1935281	0.26712503	2.3877727	20	6 11.2	20.3
102450 1999 TD_{217}	16.1	X	140.14374	325.39659	76.43268	2.40092	0.1853709	0.25895297	2.4377479	20	3 20.9	19.8
102451 1999 TL_{217}	15.9	X	13.16450	195.36590	205.21825	8.74762	0.1160462	0.24143850	2.5542596	20	—	—
102452 1999 TV_{217}	16.5	X	261.58244	193.85247	191.81577	3.22327	0.2476721	0.27272539	2.3549716	20	6 15.9	19.8
102453 1999 TW_{217}	16.3	X	97.72888	54.54592	14.91822	6.35015	0.1090893	0.25625749	2.4548126	20	2 26.6	19.3
102454 1999 TY_{218}	16.4	X	79.44408	142.63160	170.65529	5.24615	0.3187821	0.29269470	2.2466020	20	—	—
102455 1999 TU_{220}	15.8	X	172.47044	120.02756	292.13453	3.77775	0.1845419	0.26477867	2.4018583	20	4 30.1	19.8
102456 1999 TJ_{221}	16.4	X	234.08165	193.24451	159.23774	6.85301	0.1571435	0.26744309	2.3858793	20	4 15.4	20.0
102457 1999 TP_{221}	15.8	X	304.49522	188.13809	153.06324	7.19327	0.1905826	0.27468015	2.3437855	20	6 24.8	18.2
102458 1999 TH_{225}	15.0	X	201.60381	104.84105	352.34135	9.22023	0.0744699	0.18123899	3.0924425	20	7 30.7	19.7
102459 1999 TD_{226}	16.6	X	97.68089	318.39825	325.38965	0.44287	0.1987498	0.28794677	2.2712307	20	12 18.9	20.1
102460 1999 TN_{226}	16.3	X	314.85675	30.33765	248.06041	2.32185	0.1757112	0.26918093	2.3755993	20	4 9.2	19.0
102461 1999 TG_{227}	16.5	X	242.04166	340.67209	8.40091	3.37469	0.2194538	0.26950693	2.3736832	20	4 11.3	20.1
102462 1999 TE_{229}	16.0	X	34.99122	329.45728	18.19874	7.01167	0.1789194	0.29066026	2.2570730	20	—	—
102463 1999 TD_{230}	16.0	X	37.78363	179.61005	120.19311	7.60847	0.1409535	0.28325642	2.2962344	20	11 2.7	18.8
102464 1999 TG_{230}	16.1	X	335.89145	250.86918	64.40524	6.90088	0.1533275	0.27730601	2.3289662	20	7 28.8	18.1
102465 1999 TB_{231}	14.5	X	330.58015	272.46926	34.69870	16.48704	0.0920614	0.18001132	3.1064868	20	6 29.9	18.7
102466 1999 TW_{232}	16.3	X	344.86621	12.49256	10.42536	5.29354	0.0844733	0.23668372	2.5883547	20	11 12.4	19.3
102467 1999 TA_{233}	15.1	X	269.67009	276.41191	147.77899	14.61322	0.1152950	0.22913192	2.6449187	20	9 7.5	18.5
102468 1999 TV_{234}	16.0	X	85.86240	231.36020	66.54813	6.43637	0.1810049	0.28983900	2.2613347	20	12 25.4	19.5
102469 1999 TC_{237}	16.0	X	66.82212	236.77839	124.42463	4.60983	0.1752496	0.29263010	2.2469326	20	—	—
102470 1999 TQ_{239}	16.5	X	239.04561	310.47387	95.56366	5.78919	0.0891282	0.27271894	2.3550087	20	7 8.5	19.6
102471 1999 TN_{241}	15.8	X	175.99685	342.74975	71.79777	7.56471	0.1267750	0.26505338	2.4001985	20	5 8.2	19.4
102472 1999 TT_{242}	15.0	X	91.24514	273.33689	124.22716	7.97665	0.1702139	0.25118359	2.4877604	20	1 12.8	17.6
102473 1999 TW_{244}	15.6	X	205.79029	270.65094	189.65100	12.43647	0.3033003	0.22536157	2.6743371	20	7 22.4	20.6
102474 1999 TZ_{245}	15.6	X	270.13937	243.27733	155.90576	13.18538	0.1712311	0.22635245	2.6665266	20	7 23.5	19.2
102475 1999 TA_{246}	15.5	X	321.98963	230.55516	162.43869	13.99777	0.2019560	0.23282257	2.6168932	20	10 22.3	17.9
102476 1999 TC_{246}	15.9	X	124.19435	320.10028	133.05476	5.63289	0.1623392	0.26093646	2.4253786	20	5 8.3	19.5
102477 1999 TQ_{247}	15.4	X	308.05775	249.83013	204.39952	10.85946	0.1450851	0.23778809	2.5803344	20	12 20.9	18.2
102478 1999 TN_{248}	16.2	X	324.00293	237.73175	153.86527	4.48198	0.2890123	0.23332828	2.6131106	20	10 21.2	17.6
102479 1999 TQ_{250}	15.4	X	79.17068	155.45075	316.60253	8.87405	0.1157580	0.21303106	2.7765623	20	3 27.2	19.1
102480 1999 TW_{250}	15.2	X	30.53388	291.71486	48.88321	0.49278	0.0895547	0.18978798	2.9988650	20	11 14.7	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102481 1999 TG_{252}	15.7	X	328.84512	246.93475	126.90418	8.50855	0.1768028	0.23380531	2.6095551	20	10 9.3	18.2
102482 1999 TH_{252}	15.3	X	343.80167	317.10399	133.15235	9.46335	0.2086089	0.24299161	2.5433641	20	—	—
102483 1999 TA_{253}	15.4	X	129.94112	296.42768	103.91253	4.85957	0.1661070	0.25798571	2.4438373	20	3 7.3	18.9
102484 1999 TU_{256}	16.6	X	128.42344	229.05917	175.57139	4.68901	0.1832775	0.25910133	2.4368172	20	3 10.7	20.2
102485 1999 TQ_{258}	16.2	X	246.47044	117.00511	326.46619	1.82148	0.1914617	0.23027802	2.6361354	20	8 20.6	19.8
102486 1999 TY_{258}	16.5	X	315.20348	221.58375	198.56445	2.51275	0.1274566	0.23736323	2.5834125	20	11 16.8	19.2
102487 1999 TF_{260}	16.6	X	160.72632	190.18591	188.83269	5.20447	0.1469342	0.26171055	2.4205937	20	3 6.9	20.2
102488 1999 TU_{260}	15.8	X	138.99952	64.54682	341.47500	5.43417	0.1506039	0.30673199	2.1775259	20	3 15.6	18.6
102489 1999 TC_{262}	16.6	X	40.77326	188.81211	319.78752	1.57044	0.0595387	0.25957992	2.4338211	20	3 10.8	19.4
102490 1999 TD_{264}	14.8	X	327.56228	207.02798	42.28312	1.67187	0.0706062	0.16897030	3.2403789	20	4 13.1	19.0
102491 1999 TK_{264}	16.4	X	29.23913	0.48851	203.97701	4.37906	0.1592516	0.26566201	2.3965312	20	5 23.0	18.4
102492 1999 TG_{265}	13.2	X	199.53000	97.22266	260.22971	16.52858	0.0467012	0.17000865	3.2271715	20	3 17.5	18.4
102493 1999 TW_{265}	15.0	X	328.89651	274.04460	253.05049	13.68038	0.0421875	0.25577803	2.4578793	20	—	—
102494 1999 TQ_{273}	14.7	X	280.50328	100.87504	262.78132	13.80697	0.1725025	0.22645365	2.6657321	20	6 19.8	18.3
102495 1999 TH_{274}	16.5	X	329.38318	158.08416	212.44703	2.06904	0.2679438	0.28435702	2.2903055	20	10 22.3	17.2
102496 1999 TT_{277}	15.9	X	29.69530	134.34062	14.84966	9.71647	0.1600236	0.25731181	2.4481023	20	3 1.2	18.1
102497 1999 TY_{278}	15.6	X	318.38281	245.66229	26.86467	5.92557	0.1145235	0.26536259	2.3983335	20	4 17.9	18.2
102498 1999 TQ_{280}	16.5	X	282.42293	234.58901	130.45275	2.74719	0.1813752	0.27622577	2.3350343	20	6 24.9	19.1
102499 1999 TD_{282}	15.0	X	309.48250	261.98713	177.30068	27.17978	0.1853525	0.23436222	2.6054194	20	12 2.8	18.2
102500 1999 TG_{283}	15.5	X	285.18878	3.23784	62.18947	8.63719	0.0979072	0.23315857	2.6143785	20	10 8.7	18.7
102501 1999 TZ_{283}	15.9	X	79.58404	251.57786	171.55969	5.91472	0.1135517	0.25276043	2.4774030	20	1 19.7	18.8
102502 1999 TF_{285}	15.9	X	244.12029	146.62174	190.18371	14.51590	0.1892371	0.26572475	2.3961539	20	3 31.7	19.7
102503 1999 TJ_{288}	16.2	X	277.98898	164.03688	147.14322	3.17272	0.1846854	0.26801566	2.3824800	20	4 4.6	19.3
102504 1999 TV_{288}	15.9	X	55.92787	120.82624	180.57589	6.93641	0.1577408	0.28439232	2.2901159	20	11 27.9	19.1
102505 1999 TZ_{288}	16.5	X	88.63991	130.79061	182.12724	5.97164	0.2125446	0.29088312	2.2559200	20	—	—
102506 1999 TU_{289}	16.4	X	332.95296	172.67108	131.79453	3.08204	0.2144516	0.27467051	2.3438403	20	6 23.9	17.9
102507 1999 TL_{290}	15.8	X	264.66324	277.42287	173.70173	4.71910	0.1764661	0.23162459	2.6259086	20	9 26.4	19.1
102508 1999 TZ_{291}	16.5	X	258.42855	184.24295	147.25546	2.54412	0.2142566	0.26755342	2.3852233	20	4 6.4	20.1
102509 1999 TE_{293}	15.6	X	233.91550	241.24723	242.81221	10.58192	0.2577321	0.23058070	2.6338280	20	9 15.2	19.9
102510 1999 TP_{293}	15.9	X	333.14137	298.42265	4.52846	7.05305	0.2121590	0.27382157	2.3486823	20	6 21.9	17.6
102511 1999 TQ_{298}	16.7	X	37.03953	307.30956	222.20761	1.88177	0.1227994	0.26588882	2.3951681	20	4 8.3	19.0
102512 1999 TO_{300}	15.0	X	16.59594	1.06378	181.12298	11.64884	0.1094161	0.16935387	3.2354843	20	3 31.2	19.0
102513 1999 TE_{303}	16.7	X	8.24720	199.90006	52.34875	1.39363	0.1989987	0.27443936	2.3451562	20	6 27.8	18.3
102514 1999 TC_{304}	15.9	X	227.21822	124.47238	167.88776	6.29843	0.1204837	0.25838249	2.4413348	20	1 23.4	19.6
102515 1999 TT_{305}	16.2	X	23.39973	325.43839	344.61162	4.03734	0.2438787	0.28166096	2.3048975	20	11 7.9	18.7
102516 1999 TC_{306}	16.9	X	160.27083	250.92865	295.11376	1.44764	0.1249599	0.28449448	2.2895677	20	10 13.4	20.2
102517 1999 TZ_{309}	16.0	X	83.36070	199.14565	162.90248	7.08688	0.1505763	0.25208053	2.4818556	20	—	—
102518 1999 TB_{312}	16.7	X	302.05591	95.58810	342.10038	1.11013	0.1005696	0.24002416	2.5642838	20	11 19.3	19.4
102519 1999 TO_{312}	16.3	X	100.39164	265.29525	71.39405	6.26237	0.2198986	0.29720755	2.2238022	20	—	—
102520 1999 TW_{318}	16.3	X	5.46518	137.22186	34.28502	6.34317	0.1310710	0.25722194	2.4486726	20	2 14.9	18.8
102521 1999 TE_{319}	16.5	X	321.38796	120.05009	163.85764	2.53250	0.2074467	0.27238396	2.3569391	20	4 25.4	18.6
102522 1999 TC_{321}	14.9	X	13.61476	164.34539	218.61632	12.07986	0.1570036	0.18960890	3.0007529	20	12 22.6	18.8
102523 1999 UG	16.0	X	202.38258	352.29778	28.41254	1.91698	0.1951684	0.26593803	2.3948726	20	4 18.1	19.9
102524 1999 UK	15.5	X	15.14213	140.74221	259.35311	1.23332	0.1686135	0.24268451	2.5455092	20	—	—
102525 1999 UV	15.4	X	165.97197	18.41277	29.48902	6.65868	0.1271155	0.26369116	2.4084576	20	4 17.9	19.0
102526 1999 UG_1	15.7	X	344.18873	295.81688	48.52020	5.86264	0.1816960	0.28040376	2.3117817	20	10 9.4	17.3
102527 1999 UH_2	15.9	X	4.42979	149.43488	208.59214	6.75861	0.1407575	0.28415880	2.2913705	20	12 2.4	18.3
102528 1999 US_3	13.6	X	170.20085	181.89128	268.20242	29.06135	0.5199516	0.21489041	2.7605229	20	6 19.1	19.5
102529 1999 UD_4	15.0	X	224.33310	323.36607	40.88937	6.84236	0.1580862	0.26628420	2.3927966	20	4 19.5	18.7
102530 1999 UF_4	16.2	X	287.01026	250.96522	116.02175	2.80733	0.1840482	0.22691409	2.6621247	20	7 2.2	19.3
102531 1999 UP_4	16.0	X	247.84957	357.68467	16.48597	2.68843	0.2117796	0.27137741	2.3627635	20	5 20.1	19.6
102532 1999 UU_4	15.8	X	298.75569	171.74598	243.56593	1.80824	0.1922209	0.23371793	2.6102055	20	9 30.3	18.2
102533 1999 UB_5	15.7	X	352.06838	181.24156	251.73320	6.33504	0.1430300	0.24278245	2.5448246	20	—	—
102534 1999 UJ_5	14.2	X	359.91870	28.52987	339.84355	28.95063	0.1682654	0.23489529	2.6014761	20	11 15.1	17.9
102535 1999 UL_6	16.0	X	310.03205	172.37964	207.47849	4.13362	0.2490779	0.23109363	2.6299292	20	8 20.9	18.3
102536 Luanenjie	14.9	X	185.75376	339.97614	52.38905	10.16206	0.3138224	0.21542981	2.7559131	20	4 22.6	20.0
102537 1999 UY_7	16.0	X	188.62780	7.48024	48.75295	7.04600	0.1131907	0.26589827	2.3951113	20	5 21.6	19.4
102538 1999 UZ_9	15.4	X	49.08746	318.07300	354.76696	25.00986	0.1774842	0.28428643	2.2906846	20	11 28.9	19.2
102539 1999 UT_{10}	14.5	X	263.44393	78.89561	7.06264	20.97139	0.2300111	0.27486958	2.3427085	20	9 19.4	17.1
102540 1999 UV_{11}	16.3	X	262.49019	151.33154	75.57287	1.42293	0.0503040	0.25077396	2.4904687	20	—	—
102541 1999 UN_{12}	15.5	X	315.35300	151.78232	290.12802	3.40358	0.2319259	0.23801677	2.5786814	20	12 19.5	17.2
102542 1999 UT_{12}	15.4	X	152.44441	171.80979	209.24316	7.33424	0.2104008	0.21242905	2.7818056	20	3 8.8	20.1
102543 1999 UV_{12}	15.6	X	310.66371	152.96929	210.92915	6.53782	0.1243368	0.27919495	2.3184497	20	8 21.1	17.8
102544 1999 UK_{13}	15.8	X	56.97717	98.48539	217.94726	5.73788	0.1544246	0.28846091	2.2685311	20	12 17.8	18.9
102545 1999 UP_{14}	15.5	X	246.64119	260.19142	201.73623	13.77984	0.1537288	0.23129062	2.6284358	20	9 17.2	19.3
102546 1999 UQ_{15}	15.6	X	116.85052	226.53883	177.76391	5.98946	0.1351990	0.25594939	2.4567822	20	2 18.9	18.9
102547 1999 UW_{15}	16.4	X	115.66558	138.87183	190.74647	7.17689	0.1824470	0.29619963	2.2288442	20	—	—
102548 1999 UF_{16}	15.4	X	172.97944	84.48198	23.87840	7.40492	0.0605791	0.27084311	2.3658699	20	7 17.2	18.7
102549 1999 UP_{16}	16.3	X	267.98580	178.37386	225.47590	6.08103	0.1314100	0.27554027	2.3389054	20	8 5.7	19.2
102550 1999 UY_{17}	16.5	X	27.48093	71.10118	76.59171	2.24849	0.1350783	0.25821182	2.4424104	20	2 19.7	18.8
102551 1999 UC_{18}	16.1	X	358.04503	50.60784	33.45289	10.36163	0.1001108	0.24617942	2.5213602	20	—	—
102552 1999 UF_{20}	16.8	X	280.97695	120.71781	188.81922	4.97720	0.1460327	0.26931723	2.3747977	20	4 10.7	20.0
102553 1999 UJ_{20}	16.8	X	18.49225	104.68248	49.50853	3.18118	0.1367390	0.25805677	2.4433886	20	2 12.1	19.0
102554 1999 US_{21}	16.7	X	9.23025	137.60761	35.67798	6.83236	0.1142668	0.25808532	2.4432084	20	2 25.9	19.2
102555 1999 UG_{22}	16.1	X	275.98703	68.12241	49.05684	2.64364	0.0755701	0.23820487	2.5773237	20	12 3.5	19.2
102556 1999 UW_{23}	15.6	X	296.37717	73.99049	270.07200	5.75114	0.1316345	0.27409720	2.3471075	20	6 24.9	18.0
102557 1999 UY_{23}	15.9	X	42.82621	61.24439	261.13375	6.18182	0.1799915	0.28648986	2.2789242	20	12 12.4	18.9
102558 1999 UJ_{24}	14.6	X	156.52353	129.05012	257.39008	6.85434	0.2383191	0.21215119	2.7842340	20	3 18.9	19.5
102559 1999 UJ_{25}	13.8	X	56.79567	79.62221	7.18361	13.41585	0.2002215	0.15570950	3.4218369	20	2 19.6	18.1
102560 1999 UR_{25}	15.8	X	128.06604	14.66711	27.98554	2.76588	0.1901121	0.25639789	2.4539163	20	3 9.9	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102561 1999 UX_{27}	15.7	X	137.82410	231.37467	197.83442	9.19821	0.1600768	0.21631508	2.7483889	20	4 21.5	19.9
102562 1999 UD_{28}	16.5	X	83.16333	139.28854	202.15153	5.54122	0.1926996	0.29530090	2.2333641	20	—	—
102563 1999 UW_{29}	16.4	X	54.92783	159.63577	34.52061	4.39769	0.1342653	0.26956086	2.3733666	20	6 19.9	19.1
102564 1999 UH_{30}	16.4	X	79.95389	118.39462	55.17200	2.76895	0.1531320	0.26898327	2.3767630	20	6 30.9	19.2
102565 1999 UL_{30}	16.8	X	321.25607	204.09968	175.12191	3.06677	0.1924978	0.23377530	2.6097784	20	9 25.3	19.1
102566 1999 UB_{32}	16.6	X	334.26397	155.95338	50.55727	1.98506	0.1143844	0.25860290	2.4399473	20	2 11.1	19.2
102567 1999 UY_{32}	16.3	X	97.60589	296.64868	32.41899	5.35848	0.1976479	0.29418904	2.2389878	20	—	—
102568 1999 UG_{35}	16.4	X	169.17535	208.30286	192.22588	1.32531	0.2060009	0.26249944	2.4157415	20	4 14.9	20.3
102569 1999 UQ_{35}	16.6	X	104.64488	257.98473	231.85642	3.65410	0.0621322	0.26408992	2.4060326	20	5 19.1	19.7
102570 1999 UW_{35}	16.5	X	67.25671	267.76070	2.30679	7.13115	0.1087681	0.28498674	2.2869304	20	10 21.2	19.4
102571 1999 UX_{35}	16.1	X	88.66780	167.21068	200.90283	4.62072	0.1522748	0.29869031	2.2164365	20	—	—
102572 1999 UW_{36}	16.7	X	171.17322	43.32170	196.58968	5.66010	0.0839065	0.29434319	2.2382060	20	—	—
102573 1999 UH_{40}	16.2	X	58.95727	176.65519	359.86832	6.85812	0.0508282	0.26643784	2.3918766	20	5 15.2	19.1
102574 1999 UH_{41}	16.0	X	162.85427	198.46908	191.71472	10.57747	0.2592931	0.26056601	2.4276768	20	3 29.9	20.2
102575 1999 UQ_{42}	15.8	X	195.14750	349.39525	341.93259	8.27238	0.2607848	0.26034830	2.4290301	20	2 14.3	20.0
102576 1999 UZ_{42}	15.3	X	291.31976	338.27213	357.91287	9.65762	0.1677223	0.27256365	2.3559031	20	5 26.3	18.3
102577 1999 UE_{43}	15.9	X	296.25300	17.36794	324.89818	5.83304	0.1579919	0.27367515	2.3495200	20	6 17.2	18.5
102578 1999 UO_{43}	15.7	X	278.23098	66.75664	346.55446	9.12288	0.1888645	0.23003858	2.6379644	20	8 24.3	18.8
102579 1999 UZ_{43}	15.0	X	231.52224	145.43992	21.00553	13.73422	0.0928946	0.23801514	2.5786931	20	11 30.5	18.6
102580 1999 UC_{44}	16.7	X	120.42934	156.71548	254.95654	4.57816	0.1254321	0.30470176	2.1871878	20	2 24.5	19.3
102581 1999 US_{44}	15.6	X	330.26494	66.61580	244.32793	6.08670	0.1306209	0.27474472	2.3434183	20	7 6.7	17.8
102582 1999 UD_{46}	15.4	X	0.34519	40.07550	237.23006	10.08231	0.2220644	0.27459539	2.3442678	20	7 20.2	17.1
102583 1999 UE_{47}	16.1	X	271.88482	70.87298	353.98882	3.72454	0.0770097	0.23097944	2.6307960	20	9 16.3	19.5
102584 1999 UE_{48}	14.7	X	139.39929	244.01822	353.28036	6.81181	0.1594273	0.23877733	2.5732026	20	11 17.9	18.9
102585 1999 UJ_{48}	16.2	X	220.92905	277.42944	145.55671	2.32403	0.1990911	0.26954639	2.3734515	20	6 28.5	19.9
102586 1999 UR_{49}	17.4	X	194.98241	210.66940	160.49463	3.58945	0.1799681	0.31091411	2.1579552	20	3 29.1	20.7
102587 1999 UA_{50}	16.6	X	188.46481	210.67060	159.98900	3.84313	0.1880910	0.26216839	2.4177747	20	3 25.5	20.4
102588 1999 UM_{52}	14.6	X	130.03207	309.17497	177.82009	11.55998	0.1432388	0.21726349	2.7403848	20	6 23.6	19.0
102589 1999 UP_{52}	15.9	X	355.97660	168.04568	168.90808	8.70720	0.2002486	0.28037077	2.3119631	20	10 26.9	17.9
102590 1999 UT_{52}	15.8	X	199.91002	237.87993	150.65349	8.74404	0.2332163	0.21695519	2.7429803	20	4 29.5	20.7
102591 1999 UP_{57}	17.7	X	347.32089	204.37446	53.78691	1.01698	0.1105526	0.31516088	2.1385259	20	5 17.9	19.3
102592 1999 VE_{1}	15.6	X	287.58217	21.69378	18.60794	10.19022	0.1126967	0.27802679	2.3249393	20	9 12.3	18.0
102593 1999 VY_{1}	15.9	X	33.01006	356.10924	38.86306	4.00721	0.0940564	0.24315123	2.5422508	20	—	—
102594 1999 VC_{3}	16.2	X	297.16665	225.93214	63.59398	7.16482	0.1340561	0.26502627	2.4003621	20	4 9.8	19.2
102595 1999 VJ_{3}	16.5	X	296.58056	139.90651	135.65373	1.81951	0.1703840	0.26318201	2.4115628	20	3 12.6	19.4
102596 1999 VN_{3}	16.7	X	286.71329	154.31014	100.65708	2.47086	0.1524274	0.25814418	2.4428370	20	2 5.9	20.0
102597 1999 VS_{3}	16.1	X	222.60144	247.99316	189.49333	2.75392	0.0790804	0.22409964	2.6843673	20	7 28.4	20.0
102598 1999 VE_{4}	16.0	X	346.13802	253.05141	162.33971	4.64965	0.2235125	0.24024161	2.5627362	20	—	—
102599 1999 VX_{4}	15.6	X	9.60291	225.28121	201.23605	0.75511	0.1224326	0.24348447	2.5399307	20	—	—
102600 1999 VC_{5}	15.5	X	320.26949	32.63600	42.76026	4.50719	0.1982063	0.23752815	2.5822165	20	12 19.8	17.6
102601 1999 VD_{5}	15.5	X	197.43148	330.72714	52.03570	3.44743	0.1927917	0.26426275	2.4049834	20	4 17.3	19.4
102602 1999 VG_{5}	16.2	X	344.59282	157.37945	223.53733	0.14331	0.2471641	0.28373073	2.2936746	20	12 17.9	17.7
102603 1999 VP_{5}	15.3	X	319.46490	350.75211	84.58060	1.15260	0.1078729	0.23699662	2.5860760	20	12 15.2	18.1
102604 1999 VW_{5}	15.6	X	209.61903	351.51415	53.44191	2.19683	0.1811411	0.26639982	2.3921042	20	5 26.1	19.3
102605 1999 VH_{9}	15.5	X	169.10359	356.02517	43.09202	5.44506	0.1874001	0.26114912	2.4240617	20	4 13.3	19.3
102606 1999 VA_{10}	15.6	X	280.26384	34.87987	19.75141	12.72660	0.2758256	0.22937939	2.6430160	20	8 19.2	19.0
102607 1999 VJ_{11}	14.7	X	62.87852	325.28062	52.21980	6.44694	0.1307675	0.24404691	2.5360268	20	—	—
102608 1999 VH_{13}	14.9	X	295.08517	38.02634	59.27351	33.30938	0.2437293	0.23233568	2.6205479	20	11 19.5	17.0
102609 1999 VJ_{14}	14.5	X	267.81048	59.74997	56.24453	23.09518	0.2417047	0.27835758	2.3230970	20	11 8.7	16.6
102610 1999 VQ_{15}	16.4	X	263.22238	28.14550	318.24268	2.24043	0.1923354	0.27040814	2.3684063	20	5 1.4	19.6
102611 1999 VK_{19}	14.8	X	346.48818	174.59569	237.29775	11.70515	0.1641419	0.23674860	2.5878818	20	—	—
102612 1999 VY_{19}	16.1	X	250.72831	279.30141	59.23621	3.28819	0.2089653	0.26594989	2.3948014	20	4 8.7	19.8
102613 1999 VQ_{20}	15.1	X	244.33318	358.65473	352.92842	10.83437	0.2229551	0.26813153	2.3817936	20	4 13.2	18.9
102614 1999 VG_{21}	16.6	X	210.65095	117.98125	223.04073	3.78552	0.1582788	0.31050459	2.1598522	20	3 2.2	19.8
102615 1999 VJ_{21}	16.3	X	125.12631	216.46595	199.99251	2.13122	0.1893954	0.25853351	2.4403839	20	3 22.9	19.6
102616 1999 VC_{22}	15.5	X	133.47089	255.44986	139.49627	3.22403	0.1837011	0.25646287	2.4535018	20	3 4.8	18.9
102617 1999 VC_{23}	15.4	X	340.79654	332.40446	70.53052	12.65810	0.2112623	0.23657512	2.5891468	20	12 17.0	17.7
102618 1999 VJ_{23}	15.8	X	79.84433	61.90481	356.43049	3.68189	0.1298119	0.25183182	2.4834894	20	1 18.0	18.5
102619 1999 VK_{23}	16.4	X	256.45685	346.76315	67.01538	7.01789	0.2323481	0.27442509	2.3452376	20	7 22.4	19.5
102620 1999 VX_{23}	15.2	X	351.36323	132.69306	273.56057	6.29709	0.1891035	0.23747622	2.5825930	20	—	—
102621 1999 VO_{25}	16.0	X	259.13269	79.95519	310.20046	1.19915	0.0967570	0.22354547	2.6888019	20	7 9.2	19.7
102622 1999 VR_{25}	15.6	X	151.30178	226.45168	156.36588	5.23889	0.1336894	0.25789873	2.4443867	20	3 2.5	18.9
102623 1999 VM_{26}	15.9	X	46.79662	154.68617	213.53150	1.45511	0.1230549	0.24076639	2.5590110	20	—	—
102624 1999 VZ_{26}	15.4	X	250.04924	253.94770	233.83635	11.88319	0.1300067	0.23274183	2.6174984	20	10 31.2	18.8
102625 1999 VX_{27}	15.5	X	247.19161	106.11677	59.61215	4.99807	0.2062761	0.23605298	2.5929634	20	12 5.7	18.8
102626 1999 VY_{27}	14.6	X	195.18704	26.95454	300.54037	15.60635	0.0874224	0.25722737	2.4486381	20	2 2.7	18.1
102627 1999 VZ_{27}	14.2	X	268.73659	130.97590	255.75343	14.48517	0.1279365	0.18127718	3.0920081	20	7 7.9	18.7
102628 1999 VG_{28}	15.8	X	268.40353	104.97548	234.61857	5.73074	0.1390715	0.26800238	2.3825587	20	5 6.3	18.9
102629 1999 VQ_{28}	15.3	X	166.14053	159.02784	237.30344	1.58014	0.2105158	0.26080646	2.4261845	20	4 6.7	19.3
102630 1999 VM_{30}	16.0	X	266.36728	347.01616	3.89231	1.07279	0.2319935	0.26950206	2.3737118	20	5 6.7	19.4
102631 1999 VR_{31}	15.3	X	39.60680	315.67939	235.12237	8.40866	0.0795580	0.21481007	2.7612111	20	5 12.7	18.5
102632 1999 VX_{32}	16.5	X	315.10437	130.33506	227.98748	4.81711	0.1721734	0.27612168	2.3356210	20	8 15.9	18.5
102633 1999 VY_{33}	15.8	X	311.20954	269.05621	42.29035	2.83999	0.2215903	0.27114141	2.3641343	20	5 15.1	18.0
102634 1999 VD_{34}	14.6	X	166.43799	320.76783	61.01703	9.04157	0.2391234	0.21121297	2.7924731	20	3 28.7	19.5
102635 1999 VH_{34}	15.8	X	257.10800	141.14940	245.32355	1.13361	0.2199926	0.27120305	2.3637761	20	6 15.4	19.1
102636 1999 VV_{37}	15.0	X	324.84270	44.60102	68.62503	13.98289	0.2220502	0.23900090	2.5715977	20	—	—
102637 1999 VH_{38}	15.6	X	256.85661	325.53818	25.01184	2.54044	0.2378805	0.22239109	2.6980985	20	4 27.3	19.9
102638 1999 VQ_{38}	16.8	X	262.79268	284.68304	80.89004	2.79277	0.1634266	0.26962653	2.3729812	20	6 1.2	19.7
102639 1999 VV_{38}	15.3	X	207.21509	257.92536	56.55325	7.05174	0.1475565	0.25578832	2.4578134	20	2 4.1	19.2
102640 1999 VO_{39}	15.5	X	169.53756	82.04866	56.62239	14.12220	0.1188867	0.22305802	2.6927177	20	8 23.8	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102641 1999 VV_{39}	16.1	X	302.65463	55.41278	35.76786	3.99756	0.2771903	0.23778442	2.5803609	20	11 26.2	17.9
102642 1999 VY_{42}	14.6	X	102.37596	66.35837	75.50179	6.53662	0.0732266	0.16773558	3.2562614	20	6 3.2	19.2
102643 1999 VQ_{43}	15.8	X	287.09956	356.86460	348.89136	0.49947	0.2589613	0.22667047	2.6640319	20	5 21.7	19.1
102644 1999 VA_{44}	15.6	X	243.46736	150.86376	225.17573	3.43884	0.1161132	0.27011314	2.3701304	20	5 29.4	18.9
102645 1999 VC_{44}	16.4	X	354.16239	145.36430	229.05686	4.78180	0.1578579	0.28476775	2.2881027	20	12 11.5	18.5
102646 1999 VT_{46}	15.7	X	11.19983	23.62666	40.96132	22.88856	0.0639985	0.24272467	2.5452285	20	—	—
102647 1999 VT_{47}	14.8	X	20.26135	123.38306	278.29504	10.52927	0.2452854	0.24381291	2.5376492	20	—	—
102648 1999 VR_{48}	15.8	X	203.72101	63.89915	317.93494	6.27241	0.0458714	0.26381910	2.4076789	20	4 21.6	19.1
102649 1999 VW_{48}	15.0	X	325.28096	59.39635	24.80243	10.42011	0.0786975	0.19116336	2.9844636	20	12 20.3	18.9
102650 1999 VM_{51}	15.9	X	203.50169	42.73354	27.94803	9.13153	0.1822229	0.22090478	2.7101873	20	6 21.7	20.4
102651 1999 VS_{51}	14.9	X	137.65394	240.42154	33.66059	15.06361	0.1715096	0.24187386	2.5511936	20	—	—
102652 1999 VQ_{52}	15.4	X	358.33851	341.49865	73.56539	7.05612	0.2255464	0.23887549	2.5724976	20	—	—
102653 1999 VG_{53}	15.4	X	344.24764	352.89581	30.01439	4.86236	0.1635161	0.23414254	2.6070488	20	11 18.3	17.9
102654 1999 VV_{53}	15.8	X	236.58990	30.49491	29.40171	5.05260	0.0839419	0.22548151	2.6733886	20	7 23.9	19.6
102655 1999 VV_{54}	16.6	X	284.49498	351.55222	41.87666	2.94852	0.2123908	0.27678417	2.3318926	20	8 6.7	19.0
102656 1999 VY_{54}	16.1	X	301.80833	117.86681	175.29758	0.93336	0.1872297	0.26868416	2.3785266	20	4 9.5	19.0
102657 1999 VZ_{54}	14.9	X	303.02552	74.82770	39.08180	11.22565	0.0782612	0.19333470	2.9620758	20	12 25.9	18.8
102658 1999 VK_{55}	16.5	X	144.59153	186.22166	259.23901	0.61145	0.1509460	0.26341666	2.4101305	20	5 16.3	20.1
102659 1999 VO_{55}	16.5	X	101.20836	125.86692	221.50802	2.07738	0.1944806	0.29614056	2.2291405	20	—	—
102660 1999 VA_{56}	16.7	X	88.37322	119.01817	210.80053	5.21090	0.1482315	0.29204025	2.2499571	20	—	—
102661 1999 VX_{57}	16.4	X	92.71776	108.72755	226.64937	4.03905	0.1876056	0.29250410	2.2475779	20	—	—
102662 1999 VZ_{58}	15.9	X	183.15234	204.52768	228.52339	10.16190	0.0234635	0.26701464	2.3884308	20	6 9.1	19.1
102663 1999 VA_{59}	15.8	X	155.71970	40.03948	42.54543	3.06166	0.0993042	0.21617690	2.7495600	20	5 21.4	19.8
102664 1999 VB_{59}	16.3	X	59.24308	211.86002	226.46965	2.86004	0.1061312	0.29869537	2.2164115	20	—	—
102665 1999 VC_{59}	16.2	X	177.00345	338.35911	43.99311	2.75018	0.2220298	0.26136257	2.4227418	20	3 31.2	20.3
102666 1999 VO_{60}	15.8	X	246.19759	120.07195	212.98671	6.65142	0.1407010	0.26527403	2.3988673	20	3 31.9	19.5
102667 1999 VB_{62}	15.8	X	313.02466	52.53014	223.83828	14.61196	0.1574373	0.26659875	2.3909141	20	4 4.7	18.6
102668 1999 VG_{62}	15.7	X	223.89033	68.94603	225.75567	6.07624	0.1086557	0.25648946	2.4533323	20	1 22.8	19.4
102669 1999 VQ_{62}	15.5	X	38.76447	19.44420	53.15748	3.21554	0.1269178	0.20006291	2.8952873	20	—	—
102670 1999 VT_{62}	15.3	X	302.69313	52.65243	49.85938	11.07445	0.1359507	0.23826444	2.5768941	20	12 22.7	18.0
102671 1999 VW_{62}	15.6	X	336.06857	353.11310	49.14995	8.22989	0.2311840	0.23646185	2.5899736	20	12 7.6	17.7
102672 1999 VY_{62}	14.8	X	18.98016	295.79825	47.43055	13.75261	0.1839201	0.23638274	2.5905514	20	11 25.6	18.0
102673 1999 VZ_{63}	16.3	X	68.64535	254.06153	50.87560	6.94204	0.1550812	0.28569936	2.2831260	20	12 14.4	19.6
102674 1999 VA_{66}	15.5	X	263.17422	287.47639	67.28867	4.28394	0.1050326	0.22106689	2.7088622	20	5 26.4	19.2
102675 1999 VM_{66}	16.3	X	258.65885	133.72282	201.11009	2.38188	0.1749796	0.26683068	2.3895285	20	4 14.2	19.6
102676 1999 VC_{67}	15.5	X	282.08340	36.63790	68.29600	4.36442	0.0598435	0.23597253	2.5935527	20	11 27.5	18.4
102677 1999 VJ_{68}	16.1	X	175.67796	158.35384	207.24606	1.87321	0.2072047	0.25890414	2.4380544	20	3 7.8	20.1
102678 1999 VL_{68}	15.6	X	231.73213	144.96706	204.82106	2.14466	0.1985642	0.26458097	2.4030546	20	4 4.8	19.4
102679 1999 VP_{68}	17.0	X	82.76008	218.34030	225.77493	3.92556	0.0886344	0.30238129	2.1983632	20	2 9.8	19.3
102680 1999 VQ_{68}	16.1	X	103.62911	248.78529	53.75142	7.30619	0.2009108	0.28979884	2.2615435	20	—	—
102681 1999 VM_{69}	16.0	X	269.40136	156.36869	251.09282	1.19041	0.0962949	0.22806444	2.6531654	20	8 15.8	19.4
102682 1999 VQ_{69}	16.3	X	44.22618	264.49569	39.99415	5.96398	0.1778448	0.28294497	2.2979191	20	11 18.7	19.1
102683 1999 VW_{69}	16.3	X	230.01849	99.24526	224.70213	2.71758	0.2149192	0.31060056	2.1594073	20	2 26.1	19.8
102684 1999 VG_{70}	16.4	X	36.47322	100.50683	219.23544	2.68126	0.2505209	0.23676131	2.5877892	20	11 30.5	19.8
102685 1999 VK_{70}	16.3	X	242.83862	347.75478	46.71796	6.99823	0.1081326	0.27043397	2.3682555	20	6 24.0	19.5
102686 1999 VS_{70}	16.8	X	5.36066	52.67372	52.00658	4.87905	0.0741364	0.29486434	2.2355680	20	—	—
102687 1999 VR_{71}	16.8	X	328.57396	306.58590	62.86734	3.04561	0.1028497	0.27896827	2.3197054	20	10 10.3	18.8
102688 1999 VK_{72}	15.1	X	109.35830	33.69749	114.46548	4.38196	0.1434096	0.25917633	2.4363471	20	6 30.4	18.4
102689 1999 VA_{73}	16.4	X	288.67338	308.46004	42.81300	3.03154	0.1918467	0.27236519	2.3570474	20	6 11.9	18.9
102690 1999 VG_{73}	15.8	X	24.30480	281.80311	194.68825	5.75537	0.0866275	0.25405463	2.4689823	20	—	—
102691 1999 VS_{73}	15.9	X	139.17380	92.04607	45.05995	3.54681	0.1002134	0.27151244	2.3619800	20	7 16.8	19.3
102692 1999 VW_{73}	16.3	X	65.08787	309.09522	164.62068	2.26582	0.1637936	0.25759937	2.4462801	20	3 14.9	18.6
102693 1999 VL_{77}	16.9	X	231.36404	15.34000	9.26808	2.58638	0.2009459	0.26844565	2.3799352	20	5 18.4	20.7
102694 1999 VO_{77}	14.9	X	232.08759	331.86053	26.34357	8.87917	0.0874198	0.26473757	2.4021069	20	4 23.6	18.1
102695 1999 VP_{77}	15.9	X	239.79261	342.58408	11.75382	2.66555	0.2136257	0.26646838	2.3916939	20	4 16.6	19.7
102696 1999 VA_{81}	15.9	X	214.92260	216.88631	114.77709	3.96384	0.1904484	0.26070709	2.4268010	20	2 29.9	19.9
102697 1999 VE_{84}	15.5	X	51.68543	20.89716	193.79802	7.82825	0.0400474	0.22668865	2.6638894	20	6 27.7	19.1
102698 1999 VL_{85}	13.5	X	97.13707	229.01002	105.52341	19.18794	0.0627403	0.14900945	3.5236561	20	—	—
102699 1999 VH_{86}	16.2	X	260.51935	231.42177	167.38109	5.65676	0.1078245	0.27405043	2.3473745	20	7 23.6	19.1
102700 1999 VR_{86}	16.5	X	342.47583	355.54972	29.42711	5.08439	0.1858998	0.28600561	2.2814958	20	12 9.7	18.4
102701 1999 VU_{86}	16.1	X	34.51370	204.86225	170.53370	14.27096	0.1992522	0.24166373	2.5526723	20	—	—
102702 1999 VY_{86}	15.3	X	308.25744	258.96251	158.53915	12.76729	0.1941844	0.23372500	2.6101528	20	10 29.2	17.9
102703 1999 VE_{87}	15.4	X	304.60605	152.72204	208.42807	24.33515	0.2690699	0.27550613	2.3390986	20	7 6.5	18.3
102704 1999 VO_{87}	15.3	X	199.04023	28.64679	50.73554	14.38283	0.1347922	0.22245599	2.6975737	20	6 30.9	19.7
102705 1999 VM_{88}	16.0	X	240.73423	294.84571	38.90988	5.42234	0.1350610	0.26461993	2.4028188	20	3 30.4	19.6
102706 1999 VT_{90}	15.6	X	298.11469	42.89457	39.55787	4.87236	0.3018633	0.23542897	2.5975432	20	10 26.1	17.5
102707 1999 VA_{91}	16.7	X	120.99541	76.42720	222.47392	7.14254	0.1803701	0.29300008	2.2450407	20	—	—
102708 1999 VB_{91}	15.2	X	129.14538	211.85687	43.54595	6.97065	0.1322701	0.23898655	2.5717006	20	12 1.6	19.2
102709 1999 VL_{91}	15.4	X	259.99752	339.48991	39.09238	6.47429	0.0502133	0.22462134	2.6802093	20	7 2.0	19.0
102710 1999 VM_{91}	16.3	X	122.68371	195.02006	203.31664	5.27437	0.1069787	0.25661216	2.4525502	20	2 13.5	19.5
102711 1999 VE_{93}	16.0	X	236.08432	74.16011	17.82698	3.49098	0.2128658	0.22910019	2.6451628	20	8 18.8	20.1
102712 1999 VQ_{93}	16.2	X	70.09850	85.17036	31.64890	1.61604	0.1297997	0.25872604	2.4391731	20	3 22.7	18.6
102713 1999 VT_{93}	15.5	X	64.52985	192.57354	200.91464	1.61712	0.1030020	0.20091217	2.8871225	20	—	—
102714 1999 VW_{93}	16.6	X	232.37258	244.65770	28.34636	4.25975	0.0849656	0.30398524	2.1906234	20	—	—
102715 1999 VZ_{93}	15.4	X	323.89333	42.93020	32.29300	15.48825	0.0349888	0.24068834	2.5595641	20	12 19.2	18.9
102716 1999 VZ_{94}	16.5	X	74.78122	284.22531	30.30424	4.40052	0.1579650	0.28939201	2.2636626	20	—	—
102717 1999 VO_{95}	16.7	X	207.82366	273.10098	52.10321	2.77615	0.1824376	0.26074834	2.4265450	20	2 16.0	20.6
102718 1999 VZ_{97}	16.2	X	143.18630	45.38292	55.06651	3.88573	0.0965125	0.26509165	2.3999674	20	5 30.7	19.7
102719 1999 VR_{98}	16.3	X	215.09701	193.03987	44.79554	7.87519	0.0704862	0.29424243	2.2387169	20	—	—
102720 1999 VW_{98}	16.2	X	43.69666	313.50829	222.84122	6.94369	0.0834308	0.26213976	2.4179507	20	4 26.9	18.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102721 1999 VZ_{98}	15.7	X	262.22146	52.43503	221.12921	5.66102	0.1028011	0.25843353	2.4410133	20	2 5.2	19.3
102722 1999 VL_{99}	16.3	X	142.14990	311.57516	182.37192	1.85543	0.0368572	0.22103299	2.7091392	20	7 8.3	20.2
102723 1999 VM_{99}	16.6	X	3.94808	246.89553	64.73337	3.37823	0.1626809	0.27754763	2.3276144	20	9 25.6	18.6
102724 1999 VP_{99}	16.1	X	7.70466	126.58295	219.74108	4.72985	0.2102558	0.23507884	2.6001218	20	11 17.8	18.7
102725 1999 VE_{100}	16.7	X	92.49812	233.11781	236.32882	1.74337	0.1506768	0.25819852	2.4424942	20	4 17.6	19.8
102726 1999 VX_{100}	16.8	X	157.55595	116.97344	261.83933	0.23278	0.2017223	0.25814791	2.4428134	20	3 8.6	20.7
102727 1999 VF_{101}	16.0	X	69.18738	285.87770	40.30835	1.72634	0.0343280	0.23820391	2.5773305	20	12 18.5	19.3
102728 1999 VS_{101}	15.8	X	259.19682	205.55845	225.61703	2.42560	0.0633193	0.22862434	2.6488319	20	9 7.5	19.4
102729 1999 VX_{101}	16.1	X	268.70618	233.15195	72.29956	2.50060	0.1932566	0.26430239	2.4047429	20	3 17.2	19.6
102730 1999 VE_{102}	15.7	X	330.01555	297.83311	148.17977	14.15279	0.1573064	0.23857398	2.5746646	20	—	—
102731 1999 VJ_{102}	15.6	X	35.23270	168.27550	150.31172	1.13784	0.2593397	0.18840176	3.0135570	20	11 18.5	19.5
102732 1999 VV_{102}	17.1	X	69.56279	260.54272	52.95496	2.08454	0.1234957	0.28626420	2.2801217	20	12 23.9	20.3
102733 1999 VX_{103}	16.4	X	66.19281	305.64633	233.23162	5.38728	0.0496559	0.26476677	2.4019303	20	6 1.2	19.1
102734 1999 VB_{104}	14.8	X	119.89276	353.69233	228.81594	16.59706	0.0440897	0.18256975	3.0773969	20	9 26.3	19.6
102735 1999 VX_{104}	16.4	X	249.22746	217.63492	63.15239	2.61511	0.1312181	0.25702888	2.4498985	20	2 1.4	20.0
102736 1999 VE_{105}	15.6	X	205.13639	304.12949	55.19836	5.39084	0.1072673	0.21332503	2.7740109	20	3 31.6	20.0
102737 1999 VW_{105}	16.3	X	353.09731	203.58019	65.19469	5.61762	0.1450057	0.26858637	2.3791039	20	6 16.1	18.3
102738 1999 VM_{106}	16.7	X	188.14263	80.16380	240.79660	6.03533	0.1862192	0.30309634	2.1949043	20	1 17.8	20.1
102739 1999 VB_{107}	15.8	X	315.41991	78.75228	228.33018	5.61003	0.0991304	0.26860541	2.3789914	20	6 6.5	18.3
102740 1999 VJ_{107}	15.4	X	185.58719	336.04654	262.08484	1.69609	0.0852735	0.19260073	2.9695964	20	12 29.6	19.7
102741 1999 VX_{109}	16.8	X	344.47580	77.44627	228.87383	1.42102	0.2185320	0.27433901	2.3457281	20	7 30.8	17.9
102742 1999 VE_{111}	15.9	X	251.65549	294.29526	40.09446	2.52835	0.2335193	0.26519627	2.3993362	20	4 1.7	19.5
102743 1999 VJ_{111}	15.5	X	40.20934	218.33412	87.35259	2.42744	0.0997387	0.23067785	2.6330885	20	10 25.2	18.9
102744 1999 VO_{111}	15.6	X	317.20899	61.14324	68.07293	13.48997	0.0896187	0.24144734	2.5541972	20	—	—
102745 1999 VZ_{111}	14.7	X	36.12476	253.33334	64.06207	14.65434	0.1317342	0.23218960	2.6216469	20	11 10.6	18.0
102746 1999 VK_{113}	16.0	X	11.72036	225.05046	67.55849	8.00118	0.1186842	0.27318058	2.3523548	20	9 6.7	18.5
102747 1999 VB_{116}	16.2	X	353.39998	305.52092	168.69962	2.11831	0.1378599	0.24518145	2.5281974	20	—	—
102748 1999 VL_{117}	15.4	X	288.52088	139.79822	129.78357	1.76707	0.1739507	0.17091203	3.2157896	20	3 4.1	19.9
102749 1999 VY_{117}	15.5	X	250.17732	216.48486	201.97211	13.04322	0.1714523	0.22778435	2.6553400	20	7 22.0	19.6
102750 1999 VO_{119}	16.1	X	167.69018	282.73534	345.00741	3.00157	0.0463594	0.24567519	2.5248089	20	—	—
102751 1999 VR_{120}	16.4	X	70.38448	209.58992	47.05126	7.60087	0.0765471	0.28076179	2.3098160	20	10 6.5	19.4
102752 1999 VX_{121}	16.5	X	32.54060	233.91677	65.23645	7.57524	0.1147925	0.27858579	2.3218282	20	10 19.5	19.2
102753 1999 VB_{123}	15.4	X	49.30631	45.01759	218.55282	6.28226	0.1079230	0.27528517	2.3403502	20	9 15.9	18.3
102754 1999 VY_{123}	17.0	X	337.13132	132.12742	163.41245	2.19507	0.1572354	0.27075413	2.3663882	20	6 24.4	18.9
102755 1999 VX_{127}	16.2	X	141.36886	7.76645	62.55072	2.99377	0.1808677	0.26244808	2.4160566	20	4 26.3	19.8
102756 1999 VZ_{127}	15.7	X	155.27468	254.58497	239.63923	3.45495	0.0391823	0.22350002	2.6891664	20	7 24.6	19.5
102757 1999 VA_{128}	16.5	X	210.17460	0.67983	309.52109	0.59932	0.1858790	0.25790932	2.4443198	20	1 30.0	20.6
102758 1999 VK_{130}	15.7	X	78.81768	36.39753	288.76411	4.38697	0.2856208	0.24299552	2.5433368	20	—	—
102759 1999 VL_{130}	15.7	X	99.22814	234.17213	44.28036	23.21600	0.1716362	0.28525196	2.2855126	20	12 7.6	19.5
102760 1999 VG_{132}	16.8	X	214.60402	264.45779	148.10595	1.61969	0.1688844	0.26829390	2.3808326	20	6 10.9	20.3
102761 1999 VH_{133}	16.9	X	295.51509	47.95380	234.21187	1.36361	0.1028124	0.31307928	2.1479945	20	3 24.9	19.2
102762 1999 VX_{133}	15.4	X	292.51957	240.61299	234.87273	5.63860	0.1122395	0.23863916	2.5741958	20	12 24.4	18.2
102763 1999 VO_{135}	16.2	X	290.48937	328.75328	25.93366	4.80280	0.0792397	0.27288532	2.3540513	20	7 11.0	18.8
102764 1999 VF_{136}	16.2	X	335.43618	213.33487	53.99128	7.24122	0.1147937	0.26613920	2.3936656	20	5 10.5	18.7
102765 1999 VN_{136}	15.4	X	196.53270	64.54035	63.58080	15.11004	0.0435822	0.22559964	2.6724553	20	9 15.3	19.5
102766 1999 VQ_{136}	16.6	X	107.98121	335.57130	60.10378	6.95335	0.0898526	0.29876782	2.2160532	20	1 14.0	19.0
102767 1999 VZ_{136}	17.2	X	342.34371	353.20532	227.70108	2.27419	0.0282143	0.30781453	2.1724175	20	3 18.0	19.5
102768 1999 VC_{139}	15.9	X	5.23866	240.08434	131.24588	2.30179	0.1553566	0.23620529	2.5918486	20	12 9.7	18.7
102769 1999 VW_{139}	16.2	X	319.97039	8.68268	273.78560	1.64711	0.2067033	0.27013273	2.3700158	20	4 18.9	18.6
102770 1999 VK_{140}	16.3	X	327.19072	119.59169	239.70401	2.63176	0.2637194	0.23212441	2.6221378	20	8 31.5	18.0
102771 1999 VY_{141}	16.3	X	164.86249	4.92434	247.31801	2.40043	0.0742667	0.24164297	2.5528185	20	—	—
102772 1999 VT_{142}	16.7	X	257.81106	309.42074	336.99772	1.69204	0.1663452	0.26178355	2.4201436	20	2 12.9	20.2
102773 1999 VD_{144}	16.0	X	235.90785	152.45963	308.39184	1.39604	0.1638357	0.22879991	2.6474767	20	9 3.3	19.8
102774 1999 VH_{144}	15.6	X	239.57899	46.87456	31.25016	13.40595	0.1229552	0.22697311	2.6616633	20	8 21.2	19.6
102775 1999 VS_{144}	13.7	X	235.43828	115.38402	239.91180	21.02934	0.0754724	0.17287637	3.1913832	20	4 27.6	18.6
102776 1999 VZ_{144}	15.6	X	3.67621	190.72811	272.30745	7.18770	0.1087233	0.24637282	2.5200405	20	—	—
102777 1999 VH_{145}	15.3	X	338.49748	328.80193	16.99725	12.63538	0.1866744	0.23486917	2.6016690	20	9 17.7	17.7
102778 1999 VT_{145}	16.3	X	4.79302	200.83052	135.09970	1.25682	0.0334085	0.22993064	2.6387899	20	10 5.9	19.7
102779 1999 VN_{146}	15.9	X	258.00283	9.79920	216.93059	6.49982	0.0799465	0.25015152	2.4945983	20	—	—
102780 1999 VO_{147}	16.9	X	154.20051	231.85874	85.36344	2.95044	0.1953202	0.29914145	2.2142075	20	—	—
102781 1999 VO_{148}	16.0	X	234.46530	92.92018	270.32403	2.04650	0.1479666	0.21885032	2.7271222	20	4 29.4	20.3
102782 1999 VE_{151}	15.7	X	266.75547	318.87349	47.44287	6.38460	0.0584726	0.22119543	2.7078127	20	6 22.5	19.3
102783 1999 VK_{151}	16.0	X	50.07137	221.53868	47.08957	7.51912	0.0907689	0.27545045	2.3394138	20	9 27.5	18.9
102784 1999 VB_{152}	16.4	X	357.54320	149.02199	94.23167	2.86092	0.1335690	0.26555260	2.3971894	20	5 15.9	18.5
102785 1999 VW_{152}	16.6	X	30.83955	38.74338	208.43894	4.42418	0.0709110	0.26942763	2.3741490	20	7 18.8	19.4
102786 1999 VV_{153}	16.6	X	10.74485	181.72196	85.68834	3.30568	0.1925387	0.27118121	2.3639030	20	7 30.9	18.3
102787 1999 VN_{154}	16.8	X	201.17023	186.22595	48.68134	3.41462	0.1192944	0.29193110	2.2505179	20	—	—
102788 1999 VY_{154}	15.6	X	281.16657	211.50052	207.10254	5.89289	0.0801305	0.28222459	2.3018277	20	9 29.3	17.9
102789 1999 VJ_{156}	17.2	X	325.28149	137.71860	224.81277	2.53866	0.1567787	0.27809113	2.3245807	20	9 19.3	18.8
102790 1999 VH_{157}	16.8	X	234.39496	122.80155	282.81477	1.20378	0.2215440	0.27295382	2.3536575	20	6 16.9	20.4
102791 1999 VR_{157}	16.2	X	242.55679	88.13574	307.70062	1.90415	0.1679552	0.27224235	2.3577564	20	6 18.1	19.6
102792 1999 VN_{158}	16.2	X	110.16811	55.23841	35.21792	7.03661	0.0768713	0.25953832	2.4340812	20	4 5.7	19.3
102793 1999 VO_{158}	16.1	X	300.51249	321.13780	350.68020	2.06537	0.2392740	0.27095294	2.3652305	20	4 24.3	18.8
102794 1999 VZ_{158}	15.5	X	216.90527	91.33319	36.38026	12.70368	0.2161902	0.22896790	2.6461817	20	9 18.2	19.8
102795 1999 VA_{163}	16.1	X	234.77454	121.68247	242.89245	2.75175	0.2404642	0.26793967	2.3829304	20	4 22.9	19.9
102796 1999 VB_{163}	16.2	X	246.40762	58.04609	338.50457	1.41471	0.2125767	0.22393438	2.6856878	20	6 17.2	20.4
102797 1999 VE_{165}	15.0	X	98.69441	107.66668	41.24776	15.59616	0.0787034	0.21661416	2.7458585	20	6 6.1	19.0
102798 1999 VF_{165}	15.8	X	110.81108	72.86135	31.68425	6.63502	0.0806311	0.26074851	2.4265439	20	4 24.6	18.8
102799 1999 VO_{165}	15.5	X	352.38659	223.55157	6.02581	3.68802	0.0190321	0.21445134	2.7642896	20	4 22.4	19.0
102800 1999 VS_{165}	15.9	X	190.11468	298.48676	264.15364	4.76613	0.1039084	0.28433183	2.2904408	20	12 9.1	18.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102801 1999 VX_{166}	16.0	X	47.53270	83.05000	46.12052	8.22951	0.0775374	0.25492009	2.4633909	20	3 1.4	18.9
102802 1999 VB_{168}	15.8	X	269.73575	149.41394	26.76379	3.21960	0.1591128	0.28905419	2.2654260	20	—	—
102803 1999 VA_{169}	16.7	X	283.41149	269.03819	51.67088	4.84772	0.2355438	0.31594676	2.1349782	20	4 14.2	19.2
102804 1999 VJ_{170}	15.7	X	56.47023	331.61369	30.63483	3.00838	0.0826863	0.24024380	2.5627206	20	—	—
102805 1999 VM_{170}	16.0	X	290.25379	36.09869	38.59176	3.77320	0.1307696	0.23183910	2.6242886	20	10 21.6	18.8
102806 1999 VU_{170}	16.6	X	332.73908	188.81886	280.28039	4.17939	0.0754111	0.28953452	2.2629197	20	—	—
102807 1999 VE_{171}	15.2	X	153.22888	222.92306	61.20542	16.12224	0.0961781	0.24206525	2.5498487	20	—	—
102808 1999 VG_{172}	15.6	X	103.60939	58.30783	62.82295	10.90835	0.0474742	0.25995496	2.4314797	20	5 5.1	18.6
102809 1999 VT_{173}	15.7	X	268.04096	302.74059	70.53463	6.48945	0.0749080	0.22331743	2.6906320	20	7 1.5	19.2
102810 1999 VH_{174}	14.7	X	37.42047	103.90039	291.59548	11.52839	0.2776791	0.24556172	2.5255866	20	—	—
102811 1999 VM_{176}	16.3	X	21.84341	281.59315	99.31664	1.36736	0.1395798	0.24023997	2.5627478	20	—	—
102812 1999 VO_{176}	16.3	X	284.97193	137.99297	304.20332	0.61819	0.1174275	0.23427907	2.6060358	20	10 24.8	19.3
102813 1999 VE_{177}	15.8	X	267.40311	235.37835	151.48934	6.79680	0.1039816	0.27313644	2.3526083	20	7 17.1	18.7
102814 1999 VK_{177}	15.5	X	22.82503	156.62029	79.27640	8.39509	0.0703892	0.26921089	2.3754231	20	6 18.9	18.1
102815 1999 VL_{177}	15.9	X	32.32146	152.67804	179.39555	8.06527	0.1593942	0.28493683	2.2871975	20	12 9.9	18.8
102816 1999 VK_{179}	16.7	X	61.76553	249.45952	112.51307	5.60185	0.1764092	0.29210843	2.2496070	20	—	—
102817 1999 VE_{180}	15.6	X	315.51950	350.38149	68.22625	8.61764	0.1793474	0.23584088	2.5945178	20	11 14.3	17.9
102818 1999 VH_{180}	15.8	X	81.03751	135.88442	175.94064	6.22037	0.1623669	0.28926337	2.2643336	20	—	—
102819 1999 VJ_{181}	16.4	X	316.38827	56.08154	26.24878	1.08561	0.0938268	0.23763931	2.5814112	20	12 19.5	19.1
102820 1999 VO_{181}	16.0	X	171.63799	100.86950	55.27010	11.11456	0.1512485	0.22609120	2.6685803	20	9 15.6	20.4
102821 1999 VR_{181}	17.0	X	322.56320	126.95376	237.98671	2.62796	0.1423592	0.27834026	2.3231934	20	9 17.2	19.0
102822 1999 VD_{182}	16.3	X	335.15259	58.21877	217.64827	2.70246	0.1152602	0.26718047	2.3874424	20	5 23.3	18.4
102823 1999 VM_{182}	16.8	X	233.70636	229.74498	151.03073	1.02124	0.0846895	0.26703523	2.3883080	20	5 27.6	20.0
102824 1999 VU_{182}	15.9	X	350.14364	204.67658	58.41131	5.13318	0.0355776	0.26552881	2.3973326	20	6 3.8	18.6
102825 1999 VQ_{183}	15.3	X	28.78218	187.56533	157.39036	1.12275	0.0959967	0.18780926	3.0198918	20	11 18.6	19.2
102826 1999 VA_{184}	16.7	X	147.48535	245.01901	137.45410	1.68825	0.1959051	0.25740714	2.4474979	20	3 3.9	20.3
102827 1999 VU_{184}	15.8	X	325.04514	199.99954	194.05718	5.42333	0.1249418	0.23514627	2.5996247	20	10 28.5	18.3
102828 1999 VS_{186}	16.0	X	93.67306	133.29580	204.91678	7.51860	0.1781529	0.29351581	2.2424101	20	—	—
102829 1999 VK_{187}	16.4	X	184.00097	315.71006	79.82723	4.93837	0.1611752	0.26316469	2.4116687	20	4 22.5	20.2
102830 1999 VU_{187}	16.5	X	26.96656	260.55122	89.74148	4.79534	0.1712474	0.28543934	2.2845123	20	12 28.7	19.1
102831 1999 VK_{189}	15.7	X	347.93100	93.33830	228.22079	7.75403	0.2151393	0.27620128	2.3351723	20	9 3.9	17.4
102832 1999 VL_{189}	16.2	X	50.35159	140.10331	210.49464	4.11278	0.1643933	0.28751167	2.2735215	20	—	—
102833 1999 VU_{189}	16.0	X	329.45249	203.96348	193.00250	3.67240	0.2070673	0.23366976	2.6105642	20	11 12.3	18.1
102834 1999 VF_{190}	16.7	X	67.44066	294.34087	109.51141	3.90043	0.1181694	0.29481195	2.2358328	20	—	—
102835 1999 VN_{190}	16.1	X	17.43712	225.84057	151.57212	2.58396	0.0432821	0.23763295	2.5814573	20	12 19.4	19.3
102836 1999 VL_{191}	15.4	X	239.87533	94.62997	60.59386	3.71360	0.0516468	0.18887668	3.0085032	20	11 24.9	19.6
102837 1999 VE_{192}	15.1	X	3.13298	349.75184	50.69667	10.88768	0.0976393	0.19039792	2.9924570	20	12 22.0	19.0
102838 1999 VO_{192}	15.6	X	344.65538	270.80479	22.15252	10.94454	0.1745536	0.27347479	2.3506674	20	7 10.1	17.7
102839 1999 VY_{193}	16.3	X	31.92908	12.91485	359.63938	3.31405	0.2484143	0.24085824	2.5583603	20	—	—
102840 1999 VO_{194}	15.7	X	10.25391	265.38389	163.49327	8.40499	0.1414171	0.24262550	2.5459220	20	—	—
102841 1999 VT_{194}	16.0	X	140.58492	339.39327	124.22434	1.52235	0.1603138	0.26543621	2.3978901	20	6 6.2	19.6
102842 1999 VP_{196}	15.9	X	24.27431	237.56121	98.12607	12.28688	0.2417904	0.28427778	2.2907311	20	12 16.5	18.8
102843 1999 VZ_{197}	15.1	X	266.20058	311.56168	102.14002	8.81937	0.0936098	0.18062208	3.0994798	20	8 17.9	19.5
102844 1999 VM_{198}	16.2	X	127.12143	213.56912	112.70154	8.54317	0.1619256	0.29673604	2.2261573	20	—	—
102845 1999 VP_{198}	15.8	X	279.80038	219.17795	128.69227	8.42980	0.1604810	0.22365149	2.6879520	20	6 1.1	19.5
102846 1999 VR_{201}	15.8	X	35.10021	75.51233	299.84259	2.49366	0.2170835	0.24102267	2.5571966	20	—	—
102847 1999 VV_{202}	13.9	X	225.51978	115.07618	290.20341	11.01939	0.2562900	0.17393450	3.1784269	20	6 4.7	19.4
102848 1999 VR_{203}	15.4	X	135.80615	340.83520	74.09354	10.59696	0.2053539	0.26154980	2.4215854	20	4 8.1	19.2
102849 1999 VT_{210}	15.9	X	160.83472	52.15502	1.96180	4.56973	0.1548255	0.21405097	2.7677355	20	4 22.7	20.3
102850 1999 VF_{211}	16.3	X	273.02115	171.79712	298.46717	3.80180	0.2078181	0.23444070	2.6048380	20	10 28.9	19.1
102851 1999 VX_{212}	15.8	X	278.27281	305.03821	112.35218	4.84075	0.1142722	0.22951395	2.6419829	20	9 11.7	19.0
102852 1999 VG_{213}	16.9	X	167.42854	324.93925	226.02304	3.98278	0.1615399	0.27833501	2.3232226	20	10 24.7	20.5
102853 1999 VU_{217}	16.1	X	31.52501	233.69960	37.78061	10.94062	0.0772562	0.27687680	2.3313725	20	9 4.4	18.9
102854 1999 VN_{220}	16.0	X	337.98791	28.20934	263.83028	8.49595	0.2314358	0.27281649	2.3544473	20	6 12.9	17.2
102855 1999 VM_{223}	16.2	X	274.20060	264.08283	143.71446	6.81365	0.0873662	0.27607690	2.3358736	20	9 1.6	18.7
102856 1999 VQ_{223}	14.3	X	211.55168	72.84011	92.41686	13.54060	0.1375634	0.18463539	3.0544012	20	10 30.6	19.2
102857 1999 VG_{224}	16.0	X	151.57337	261.40199	174.62882	6.73421	0.1109738	0.26164094	2.4210230	20	5 10.4	19.6
102858 1999 VY_{225}	16.4	X	339.79548	233.50041	163.49166	5.16849	0.1750433	0.23561435	2.5961805	20	12 3.4	19.0
102859 1999 WH_{1}	16.6	X	290.92263	335.52711	49.11815	4.17938	0.2407865	0.27502306	2.3418369	20	7 30.4	18.8
102860 1999 WJ_{1}	15.7	X	218.65625	291.94610	61.10924	9.05045	0.1137831	0.26050488	2.4280566	20	4 5.3	19.4
102861 1999 WZ_{2}	15.8	X	164.01263	113.95387	81.04084	4.77209	0.0998816	0.27822660	2.3238261	20	10 31.6	19.0
102862 1999 WB_{3}	16.2	X	356.39516	343.54266	82.92473	2.39638	0.2134638	0.24003090	2.5642357	20	—	—
102863 1999 WL_{3}	15.0	X	310.32696	32.93083	87.93048	13.65439	0.2282481	0.23763484	2.5814436	20	—	—
102864 1999 WA_{4}	15.9	X	300.10297	346.00668	8.35485	2.67073	0.2460776	0.27361316	2.3498748	20	6 26.9	18.2
102865 1999 WD_{4}	14.9	X	327.96311	331.15618	49.10236	11.05124	0.1170001	0.23051984	2.6342916	20	10 15.7	17.8
102866 1999 WA_{5}	15.9	X	313.24507	266.51156	124.10058	4.92974	0.2504321	0.27844106	2.3226327	20	10 7.0	17.1
102867 1999 WE_{5}	15.8	X	306.21812	236.84481	149.24264	6.09098	0.2160337	0.27591438	2.3367907	20	9 9.4	17.2
102868 1999 WO_{6}	15.3	X	120.07402	19.04582	76.92619	14.75735	0.1645749	0.21130342	2.7916761	20	5 10.5	19.7
102869 1999 WN_{10}	15.0	X	276.22249	49.53261	38.59914	11.01462	0.1016708	0.18780330	3.0199557	20	10 14.4	19.0
102870 1999 WZ_{10}	16.4	X	358.26811	139.12221	317.44443	0.44203	0.2239948	0.29190327	2.2506610	20	—	—
102871 1999 WB_{11}	16.4	X	270.84847	315.13426	79.34714	3.50330	0.2094785	0.27388953	2.3482938	20	7 16.7	19.2
102872 1999 WE_{11}	15.2	X	147.46310	154.92236	92.06902	2.91254	0.0394320	0.18899950	3.0071998	20	12 1.4	19.5
102873 1999 WK_{11}	17.6	X	287.22527	220.40042	72.61063	7.46254	0.4671516	0.31659675	2.1320551	20	2 18.8	21.4
102874 1999 WA_{12}	15.4	X	126.65963	5.59863	81.81649	5.42947	0.0673521	0.21115673	2.7929689	20	4 24.4	19.3
102875 1999 WB_{12}	16.2	X	270.74847	242.02150	87.72902	3.45622	0.1609397	0.26538965	2.3981705	20	4 24.5	19.4
102876 1999 WL_{12}	16.6	X	220.89351	158.46940	216.17219	5.55851	0.1505030	0.26799935	2.3825767	20	4 29.3	20.3
102877 1999 WV_{13}	16.4	X	347.94664	204.34620	54.91699	7.52948	0.0720705	0.26722004	2.3872067	20	5 23.8	18.8
102878 1999 WZ_{14}	16.1	X	347.48741	299.27616	33.54696	6.63283	0.1653037	0.28060367	2.3106836	20	9 26.4	17.9
102879 1999 WP_{15}	16.8	X	7.07597	349.21499	224.14676	4.83678	0.1007940	0.26259085	2.4151808	20	4 17.3	19.2
102880 1999 WA_{18}	16.4	X	307.65097	228.94908	69.14956	1.71931	0.2167935	0.26941982	2.3741948	20	4 20.8	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102881 1999 WE_{18}	16.5	X	70.61626	126.07821	235.16888	7.09621	0.1631984	0.29267904	2.2466821	20	—	—
102882 1999 WX_{19}	15.8	X	31.20237	18.40413	346.07358	3.63365	0.2633319	0.23985211	2.5655099	20	—	—
102883 1999 WA_{20}	15.6	X	343.35693	283.73869	156.89035	8.78444	0.0730976	0.23999765	2.5644725	20	—	—
102884 1999 XQ_{1}	15.7	X	326.09313	347.09635	90.50201	6.40641	0.2538922	0.23963958	2.5670265	20	—	—
102885 1999 XX_{1}	15.6	X	248.46688	153.28399	250.13357	3.92738	0.2229666	0.27163576	2.3612652	20	6 28.3	19.1
102886 1999 XG_{4}	16.7	X	33.96971	237.39645	115.24431	0.97599	0.2109359	0.28679416	2.2773119	20	—	—
102887 1999 XM_{4}	15.5	X	182.42551	225.47657	179.75047	2.26821	0.2052987	0.26355095	2.4093117	20	5 2.5	19.3
102888 1999 XV_{4}	16.9	X	269.11687	260.71688	107.51600	1.99223	0.1321016	0.31872347	2.1225602	20	6 19.6	19.3
102889 1999 XL_{5}	15.9	X	23.55311	358.21851	75.05540	4.25351	0.2200144	0.24466634	2.5317446	20	—	—
102890 1999 XV_{5}	15.7	X	338.14408	358.19118	66.88008	7.69689	0.0359829	0.23784236	2.5799418	20	12 26.6	19.0
102891 1999 XK_{6}	16.4	X	237.96713	335.19044	59.69705	3.30534	0.1944947	0.26919924	2.3754916	20	6 8.7	20.0
102892 1999 XY_{6}	15.3	X	316.93596	63.57223	43.91158	6.64717	0.1955565	0.23854320	2.5748861	20	—	—
102893 1999 XF_{7}	15.9	X	328.16682	25.32860	27.34364	2.49733	0.1325379	0.23493811	2.6011600	20	11 28.7	18.4
102894 1999 XV_{8}	15.4	X	336.13677	340.24430	98.68834	13.18400	0.2196070	0.23836634	2.5761596	20	—	—
102895 1999 XY_{9}	16.3	X	317.21434	63.35446	62.83408	7.45108	0.1611633	0.24202012	2.5501657	20	—	—
102896 1999 XD_{10}	15.6	X	171.30112	41.43299	289.47870	8.32957	0.2617669	0.29743919	2.2226475	20	1 21.6	19.3
102897 1999 XA_{11}	14.3	X	16.54227	229.18508	32.64083	15.45367	0.0542668	0.22246279	2.6975187	20	7 16.4	18.0
102898 1999 XD_{11}	15.6	X	244.73085	330.15702	12.48350	6.82366	0.1228909	0.26521365	2.3992314	20	4 13.9	18.9
102899 1999 XN_{11}	15.2	X	137.02262	350.14032	24.75060	7.68246	0.0927438	0.25404745	2.4690288	20	2 3.9	18.6
102900 1999 XX_{12}	14.9	X	145.32851	285.91540	217.22666	12.71455	0.1071266	0.21905175	2.7254500	20	7 24.3	19.3
102901 1999 XU_{14}	15.1	X	319.74681	8.46726	82.97800	23.01977	0.1220180	0.23731673	2.5837499	20	—	—
102902 1999 XD_{15}	15.1	X	23.54443	130.04799	319.57163	24.12955	0.2327690	0.28871293	2.2672108	20	—	—
102903 1999 XK_{15}	15.1	X	17.95317	200.80632	257.83687	10.94139	0.1259566	0.24589288	2.5233186	20	—	—
102904 1999 XF_{16}	15.2	X	238.24261	285.83459	90.53231	11.05225	0.2826013	0.26804958	2.3822790	20	5 11.6	19.2
102905 1999 XV_{16}	16.0	X	169.66955	293.91920	88.41406	7.49902	0.1714112	0.30623363	2.1798877	20	3 23.3	19.3
102906 1999 XJ_{18}	15.3	X	165.64059	10.95097	33.74527	3.33515	0.1697524	0.26372797	2.4082335	20	4 15.6	19.0
102907 1999 XZ_{18}	15.1	X	70.09849	32.34474	16.59911	14.45441	0.2132539	0.25229929	2.4804208	20	—	—
102908 1999 XO_{19}	15.5	X	320.85680	143.06686	236.76054	4.55429	0.1501424	0.28180800	2.3040957	20	10 8.6	17.2
102909 1999 XR_{19}	15.5	X	354.01795	325.46525	31.91755	7.93023	0.1328531	0.28361195	2.2943150	20	11 10.3	17.6
102910 1999 XT_{19}	15.5	X	53.78662	102.07265	228.56841	5.01616	0.2838304	0.29017439	2.2595918	20	—	—
102911 1999 XZ_{19}	15.8	X	201.22918	306.69691	67.71768	3.56900	0.1937711	0.26490287	2.4011075	20	4 10.7	19.8
102912 1999 XA_{21}	15.1	X	50.69955	69.91844	220.77371	22.54236	0.2715088	0.28505030	2.2865904	20	11 21.2	18.5
102913 1999 XT_{21}	15.9	X	30.23560	161.55275	159.84654	7.92388	0.2216926	0.23413954	2.6070711	20	11 21.8	19.3
102914 1999 XT_{22}	15.9	X	163.48749	334.74169	70.69781	3.33711	0.1774243	0.26186244	2.4196576	20	4 15.9	19.7
102915 1999 XT_{23}	14.4	X	140.54598	306.69815	121.44639	1.32237	0.2310774	0.16408940	3.3043220	20	4 29.3	19.9
102916 1999 XG_{24}	15.0	X	259.68124	80.47862	235.45800	21.57941	0.2168709	0.26569688	2.3963215	20	3 9.7	19.3
102917 1999 XK_{24}	16.0	X	173.91979	89.12034	63.93051	11.88826	0.1290516	0.26950044	2.3737213	20	9 20.0	19.8
102918 1999 XW_{24}	15.7	X	41.20361	328.85364	85.39097	3.78664	0.1697606	0.24578607	2.5240496	20	—	—
102919 1999 XC_{26}	16.4	X	295.66452	303.17892	94.00693	2.27161	0.2396161	0.27816839	2.3241502	20	8 30.4	18.0
102920 1999 XC_{27}	15.5	X	229.09301	282.35167	82.83124	3.92746	0.1551114	0.26599900	2.3945067	20	4 26.3	19.1
102921 1999 XH_{27}	15.0	X	297.81985	39.14231	66.69418	15.37406	0.0543858	0.23812680	2.5778869	20	12 21.8	18.2
102922 1999 XA_{30}	15.4	X	60.34358	48.71818	116.73939	6.57323	0.0727038	0.25987511	2.4319777	20	5 9.8	18.3
102923 1999 XX_{30}	15.8	X	13.58684	204.57157	202.80909	3.76232	0.1524884	0.24056609	2.5604312	20	—	—
102924 1999 XZ_{30}	15.6	X	257.26831	85.33334	79.96336	15.84684	0.0941541	0.23855023	2.5748355	20	—	—
102925 1999 XZ_{32}	14.9	X	280.83142	224.41050	291.63031	10.17052	0.0369536	0.23486396	2.6017074	20	—	—
102926 1999 XH_{34}	15.0	X	188.81896	359.53035	122.46729	6.65171	0.2104058	0.21770811	2.7366525	20	8 11.5	19.5
102927 1999 XX_{35}	15.6	X	243.09685	211.96965	161.87403	2.37711	0.2193088	0.26582595	2.3955458	20	5 15.5	19.2
102928 1999 XU_{36}	14.5	X	62.84907	99.29613	273.91543	13.43328	0.1236334	0.24384030	2.5374592	20	—	—
102929 1999 XQ_{37}	15.0	X	283.52096	291.23719	88.04227	16.18571	0.2325603	0.22580211	2.6708575	20	7 5.9	18.4
102930 1999 XO_{40}	16.0	X	198.04794	334.90888	41.01174	3.76443	0.2011635	0.26347339	2.4097845	20	4 9.2	20.0
102931 1999 XE_{41}	15.9	X	264.56611	354.27137	338.17408	1.98403	0.2399288	0.26850969	2.3795568	20	4 9.3	19.6
102932 1999 XH_{41}	16.7	X	195.37040	349.50333	41.39816	3.02387	0.1869217	0.26435912	2.4043989	20	4 25.2	20.5
102933 1999 XV_{41}	16.1	X	300.58948	86.26302	298.22143	1.66494	0.2350253	0.22958524	2.6414359	20	8 11.3	18.6
102934 1999 XY_{42}	15.0	X	277.08925	186.48979	244.01656	21.31368	0.0287978	0.23114296	2.6295551	20	10 1.1	18.9
102935 1999 XK_{43}	15.3	X	334.11082	270.62447	40.56113	4.15646	0.3322546	0.27568560	2.3380834	20	6 22.3	15.9
102936 1999 XH_{44}	15.1	X	164.37454	233.17796	251.09753	10.27447	0.2201114	0.21971678	2.7199478	20	7 21.9	19.9
102937 1999 XS_{46}	16.4	X	204.64398	344.59961	71.38736	5.75133	0.1440030	0.26697805	2.3886490	20	6 6.5	20.0
102938 1999 XU_{47}	16.0	X	304.02700	275.73745	73.20444	3.13406	0.2175342	0.27408309	2.3471881	20	7 1.5	17.9
102939 1999 XV_{47}	16.1	X	239.05627	288.82301	74.79618	2.65877	0.1362675	0.26619232	2.3933472	20	5 5.5	19.5
102940 1999 XY_{49}	16.7	X	178.12394	327.79424	63.32214	6.42797	0.1039011	0.30859401	2.1687578	20	4 7.9	19.7
102941 1999 XF_{50}	15.5	X	24.45263	189.07430	66.37994	7.69821	0.1196967	0.26944490	2.3740475	20	7 30.9	18.0
102942 1999 XX_{50}	16.2	X	6.74978	218.83651	84.84863	8.34004	0.1290028	0.27501523	2.3418813	20	9 16.7	18.6
102943 1999 XY_{51}	15.3	X	272.78549	51.06842	58.33912	7.16366	0.1733969	0.18570837	3.0426248	20	10 25.3	19.3
102944 1999 XE_{52}	15.7	X	192.07540	135.82036	264.58924	3.89643	0.0511821	0.21501517	2.7594550	20	5 6.2	19.7
102945 1999 XT_{52}	15.5	X	220.29454	22.63105	292.43075	1.48721	0.1919933	0.25768138	2.4457611	20	2 12.9	19.4
102946 1999 XM_{53}	15.2	X	244.15875	317.85538	73.47191	12.78256	0.1890102	0.22172315	2.7035144	20	6 10.4	19.2
102947 1999 XS_{53}	16.3	X	148.29620	229.42929	184.97389	1.93100	0.1986794	0.25940116	2.4349391	20	4 13.7	20.0
102948 1999 XU_{54}	16.7	X	189.47518	137.60352	211.13013	1.50726	0.1761496	0.30592697	2.1813442	20	2 23.0	19.9
102949 1999 XB_{56}	15.3	X	172.74629	3.33930	69.31987	6.39380	0.0321094	0.21597120	2.7513056	20	5 26.0	19.1
102950 1999 XF_{56}	15.7	X	29.58254	40.08380	248.25881	5.51055	0.1178118	0.27489592	2.3425589	20	9 22.9	18.4
102951 1999 XG_{56}	15.4	X	146.50363	292.42532	245.27145	6.70103	0.2369851	0.22274586	2.6952328	20	9 10.9	20.2
102952 1999 XB_{58}	15.6	X	149.93411	338.29558	91.04074	6.31700	0.1436153	0.21268437	2.7795788	20	5 3.8	20.0
102953 1999 XR_{58}	16.0	X	359.75909	232.26420	232.86492	3.06465	0.0653313	0.24456821	2.5324218	20	—	—
102954 1999 XX_{58}	16.1	X	216.65804	294.90658	66.07517	3.26462	0.1741583	0.26275081	2.4142005	20	4 8.0	19.9
102955 1999 XZ_{59}	15.7	X	299.97424	250.47050	246.64798	14.04505	0.0558744	0.24061341	2.5600955	20	—	—
102956 1999 XH_{61}	15.6	X	335.06411	243.31933	200.90533	2.71168	0.1245020	0.23865638	2.5740720	20	—	—
102957 1999 XK_{62}	16.1	X	293.62779	48.10705	74.69913	4.71209	0.1778870	0.23713047	2.5851027	20	—	—
102958 1999 XT_{63}	16.3	X	226.03830	293.64208	102.48706	7.21022	0.1397353	0.26700628	2.3884807	20	6 3.8	19.8
102959 1999 XX_{64}	16.7	X	162.31880	186.75558	221.20529	0.63557	0.1834033	0.26015709	2.4302201	20	4 17.1	20.6
102960 1999 XV_{65}	16.2	X	299.28350	251.54512	223.64837	2.69893	0.1878012	0.23638674	2.5905222	20	12 31.7	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
102961 1999 XZ_{65}	16.4	X	185.41362	172.99036	208.28580	0.61893	0.1965009	0.26074130	2.4265887	20	4 4.4	20.3
102962 1999 XB_{66}	15.3	X	90.83672	1.81167	249.14527	9.93711	0.1240241	0.22824672	2.6517527	20	10 14.9	19.4
102963 1999 XU_{66}	16.2	X	206.23800	327.03103	81.83908	3.30552	0.1332142	0.26544457	2.3978397	20	5 30.5	19.9
102964 1999 XW_{66}	15.5	X	296.68764	328.63354	75.69142	5.75873	0.1913223	0.22931048	2.6435454	20	9 13.7	18.3
102965 1999 XH_{67}	17.0	X	176.95136	187.04809	222.42618	2.37953	0.1673846	0.26200357	2.4187886	20	5 1.9	20.6
102966 1999 XO_{67}	16.4	X	229.63056	321.83981	179.16090	2.38048	0.1067815	0.27901629	2.3194393	20	11 5.3	19.3
102967 1999 XF_{69}	15.9	X	311.59567	81.68328	78.89216	4.69445	0.1432013	0.24311945	2.5424724	20	—	—
102968 1999 XW_{69}	15.7	X	259.31670	338.86779	85.19441	4.07387	0.0959559	0.22561284	2.6723510	20	8 26.6	19.3
102969 1999 XB_{71}	15.6	X	322.80757	227.53549	226.62322	3.87404	0.2704400	0.23727875	2.5840256	20	—	—
102970 1999 XG_{71}	16.2	X	324.22958	9.68005	106.60910	4.60545	0.1512124	0.23978259	2.5660057	20	—	—
102971 1999 XP_{72}	14.8	X	294.37629	313.19480	81.11620	14.95876	0.1153774	0.22710102	2.6606637	20	9 10.8	18.3
102972 1999 XP_{74}	15.8	X	264.95732	81.52904	92.69335	9.67056	0.1047792	0.23870532	2.5737201	20	—	—
102973 1999 XT_{74}	15.7	X	347.27061	289.43747	95.82844	3.65954	0.1805524	0.23365956	2.6106402	20	11 30.6	18.2
102974 1999 XQ_{75}	15.5	X	307.61910	72.06099	96.02316	5.77011	0.1504247	0.24265372	2.5457246	20	—	—
102975 1999 XF_{76}	15.5	X	92.19433	303.81283	128.43482	2.08974	0.2100755	0.25219471	2.4811064	20	3 8.4	18.5
102976 1999 XG_{76}	15.8	X	336.99620	244.94873	231.59567	3.84656	0.0915925	0.28948693	2.2631677	20	—	—
102977 1999 XV_{76}	16.3	X	224.26403	288.40013	94.17273	4.25705	0.1530443	0.31260850	2.1501505	20	5 13.2	19.2
102978 1999 XD_{77}	15.7	X	11.91514	259.46418	92.83180	7.69714	0.1446543	0.28024871	2.3126343	20	12 5.5	18.3
102979 1999 XV_{77}	15.9	X	17.65488	131.54001	244.76884	3.72703	0.2140933	0.28478217	2.2880254	20	—	—
102980 1999 XA_{78}	16.3	X	259.72456	121.46461	250.24239	2.92493	0.1906081	0.26957320	2.3732942	20	6 2.1	19.4
102981 1999 XC_{78}	16.3	X	95.90073	265.00866	69.59522	7.27940	0.1946763	0.29139666	2.2532688	20	—	—
102982 1999 XR_{79}	16.1	X	239.86290	227.50831	134.51508	2.69937	0.1744839	0.26559529	2.3969325	20	5 1.3	19.6
102983 1999 XA_{80}	16.0	X	328.30690	242.66346	145.00425	0.94707	0.1134548	0.23127155	2.6285803	20	10 23.8	18.8
102984 1999 XJ_{81}	16.0	X	299.83883	74.05092	257.78099	4.99411	0.2020278	0.26920499	2.3754578	20	5 30.2	18.7
102985 1999 XZ_{81}	16.4	X	212.67036	266.71829	111.30200	3.18480	0.1517432	0.31039418	2.1603644	20	4 25.3	19.5
102986 1999 XD_{82}	16.2	X	135.54698	3.85594	255.93212	5.47807	0.1076835	0.28353598	2.2947247	20	12 22.6	19.5
102987 1999 XM_{87}	16.6	X	75.82804	335.33665	92.79070	6.26731	0.1387476	0.29725904	2.2235454	20	1 15.1	18.4
102988 1999 XC_{88}	14.9	X	270.92411	131.92317	254.99712	7.37620	0.2541396	0.22312259	2.6921981	20	6 26.1	18.7
102989 1999 XD_{88}	15.7	X	219.99728	220.07242	270.84007	12.28719	0.2010149	0.22573085	2.6714196	20	9 13.7	20.2
102990 1999 XF_{88}	16.5	X	66.65457	312.67938	93.37871	4.73817	0.1758406	0.29363128	2.2418222	20	—	—
102991 1999 XF_{90}	15.6	X	63.72272	116.27321	276.44008	6.11183	0.1080179	0.29034607	2.2587010	20	—	—
102992 1999 XP_{90}	15.5	X	127.22429	234.19975	270.58819	6.18115	0.1900560	0.26199726	2.4188274	20	7 18.3	19.4
102993 1999 XL_{91}	16.0	X	24.87410	12.94235	86.55536	5.28354	0.1389257	0.29236466	2.2482924	20	—	—
102994 1999 XG_{92}	15.7	X	238.94692	247.96414	236.97115	1.41833	0.1663981	0.27631294	2.3345431	20	10 15.8	18.6
102995 1999 XN_{92}	15.9	X	65.03130	295.94126	94.95796	7.31259	0.1086128	0.29084076	2.2561391	20	—	—
102996 1999 XV_{92}	15.0	X	32.18559	212.54903	168.58529	1.84148	0.2296907	0.23836763	2.5761503	20	—	—
102997 1999 XF_{94}	15.0	X	35.11528	276.19799	104.58863	22.96869	0.2981234	0.28658269	2.2784320	20	—	—
102998 1999 XJ_{94}	14.8	X	351.29827	272.98166	107.21575	13.90206	0.1852792	0.23028645	2.6360711	20	12 2.9	17.7
102999 1999 XP_{95}	15.2	X	6.52547	275.01103	154.67379	3.25778	0.2705148	0.19194353	2.9763710	20	—	—
103000 1999 XT_{95}	14.9	X	240.25085	36.43425	74.75238	12.55795	0.1520623	0.22670548	2.6637576	20	9 30.9	18.9
103001 1999 XW_{95}	14.7	X	205.86759	123.38316	279.12447	23.26508	0.3292189	0.21707939	2.7419339	20	5 12.9	20.1
103002 1999 XH_{98}	14.6	X	29.36206	314.22462	73.54546	10.04102	0.2271567	0.19195473	2.9762553	20	—	—
103003 1999 XN_{98}	15.5	X	332.48199	317.39939	54.18974	4.56133	0.1980644	0.27845966	2.3225292	20	10 26.4	17.0
103004 1999 XR_{98}	15.0	X	208.10072	358.06181	75.41612	6.54904	0.1227059	0.21900003	2.7258792	20	7 3.6	19.1
103005 1999 XN_{99}	16.0	X	167.67263	107.31425	279.54437	2.85135	0.1923283	0.30582931	2.1818086	20	3 22.6	19.2
103006 1999 XW_{99}	14.7	X	211.37345	350.07111	74.82953	10.18231	0.1618871	0.21864475	2.7288312	20	6 22.9	19.0
103007 1999 XD_{100}	15.3	X	135.91839	342.49219	86.70115	10.45197	0.1505263	0.20908090	2.8114249	20	4 22.9	19.8
103008 1999 XX_{100}	15.8	X	91.42274	306.16274	80.04416	6.05245	0.2068870	0.29505662	2.2345966	20	—	—
103009 1999 XW_{101}	14.8	X	240.34425	347.46132	65.86829	4.84221	0.2503148	0.22078937	2.7111316	20	6 28.8	19.2
103010 1999 XQ_{102}	16.0	X	45.19602	105.51854	292.93680	3.32360	0.1133945	0.28883378	2.2665783	20	—	—
103011 1999 XG_{103}	16.2	X	49.23805	87.98186	349.44122	1.49898	0.1686367	0.29378000	2.2410656	20	—	—
103012 1999 XT_{103}	15.1	X	302.97170	35.49472	24.02969	0.92551	0.1670046	0.18160180	3.0883223	20	10 6.2	18.8
103013 1999 XV_{103}	15.6	X	44.34837	210.60908	292.04733	3.69496	0.0595885	0.30030504	2.2084842	20	3 1.0	17.9
103014 1999 XD_{104}	14.7	X	284.99400	165.98125	291.21832	12.43707	0.2392420	0.23081450	2.6320491	20	10 21.1	17.7
103015 1999 XF_{104}	15.5	X	250.68150	18.84171	126.90365	4.30449	0.1098092	0.28138555	2.3064012	20	12 12.6	18.0
103016 1999 XH_{105}	15.5	X	223.35723	351.55045	31.35415	11.71531	0.1547710	0.22100195	2.7093929	20	5 11.2	19.7
103017 1999 XR_{105}	14.6	X	155.64506	261.37526	234.55261	12.29112	0.1462593	0.21867040	2.7286178	20	7 26.5	19.2
103018 1999 XW_{105}	15.9	X	315.45554	318.13838	114.34327	3.14371	0.1499826	0.28035396	2.3120555	20	12 21.7	17.7
103019 1999 XG_{106}	15.4	X	315.36374	222.45327	238.09344	1.75842	0.1667222	0.18766992	3.0213864	20	12 23.9	18.7
103020 1999 XP_{106}	15.5	X	59.06308	1.51791	28.95642	11.78002	0.1990093	0.24673889	2.5175473	20	—	—
103021 1999 XM_{109}	16.0	X	97.35618	347.93231	108.67542	4.01905	0.0849132	0.25798555	2.4438383	20	3 29.8	19.1
103022 1999 XU_{109}	15.2	X	357.17580	226.61751	175.72582	3.05231	0.1707583	0.23870961	2.5736893	20	—	—
103023 1999 XD_{110}	16.7	X	154.69093	219.07378	227.29550	1.77624	0.1477307	0.26378065	2.4079128	20	5 27.8	20.4
103024 1999 XG_{110}	15.9	X	291.96157	282.99080	75.07628	7.36973	0.1433579	0.27297361	2.3535437	20	7 7.1	18.5
103025 1999 XQ_{110}	15.7	X	187.56743	192.25963	262.98609	6.97338	0.1994723	0.22084673	2.7106622	20	7 7.6	20.3
103026 1999 XN_{111}	14.5	X	213.57286	8.00176	43.79189	13.87518	0.1755727	0.21502751	2.7593495	20	6 5.8	19.1
103027 1999 XS_{112}	13.3	X	113.88273	23.56557	351.49375	19.21630	0.1691514	0.15676300	3.4064892	20	2 4.5	18.5
103028 1999 XJ_{114}	14.6	X	358.92081	165.75888	297.70614	13.75691	0.1304269	0.24517787	2.5282220	20	—	—
103029 1999 XL_{114}	15.3	X	255.42042	48.83479	309.15253	11.48570	0.2065261	0.26918863	2.3755540	20	5 2.9	19.1
103030 1999 XH_{115}	15.3	X	320.97602	107.89953	6.20811	3.62511	0.1571704	0.19264016	2.9691912	20	—	—
103031 1999 XN_{115}	15.8	X	355.86124	30.81380	15.67166	3.56489	0.1181138	0.23808132	2.5782152	20	—	—
103032 1999 XJ_{116}	14.8	X	264.91817	53.33869	38.55889	14.14041	0.0708563	0.23239374	2.6201114	20	10 16.9	18.2
103033 1999 XP_{116}	15.5	X	319.18736	174.21855	286.79438	4.79960	0.2375342	0.23889199	2.5723792	20	—	—
103034 1999 XD_{117}	15.8	X	278.00408	318.11359	39.52801	7.49341	0.2185866	0.27207772	2.3587073	20	5 31.2	18.7
103035 1999 XY_{117}	16.5	X	22.76112	158.29174	290.29091	2.42149	0.1183220	0.29469066	2.2364463	20	—	—
103036 1999 XP_{118}	15.7	X	227.07273	26.09888	352.88237	2.14272	0.1991389	0.26702575	2.3883645	20	5 7.1	19.5
103037 1999 XK_{119}	15.2	X	353.20316	20.86703	27.17687	5.23435	0.0917743	0.23839445	2.5759571	20	—	—
103038 1999 XR_{119}	15.6	X	298.81680	123.73550	298.43344	4.64199	0.0391344	0.23275880	2.6173711	20	10 24.5	19.0
103039 1999 XB_{121}	15.7	X	311.47005	335.73896	44.72206	7.24360	0.1327460	0.27749557	2.3279055	20	9 24.6	17.8
103040 1999 XH_{121}	15.4	X	283.98313	82.12971	261.07844	8.55072	0.1044033	0.22113335	2.7083194	20	6 7.6	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103041 1999 XN_{121}	15.1	X	269.67193	282.69927	49.93352	9.90625	0.2455609	0.22000285	2.7175895	20	4 19.2	19.3
103042 1999 XO_{122}	15.3	X	173.66987	50.37388	342.81988	5.90599	0.1168253	0.26136409	2.4227323	20	4 4.4	18.9
103043 1999 XP_{122}	15.7	X	229.19802	343.55815	8.24773	6.74860	0.1271566	0.26433331	2.4045554	20	4 8.8	19.3
103044 1999 XH_{123}	15.2	X	152.52255	4.07730	13.50393	8.58053	0.1341140	0.25679670	2.4513750	20	2 29.0	18.8
103045 1999 XH_{128}	16.6	X	136.99342	62.42561	333.82982	1.75175	0.1909630	0.25575323	2.4580382	20	3 9.9	20.3
103046 1999 XU_{128}	15.6	X	278.13313	116.36669	343.31088	13.89613	0.1041343	0.23446647	2.6046471	20	11 2.4	19.0
103047 1999 XV_{128}	14.8	X	257.44358	5.60318	41.54580	12.42677	0.1371065	0.22425006	2.6831668	20	7 27.7	18.7
103048 1999 XW_{128}	15.5	X	40.58907	105.92710	36.16827	8.69736	0.1612501	0.30150172	2.2026366	20	3 6.3	17.2
103049 1999 XF_{129}	16.3	X	325.67104	27.25015	19.76252	6.21546	0.2727012	0.23436588	2.6053923	20	11 18.9	17.9
103050 1999 XV_{129}	15.0	X	281.15174	340.13922	38.94819	13.25453	0.1773692	0.22439444	2.6820157	20	7 13.6	18.7
103051 1999 XD_{130}	16.5	X	77.63106	132.80437	297.60606	6.94432	0.0536725	0.29854143	2.2171733	20	1 10.9	18.9
103052 1999 XT_{131}	15.2	X	142.96160	89.67071	59.27912	9.93189	0.1348875	0.21649888	2.7468332	20	8 6.6	19.7
103053 1999 XH_{134}	15.6	X	2.62312	356.33845	357.62361	9.09073	0.2809569	0.27926707	2.3180505	20	12 14.8	18.1
103054 1999 XL_{134}	15.0	X	239.30438	169.71513	325.75464	11.35249	0.1303224	0.22809657	2.6529163	20	10 21.4	18.9
103055 1999 XR_{134}	14.8	X	241.08016	254.79662	238.41066	20.73407	0.0970151	0.23076507	2.6324250	20	10 30.4	18.4
103056 1999 XX_{134}	14.6	X	271.25362	229.92330	295.20330	30.36227	0.2805579	0.23195856	2.6233875	20	—	—
103057 1999 XN_{135}	16.5	X	184.08825	182.81022	177.39251	3.29571	0.1789260	0.30539521	2.1838756	20	3 4.1	19.7
103058 1999 XQ_{135}	15.9	X	66.18452	145.23823	215.20910	4.30258	0.2491715	0.29002605	2.2603622	20	—	—
103059 1999 XV_{136}	15.8	X	269.19375	313.49652	99.09877	10.25057	0.1909009	0.27475142	2.3433802	20	8 15.6	18.6
103060 1999 XD_{137}	15.0	X	323.19166	316.09295	91.71771	25.05651	0.1937610	0.28239939	2.3008777	20	12 7.7	16.8
103061 1999 XZ_{138}	15.9	X	275.85609	315.38043	72.66889	2.49501	0.0676575	0.31684796	2.1309280	20	8 14.0	17.9
103062 1999 XU_{139}	16.0	X	275.73188	20.79816	107.41589	5.51525	0.1692813	0.23221603	2.6214481	20	12 5.3	18.9
103063 1999 XL_{140}	16.0	X	126.06659	234.68019	111.51807	3.47689	0.1073922	0.24313256	2.5423810	20	—	—
103064 1999 XF_{141}	16.8	X	98.52042	245.00636	55.66846	3.27541	0.0758164	0.29014500	2.2597444	20	—	—
103065 1999 XH_{141}	15.8	X	92.91672	161.21732	269.04647	2.37860	0.0784753	0.29785913	2.2205579	20	2 6.1	18.1
103066 1999 XO_{141}	17.7	X	321.16819	192.50956	111.29254	2.93720	0.1745586	0.45652532	1.6704218	20	6 1.7	17.2
103067 1999 XA_{143}	16.8	X	19.26581	104.03429	116.62793	38.54727	0.5816216	0.39370603	1.8436905	20	1 25.0*	15.8
103068 1999 XD_{145}	16.6	X	314.32256	315.24934	231.08745	2.80950	0.0979182	0.25103017	2.4887738	20	—	—
103069 1999 XN_{145}	16.3	X	345.35898	4.89923	226.56844	5.38164	0.0678250	0.26207693	2.4183372	20	4 7.5	19.1
103070 1999 XC_{148}	16.2	X	221.88448	103.22510	229.89751	2.10452	0.1657497	0.26071321	2.4267630	20	3 7.1	20.1
103071 1999 XU_{150}	16.7	X	196.61957	173.86560	246.26091	6.55782	0.0959754	0.26623914	2.3930666	20	6 5.8	20.1
103072 1999 XJ_{151}	15.8	X	173.57324	81.97016	26.09172	7.73383	0.3399085	0.21596263	2.7513783	20	7 12.9	21.1
103073 1999 XO_{151}	16.2	X	239.31836	220.30153	305.52116	2.95248	0.1557663	0.23102850	2.6304235	20	12 1.6	19.6
103074 1999 XZ_{151}	15.8	X	115.64822	36.95229	306.43662	3.51735	0.1677047	0.29085897	2.2560449	20	—	—
103075 1999 XC_{152}	15.9	X	76.24507	95.82169	59.46877	8.57025	0.1584606	0.21262539	2.7800928	20	5 30.5	19.7
103076 1999 XM_{152}	13.9	X	202.41685	46.72329	44.72717	14.55029	0.2677707	0.17439009	3.1728888	20	7 13.2	19.6
103077 1999 XA_{153}	16.0	X	212.88864	10.38532	165.84188	5.17550	0.1363867	0.27990714	2.3145154	20	11 27.6	19.0
103078 1999 XX_{153}	15.9	X	0.45691	300.15297	157.65360	7.22208	0.1677727	0.24356263	2.5393873	20	—	—
103079 1999 XS_{157}	15.9	X	284.03438	196.34314	226.22758	4.09172	0.1683969	0.22852087	2.6496314	20	9 15.4	19.1
103080 1999 XG_{158}	16.3	X	145.27648	238.64938	192.43082	2.94812	0.1571141	0.25999390	2.4312369	20	4 29.3	20.0
103081 1999 XQ_{158}	17.2	X	61.00367	283.12104	148.24996	2.79946	0.1475093	0.29618724	2.2289063	20	—	—
103082 1999 XO_{159}	14.5	X	30.32582	134.88643	257.15512	13.97817	0.1117963	0.23849479	2.5752345	20	—	—
103083 1999 XY_{159}	15.1	X	203.00460	107.30705	243.40814	5.25505	0.1521520	0.25682841	2.4511732	20	3 10.6	19.1
103084 1999 XO_{160}	16.2	X	203.45248	325.77349	170.42024	2.85859	0.1172476	0.27259057	2.3557480	20	9 24.3	19.5
103085 1999 XB_{161}	15.5	X	174.13386	8.29055	38.35891	9.53926	0.2380771	0.21408062	2.7674799	20	4 28.6	20.4
103086 1999 XZ_{161}	14.7	X	250.44518	17.16851	30.93403	12.34347	0.1817586	0.22311764	2.6922379	20	7 12.4	18.8
103087 1999 XW_{162}	16.3	X	228.28629	31.90761	121.17943	2.97166	0.1590881	0.27689380	2.3312771	20	11 11.9	19.2
103088 1999 XD_{163}	15.6	X	218.60311	69.17405	255.04252	1.31555	0.0600507	0.20322373	2.8651879	20	3 2.2	19.7
103089 1999 XL_{163}	15.9	X	23.52439	35.87845	287.39267	1.03496	0.0852514	0.22563501	2.6721760	20	10 20.3	19.1
103090 1999 XO_{163}	15.5	X	281.00197	337.63024	100.48103	2.81616	0.1886732	0.22812314	2.6527103	20	10 2.5	18.4
103091 1999 XJ_{164}	14.6	X	184.37125	282.47834	295.68279	22.17716	0.2534142	0.27615494	2.3354335	20	12 7.3	18.6
103092 1999 XU_{164}	15.3	X	118.08754	202.38024	309.18865	7.99766	0.2058241	0.25993729	2.4315899	20	7 20.8	19.0
103093 1999 XD_{166}	14.7	X	259.29578	63.21817	27.92476	12.40649	0.1807421	0.23047605	2.6346253	20	9 22.3	18.2
103094 1999 XA_{167}	14.5	X	264.10367	52.59477	49.35021	11.75967	0.2012220	0.23117212	2.6293339	20	10 10.4	17.8
103095 1999 XH_{167}	15.6	X	4.72041	1.24321	17.36887	5.74263	0.2728355	0.23713232	2.5850893	20	—	—
103096 1999 XM_{167}	15.5	X	169.77885	342.45769	45.25980	5.68528	0.1888542	0.25944025	2.4346946	20	3 31.7	19.5
103097 1999 XJ_{168}	15.6	X	350.59708	42.43802	359.88400	3.38015	0.2245594	0.23767758	2.5811341	20	—	—
103098 1999 XA_{173}	16.0	X	114.35882	82.85041	15.22246	3.06825	0.1343117	0.30426417	2.1892844	20	4 25.5	18.6
103099 1999 XL_{173}	15.7	X	89.71546	53.73790	343.03696	4.66914	0.1289962	0.29420243	2.2389198	20	—	—
103100 1999 XU_{173}	14.8	X	193.84672	6.96556	89.71662	18.44882	0.2038998	0.21747769	2.7385851	20	7 15.2	19.5
103101 1999 XD_{174}	16.4	X	38.78058	76.44334	17.07612	5.14284	0.1522701	0.29355024	2.2422348	20	—	—
103102 1999 XF_{174}	16.2	X	227.36181	104.62215	73.55345	7.69907	0.1066957	0.27960395	2.3161882	20	12 22.4	18.9
103103 1999 XM_{174}	14.7	X	211.17460	93.16123	91.12036	13.53629	0.1852730	0.22860527	2.6489793	20	11 21.6	18.8
103104 1999 XW_{174}	14.8	X	260.76477	81.92621	87.53203	13.74292	0.1535325	0.23381954	2.6094492	20	—	—
103105 1999 XB_{175}	15.3	X	355.20400	48.21329	42.91760	6.50710	0.0914318	0.28704975	2.2759599	20	—	—
103106 1999 XT_{176}	14.9	X	198.29465	355.09780	67.87794	10.78778	0.2151743	0.21491110	2.7603458	20	6 6.2	19.6
103107 1999 XE_{177}	15.0	X	143.21156	345.94542	84.63006	11.23980	0.1667192	0.25599575	2.4564855	20	5 1.1	18.9
103108 1999 XF_{177}	14.6	X	264.82785	26.83657	54.13197	7.07752	0.2135941	0.22550273	2.6732209	20	9 9.6	18.1
103109 1999 XN_{177}	15.1	X	356.82822	120.25665	37.51723	4.81899	0.0959115	0.24701138	2.5156955	20	1 15.4	17.9
103110 1999 XP_{177}	16.0	X	344.87106	14.02695	53.34222	4.18862	0.2085357	0.23620172	2.5918747	20	—	—
103111 1999 XY_{177}	16.0	X	26.10047	70.43676	16.56852	2.87410	0.0956661	0.29098103	2.2554140	20	—	—
103112 1999 XA_{178}	15.4	X	169.52213	164.31278	309.19364	7.57739	0.1181429	0.21612096	2.7500344	20	7 15.9	19.7
103113 1999 XD_{178}	15.2	X	283.83548	141.66347	297.41548	21.32074	0.0472344	0.22807705	2.6530677	20	10 14.3	19.2
103114 1999 XH_{178}	15.5	X	307.72227	44.49496	69.49407	7.52311	0.0877572	0.28346059	2.2951316	20	—	—
103115 1999 XN_{180}	15.0	X	240.00849	62.09951	46.66845	10.04799	0.1935804	0.22364982	2.6879655	20	9 19.3	19.0
103116 1999 XD_{181}	14.9	X	44.93752	298.10857	31.50155	13.59037	0.2224043	0.23732319	2.5837031	20	12 17.0	18.8
103117 1999 XY_{181}	15.0	X	160.29296	57.98877	45.02747	16.09731	0.2443829	0.21635001	2.7480931	20	6 24.5	20.0
103118 1999 XY_{182}	15.0	X	174.75126	16.64556	24.45916	10.29559	0.1987285	0.21330554	2.7741799	20	4 21.0	19.5
103119 1999 XR_{184}	15.0	X	198.02164	33.18885	47.43878	8.92592	0.1739526	0.21889777	2.7267280	20	6 30.0	19.5
103120 1999 XN_{185}	15.1	X	295.79239	48.62736	40.88738	12.91724	0.1604425	0.23379890	2.6096028	20	11 16.7	17.9

* The additional opposition: 9 23.4, $V = 19.9$

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103121 1999 XP_{188}	14.6	X	239.04298	144.52724	286.36000	11.84729	0.1543191	0.22343392	2.6896967	20	7 28.8	18.7
103122 1999 XA_{189}	15.5	X	244.66081	176.23729	301.49430	11.69987	0.2132612	0.22893311	2.6464497	20	9 22.6	19.5
103123 1999 XG_{189}	15.0	X	155.73733	58.93962	0.01757	7.11739	0.2235148	0.21189681	2.7864618	20	4 26.4	19.8
103124 1999 XD_{190}	15.2	X	180.27697	164.30034	304.36973	10.31947	0.1203091	0.21902797	2.7256473	20	7 20.6	19.3
103125 1999 XQ_{191}	15.2	X	303.05219	118.86896	2.62652	5.88585	0.1030747	0.28541594	2.2846372	20	—	—
103126 1999 XX_{191}	16.0	X	100.23629	34.70365	35.16054	5.39551	0.2253424	0.25305848	2.4754574	20	3 19.4	19.2
103127 1999 XR_{194}	15.3	X	211.33693	47.19024	319.34566	6.17481	0.1587568	0.26046191	2.4283237	20	4 6.4	19.2
103128 1999 XZ_{195}	16.3	X	5.57402	173.73550	315.50776	6.57853	0.0346805	0.29458410	2.2369855	20	—	—
103129 1999 XA_{196}	15.8	X	316.16786	59.06694	37.49164	5.28232	0.1108701	0.28383178	2.2931302	20	—	—
103130 1999 XR_{196}	14.6	X	193.09285	315.22651	291.19431	28.54920	0.1394482	0.23785906	2.5798211	20	—	—
103131 1999 XK_{197}	15.9	X	169.56900	96.39692	335.68002	8.34118	0.0750557	0.30934207	2.1652600	20	5 18.5	18.9
103132 1999 XY_{198}	15.7	X	170.84891	49.27184	323.55364	5.80716	0.1508462	0.25669499	2.4520225	20	3 9.1	19.6
103133 1999 XX_{199}	15.5	X	212.98270	25.31928	30.13577	5.75307	0.0704715	0.21766187	2.7370400	20	6 18.9	19.6
103134 1999 XE_{202}	15.5	X	217.71483	140.34388	9.37868	6.94679	0.0450025	0.27772745	2.3266096	20	11 7.8	18.3
103135 1999 XL_{202}	15.8	X	309.95039	76.02086	34.58181	6.92715	0.0570676	0.28416409	2.2913420	20	—	—
103136 1999 XF_{203}	14.9	X	200.17521	359.91192	36.84290	9.15333	0.3152068	0.21542645	2.7559417	20	5 4.5	20.0
103137 1999 XN_{203}	16.3	X	69.18167	73.33924	327.60364	6.57029	0.1071548	0.29199507	2.2501892	20	—	—
103138 1999 XP_{204}	15.9	X	265.89937	104.78517	17.14005	8.22143	0.1437250	0.27898293	2.3196242	20	11 25.0	18.4
103139 1999 XS_{205}	15.3	X	176.85070	18.60443	38.25016	7.61723	0.2504624	0.21279099	2.7786503	20	5 12.4	20.1
103140 1999 XB_{206}	15.3	X	243.98576	59.54445	343.91240	8.97276	0.2203216	0.21950926	2.7216618	20	6 23.1	19.7
103141 1999 XF_{206}	15.1	X	149.19969	50.56698	28.66568	8.75818	0.1852726	0.21033219	2.8002634	20	5 14.3	19.7
103142 1999 XM_{207}	14.5	X	54.16741	258.59838	62.57062	13.14737	0.2029782	0.23049966	2.6344453	20	12 13.2	18.4
103143 1999 XY_{208}	15.2	X	299.73458	140.29260	328.86533	9.35247	0.1763857	0.23554271	2.5967069	20	12 25.1	17.8
103144 1999 XY_{209}	14.3	X	176.83968	58.37363	41.70455	12.55844	0.0574160	0.21745661	2.7387621	20	7 7.1	18.5
103145 1999 XQ_{210}	15.0	X	146.78681	75.40598	352.11293	10.51304	0.0687654	0.20986242	2.8044407	20	4 16.9	19.2
103146 1999 XS_{210}	15.3	X	122.03934	144.29751	13.38066	10.05448	0.1444225	0.21565359	2.7540062	20	7 28.3	19.7
103147 1999 XU_{212}	15.4	X	300.90898	229.41167	215.30240	7.64211	0.2220130	0.23446844	2.6046325	20	11 16.9	17.7
103148 1999 XQ_{213}	16.1	X	258.64716	185.81347	194.42250	4.23785	0.1615440	0.26930272	2.3748830	20	6 16.8	19.3
103149 1999 XC_{215}	15.1	X	210.87020	284.49311	131.06574	6.35046	0.0859336	0.21578423	2.7528946	20	6 16.1	19.2
103150 1999 XP_{215}	15.0	X	335.00946	167.50378	250.32897	12.02470	0.1947851	0.23372422	2.6101586	20	12 23.5	17.5
103151 1999 XR_{217}	15.9	X	109.32772	177.08222	100.89509	4.79604	0.1636679	0.22963240	2.6410743	20	12 10.9	20.1
103152 1999 XR_{220}	15.6	X	23.14074	253.87949	125.41016	5.00228	0.2891503	0.24077681	2.5589371	20	—	—
103153 1999 XT_{220}	16.4	X	30.89387	259.74298	102.74075	6.99834	0.1484749	0.28721793	2.2750713	20	—	—
103154 1999 XZ_{221}	15.5	X	264.26600	42.54335	47.92721	14.27736	0.1499832	0.23012025	2.6373402	20	10 5.1	19.0
103155 1999 XN_{222}	15.4	X	37.33360	123.12015	332.16702	3.46506	0.0924348	0.24652942	2.5189732	20	—	—
103156 1999 XT_{222}	15.7	X	174.29125	86.87482	358.50025	5.10169	0.0875639	0.21503115	2.7593183	20	6 13.6	19.9
103157 1999 XU_{223}	15.4	X	286.92196	165.07754	282.14511	8.53126	0.1405182	0.22974944	2.6401772	20	10 27.7	18.7
103158 1999 XB_{224}	16.4	X	281.81335	223.54833	357.39973	0.60343	0.0807272	0.24463500	2.5319609	20	—	—
103159 1999 XP_{224}	15.4	X	160.36459	275.53711	97.62865	3.05408	0.0822290	0.20316262	2.8657624	20	3 2.1	19.6
103160 1999 XW_{224}	15.8	X	146.30616	304.43013	323.98568	1.25592	0.1059183	0.23340799	2.6125157	20	—	—
103161 1999 XF_{225}	16.5	X	40.55011	239.86034	100.33230	7.52415	0.2780508	0.28162333	2.3051028	20	—	—
103162 1999 XZ_{225}	16.2	X	193.48453	12.26760	294.73508	7.54590	0.1533663	0.29438133	2.2380127	20	1 6.4	19.5
103163 1999 XR_{226}	15.8	X	260.55252	159.82686	98.43082	9.52175	0.0658478	0.24731928	2.5136071	20	1 22.9	19.2
103164 1999 XX_{226}	15.7	X	320.57428	55.48446	94.70171	5.68703	0.0869632	0.28929157	2.2641865	20	—	—
103165 1999 XN_{227}	16.0	X	305.05409	249.51196	110.69555	3.70986	0.2583390	0.27185840	2.3599757	20	7 14.1	17.8
103166 1999 XT_{227}	16.4	X	61.28198	105.97750	260.38871	0.83239	0.1870232	0.23855037	2.5748345	20	—	—
103167 1999 XS_{228}	16.0	X	176.69657	86.38297	298.81970	4.38097	0.1663118	0.30503528	2.1855932	20	3 27.0	19.3
103168 1999 XW_{228}	17.0	X	157.84592	84.65444	303.58730	3.65835	0.1517262	0.30252692	2.1976576	20	3 12.1	20.0
103169 1999 XR_{229}	15.6	X	333.09973	31.95087	27.73430	13.87272	0.1407197	0.23715315	2.5849379	20	12 17.9	18.5
103170 1999 XL_{230}	15.0	X	332.71700	22.83159	35.07787	14.64679	0.1581131	0.23754624	2.5820854	20	12 15.7	17.9
103171 1999 XC_{231}	14.4	X	243.89435	189.08590	47.47142	15.01807	0.1960994	0.23719702	2.5846192	20	—	—
103172 1999 XL_{231}	14.7	X	189.07704	356.87668	77.40435	10.51284	0.2319615	0.21512299	2.7585329	20	6 12.5	19.4
103173 1999 XS_{233}	15.9	X	348.71500	196.73765	137.85487	4.54739	0.2832425	0.27993626	2.3143548	20	10 19.2	17.1
103174 1999 XK_{234}	15.6	X	272.57595	227.80331	207.26316	13.16191	0.1325113	0.23042997	2.6349765	20	9 19.8	18.9
103175 1999 XS_{234}	15.3	X	318.70905	284.53121	149.88017	4.99625	0.1099264	0.23557026	2.5965045	20	12 12.7	18.1
103176 1999 XT_{234}	16.0	X	257.13180	218.35164	149.97627	5.37970	0.2295960	0.26964135	2.3728943	20	5 22.1	19.5
103177 1999 XU_{234}	15.6	X	357.04889	192.45205	204.49762	6.77104	0.1464990	0.23730601	2.5838278	20	12 29.4	18.6
103178 1999 XL_{235}	17.2	X	218.53325	276.77308	68.77597	6.11287	0.2072977	0.30945284	2.1647433	20	3 19.4	20.7
103179 1999 XO_{236}	14.6	X	30.79169	60.11005	327.59934	8.74318	0.0866715	0.19289821	2.9665426	20	—	—
103180 1999 XF_{237}	15.7	X	301.50228	160.11737	59.35699	5.03870	0.1448103	0.29856304	2.2170663	20	1 2.4	18.5
103181 1999 XR_{237}	16.3	X	243.89803	312.63597	57.13691	7.28707	0.1683910	0.26678339	2.3898108	20	5 15.4	19.7
103182 1999 XJ_{238}	14.8	X	206.38405	337.65858	275.61718	13.19545	0.1496362	0.23901168	2.5715203	20	—	—
103183 1999 XA_{239}	16.1	X	309.49282	163.96095	325.73575	1.48461	0.0878011	0.24113107	2.5564301	20	—	—
103184 1999 XG_{239}	14.6	X	208.50378	170.70155	69.41824	14.95865	0.1319572	0.24503348	2.5292151	20	—	—
103185 1999 XD_{242}	15.8	X	191.55817	193.87828	321.52429	4.56221	0.1891846	0.27537996	2.3398131	20	9 28.7	19.3
103186 1999 XH_{242}	14.7	X	177.02123	50.47482	44.25035	9.84912	0.0802135	0.21487404	2.7606631	20	6 29.1	19.0
103187 1999 XS_{242}	14.8	X	49.45337	11.36903	47.95414	15.18073	0.0968042	0.24247734	2.5469589	20	—	—
103188 1999 XT_{242}	14.3	X	201.80063	40.83825	19.39685	13.93221	0.1690327	0.21543953	2.7558302	20	6 5.2	19.0
103189 1999 XV_{242}	14.4	X	357.02131	39.70710	30.62053	13.58910	0.1390719	0.23704209	2.5857453	20	—	—
103190 1999 XD_{243}	15.1	X	251.58680	298.46220	94.60452	13.20207	0.1783460	0.22544704	2.6736611	20	6 22.5	18.9
103191 1999 XE_{243}	14.8	X	132.58298	97.17490	358.00342	12.62532	0.1771990	0.20949503	2.8077185	20	5 15.4	19.5
103192 1999 XF_{243}	15.6	X	178.83708	74.08142	324.89771	8.02399	0.1361151	0.26239308	2.4163943	20	4 15.7	19.5
103193 1999 XG_{243}	14.7	X	314.82620	117.26919	280.24932	13.24089	0.1676287	0.23247396	2.6195086	20	10 1.7	17.7
103194 1999 XX_{243}	15.4	X	191.27084	232.33114	315.85535	23.43056	0.2389731	0.27512315	2.3412689	20	10 26.2	19.8
103195 1999 XZ_{243}	15.0	X	8.66673	20.35467	15.48680	15.05046	0.1720615	0.23584172	2.5945117	20	—	—
103196 1999 XA_{244}	14.4	X	258.44674	45.86433	57.47871	22.77523	0.0445880	0.22749429	2.6575965	20	10 30.0	18.0
103197 1999 XZ_{247}	15.4	X	88.61984	32.49810	128.72591	5.81741	0.2595345	0.21176362	2.7876301	20	7 6.9	19.6
103198 1999 XT_{248}	16.1	X	235.89384	259.05558	224.82253	6.25818	0.1500139	0.27703477	2.3304862	20	10 12.0	19.0
103199 1999 XE_{249}	15.2	X	279.60152	186.98407	216.37957	6.81708	0.2051354	0.22623913	2.6674169	20	8 4.9	18.7
103200 1999 XL_{249}	16.0	X	25.87335	288.48591	150.88642	6.43580	0.1306398	0.24493138	2.5299179	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103201 1999 XB_{250}	15.2	X	108.19129	238.95180	248.17723	6.80429	0.1785251	0.20923507	2.8100436	20	6 4.5	19.4
103202 1999 XW_{250}	16.0	X	64.32487	297.71054	301.22211	2.31229	0.1405638	0.21743551	2.7389393	20	9 1.3	19.6
103203 1999 XM_{251}	16.9	X	63.35845	245.84450	92.41232	2.96934	0.2261559	0.28903263	2.2655386	20	—	—
103204 1999 XN_{251}	16.8	X	256.73980	291.98443	228.82978	5.44923	0.0469160	0.28708172	2.2757909	20	—	—
103205 1999 XJ_{252}	15.0	X	242.73354	62.74517	108.43760	2.30325	0.1608626	0.18381275	3.0635076	20	12 1.7	19.3
103206 1999 XN_{252}	16.4	X	282.31518	178.91371	98.67871	3.12850	0.1539149	0.26036778	2.4289089	20	3 1.4	19.8
103207 1999 XA_{253}	16.0	X	259.38329	194.22761	80.62618	5.98765	0.0672990	0.25582445	2.4575820	20	2 11.8	19.4
103208 1999 XN_{254}	16.2	X	119.33473	299.30688	286.91171	2.92580	0.1962237	0.27027142	2.3692050	20	10 23.8	20.1
103209 1999 XX_{256}	15.1	X	70.33973	253.88698	43.57697	12.26812	0.1207102	0.23384136	2.6092868	20	11 21.8	18.9
103210 1999 XK_{257}	15.3	X	328.30408	129.45968	279.38378	4.09818	0.0641803	0.23265093	2.6181801	20	11 20.3	18.4
103211 1999 XA_{258}	15.4	X	321.34370	309.71804	109.94100	6.50440	0.0651554	0.23043643	2.6349272	20	11 25.8	18.6
103212 1999 XV_{258}	15.8	X	131.66723	63.13572	92.62955	5.97561	0.0988118	0.22013854	2.7164726	20	7 30.3	19.8
103213 1999 XL_{259}	14.3	X	267.55493	145.85581	54.04982	23.96503	0.1360142	0.28853118	2.2681628	20	—	—
103214 1999 XG_{260}	15.9	X	203.14166	253.45574	176.86979	1.42086	0.0568783	0.22009018	2.7168705	20	6 28.1	19.8
103215 1999 XZ_{260}	16.6	X	128.51428	85.84106	257.38680	3.18038	0.1371381	0.29534711	2.2331312	20	—	—
103216 1999 XT_{261}	14.1	X	18.97808	36.45267	7.38300	17.01319	0.2031291	0.23948577	2.5681255	20	—	—
103217 1999 YK_{1}	14.9	X	322.36283	330.19618	56.66101	27.15393	0.2317303	0.27783486	2.3260099	20	11 3.9	16.5
103218 1999 YV_{2}	16.4	X	45.04625	300.99722	79.73742	2.30938	0.0912988	0.28524427	2.2855537	20	—	—
103219 1999 YX_{3}	15.0	X	276.52874	80.03111	4.83997	21.49438	0.1431194	0.22951104	2.6420051	20	10 6.9	18.3
103220 Kwongchuikuen	15.2	X	239.84400	162.85939	305.22354	9.88680	0.1899011	0.22525304	2.6751960	20	9 9.4	19.2
103221 1999 YC_{5}	15.1	X	337.18839	205.41905	128.72219	15.63722	0.0305939	0.21913098	2.7247931	20	8 24.1	18.6
103222 1999 YD_{5}	16.4	X	164.11455	235.91872	149.29526	3.40218	0.1313558	0.30159267	2.2021937	20	3 15.7	19.4
103223 1999 YT_{6}	15.1	X	357.67566	83.79675	357.27054	10.95445	0.0974110	0.23934831	2.5691087	20	—	—
103224 1999 YP_{8}	15.2	X	23.35765	342.66560	94.08938	3.11376	0.0730049	0.19219659	2.9737578	20	—	—
103225 1999 YQ_{8}	16.3	X	304.79233	272.93229	75.52889	1.50994	0.1876461	0.26821847	2.3812789	20	7 7.4	18.6
103226 1999 YH_{9}	16.2	X	227.36418	50.99126	115.16016	22.53367	0.0535606	0.37471899	1.9054559	20	—	—
103227 1999 YR_{10}	16.2	X	35.66711	153.97337	175.12386	2.72113	0.1644621	0.23487183	2.6016494	20	11 28.9	19.5
103228 1999 YT_{13}	15.8	X	347.02724	219.13771	315.31136	3.41033	0.0420264	0.29513621	2.2341949	20	1 19.6	18.3
103229 1999 YA_{14}	16.7	X	177.08553	317.89116	180.51877	0.18466	0.1101356	0.27061575	2.3671949	20	8 28.9	20.2
103230 1999 YE_{15}	16.2	X	127.66642	346.83750	108.52328	3.09153	0.1921554	0.26024142	2.4296950	20	5 16.5	19.9
103231 1999 YM_{15}	17.1	X	295.34390	49.59562	226.13128	4.38707	0.0649344	0.30841921	2.1695772	20	3 20.9	19.7
103232 1999 YU_{16}	14.9	X	165.73293	282.82478	296.54471	10.86962	0.2156194	0.22662921	2.6643553	20	11 15.4	19.7
103233 1999 YM_{17}	16.8	X	297.82557	326.32377	130.32128	2.44380	0.1581355	0.27938308	2.3174088	20	12 21.3	18.5
103234 1999 YY_{19}	16.1	X	59.29100	179.91930	111.32930	6.27590	0.1675159	0.27230093	2.3574182	20	11 17.9	19.4
103235 1999 YM_{22}	15.3	X	168.84802	132.87431	28.16311	11.08609	0.1562381	0.22112326	2.7084018	20	9 16.7	19.8
103236 1999 YV_{24}	16.4	X	348.35009	275.66518	90.48362	7.59878	0.1725206	0.28129081	2.3069190	20	11 21.0	18.4
103237 1999 YO_{26}	14.3	X	80.43278	353.36938	14.32700	15.12657	0.1145612	0.24096966	2.5575716	20	—	—
103238 1999 YA_{28}	15.2	X	26.19637	25.14153	3.19746	14.80415	0.0976662	0.23791062	2.5794483	20	—	—
103239 2000 AS	16.0	X	311.81195	260.15457	168.10917	1.03758	0.0393371	0.22814855	2.6525133	20	11 21.6	19.3
103240 2000 AC_{1}	15.5	X	276.59978	279.40696	150.20834	1.45848	0.2446156	0.17803809	3.1293977	20	8 26.8	19.8
103241 2000 AK_{2}	14.6	X	225.56348	80.75696	332.94415	9.27576	0.3234341	0.21888358	2.7268459	20	6 10.7	19.6
103242 2000 AL_{3}	15.4	X	358.93473	60.93542	65.44880	7.54449	0.0419631	0.29336877	2.2431594	20	—	—
103243 2000 AV_{3}	14.5	X	5.78625	79.28017	284.20393	22.07534	0.3376995	0.23853773	2.5749255	20	12 31.1	17.3
103244 2000 AK_{4}	16.4	X	289.49830	306.68260	123.89325	7.11013	0.0768906	0.27465237	2.3439436	20	11 3.1	19.0
103245 2000 AN_{4}	15.3	X	205.42157	304.98112	138.75389	15.27679	0.2142695	0.21544913	2.7557484	20	7 8.3	20.1
103246 2000 AQ_{4}	15.6	X	236.32569	266.71351	191.72777	3.77695	0.1267616	0.22396951	2.6854070	20	9 4.4	19.4
103247 2000 AS_{4}	15.7	X	157.57219	84.64425	312.39753	4.00172	0.1555328	0.30216796	2.1993977	20	3 23.5	18.8
103248 2000 AZ_{4}	16.1	X	341.12925	121.68506	297.82275	6.99419	0.0751973	0.28087775	2.3091802	20	—	—
103249 2000 AA_{5}	15.3	X	270.75385	116.69332	318.07371	5.25840	0.1777593	0.22589900	2.6700937	20	9 9.8	18.6
103250 2000 AY_{6}	14.8	X	246.93822	95.33566	64.99740	12.31239	0.2264615	0.23285892	2.6166209	20	11 24.9	18.2
103251 2000 AN_{7}	15.7	X	279.69301	120.15637	55.30435	6.99399	0.0227570	0.28974563	2.2618204	20	—	—
103252 2000 AG_{9}	16.0	X	51.65156	111.86662	308.48068	5.41123	0.1760991	0.29343061	2.2428442	20	—	—
103253 2000 AC_{13}	15.5	X	201.64734	2.89984	42.13501	4.58608	0.0956611	0.21569254	2.7536747	20	5 21.9	19.5
103254 2000 AX_{13}	16.1	X	78.82035	84.30299	48.70577	4.00683	0.0771422	0.30532982	2.1841874	20	4 17.3	18.3
103255 2000 AD_{14}	14.5	X	145.55534	193.57074	81.36105	14.56063	0.1257696	0.23802738	2.5786047	20	—	—
103256 2000 AY_{14}	15.1	X	25.43744	255.38516	304.63349	1.78114	0.1960159	0.25672942	2.4518033	20	5 9.9	17.1
103257 2000 AG_{19}	16.0	X	297.08935	317.94298	38.93519	3.96513	0.2545305	0.27305454	2.3530787	20	6 23.4	18.3
103258 2000 AH_{20}	15.7	X	334.54574	289.92946	67.55052	5.02992	0.1492461	0.27596220	2.3365208	20	10 5.8	17.6
103259 2000 AZ_{20}	15.3	X	196.11396	29.20679	69.38537	6.03237	0.1259822	0.21951296	2.7216311	20	7 24.3	19.5
103260 2000 AF_{22}	14.5	X	296.97280	278.96567	81.67082	11.16099	0.1097386	0.17353293	3.1833285	20	7 17.9	18.8
103261 2000 AJ_{23}	16.0	X	322.53318	353.33940	97.27658	4.84176	0.1179555	0.23539692	2.5977789	20	—	—
103262 2000 AM_{24}	14.9	X	233.55869	242.14485	284.21500	13.92482	0.1251324	0.23155917	2.6264031	20	11 29.3	18.6
103263 2000 AB_{25}	14.6	X	267.33499	230.43477	282.25646	8.12248	0.0964879	0.18646525	3.0343857	20	12 20.1	18.5
103264 2000 AQ_{25}	15.5	X	293.23887	53.51904	30.63731	3.75084	0.1358179	0.23078049	2.6323077	20	11 7.3	18.1
103265 2000 AY_{25}	16.4	X	329.64485	196.57852	296.06554	4.07957	0.1194231	0.28882768	2.2666102	20	—	—
103266 2000 AT_{26}	14.5	X	285.32007	183.05586	288.78686	10.65835	0.0323625	0.18419376	3.0592815	20	11 29.7	18.7
103267 2000 AK_{27}	15.1	X	228.66866	313.62485	64.39131	6.06255	0.1723648	0.21509361	2.7587840	20	5 11.6	19.3
103268 2000 AV_{27}	15.1	X	124.77573	204.11472	310.81081	6.92263	0.2309081	0.21374828	2.7703478	20	7 30.2	19.5
103269 2000 AG_{28}	15.9	X	319.08317	24.64408	103.36430	4.83093	0.1426097	0.28657908	2.2784511	20	—	—
103270 2000 AJ_{30}	15.2	X	134.60682	213.59183	299.95327	8.09000	0.0929260	0.21560945	2.7543821	20	7 28.7	19.4
103271 2000 AR_{30}	15.7	X	53.79491	274.00032	85.17285	7.57354	0.1332027	0.28398234	2.2923195	20	—	—
103272 2000 AX_{30}	15.2	X	135.68137	183.19334	310.78216	12.70133	0.1490928	0.21330989	2.7741422	20	7 10.1	19.6
103273 2000 AQ_{32}	16.3	X	93.98089	115.91138	44.18487	2.84337	0.1440649	0.25884048	2.4384541	20	6 28.5	19.6
103274 2000 AF_{33}	14.5	X	275.08799	131.93371	330.32669	8.43764	0.1139766	0.18113070	3.0936749	20	10 21.5	18.7
103275 2000 AM_{33}	15.2	X	195.03967	185.74951	329.74868	7.33767	0.1960279	0.22315583	2.6919308	20	9 25.2	19.7
103276 2000 AT_{33}	16.7	X	262.24556	240.29039	122.57801	5.82204	0.2756097	0.31570731	2.1360576	20	5 14.6	19.7
103277 2000 AU_{33}	15.1	X	54.01951	48.82525	107.77869	15.99355	0.0876078	0.20490465	2.8494968	20	4 27.9	19.1
103278 2000 AG_{34}	16.6	X	28.96273	121.49553	357.27707	3.11974	0.1339247	0.29408264	2.2395278	20	—	—
103279 2000 AD_{35}	15.6	X	172.51388	203.40131	322.21955	13.43621	0.0953236	0.22174467	2.7033395	20	9 18.1	19.8
103280 2000 AV_{36}	16.0	X	328.62085	39.30312	38.38846	1.50989	0.1170405	0.23460641	2.6036112	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103281 2000 AY_{36}	17.1	X	70.92882	127.73854	320.18005	4.06538	0.1383241	0.29774770	2.2211119	20	2 4.9	18.9
103282 2000 AX_{37}	15.7	X	200.73621	327.50512	94.96758	5.85611	0.1531329	0.21518742	2.7579822	20	6 10.6	20.0
103283 2000 AZ_{38}	16.2	X	59.79110	37.89182	16.19371	2.16439	0.2077544	0.24403283	2.5361243	20	—	—
103284 2000 AL_{39}	15.4	X	222.60600	313.17321	57.44552	3.22636	0.2008536	0.25997772	2.4313378	20	4 23.8	19.2
103285 2000 AF_{40}	16.1	X	11.09069	22.11193	34.90772	4.59148	0.2752806	0.23882426	2.5728655	20	—	—
103286 2000 AV_{40}	14.3	X	217.16783	257.35018	320.00687	10.42951	0.1383462	0.23325590	2.6136511	20	—	—
103287 2000 AD_{41}	16.2	X	143.79578	63.46094	351.19070	4.18100	0.1459314	0.30254046	2.1975921	20	4 1.4	19.0
103288 2000 AA_{42}	14.5	X	184.89120	283.64705	321.47519	13.32192	0.1590737	0.23226775	2.6210588	20	—	—
103289 2000 AF_{42}	15.2	X	258.02929	11.68631	116.74515	14.64288	0.0512513	0.22994544	2.6386767	20	11 27.9	18.8
103290 2000 AN_{43}	15.4	X	239.73840	55.64796	356.13806	3.10148	0.1806596	0.21973615	2.7197879	20	7 3.7	19.5
103291 2000 AL_{44}	16.3	X	166.37332	97.61539	68.71574	2.05997	0.0372935	0.22239762	2.6980456	20	9 20.6	20.0
103292 2000 AD_{45}	16.0	X	36.97736	304.45613	329.97567	3.36452	0.1095018	0.26732725	2.3865685	20	9 13.7	18.7
103293 2000 AN_{45}	15.7	X	345.34785	350.25483	97.06058	13.41604	0.1264686	0.23885569	2.5726399	20	—	—
103294 2000 AS_{45}	14.5	X	256.91123	279.05740	268.55326	10.78685	0.2420477	0.23712733	2.5851256	20	—	—
103295 2000 AA_{46}	15.7	X	151.48225	222.40702	276.32134	5.22107	0.1998984	0.26519188	2.3993627	20	8 1.8	19.6
103296 2000 AY_{46}	15.8	X	338.93842	351.19738	80.82230	3.57760	0.2364832	0.23483532	2.6019190	20	—	—
103297 2000 AC_{47}	15.4	X	207.59792	187.25931	308.19075	22.04939	0.1624015	0.22257049	2.6966484	20	9 6.3	20.0
103298 2000 AU_{47}	14.7	X	246.97673	8.97723	128.17939	15.74628	0.0717349	0.22753125	2.6573087	20	11 22.0	18.5
103299 2000 AV_{47}	15.2	X	300.05498	16.91157	111.57061	5.51733	0.1522889	0.28213074	2.3023382	20	—	—
103300 2000 AX_{47}	15.1	X	221.75501	335.35270	124.46450	14.07195	0.1189481	0.21965038	2.7204959	20	8 23.8	19.1
103301 2000 AL_{49}	16.3	X	98.28765	184.51004	122.58412	28.00423	0.0639346	0.37778588	1.8951295	20	—	—
103302 2000 AF_{50}	15.8	X	262.15761	82.05358	117.52553	2.94203	0.0584800	0.23982944	2.5656715	20	—	—
103303 2000 AM_{50}	15.5	X	298.43331	16.05589	127.88711	14.08116	0.1330428	0.23491827	2.6013065	20	—	—
103304 2000 AF_{53}	15.7	X	255.23623	246.13637	259.35350	9.37397	0.1153312	0.23472677	2.6027211	20	12 4.3	18.9
103305 2000 AO_{53}	15.3	X	199.12694	209.52974	318.93443	1.37691	0.1365914	0.22660429	2.6645506	20	10 21.9	19.3
103306 2000 AU_{53}	16.0	X	2.32637	79.53195	305.02181	1.05233	0.2249003	0.23335072	2.6129431	20	—	—
103307 2000 AM_{54}	15.7	X	355.72754	355.47531	111.01559	8.54238	0.1463366	0.24013511	2.5634938	20	—	—
103308 2000 AH_{55}	16.2	X	106.42477	285.35555	106.07717	4.26570	0.2121167	0.29614127	2.2291370	20	1 25.9	18.4
103309 2000 AR_{55}	16.0	X	79.15579	133.62627	296.46311	4.38816	0.1444550	0.29591683	2.2302640	20	1 24.8	17.8
103310 2000 AA_{56}	15.7	X	26.00082	250.61503	311.29409	2.31513	0.1379820	0.25433868	2.4671437	20	5 8.4	18.1
103311 2000 AH_{56}	15.0	X	157.69244	26.78510	106.81993	7.16818	0.0534245	0.26447370	2.4037044	20	7 31.9	18.1
103312 2000 AL_{56}	15.8	X	5.30695	105.26669	315.87586	3.72470	0.2025081	0.23721378	2.5844975	20	—	—
103313 2000 AP_{56}	15.6	X	265.43769	38.20921	94.04054	4.20018	0.1445679	0.23040587	2.6351602	20	11 27.0	18.6
103314 2000 AY_{56}	15.4	X	122.59031	161.70435	358.40662	1.72907	0.1317903	0.21374315	2.7703921	20	7 27.8	19.7
103315 2000 AV_{59}	14.8	X	180.14789	113.38374	115.81315	13.04803	0.1458824	0.22954031	2.6417806	20	12 17.4	18.9
103316 2000 AD_{60}	16.0	X	233.21001	268.87128	120.06089	9.07991	0.2287019	0.26381173	2.4077237	20	5 26.4	19.9
103317 2000 AK_{60}	13.8	X	348.74104	250.32267	125.17630	13.68974	0.0322521	0.17753727	3.1352802	20	10 30.3	18.3
103318 2000 AS_{60}	14.5	X	35.94225	47.51519	119.86690	17.06795	0.1910339	0.20197008	2.8770320	20	4 25.6	18.0
103319 2000 AZ_{62}	15.8	X	301.91921	89.29094	13.87015	3.11902	0.1283601	0.28031452	2.3122723	20	—	—
103320 2000 AN_{64}	14.9	X	238.67541	84.18381	333.27504	7.89433	0.2116940	0.21852684	2.7298128	20	7 7.4	19.3
103321 2000 AX_{65}	14.7	X	123.59264	91.21442	105.51526	12.71383	0.1088457	0.21722424	2.7407148	20	9 17.3	19.1
103322 2000 AH_{66}	15.3	X	333.07802	7.32686	119.75795	18.04804	0.1140466	0.23744424	2.5828249	20	—	—
103323 2000 AA_{67}	14.9	X	18.53485	338.17072	88.48934	6.98341	0.0694754	0.28448325	2.2896280	20	—	—
103324 2000 AB_{67}	15.3	X	197.00869	307.59015	96.13694	8.50028	0.1707575	0.25855093	2.4402743	20	5 15.5	19.2
103325 2000 AC_{67}	16.9	X	88.30182	116.71032	302.01937	7.47185	0.0903855	0.29504352	2.2346628	20	1 16.6	19.1
103326 2000 AD_{67}	15.0	X	21.99711	94.20028	111.64845	6.62728	0.1644321	0.20487805	2.8497434	20	5 14.0	18.0
103327 2000 AQ_{68}	15.4	X	283.74179	55.01754	93.25307	12.87345	0.2130571	0.23758017	2.5818396	20	—	—
103328 2000 AC_{69}	15.2	X	273.79476	111.53693	258.51858	12.63437	0.1647952	0.22247713	2.6974028	20	6 20.4	18.7
103329 2000 AN_{69}	16.1	X	189.47454	118.10591	246.29388	3.09777	0.1765641	0.30689223	2.1767679	20	3 13.0	19.4
103330 2000 AX_{69}	15.1	X	336.60884	237.99223	197.91576	3.86074	0.2391057	0.23780099	2.5802410	20	—	—
103331 2000 AY_{69}	15.6	X	323.02771	277.41569	158.87644	4.66056	0.0995350	0.23573597	2.5952876	20	12 21.9	18.5
103332 2000 AZ_{69}	16.0	X	331.10779	330.09981	127.75609	4.83982	0.2219034	0.23869104	2.5738227	20	—	—
103333 2000 AN_{70}	16.0	X	173.73590	98.92906	231.62922	6.09952	0.0855362	0.29877511	2.2160171	20	1 8.7	19.0
103334 2000 AZ_{72}	16.3	X	183.86996	258.52934	147.27582	4.20294	0.1421846	0.26232529	2.4168106	20	5 5.1	20.0
103335 2000 AF_{75}	15.1	X	348.82524	329.16615	123.44294	8.31038	0.1648137	0.24005795	2.5640431	20	—	—
103336 2000 AH_{77}	15.5	X	53.74680	271.86402	141.13320	4.75746	0.1281966	0.24426048	2.5345483	20	—	—
103337 2000 AG_{78}	15.0	X	11.46220	283.60365	115.97036	8.44932	0.1956263	0.23780902	2.5801829	20	—	—
103338 2000 AN_{78}	16.0	X	321.48607	206.47084	225.74393	3.02454	0.1988422	0.23425676	2.6062013	20	12 16.6	18.3
103339 2000 AV_{79}	15.4	X	322.96975	287.61116	261.50017	5.79415	0.0702083	0.29531534	2.2332913	20	—	—
103340 2000 AW_{81}	15.2	X	349.15626	202.11895	195.81785	4.65108	0.1650371	0.23375411	2.6099361	20	12 19.5	17.9
103341 2000 AG_{82}	15.4	X	165.94316	337.65434	122.03879	10.34178	0.1033230	0.21492200	2.7602524	20	6 24.0	19.7
103342 2000 AX_{83}	16.2	X	46.25315	215.99295	238.57157	2.40421	0.0760148	0.24636179	2.5201157	20	1 8.0	19.0
103343 2000 AX_{84}	15.4	X	167.72653	63.75279	130.98628	3.08849	0.1241725	0.22488897	2.6780825	20	10 25.6	19.6
103344 2000 AC_{85}	15.1	X	238.96902	230.88141	281.15681	10.53554	0.1843827	0.22900569	2.6458905	20	11 6.6	19.0
103345 2000 AU_{85}	15.4	X	90.01435	101.49158	270.10536	6.54150	0.1321677	0.29009781	2.2599895	20	—	—
103346 2000 AD_{86}	16.3	X	304.39073	226.88803	152.99171	2.56351	0.2783142	0.27385109	2.3485135	20	8 11.5	17.7
103347 2000 AK_{86}	16.0	X	158.44693	227.36835	290.04016	4.97865	0.1293859	0.26749731	2.3855568	20	8 31.5	19.6
103348 2000 AL_{86}	15.2	X	218.43411	82.17820	291.93647	4.82953	0.1586648	0.21161292	2.7889534	20	4 25.5	19.7
103349 2000 AN_{87}	14.7	X	328.65498	133.08441	292.32112	8.86504	0.1121953	0.18384184	3.0631844	20	11 29.6	18.4
103350 2000 AV_{88}	15.8	X	33.09024	135.22838	286.09886	5.71673	0.1461188	0.28857021	2.2679582	20	—	—
103351 2000 AS_{89}	15.8	X	283.44197	312.15702	122.41149	8.00925	0.0590387	0.27423621	2.3463143	20	11 1.3	18.5
103352 2000 AO_{90}	16.4	X	143.02030	304.94036	116.09488	5.80957	0.0925136	0.30309883	2.1948923	20	4 7.8	19.3
103353 2000 AP_{90}	15.6	X	237.48780	105.25782	295.69209	1.49742	0.2043619	0.21783297	2.7356066	20	6 14.6	19.9
103354 2000 AV_{90}	14.6	X	178.09340	70.86594	121.01448	11.80977	0.0035447	0.17874145	3.1211828	20	11 4.1	19.2
103355 2000 AY_{90}	15.4	X	251.26312	170.00808	288.61358	11.10580	0.1397963	0.22508337	2.6765403	20	9 15.9	19.4
103356 2000 AJ_{92}	14.4	X	276.85972	148.37664	322.34055	16.19122	0.1403240	0.18050600	3.1008086	20	10 26.6	18.9
103357 2000 AM_{92}	14.3	X	354.25492	357.03945	327.66803	25.19131	0.1825490	0.28110441	2.3079388	20	9 13.9	16.6
103358 2000 AE_{93}	15.8	X	103.37924	252.09740	85.03337	8.87499	0.2939338	0.29079704	2.2563652	20	—	—
103359 2000 AH_{93}	15.0	X	149.55277	91.90664	104.82703	24.66708	0.3225095	0.22003030	2.7173634	20	10 20.9	20.6
103360 2000 AS_{94}	16.2	X	185.60760	254.06568	317.80093	5.20115	0.0463121	0.28000817	2.3139586	20	12 22.1	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103361 2000 AR_{95}	14.7	X	192.74271	158.00361	324.50761	6.99874	0.0925348	0.21794797	2.7346442	20	8 20.9	18.6
103362 2000 AV_{95}	16.1	X	243.39294	17.20612	119.59241	6.49613	0.1645010	0.27520753	2.3407903	20	11 10.6	18.9
103363 2000 AL_{100}	15.1	X	316.91722	301.33540	138.29405	4.24127	0.1947763	0.23725095	2.5842275	20	12 18.8	17.2
103364 2000 AP_{102}	14.7	X	248.24531	338.74249	99.61820	14.70828	0.1506328	0.22697950	2.6616133	20	8 25.9	18.6
103365 2000 AZ_{103}	15.8	X	256.93779	334.48025	142.37561	6.34490	0.2417484	0.23064660	2.6333263	20	10 11.9	19.2
103366 2000 AQ_{104}	14.7	X	282.22721	322.78208	104.08227	17.13079	0.0859039	0.18127003	3.0920894	20	10 3.2	19.2
103367 2000 AZ_{105}	15.2	X	52.58080	64.57642	265.57425	20.64671	0.2646105	0.28378173	2.2933998	20	—	—
103368 2000 AF_{107}	16.6	X	190.00781	252.64068	225.41901	2.85536	0.1939703	0.26857024	2.3791991	20	8 9.7	20.3
103369 2000 AN_{109}	15.7	X	217.73618	300.97782	160.89483	4.11967	0.1828149	0.22257853	2.6965834	20	8 13.5	19.9
103370 2000 AH_{111}	15.5	X	197.06139	91.47331	112.79141	15.15113	0.1748482	0.23005220	2.6378603	20	12 3.2	19.8
103371 2000 AO_{113}	16.0	X	76.31714	247.90744	190.72365	4.11304	0.1014590	0.29682782	2.2256984	20	1 25.3	18.1
103372 2000 AS_{113}	16.1	X	43.82119	296.17690	151.49464	5.10454	0.1333944	0.29354244	2.2422745	20	—	—
103373 2000 AM_{114}	15.1	X	268.53307	227.83445	238.62333	4.52220	0.1278454	0.27737700	2.3285689	20	11 10.6	17.4
103374 2000 AQ_{114}	16.3	X	26.15585	173.24540	234.71885	4.69678	0.1003482	0.28625627	2.2801638	20	—	—
103375 2000 AT_{114}	16.6	X	269.56414	23.13323	121.82737	6.07852	0.0548508	0.28177084	2.3042982	20	—	—
103376 2000 AX_{118}	14.7	X	291.12501	213.97824	275.00206	7.77408	0.0919046	0.18545835	3.0453587	20	12 24.3	18.6
103377 2000 AG_{119}	15.3	X	155.72897	339.70108	147.91545	8.74611	0.1643590	0.21465859	2.7625101	20	7 19.6	19.9
103378 2000 AM_{119}	16.1	X	120.89867	233.96284	167.51276	5.81496	0.1479865	0.29824039	2.2186650	20	2 16.9	18.8
103379 2000 AH_{120}	15.1	X	168.53332	94.23590	162.97071	4.03714	0.1795541	0.23221052	2.6214895	20	—	—
103380 2000 AN_{120}	15.7	X	324.37838	155.68172	257.37763	5.96064	0.0899989	0.27760130	2.3273144	20	12 4.8	18.0
103381 2000 AP_{120}	15.5	X	352.20993	251.34437	182.94952	4.09039	0.2127418	0.18874500	3.0099024	20	—	—
103382 2000 AC_{121}	15.7	X	51.33867	172.13199	246.42057	5.31649	0.1203885	0.29015141	2.2597111	20	—	—
103383 2000 AF_{121}	15.9	X	132.32257	171.56115	257.91407	5.10414	0.1130753	0.30233794	2.1985733	20	4 3.1	18.7
103384 2000 AG_{121}	15.6	X	172.22038	345.21512	137.50602	9.46427	0.2115635	0.21627732	2.7487088	20	7 28.6	20.4
103385 2000 AU_{121}	15.9	X	299.91953	132.53950	234.15039	6.12601	0.1326072	0.27035358	2.3687249	20	8 2.4	18.4
103386 2000 AK_{122}	15.4	X	287.95305	313.19576	156.35497	6.26062	0.1256822	0.28039079	2.3118530	20	12 22.8	17.6
103387 2000 AS_{123}	15.9	X	120.54810	161.92552	243.56531	5.45788	0.1574800	0.29842930	2.2177286	20	2 21.4	18.6
103388 2000 AX_{123}	15.8	X	219.17961	7.10776	189.20601	5.66829	0.1906243	0.27833960	2.3231971	20	12 22.6	18.8
103389 2000 AN_{124}	16.3	X	30.88015	145.89802	273.58993	4.52753	0.1707974	0.28798704	2.2710189	20	—	—
103390 2000 AL_{125}	14.9	X	176.72168	149.90559	296.40534	12.28316	0.1428101	0.21303413	2.7765357	20	6 18.3	19.5
103391 2000 AZ_{125}	16.2	X	168.60721	224.03090	155.97514	2.41593	0.1713961	0.30138605	2.2032001	20	3 15.7	19.4
103392 2000 AC_{127}	14.9	X	225.02030	40.67969	137.44457	12.73367	0.0968325	0.22924452	2.6440525	20	12 9.9	18.7
103393 2000 AF_{127}	15.8	X	56.23177	275.72959	265.28928	5.21892	0.1311175	0.25503360	2.4626600	20	6 1.5	18.4
103394 2000 AO_{127}	14.7	X	189.99780	59.44313	144.56920	10.06379	0.1753748	0.22652099	2.6652037	20	11 25.1	19.1
103395 2000 AX_{127}	15.5	X	226.42148	357.80172	142.92641	6.52614	0.1237057	0.27375380	2.3490700	20	10 30.2	18.5
103396 2000 AC_{129}	15.0	X	241.44807	127.37392	266.21090	7.80032	0.1532111	0.21560804	2.7543941	20	6 14.6	19.1
103397 2000 AJ_{129}	15.0	X	1.05635	260.65145	141.22261	14.89862	0.0808023	0.23181857	2.6244435	20	—	—
103398 2000 AS_{129}	15.8	X	208.49774	307.52740	139.85451	7.43974	0.2750201	0.21784734	2.7354863	20	7 11.9	20.6
103399 2000 AM_{130}	15.6	X	324.54030	326.60481	135.14577	7.47002	0.1320292	0.28235582	2.3011144	20	—	—
103400 2000 AO_{130}	15.3	X	223.95603	171.47044	276.25361	6.93703	0.2074762	0.21975430	2.7196382	20	7 29.4	19.8
103401 2000 AW_{130}	15.8	X	48.42105	271.54284	117.15766	6.16533	0.1240455	0.28808966	2.2704796	20	—	—
103402 2000 AA_{132}	16.4	X	292.56192	184.76040	285.24749	4.06110	0.0922994	0.28164495	2.3049848	20	—	—
103403 2000 AG_{132}	16.0	X	306.21282	331.75016	95.22728	3.28971	0.0811600	0.22980034	2.6397874	20	11 10.9	19.0
103404 2000 AJ_{134}	15.2	X	255.42370	46.66147	83.38886	12.89891	0.1185005	0.23045423	2.6347915	20	11 15.9	18.7
103405 2000 AM_{134}	16.2	X	238.09108	80.01856	291.16878	0.42105	0.1945412	0.26408795	2.4060445	20	5 8.5	19.9
103406 2000 AX_{135}	15.1	X	238.13377	288.03235	319.19431	4.93737	0.1107847	0.24169958	2.5524199	20	—	—
103407 2000 AC_{136}	16.1	X	334.65999	65.90831	41.97493	2.31374	0.1230296	0.23737621	2.5833183	20	—	—
103408 2000 AK_{140}	16.0	X	329.14109	208.34790	170.73297	5.76502	0.1753174	0.28162539	2.3050915	20	10 31.4	17.6
103409 2000 AP_{140}	15.7	X	300.80837	334.20625	102.47572	4.74392	0.1597236	0.23186468	2.6240956	20	11 10.8	18.3
103410 2000 AR_{140}	15.5	X	283.27845	23.86464	119.43233	19.46856	0.1469469	0.23482493	2.6019958	20	—	—
103411 2000 AR_{141}	15.6	X	59.61646	155.25327	260.39817	5.80338	0.1209451	0.29002681	2.2603583	20	—	—
103412 2000 AS_{142}	14.8	X	239.39140	344.89471	146.48495	13.27094	0.1069050	0.22527434	2.6750274	20	10 29.7	18.7
103413 2000 AL_{143}	14.8	X	209.22399	224.90146	273.78041	10.17616	0.0730176	0.22282907	2.6945618	20	9 26.2	19.0
103414 2000 AX_{144}	14.3	X	266.02655	133.93659	309.77432	23.99218	0.1504858	0.27189662	2.3597546	20	9 13.4	17.6
103415 2000 AF_{146}	15.1	X	1.00104	320.54820	105.81461	19.05252	0.2526704	0.24018177	2.5631618	20	—	—
103416 2000 AM_{148}	14.1	X	185.52884	225.70130	222.13443	26.81546	0.2411688	0.17316647	3.1878180	20	6 21.6	20.0
103417 2000 AL_{150}	15.1	X	193.03588	187.09321	242.12414	8.44177	0.1373510	0.21442988	2.7644740	20	6 11.9	19.4
103418 2000 AM_{150}	16.2	X	42.26914	272.92736	140.71780	6.94917	0.1407337	0.28889709	2.2662471	20	—	—
103419 2000 AS_{150}	15.2	X	161.85815	290.74882	163.87440	14.03787	0.1472712	0.21295844	2.7771935	20	6 15.2	19.9
103420 2000 AX_{150}	15.4	X	89.57784	306.86243	211.04743	10.37672	0.1689392	0.20924084	2.8099920	20	6 21.4	19.5
103421 Laurmatt	15.8	X	288.83735	170.64677	313.19754	8.50714	0.0682245	0.28094180	2.3088292	20	—	—
103422 Laurisiren	16.0	X	193.66508	41.09114	122.06991	7.24710	0.0693628	0.27257158	2.3558574	20	10 27.2	19.3
103423 2000 AM_{153}	15.5	X	310.25168	32.59577	299.00052	4.43846	0.0991974	0.21496934	2.7598472	20	7 2.2	18.7
103424 2000 AY_{155}	16.1	X	325.91110	153.12738	301.04773	2.38135	0.1168366	0.28546572	2.2843715	20	—	—
103425 2000 AX_{157}	15.5	X	314.21620	344.62217	42.72097	3.16634	0.1067891	0.22684648	2.6626537	20	9 28.2	18.3
103426 2000 AC_{158}	15.6	X	347.29473	30.99212	80.02888	7.91243	0.0882941	0.24060058	2.5601865	20	—	—
103427 2000 AJ_{158}	15.7	X	169.39296	40.25932	79.37675	4.46023	0.1473593	0.21674690	2.7447373	20	7 23.7	20.1
103428 2000 AN_{158}	16.2	X	266.67126	81.24214	64.20536	4.99895	0.1088048	0.28160110	2.3052241	20	—	—
103429 2000 AJ_{159}	16.0	X	6.02881	161.22669	331.21298	3.60160	0.1809586	0.29260126	2.2470803	20	—	—
103430 2000 AT_{159}	15.5	X	301.85163	22.23807	70.11299	3.32960	0.1509746	0.23154749	2.6264915	20	12 4.1	18.1
103431 2000 AY_{159}	15.6	X	292.96927	42.03213	89.35570	6.10465	0.0765292	0.28251315	2.3002601	20	—	—
103432 2000 AX_{160}	15.2	X	177.39647	72.73300	335.94127	6.06728	0.2421770	0.21147030	2.7902072	20	5 1.3	20.1
103433 2000 AY_{165}	14.9	X	192.56062	317.62538	254.45536	31.41587	0.2096796	0.23113120	2.6296443	20	12 2.9	19.1
103434 2000 AQ_{171}	16.1	X	330.89176	350.25625	114.17612	15.33620	0.1543576	0.23928134	2.5695880	20	—	—
103435 2000 AO_{176}	14.9	X	319.95742	242.36581	209.41059	9.62280	0.1109647	0.18838095	3.0137790	20	12 21.2	18.6
103436 2000 AE_{179}	15.5	X	276.16732	220.70988	232.84957	10.12917	0.1429069	0.22914968	2.6447820	20	10 19.9	18.6
103437 2000 AJ_{181}	16.5	X	15.15257	263.42844	237.45683	7.54075	0.1116486	0.29510518	2.2343515	20	1 6.6	18.6
103438 2000 AT_{182}	14.8	X	142.53834	235.31050	259.92736	11.28169	0.1552437	0.21370188	2.7707488	20	7 15.2	19.3
103439 2000 AK_{184}	14.9	X	269.61757	295.33518	250.90572	11.80349	0.1347587	0.23766572	2.5812200	20	—	—
103440 2000 AC_{187}	14.9	X	80.86664	314.99777	113.79536	14.84211	0.1929199	0.20434569	2.8546907	20	2 22.9	18.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103441 2000 AN_{187}	15.6	X	287.35352	301.71739	131.66856	14.24553	0.1518546	0.23189208	2.6238889	20	10 18.1	18.8
103442 2000 AO_{187}	14.9	X	274.65966	326.24290	132.01480	15.79453	0.0516754	0.23334202	2.6130080	20	11 14.2	18.6
103443 2000 AP_{188}	15.6	X	272.38843	265.87390	154.80414	11.10660	0.2349404	0.22763031	2.6565377	20	8 15.6	19.1
103444 2000 AD_{189}	15.7	X	10.40383	244.18979	190.84130	9.45340	0.1500666	0.24154666	2.5534971	20	—	—
103445 2000 AJ_{190}	15.5	X	334.15585	238.18123	223.39686	12.55322	0.1168383	0.23860350	2.5744522	20	—	—
103446 2000 AS_{190}	14.8	X	271.73357	260.77611	158.56755	11.53098	0.1704174	0.22592501	2.6698888	20	8 23.3	18.1
103447 2000 AD_{191}	15.3	X	237.41037	353.57039	149.02263	13.71477	0.2286582	0.22860364	2.6489919	20	10 25.1	19.3
103448 2000 AL_{192}	15.3	X	134.45288	351.68432	182.75817	9.46542	0.1837751	0.21747879	2.7385759	20	8 27.6	19.9
103449 2000 AM_{192}	15.4	X	251.64032	199.87812	204.25155	9.36106	0.2445167	0.22102339	2.7092176	20	6 27.9	19.8
103450 2000 AJ_{193}	15.0	X	286.46475	339.65062	194.54979	9.48312	0.1416266	0.23799275	2.5788548	20	—	—
103451 2000 AM_{193}	15.0	X	217.36653	261.59451	254.84895	12.71703	0.1122813	0.22698998	2.6615314	20	10 27.2	19.1
103452 2000 AY_{193}	15.4	X	220.07193	20.52681	144.46477	15.19352	0.1898114	0.22742822	2.6581112	20	11 8.5	19.7
103453 2000 AU_{194}	15.2	X	201.52184	359.10483	176.72795	8.23175	0.1638379	0.22599862	2.6693091	20	11 2.3	19.3
103454 2000 AE_{196}	15.6	X	245.34401	266.38297	247.25055	10.97135	0.1437503	0.22909287	2.6452192	20	11 25.5	19.1
103455 2000 AJ_{196}	15.4	X	175.49856	356.34647	155.30052	15.36859	0.1245104	0.21979697	2.7192862	20	9 8.8	19.6
103456 2000 AN_{196}	15.1	X	224.51871	234.89903	172.00281	9.02926	0.2826117	0.21716088	2.7412480	20	6 5.8	20.0
103457 2000 AO_{196}	15.9	X	36.86519	215.91399	234.89939	6.95809	0.1773007	0.24354641	2.5395000	20	—	—
103458 2000 AA_{199}	15.2	X	121.06974	351.73093	185.14184	9.13577	0.0980915	0.21454756	2.7634630	20	8 11.3	19.4
103459 2000 AB_{201}	14.2	X	315.89731	169.38019	246.37000	31.93970	0.1421332	0.23143270	2.6273599	20	11 8.7	17.1
103460 Dieterherrmann	15.7	X	282.18439	100.82266	115.44897	2.93341	0.0878570	0.24315881	2.5421980	20	—	—
103461 2000 AX_{205}	15.8	X	151.78902	157.90450	111.94078	18.75105	0.1413385	0.28181984	2.3040311	20	—	—
103462 2000 AQ_{206}	15.5	X	246.69568	76.47227	281.35896	3.65446	0.0920435	0.21379418	2.7699513	20	5 11.3	19.4
103463 2000 AF_{207}	15.5	X	309.81095	215.64074	301.15780	9.39771	0.0868153	0.19015848	2.9949684	20	—	—
103464 2000 AG_{207}	16.1	X	125.51941	345.34796	285.76561	0.72540	0.0510123	0.22933325	2.6433705	20	12 14.6	19.9
103465 2000 AB_{208}	15.7	X	8.86967	47.66865	117.84170	3.88571	0.1220015	0.25273339	2.4775797	20	2 11.5	18.0
103466 2000 AC_{209}	15.2	X	193.01529	346.04102	122.73171	10.16757	0.0544630	0.21693585	2.7431433	20	8 6.4	19.2
103467 2000 AD_{209}	15.7	X	221.58054	351.52146	118.48684	4.38263	0.0960556	0.26998048	2.3709068	20	9 14.5	18.8
103468 2000 AX_{209}	16.4	X	266.93325	258.42847	103.01652	2.49411	0.2002574	0.26842380	2.3800644	20	5 26.7	19.6
103469 2000 AK_{211}	15.0	X	173.05780	326.90503	310.60308	11.78098	0.1714820	0.23531332	2.5983942	20	—	—
103470 2000 AA_{212}	15.5	X	329.70688	358.84414	318.35586	8.54987	0.2499116	0.26019248	2.4299997	20	7 3.6	17.1
103471 2000 AF_{212}	15.4	X	311.96335	91.33909	320.61541	9.95960	0.1676023	0.17733378	3.1376782	20	10 5.6	19.3
103472 2000 AM_{212}	16.6	X	154.99889	353.41783	137.72324	3.20469	0.1608196	0.26155194	2.4215722	20	7 26.2	20.4
103473 2000 AU_{212}	16.0	X	72.32327	137.79392	97.46146	3.59960	0.1545309	0.26922911	2.3753159	20	9 17.8	19.2
103474 2000 AN_{213}	15.7	X	193.48445	200.50210	322.52526	4.06808	0.0324946	0.22553484	2.6729672	20	10 17.0	19.5
103475 2000 AY_{214}	15.8	X	231.38486	237.59184	88.48933	6.30171	0.1557636	0.25876560	2.4389245	20	3 12.0	19.6
103476 2000 AH_{215}	15.2	X	91.04910	150.23594	256.05719	1.66023	0.0958949	0.20090786	2.8871638	20	1 22.3	18.8
103477 2000 AA_{219}	15.5	X	203.48237	72.99737	302.64712	7.81022	0.1745475	0.21044422	2.7992695	20	4 11.5	20.2
103478 2000 AD_{219}	15.6	X	308.11304	57.82944	307.75364	4.34252	0.0793275	0.22119274	2.7078346	20	8 17.8	19.0
103479 2000 AE_{223}	16.1	X	237.63408	338.68033	45.22741	0.41323	0.1672862	0.21687331	2.7436706	20	5 27.7	20.4
103480 2000 AS_{223}	15.5	X	256.19757	235.74491	171.50849	0.47426	0.1686889	0.17015579	3.2253108	20	7 14.8	20.2
103481 2000 AP_{224}	15.7	X	339.45852	314.78095	109.65467	1.64071	0.0710244	0.23593295	2.5938428	20	12 30.1	18.7
103482 2000 AB_{227}	15.9	X	337.92328	211.14674	153.27220	2.72729	0.0810759	0.22122998	2.7075308	20	10 5.4	19.1
103483 2000 AJ_{227}	15.9	X	29.83813	9.25475	320.70449	4.09115	0.1499772	0.27134639	2.3629435	20	11 27.4	18.7
103484 2000 AR_{227}	16.4	X	310.86027	112.11489	319.56455	5.27931	0.1081593	0.27607719	2.3358720	20	12 7.5	18.6
103485 2000 AR_{231}	14.8	X	156.32157	335.04941	296.15433	11.62476	0.1549611	0.23494529	2.6011070	20	—	—
103486 2000 AV_{231}	16.3	X	352.35734	171.33100	291.26613	2.10395	0.0840558	0.28780557	2.2719735	20	—	—
103487 2000 AC_{232}	15.5	X	222.16065	166.33418	299.15199	2.39888	0.0900791	0.22321564	2.6914499	20	9 1.4	19.3
103488 2000 AK_{232}	16.4	X	241.25703	281.75936	103.17861	7.50676	0.1136054	0.26405599	2.4062387	20	6 8.7	19.8
103489 2000 AO_{232}	15.7	X	284.04530	346.41788	122.73173	3.80945	0.0676523	0.23002083	2.6381001	20	12 4.2	18.9
103490 2000 AA_{235}	14.5	X	22.41617	58.11145	289.65177	9.97533	0.1048731	0.18098479	3.0953374	20	11 10.0	18.7
103491 2000 AG_{236}	14.9	X	186.39137	210.04169	275.64893	11.62415	0.1319749	0.21829886	2.7317130	20	8 12.2	19.3
103492 2000 AK_{236}	15.7	X	327.31486	104.59324	299.75673	1.98475	0.3041856	0.23127769	2.6285337	20	11 20.9	17.0
103493 2000 AN_{237}	14.7	X	185.78792	343.17517	127.75868	10.32879	0.1780259	0.21512087	2.7585510	20	7 26.4	19.3
103494 2000 AB_{239}	16.0	X	184.99614	331.46885	101.07430	0.41906	0.0492481	0.21280332	2.7785429	20	6 9.6	20.1
103495 2000 AJ_{239}	16.2	X	243.54328	256.96747	120.30628	4.95995	0.1281347	0.26313576	2.4118454	20	5 30.5	19.7
103496 2000 AR_{239}	14.3	X	138.14693	60.51021	115.20852	17.14202	0.2060828	0.21450391	2.7638379	20	9 8.5	19.2
103497 2000 AX_{240}	15.3	X	182.19035	255.87677	176.32067	12.14218	0.1620934	0.26440448	2.4041239	20	6 6.6	19.3
103498 2000 AW_{243}	15.3	X	19.48224	25.31260	122.07991	11.70706	0.1933559	0.24428249	2.5343961	20	2 3.7	17.3
103499 2000 AO_{244}	15.4	X	298.39393	358.54039	71.18913	14.52032	0.1497454	0.22866652	2.6485062	20	10 31.1	18.4
103500 2000 AE_{245}	14.9	X	267.89523	51.47279	112.34245	24.53673	0.2119925	0.28625703	2.2801597	20	—	—
103501 2000 AT_{245}	15.2	X	22.16042	106.51446	3.92938	22.50132	0.2871181	0.28700001	2.2762228	20	—	—
103502 2000 AF_{247}	15.5	X	55.68817	41.58936	36.37524	9.71149	0.1751981	0.29406041	2.2396407	20	—	—
103503 2000 AP_{248}	15.2	X	233.83807	338.38292	151.96717	13.19753	0.0497324	0.22643176	2.6659038	20	10 29.5	19.0
103504 2000 AF_{254}	15.8	X	265.11986	98.01125	319.23373	1.19314	0.0715657	0.22292982	2.6937499	20	8 26.8	19.4
103505 2000 BW	16.1	X	211.97877	214.20421	297.04372	19.53393	0.0278411	0.37044429	1.9200864	20	11 28.4	18.3
103506 2000 BD_{1}	15.8	X	158.38372	286.42884	170.57151	27.09801	0.2664353	0.35668500	1.9691531	20	6 20.6	19.7
103507 2000 BK_{1}	15.5	X	35.78538	317.12541	120.81523	4.12215	0.0559881	0.19350161	2.9603723	20	—	—
103508 2000 BV_{1}	12.8	X	1.77204	225.20607	152.88693	3.56930	0.0300507	0.08057924	5.3086889	20	10 27.0	19.7
103509 2000 BG_{2}	15.9	X	237.87755	201.69393	313.63315	3.11973	0.1771654	0.27642629	2.3339049	20	11 23.1	18.7
103510 2000 BS_{2}	15.0	X	277.37465	195.25624	340.87802	24.54611	0.1705232	0.28566750	2.2832957	20	—	—
103511 2000 BW_{2}	16.2	X	113.08863	212.00673	332.85259	4.00510	0.1352564	0.26286225	2.4135181	20	8 22.7	19.6
103512 2000 BZ_{2}	15.7	X	60.73603	136.03518	121.09928	7.84092	0.0510574	0.26725490	2.3869992	20	9 18.4	18.7
103513 2000 BM_{3}	14.7	X	245.70475	167.76814	328.29203	8.44886	0.1376362	0.22687928	2.6623971	20	10 30.9	18.4
103514 2000 BD_{4}	13.8	X	21.73815	67.81047	2.10714	13.03261	0.1455385	0.24356259	2.5393876	20	—	—
103515 2000 BR_{4}	15.2	X	161.45924	90.83745	35.37788	12.07093	0.2442419	0.21659462	2.7460236	20	7 28.5	20.2
103516 2000 BY_{4}	14.5	X	245.76020	117.57249	331.43581	12.39223	0.2284218	0.22528460	2.6749461	20	8 22.1	18.3
103517 2000 BE_{5}	15.9	X	44.16692	339.73729	103.17583	4.39995	0.1293765	0.29261321	2.2470191	20	—	—
103518 2000 BF_{5}	17.3	X	64.18918	101.38429	326.78025	3.95288	0.1483213	0.29390848	2.2404124	20	—	—
103519 2000 BW_{5}	15.4	X	271.61760	28.75691	48.52827	13.86226	0.1537420	0.22662352	2.6643998	20	9 27.6	18.9
103520 2000 BB_{6}	14.9	X	172.93681	67.84178	27.29342	13.75122	0.1444101	0.21421357	2.7663348	20	6 24.9	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103521 2000 BH_6	14.8	X	143.09986	281.52113	7.64403	14.50205	0.1963058	0.23557850	2.5964439	20	—	—
103522 2000 BQ_6	16.5	X	55.16861	224.71976	80.62528	12.47942	0.1777020	0.41922132	1.7681013	20	12 31.7	18.6
103523 2000 BT_6	14.2	X	245.65885	65.62032	46.27889	22.86376	0.0588161	0.17909788	3.1170403	20	10 15.3	18.8
103524 2000 BO_7	15.8	X	5.85810	89.38559	56.81609	4.90833	0.0935901	0.29545968	2.2325639	20	1 1.7	18.1
103525 2000 BW_7	15.9	X	71.73649	338.44530	33.87913	5.33997	0.1701178	0.28914616	2.2649456	20	—	—
103526 2000 BS_8	15.6	X	85.45765	5.20498	26.57916	6.67972	0.0820092	0.29104263	2.2550957	20	—	—
103527 2000 BB_9	15.7	X	112.29895	257.40874	97.35301	4.56061	0.1065279	0.24184783	2.5513767	20	—	—
103528 2000 BD_{10}	16.3	X	49.92411	291.78953	131.02100	1.09116	0.0604298	0.24031421	2.5622200	20	—	—
103529 2000 BK_{10}	15.5	X	101.21276	279.77541	131.97524	5.94545	0.0758086	0.19754235	2.9198637	20	2 9.4	19.5
103530 2000 BS_{11}	16.6	X	123.94645	280.97102	290.76318	3.48516	0.0858474	0.27082691	2.3659642	20	10 4.9	20.0
103531 2000 BD_{12}	16.0	X	214.48950	56.57290	308.74091	1.02477	0.0804778	0.20624537	2.8371344	20	4 16.4	20.2
103532 2000 BT_{12}	16.1	X	51.56928	206.94232	112.74158	1.63624	0.2180343	0.27373620	2.3491706	20	12 20.2	19.4
103533 2000 BS_{14}	14.4	X	294.19336	73.29363	349.55403	12.06600	0.2730784	0.22636546	2.6664244	20	9 17.3	17.1
103534 2000 BS_{16}	14.6	X	195.09587	88.65693	114.76478	13.23808	0.2019831	0.22906117	2.6454632	20	11 27.9	19.0
103535 2000 BT_{16}	15.5	X	128.62622	91.69804	57.62333	3.40314	0.0847166	0.21478169	2.7614544	20	7 16.8	19.6
103536 2000 BD_{17}	15.8	X	127.37484	276.94492	307.48164	6.71517	0.0692388	0.27292909	2.3537997	20	10 23.9	19.2
103537 2000 BO_{17}	13.5	X	199.57459	65.45170	85.06123	6.61466	0.1455358	0.12740425	3.9115310	20	9 22.3	19.6
103538 2000 BY_{17}	15.1	X	147.07701	271.93078	318.87601	6.26946	0.2458372	0.27280231	2.3545289	20	11 20.7	19.2
103539 2000 BZ_{17}	15.4	X	224.25961	102.32377	103.99626	7.95800	0.1085702	0.23372446	2.6101568	20	—	—
103540 2000 BT_{18}	15.3	X	146.03671	129.03371	318.05768	6.52585	0.1276510	0.20974190	2.8055149	20	5 17.2	19.8
103541 2000 BU_{18}	15.4	X	292.59676	154.81699	356.79182	1.84994	0.2087740	0.18784886	3.0194673	20	—	—
103542 2000 BV_{18}	16.7	X	1.12559	278.78317	337.79781	17.63209	0.0556775	0.35566858	1.9729029	20	6 14.3	18.9
103543 2000 BJ_{20}	16.2	X	293.48482	152.37075	312.54164	5.77382	0.0494377	0.27847717	2.3224319	20	12 28.3	18.7
103544 2000 BC_{21}	16.9	X	192.13721	212.65711	288.78804	1.43731	0.0485109	0.26953180	2.3735372	20	9 23.3	20.0
103545 2000 BP_{22}	16.0	X	282.52235	57.71358	131.28794	6.22223	0.2207286	0.23683408	2.5872590	20	—	—
103546 2000 BN_{23}	15.1	X	170.96519	81.85216	355.64111	16.91756	0.1351335	0.21278437	2.7787079	20	5 27.5	19.9
103547 2000 BA_{24}	15.0	X	144.73037	194.96467	10.07045	12.61368	0.1167026	0.22246587	2.6974938	20	10 12.8	19.2
103548 2000 BH_{24}	15.1	X	105.12798	126.03491	48.92138	8.59312	0.1589775	0.21184116	2.7869499	20	8 2.3	19.4
103549 2000 BJ_{24}	14.8	X	327.45381	36.82796	350.02625	14.56316	0.0468067	0.22465433	2.6799469	20	10 13.5	18.3
103550 2000 BS_{24}	15.2	X	170.87122	297.64336	32.94179	10.00643	0.1287521	0.29241375	2.2480408	20	1 13.6	18.5
103551 2000 BJ_{25}	15.9	X	42.76551	72.09152	301.34997	6.12142	0.1399557	0.28376036	2.2935149	20	—	—
103552 2000 BU_{26}	15.5	X	85.57308	223.60207	315.00598	8.00012	0.0834650	0.25868708	2.4394180	20	7 5.2	18.6
103553 2000 BW_{26}	15.6	X	202.02496	93.51031	93.16659	2.88767	0.1651040	0.22614897	2.6681258	20	11 14.7	19.7
103554 2000 BF_{27}	15.7	X	319.68714	208.93669	348.75551	4.87886	0.1044027	0.29222497	2.2490089	20	1 3.8	18.3
103555 2000 BS_{27}	16.3	X	197.99931	185.39374	356.27931	3.93395	0.1227298	0.27456132	2.3444617	20	11 15.4	19.6
103556 2000 BD_{28}	16.2	X	97.36399	37.09113	153.06263	2.88343	0.1296057	0.26157601	2.4214236	20	8 10.9	19.4
103557 2000 BK_{28}	14.9	X	275.62035	309.62823	115.39477	6.54392	0.3581355	0.22801399	2.6535568	20	8 7.6	18.5
103558 2000 BE_{29}	15.3	X	105.39318	291.71378	328.93886	6.42778	0.1792043	0.27097802	2.3650846	20	11 22.0	19.2
103559 2000 BU_{31}	15.7	X	344.06737	313.21542	308.77355	9.14635	0.1346217	0.25541103	2.4602333	20	5 13.9	18.3
103560 2000 BZ_{31}	15.6	X	21.37926	12.01062	281.04667	5.65017	0.1349062	0.26601585	2.3944055	20	9 16.9	18.3
103561 2000 BJ_{32}	15.3	X	59.51572	162.82404	112.47943	4.53690	0.0676810	0.22211364	2.7003448	20	10 5.9	19.0
103562 2000 BL_{33}	15.9	X	60.54231	66.68232	115.13117	4.80771	0.1419466	0.25580938	2.4576785	20	6 12.1	18.6
103563 2000 BY_{33}	16.5	X	230.73203	159.10814	356.37954	3.10631	0.1022132	0.27599081	2.3363593	20	11 25.2	19.4
103564 2000 BR_{34}	15.3	X	133.37274	24.11695	131.08450	21.23137	0.0924564	0.26196995	2.4189955	20	8 1.9	18.6
103565 2000 BG_{35}	15.5	X	291.10051	125.03565	327.37284	12.08683	0.1359020	0.22953170	2.6418466	20	11 10.0	18.7
103566 2000 BL_{35}	15.1	X	201.58818	104.82462	57.37296	4.79897	0.1263923	0.22425966	2.6830903	20	10 19.2	19.0
103567 2000 BR_{40}	16.6	X	38.10170	335.02751	301.19722	1.21908	0.1362126	0.26535326	2.3983898	20	9 22.3	19.3
103568 2000 BZ_{41}	16.3	X	346.51563	50.98200	287.64468	1.17626	0.2748620	0.27432758	2.3457933	20	10 12.6	17.4
103569 2000 BD_{45}	16.4	X	176.03850	264.56090	135.83935	3.24757	0.1750602	0.25586780	2.4573044	20	4 21.4	20.3
103570 2000 BH_{49}	15.4	X	51.47384	46.75959	301.11396	2.40737	0.0329505	0.23111276	2.6297841	20	12 22.2	18.9
103571 2000 BU_{49}	16.8	X	126.14478	343.70005	323.87581	0.77404	0.1975088	0.28498891	2.2869188	20	—	—
103572 2000 BX_{50}	15.5	X	131.29122	358.63818	299.23294	10.28899	0.0644248	0.23532648	2.5982973	20	—	—
103573 2000 BE_{51}	15.3	X	106.55208	305.42160	353.49520	0.78066	0.1393235	0.18099915	3.0951737	20	12 22.6	20.2
103574 2000 CR	15.5	X	39.91190	312.16851	126.16041	3.61966	0.1193502	0.24084386	2.5584622	20	—	—
103575 2000 CS	16.2	X	39.21979	164.74491	327.79813	6.79195	0.1328711	0.29548549	2.2324339	20	2 11.4	17.7
103576 2000 CG_1	15.6	X	75.62598	105.31765	323.66570	6.93599	0.1310207	0.29333590	2.2433270	20	1 16.8	17.6
103577 2000 CL_1	15.3	X	204.06360	37.84107	146.92449	15.29640	0.1260283	0.22499611	2.6772322	20	11 21.7	19.6
103578 2000 CK_3	15.1	X	352.48393	300.08880	120.33805	5.72193	0.2048965	0.23872744	2.5735611	20	—	—
103579 2000 CZ_3	15.8	X	166.10225	255.20888	267.07977	1.75505	0.1111045	0.27001601	2.3706988	20	9 16.7	19.4
103580 2000 CF_4	15.7	X	353.98229	26.29095	142.61607	3.12652	0.0668156	0.24809020	2.5083972	20	1 27.7	18.6
103581 2000 CO_4	16.0	X	110.70836	129.59699	278.99801	7.07776	0.0962025	0.29795160	2.2200984	20	2 3.4	18.5
103582 2000 CQ_4	15.9	X	317.98588	249.46819	122.11963	6.65461	0.2439020	0.27490189	2.3425250	20	9 15.0	17.2
103583 2000 CR_5	15.2	X	302.68839	235.50907	153.37184	2.50621	0.2186428	0.22590284	2.6700635	20	8 24.7	17.8
103584 2000 CW_5	15.7	X	281.96319	327.70502	168.54037	5.64314	0.1546665	0.28316242	2.2967425	20	—	—
103585 2000 CH_7	14.9	X	357.76506	77.00001	345.66139	2.10235	0.0806716	0.18564966	3.0432662	20	—	—
103586 2000 CR_7	15.1	X	252.07810	116.58410	97.33250	9.86098	0.0346079	0.18978998	2.9988439	20	—	—
103587 2000 CT_7	16.4	X	100.74521	339.29625	66.17234	4.03352	0.1707072	0.29526933	2.2335233	20	1 31.4	18.8
103588 2000 CU_7	15.2	X	224.39321	321.77799	121.22536	18.56389	0.1004200	0.21808013	2.7335392	20	8 5.4	19.2
103589 2000 CH_8	16.0	X	34.26591	155.90728	280.73950	7.07066	0.0921656	0.29064692	2.2571421	20	—	—
103590 2000 CL_8	15.8	X	17.45217	183.91347	264.32764	4.40793	0.1014912	0.24127805	2.5553919	20	—	—
103591 2000 CR_8	15.5	X	146.44065	338.30737	127.79825	9.83420	0.1060782	0.21209859	2.7846943	20	6 12.5	19.8
103592 2000 CB_9	16.5	X	99.21162	184.44494	242.90771	4.18832	0.1028014	0.29818014	2.2189639	20	2 14.1	18.9
103593 2000 CC_{10}	15.8	X	292.36034	136.85127	289.00581	1.24306	0.1960141	0.22812291	2.6527120	20	10 1.6	18.5
103594 2000 CC_{11}	14.7	X	194.58143	284.57705	282.75826	7.92164	0.1512396	0.22891713	2.6465728	20	12 3.1	18.8
103595 2000 CE_{11}	16.3	X	318.81609	341.14897	207.38403	4.68630	0.1501728	0.29172403	2.2515828	20	—	—
103596 2000 CK_{12}	15.0	X	349.82428	219.37287	144.02301	15.07853	0.1045959	0.22604893	2.6689130	20	10 30.9	18.4
103597 2000 CP_{14}	16.5	X	60.44488	7.31057	168.10443	2.70336	0.1347765	0.25547428	2.4598272	20	6 1.4	19.2
103598 2000 CR_{14}	15.8	X	327.10886	164.54171	241.76761	2.43035	0.1011458	0.22848415	2.6499153	20	11 15.3	18.8
103599 2000 CY_{14}	16.3	X	127.56175	321.41055	174.00591	1.26123	0.1357851	0.25999566	2.4312259	20	7 2.7	19.8
103600 2000 CM_{16}	15.9	X	152.07620	196.32369	152.13644	6.49768	0.1930080	0.29486754	2.2355518	20	1 20.3	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103601 2000 CP_{17}	16.2	X	33.77689	233.46124	145.79111	7.35736	0.1221895	0.28236160	2.3010831	20	—	—
103602 2000 CU_{17}	16.6	X	342.29550	285.31842	140.17543	5.62928	0.1270660	0.28158265	2.3053248	20	—	—
103603 2000 CG_{18}	16.1	X	302.78226	319.29387	174.89478	4.50872	0.1327488	0.23501130	2.6006199	20	—	—
103604 2000 CH_{18}	15.5	X	213.29392	303.41474	191.17740	3.47732	0.0184711	0.22328951	2.6908563	20	10 8.3	18.9
103605 2000 CM_{18}	15.9	X	94.05611	2.78201	264.36637	5.28398	0.1013077	0.27237225	2.3570066	20	11 15.5	19.3
103606 2000 CR_{18}	15.4	X	241.57771	158.52198	291.73962	12.06530	0.1237908	0.22211942	2.7002980	20	8 26.8	19.5
103607 2000 CE_{19}	16.3	X	168.47272	356.56574	143.04349	4.19654	0.1380665	0.21726630	2.7403612	20	8 16.4	20.7
103608 2000 CR_{19}	16.1	X	187.27968	105.16136	270.48543	4.58039	0.1895513	0.30326489	2.1940910	20	3 25.1	19.6
103609 2000 CE_{20}	15.9	X	26.26557	296.75941	180.47452	4.50929	0.1410129	0.24433546	2.5340298	20	1 5.1	18.4
103610 2000 CS_{20}	15.7	X	108.72045	247.39835	139.61189	4.02034	0.0470612	0.24335981	2.5407981	20	1 6.5	18.9
103611 2000 CW_{20}	15.7	X	345.61666	116.41587	143.08557	3.60886	0.1552064	0.25520906	2.4615311	20	5 16.1	17.9
103612 2000 CD_{21}	15.4	X	193.73637	238.46311	301.29533	13.58715	0.0440880	0.22574967	2.6712711	20	11 3.4	19.5
103613 2000 CM_{21}	15.4	X	100.26852	300.91881	281.43124	7.91802	0.1045507	0.21760720	2.7374984	20	9 14.2	19.6
103614 2000 CF_{22}	16.0	X	144.70346	340.42263	176.82816	1.78552	0.1493924	0.21540608	2.7561154	20	8 15.4	20.4
103615 2000 CQ_{22}	15.3	X	192.44571	338.44726	152.92954	7.59065	0.2037316	0.21951071	2.7216498	20	8 25.9	19.9
103616 2000 CK_{23}	16.3	X	130.07597	265.44178	162.68200	7.33790	0.1213507	0.30103734	2.2049012	20	4 3.9	19.1
103617 2000 CL_{23}	15.9	X	167.15133	252.52389	158.90135	8.90197	0.2372801	0.25716937	2.4490062	20	4 30.7	20.2
103618 2000 CT_{23}	15.7	X	295.26498	314.78016	156.16770	8.43612	0.1172765	0.23102138	2.6304775	20	12 20.5	18.7
103619 2000 CH_{24}	15.9	X	76.81137	105.22702	278.37403	2.92782	0.1353335	0.28795851	2.2711689	20	—	—
103620 2000 CJ_{24}	16.3	X	186.95292	338.15879	151.25671	7.74194	0.1369448	0.26693975	2.3888775	20	8 25.8	19.9
103621 2000 CA_{25}	15.8	X	210.37017	346.40679	235.81354	2.82668	0.1768099	0.27936990	2.3174817	20	—	—
103622 2000 CR_{25}	16.3	X	179.79457	309.13898	174.01225	3.35665	0.1451199	0.21635723	2.7480319	20	8 5.5	20.7
103623 2000 CN_{26}	15.1	X	173.09617	304.83203	169.31748	1.81950	0.0694057	0.21381226	2.7697951	20	7 19.6	19.3
103624 2000 CF_{27}	15.4	X	156.30482	325.29691	251.87980	2.97517	0.2435733	0.22217038	2.6998851	20	11 6.4	20.2
103625 2000 CY_{27}	16.0	X	59.16236	243.99016	314.83568	5.54101	0.1004883	0.25691378	2.4506302	20	6 28.0	18.9
103626 2000 CH_{28}	16.3	X	31.76363	174.07727	243.34779	1.67186	0.2268355	0.28742326	2.2739877	20	—	—
103627 2000 CL_{28}	15.4	X	124.97919	332.45085	167.84110	7.06984	0.0747559	0.21018096	2.8016065	20	6 28.7	19.6
103628 2000 CB_{29}	16.4	X	33.54626	142.55272	298.35528	3.40572	0.1138044	0.28871685	2.2671902	20	—	—
103629 2000 CN_{29}	14.7	X	38.25127	119.65046	158.12882	9.28276	0.1075703	0.21583326	2.7524777	20	9 13.6	18.1
103630 2000 CS_{29}	15.2	X	33.00020	104.98252	321.43008	9.24845	0.1180135	0.18976202	2.9991385	20	—	—
103631 2000 CL_{30}	15.5	X	235.85194	80.15726	147.59748	28.37476	0.3629176	0.23191386	2.6237246	20	—	—
103632 2000 CP_{30}	15.9	X	1.97245	267.04292	168.58988	2.70424	0.1241693	0.23686047	2.5870669	20	—	—
103633 2000 CW_{30}	15.7	X	242.47400	355.08279	222.70454	3.84415	0.0491153	0.23729688	2.5838940	20	—	—
103634 2000 CA_{31}	15.4	X	73.50581	94.43758	240.00789	2.02137	0.1222788	0.23143531	2.6273401	20	—	—
103635 2000 CT_{31}	15.6	X	126.22019	356.02740	172.98784	5.28721	0.0946711	0.21398977	2.7682632	20	8 7.7	19.8
103636 2000 CW_{31}	16.3	X	11.23966	190.61748	221.24980	1.76421	0.1232804	0.28252617	2.3001894	20	—	—
103637 2000 CF_{32}	15.3	X	196.69054	28.34671	166.75473	5.35511	0.1854154	0.22562074	2.6722887	20	11 18.5	19.5
103638 2000 CJ_{32}	14.3	X	53.67974	7.97851	324.53023	12.98902	0.1635629	0.22674248	2.6634678	20	12 22.9	18.3
103639 2000 CP_{33}	14.7	X	289.95675	301.13563	100.59805	14.09468	0.2626982	0.22384246	2.6864230	20	8 14.9	17.9
103640 2000 CQ_{33}	14.9	X	242.67958	316.52248	124.12670	6.29527	0.1613427	0.17275525	3.1928747	20	8 12.2	19.6
103641 2000 CV_{33}	15.6	X	67.74249	27.83591	135.78187	4.61285	0.0590202	0.25368785	2.4713615	20	5 15.5	18.6
103642 2000 CG_{34}	16.0	X	111.46177	10.36413	154.96918	6.77451	0.0660368	0.25906413	2.4370505	20	7 16.7	19.3
103643 2000 CW_{34}	14.2	X	355.25140	79.71382	286.02168	9.27359	0.0962025	0.17810756	3.1285840	20	10 20.7	18.3
103644 2000 CK_{35}	16.2	X	340.24260	302.16688	154.91339	5.16435	0.1174951	0.28448110	2.2896395	20	—	—
103645 2000 CP_{35}	14.5	X	245.04891	246.22580	237.10202	2.86752	0.1681312	0.17802543	3.1295461	20	10 4.4	19.1
103646 2000 CD_{36}	15.2	X	168.92725	308.70514	155.57463	8.24034	0.2893156	0.21294717	2.7772916	20	7 3.5	20.3
103647 2000 CH_{36}	16.0	X	223.39394	207.77739	317.65882	2.83466	0.1754951	0.27438438	2.3454695	20	11 17.3	18.9
103648 2000 CG_{37}	14.6	X	210.18081	3.83092	335.40845	7.24311	0.1128590	0.24650409	2.5191457	20	3 6.2	18.4
103649 2000 CJ_{37}	15.8	X	109.67401	9.90245	17.15827	4.77056	0.1620860	0.29376765	2.2411284	20	1 17.6	18.3
103650 2000 CL_{37}	16.6	X	121.59324	268.30163	118.58565	3.48273	0.1428476	0.29615022	2.2290921	20	1 29.4	19.2
103651 2000 CJ_{38}	16.3	X	201.96569	72.27781	134.34419	3.72553	0.1770736	0.27695900	2.3309112	20	12 17.5	19.4
103652 2000 CP_{38}	15.5	X	232.25237	250.32614	216.94564	0.26157	0.1336657	0.17565972	3.1575817	20	9 5.6	20.3
103653 2000 CR_{39}	16.2	X	293.07434	26.13175	130.42147	1.61541	0.1666099	0.28359440	2.2944096	20	—	—
103654 2000 CX_{40}	16.3	X	261.65165	37.55303	98.58982	3.91281	0.1669818	0.27710068	2.3301166	20	12 6.7	18.7
103655 2000 CC_{41}	16.7	X	88.47154	98.96795	143.33823	7.35374	0.0721062	0.26621105	2.3932349	20	10 6.9	20.0
103656 2000 CV_{41}	15.7	X	49.78454	197.65002	168.95107	4.34191	0.0239247	0.23241118	2.6199804	20	—	—
103657 2000 CW_{41}	15.9	X	32.51631	300.68844	302.66797	10.12838	0.1595891	0.25902473	2.4372976	20	7 29.4	18.4
103658 2000 CL_{42}	16.3	X	169.81856	346.07719	157.05084	1.99427	0.1003831	0.26627421	2.3928564	20	8 27.1	19.8
103659 2000 CS_{45}	15.9	X	211.21308	308.78032	191.55455	5.14387	0.1879188	0.22224979	2.6992419	20	9 24.1	20.1
103660 2000 CJ_{46}	16.3	X	133.59878	59.98555	157.74067	1.51742	0.1343281	0.26868315	2.3785326	20	10 26.4	20.0
103661 2000 CK_{46}	16.5	X	350.65338	273.59399	164.62366	7.16734	0.1094474	0.28238388	2.3009620	20	—	—
103662 2000 CM_{46}	16.3	X	314.24754	310.74187	168.12443	6.34931	0.0430665	0.28166896	2.3048538	20	—	—
103663 2000 CC_{47}	15.2	X	182.99764	328.65100	163.33886	9.43067	0.1145632	0.21756594	2.7378445	20	8 20.9	19.4
103664 2000 CK_{48}	15.3	X	143.01870	253.80539	269.17209	6.45795	0.1583103	0.21465444	2.7625456	20	8 18.9	19.9
103665 2000 CZ_{48}	15.3	X	357.59264	307.51987	161.84269	10.66883	0.2222249	0.19070668	2.9892262	20	—	—
103666 2000 CU_{49}	15.2	X	127.52328	312.04594	246.87296	5.23807	0.0513159	0.21728129	2.7402351	20	9 12.4	19.2
103667 2000 CB_{50}	15.0	X	136.72578	242.83808	308.66359	12.97601	0.0606291	0.21733839	2.7397551	20	9 10.9	19.2
103668 2000 CB_{51}	14.4	X	223.57827	231.32871	320.21546	16.70671	0.1065841	0.17991706	3.1075717	20	12 9.8	19.2
103669 2000 CW_{51}	16.1	X	137.86623	178.30350	321.29577	4.22230	0.1352653	0.26004922	2.4308921	20	7 19.9	19.8
103670 2000 CD_{52}	14.7	X	175.81312	3.65015	171.33268	1.52053	0.1361676	0.17197317	3.2025476	20	10 1.3	19.7
103671 2000 CP_{54}	15.4	X	261.62398	258.70354	193.32486	1.62438	0.1752235	0.22337623	2.6901598	20	9 21.6	18.8
103672 2000 CB_{55}	14.8	X	103.47547	126.02949	140.94451	6.72656	0.1932244	0.22348266	2.6893056	20	11 24.7	19.3
103673 2000 CZ_{55}	14.9	X	108.88655	191.85847	324.33751	12.17904	0.0494086	0.21018864	2.8015382	20	6 28.8	19.0
103674 2000 CU_{58}	16.0	X	279.95714	60.61209	158.80283	25.43841	0.0854769	0.38514287	1.8709182	20	—	—
103675 2000 CP_{59}	16.3	X	221.12804	354.58481	153.76816	8.32492	0.0515277	0.27463091	2.3440656	20	11 13.6	19.3
103676 2000 CQ_{59}	15.5	X	207.33445	72.83190	182.61303	5.74736	0.1390641	0.23700314	2.5860286	20	—	—
103677 2000 CT_{59}	14.8	X	315.74166	69.89874	154.76159	10.51374	0.1772119	0.19708141	2.9244146	20	2 6.8	18.7
103678 2000 CY_{59}	15.3	X	88.92504	107.24424	156.46292	12.50908	0.0393470	0.22255490	2.6967743	20	10 25.4	19.2
103679 2000 CL_{61}	15.1	X	135.73816	225.77165	290.48157	7.77781	0.2084639	0.21225790	2.7833008	20	8 7.2	19.9
103680 2000 CP_{61}	14.7	X	180.49402	223.06433	307.94206	9.98457	0.0520998	0.22034928	2.7147403	20	10 5.8	18.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103681 2000 CN_{62}	15.1	X	174.55440	284.90180	192.56939	8.79608	0.2776416	0.21421386	2.7663322	20	7 21.8	20.2
103682 2000 CY_{62}	15.1	X	293.06059	261.39458	325.22707	13.35462	0.1239063	0.24094894	2.5577182	20	1 16.5	18.7
103683 2000 CK_{64}	15.7	X	300.10998	147.56172	2.56419	2.07978	0.1697637	0.18775889	3.0204318	20	—	—
103684 2000 CF_{65}	16.2	X	113.06072	95.59249	123.74677	4.12391	0.0992323	0.26689235	2.3891604	20	10 7.0	19.7
103685 2000 CB_{66}	15.2	X	38.61748	46.02248	197.64975	4.74733	0.1066833	0.21225209	2.7833515	20	7 26.3	18.7
103686 2000 CX_{66}	16.6	X	359.70482	206.25764	226.32615	5.75622	0.1205502	0.28394541	2.2925183	20	—	—
103687 2000 CL_{68}	15.5	X	26.63924	328.68914	298.72892	1.67805	0.0537410	0.21459747	2.7630346	20	8 4.4	19.0
103688 2000 CS_{68}	16.4	X	354.39744	92.70694	226.08665	0.37835	0.1889712	0.26653074	2.3913208	20	9 14.9	18.2
103689 2000 CK_{69}	15.1	X	200.91077	228.75385	315.86880	13.98681	0.0341772	0.22727565	2.6593007	20	11 21.4	19.1
103690 2000 CM_{71}	15.7	X	190.77124	211.58847	298.49802	1.54405	0.1325167	0.26750450	2.3855141	20	9 25.5	19.3
103691 2000 CG_{72}	16.2	X	153.80456	111.37211	321.23004	1.17787	0.0707386	0.20699768	2.8302560	20	5 4.9	20.3
103692 2000 CJ_{72}	15.5	X	178.00919	120.99693	135.46085	13.79979	0.1105393	0.23249660	2.6193386	20	—	—
103693 2000 CY_{72}	15.4	X	331.20445	168.33761	260.87984	4.34739	0.1369845	0.23292022	2.6161617	20	12 27.4	17.9
103694 2000 CP_{73}	15.5	X	175.98495	170.19541	137.65758	10.24886	0.0775360	0.24067391	2.5596665	20	—	—
103695 2000 CL_{75}	15.1	X	340.34466	297.54806	336.55348	12.65546	0.2079275	0.25684578	2.4510628	20	5 15.2	17.5
103696 2000 CP_{75}	15.8	X	176.39024	282.90464	172.54184	13.39450	0.1655225	0.21355263	2.7720396	20	6 28.5	20.6
103697 2000 CB_{76}	15.9	X	40.78905	22.64581	7.56070	7.33087	0.1171335	0.28417512	2.2912827	20	—	—
103698 2000 CH_{77}	14.8	X	94.88164	120.72588	127.84963	9.02161	0.1506637	0.21994577	2.7180596	20	10 24.4	19.1
103699 2000 CS_{77}	17.2	X	15.50952	296.23734	164.29760	3.19079	0.1197167	0.28817647	2.2700236	20	—	—
103700 2000 CC_{78}	15.7	X	293.44410	220.89073	159.12708	5.75288	0.0805653	0.21673518	2.7448362	20	8 14.4	19.1
103701 2000 CL_{78}	16.1	X	188.74008	24.70651	150.43640	6.27853	0.0566933	0.27108888	2.3644397	20	11 6.2	19.3
103702 2000 CZ_{78}	16.0	X	161.75551	307.42773	303.04819	2.89309	0.1668938	0.22805440	2.6532433	20	12 23.2	20.3
103703 2000 CZ_{81}	15.6	X	40.22423	67.05570	334.49088	4.42884	0.1778555	0.28550893	2.2841410	20	—	—
103704 2000 CH_{82}	15.8	X	195.52691	31.44230	136.78819	10.95828	0.1071827	0.27168652	2.3609710	20	11 1.9	19.3
103705 2000 CW_{82}	15.3	X	140.19852	311.18653	119.21495	3.67516	0.1179984	0.30179412	2.2012137	20	4 18.9	18.2
103706 2000 CS_{83}	14.9	X	200.79851	188.97845	332.10829	14.53247	0.0218736	0.22296722	2.6934487	20	10 18.8	18.9
103707 2000 CW_{83}	14.8	X	270.56093	30.75065	85.53816	2.18508	0.1386600	0.17927415	3.1149968	20	11 2.5	18.9
103708 2000 CD_{84}	15.3	X	64.04939	267.90855	324.46010	2.34307	0.1973703	0.21098772	2.7944602	20	8 31.4	19.0
103709 2000 CF_{84}	15.9	X	73.46678	307.12450	145.69211	5.61229	0.1262218	0.29536979	2.2330168	20	2 15.6	17.9
103710 2000 CT_{86}	15.3	X	80.16636	13.80502	126.45377	6.76936	0.0753283	0.25222842	2.4808854	20	5 4.7	18.4
103711 2000 CV_{86}	15.2	X	313.28134	319.13399	120.97455	6.43801	0.2429815	0.23033613	2.6356921	20	12 8.1	17.1
103712 2000 CP_{87}	15.4	X	241.22878	277.48081	141.11537	9.78467	0.1752086	0.21738702	2.7393465	20	7 13.8	19.5
103713 2000 CZ_{87}	16.0	X	142.47382	355.51252	139.24070	1.63363	0.1286432	0.26009804	2.4305879	20	7 17.3	19.7
103714 2000 CO_{89}	16.1	X	226.81719	32.07050	62.34183	3.19679	0.1754232	0.26691695	2.3890135	20	8 19.7	19.4
103715 2000 CA_{91}	15.6	X	186.99792	352.29044	152.32536	1.89791	0.1695699	0.21853604	2.7297361	20	9 8.3	19.8
103716 2000 CK_{91}	15.1	X	265.48467	163.68094	151.93281	11.54736	0.0354903	0.25122505	2.4874866	20	4 19.8	18.5
103717 2000 CS_{91}	15.2	X	104.55221	275.13668	344.02578	8.74143	0.1963885	0.26735514	2.3864025	20	11 18.7	19.2
103718 2000 CV_{92}	15.3	X	261.51005	52.00809	52.16838	3.53166	0.1658617	0.27268466	2.3552061	20	10 20.4	17.7
103719 2000 CV_{93}	15.1	X	163.62695	280.95998	332.64672	9.52047	0.2506095	0.22754486	2.6572027	20	12 25.3	19.9
103720 2000 CF_{95}	14.6	X	78.86019	217.03133	31.16485	14.27157	0.1592763	0.25989355	2.4318627	20	10 12.2	18.0
103721 2000 CV_{95}	16.4	X	103.88934	256.20441	112.78303	1.60085	0.1004647	0.29045849	2.2581182	20	—	—
103722 2000 CL_{96}	16.3	X	280.72737	154.03049	334.80125	5.47647	0.1710453	0.27838788	2.3229285	20	—	—
103723 2000 CN_{96}	16.7	X	83.48034	251.17880	340.57528	2.46673	0.1527473	0.26198798	2.4188845	20	9 22.4	20.1
103724 2000 CW_{96}	15.5	X	90.91113	123.43871	259.40004	6.07447	0.1343829	0.28833046	2.2692153	20	—	—
103725 2000 CF_{98}	14.9	X	345.86181	73.17694	324.84384	10.12896	0.1124430	0.17865270	3.1222163	20	11 18.5	18.9
103726 2000 CR_{98}	15.9	X	277.21140	15.75464	297.59799	1.34362	0.0794909	0.20609632	2.8385021	20	4 23.2	19.7
103727 2000 CF_{99}	15.6	X	335.97468	133.45283	344.29336	0.48128	0.1569131	0.18862248	3.0112056	20	—	—
103728 2000 CZ_{99}	15.7	X	219.01371	9.29624	338.22353	1.37114	0.0798446	0.20423389	2.8557324	20	3 30.4	20.1
103729 2000 CW_{100}	15.9	X	337.46526	237.55029	123.45976	7.68376	0.1491116	0.27343109	2.3509178	20	10 18.8	18.1
103730 2000 CJ_{102}	15.8	X	206.09812	12.43291	189.48986	2.54876	0.1704618	0.27615868	2.3354124	20	12 16.7	19.1
103731 2000 CK_{102}	16.5	X	84.50471	328.32331	182.61917	2.02693	0.1331772	0.25480805	2.4641130	20	6 1.7	19.5
103732 2000 CO_{103}	15.0	X	74.94760	92.42253	300.93564	22.46886	0.2833525	0.29003854	2.2602973	20	—	—
103733 2000 CD_{105}	16.7	X	9.77292	58.01152	327.78672	7.15650	0.1268533	0.27865739	2.3214304	20	—	—
103734 2000 CO_{106}	15.9	X	69.68126	318.95687	307.84613	9.43067	0.2392822	0.26765665	2.3846100	20	10 29.8	19.7
103735 2000 CH_{108}	15.3	X	7.27235	274.73947	199.82266	14.78515	0.1319063	0.24132846	2.5550360	20	—	—
103736 2000 CQ_{108}	15.5	X	310.87685	277.62147	222.85773	10.65118	0.1143579	0.23610084	2.5926130	20	—	—
103737 2000 CU_{108}	16.0	X	269.13363	94.56891	111.27668	2.11598	0.0669966	0.23863610	2.5742178	20	—	—
103738 2000 CA_{110}	16.1	X	78.06534	124.63740	148.65183	3.40585	0.0627582	0.22163843	2.7042033	20	10 24.7	19.9
103739 2000 CT_{110}	15.2	X	84.53295	343.57437	330.85926	7.71780	0.0630483	0.22999748	2.6382787	20	12 23.6	19.1
103740 Budinger	15.3	X	163.20175	8.31034	99.03581	1.84221	0.0228950	0.21220888	2.7837294	20	6 28.6	19.2
103741 2000 CA_{112}	15.6	X	8.55309	262.67513	200.23196	11.41719	0.2182563	0.24002862	2.5642520	20	—	—
103742 2000 CP_{112}	16.9	X	111.12293	271.83544	146.70268	0.83059	0.1443903	0.29911892	2.2143187	20	2 27.8	19.4
103743 2000 CS_{112}	14.9	X	203.04165	255.01712	316.69280	9.16694	0.0721189	0.23230992	2.6207417	20	12 28.5	18.6
103744 2000 CV_{112}	15.6	X	136.16806	188.06383	89.08313	6.97866	0.0951985	0.28072894	2.3099961	20	—	—
103745 2000 CC_{113}	15.9	X	335.89374	127.93581	310.07792	1.36008	0.0750433	0.23358971	2.6111606	20	—	—
103746 2000 CK_{113}	15.6	X	52.07419	338.43891	311.63617	6.26627	0.1312471	0.26964938	2.3728472	20	10 28.5	18.7
103747 2000 CT_{114}	14.9	X	133.52109	239.97965	290.96039	10.22657	0.0581319	0.21610709	2.7501521	20	8 14.2	19.0
103748 2000 CE_{115}	16.3	X	23.78043	247.65063	148.22859	6.31029	0.1348734	0.28312789	2.2969292	20	—	—
103749 2000 CO_{115}	16.3	X	78.30870	266.20879	117.32002	3.14641	0.0833030	0.23898115	2.5717394	20	—	—
103750 2000 CZ_{116}	15.2	X	250.83141	320.79848	104.72327	10.87746	0.1026983	0.26625032	2.3929996	20	8 21.7	18.3
103751 2000 CE_{117}	16.3	X	8.85051	94.18831	168.94660	1.22727	0.1539087	0.25904218	2.4371882	20	7 12.2	18.3
103752 2000 CM_{117}	15.7	X	228.58369	130.55857	121.47637	14.06886	0.0934685	0.24116912	2.5561613	20	—	—
103753 2000 CA_{118}	15.4	X	341.11411	192.02370	127.16314	12.51549	0.1050793	0.21789923	2.7350520	20	8 6.6	18.5
103754 2000 CP_{122}	15.2	X	292.31138	174.93956	25.54438	1.78936	0.0250927	0.19342202	2.9611843	20	1 2.4	19.2
103755 2000 CY_{123}	16.3	X	45.79253	288.42100	121.35885	5.23138	0.1476067	0.28864371	2.2675732	20	—	—
103756 2000 CH_{124}	15.4	X	199.97951	203.81148	337.39954	7.80791	0.0298434	0.22670825	2.6637359	20	11 17.0	19.2
103757 2000 CJ_{124}	14.6	X	349.51003	316.49454	328.05897	16.37951	0.1154772	0.21131276	2.7915939	20	7 4.7	18.0
103758 2000 CF_{125}	16.0	X	64.69292	136.93058	102.30920	3.25562	0.1348244	0.26240425	2.4163257	20	9 9.5	19.0
103759 2000 CG_{125}	16.1	X	132.26160	240.64588	130.35646	7.63680	0.1490503	0.29324158	2.2438080	20	1 22.5	18.7
103760 2000 CV_{125}	15.5	X	190.03902	239.62873	92.20245	4.44696	0.0906428	0.24450886	2.5328316	20	2 7.5	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103761 2000 CV_{129}	16.7	X	96.65357	227.78963	151.11009	1.66296	0.1681084	0.29010380	2.2599584	20	—	—
103762 2000 CP_{131}	16.2	X	251.83233	179.57027	142.75056	3.23668	0.0405182	0.20373421	2.8603999	20	4 10.7	20.3
103763 2000 CP_{136}	16.8	X	22.75409	66.63698	314.01647	0.42945	0.1188027	0.23115552	2.6294598	20	—	—
103764 2000 CY_{139}	15.6	X	118.41406	66.55769	335.72638	1.28101	0.0874533	0.19678381	2.9273623	20	2 20.1	19.8
103765 2000 CZ_{139}	16.1	X	354.21393	335.29640	122.70644	0.15532	0.0824497	0.18720597	3.0263762	20	—	—
103766 2000 CY_{141}	15.6	X	20.39918	102.69937	125.73903	5.17064	0.0482404	0.20931731	2.8093075	20	6 2.5	19.1
103767 2000 CK_{147}	16.1	X	181.46258	236.66761	148.06701	6.98069	0.0789401	0.20382406	2.8595592	20	4 8.4	20.5
103768 2000 DO	15.6	X	147.15383	136.93815	350.41382	7.73613	0.1697057	0.21105225	2.7938905	20	7 13.8	20.2
103769 2000 DV	15.8	X	154.45980	32.88041	128.64080	6.84670	0.0925016	0.26394662	2.4069033	20	9 5.4	19.3
103770 Wilfriedlang	15.0	X	198.19678	218.27725	358.54478	16.57711	0.1262616	0.17720711	3.1391733	20	12 8.4	20.1
103771 2000 DZ_{1}	15.5	X	315.92393	148.95772	342.63431	1.97483	0.1440387	0.18698666	3.0287422	20	—	—
103772 2000 DD_{2}	16.7	X	0.54660	257.91291	172.65968	4.31947	0.1305297	0.27982986	2.3149415	20	—	—
103773 2000 DH_{2}	16.5	X	319.44034	57.54520	46.62714	1.59860	0.1828791	0.27934581	2.3176149	20	—	—
103774 2000 DA_{4}	14.7	X	120.18137	64.99580	111.38114	7.09960	0.1394615	0.21344647	2.7729586	20	8 16.6	19.0
103775 2000 DK_{4}	15.6	X	325.52104	36.95024	75.34100	4.58174	0.2241813	0.18720296	3.0264087	20	—	—
103776 2000 DV_{4}	14.9	X	163.02541	98.15740	121.98160	10.67651	0.0434157	0.22566845	2.6719120	20	11 25.9	18.9
103777 2000 DG_{5}	15.0	X	50.95023	283.94014	20.46087	5.21471	0.0731094	0.22200891	2.7011940	20	10 30.2	18.5
103778 2000 DH_{5}	16.2	X	298.63461	134.51518	3.99405	6.01341	0.1048289	0.28223384	2.3017774	20	—	—
103779 2000 DN_{5}	14.6	X	190.10236	31.64234	72.17870	37.30344	0.1664683	0.21531723	2.7568736	20	7 21.1	19.7
103780 2000 DO_{5}	15.8	X	332.02701	116.82614	181.81389	2.96133	0.1802571	0.25601604	2.4563558	20	6 15.0	17.9
103781 2000 DZ_{6}	16.4	X	226.40638	279.60350	182.03046	0.93932	0.1191104	0.26669485	2.3903397	20	9 3.4	19.6
103782 2000 DJ_{7}	15.5	X	306.37032	84.95407	56.87397	8.15852	0.2249101	0.28239820	2.3008842	20	—	—
103783 2000 DZ_{7}	15.9	X	314.81312	148.60326	143.15622	3.03542	0.1760679	0.25545822	2.4599303	20	5 2.2	18.4
103784 2000 DA_{8}	15.5	X	270.66807	351.19463	330.87189	1.31453	0.0935776	0.20677890	2.8322521	20	4 24.3	19.4
103785 2000 DQ_{8}	16.4	X	104.71330	23.13183	125.78512	2.20861	0.1230183	0.25703904	2.4498340	20	6 23.3	19.7
103786 2000 DY_{8}	16.2	X	26.29471	300.26052	308.27394	1.63743	0.1665803	0.25762744	2.4461024	20	7 27.1	18.5
103787 2000 DL_{9}	16.5	X	345.59195	133.48871	153.05587	2.78780	0.1761206	0.25788314	2.4444852	20	6 27.3	18.5
103788 2000 DA_{10}	15.4	X	278.28633	233.34877	343.79303	0.70235	0.1560725	0.19026231	2.9938788	20	—	—
103789 2000 DL_{10}	15.6	X	120.01773	134.90172	156.76936	3.22599	0.0348096	0.23012706	2.6372882	20	—	—
103790 2000 DY_{10}	16.2	X	330.52438	177.59556	146.40634	6.61616	0.1493733	0.26256854	2.4153177	20	7 26.4	18.3
103791 2000 DB_{11}	15.7	X	268.45963	36.06550	334.68140	5.23015	0.0452418	0.21243143	2.7817848	20	7 3.3	19.4
103792 2000 DE_{11}	16.3	X	27.75550	285.12211	138.43463	2.85980	0.0513134	0.23602909	2.5931384	20	—	—
103793 2000 DK_{11}	15.4	X	207.55936	60.04721	172.40273	1.32576	0.1802878	0.17905428	3.1175463	20	—	—
103794 2000 DG_{12}	15.9	X	302.90338	290.66742	170.58822	5.65014	0.1701861	0.22793359	2.6541808	20	12 16.8	18.6
103795 2000 DO_{12}	16.2	X	16.03154	237.30563	28.48745	1.69632	0.0297951	0.20788285	2.8222161	20	7 15.4	19.9
103796 2000 DQ_{12}	15.8	X	92.96326	141.69301	155.80396	2.01922	0.0485711	0.22271464	2.6954847	20	12 9.1	19.5
103797 2000 DR_{12}	15.4	X	298.97892	9.46649	161.03869	3.01580	0.0416964	0.18512850	3.0489750	20	—	—
103798 2000 DH_{13}	16.4	X	317.80661	220.50181	167.05474	6.20121	0.1384044	0.27044841	2.3681712	20	10 15.2	18.4
103799 2000 DN_{13}	16.5	X	245.38283	296.47941	180.94779	2.03555	0.1580566	0.27269356	2.3551548	20	10 15.7	19.4
103800 2000 DO_{13}	16.7	X	30.56327	67.60137	204.26268	1.23855	0.1155820	0.26102805	2.4248112	20	8 31.0	19.2
103801 2000 DY_{13}	16.3	X	81.57095	68.31294	170.01735	2.70233	0.0287140	0.21599613	2.7510938	20	9 6.7	20.1
103802 2000 DH_{14}	16.0	X	295.96963	111.62308	338.50503	0.84214	0.1420429	0.17911311	3.1168636	20	11 5.5	19.9
103803 2000 DJ_{17}	15.9	X	65.52214	264.18467	343.01376	18.76115	0.0568316	0.36036491	1.9557247	20	9 18.5	17.8
103804 2000 DU_{17}	15.2	X	72.78235	3.11633	281.93895	1.01971	0.1137791	0.17340349	3.1849124	20	10 29.5	19.7
103805 2000 DV_{17}	16.2	X	307.00580	130.75593	306.37169	2.26834	0.0280975	0.22711886	2.6605244	20	11 25.8	19.7
103806 2000 DZ_{17}	15.6	X	315.27029	236.21747	134.93251	4.90047	0.0791025	0.22008270	2.7169321	20	9 7.9	18.9
103807 2000 DM_{18}	15.9	X	319.66073	217.64370	346.33199	6.92395	0.1713276	0.24293632	2.5437499	20	1 12.1	19.2
103808 2000 DN_{18}	15.9	X	329.91655	253.41233	129.33049	3.54954	0.1528190	0.27217044	2.3581717	20	11 3.2	17.8
103809 2000 DB_{19}	16.3	X	141.25655	24.72398	127.58580	3.15730	0.1279935	0.26297076	2.4128542	20	8 8.9	20.0
103810 2000 DD_{19}	16.0	X	20.26610	116.84178	331.77999	6.75621	0.0635254	0.28771610	2.2724444	20	—	—
103811 2000 DE_{19}	16.1	X	128.94199	229.75145	312.15987	4.23306	0.0986196	0.21612097	2.7500343	20	8 27.9	20.3
103812 2000 DK_{19}	15.0	X	62.10839	332.80523	322.96187	14.56073	0.1106462	0.22282857	2.6945659	20	11 1.7	19.1
103813 2000 DO_{19}	14.9	X	186.04638	319.23422	331.49483	8.74905	0.1171144	0.23849086	2.5752628	20	—	—
103814 2000 DW_{19}	15.3	X	216.40590	31.49964	141.01135	3.40971	0.1382376	0.22659265	2.6646418	20	11 15.8	19.2
103815 2000 DE_{20}	16.1	X	158.59642	73.18361	310.61349	3.16914	0.1654303	0.29915722	2.2141297	20	3 8.9	19.3
103816 2000 DL_{20}	15.7	X	176.36310	257.76905	258.44313	1.85899	0.0097219	0.21998955	2.7176990	20	9 18.4	19.3
103817 2000 DW_{20}	15.9	X	231.87221	309.32867	179.86243	2.17528	0.0242123	0.22388269	2.6861012	20	10 24.8	19.5
103818 2000 DY_{20}	15.7	X	223.88829	287.62482	145.26377	10.02764	0.1455078	0.21668415	2.7452672	20	7 16.7	20.0
103819 2000 DL_{21}	15.4	X	357.40866	210.40305	154.08071	8.33030	0.1096760	0.22496730	2.6774608	20	11 11.1	18.6
103820 2000 DN_{22}	16.0	X	238.61363	351.64249	239.84422	2.52453	0.0775244	0.23688008	2.5869241	20	—	—
103821 2000 DE_{23}	15.4	X	53.13744	304.85556	323.49578	8.33550	0.1878594	0.21596317	2.7513738	20	9 29.4	19.2
103822 2000 DQ_{23}	16.4	X	65.58416	65.27832	337.97728	3.45399	0.0956325	0.28803757	2.2707533	20	—	—
103823 2000 DC_{24}	15.0	X	296.85401	118.31664	333.59731	1.71680	0.0394296	0.17930632	3.1146242	20	11 18.8	19.1
103824 2000 DE_{24}	15.5	X	94.25306	314.81063	342.25094	1.99434	0.2274452	0.27394409	2.3479820	20	12 31.0	19.3
103825 2000 DR_{24}	16.5	X	115.81899	272.28198	140.16575	4.39810	0.1560742	0.29693884	2.2251436	20	2 28.4	19.1
103826 2000 DV_{24}	15.2	X	113.34399	242.14322	335.30835	12.15225	0.1598085	0.21706547	2.7420511	20	9 26.5	19.7
103827 2000 DH_{25}	15.3	X	272.99649	9.24827	166.71309	4.72254	0.0363235	0.23479593	2.6022100	20	—	—
103828 2000 DC_{26}	16.0	X	36.44874	53.82373	340.59026	5.75110	0.1277761	0.28304373	2.2973845	20	—	—
103829 2000 DZ_{26}	15.9	X	140.29997	259.66100	256.35180	0.51330	0.1447575	0.21375406	2.7702979	20	8 9.6	20.1
103830 2000 DL_{27}	14.9	X	219.09722	282.77970	322.31665	12.90864	0.2027849	0.23378200	2.6097286	20	—	—
103831 2000 DO_{27}	15.7	X	236.84818	204.31654	183.02029	3.66444	0.1054316	0.21130745	2.7916406	20	6 6.9	19.8
103832 2000 DV_{27}	16.9	X	23.98562	248.32952	190.31330	1.33459	0.1814040	0.28782574	2.2718673	20	—	—
103833 2000 DP_{28}	15.3	X	95.63056	87.64487	161.30631	3.91838	0.0520736	0.22006510	2.7170769	20	10 13.1	19.1
103834 2000 DY_{28}	15.9	X	122.13793	240.11357	159.53467	2.37903	0.1168467	0.24632575	2.5203615	20	2 18.9	19.3
103835 2000 DG_{29}	16.4	X	222.69088	78.54912	345.85195	1.12198	0.1944959	0.21538659	2.7562817	20	7 1.1	20.7
103836 2000 DU_{29}	16.7	X	155.60217	34.54597	171.60826	2.37143	0.1659200	0.26963410	2.3729368	20	11 1.5	20.4
103837 2000 DX_{29}	16.2	X	284.52804	244.54719	321.19088	4.28596	0.0739732	0.28783085	2.2718404	20	—	—
103838 2000 DN_{31}	14.7	X	14.08550	26.50528	337.62218	9.72336	0.0840741	0.17753889	3.1352611	20	11 14.7	19.0
103839 2000 DN_{32}	15.4	X	2.21524	24.22125	297.92061	1.28456	0.0786717	0.21757086	2.7378032	20	9 13.8	18.7
103840 2000 DU_{32}	15.0	X	47.09972	301.00564	330.98670	12.26791	0.1264303	0.21529603	2.7570546	20	9 16.7	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103841 2000 DM_{33}	16.3	X	93.99515	216.11784	165.61135	5.90310	0.1338412	0.28835266	2.2690988	20	—	—
103842 2000 DQ_{33}	15.7	X	61.11325	69.23429	314.49926	4.70058	0.1761416	0.28473210	2.2882937	20	—	—
103843 2000 DZ_{33}	15.4	X	275.70799	202.46389	180.42615	2.14573	0.2032208	0.21653453	2.7465317	20	7 4.2	19.0
103844 2000 DC_{34}	15.3	X	135.23144	157.16481	157.35363	15.97270	0.0848281	0.23399368	2.6081544	20	—	—
103845 2000 DF_{34}	15.4	X	295.66233	73.27116	316.86869	2.81771	0.2123689	0.22046859	2.7137608	20	8 13.3	18.3
103846 2000 DQ_{34}	16.0	X	347.40983	317.44546	132.41955	1.59995	0.0654632	0.23378489	2.6097070	20	—	—
103847 2000 DW_{34}	15.3	X	357.62064	202.30148	148.67604	5.58225	0.0636414	0.22130699	2.7069026	20	10 18.3	18.6
103848 2000 DE_{35}	15.8	X	32.88916	43.31435	347.53896	6.26381	0.1370162	0.28160356	2.3052107	20	—	—
103849 2000 DK_{35}	14.5	X	313.67733	264.31478	137.56489	5.82680	0.1208280	0.17520357	3.1630599	20	10 6.6	18.4
103850 2000 DS_{35}	15.1	X	79.84001	162.15211	331.08117	1.22046	0.0083952	0.20265577	2.8705387	20	4 13.8	18.9
103851 2000 DW_{35}	15.3	X	174.38026	60.22591	147.16585	1.60639	0.1208292	0.17537784	3.1609641	20	11 8.1	20.2
103852 2000 DH_{36}	15.6	X	95.84005	332.45726	147.34724	2.62397	0.0117342	0.20303924	2.8669232	20	4 19.2	19.6
103853 2000 DX_{36}	15.2	X	315.63596	334.48431	342.86475	5.85089	0.1261229	0.25843608	2.4409972	20	6 18.3	17.9
103854 2000 DJ_{37}	16.3	X	117.13940	215.69066	351.89784	5.92880	0.0653928	0.26546127	2.3977392	20	9 21.0	19.5
103855 2000 DP_{37}	15.6	X	109.99057	300.64331	153.13908	2.61729	0.0199238	0.20153281	2.8811921	20	4 5.0	19.5
103856 2000 DA_{38}	15.7	X	117.96765	163.51236	146.91974	2.44154	0.0329489	0.23123204	2.6288797	20	—	—
103857 2000 DG_{39}	16.0	X	247.47122	279.09250	225.16606	2.41099	0.0789604	0.22680774	2.6629569	20	11 25.6	19.5
103858 2000 DH_{39}	15.4	X	281.54914	289.54971	231.58637	2.49980	0.0620459	0.18459391	3.0548588	20	—	—
103859 2000 DX_{39}	16.1	X	89.81994	198.00950	262.66664	2.00086	0.1566894	0.20121605	2.8842151	20	4 6.4	20.0
103860 2000 DN_{40}	15.4	X	203.32253	292.78161	161.79937	9.32479	0.1306900	0.21502896	2.7593370	20	7 23.7	19.8
103861 2000 DS_{40}	15.9	X	247.13691	206.15717	227.77873	1.20061	0.0383994	0.21734262	2.7397196	20	8 28.9	19.7
103862 2000 DW_{40}	15.8	X	287.49841	134.41454	334.95376	6.99885	0.0768295	0.27673883	2.3321473	20	12 23.3	18.3
103863 2000 DR_{41}	15.4	X	346.77171	334.46533	348.28953	4.22325	0.0450201	0.21515904	2.7582247	20	8 21.1	18.7
103864 2000 DX_{41}	15.6	X	74.17264	253.04595	355.66836	2.44065	0.0224679	0.21686598	2.7437325	20	9 10.3	19.2
103865 2000 DY_{42}	15.2	X	12.16672	175.72360	119.88980	2.97338	0.0604085	0.21432403	2.7653842	20	8 22.9	18.5
103866 2000 DA_{43}	15.5	X	113.66993	28.07183	130.15064	3.46662	0.0240917	0.20981449	2.8048678	20	7 2.7	19.3
103867 2000 DC_{43}	15.4	X	128.49734	64.99038	16.60254	1.82522	0.0563456	0.20274203	2.8697244	20	4 16.1	19.5
103868 2000 DV_{43}	15.9	X	285.77811	75.74113	345.95685	1.31257	0.0873990	0.22181732	2.7027492	20	9 29.2	19.0
103869 2000 DC_{44}	16.4	X	101.03977	267.61690	339.95085	4.53327	0.1909816	0.26609140	2.3939523	20	11 1.9	20.2
103870 2000 DJ_{44}	15.2	X	211.12672	261.65123	163.60164	4.04677	0.0737711	0.21159307	2.7891279	20	6 29.2	19.4
103871 2000 DK_{45}	15.2	X	5.67231	267.39186	177.95368	4.57871	0.1737718	0.18836299	3.0139705	20	—	—
103872 2000 DT_{45}	15.7	X	230.47858	278.68948	197.28205	3.67326	0.0303675	0.22058385	2.7128154	20	10 3.7	19.4
103873 2000 DD_{46}	15.2	X	339.13657	134.95812	189.19375	4.28754	0.0913373	0.21378180	2.7700582	20	8 8.2	18.6
103874 2000 DG_{46}	15.9	X	75.93782	30.20671	174.50385	5.07485	0.1186600	0.25843895	2.4409792	20	8 1.4	19.0
103875 2000 DR_{47}	16.3	X	66.52147	249.78139	148.60160	3.77103	0.1635009	0.28709541	2.2757186	20	—	—
103876 2000 DS_{47}	16.7	X	98.46094	79.81698	151.10584	3.66086	0.0852069	0.26524260	2.3990568	20	10 3.4	19.9
103877 2000 DF_{48}	15.6	X	227.21598	4.62653	353.96206	1.99622	0.0552793	0.20413241	2.8566788	20	4 23.9	19.7
103878 2000 DH_{48}	15.5	X	216.88102	272.95330	52.73643	0.38632	0.2099689	0.24551028	2.5259394	20	2 24.0	19.7
103879 2000 DZ_{48}	14.3	X	87.17154	355.77546	330.70555	14.21100	0.1112365	0.22928350	2.6437528	20	—	—
103880 2000 DG_{49}	16.3	X	331.95555	124.00861	147.73895	4.37649	0.1800431	0.25255091	2.4787730	20	5 4.2	18.6
103881 2000 DS_{49}	15.1	X	168.88057	163.72964	162.03762	10.99493	0.1155784	0.19145186	2.9814646	20	1 15.8	19.8
103882 2000 DE_{50}	16.5	X	348.50823	13.96736	13.34982	0.54615	0.2117724	0.27571012	2.3379448	20	12 25.9	18.6
103883 2000 DP_{50}	16.1	X	302.66806	245.58064	193.73837	2.00667	0.1854286	0.27638137	2.3341578	20	12 2.7	17.7
103884 2000 DB_{51}	15.5	X	150.51252	186.56666	141.06508	3.82887	0.1213266	0.23736080	2.5834301	20	—	—
103885 2000 DH_{51}	15.6	X	150.73651	62.36712	24.47406	2.01660	0.0532255	0.20612483	2.8382404	20	5 18.6	19.7
103886 2000 DP_{51}	14.8	X	227.26134	63.31219	349.74521	7.01687	0.2995141	0.21555013	2.7548874	20	6 12.7	19.7
103887 2000 DO_{52}	16.1	X	283.55548	254.16038	349.16981	3.14223	0.1495906	0.24206371	2.5498596	20	1 21.5	19.9
103888 2000 DP_{52}	15.0	X	80.80007	132.04604	357.79096	1.68834	0.0044424	0.20160827	2.8804731	20	4 10.3	19.0
103889 2000 DS_{52}	15.5	X	169.78719	129.09893	164.86124	13.48697	0.0587509	0.23508400	2.6000837	20	—	—
103890 2000 DY_{52}	15.4	X	346.99472	182.92708	166.37653	13.13913	0.1126902	0.26761922	2.3848323	20	10 13.8	17.8
103891 2000 DJ_{53}	16.2	X	90.50047	323.65225	237.54945	1.80579	0.1308633	0.25985788	2.4320852	20	8 17.3	19.6
103892 2000 DM_{54}	15.5	X	265.22256	74.23413	334.48017	5.31084	0.0569963	0.21610368	2.7501810	20	8 17.6	19.2
103893 2000 DR_{54}	15.0	X	159.45934	18.12102	329.62726	1.54552	0.0670214	0.19292781	2.9662392	20	1 29.5	19.4
103894 2000 DB_{55}	15.1	X	273.22090	241.62006	156.53910	14.61218	0.0682287	0.21579699	2.7527860	20	8 10.9	18.7
103895 2000 DF_{55}	15.6	X	134.04061	124.47584	152.26660	9.20667	0.1631693	0.22619380	2.6677733	20	12 29.8	20.1
103896 2000 DN_{55}	15.3	X	206.39617	300.81776	23.89547	2.13479	0.1031278	0.19555132	2.9396495	20	2 20.3	20.0
103897 2000 DS_{55}	15.3	X	140.50913	201.56005	158.12359	10.83404	0.0774317	0.19213882	2.9743539	20	1 22.9	19.7
103898 2000 DT_{55}	15.7	X	353.12339	140.17600	150.57960	5.28350	0.1852235	0.25728577	2.4482675	20	7 22.9	17.5
103899 2000 DG_{56}	15.8	X	309.58750	53.04743	156.41241	5.54591	0.1339274	0.24164080	2.5528338	20	1 10.1	19.3
103900 2000 DM_{56}	15.3	X	101.42602	102.24451	162.57737	11.97171	0.1233422	0.22064518	2.7123127	20	11 16.6	19.7
103901 2000 DP_{56}	17.0	X	92.23434	24.20322	165.86535	2.14821	0.1599179	0.25852885	2.4404132	20	8 8.1	20.5
103902 2000 DR_{56}	15.5	X	274.38282	330.14215	342.25271	12.56442	0.0660325	0.25163287	2.4847983	20	4 12.7	18.9
103903 2000 DX_{56}	15.6	X	26.04962	321.38050	334.54611	5.17924	0.0497336	0.21587232	2.7521456	20	9 10.5	19.0
103904 2000 DG_{57}	16.2	X	55.33952	259.48669	332.93673	5.46932	0.1091490	0.25867821	2.4394738	20	8 12.1	19.0
103905 2000 DA_{58}	15.5	X	115.29504	198.94334	184.97101	5.69966	0.1216936	0.24156763	2.5533492	20	1 21.5	19.0
103906 2000 DJ_{58}	15.4	X	96.21730	282.07210	301.53244	3.41711	0.0509059	0.21527473	2.7572365	20	9 7.7	19.4
103907 2000 DW_{58}	14.7	X	109.27465	353.55422	335.03711	9.53567	0.0582497	0.18264085	3.0765981	20	—	—
103908 2000 DO_{59}	14.9	X	122.48817	319.17978	341.58574	14.17964	0.0498916	0.18041652	3.1018338	20	—	—
103909 2000 DQ_{59}	16.5	X	274.20868	125.01488	292.87317	0.44700	0.1763711	0.26884968	2.3775502	20	8 30.3	18.8
103910 2000 DS_{59}	16.0	X	164.38099	19.24720	169.53198	5.22789	0.0931946	0.21993327	2.7181625	20	10 15.1	20.1
103911 2000 DW_{59}	16.2	X	16.49398	242.18331	359.65657	1.53332	0.1342840	0.25427602	2.4675490	20	6 21.9	18.4
103912 2000 DA_{60}	15.5	X	335.24877	187.13017	28.25072	0.38351	0.0699352	0.19752858	2.9199993	20	3 9.1	19.3
103913 2000 DN_{60}	15.7	X	166.02027	150.73437	352.86753	3.94890	0.0566106	0.21464593	2.7626187	20	8 20.2	19.6
103914 2000 DR_{60}	15.1	X	92.66693	332.89577	4.26924	5.44458	0.2142624	0.23037062	2.6354290	20	—	—
103915 2000 DZ_{60}	15.2	X	113.05697	105.41753	359.17532	4.32503	0.1054809	0.20354573	2.8621653	20	5 1.9	19.3
103916 2000 DL_{61}	15.7	X	163.02360	299.15935	146.79996	2.88382	0.0073622	0.20628799	2.8367436	20	5 30.9	19.7
103917 2000 DS_{61}	16.0	X	39.70922	10.04232	30.72190	1.27460	0.2411931	0.28420706	2.2911110	20	—	—
103918 2000 DG_{62}	15.4	X	245.14636	52.07507	162.00803	14.80769	0.0490132	0.23403877	2.6078194	20	—	—
103919 2000 DJ_{62}	14.2	X	317.35451	233.05640	163.97052	14.64218	0.2023323	0.17415341	3.1757628	20	9 28.9	17.6
103920 2000 DM_{62}	16.0	X	52.88288	72.80427	337.53778	6.27493	0.0877133	0.28519610	2.2858111	20	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
103921 2000 DN_{62}	15.2	X	356.71904	106.25716	176.02308	3.07837	0.0539660	0.20936754	2.8088582	20	7 9.6	18.8
103922 2000 DO_{62}	15.0	X	352.79732	105.50835	337.74564	8.92349	0.1443839	0.18522918	3.0478700	20	—	—
103923 2000 DP_{62}	15.6	X	61.89624	299.75938	167.82069	10.23170	0.0618883	0.19630723	2.9320982	20	2 24.4	19.4
103924 2000 DC_{63}	14.7	X	121.32914	53.05875	340.76085	11.40883	0.0690549	0.19432823	2.9519712	20	2 12.9	18.8
103925 2000 DJ_{63}	15.0	X	17.32230	352.53916	316.80541	4.51206	0.0406705	0.21638917	2.7477615	20	9 14.2	18.6
103926 2000 DR_{63}	14.8	X	139.48203	292.72134	327.29949	4.77238	0.1181604	0.17567665	3.1573788	20	12 5.6	19.9
103927 2000 DA_{64}	15.1	X	267.41182	229.98917	174.09248	14.79246	0.1582713	0.21644355	2.7473012	20	7 26.7	19.1
103928 2000 DL_{64}	14.5	X	358.17157	119.39589	176.38402	6.28963	0.1034466	0.21084773	2.7956970	20	7 31.5	17.7
103929 2000 DU_{64}	14.8	X	120.39603	48.11119	310.12548	2.04727	0.0794319	0.18845149	3.0130268	20	—	—
103930 2000 DG_{65}	15.7	X	298.41353	173.42645	146.40080	5.34834	0.2252949	0.25535146	2.4606159	20	5 8.7	18.7
103931 2000 DN_{65}	15.3	X	4.02982	175.69700	159.61140	12.90452	0.1269212	0.21884002	2.7272077	20	10 14.2	18.5
103932 2000 DS_{65}	15.1	X	287.54815	51.51584	148.99713	1.66499	0.1278977	0.18889592	3.0082989	20	—	—
103933 2000 DY_{66}	15.2	X	256.39612	80.37697	190.49144	1.98300	0.0197273	0.19499130	2.9452753	20	2 13.5	19.3
103934 2000 DK_{67}	16.3	X	299.16339	140.15485	274.44561	1.47561	0.1957819	0.27211349	2.3585007	20	10 10.3	18.0
103935 2000 DS_{67}	15.4	X	302.06380	166.98052	187.79402	4.90368	0.1701008	0.21295196	2.7772499	20	7 9.9	18.8
103936 2000 DV_{67}	15.2	X	112.17850	231.71163	317.47811	3.14786	0.0378935	0.21266020	2.7797895	20	8 12.9	19.0
103937 2000 DR_{68}	14.8	X	243.81161	20.99456	331.85024	3.36226	0.0589587	0.20444685	2.8537490	20	5 5.1	18.9
103938 2000 DU_{68}	14.9	X	177.65024	287.56973	340.02987	5.08972	0.1509675	0.27871926	2.3210869	20	—	—
103939 2000 DJ_{69}	15.0	X	24.23512	283.77778	196.27761	1.89320	0.0395623	0.19194056	2.9764017	20	1 19.3	19.0
103940 2000 DM_{69}	15.0	X	0.59066	129.69076	168.12109	6.01747	0.0775836	0.21149012	2.7900329	20	8 6.7	18.5
103941 2000 DW_{69}	15.8	X	326.17654	230.00020	349.40768	9.58953	0.1953804	0.24400582	2.5363115	20	2 7.9	18.9
103942 2000 DE_{70}	14.8	X	173.74939	98.72563	161.01523	10.84256	0.0271713	0.18146476	3.0898769	20	—	—
103943 2000 DU_{70}	14.6	X	254.09688	284.75394	341.28707	9.08361	0.0375558	0.19290208	2.9665029	20	2 5.8	18.8
103944 2000 DE_{71}	16.2	X	109.58987	290.46411	317.66455	2.73331	0.1465270	0.26674261	2.3900544	20	11 8.9	19.8
103945 2000 DK_{71}	15.4	X	220.01159	54.92049	170.98899	13.72473	0.2175114	0.22989930	2.6390297	20	—	—
103946 2000 DG_{72}	15.0	X	127.88308	225.19904	51.95954	1.90643	0.0518217	0.17710430	3.1403880	20	12 13.2	19.7
103947 2000 DK_{72}	15.0	X	329.78550	325.31170	128.81294	2.06076	0.1316861	0.18273073	3.0755892	20	—	—
103948 2000 DP_{72}	16.5	X	40.87430	64.65382	84.74475	1.03283	0.1060017	0.24703125	2.5155606	20	3 18.2	19.1
103949 2000 DD_{73}	16.6	X	108.62989	203.50240	352.79070	2.11820	0.1167309	0.26109854	2.4243748	20	8 31.4	19.9
103950 2000 DK_{73}	14.7	X	222.69878	185.64847	147.58704	2.66275	0.0704370	0.19797949	2.9155640	20	3 18.9	19.1
103951 2000 DW_{73}	15.6	X	287.50616	253.89797	354.81463	5.38866	0.1816310	0.24160477	2.5530876	20	1 29.5	19.4
103952 2000 DA_{74}	15.0	X	196.40391	331.34828	345.55588	10.62434	0.0760067	0.19154266	2.9805223	20	2 3.6	19.6
103953 2000 DB_{74}	16.6	X	317.95064	300.94731	178.04937	3.21756	0.1188196	0.28104622	2.3082573	20	—	—
103954 2000 DM_{74}	16.4	X	242.05541	225.58127	315.56147	2.45509	0.0974591	0.27743188	2.3282618	20	—	—
103955 2000 DB_{75}	15.4	X	201.53717	275.96481	192.71263	4.05132	0.0705926	0.21422549	2.7662322	20	8 13.1	19.4
103956 2000 DR_{75}	15.6	X	126.53708	91.58578	143.70482	4.86292	0.1754958	0.21935773	2.7229150	20	11 5.7	20.1
103957 2000 DS_{75}	15.4	X	136.57152	250.13693	157.97877	6.73714	0.1296910	0.19948984	2.9008294	20	3 24.0	19.7
103958 2000 DC_{76}	14.7	X	231.22507	278.20529	1.46167	0.93642	0.1889054	0.18935382	3.0034472	20	1 18.9	19.7
103959 2000 DT_{76}	15.2	X	85.21557	45.22043	334.23238	4.98270	0.1680106	0.23637275	2.5906243	20	—	—
103960 2000 DD_{77}	15.4	X	275.60381	177.58355	5.67941	2.64241	0.0691236	0.18522732	3.0478904	20	—	—
103961 2000 DM_{77}	14.8	X	19.01732	317.95866	3.66514	5.20552	0.0752468	0.21796500	2.7345017	20	10 8.5	18.0
103962 2000 DZ_{77}	15.1	X	321.13034	312.71741	168.36751	2.22482	0.0618341	0.18367352	3.0650556	20	—	—
103963 2000 DT_{78}	15.2	X	242.59422	143.63819	46.70644	1.77907	0.1235131	0.18110127	3.0940101	20	12 28.7	19.4
103964 2000 DV_{78}	14.6	X	130.59839	167.42204	164.20867	9.54405	0.1296717	0.18436825	3.0573509	20	—	—
103965 2000 DW_{78}	15.3	X	131.29932	39.45669	153.40377	4.56708	0.0853236	0.21512400	2.7585242	20	9 14.0	19.4
103966 Luni	16.0	X	218.68189	318.00053	146.24885	3.48368	0.1267838	0.26728345	2.3868291	20	8 28.2	19.4
103967 2000 DP_{79}	15.9	X	153.97983	260.13256	4.16629	6.91759	0.0985129	0.27910353	2.3189559	20	—	—
103968 2000 DX_{79}	16.4	X	330.53452	105.19696	18.07845	3.00246	0.0333460	0.28512579	2.2861868	20	—	—
103969 2000 DB_{80}	16.0	X	184.85793	116.86602	22.30159	3.36368	0.1235195	0.26771925	2.3842382	20	9 7.5	19.6
103970 2000 DK_{80}	14.9	X	156.64593	120.78416	11.79790	8.17206	0.0934732	0.21418196	2.7666069	20	7 28.6	19.2
103971 2000 DW_{80}	16.4	X	171.67370	156.74817	42.80366	3.26657	0.1455496	0.27200725	2.3591147	20	11 9.0	19.8
103972 2000 DD_{81}	15.5	X	302.44170	132.62469	104.59527	5.97253	0.0836318	0.29503016	2.2347302	20	2 6.9	18.1
103973 2000 DL_{82}	16.1	X	198.21922	239.35837	355.11798	6.41229	0.0740885	0.28059810	2.3107142	20	—	—
103974 2000 DF_{83}	15.1	X	262.07434	175.11865	36.62231	2.21782	0.1552400	0.18753485	3.0228370	20	—	—
103975 2000 DO_{83}	14.7	X	193.27862	61.16226	355.66707	8.47047	0.0416006	0.20894485	2.8126451	20	5 28.1	18.9
103976 2000 DR_{83}	15.6	X	285.52947	120.71137	31.90857	4.94847	0.1259745	0.23354117	2.6115224	20	—	—
103977 2000 DS_{84}	15.2	X	323.48308	6.77196	342.25015	2.86541	0.0963250	0.21775469	2.7362622	20	8 18.9	18.5
103978 2000 DZ_{84}	14.8	X	171.81982	128.15483	131.03557	14.41932	0.1531286	0.23058280	2.6338121	20	—	—
103979 2000 DN_{85}	15.1	X	0.05768	351.61816	115.65796	9.40881	0.0578453	0.18941467	3.0028039	20	—	—
103980 2000 DT_{85}	15.6	X	181.29652	124.43108	129.03454	14.63689	0.0668500	0.23194167	2.6235149	20	—	—
103981 2000 DC_{86}	15.4	X	181.36190	169.07933	4.38471	10.16904	0.1374245	0.22141889	2.7059905	20	10 8.9	19.5
103982 2000 DE_{86}	14.1	X	139.19081	118.19059	122.08252	10.99607	0.1974742	0.17368674	3.1814489	20	11 17.7	19.6
103983 2000 DG_{86}	15.9	X	139.27206	113.18839	112.51157	6.59622	0.1454749	0.26991823	2.3712713	20	11 12.7	19.6
103984 2000 DH_{86}	15.1	X	189.84393	303.38170	1.36718	10.99944	0.2181025	0.23911633	2.5707700	20	1 12.1	19.6
103985 2000 DE_{89}	16.2	X	86.87218	27.28322	334.34402	2.89350	0.1669741	0.28508050	2.2864289	20	—	—
103986 2000 DB_{90}	17.2	X	13.78215	90.47537	207.74036	0.88292	0.1921849	0.26459310	2.4029812	20	9 23.5	19.4
103987 2000 DS_{92}	16.3	X	159.94356	192.51809	168.02340	4.78550	0.1969833	0.24482339	2.5306618	20	2 17.7	20.4
103988 2000 DE_{93}	16.4	X	107.56458	243.78727	345.19220	4.34869	0.1141648	0.26753899	2.3853091	20	10 11.3	19.8
103989 2000 DC_{94}	12.0	X	344.83985	329.23604	61.15886	3.07035	0.0719118	0.07966237	5.3493444	20	10 19.9	18.6
103990 2000 DS_{94}	14.1	X	288.27416	100.27526	336.19206	21.79418	0.0448557	0.17584713	3.1553378	20	10 7.7	18.8
103991 2000 DC_{95}	15.2	X	235.61079	61.15302	349.89642	8.38470	0.1152513	0.21439128	2.7648058	20	7 6.4	19.4
103992 2000 DG_{95}	15.8	X	109.67470	22.87459	358.79771	5.74867	0.1483917	0.29093022	2.2556766	20	1 8.1	18.3
103993 2000 DH_{95}	16.1	X	306.36654	62.38818	140.00367	7.76831	0.1749305	0.24093373	2.5578259	20	—	—
103994 2000 DQ_{95}	15.7	X	127.64093	243.65600	0.19887	7.15330	0.0792460	0.27166570	2.3610917	20	11 19.7	19.1
103995 2000 DX_{95}	15.6	X	199.59796	209.89020	10.34635	5.30857	0.0989358	0.22998552	2.6383701	20	12 30.8	19.4
103996 2000 DX_{96}	16.3	X	359.63508	271.87787	163.41979	5.60452	0.1313631	0.28442799	2.2899245	20	—	—
103997 2000 DV_{97}	16.3	X	105.03695	194.86002	42.30616	4.39310	0.1532795	0.26649049	2.3915616	20	10 23.6	19.9
103998 2000 DE_{98}	15.3	X	207.21230	189.55959	133.41089	13.59897	0.1190524	0.24484752	2.5304956	20	2 13.8	19.1
103999 2000 DB_{99}	15.6	X	353.90954	226.25419	115.20505	7.39497	0.1344342	0.26840958	2.3801484	20	10 18.6	18.0
104000 2000 DM_{99}	16.1	X	127.97225	25.29720	2.15184	10.29093	0.0884139	0.29303695	2.2448524	20	2 3.5	18.9