Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116001 2003 WD_{74}	15.7	X	295.25203	39.01408	19.05303	4.44544	0.0580696	0.21248159	2.7813470	21	9 30.6	19.3
116002 2003 WH_{75}	16.2	X	21.25575	253.64477	192.42366	4.82979	0.0865138	0.28523719	2.2855915	21	—	—
116003 2003 WN_{75}	15.5	X	340.74473	337.30135	19.71651	3.80463	0.0913923	0.21211357	2.7845632	21	9 16.3	18.6
116004 2003 WB_{76}	15.1	X	75.93804	46.75827	320.25317	8.42101	0.0780643	0.17427100	3.1743340	21	—	—
116005 2003 WL_{77}	15.2	X	218.28898	301.35624	17.12695	1.49633	0.1082785	0.18673272	3.0314874	21	2 17.9	19.9
116006 2003 WA_{78}	14.7	X	268.82605	281.55087	273.11935	8.81285	0.0931710	0.17367118	3.1816388	21	—	—
116007 2003 WJ_{78}	15.8	X	107.70275	194.84208	299.72357	5.02702	0.0717143	0.25204035	2.4821194	21	5 18.4	19.0
116008 2003 WE_{79}	14.4	X	147.59241	271.40163	37.52577	7.81359	0.0583628	0.17483120	3.1675496	21	—	—
116009 2003 WT_{79}	14.9	X	333.87203	133.13501	316.62057	4.09983	0.0956202	0.16822254	3.2499743	21	12 25.5	18.9
116010 2003 WP_{80}	14.9	X	110.13731	321.65814	266.77624	12.36952	0.0872902	0.21002836	2.8029633	21	9 20.0	19.3
116011 2003 WQ_{80}	15.6	X	28.79999	14.49082	112.60184	16.53643	0.1177895	0.23679660	2.5875321	21	1 11.4	18.3
116012 2003 WU_{81}	15.0	X	81.11414	55.65278	70.48250	15.29761	0.1602654	0.18796444	3.0182294	21	4 26.9	19.2
116013 2003 WU_{82}	15.2	X	264.90944	293.94946	176.79247	15.63762	0.1351045	0.21342036	2.7731848	21	10 17.9	18.9
116014 2003 WA_{83}	15.5	X	3.08591	78.42691	355.60360	12.46113	0.1310369	0.22721838	2.6597475	21	—	—
116015 2003 WE_{83}	15.6	X	249.64456	24.46112	147.19795	13.90701	0.1047906	0.22290745	2.6939301	21	12 19.8	19.4
116016 2003 WK_{83}	15.4	X	106.42214	32.73930	348.55333	10.50166	0.1404361	0.23561336	2.5961878	21	1 1.2	18.8
116017 2003 WN_{84}	15.2	X	207.87444	0.56280	90.63975	10.47996	0.1008557	0.20612150	2.8382709	21	7 20.2	19.5
116018 2003 WS_{84}	14.7	X	87.66286	332.58265	99.03209	13.51083	0.1276049	0.18266794	3.0762939	21	2 20.5	18.9
116019 2003 WT_{84}	15.7	X	238.75809	318.69757	196.65917	7.68862	0.1492755	0.21659890	2.7459875	21	11 8.2	19.6
116020 2003 WC_{86}	14.6	X	359.47853	56.52151	87.53594	11.59954	0.1002443	0.17216584	3.2001578	21	1 6.4	18.6
116021 2003 WG_{86}	14.8	X	43.29663	240.71589	175.89482	15.85972	0.0993437	0.17639880	3.1487557	21	—	—
116022 2003 WM_{87}	14.7	X	298.68745	18.42452	101.23930	18.41974	0.2131802	0.21629118	2.7485914	21	12 12.6	17.5
116023 2003 WN_{87}	16.2	X	357.74952	333.64118	88.37556	9.22367	0.2030764	0.27541430	2.3396185	21	—	—
116024 2003 WR_{87}	15.0	X	53.61743	239.19230	133.97974	13.62893	0.1481623	0.22754633	2.6571913	21	—	—
116025 2003 WS_{87}	15.2	X	92.52723	261.18088	113.68583	5.47888	0.2084659	0.23297753	2.6157327	21	—	—
116026 2003 WP_{88}	16.1	X	231.46951	282.80854	315.37657	2.61063	0.1244567	0.28913192	2.2650199	21	—	—
116027 2003 WV_{88}	16.9	X	187.11560	310.10109	138.83264	1.62194	0.1533572	0.25659005	2.4526910	21	6 23.6	20.8
116028 2003 WJ_{89}	15.5	X	259.27326	231.69451	234.50643	5.71858	0.0816947	0.21461673	2.7628692	21	10 8.7	19.3
116029 2003 WO_{89}	16.7	X	323.35140	83.44907	45.82411	7.35081	0.0507377	0.28440874	2.2900278	21	—	—
116030 2003 WY_{90}	15.6	X	73.97329	182.81971	125.16580	3.35025	0.0445802	0.21919377	2.7242727	21	11 20.3	19.4
116031 2003 WR_{91}	14.7	X	268.61570	71.80250	130.12765	5.75303	0.0448893	0.17576994	3.1562615	21	—	—
116032 2003 WQ_{92}	15.7	X	291.08383	294.49989	268.55678	8.84098	0.0278313	0.23576947	2.5950417	21	—	—
116033 2003 WY_{92}	15.8	X	71.57214	328.02839	276.88314	5.70575	0.0801098	0.26393760	2.4069582	21	9 1.4	19.0
116034 2003 WH_{95}	16.0	X	51.28764	196.53893	85.34806	2.62278	0.1790558	0.26793856	2.3829371	21	10 15.7	18.8
116035 2003 WN_{96}	14.9	X	256.60319	124.31678	46.36755	4.57614	0.0799024	0.16942156	3.2346225	21	12 18.3	19.4
116036 2003 WX_{97}	14.0	X	16.00110	35.33359	101.69189	24.61176	0.1248462	0.17325344	3.1867510	21	1 21.0	17.9
116037 2003 WU_{99}	15.4	X	334.82559	152.10932	5.23612	13.19652	0.0928113	0.23405648	2.6076879	21	—	—
116038 2003 WY_{99}	16.4	X	186.40731	163.57747	47.57751	7.43198	0.0684904	0.27451095	2.3447485	21	12 5.9	19.5
116039 2003 WZ_{99}	15.6	X	312.82394	93.39543	305.05016	2.95186	0.1033411	0.21261385	2.7801934	21	9 23.8	18.8
116040 2003 WQ_{100}	13.8	X	356.99106	192.36254	274.72290	19.30577	0.1457534	0.17627363	3.1502461	21	—	—
116041 2003 WZ_{100}	14.7	X	13.74827	47.07775	93.09292	11.90392	0.0302411	0.18578731	3.0417628	21	1 23.7	18.9
116042 2003 WA_{101}	14.3	X	329.57216	161.79623	84.52240	18.30628	0.1400353	0.19738956	2.9213702	21	4 2.0	18.4
116043 2003 WW_{101}	16.7	X	220.49434	278.13003	227.65494	10.53968	0.0950390	0.27057282	2.3674452	21	10 16.9	19.9
116044 2003 WE_{102}	15.6	X	108.69789	54.18431	48.85138	0.27562	0.1127745	0.19001419	2.9964845	21	4 20.2	19.8
116045 2003 WR_{102}	14.4	X	100.77959	64.78440	323.09771	15.21992	0.1540908	0.18070549	3.0985261	21	1 18.3	18.7
116046 2003 WZ_{102}	15.2	X	318.92246	3.71608	317.29411	14.34664	0.1565669	0.26078506	2.4263172	21	6 8.3	18.1
116047 2003 WR_{104}	15.4	X	158.53894	178.80312	82.32549	6.19988	0.0178306	0.22249539	2.6972552	21	12 30.6	19.2
116048 2003 WC_{105}	15.0	X	89.09785	117.55636	232.51234	5.05977	0.1996617	0.22920457	2.6443597	21	—	—
116049 2003 WE_{105}	14.8	X	204.73503	156.54389	78.78339	13.92136	0.1032919	0.22732641	2.6589048	21	—	—
116050 2003 WL_{105}	15.0	X	108.46616	306.52362	263.61711	5.52115	0.0597926	0.20570933	2.8420610	21	8 26.3	19.1
116051 2003 WM_{106}	15.1	X	279.66781	66.75061	359.84602	16.91512	0.1483333	0.20878474	2.8140828	21	9 8.8	18.8
116052 2003 WT_{106}	14.5	X	59.19640	52.15654	74.65748	17.66296	0.2032359	0.17755093	3.1351194	21	4 7.2	18.6
116053 2003 WD_{107}	14.8	X	29.10256	198.99936	243.17502	21.31646	0.0416177	0.23026155	2.6362612	21	—	—
116054 2003 WO_{107}	15.9	X	317.25818	232.86338	181.78917	2.19346	0.0624577	0.21547173	2.7555556	21	10 28.3	19.3
116055 2003 WQ_{107}	15.2	X	97.00770	29.40151	39.58160	15.16282	0.0751482	0.23566384	2.5958170	21	2 16.0	18.9
116056 2003 WS_{107}	15.0	X	81.92654	30.39411	18.38564	12.99875	0.1629587	0.23132112	2.6282047	21	1 4.4	18.2
116057 2003 WW_{107}	14.0	X	143.71968	248.81046	72.73806	30.17508	0.3327107	0.22904462	2.6455907	21	—	—
116058 2003 WB_{108}	16.3	X	202.12324	278.68347	273.00546	6.03481	0.0528805	0.27887652	2.3202142	21	12 2.6	19.1
116059 2003 WG_{110}	15.9	X	225.75728	43.59482	305.43129	3.73409	0.0931522	0.19403278	2.9549671	21	3 31.0	20.4
116060 2003 WL_{111}	15.8	X	312.49671	88.65986	355.67269	2.80656	0.0888658	0.21986749	2.7187047	21	11 27.7	19.0
116061 2003 WO_{111}	16.9	X	282.26666	231.09351	327.59739	2.00252	0.0499097	0.28865978	2.2674890	21	—	—
116062 2003 WN_{115}	15.1	X	21.41129	130.87144	8.81151	5.19248	0.1150340	0.18063601	3.0993206	21	2 2.2	18.9
116063 2003 WM_{117}	15.3	X	191.44971	15.05929	355.02966	4.27604	0.1938344	0.19152580	2.9806972	21	3 24.9	20.4
116064 2003 WA_{118}	15.7	X	59.86175	40.19578	1.46606	3.64333	0.2054175	0.23035502	2.6355480	21	—	—
116065 2003 WX_{118}	15.7	X	327.12633	33.61401	45.39142	5.67886	0.0906484	0.21979602	2.7192941	21	12 14.1	18.8
116066 2003 WC_{119}	14.8	X	119.05942	341.27640	63.27419	11.96636	0.0780590	0.18285371	3.0742100	21	2 21.2	19.4
116067 2003 WF_{119}	16.3	X	120.06805	283.45850	54.65393	6.29640	0.1959813	0.28741866	2.2740120	21	—	—
116068 2003 WW_{119}	15.1	X	112.50295	46.92473	55.82170	7.46509	0.0859684	0.18936509	3.0033280	21	4 22.4	19.4
116069 2003 WR_{120}	14.7	X	197.02611	329.88901	63.02213	11.17621	0.1128709	0.19336906	2.9617250	21	4 28.7	19.3
116070 2003 WV_{120}	15.2	X	89.73308	125.78942	271.27239	13.79781	0.1049466	0.23298314	2.6156907	21	—	—
116071 2003 WB_{121}	16.0	X	128.48165	21.14296	34.26771	4.48605	0.0619762	0.29710042	2.2243368	21	2 21.7	18.6
116072 2003 WG_{121}	16.1	X	121.52243	336.18708	39.18384	3.26467	0.1906054	0.29197746	2.2502797	21	1 7.2	18.4
116073 2003 WH_{121}	15.7	X	131.85339	41.29138	298.25613	3.63554	0.2458409	0.28948285	2.2631890	21	—	—
116074 2003 WK_{121}	15.7	X	167.72927	52.59327	4.13494	4.14328	0.1704745	0.19190782	2.9767402	21	4 27.8	20.5
116075 2003 WX_{121}	16.1	X	232.25877	333.26861	24.03171	4.66502	0.1551421	0.30602172	2.1808939	21	4 5.9	19.4
116076 2003 WL_{123}	15.9	X	200.06845	278.33014	39.65150	7.10670	0.0749570	0.23826133	2.5769165	21	1 23.6	19.8
116077 2003 WT_{123}	15.3	X	254.01672	234.00797	264.04328	13.77288	0.1166742	0.21570031	2.7536085	21	11 6.1	19.2
116078 2003 WV_{123}	15.9	X	154.28921	343.90081	356.72629	2.59335	0.1335937	0.23537523	2.5979386	21	1 6.6	19.5
116079 2003 WA_{124}	15.5	X	41.56592	29.55924	20.48676	6.78224	0.1236398	0.22716056	2.6601988	21	—	—
116080 2003 WG_{124}	14.7	X	15.36271	29.01971	56.17639	15.15182	0.1149219	0.17114517	3.2128685	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116081 2003 WM_{124}	15.7	X	101.78699	294.47300	40.36299	6.54693	0.0753898	0.22633803	2.6666398	21	—	—
116082 2003 WZ_{124}	14.9	X	304.67241	169.53204	52.65371	7.92447	0.2238359	0.23368738	2.6104330	21	—	—
116083 2003 WA_{125}	14.3	X	347.17653	44.43899	291.29713	7.30952	0.3344336	0.21143910	2.7904817	21	8 20.7	15.9
116084 2003 WB_{125}	15.7	X	93.63937	75.93637	62.67407	10.94027	0.1155067	0.24555575	2.5256276	21	5 14.3	18.9
116085 2003 WK_{125}	15.4	X	328.06885	181.06661	290.17142	7.08392	0.0575128	0.22251536	2.6970938	21	—	—
116086 2003 WU_{125}	14.6	X	203.89386	330.84662	70.31288	12.24074	0.1117481	0.19360575	2.9593106	21	5 14.6	19.3
116087 2003 WX_{125}	13.9	X	70.61093	328.07372	84.26370	28.59218	0.1760419	0.17494758	3.1661447	21	1 5.6	17.9
116088 2003 WY_{125}	15.4	X	163.01735	292.94012	50.11143	3.68271	0.2460049	0.23677717	2.5876736	21	1 28.8	19.6
116089 2003 WA_{126}	14.8	X	260.92811	140.52986	79.75446	12.60768	0.1301155	0.22624930	2.6673370	21	—	—
116090 2003 WC_{126}	13.8	X	156.22417	286.33450	69.40632	13.40729	0.1500447	0.17965360	3.1106090	21	2 10.1	18.9
116091 2003 WG_{126}	15.0	X	67.34564	272.98252	76.53286	13.24576	0.2254514	0.22219872	2.6996555	21	—	—
116092 2003 WJ_{126}	15.2	X	344.43181	114.36902	80.79453	11.22827	0.0740073	0.23568363	2.5956718	21	2 10.2	18.6
116093 2003 WK_{126}	14.5	X	348.80354	208.68291	86.86050	14.81849	0.0518030	0.19706174	2.9246092	21	7 5.1	18.2
116094 2003 WZ_{126}	14.4	X	327.75472	75.87933	70.11476	14.56260	0.0294508	0.17150642	3.2083554	21	—	—
116095 2003 WD_{127}	15.5	X	64.92397	350.83409	25.96905	2.49400	0.2153471	0.22646960	2.6656069	21	—	—
116096 2003 WE_{127}	14.2	X	298.88430	131.10200	70.31543	6.10768	0.1193447	0.17322492	3.1871008	21	—	—
116097 2003 WH_{127}	15.2	X	330.07094	71.15467	69.48609	12.76412	0.1308453	0.22549442	2.6732865	21	—	—
116098 2003 WU_{127}	14.1	X	301.21789	276.60077	289.43815	20.27884	0.1724823	0.17263194	3.1943949	21	—	—
116099 2003 WY_{127}	14.3	X	125.43872	87.75024	326.36280	15.17358	0.1348095	0.18400796	3.0613405	21	3 9.2	18.9
116100 2003 WB_{128}	14.7	X	20.60389	58.60064	95.87983	18.68333	0.1820804	0.17512742	3.1639767	21	2 24.6	18.5
116101 2003 WM_{131}	16.7	X	261.34869	334.38582	324.76295	3.38677	0.0758581	0.30213309	2.1995670	21	2 23.9	19.6
116102 2003 WL_{132}	16.6	X	341.86515	322.68383	237.18622	4.28637	0.0803430	0.29674095	2.2261328	21	1 23.9	19.2
116103 2003 WT_{132}	16.1	X	53.47872	296.81825	62.33190	1.89993	0.0943320	0.22390652	2.6859107	21	—	—
116104 2003 WB_{133}	16.0	X	290.35276	313.36562	208.52922	1.89279	0.0165070	0.22809134	2.6529569	21	—	—
116105 2003 WZ_{133}	16.3	X	9.80259	338.56110	251.96498	4.42863	0.1279340	0.30670199	2.1776679	21	4 23.9	18.0
116106 2003 WC_{134}	15.9	X	277.64839	54.74075	65.72224	7.18456	0.0459568	0.27510769	2.3413566	21	12 10.1	18.6
116107 2003 WE_{134}	16.5	X	334.03984	317.55410	240.42169	5.23897	0.0943295	0.29504520	2.2346543	21	1 8.6	19.0
116108 2003 WR_{134}	15.3	X	74.04181	322.72052	68.33475	13.61835	0.0784432	0.23068416	2.6330404	21	—	—
116109 2003 WT_{134}	16.7	X	58.65661	66.27462	72.95134	4.12759	0.0699462	0.29914922	2.2141692	21	3 8.2	18.8
116110 2003 WV_{134}	16.2	X	301.81990	16.25629	78.08871	5.23873	0.1044203	0.27440818	2.3453339	21	12 7.4	18.4
116111 2003 WD_{135}	14.6	X	318.50157	303.06746	253.26327	14.75606	0.1028563	0.17941811	3.1133303	21	1 9.7	19.0
116112 2003 WH_{135}	15.1	X	347.51626	154.80952	241.64479	8.70931	0.1609572	0.21836407	2.7311691	21	11 24.8	17.8
116113 2003 WW_{135}	15.3	X	282.47880	54.71958	60.05698	9.36239	0.0278323	0.21850142	2.7300245	21	11 29.1	18.9
116114 2003 WZ_{135}	15.5	X	5.32576	279.46588	53.37002	4.78810	0.1087333	0.21131256	2.7915956	21	9 26.2	18.7
116115 2003 WL_{136}	14.0	X	29.82566	148.80465	248.66945	20.73608	0.0543013	0.16825317	3.2495799	21	—	—
116116 2003 WY_{136}	14.7	X	151.17009	123.28108	245.13732	8.53388	0.1003379	0.18314235	3.0709791	21	2 7.4	19.4
116117 2003 WG_{137}	14.3	X	26.81814	214.62782	257.83398	8.01323	0.0454121	0.17774679	3.1328159	21	1 6.6	18.4
116118 2003 WH_{137}	15.4	X	80.56594	102.06634	345.30656	0.79417	0.1560262	0.18232795	3.0801171	21	3 2.6	19.3
116119 2003 WU_{137}	16.0	X	86.63721	297.44849	78.16269	7.46991	0.1269929	0.28631257	2.2798649	21	—	—
116120 2003 WP_{138}	15.6	X	126.50970	277.66588	90.75317	4.74121	0.1245099	0.23516308	2.5995008	21	1 7.8	18.9
116121 2003 WU_{138}	15.5	X	33.27104	48.81416	72.90089	8.41983	0.1805896	0.23419963	2.6066251	21	1 11.4	17.9
116122 2003 WD_{139}	16.3	X	280.57806	264.61798	201.22776	1.76895	0.1706879	0.27101556	2.3648661	21	11 6.8	18.5
116123 2003 WL_{139}	15.9	X	139.26241	344.19577	79.14397	3.73029	0.1858789	0.24442654	2.5334002	21	4 9.5	19.7
116124 2003 WU_{139}	14.6	X	41.20764	74.95172	76.36485	4.80053	0.2146755	0.18192653	3.0846462	21	3 30.7	17.8
116125 2003 WY_{139}	14.9	X	334.79344	19.98566	80.73581	14.40809	0.1301296	0.22274373	2.6952500	21	—	—
116126 2003 WA_{140}	15.7	X	147.40662	287.98366	108.89199	2.00813	0.1218215	0.24171256	2.5523285	21	3 8.3	19.2
116127 2003 WL_{140}	16.6	X	215.44146	347.59435	63.21226	3.40410	0.0798164	0.25497191	2.4630572	21	6 5.4	19.9
116128 2003 WN_{140}	15.0	X	93.88149	225.70477	249.49786	9.86976	0.1233123	0.18801401	3.0176989	21	4 16.2	19.2
116129 2003 WO_{140}	15.3	X	157.35635	293.60387	73.04105	3.99002	0.1690989	0.24062112	2.5600408	21	2 14.6	19.3
116130 2003 WB_{141}	14.7	X	275.87039	256.72692	82.49759	12.88634	0.0598677	0.19570614	2.9380989	21	5 22.5	18.8
116131 2003 WS_{141}	15.0	X	320.65904	223.64184	262.61202	10.72704	0.1462021	0.22240257	2.6980056	21	—	—
116132 2003 WA_{142}	14.7	X	97.43885	320.44072	91.48785	12.47760	0.1918928	0.17906555	3.1174155	21	2 19.1	19.1
116133 2003 WO_{142}	15.2	X	150.84805	179.75073	87.67303	25.79265	0.1857618	0.27483972	2.3428783	21	—	—
116134 2003 WZ_{142}	12.5	X	10.34429	187.92631	53.74744	7.71601	0.0574766	0.08421463	5.1547904	21	5 31.0	19.0
116135 2003 WC_{144}	17.0	X	238.06237	301.36397	156.76328	1.20600	0.1451258	0.26553541	2.3972928	21	8 29.4	20.3
116136 2003 WH_{144}	16.5	X	198.09125	94.96568	51.53030	8.24250	0.0470147	0.26784242	2.3835072	21	9 30.8	19.7
116137 2003 WC_{145}	14.9	X	66.00082	6.55468	58.36758	8.07270	0.2272185	0.17935685	3.1140391	21	1 22.9	18.5
116138 2003 WK_{145}	16.1	X	299.83211	281.87592	130.87853	0.61957	0.0641094	0.21321950	2.7749262	21	9 29.2	19.6
116139 2003 WA_{146}	14.4	X	21.59156	109.20798	358.88104	15.82104	0.2259231	0.17634501	3.1493960	21	—	—
116140 2003 WP_{146}	14.5	X	42.30875	282.07905	185.95301	21.40385	0.2367581	0.17980937	3.1088123	21	1 28.2	18.0
116141 2003 WA_{149}	16.4	X	161.86624	192.64866	52.39465	7.96296	0.0811706	0.27748691	2.3279539	21	12 21.5	19.8
116142 2003 WA_{150}	16.2	X	63.46773	242.06442	95.02304	7.32481	0.1432647	0.27905353	2.3192330	21	—	—
116143 2003 WO_{152}	15.5	X	187.60180	9.35144	268.88391	8.32687	0.0966718	0.23363229	2.6108433	21	—	—
116144 2003 WM_{153}	14.6	X	356.14842	327.30330	156.57304	17.73048	0.2244528	0.17319304	3.1874920	21	—	—
116145 2003 WA_{156}	14.9	X	328.20736	0.88857	142.25087	7.38784	0.1315798	0.17288792	3.1912411	21	—	—
116146 2003 WJ_{156}	15.3	X	346.89985	268.36226	177.67277	13.44364	0.1646989	0.22360420	2.6883311	21	—	—
116147 2003 WM_{157}	17.0	X	174.38501	161.25509	176.73217	5.31593	0.2501180	0.29698797	2.2248982	21	1 22.3	20.6
116148 2003 WN_{157}	16.3	X	27.69713	89.41373	81.41369	9.60011	0.0604132	0.29985544	2.2106913	21	3 5.4	18.7
116149 2003 WU_{158}	15.9	X	104.01253	338.18884	100.38612	3.79888	0.0503546	0.24222415	2.5487334	21	2 27.1	19.1
116150 2003 WD_{163}	15.3	X	16.24107	347.21743	113.48628	14.38097	0.1251074	0.22933343	2.6433691	21	—	—
116151 2003 WR_{164}	16.0	X	117.11276	348.31687	235.39338	2.49122	0.0338238	0.21005386	2.8027366	21	9 22.5	20.1
116152 2003 WX_{165}	14.4	X	39.31019	204.59537	228.07665	6.79477	0.1592048	0.17523610	3.1626685	21	—	—
116153 2003 WO_{166}	14.7	X	125.66212	321.27737	53.23952	10.12331	0.0536251	0.18498694	3.0505302	21	1 16.5	19.1
116154 2003 WA_{168}	13.8	X	72.99235	258.53839	77.01781	18.43430	0.2156367	0.17109103	3.2135463	21	—	—
116155 2003 WW_{168}	15.9	X	253.10678	90.43812	131.22275	6.77316	0.1486353	0.28860119	2.2677959	21	—	—
116156 2003 WS_{170}	15.4	X	324.33211	110.49194	160.49479	11.98853	0.1484953	0.25294830	2.4761762	21	4 10.2	18.3
116157 2003 WC_{171}	15.9	X	328.11142	280.60061	178.83424	13.34604	0.1231667	0.22382360	2.6865740	21	—	—
116158 2003 WU_{171}	14.9	X	52.16660	226.56240	312.82308	9.67390	0.0770767	0.19228066	2.9728909	21	5 2.9	19.0
116159 2003 WZ_{171}	15.4	X	188.94317	198.46327	162.92190	15.66858	0.1537561	0.24469596	2.5315403	21	3 7.1	19.2
116160 2003 WK_{176}	15.3	X	324.64422	28.47512	354.08429	7.13365	0.1290867	0.21270256	2.7794203	21	9 21.0	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116161 2003 WS_{176}	16.8	X	132.38220	118.00657	82.14573	3.53162	0.1320045	0.26362357	2.4088692	21	9 24.5	20.4
116162 2003 WL_{181}	15.4	X	99.33123	348.92628	32.28949	2.62483	0.0962504	0.23175257	2.6249418	21	—	—
116163 2003 WW_{181}	15.6	X	79.31695	306.95544	71.27440	4.17184	0.0913933	0.22695123	2.6618344	21	—	—
116164 2003 WD_{190}	14.7	X	16.05675	190.83051	322.15386	17.33176	0.1833990	0.18116335	3.0933032	21	2 6.7	17.9
116165 2003 WU_{190}	15.2	X	59.88486	260.77375	115.93443	15.64561	0.0424865	0.23081801	2.6320224	21	—	—
116166 Andrémaeder	15.3	X	100.61845	170.17260	221.99100	5.15673	0.2363685	0.17960000	3.1112280	21	1 30.7	19.7
116167 2003 XG_{1}	15.5	X	252.34665	19.59154	85.16236	9.05934	0.1848943	0.21094932	2.7947994	21	9 19.6	19.7
116168 2003 XR_{1}	16.4	X	85.42814	290.90779	281.49782	8.47058	0.1068555	0.25970266	2.4330542	21	8 9.9	19.6
116169 2003 XL_{2}	14.6	X	36.64424	30.47264	79.83262	22.83826	0.1402522	0.17921217	3.1157150	21	1 20.8	18.5
116170 2003 XW_{2}	14.9	X	300.71111	260.68821	85.74702	13.70966	0.1439086	0.20474506	2.8509773	21	6 19.5	18.5
116171 2003 XX_{2}	14.9	X	216.96395	194.92832	88.12212	12.84680	0.1734748	0.23709238	2.5853796	21	—	—
116172 2003 XE_{3}	14.5	X	275.41525	12.61463	94.78243	9.29461	0.1364250	0.16066119	3.3511617	21	10 22.2	19.2
116173 2003 XF_{3}	15.8	X	226.90091	231.44080	184.11311	3.88025	0.1500301	0.20175027	2.8791214	21	6 20.5	20.3
116174 2003 XR_{3}	15.7	X	135.98101	299.75124	158.35176	5.29448	0.1652029	0.19199983	2.9757892	21	5 20.9	20.4
116175 2003 XZ_{3}	15.2	X	197.59813	220.13027	121.08332	10.29378	0.2048162	0.24331919	2.5410808	21	2 21.4	19.5
116176 2003 XC_{4}	16.3	X	36.15825	107.53057	124.71875	2.95054	0.1112736	0.31150559	2.1552227	21	6 24.6	18.1
116177 2003 XN_{4}	15.4	X	127.53018	275.82640	151.70789	4.82380	0.0756885	0.18795555	3.0183246	21	3 25.7	19.8
116178 2003 XP_{4}	15.6	X	342.77432	311.00996	224.31297	11.71606	0.1271639	0.23378982	2.6096703	21	—	—
116179 2003 XU_{4}	15.6	X	139.26298	265.47005	117.59887	13.32314	0.1771081	0.23720098	2.5845904	21	2 18.5	19.4
116180 2003 XW_{4}	16.1	X	225.63314	167.05114	72.30540	2.82673	0.0469994	0.22952680	2.6418842	21	—	—
116181 2003 XB_{5}	14.6	X	234.58069	280.78971	77.17537	12.37511	0.1825532	0.19144044	2.9815831	21	4 21.2	19.6
116182 2003 XQ_{5}	15.1	X	111.40333	104.38033	18.43103	9.16976	0.0996242	0.19347448	2.9606490	21	5 14.1	19.5
116183 2003 XD_{6}	14.8	X	38.66462	162.66859	313.50212	10.67527	0.0682980	0.17974945	3.1095032	21	1 28.4	18.7
116184 2003 XH_{6}	14.7	X	22.75051	70.99657	32.95542	9.24944	0.2305575	0.17392707	3.1785174	21	—	—
116185 2003 XK_{6}	15.5	X	297.72401	265.98989	296.09184	11.77537	0.1038910	0.23318107	2.6142103	21	—	—
116186 2003 XZ_{7}	15.2	X	325.11700	23.37175	28.04032	13.45835	0.1387917	0.21351805	2.7723389	21	10 30.9	18.3
116187 2003 XG_{8}	15.7	X	53.81261	10.50969	119.20372	4.70308	0.1550485	0.23879242	2.5730942	21	3 5.4	18.3
116188 2003 XE_{9}	14.5	X	116.66995	12.81071	0.57720	12.93333	0.1755089	0.17944842	3.1129797	21	1 24.4	19.2
116189 2003 XL_{9}	15.2	X	175.29451	1.27032	324.01130	13.88966	0.0984072	0.23564019	2.5959908	21	1 8.6	19.1
116190 2003 XS_{9}	15.8	X	35.42793	161.48276	308.80255	3.79931	0.0865639	0.23404804	2.6077506	21	1 1.8	18.7
116191 2003 XG_{10}	14.9	X	150.55182	359.88758	11.77558	16.97646	0.1738781	0.23708362	2.5854433	21	2 20.7	19.0
116192 2003 XS_{10}	14.2	X	200.29284	269.32929	99.92988	16.61969	0.0614634	0.17820295	3.1274674	21	4 10.8	19.2
116193 2003 XK_{11}	15.1	X	159.53195	323.99335	128.09378	9.85256	0.2257949	0.19541093	2.9410573	21	6 7.2	20.2
116194 2003 XV_{11}	14.4	X	4.09955	289.50562	187.37635	24.82613	0.2419035	0.17468770	3.1692840	21	—	—
116195 2003 XY_{11}	14.6	X	247.96365	327.24649	218.52820	23.93927	0.0910687	0.22069556	2.7118999	21	12 31.2	18.7
116196 2003 XD_{13}	15.6	X	154.63408	249.38039	146.77300	2.64076	0.1845609	0.18927128	3.0043203	21	3 25.6	20.5
116197 2003 XC_{14}	14.6	X	182.00120	0.88569	11.79261	12.04985	0.2817085	0.18920944	3.0049749	21	3 24.2	20.0
116198 2003 XJ_{14}	14.5	X	21.71031	62.56816	27.67288	21.95726	0.0978826	0.22863212	2.6487719	21	—	—
116199 2003 XN_{14}	14.6	X	48.49980	22.38513	73.28172	25.89111	0.2602558	0.17828709	3.1264834	21	2 7.5	18.3
116200 2003 XY_{14}	14.6	X	26.78604	285.60366	27.49434	22.49211	0.2321330	0.26509651	2.3999381	21	10 27.6	17.1
116201 2003 XS_{15}	15.5	X	322.34293	77.84909	35.35191	12.93696	0.1306265	0.22069883	2.7118731	21	—	—
116202 2003 XE_{19}	15.4	X	5.80032	249.20957	231.56040	14.21138	0.0911930	0.23135151	2.6279745	21	—	—
116203 2003 XQ_{20}	16.9	X	209.19567	58.27776	47.58752	3.33495	0.1231028	0.26023232	2.4297517	21	8 10.5	20.5
116204 2003 XD_{22}	15.4	X	215.94379	263.67022	170.69199	12.68928	0.1286569	0.20184843	2.8781878	21	7 3.9	20.2
116205 2003 XR_{22}	15.6	X	81.43744	299.93960	153.03430	16.01819	0.1531144	0.23864787	2.5741331	21	2 28.8	18.4
116206 2003 XZ_{32}	15.4	X	321.13492	21.66519	118.09576	2.56508	0.1273167	0.17177323	3.2050322	21	—	—
116207 2003 XS_{34}	15.2	X	310.28098	180.75852	309.30431	14.01315	0.0741392	0.22764715	2.6564067	21	—	—
116208 2003 XY_{34}	15.2	X	6.89442	153.23472	337.30904	14.16787	0.0722093	0.23660741	2.5889112	21	—	—
116209 2003 XC_{35}	15.5	X	290.93653	263.46892	74.38879	3.19250	0.0690563	0.20060027	2.8901145	21	6 5.9	19.2
116210 2003 XT_{35}	15.1	X	86.31215	285.95987	45.81365	15.06700	0.1005519	0.22364918	2.6879706	21	—	—
116211 2003 XA_{36}	14.7	X	12.18231	134.26306	3.43112	9.52455	0.0507145	0.17888326	3.1195329	21	1 20.8	19.0
116212 2003 XP_{36}	15.0	X	286.81799	119.81779	40.14183	13.58785	0.1396598	0.22331386	2.6906606	21	—	—
116213 2003 XS_{36}	15.2	X	166.30440	8.27437	38.11756	9.33803	0.0863788	0.18979367	2.9988050	21	4 12.6	19.7
116214 2003 XA_{37}	14.7	X	328.96619	307.83462	303.22176	11.41861	0.0675129	0.18813704	3.0163831	21	3 31.7	19.0
116215 2003 XW_{39}	15.5	X	33.20200	187.76638	165.60723	15.10232	0.1286588	0.22171601	2.7035725	21	12 9.6	19.3
116216 2003 XA_{41}	16.6	X	192.54530	347.42586	267.16637	4.92029	0.1406920	0.28268655	2.2993193	21	—	—
116217 2003 XK_{41}	14.7	X	197.75403	303.80826	94.25363	13.33349	0.1537199	0.19309593	2.9645172	21	5 7.4	19.7
116218 2003 XQ_{42}	15.6	X	295.58408	77.01494	7.55646	12.06116	0.1761568	0.21496787	2.7598598	21	10 18.5	18.8
116219 2003 YH	14.8	X	28.55227	281.75818	177.64031	25.15043	0.1991792	0.17509392	3.1643803	21	—	—
116220 2003 YO_{2}	16.7	X	23.57699	27.97071	233.36802	1.78962	0.0838889	0.31304632	2.1481453	21	7 15.1	18.3
116221 2003 YU_{3}	15.6	X	5.83065	1.19666	306.80793	19.78436	0.0845052	0.37064417	1.9193961	21	8 25.3	17.2
116222 2003 YW_{3}	15.7	X	20.36387	14.47068	130.23859	5.52101	0.1913872	0.23580218	2.5948017	21	1 15.3	18.2
116223 2003 YD_{4}	15.3	X	112.44868	232.95761	202.91187	9.95712	0.1091118	0.18664771	3.0324078	21	3 20.0	19.6
116224 2003 YN_{4}	16.2	X	190.43455	354.88815	92.94536	3.28875	0.0911017	0.25249984	2.4791072	21	6 26.4	19.6
116225 2003 YS_{4}	17.0	X	290.20689	205.29537	210.39297	6.10055	0.1350159	0.26770790	2.3843056	21	9 12.5	19.7
116226 2003 YU_{4}	14.8	X	50.74966	320.16172	109.23678	10.93908	0.0700612	0.17669263	3.1452639	21	—	—
116227 2003 YX_{4}	14.7	X	357.02625	123.56392	96.70306	16.37233	0.0701776	0.19055746	2.9907865	21	4 16.4	18.9
116228 2003 YZ_{4}	14.7	X	27.99756	248.41786	173.04417	5.12155	0.1595549	0.17229466	3.1985625	21	—	—
116229 2003 YF_{5}	15.4	X	49.11053	236.45892	236.46480	14.16804	0.0935762	0.23715179	2.5849478	21	1 21.7	18.7
116230 2003 YH_{5}	16.2	X	71.12802	302.37670	201.22054	3.63262	0.1395557	0.24415976	2.5352453	21	4 20.8	19.0
116231 2003 YO_{5}	14.7	X	146.82911	2.99762	84.80602	11.39485	0.0813462	0.18886872	3.0085878	21	5 13.7	19.3
116232 2003 YW_{5}	15.7	X	51.44950	186.30344	138.80549	6.52647	0.0286826	0.21647401	2.7470435	21	11 12.3	19.5
116233 2003 YY_{5}	15.6	X	89.45394	6.52425	37.88649	2.90687	0.1538488	0.23070644	2.6328709	21	1 8.6	18.5
116234 2003 YT_{6}	15.7	X	141.94132	351.82751	35.58155	3.33076	0.1943305	0.23836461	2.5761721	21	2 27.5	19.5
116235 2003 YW_{8}	16.2	X	181.50063	197.12873	139.82759	3.92780	0.2323371	0.29610313	2.2293284	21	1 26.8	19.5
116236 2003 YH_{11}	14.3	X	305.52701	83.60108	63.88577	15.44697	0.0293444	0.16827845	3.2492544	21	—	—
116237 2003 YF_{12}	15.0	X	64.06923	116.76388	13.27007	9.52705	0.0562262	0.18537863	3.0462317	21	3 21.1	19.0
116238 2003 YJ_{12}	12.6	X	100.70890	185.77196	345.46408	9.07623	0.0580258	0.08241427	5.2295914	21	6 30.7	19.6
116239 2003 YR_{12}	15.0	X	101.36768	206.47719	321.95540	9.22036	0.0293747	0.19348693	2.9605220	21	6 22.7	19.3
116240 2003 YQ_{13}	15.9	X	0.04160	337.26733	14.91613	6.50506	0.1226441	0.26520362	2.3992919	21	10 21.6	18.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116241 2003 YE_{14}	14.9	X	22.03188	145.16625	46.23046	12.20493	0.1182288	0.18402449	3.0611572	21	4 12.6	18.6
116242 2003 YY_{14}	16.1	X	167.92817	330.80075	12.45284	5.13852	0.1872069	0.29296177	2.2452364	21	1 20.5	19.3
116243 2003 YF_{15}	14.7	X	346.12407	261.68188	66.33216	12.85371	0.0754409	0.20251188	2.8718982	21	8 20.1	18.5
116244 2003 YZ_{15}	16.6	X	144.53924	324.14941	45.66686	6.53082	0.1934832	0.29172657	2.2515697	21	1 31.7	19.7
116245 2003 YC_{16}	14.7	X	18.96035	55.59608	68.70012	6.73907	0.1553396	0.17297367	3.1901864	21	1 8.9	18.3
116246 2003 YK_{16}	14.4	X	88.65957	334.24969	94.09898	13.55098	0.0378286	0.17483440	3.1675109	21	2 5.7	18.9
116247 2003 YJ_{18}	16.1	X	137.26651	287.66600	292.19403	6.08003	0.0721806	0.27007267	2.3703672	21	10 18.6	19.5
116248 2003 YN_{20}	15.7	X	58.63277	80.47512	66.07790	4.53214	0.0144523	0.23973470	2.5663474	21	3 23.9	19.0
116249 2003 YS_{21}	16.5	X	164.38451	327.40148	80.22919	3.72228	0.1287311	0.24301479	2.5432023	21	4 10.2	20.3
116250 2003 YK_{22}	16.0	X	134.90146	358.03875	352.28419	2.74556	0.0513187	0.23307805	2.6149806	21	—	—
116251 2003 YV_{23}	15.3	X	91.78674	125.17792	6.74907	9.14470	0.0709694	0.19034608	2.9930003	21	4 26.9	19.4
116252 2003 YW_{23}	15.8	X	32.61383	277.04929	157.60463	3.06345	0.0837906	0.22926995	2.6438570	21	—	—
116253 2003 YV_{25}	14.7	X	114.29059	61.54709	91.27332	15.75749	0.0814124	0.19323263	2.9631189	21	6 25.0	18.8
116254 2003 YR_{26}	15.7	X	274.78559	298.75178	298.37238	22.57685	0.1781527	0.28328963	2.2960549	21	—	—
116255 2003 YA_{27}	15.6	X	94.48247	62.52479	78.32653	1.32484	0.2160212	0.18669214	3.0319267	21	6 4.5	20.1
116256 2003 YF_{27}	14.8	X	62.87645	45.35305	91.25177	9.25729	0.2432849	0.18363989	3.0654297	21	4 25.6	18.6
116257 2003 YY_{27}	14.9	X	50.41237	74.90573	77.54926	10.27014	0.0960618	0.18674424	3.0313627	21	4 7.2	18.9
116258 2003 YY_{29}	16.0	X	182.94197	303.15772	84.16227	7.49224	0.1767354	0.29797126	2.2200008	21	4 2.5	19.5
116259 2003 YB_{30}	16.5	X	199.99391	289.25352	291.51021	2.98880	0.0806527	0.27976685	2.3152890	21	—	—
116260 2003 YZ_{31}	16.4	X	121.22256	301.21512	101.47591	4.91645	0.1625686	0.23667837	2.5883937	21	2 20.4	19.9
116261 2003 YF_{32}	15.4	X	29.32365	338.02578	56.80953	6.28934	0.0480614	0.22074087	2.7115288	21	—	—
116262 2003 YJ_{32}	15.2	X	22.21705	110.27701	85.31770	10.60971	0.0489542	0.18578001	3.0418426	21	4 18.3	19.3
116263 2003 YR_{32}	15.1	X	247.49710	56.47347	61.83024	25.78628	0.1723092	0.21617652	2.7495632	21	10 13.3	19.5
116264 2003 YY_{32}	14.9	X	276.37594	88.16756	119.82631	8.98228	0.0432151	0.17670119	3.1451623	21	—	—
116265 2003 YB_{33}	15.7	X	31.49098	218.25673	154.07150	6.78219	0.0425707	0.22153944	2.7050088	21	12 17.5	19.4
116266 2003 YF_{33}	16.0	X	325.20142	150.39653	180.65505	6.35823	0.1526862	0.26183633	2.4198184	21	7 6.6	18.4
116267 2003 YX_{33}	15.3	X	301.71971	275.11596	131.99865	6.77743	0.0224685	0.21192051	2.7862541	21	10 1.3	19.1
116268 2003 YU_{34}	16.2	X	110.05035	212.25752	66.01010	7.49729	0.1039360	0.27304357	2.3531417	21	12 7.7	19.6
116269 2003 YB_{35}	14.5	X	6.61827	205.94462	131.99958	10.37822	0.2385394	0.21461453	2.7628882	21	10 23.5	17.4
116270 2003 YJ_{35}	16.2	X	337.15897	343.46429	354.44510	3.52656	0.0443705	0.31821919	2.1248020	21	8 24.2	18.0
116271 2003 YQ_{35}	14.9	X	29.20129	139.12354	101.88789	6.85406	0.0323541	0.19751040	2.9201785	21	6 20.6	18.7
116272 2003 YA_{41}	16.0	X	8.09594	125.53096	104.88886	2.82226	0.0912858	0.24372481	2.5382607	21	5 3.0	18.7
116273 2003 YX_{41}	15.9	X	135.34056	43.85462	51.62066	1.50322	0.1419382	0.18819261	3.0157894	21	5 13.7	20.6
116274 2003 YX_{42}	15.4	X	287.98631	147.78133	119.63072	5.57921	0.2717340	0.23574797	2.5951994	21	2 2.9	19.6
116275 2003 YH_{43}	15.8	X	28.77731	251.24858	243.80215	3.47497	0.0672721	0.23300556	2.6155229	21	1 24.1	19.0
116276 2003 YE_{44}	15.5	X	73.31929	230.35081	100.77652	3.39651	0.0768909	0.21528817	2.7571217	21	12 20.8	19.5
116277 2003 YS_{45}	15.5	X	293.56932	193.48554	200.91668	3.54174	0.1060794	0.20943175	2.8082841	21	8 18.4	19.1
116278 2003 YY_{45}	14.4	X	318.18429	119.42591	37.64046	14.14330	0.1082773	0.17196220	3.2026837	21	—	—
116279 2003 YG_{46}	15.9	X	333.48991	41.31652	60.87018	4.14542	0.0258047	0.22444450	2.6816169	21	—	—
116280 2003 YH_{47}	13.8	X	17.59854	254.21662	290.05003	10.62906	0.1467608	0.12495673	3.9624424	21	3 27.3	18.8
116281 2003 YR_{47}	15.9	X	58.00364	183.75593	304.10207	1.06253	0.2010772	0.18264382	3.0765647	21	3 25.5	19.5
116282 2003 YU_{50}	14.7	X	137.92772	5.16911	90.78860	7.78655	0.1476248	0.19052089	2.9911692	21	5 18.9	19.3
116283 2003 YS_{51}	16.7	X	18.57464	327.61997	69.10138	3.22960	0.1712872	0.27683139	2.3316274	21	—	—
116284 2003 YC_{52}	14.9	X	88.79318	27.85056	92.93749	11.22234	0.1541597	0.18546156	3.0453236	21	4 28.9	19.2
116285 2003 YG_{52}	16.3	X	285.21702	357.69267	350.32763	4.67477	0.1603131	0.30980640	2.1630960	21	5 21.4	18.9
116286 2003 YB_{53}	15.9	X	36.90155	261.98667	192.27722	2.09112	0.0442519	0.23432014	2.6057313	21	—	—
116287 2003 YF_{54}	15.2	X	330.29666	6.22886	109.84293	2.95748	0.1242202	0.17029768	3.2235189	21	—	—
116288 2003 YV_{54}	15.5	X	180.67941	352.55537	120.18921	3.11968	0.0126637	0.20304315	2.8668864	21	7 18.8	19.4
116289 2003 YO_{55}	15.8	X	98.88805	341.34131	107.03769	5.87754	0.1624458	0.24159802	2.5531351	21	3 24.1	19.0
116290 2003 YO_{56}	15.6	X	28.98197	352.87467	161.40226	0.74183	0.1065923	0.18214039	3.0822312	21	3 2.9	19.3
116291 2003 YD_{57}	14.8	X	218.64318	307.75997	256.62035	12.21174	0.1468456	0.21863912	2.7288781	21	12 15.5	18.7
116292 2003 YO_{57}	15.2	X	197.38109	89.18749	244.00293	10.44180	0.1999143	0.24190339	2.5509861	21	2 5.8	19.6
116293 2003 YU_{57}	15.6	X	75.55217	166.55925	226.52338	1.72381	0.0446258	0.22851485	2.6496780	21	—	—
116294 2003 YE_{58}	13.5	X	125.75723	272.34339	99.01240	11.57960	0.1841750	0.12248340	4.0156071	21	2 8.2	19.6
116295 2003 YL_{58}	15.2	X	168.03014	153.78401	100.78353	9.65124	0.0281655	0.22026156	2.7154610	21	—	—
116296 2003 YT_{58}	14.9	X	35.94475	39.76557	100.35342	11.64233	0.0444909	0.18065568	3.0990955	21	2 25.8	19.2
116297 2003 YR_{59}	16.5	X	180.08618	190.90453	46.78159	3.22236	0.1200110	0.27745075	2.3281562	21	12 29.5	19.8
116298 2003 YY_{59}	16.0	X	148.61355	123.45670	250.19494	0.53306	0.1979445	0.18534053	3.0466492	21	2 22.5	20.9
116299 2003 YJ_{60}	16.5	X	342.68873	317.76310	111.24139	2.51471	0.2168744	0.27733422	2.3288083	21	—	—
116300 2003 YW_{60}	14.5	X	16.32817	73.79071	92.54024	26.57419	0.2211797	0.17977194	3.1092438	21	3 6.8	18.2
116301 2003 YZ_{60}	15.5	X	90.12340	341.66470	114.37398	1.94030	0.1951746	0.18273135	3.0755823	21	4 2.0	19.7
116302 2003 YH_{61}	14.8	X	312.78539	46.13667	141.83120	2.04439	0.1133883	0.17255300	3.1953691	21	—	—
116303 2003 YK_{61}	15.8	X	56.68152	24.86073	106.12565	5.28808	0.1414703	0.23742194	2.5829866	21	3 12.4	18.5
116304 2003 YV_{61}	15.8	X	227.63907	354.20903	111.30107	7.19364	0.1057814	0.26194835	2.4191285	21	9 3.3	19.1
116305 2003 YL_{62}	15.1	X	310.71319	49.01629	104.56145	14.25872	0.1023796	0.22496256	2.6774984	21	—	—
116306 2003 YQ_{62}	15.0	X	80.59919	268.46514	109.73843	12.50526	0.2023455	0.22885744	2.6470330	21	—	—
116307 2003 YX_{62}	15.5	X	90.21610	353.98135	91.14494	0.70739	0.1678363	0.18033329	3.1027881	21	3 15.3	19.7
116308 2003 YR_{63}	15.9	X	201.16055	204.54513	259.12382	3.71993	0.0454955	0.25689346	2.4507594	21	7 31.9	19.3
116309 2003 YF_{64}	16.0	X	122.71542	117.55057	269.28902	3.06567	0.1064349	0.23407734	2.6075329	21	1 23.3	19.5
116310 2003 YA_{65}	14.5	X	25.35125	253.24427	285.54171	9.59681	0.0675973	0.18138720	3.0907577	21	3 22.6	18.7
116311 2003 YQ_{65}	15.2	X	113.99623	342.60730	152.44020	0.75245	0.1043515	0.18933268	3.0036707	21	6 5.0	19.4
116312 2003 YS_{65}	14.6	X	65.37132	188.79877	115.36425	13.83190	0.1227314	0.20894885	2.8126092	21	11 17.9	18.8
116313 2003 YT_{65}	14.3	X	213.28403	259.92348	104.89624	9.23917	0.2318404	0.19040582	2.9923743	21	4 9.4	19.6
116314 2003 YA_{66}	15.7	X	43.63344	313.50058	110.89750	12.55674	0.1000688	0.22965899	2.6408704	21	—	—
116315 2003 YE_{66}	16.3	X	70.67828	236.26833	177.63634	6.33001	0.1628531	0.28820450	2.2698764	21	—	—
116316 2003 YJ_{68}	14.7	X	77.08908	6.69096	125.78097	10.54704	0.0463870	0.18402280	3.0611759	21	4 12.9	19.0
116317 2003 YZ_{68}	15.2	X	43.14003	263.95045	88.13041	14.47884	0.0587870	0.22157230	2.7047413	21	12 9.6	18.8
116318 2003 YB_{69}	15.2	X	83.88274	172.62181	91.12083	16.13930	0.1237309	0.21346252	2.7728197	21	10 24.2	19.5
116319 2003 YF_{69}	14.4	X	96.85406	311.18640	131.06917	20.53466	0.1065242	0.18052116	3.1006350	21	3 15.8	18.9
116320 2003 YW_{69}	16.0	X	142.45300	263.74427	174.63162	1.06997	0.1560268	0.19298406	2.9656627	21	5 1.1	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116321 2003 YB_{70}	14.4	X	331.38762	67.07921	131.85560	17.12878	0.0776953	0.17480121	3.1679118	21	2 5.6	18.5
116322 2003 YJ_{72}	16.0	X	93.90742	310.81502	281.53178	10.65649	0.1157760	0.26165842	2.4209152	21	9 14.7	19.6
116323 2003 YP_{72}	15.0	X	180.99162	280.02402	288.50790	7.51457	0.1567410	0.21385276	2.7694454	21	11 10.6	19.6
116324 2003 YT_{72}	14.6	X	320.83770	102.48403	71.59117	11.35332	0.1676889	0.17312327	3.1883483	21	—	—
116325 2003 YV_{72}	14.7	X	326.74725	124.70630	77.87950	12.55160	0.1951710	0.23438400	2.6052580	21	1 4.9	18.2
116326 2003 YH_{73}	16.1	X	54.72353	328.23331	79.63692	7.49345	0.0949056	0.28388536	2.2928416	21	—	—
116327 2003 YJ_{73}	15.9	X	116.39032	335.91025	71.68071	4.50662	0.1601828	0.23799115	2.5788664	21	2 20.7	19.3
116328 2003 YL_{73}	16.2	X	123.98883	317.29267	46.90410	1.66915	0.2119923	0.29037498	2.2585511	21	—	—
116329 2003 YZ_{73}	15.4	X	13.18777	105.75839	20.12644	2.94320	0.0699295	0.17691570	3.1426195	21	1 4.9	19.6
116330 2003 YN_{74}	16.6	X	58.78154	356.16520	10.62842	0.61917	0.2037229	0.28125775	2.3070998	21	—	—
116331 2003 YS_{74}	15.8	X	87.84129	343.78442	25.39878	3.04195	0.0924504	0.22834400	2.6509995	21	—	—
116332 2003 YC_{75}	15.7	X	239.03935	328.48963	310.28031	5.15880	0.0675636	0.23609131	2.5926827	21	1 15.8	19.6
116333 2003 YC_{76}	14.7	X	328.09978	267.36377	303.72111	4.15236	0.0920317	0.18015188	3.1048707	21	2 12.3	18.9
116334 2003 YP_{76}	15.4	X	211.97179	65.14790	57.22998	2.81569	0.0821769	0.20488838	2.8496476	21	9 4.6	19.5
116335 2003 YA_{77}	14.5	X	13.69837	114.20634	89.11064	17.74585	0.2238019	0.18309346	3.0715258	21	4 20.6	17.9
116336 2003 YB_{77}	14.5	X	147.50668	222.45543	84.68516	12.88839	0.0258854	0.16851491	3.2462141	21	—	—
116337 2003 YF_{77}	15.7	X	183.69873	20.39440	25.22716	2.00408	0.1075486	0.24715359	2.5147304	21	4 24.4	19.5
116338 2003 YH_{78}	16.0	X	161.03735	295.31679	79.21180	3.38461	0.1924453	0.24012687	2.5635525	21	3 1.7	20.0
116339 2003 YZ_{78}	15.9	X	142.61478	349.96034	29.28161	3.94858	0.1723104	0.23793437	2.5792767	21	2 15.9	19.6
116340 2003 YC_{81}	14.8	X	152.35333	324.35625	281.11676	13.65501	0.1656474	0.21403180	2.7679008	21	11 30.3	19.5
116341 2003 YF_{81}	15.4	X	6.20963	322.78864	83.56126	9.47883	0.1060238	0.21937788	2.7227483	21	—	—
116342 2003 YH_{81}	14.3	X	337.82139	242.41104	284.19211	15.64923	0.1194321	0.17456585	3.1707587	21	—	—
116343 2003 YY_{83}	16.3	X	243.24211	235.61314	34.47962	3.79580	0.1399662	0.29212867	2.2495031	21	—	—
116344 2003 YB_{84}	15.6	X	275.11074	318.43045	126.33742	4.84028	0.0681377	0.21228731	2.7830437	21	10 7.9	19.2
116345 2003 YJ_{84}	14.5	X	298.04622	81.90525	107.55025	10.56953	0.0471963	0.17471697	3.1689300	21	—	—
116346 2003 YP_{84}	15.1	X	59.66013	267.87009	191.16092	4.93171	0.1344076	0.17994149	3.1072904	21	2 10.1	18.9
116347 2003 YQ_{86}	14.9	X	351.02825	168.91467	251.93102	13.16483	0.1772940	0.22022864	2.7157316	21	—	—
116348 2003 YF_{89}	15.6	X	205.16554	8.26855	108.30813	9.82820	0.1602199	0.19928964	2.9027719	21	8 15.8	20.3
116349 2003 YM_{89}	15.5	X	215.74471	50.43109	318.43785	4.02858	0.2643440	0.24585719	2.5235627	21	4 5.4	20.1
116350 2003 YU_{89}	16.4	X	294.06312	314.34784	90.72960	7.14712	0.1035146	0.26206521	2.4184093	21	9 14.0	19.2
116351 2003 YW_{89}	16.1	X	214.16108	351.24923	6.91320	2.36866	0.2482585	0.24492567	2.5299573	21	3 24.6	20.6
116352 2003 YZ_{90}	15.0	X	15.02016	268.89482	229.63381	8.79665	0.1831017	0.17684043	3.1435112	21	1 14.8	18.7
116353 2003 YC_{91}	14.3	X	122.23781	276.49005	114.69630	11.33532	0.2537292	0.18282917	3.0744851	21	2 27.7	19.1
116354 2003 YL_{91}	14.4	X	21.01279	241.43865	268.60324	14.13672	0.0769082	0.17679454	3.1440551	21	2 8.4	18.7
116355 2003 YT_{91}	15.3	X	54.19561	268.40194	111.97490	14.64378	0.1097949	0.21995406	2.7179913	21	—	—
116356 2003 YV_{91}	14.8	X	168.85915	224.83134	125.90976	11.91345	0.1165624	0.18762183	3.0219027	21	2 9.2	19.4
116357 2003 YH_{92}	14.6	X	41.74640	311.56968	145.84952	10.87358	0.1106843	0.17861034	3.1227100	21	1 10.3	18.5
116358 2003 YB_{94}	16.0	X	318.84923	28.04268	12.00907	3.17584	0.1256277	0.20865035	2.8152911	21	10 5.2	19.0
116359 2003 YX_{94}	15.6	X	57.77113	289.86988	124.48736	2.14542	0.1578973	0.17545686	3.1600150	21	—	—
116360 2003 YN_{95}	15.5	X	257.72610	213.21705	90.62027	11.28564	0.0335017	0.24442148	2.5334352	21	3 17.2	19.2
116361 2003 YZ_{95}	15.6	X	306.02572	213.40938	107.38973	6.30748	0.1629677	0.25663358	2.4524137	21	5 18.7	18.5
116362 2003 YZ_{96}	15.2	X	212.44878	318.73485	244.91326	9.11613	0.0797613	0.21929111	2.7234665	21	12 15.8	19.0
116363 2003 YN_{100}	16.0	X	211.05821	344.67580	40.70375	3.55147	0.1976402	0.24735034	2.5133967	21	4 25.1	20.2
116364 2003 YQ_{101}	14.6	X	109.41876	27.83913	84.54058	9.55023	0.1821867	0.18456707	3.0551549	21	5 14.2	19.2
116365 2003 YU_{101}	15.1	X	68.86084	0.53664	126.29660	10.46664	0.0123545	0.18302754	3.0722632	21	3 21.2	19.5
116366 2003 YG_{102}	15.3	X	70.07365	249.69845	117.22356	14.80178	0.1502397	0.22308500	2.6925006	21	—	—
116367 2003 YZ_{102}	15.7	X	348.37485	26.19950	268.76430	5.09373	0.1322372	0.25228678	2.4805028	21	6 29.7	18.0
116368 2003 YS_{104}	15.6	X	125.35372	10.67625	67.40105	1.01767	0.0958352	0.18593009	3.0402054	21	4 7.1	19.9
116369 2003 YS_{106}	15.8	X	290.14139	281.30412	86.07504	6.31945	0.0102995	0.25261783	2.4783352	21	7 25.3	18.9
116370 2003 YY_{106}	15.4	X	324.25681	332.89799	137.38158	14.33630	0.1760006	0.21809432	2.7334207	21	—	—
116371 2003 YG_{107}	15.1	X	82.14635	209.02574	125.78344	13.35738	0.1667404	0.21774644	2.7363312	21	—	—
116372 2003 YJ_{108}	15.5	X	69.01360	219.76126	197.72662	12.20303	0.1729787	0.23343387	2.6123226	21	—	—
116373 2003 YK_{108}	15.3	X	275.03475	298.49186	199.16949	13.92829	0.0901389	0.21981769	2.7191153	21	12 11.7	19.0
116374 2003 YA_{110}	15.1	X	291.93705	147.83214	274.60501	12.44400	0.1779888	0.21224350	2.7834266	21	9 6.3	18.8
116375 2003 YU_{111}	14.6	X	71.59656	53.51676	348.65775	4.57047	0.1243071	0.17600416	3.1534607	21	—	—
116376 2003 YF_{113}	14.1	X	318.59316	288.51143	298.42682	24.84952	0.1806291	0.17718387	3.1394478	21	2 2.8	18.6
116377 2003 YL_{113}	16.2	X	282.61997	321.62295	70.38760	8.09019	0.1179434	0.25810996	2.4430529	21	8 2.9	19.3
116378 2003 YJ_{114}	15.9	X	55.28676	340.60445	65.51117	1.77037	0.1607966	0.22398929	2.6852489	21	—	—
116379 2003 YB_{115}	15.6	X	60.08179	344.21043	36.68442	6.11802	0.0880210	0.22300649	2.6931325	21	—	—
116380 2003 YU_{116}	15.0	X	265.09213	190.83456	79.93279	3.88235	0.0490200	0.17777653	3.1324665	21	2 16.5	19.5
116381 2003 YV_{116}	15.5	X	250.76414	167.78596	102.29054	5.23903	0.1727238	0.23094902	2.6310270	21	1 12.7	19.8
116382 2003 YF_{121}	15.9	X	29.37498	330.34339	30.20576	7.32917	0.1413652	0.27080333	2.3661016	21	12 24.8	18.8
116383 2003 YG_{123}	14.5	X	308.90082	280.46212	314.62115	12.44041	0.1079093	0.17645435	3.1480948	21	2 14.4	19.0
116384 2003 YQ_{123}	16.0	X	103.80128	262.49529	90.62994	3.65667	0.0828946	0.22945119	2.6424646	21	—	—
116385 2003 YE_{124}	14.6	X	17.67109	177.71268	328.21241	9.66948	0.1340088	0.18171849	3.0870000	21	2 2.6	18.2
116386 2003 YZ_{125}	15.2	X	11.93739	18.92352	69.10360	13.44176	0.1186776	0.22490859	2.6779267	21	—	—
116387 2003 YM_{126}	15.1	X	18.13902	9.26267	58.50991	12.75990	0.1653971	0.22502909	2.6769706	21	—	—
116388 2003 YQ_{126}	14.5	X	346.12367	270.49657	297.97883	19.16190	0.2703546	0.17936882	3.1139007	21	2 7.3	18.1
116389 2003 YO_{127}	15.5	X	175.25614	216.14932	50.63368	10.58251	0.0489080	0.22205507	2.7008197	21	—	—
116390 2003 YU_{127}	15.0	X	66.79929	116.98446	338.10701	9.90562	0.0688325	0.17733615	3.1376502	21	2 12.1	19.2
116391 2003 YF_{128}	15.1	X	150.96753	47.48622	333.01121	11.39639	0.2428795	0.23898173	2.5717352	21	3 1.5	19.2
116392 2003 YZ_{128}	15.3	X	335.79226	161.53149	79.50828	12.86240	0.0816191	0.23948675	2.5681184	21	4 2.7	18.7
116393 2003 YF_{129}	15.6	X	260.91086	1.97478	18.75526	5.78135	0.1777743	0.25392948	2.4697934	21	6 6.4	19.1
116394 2003 YR_{129}	15.0	X	227.80246	330.69682	352.49223	9.78791	0.0572933	0.18193718	3.0845258	21	3 7.7	19.4
116395 2003 YC_{130}	16.0	X	154.43995	298.40881	69.74474	8.53616	0.1590655	0.29063670	2.2571950	21	2 6.1	19.2
116396 2003 YJ_{132}	15.1	X	207.67330	348.16191	342.02431	9.11008	0.2116139	0.24162016	2.5529792	21	2 16.1	19.3
116397 2003 YS_{132}	14.9	X	170.80360	356.32603	353.20759	10.26221	0.0708101	0.17685636	3.1433224	21	2 10.3	19.7
116398 2003 YX_{132}	14.6	X	183.25402	297.26156	77.11897	10.75250	0.0945083	0.18417294	3.0595120	21	3 27.3	19.5
116399 2003 YV_{133}	15.2	X	159.57057	271.47051	70.30738	14.54228	0.1174419	0.23171675	2.6252123	21	1 13.1	19.2
116400 2003 YY_{133}	15.0	X	2.05368	91.18366	39.10499	9.49682	0.1352399	0.17155294	3.2077753	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116401 2003 YA_{135}	16.0	X	104.44175	283.83495	316.88484	18.24167	0.0793230	0.37324602	1.9104657	21	10 12.9	18.8
116402 2003 YJ_{135}	15.5	X	45.57836	17.95070	49.21791	8.07206	0.2554470	0.22778106	2.6553655	21	—	—
116403 2003 YR_{135}	14.8	X	136.85018	319.05206	104.31876	18.54714	0.1353299	0.18160210	3.0883189	21	4 15.3	19.9
116404 2003 YU_{135}	16.0	X	36.88227	295.88055	341.53257	8.41116	0.1925338	0.25784088	2.4447523	21	9 15.7	18.5
116405 2003 YX_{135}	14.6	X	5.41959	242.33343	298.10679	20.61089	0.0386165	0.18114647	3.0934953	21	2 21.7	19.1
116406 2003 YP_{136}	14.9	X	286.90553	189.25000	111.47180	10.97936	0.0532248	0.18641790	3.0348995	21	4 22.1	19.3
116407 2003 YU_{136}	14.7	X	72.18519	284.50795	166.50662	11.51161	0.0753256	0.18208074	3.0829043	21	2 11.4	18.9
116408 2003 YX_{137}	16.1	X	129.79665	335.23065	99.89663	4.17034	0.0683643	0.23981614	2.5657664	21	4 1.0	19.6
116409 2003 YE_{138}	16.2	X	51.54070	295.70000	30.24270	3.26145	0.1835292	0.27034373	2.3687825	21	12 13.0	19.3
116410 2003 YQ_{138}	14.2	X	51.07373	78.22036	128.84846	14.80876	0.0837024	0.18637721	3.0353411	21	6 14.5	18.4
116411 2003 YB_{139}	15.3	X	29.53172	129.40438	22.68108	0.29476	0.1052565	0.17771913	3.1331410	21	3 1.9	19.1
116412 2003 YC_{139}	16.3	X	4.61516	143.45162	213.30232	1.93744	0.2086410	0.26732034	2.3866096	21	11 20.2	18.4
116413 2003 YM_{139}	15.3	X	280.72463	179.40548	308.59489	11.90891	0.0924212	0.22079116	2.7111170	21	12 6.3	18.8
116414 2003 YF_{141}	14.6	X	71.87518	138.69207	343.06713	10.57444	0.0470444	0.18394543	3.0620343	21	3 17.1	18.7
116415 2003 YX_{141}	14.8	X	329.64720	205.01924	44.00562	11.90304	0.0637255	0.18665628	3.0323150	21	4 9.6	18.8
116416 2003 YM_{142}	14.8	X	174.72460	333.55513	297.00744	14.59670	0.2202271	0.22253904	2.6969025	21	—	—
116417 2003 YO_{143}	15.9	X	40.35251	100.93271	49.73841	12.74083	0.0376737	0.23900463	2.5715709	21	3 10.3	19.3
116418 2003 YW_{143}	15.0	X	65.01344	208.06081	52.12636	13.28656	0.1282193	0.20195037	2.8772192	21	9 25.2	19.1
116419 2003 YT_{144}	15.2	X	347.28685	65.24096	60.18174	13.56624	0.0804304	0.22551917	2.6730910	21	—	—
116420 2003 YW_{146}	14.9	X	331.51962	153.61558	27.98274	13.98620	0.2102497	0.22418462	2.6836889	21	—	—
116421 2003 YF_{149}	14.8	X	93.96420	54.75226	23.20800	13.03359	0.1844177	0.18037398	3.1023214	21	3 17.5	19.1
116422 2003 YJ_{149}	15.3	X	267.42113	24.07617	27.94141	13.58684	0.1429002	0.20341093	2.8634297	21	8 6.8	19.6
116423 2003 YD_{150}	15.7	X	224.97412	308.60369	30.00705	9.13219	0.0853231	0.24274897	2.5450586	21	3 17.5	19.5
116424 2003 YV_{150}	14.6	X	293.29984	188.03514	19.54316	11.48048	0.0544485	0.17162794	3.2068407	21	1 5.4	19.4
116425 2003 YX_{150}	14.5	X	327.33593	119.05079	77.59613	17.65162	0.1381946	0.17343307	3.1845503	21	1 22.1	18.9
116426 2003 YG_{151}	14.8	X	323.76301	146.48141	64.70656	18.76284	0.0965428	0.17538092	3.1609272	21	2 14.9	19.4
116427 2003 YH_{151}	15.0	X	156.58696	8.55885	17.48268	14.09947	0.1836493	0.23869490	2.5737950	21	3 13.8	19.1
116428 2003 YX_{151}	15.1	X	225.62476	321.54566	295.63210	5.12406	0.2393764	0.22603437	2.6690276	21	—	—
116429 2003 YB_{153}	15.0	X	36.63774	76.87888	74.77417	17.27489	0.1793954	0.17764247	3.1340422	21	3 27.9	18.9
116430 2003 YD_{153}	15.3	X	81.54369	26.52488	25.96098	13.94241	0.2483079	0.23124803	2.6287585	21	1 25.3	18.3
116431 2003 YF_{153}	16.4	X	223.59057	195.39739	185.41234	3.61190	0.1952516	0.30405806	2.1902736	21	4 27.5	19.7
116432 2003 YM_{153}	13.9	X	338.08366	245.85115	292.19985	23.23709	0.3190391	0.17522287	3.1628276	21	—	—
116433 2003 YN_{153}	14.8	X	281.74623	222.18775	354.56009	11.90219	0.1381561	0.23023577	2.6364580	21	—	—
116434 2003 YK_{154}	15.0	X	40.34723	329.66586	60.65957	13.31702	0.1614554	0.21995779	2.7179605	21	—	—
116435 2003 YJ_{155}	15.4	X	123.20660	18.20795	40.50592	13.95237	0.1482744	0.23641873	2.5902884	21	3 18.6	19.2
116436 2003 YK_{158}	14.7	X	180.97165	34.92081	9.69457	10.26655	0.1066347	0.19347149	2.9606796	21	4 22.1	19.4
116437 2003 YT_{159}	15.6	X	20.30582	242.38432	294.53748	11.57383	0.0307760	0.24127968	2.5553803	21	3 2.9	19.0
116438 2003 YL_{160}	15.9	X	352.59546	42.63097	23.17158	5.29868	0.1529854	0.22072594	2.7116511	21	—	—
116439 2003 YN_{162}	13.2	X	236.73212	59.88766	342.08527	14.56253	0.0987098	0.08387920	5.1685238	21	6 20.7	20.5
116440 2003 YK_{163}	16.5	X	343.52977	315.25358	299.04102	3.40610	0.1268360	0.30584273	2.1817448	21	4 8.3	18.4
116441 2003 YU_{166}	16.3	X	266.85523	187.13510	171.73862	1.92732	0.0541731	0.25121700	2.4875397	21	6 2.4	19.6
116442 2003 YR_{167}	16.2	X	357.55903	68.28864	56.24407	5.05715	0.0780037	0.23036928	2.6354392	21	—	—
116443 2003 YU_{170}	15.3	X	191.70289	354.64409	76.62496	11.58983	0.0213848	0.19330582	2.9623709	21	6 8.4	19.4
116444 2003 YZ_{172}	14.9	X	28.73029	33.61748	313.03064	13.58489	0.1536961	0.22360254	2.6883443	21	11 24.1	18.5
116445 2003 YM_{175}	16.6	X	330.13399	312.99421	35.12328	1.70777	0.1971328	0.26009137	2.4306295	21	8 11.1	18.5
116446 McDermid	16.0	X	181.90409	125.50876	85.51758	1.77755	0.0111690	0.21395480	2.7685648	21	11 25.5	19.7
116447 2004 AJ	14.0	X	136.80080	238.23416	139.39239	23.71230	0.3273254	0.18406473	3.0607111	21	3 2.1	19.3
116448 2004 AT	14.4	X	173.33259	227.35340	114.10132	14.27625	0.1680996	0.18316594	3.0707154	21	2 6.7	19.4
116449 2004 AU	14.5	X	26.36005	351.18556	127.66797	11.77916	0.1752552	0.17687638	3.1430852	21	1 12.7	18.0
116450 2004 AW	14.0	X	206.26297	305.06155	228.47676	17.94011	0.1027207	0.15694842	3.4038056	21	10 21.6	19.4
116451 2004 AL_1	15.3	X	116.28414	8.72054	95.92704	1.36952	0.2737386	0.18596600	3.0398140	21	5 19.7	20.1
116452 2004 AN_1	15.0	X	155.28690	329.16456	125.25769	14.79600	0.0626346	0.18951616	3.0017318	21	5 30.9	19.7
116453 2004 AV_1	15.0	X	155.33261	277.50772	214.19118	13.29163	0.2179185	0.19722300	2.9230148	21	7 16.9	20.2
116454 2004 AM_2	15.9	X	27.62485	164.55446	238.23466	0.71481	0.0876328	0.22000341	2.7175848	21	—	—
116455 2004 AT_2	15.3	X	236.81859	318.98939	289.15810	11.52518	0.1281264	0.22499972	2.6772036	21	—	—
116456 2004 AH_5	14.9	X	33.02227	5.12386	116.21161	6.05461	0.1387315	0.17361285	3.1823515	21	1 29.4	18.5
116457 2004 AL_5	15.7	X	199.36086	101.47386	118.17045	2.88000	0.1604247	0.26848375	2.3797100	21	12 21.3	19.2
116458 2004 AX_5	14.7	X	10.07176	28.30040	117.06651	11.40842	0.0778602	0.17272412	3.1932583	21	1 24.9	18.9
116459 2004 AA_6	16.5	X	173.93334	341.66331	209.88758	2.04412	0.1370277	0.26199366	2.4188496	21	10 22.4	20.3
116460 2004 AD_7	14.9	X	118.51875	275.50477	164.23300	9.76084	0.0945650	0.18014709	3.1049257	21	4 3.2	19.4
116461 2004 AL_7	14.8	X	121.34046	308.22749	118.09752	12.09192	0.1093926	0.18053338	3.1004950	21	3 26.1	19.5
116462 2004 AG_8	15.8	X	42.27592	341.58911	110.20418	14.43179	0.1252026	0.22744757	2.6579605	21	—	—
116463 2004 AX_8	15.6	X	269.42305	283.96144	194.89330	8.00177	0.2156455	0.21071921	2.7968336	21	10 20.2	19.2
116464 2004 AH_9	15.8	X	50.19923	38.88579	129.46032	15.67137	0.0636402	0.24532729	2.5271953	21	4 19.2	19.2
116465 2004 AN_9	15.2	X	159.58082	215.18298	221.81153	9.33627	0.0794385	0.18777158	3.0202957	21	5 11.7	19.7
116466 2004 AT_9	14.9	X	345.87171	277.16835	280.73956	4.80236	0.0715969	0.17784332	3.1316822	21	2 21.8	19.1
116467 2004 AK_{10}	16.4	X	61.78072	282.58425	180.56803	1.28293	0.0922549	0.23339820	2.6125887	21	2 3.4	19.5
116468 2004 AA_{11}	14.5	X	304.70377	174.62966	64.31347	17.00513	0.0535681	0.17375801	3.1805788	21	3 4.3	19.3
116469 2004 AJ_{21}	16.1	X	33.12542	280.22248	32.38925	2.36738	0.0547838	0.20503921	2.8482500	21	10 3.0	19.6
116470 2004 AJ_{24}	16.2	X	169.23036	138.55264	227.83527	2.39055	0.1501549	0.23767331	2.5811650	21	2 21.9	20.2
116471 2004 AJ_{26}	16.1	X	136.82111	208.35081	159.87187	7.01465	0.1339836	0.29313937	2.2443295	21	1 8.1	18.8
116472 2004 BE_2	15.0	X	49.91563	296.30235	187.36997	1.42225	0.0847509	0.17730639	3.1380013	21	2 23.5	19.1
116473 2004 BA_3	15.1	X	47.63288	69.40455	127.53666	3.77774	0.0857175	0.18658103	3.0331302	21	5 25.9	19.1
116474 2004 BP_3	15.7	X	210.89144	133.21637	105.58460	5.59977	0.0655015	0.21943523	2.7222739	21	—	—
116475 2004 BA_4	15.2	X	196.50885	308.38678	98.18645	5.59390	0.0744999	0.18906758	3.0064778	21	5 14.5	19.8
116476 2004 BE_4	15.4	X	315.78135	323.57785	131.13058	5.97081	0.1228721	0.21506000	2.7590715	21	12 15.5	18.5
116477 2004 BL_5	14.9	X	318.30722	134.02630	114.52870	16.22167	0.0898957	0.18112829	3.0937023	21	3 25.3	19.3
116478 2004 BT_5	15.2	X	9.68649	324.21431	300.44965	10.48716	0.0625466	0.19242391	2.9714153	21	6 25.9	19.0
116479 2004 BB_6	17.0	X	124.78936	224.56728	287.41838	4.34338	0.1217896	0.30555410	2.1831185	21	7 11.2	19.8
116480 2004 BS_6	15.1	X	316.61832	284.33319	315.45153	26.34036	0.2737891	0.23036993	2.6354343	21	1 30.7	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116481 2004 BW_6	15.1	X	39.86311	169.27601	94.54090	18.19339	0.0885858	0.19717303	2.9235086	21	8 16.2	19.1
116482 2004 BX_6	15.7	X	184.94202	201.69874	66.80827	4.88617	0.0269466	0.22183267	2.7026245	21	—	—
116483 2004 BJ_8	16.0	X	71.52740	91.95658	236.46543	2.58837	0.0971302	0.21373440	2.7704677	21	12 17.6	19.9
116484 2004 BD_{10}	16.4	X	242.05993	276.16649	341.56964	5.44403	0.1272031	0.28189664	2.3036126	21	—	—
116485 2004 BS_{10}	14.4	X	84.16568	293.90783	154.46479	18.34841	0.1562437	0.17891673	3.1191439	21	3 10.9	18.5
116486 2004 BV_{11}	15.2	X	78.76673	13.67346	152.68965	2.35219	0.1254058	0.18664913	3.0323924	21	6 4.7	19.4
116487 2004 BC_{12}	15.9	X	249.92285	333.48989	85.71858	2.90650	0.0808082	0.19933922	2.9022904	21	7 28.8	20.0
116488 2004 BG_{12}	15.7	X	201.23397	318.30065	334.41481	2.63121	0.0322852	0.22665113	2.6641834	21	—	—
116489 2004 BN_{12}	14.4	X	58.88133	201.97250	312.27517	1.28477	0.0627622	0.12646020	3.9309738	21	4 18.7	19.7
116490 2004 BR_{12}	15.6	X	181.68025	264.46333	134.52152	1.82090	0.0555386	0.18551625	3.0447250	21	4 18.3	20.0
116491 2004 BU_{12}	14.7	X	105.45851	270.88042	128.40321	15.89353	0.1031122	0.17428542	3.1741590	21	1 29.2	19.0
116492 2004 BG_{13}	15.7	X	258.62426	92.65924	137.80854	7.36035	0.0754367	0.22510081	2.6764020	21	—	—
116493 2004 BL_{13}	14.9	X	349.48759	293.90981	98.22199	3.40665	0.0369144	0.15428041	3.4429353	21	11 4.7	19.5
116494 2004 BE_{15}	15.7	X	292.45545	304.14200	67.66919	2.71391	0.0374740	0.19829512	2.9124694	21	7 28.8	19.5
116495 2004 BS_{15}	15.4	X	200.21807	151.89695	119.06271	15.12016	0.0710222	0.22334340	2.6904235	21	—	—
116496 2004 BH_{16}	14.6	X	230.93658	181.06665	128.12929	13.97283	0.1670321	0.23090468	2.6313638	21	2 11.7	18.9
116497 2004 BG_{17}	15.5	X	151.43009	333.37524	44.29409	15.31215	0.1261260	0.23418728	2.6067168	21	2 25.3	19.7
116498 2004 BS_{19}	14.2	X	314.51843	37.40103	49.61360	10.71874	0.0512557	0.15532933	3.4274179	21	11 22.6	18.7
116499 2004 BF_{21}	15.6	X	287.58570	262.26794	232.00899	4.16325	0.1022471	0.21638638	2.7477851	21	12 23.2	18.8
116500 2004 BG_{22}	15.2	X	278.55431	220.51543	134.37979	2.96326	0.1216849	0.19520890	2.9430861	21	6 4.7	19.4
116501 2004 BP_{22}	16.2	X	95.36517	166.51808	123.94468	7.30703	0.1200668	0.26642759	2.3919380	21	12 8.9	19.7
116502 2004 BV_{22}	14.8	X	9.95396	73.32511	130.89166	14.12889	0.2120943	0.18006736	3.1058422	21	4 10.1	18.2
116503 2004 BN_{23}	15.5	X	260.38438	300.76483	123.74453	3.11304	0.0434545	0.19976306	2.8981838	21	8 23.5	19.6
116504 2004 BV_{23}	16.0	X	25.95537	152.09687	119.34909	7.06716	0.1081873	0.25242266	2.4796126	21	8 6.3	18.5
116505 2004 BN_{25}	16.5	X	235.74479	42.14555	148.52102	2.89636	0.1469170	0.27124956	2.3635059	21	12 29.4	19.4
116506 2004 BQ_{25}	14.8	X	166.21092	11.08426	35.27307	17.33096	0.1512666	0.24129205	2.5552930	21	4 13.2	18.8
116507 2004 BL_{26}	15.3	X	140.62161	8.30269	137.39324	2.76450	0.0393266	0.19454812	2.9497464	21	7 12.8	19.6
116508 2004 BO_{26}	16.9	X	148.01841	37.77613	161.57992	1.34899	0.1375780	0.25884228	2.4384428	21	10 7.2	20.6
116509 2004 BH_{27}	15.4	X	201.56704	326.92834	254.81363	23.44699	0.1652685	0.26777035	2.3839349	21	12 23.7	18.9
116510 2004 BK_{30}	15.9	X	149.57883	303.65275	95.97368	4.22490	0.0335690	0.23488237	2.6015715	21	3 6.3	19.5
116511 2004 BW_{34}	16.0	X	281.66001	339.55430	43.21381	2.65993	0.0718813	0.19845104	2.9109437	21	7 23.5	20.0
116512 2004 BN_{38}	14.5	X	44.55079	108.01114	49.84836	2.83145	0.1560731	0.12551144	3.9507587	21	4 14.7	19.5
116513 2004 BM_{39}	16.7	X	352.09695	271.95821	166.95602	3.68293	0.1456337	0.27663736	2.3327176	21	—	—
116514 2004 BS_{39}	16.8	X	170.47007	120.87880	131.42268	6.12375	0.1843745	0.27108115	2.3644847	21	12 31.9	20.7
116515 2004 BF_{40}	15.6	X	189.40931	281.32418	139.04430	3.11113	0.0718947	0.18956629	3.0012025	21	5 23.4	20.2
116516 2004 BA_{42}	13.7	X	173.18268	55.42178	129.96446	19.08064	0.0097091	0.14726951	3.5513556	21	10 12.3	19.1
116517 2004 BG_{42}	15.1	X	244.81752	216.37720	132.59852	15.84162	0.1687145	0.24118379	2.5560576	21	4 18.2	19.4
116518 2004 BS_{42}	14.6	X	321.88974	127.60386	95.43987	7.80572	0.1032096	0.17389511	3.1789069	21	2 21.7	18.9
116519 2004 BF_{43}	14.6	X	169.65165	177.65832	134.80574	13.68972	0.2186090	0.22256313	2.6967079	21	—	—
116520 2004 BC_{44}	14.8	X	69.05412	59.19316	125.72295	8.69841	0.0627825	0.18547389	3.0451886	21	6 7.3	19.0
116521 2004 BG_{44}	15.9	X	119.20644	136.97169	103.89782	4.17308	0.1566517	0.25696930	2.4502772	21	11 2.5	19.7
116522 2004 BV_{44}	16.8	X	231.85625	251.30353	132.69284	25.55695	0.1038110	0.36033304	1.9558400	21	5 21.6	20.0
116523 2004 BH_{46}	15.5	X	293.11744	51.23779	140.15867	13.37188	0.1114342	0.22399219	2.6852257	21	—	—
116524 2004 BP_{46}	14.8	X	139.04015	353.73459	143.53890	11.81908	0.0440995	0.19202735	2.9755048	21	6 30.7	19.2
116525 2004 BG_{47}	15.1	X	194.66627	205.51988	113.67765	15.89946	0.1188608	0.23307486	2.6150044	21	1 20.4	19.1
116526 2004 BS_{47}	15.0	X	115.83610	261.22124	182.11526	1.69634	0.0705447	0.18302370	3.0723062	21	3 30.2	19.3
116527 2004 BJ_{51}	15.9	X	226.48202	293.27285	296.47137	3.79053	0.1805368	0.27382390	2.3486690	21	—	—
116528 2004 BA_{52}	16.1	X	269.69885	266.73112	309.18081	9.80307	0.0737464	0.28006178	2.3136633	21	—	—
116529 2004 BV_{52}	15.7	X	89.58489	17.70677	181.02358	1.86467	0.0240131	0.19345181	2.9608803	21	7 15.3	19.7
116530 2004 BQ_{54}	15.4	X	255.11910	18.22782	114.01143	8.77415	0.0634050	0.20974596	2.8054788	21	11 12.5	19.3
116531 2004 BA_{55}	16.0	X	249.77009	322.92095	302.80338	5.26819	0.1550930	0.28441914	2.2899720	21	—	—
116532 2004 BM_{56}	16.4	X	201.33444	67.67863	166.18059	2.52116	0.1857355	0.26901320	2.3765867	21	—	—
116533 2004 BY_{56}	14.8	X	297.57160	87.73198	139.79482	11.56962	0.0487640	0.17304426	3.1893187	21	2 1.7	19.3
116534 2004 BU_{57}	14.7	X	170.60306	299.78396	146.91903	16.88305	0.0746537	0.18805152	3.0172976	21	6 7.3	19.6
116535 2004 BE_{58}	14.8	X	199.14891	81.91226	244.47930	7.34140	0.0473412	0.17540603	3.1606254	21	2 6.6	19.6
116536 2004 BF_{58}	16.2	X	288.90692	258.74499	174.57973	6.76555	0.1181358	0.26443785	2.4039217	21	10 12.2	18.8
116537 2004 BC_{59}	14.8	X	49.33061	268.04275	267.83069	11.08006	0.1117657	0.18269834	3.0759526	21	4 30.2	18.8
116538 2004 BM_{59}	15.8	X	354.76188	210.64306	159.47412	3.79454	0.2094120	0.26674656	2.3900308	21	11 21.3	17.8
116539 2004 BU_{60}	15.3	X	340.40157	213.93800	340.57785	0.94420	0.0455902	0.17703247	3.1412374	21	2 15.2	19.3
116540 2004 BH_{61}	15.5	X	12.86946	4.62487	173.57049	1.06718	0.0961370	0.17865874	3.1221460	21	3 8.8	19.2
116541 2004 BQ_{62}	15.5	X	219.47765	98.33652	8.50811	1.66306	0.0237421	0.20157584	2.8807820	21	8 29.2	19.5
116542 2004 BR_{68}	14.5	X	22.88374	303.88189	170.78620	27.14359	0.2156531	0.17405543	3.1769545	21	—	—
116543 2004 BZ_{69}	16.6	X	149.69424	77.56161	114.14098	2.10032	0.1233278	0.25720073	2.4488071	21	9 29.4	20.3
116544 2004 BK_{72}	16.5	X	338.35531	301.19803	251.58611	4.88450	0.1225932	0.28688721	2.2768195	21	1 5.4	19.2
116545 2004 BE_{73}	15.4	X	149.74367	140.66520	150.45173	6.91397	0.0434926	0.21818846	2.7326344	21	—	—
116546 2004 BW_{73}	13.7	X	75.74571	267.12315	136.65845	15.40352	0.2060225	0.17095318	3.2152735	21	1 9.7	17.7
116547 2004 BK_{74}	15.6	X	73.40082	274.34510	134.92584	14.44888	0.0874512	0.22535964	2.6743524	21	—	—
116548 2004 BN_{74}	16.5	X	151.11500	290.26537	120.01552	3.30932	0.1599180	0.24025222	2.5626607	21	4 2.7	20.4
116549 2004 BR_{74}	14.8	X	56.47513	302.92401	170.93566	5.22394	0.0897421	0.17573503	3.1566795	21	2 21.1	18.9
116550 2004 BT_{74}	14.5	X	23.64097	27.61623	150.22691	14.99876	0.1413442	0.17783361	3.1317962	21	3 30.1	18.2
116551 2004 BF_{75}	14.5	X	221.14521	349.10705	316.54523	15.74939	0.1301570	0.23111509	2.6297665	21	1 30.4	18.6
116552 2004 BH_{75}	15.3	X	199.01475	192.72672	120.46443	14.65875	0.0867034	0.22851506	2.6496763	21	1 16.7	19.1
116553 2004 BZ_{75}	15.4	X	15.85895	326.97222	187.85143	5.79530	0.1224157	0.17459605	3.1703931	21	2 10.3	19.3
116554 2004 BY_{76}	14.4	X	224.08653	200.53104	170.34529	21.15655	0.0794632	0.18647159	3.0343169	21	5 2.3	19.3
116555 2004 BK_{78}	15.5	X	350.71214	260.38411	29.51530	2.01540	0.0531911	0.19274380	2.9681267	21	6 30.6	19.3
116556 2004 BP_{79}	15.1	X	89.60456	224.73788	234.89917	12.42211	0.1239673	0.23565487	2.5958829	21	3 12.3	18.6
116557 2004 BC_{80}	15.5	X	77.54376	269.29273	166.46794	1.20941	0.1707454	0.17576799	3.1562848	21	2 14.9	19.6
116558 2004 BH_{82}	15.3	X	31.97624	342.98312	174.44201	10.47403	0.1694795	0.17715740	3.1397605	21	3 15.5	18.8
116559 2004 BT_{82}	14.8	X	26.08961	66.66784	44.74506	6.64086	0.0448589	0.16796355	3.2533143	21	1 8.3	19.2
116560 2004 BU_{82}	15.8	X	42.13546	117.43743	123.69366	11.67814	0.0940696	0.24538281	2.5268141	21	7 16.9	18.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116561 2004 BV_{82}	15.9	X	214.39322	182.82545	83.25629	6.64943	0.1561183	0.27515379	2.3410951	21	—	—
116562 2004 BH_{83}	16.9	X	100.45139	27.80604	168.41850	6.20550	0.0796110	0.30802370	2.1714340	21	8 6.6	19.5
116563 2004 BO_{83}	14.4	X	107.91085	116.19184	26.28679	15.86671	0.1336805	0.23679909	2.5875139	21	6 6.3	18.3
116564 2004 BA_{84}	15.5	X	58.26040	312.97733	201.80189	3.80419	0.2170044	0.23307595	2.6149963	21	4 28.5	18.0
116565 2004 BN_{84}	16.0	X	116.74857	208.84139	220.66023	12.75874	0.1462847	0.23660476	2.5889305	21	3 13.4	19.8
116566 2004 BT_{84}	15.1	X	22.65780	277.88753	214.69711	12.71683	0.1779964	0.17343775	3.1844930	21	1 21.2	18.9
116567 2004 BV_{84}	13.0	X	295.53380	94.80225	257.91048	5.19154	0.0457224	0.08038009	5.3174536	21	7 5.2	19.8
116568 2004 BZ_{84}	15.1	X	348.62759	70.43332	158.10490	13.93573	0.1422400	0.17869890	3.1216782	21	4 4.1	18.9
116569 2004 BD_{87}	14.3	X	113.23895	0.08683	147.96907	23.62637	0.0274803	0.18598282	3.0396307	21	6 14.5	19.1
116570 2004 BS_{87}	16.7	X	44.13753	225.58889	282.64859	3.67176	0.0701526	0.29091465	2.2557570	21	2 22.1	19.0
116571 2004 BW_{87}	15.7	X	214.48760	146.19816	116.33139	7.50643	0.0905973	0.27505526	2.3416541	21	—	—
116572 2004 BD_{88}	15.0	X	108.95021	331.99303	148.93805	3.55560	0.1921194	0.18413206	3.0599649	21	5 24.4	19.7
116573 2004 BZ_{88}	16.4	X	23.87017	234.47371	185.21828	5.51202	0.1808764	0.27774034	2.3265376	21	—	—
116574 2004 BY_{90}	15.5	X	246.31923	282.00185	290.70612	1.54121	0.1414852	0.27334211	2.3514280	21	—	—
116575 2004 BZ_{90}	16.5	X	301.16244	233.98476	290.15474	1.39590	0.1588680	0.27596786	2.3364888	21	—	—
116576 2004 BA_{91}	16.0	X	221.82117	270.86922	334.62818	1.91056	0.1688684	0.27375287	2.3490753	21	—	—
116577 2004 BN_{91}	15.9	X	224.47681	294.82738	295.06866	5.41322	0.0765106	0.27376939	2.3489807	21	—	—
116578 2004 BB_{92}	15.2	X	158.59769	0.87966	290.49512	8.49209	0.1277039	0.21857166	2.7294396	21	—	—
116579 2004 BD_{92}	15.2	X	154.34582	121.86211	142.25694	11.50188	0.2542521	0.26678168	2.3898210	21	12 29.5	19.5
116580 2004 BX_{92}	15.7	X	188.83356	143.60691	233.15856	8.29582	0.0943094	0.23882093	2.5728894	21	3 21.3	19.7
116581 2004 BZ_{92}	14.9	X	28.99601	319.61406	199.16145	9.94330	0.1780732	0.17739826	3.1369179	21	3 9.7	18.3
116582 2004 BD_{93}	15.2	X	239.32763	81.22414	181.37086	14.84499	0.0727063	0.22615040	2.6681146	21	—	—
116583 2004 BJ_{94}	15.9	X	146.51398	211.49157	233.09916	12.08984	0.1576859	0.24306170	2.5428751	21	5 9.5	19.7
116584 2004 BZ_{94}	15.2	X	262.21706	113.23959	205.38492	11.47194	0.1317993	0.23692202	2.5866188	21	3 24.2	19.1
116585 2004 BX_{95}	14.7	X	135.44330	8.43744	68.44475	21.74140	0.2944319	0.18386520	3.0629250	21	5 8.9	20.0
116586 2004 BK_{97}	15.9	X	311.09245	282.12842	1.18192	3.60147	0.0775398	0.24227702	2.5483626	21	4 15.9	19.2
116587 2004 BO_{97}	14.9	X	293.88955	279.42587	314.49198	4.29186	0.1158289	0.17243683	3.1968042	21	1 27.7	19.4
116588 2004 BJ_{98}	16.4	X	267.32603	153.82996	157.13286	6.94773	0.1476668	0.29027868	2.2590506	21	3 14.7	19.6
116589 2004 BV_{98}	15.2	X	86.82011	326.33067	138.49895	11.35801	0.2005874	0.17708258	3.1406449	21	4 13.7	19.6
116590 2004 BK_{100}	16.0	X	305.51198	131.24979	160.94262	4.42998	0.0916696	0.24212554	2.5494254	21	4 20.4	19.2
116591 2004 BT_{102}	16.0	X	186.35007	358.74379	246.58244	1.81605	0.1598021	0.26885710	2.3775065	21	—	—
116592 2004 BF_{103}	16.4	X	207.15990	177.68381	16.11970	24.84392	0.0643634	0.37860026	1.8924109	21	—	—
116593 2004 BA_{104}	16.0	X	111.11169	339.23434	82.86163	4.27677	0.2012565	0.23388037	2.6089967	21	3 11.6	19.5
116594 2004 BF_{104}	14.4	X	5.68109	63.11745	124.16715	27.16005	0.1659875	0.17898691	3.1183285	21	3 11.4	18.3
116595 2004 BL_{104}	14.7	X	3.54583	244.04640	270.70459	10.27127	0.0378650	0.17495647	3.1660374	21	1 26.5	19.0
116596 2004 BV_{104}	14.5	X	5.24531	56.01102	123.62498	11.37787	0.0972513	0.17929231	3.1147864	21	3 1.4	18.4
116597 2004 BL_{105}	15.1	X	53.99841	151.41468	126.58307	3.01221	0.0551144	0.19943329	2.9013778	21	9 16.5	18.9
116598 2004 BN_{105}	14.7	X	136.31048	297.47578	135.43432	12.50835	0.1123349	0.18278072	3.0750284	21	4 19.5	19.5
116599 2004 BG_{106}	15.5	X	283.94969	148.95506	111.42733	14.90698	0.1255874	0.23278640	2.6171642	21	2 7.5	19.3
116600 2004 BH_{106}	15.3	X	182.18612	222.90540	114.52217	12.01641	0.1652444	0.23187765	2.6239978	21	2 2.8	19.5
116601 2004 BP_{106}	14.6	X	101.88128	32.31202	316.05777	13.95548	0.1747255	0.22060765	2.7126203	21	—	—
116602 2004 BS_{107}	15.2	X	122.69876	251.64550	10.39527	6.68452	0.2567043	0.26139412	2.4225468	21	12 2.2	19.5
116603 2004 BJ_{108}	15.4	X	295.13319	54.10838	64.77362	5.62631	0.0200572	0.21328729	2.7743382	21	12 20.7	19.2
116604 2004 BQ_{108}	15.9	X	136.99091	181.02218	67.40357	5.34663	0.1037963	0.26301737	2.4125691	21	11 26.8	19.4
116605 2004 BJ_{109}	14.9	X	232.13176	185.60429	106.37237	15.55922	0.1205237	0.22803289	2.6534102	21	1 24.8	19.1
116606 2004 BB_{110}	14.6	X	313.04005	253.71173	49.48228	12.61415	0.2539627	0.24074089	2.5591916	21	4 21.4	17.7
116607 2004 BT_{110}	16.6	X	270.69375	178.13129	36.39134	6.48604	0.2728072	0.27571654	2.3379084	21	—	—
116608 2004 BA_{111}	15.1	X	40.87041	282.44384	236.05375	9.08804	0.0628742	0.17927398	3.1149988	21	3 21.2	19.3
116609 2004 BO_{111}	16.3	X	205.34905	117.71928	77.51351	6.18388	0.1837891	0.26373143	2.4082124	21	11 24.2	19.7
116610 2004 BO_{113}	15.9	X	285.83776	332.58964	218.72263	5.29920	0.0590171	0.27695390	2.3309398	21	—	—
116611 2004 BZ_{113}	16.4	X	66.63861	250.18384	256.01756	4.63989	0.0978264	0.29317802	2.2441322	21	3 31.7	18.6
116612 2004 BE_{114}	14.7	X	36.59797	308.10722	167.73218	18.02227	0.1665728	0.17148957	3.2085655	21	1 27.6	18.5
116613 2004 BR_{114}	15.8	X	204.48349	315.85625	245.30354	5.56628	0.0760051	0.26539472	2.3981400	21	12 12.7	18.8
116614 2004 BT_{114}	16.1	X	252.55850	272.76247	295.13944	6.19441	0.0630613	0.27395824	2.3479011	21	—	—
116615 2004 BA_{115}	16.6	X	348.37461	198.38088	86.31712	23.47232	0.0826840	0.36291430	1.9465549	21	6 13.2	17.9
116616 2004 BH_{115}	14.5	X	346.40733	177.78354	4.94235	19.31498	0.1083352	0.17447913	3.1718092	21	2 10.9	18.9
116617 2004 BJ_{115}	14.3	X	171.78976	339.99287	53.01676	18.17469	0.1992884	0.18472681	3.0533934	21	4 12.5	19.6
116618 2004 BU_{116}	13.8	X	92.98627	42.88514	75.69441	21.09181	0.1149909	0.18137317	3.0909171	21	4 30.0	18.4
116619 2004 BY_{117}	15.8	X	323.07397	294.87422	178.27802	7.12509	0.1776519	0.21888244	2.7268553	21	—	—
116620 2004 BC_{118}	15.9	X	127.14251	62.05892	168.19845	12.28192	0.1794365	0.25780752	2.4449632	21	10 30.1	20.0
116621 2004 BG_{118}	16.7	X	321.12636	70.04857	161.58379	5.42240	0.0823968	0.29107226	2.2549427	21	2 9.1	19.3
116622 2004 BM_{118}	14.8	X	36.09747	3.64222	119.00289	14.19053	0.1222900	0.17096758	3.2150930	21	2 6.0	18.6
116623 2004 BN_{118}	16.2	X	239.66299	159.36439	69.42934	7.22443	0.0742584	0.27488719	2.3426085	21	—	—
116624 2004 BR_{118}	15.6	X	7.51584	89.35375	43.48979	10.98814	0.0529128	0.22786677	2.6546996	21	—	—
116625 2004 BT_{118}	13.9	X	114.34311	349.07961	15.57081	23.28901	0.0835522	0.16849418	3.2464803	21	—	—
116626 2004 BJ_{119}	14.9	X	115.74130	296.09796	95.57583	15.03172	0.1747358	0.22947178	2.6423065	21	2 3.4	18.6
116627 2004 BB_{121}	14.6	X	73.00897	35.34572	15.95619	14.74859	0.0665493	0.16883698	3.2420845	21	—	—
116628 2004 BB_{122}	13.9	X	38.45808	271.51001	259.35568	24.22696	0.2136143	0.17980448	3.1088687	21	4 11.2	17.8
116629 2004 BD_{122}	14.7	X	89.14917	53.13304	17.01886	16.73512	0.2289602	0.17922369	3.1155814	21	3 10.2	19.0
116630 2004 BD_{124}	14.7	X	7.09839	354.54747	137.30661	13.99918	0.0555377	0.17217365	3.2000610	21	1 5.5	19.2
116631 2004 BK_{124}	16.0	X	98.29197	192.55574	104.16547	5.02886	0.1331527	0.27149816	2.3620629	21	12 20.7	19.6
116632 2004 BQ_{141}	15.4	X	129.21607	233.00093	158.83739	3.55933	0.1111060	0.17713506	3.1400245	21	2 16.9	19.9
116633 2004 BV_{147}	15.6	X	12.02723	281.69707	41.40277	2.57196	0.0664535	0.20293759	2.8678805	21	9 17.9	19.1
116634 2004 BM_{150}	15.7	X	281.95361	319.36450	88.70631	3.15108	0.0746835	0.20166551	2.8799280	21	8 26.9	19.4
116635 2004 BT_{151}	15.7	X	58.22179	161.17768	196.88482	10.05341	0.0109711	0.21468786	2.7622590	21	12 26.3	19.6
116636 2004 BC_{152}	15.5	X	68.85643	221.15131	242.48987	3.50622	0.0154809	0.23360618	2.6110378	21	2 6.6	18.8
116637 2004 BR_{155}	14.7	X	267.42861	205.88428	76.49335	11.36294	0.0712871	0.17699619	3.1416667	21	3 6.7	19.5
116638 2004 CD	14.3	X	44.87408	53.75466	73.72732	27.56739	0.1486637	0.17649425	3.1476203	21	3 14.4	18.7
116639 2004 CF	14.6	X	75.99813	346.10170	65.86698	23.21388	0.0964366	0.22795472	2.6540167	21	—	—
116640 2004 CK_{1}	14.6	X	12.04673	307.70155	84.49246	35.23125	0.2941321	0.26805208	2.3822642	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116641 2004 CL_3	15.3	X	299.24207	252.31742	22.58007	13.76676	0.1654313	0.23832224	2.5764774	21	3 12.9	18.9
116642 2004 CU_3	17.1	X	357.85731	31.35801	230.10052	0.94748	0.1599208	0.29991011	2.2104226	21	5 20.8	18.5
116643 2004 CB_4	15.9	X	35.44470	11.74708	8.70135	2.27187	0.0826222	0.21540846	2.7560952	21	—	—
116644 2004 CV_{11}	14.8	X	39.60077	340.84962	136.24757	8.94272	0.0317004	0.17193506	3.2030208	21	1 30.6	19.1
116645 2004 CT_{12}	16.6	X	290.82317	306.54205	198.20802	1.79010	0.1065862	0.27235760	2.3570912	21	—	—
116646 2004 CN_{13}	16.4	X	276.20423	27.88330	137.13988	2.56430	0.1419615	0.27268894	2.3551814	21	—	—
116647 2004 CY_{13}	16.1	X	27.94343	100.28021	136.52707	6.93465	0.1536360	0.24265373	2.5457245	21	6 22.2	18.7
116648 2004 CA_{14}	16.2	X	119.88615	144.25897	128.57371	3.62272	0.1939034	0.26224598	2.4172978	21	12 12.8	20.1
116649 2004 CY_{17}	15.7	X	270.28989	196.35637	86.37870	3.05750	0.0867304	0.23362195	2.6109203	21	2 24.1	19.5
116650 2004 CL_{21}	15.9	X	205.87335	187.51124	84.10173	1.90385	0.0458045	0.22211477	2.7003357	21	—	—
116651 2004 CL_{24}	15.3	X	256.56547	2.11641	100.39250	7.40439	0.0375706	0.20466739	2.8516986	21	10 11.4	19.3
116652 2004 CX_{24}	16.4	X	288.80218	329.57544	297.50638	5.40460	0.1802280	0.28734625	2.2743940	21	2 3.9	19.8
116653 2004 CJ_{29}	15.7	X	352.66459	51.25584	294.10081	0.99096	0.0780926	0.20352331	2.8623755	21	9 17.0	19.1
116654 2004 CV_{30}	15.5	X	76.20388	164.35247	142.45082	4.94783	0.1934157	0.21013514	2.8020137	21	12 7.6	19.8
116655 2004 CW_{33}	16.6	X	154.82464	149.33188	165.16869	5.49709	0.1694284	0.27557575	2.3387047	21	—	—
116656 2004 CY_{35}	16.8	X	313.81481	17.78190	149.98706	1.42245	0.1478647	0.27789861	2.3256541	21	—	—
116657 2004 CM_{36}	15.0	X	270.40560	123.53510	146.50951	16.04652	0.0602831	0.17524944	3.1625079	21	2 19.6	19.5
116658 2004 CR_{36}	15.0	X	196.34822	138.53592	184.01076	15.19742	0.1414259	0.22920286	2.6443729	21	1 24.6	19.5
116659 2004 CW_{36}	15.1	X	176.65599	310.49899	163.91365	13.03203	0.0998758	0.19208078	2.9749530	21	7 14.8	20.0
116660 2004 CV_{37}	16.0	X	289.65871	330.23124	291.15453	6.92809	0.0857208	0.28964538	2.2623423	21	2 7.2	18.9
116661 2004 CU_{38}	15.6	X	129.59067	303.24478	339.95678	2.17302	0.0718989	0.21228031	2.7831049	21	12 22.9	19.6
116662 2004 CW_{39}	14.9	X	22.49663	209.10166	148.34156	13.89625	0.1816754	0.20901599	2.8120068	21	12 5.5	18.6
116663 2004 CJ_{40}	14.8	X	43.62697	186.07739	45.15808	13.03426	0.0371588	0.18889843	3.0082723	21	6 28.0	19.0
116664 2004 CL_{40}	15.9	X	181.07573	81.30173	152.94033	6.64503	0.0811920	0.26769025	2.3844104	21	12 27.7	19.3
116665 2004 CM_{40}	15.8	X	64.43607	245.01516	176.37407	11.93083	0.0570265	0.22400357	2.6851348	21	—	—
116666 2004 CQ_{40}	15.8	X	199.63522	271.36979	326.10295	4.57148	0.1885570	0.26887111	2.3774239	21	—	—
116667 2004 CN_{41}	13.6	X	158.48915	16.12895	10.56175	17.74953	0.2120936	0.17885033	3.1199159	21	3 22.1	18.8
116668 2004 CQ_{42}	16.8	X	74.88025	130.51245	131.77645	4.05443	0.1088488	0.31036301	2.1605090	21	10 15.2	19.4
116669 2004 CQ_{46}	15.7	X	174.73477	221.49875	124.41025	10.48104	0.1034673	0.22996446	2.6385312	21	2 1.6	19.6
116670 2004 CK_{49}	14.8	X	115.43028	324.89907	131.81463	13.51373	0.0428417	0.18058605	3.0998921	21	4 17.3	19.4
116671 2004 CQ_{53}	16.7	X	242.81148	166.94674	138.79350	3.84043	0.1859442	0.28719167	2.2752100	21	2 9.3	20.2
116672 2004 CZ_{56}	15.5	X	164.10775	238.65171	15.37887	22.91492	0.2054891	0.26530234	2.3986966	21	12 26.6	19.9
116673 2004 CP_{60}	16.3	X	318.46000	198.52225	80.17404	7.95097	0.1973686	0.29586594	2.2305197	21	3 30.1	18.9
116674 2004 CX_{61}	15.9	X	274.04645	198.02236	96.32617	5.62266	0.0996852	0.23721292	2.5845037	21	3 14.7	19.6
116675 2004 CH_{65}	15.2	X	15.00583	264.99724	342.51518	3.78919	0.0608874	0.18992081	2.9974665	21	6 9.7	19.0
116676 2004 CC_{66}	15.9	X	71.15808	335.67397	87.37732	9.09717	0.1338329	0.22824890	2.6517358	21	1 1.2	18.7
116677 2004 CT_{67}	16.3	X	19.68604	268.54335	129.59093	7.78136	0.1204150	0.27201188	2.3590879	21	—	—
116678 2004 CX_{67}	16.6	X	140.57052	190.61050	37.67084	1.88896	0.1480615	0.25958925	2.4337628	21	11 5.1	20.3
116679 2004 CH_{69}	16.3	X	40.36666	256.22450	112.99139	6.54479	0.1101081	0.27099039	2.3650126	21	—	—
116680 2004 CK_{69}	15.6	X	178.34766	264.43822	135.63848	15.36856	0.0938352	0.23882037	2.5728935	21	4 18.1	19.7
116681 2004 CF_{70}	14.8	X	252.19939	198.93749	99.42269	11.85811	0.0082791	0.17505965	3.1647933	21	3 15.5	19.5
116682 2004 CW_{70}	16.8	X	336.96678	153.53862	130.26458	4.35967	0.1426758	0.30069808	2.2065593	21	5 16.2	18.6
116683 2004 CY_{71}	14.9	X	123.64908	61.78483	30.78587	9.49852	0.0540136	0.18044418	3.1015167	21	4 18.2	19.2
116684 2004 CO_{72}	15.1	X	198.50604	320.97623	356.09718	11.56138	0.1720112	0.22777442	2.6554171	21	1 27.4	19.6
116685 2004 CG_{77}	15.7	X	21.89459	256.23097	139.94429	6.69930	0.0613410	0.21392280	2.7688409	21	—	—
116686 2004 CM_{77}	15.7	X	216.92931	292.06013	154.66959	2.50808	0.0852261	0.19558233	2.9393388	21	7 24.2	20.2
116687 2004 CE_{78}	15.9	X	173.11407	138.22134	124.25336	3.38044	0.1747341	0.26844426	2.3799434	21	—	—
116688 2004 CC_{80}	15.6	X	42.52210	264.42381	46.54672	3.13411	0.1923529	0.25568861	2.4584523	21	11 11.1	18.7
116689 2004 CB_{83}	15.7	X	252.04901	219.02257	141.00037	15.50891	0.1081940	0.24422884	2.5347672	21	5 14.5	19.7
116690 2004 CM_{83}	14.8	X	288.17749	123.68843	145.31966	14.65251	0.0653638	0.17639664	3.1487813	21	3 11.9	19.3
116691 2004 CW_{83}	17.0	X	170.84967	94.00521	152.49956	2.98061	0.2016527	0.26552257	2.3973701	21	12 23.5	20.8
116692 2004 CZ_{84}	14.5	X	203.50849	276.47552	126.76782	12.18819	0.0413278	0.18366140	3.0651904	21	5 21.4	19.2
116693 2004 CD_{85}	15.9	X	9.68110	110.47049	141.44848	15.39655	0.0886953	0.24050527	2.5608629	21	6 8.9	19.1
116694 2004 CW_{85}	14.5	X	279.29380	151.45129	143.02794	11.40613	0.1653164	0.17755454	3.1350768	21	3 19.9	19.2
116695 2004 CQ_{91}	13.9	X	343.75779	43.87481	301.87421	14.74082	0.2527075	0.20036581	2.8923686	21	8 24.5	16.5
116696 2004 CH_{92}	16.2	X	53.81959	319.93887	40.93790	7.62601	0.1374019	0.27251967	2.3561566	21	—	—
116697 2004 CO_{92}	15.9	X	45.21381	278.96675	318.77849	15.45946	0.2181210	0.24398018	2.5364892	21	8 7.5	18.5
116698 2004 CZ_{97}	15.8	X	133.06151	247.23143	10.66845	11.71917	0.1403897	0.26400094	2.4065731	21	12 2.7	19.7
116699 2004 CP_{98}	15.8	X	249.19267	212.62576	359.81028	1.00185	0.1469580	0.21546131	2.7556444	21	—	—
116700 2004 CW_{99}	14.8	X	99.03566	311.01096	127.61513	6.54949	0.1095700	0.17394837	3.1782579	21	3 12.7	19.2
116701 2004 CJ_{101}	16.4	X	213.11928	300.47792	255.97592	2.22277	0.1181226	0.26413584	2.4057537	21	12 11.3	19.7
116702 2004 CM_{101}	15.4	X	311.40309	14.83752	251.44647	13.43382	0.1064303	0.23887340	2.5725126	21	3 14.1	19.1
116703 2004 CS_{101}	15.5	X	160.40636	234.33928	238.45254	9.92969	0.0986685	0.19162077	2.9797122	21	6 26.3	20.1
116704 2004 CZ_{101}	15.0	X	33.54239	284.25594	258.73822	13.07063	0.0774839	0.18044222	3.1015391	21	4 10.4	19.2
116705 2004 CO_{102}	14.9	X	154.32638	279.86008	220.01570	7.88183	0.0256699	0.19278511	2.9677027	21	7 19.2	19.3
116706 2004 CR_{102}	15.5	X	296.99141	276.65500	285.85497	10.23316	0.1465120	0.22347849	2.6893391	21	—	—
116707 2004 CD_{107}	16.0	X	257.78217	286.28176	213.59430	6.29191	0.0591955	0.26418287	2.4054682	21	12 4.3	18.8
116708 2004 CE_{113}	15.6	X	184.89765	358.38564	52.12239	4.86180	0.1404327	0.18929727	3.0040453	21	5 6.4	20.3
116709 2004 CS_{113}	14.6	X	77.61288	201.35844	282.38731	10.49252	0.0892555	0.17973888	3.1096251	21	3 29.4	19.0
116710 2004 CF_{114}	16.0	X	358.93968	228.45288	197.43581	9.96762	0.1720860	0.21688820	2.7435451	21	—	—
116711 2004 DY_3	15.1	X	245.46867	277.69525	123.50139	10.40488	0.0845919	0.19242564	2.9713975	21	6 29.1	19.5
116712 2004 DX_4	14.6	X	335.51181	233.15049	104.16773	14.07209	0.0707849	0.19323876	2.9630562	21	8 12.1	18.4
116713 2004 DZ_4	14.9	X	276.76072	301.02155	100.54184	12.02763	0.0614220	0.19476656	2.9475405	21	8 13.9	19.0
116714 2004 DO_6	15.3	X	198.66476	100.00944	153.23415	13.06157	0.2494480	0.21242118	2.7818743	21	—	—
116715 2004 DQ_6	16.5	X	14.53759	52.36283	137.72536	3.86049	0.0958017	0.29037744	2.2585383	21	3 6.8	18.7
116716 2004 DM_7	14.6	X	241.78549	159.08589	155.73067	24.32916	0.0547551	0.17767390	3.1336726	21	3 14.9	19.3
116717 2004 DU_8	16.3	X	94.86550	100.58538	151.46674	5.28296	0.0861310	0.25560352	2.4589979	21	10 16.2	19.6
116718 2004 DV_8	16.2	X	155.84785	145.55334	136.95254	1.75325	0.1775497	0.26867634	2.3785727	21	—	—
116719 2004 DN_{10}	16.2	X	295.63338	61.00665	229.54288	2.09213	0.2146384	0.29232280	2.2485071	21	3 8.8	19.1
116720 2004 DG_{11}	16.7	X	148.46916	261.09350	333.15722	0.93934	0.1501725	0.26028443	2.4294274	21	11 19.7	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116721 2004 DT_{11}	15.8	X	133.12944	335.33985	318.16437	2.33224	0.2242214	0.26646038	2.3917418	21	—	—
116722 2004 DS_{12}	16.6	X	3.38274	127.76963	104.72131	2.75167	0.1205162	0.29284633	2.2458264	21	4 19.3	18.4
116723 2004 DC_{13}	16.2	X	218.31276	271.45147	350.60146	6.08097	0.0760078	0.27470119	2.3436658	21	—	—
116724 2004 DE_{13}	15.1	X	30.78881	325.48273	359.38405	9.89681	0.1618323	0.25476133	2.4644142	21	11 4.4	18.1
116725 2004 DG_{13}	15.5	X	120.97148	18.15207	290.94632	6.48027	0.1191290	0.26581259	2.3956260	21	—	—
116726 2004 DK_{14}	16.3	X	180.78488	78.54271	154.79056	3.85007	0.0999720	0.26428826	2.4048287	21	12 23.9	19.6
116727 2004 DL_{16}	16.1	X	248.16677	300.56803	195.98679	6.23383	0.0988904	0.26176769	2.4202414	21	11 10.3	19.1
116728 2004 DZ_{20}	16.2	X	308.74760	27.18041	222.08219	8.24749	0.1811421	0.28616897	2.2806275	21	1 31.6	19.4
116729 2004 DR_{22}	15.0	X	177.78503	281.24757	148.08265	9.03807	0.0780075	0.18477637	3.0528474	21	5 23.8	19.8
116730 2004 DC_{23}	15.7	X	226.41083	185.30093	185.41556	21.83489	0.0243985	0.24061594	2.5600775	21	5 3.1	19.4
116731 2004 DC_{24}	16.3	X	271.64909	343.55099	250.36334	4.49726	0.0485140	0.28164186	2.3050017	21	—	—
116732 2004 DO_{24}	16.7	X	243.16871	241.15501	299.59171	1.38584	0.1522960	0.26759372	2.3849839	21	12 24.8	19.4
116733 2004 DY_{25}	14.7	X	260.64637	133.06551	118.99499	7.51943	0.1017293	0.16987316	3.2288872	21	1 15.5	19.7
116734 2004 DD_{34}	15.9	X	270.92222	248.15133	6.66658	6.77531	0.0753272	0.28102077	2.3083967	21	1 13.2	19.1
116735 2004 DD_{37}	15.7	X	147.46953	148.89468	163.70623	10.07691	0.1494952	0.27016841	2.3698071	21	—	—
116736 2004 DE_{37}	15.8	X	281.01237	302.85530	5.75860	6.90573	0.1327382	0.29101284	2.2552496	21	3 27.8	18.5
116737 2004 DC_{38}	15.4	X	38.59026	13.14835	141.41026	12.81683	0.1308571	0.22959367	2.6413712	21	3 13.8	18.2
116738 2004 DT_{41}	16.3	X	72.41568	245.49954	308.66676	4.08572	0.1101816	0.29888864	2.2154559	21	6 29.2	18.6
116739 2004 DX_{41}	16.1	X	290.79027	233.55859	318.47821	6.23582	0.0526545	0.27689369	2.3312777	21	—	—
116740 2004 DA_{45}	16.9	X	219.12481	22.46862	344.96758	17.24904	0.0733632	0.35067106	1.9916030	21	3 27.6	19.4
116741 2004 DR_{45}	16.2	X	237.59753	198.11458	24.76728	6.16230	0.0939219	0.26982408	2.3718228	21	—	—
116742 2004 DV_{47}	14.5	X	198.15859	95.80772	182.49029	10.50794	0.2307610	0.21306998	2.7762243	21	—	—
116743 2004 DB_{48}	16.2	X	254.69163	10.09349	163.42005	6.91604	0.0280408	0.26861044	2.3789617	21	—	—
116744 2004 DD_{48}	16.1	X	156.29783	119.13589	158.90109	6.70496	0.1174786	0.26745782	2.3857916	21	—	—
116745 2004 DO_{48}	16.5	X	207.22017	257.61204	348.29986	3.54449	0.1753704	0.26860932	2.3789684	21	—	—
116746 2004 DC_{49}	16.2	X	264.99427	31.41958	173.79463	6.80449	0.0880047	0.27355589	2.3502028	21	—	—
116747 2004 DC_{51}	16.1	X	294.60250	289.45235	11.23368	5.83738	0.1802353	0.29243629	2.2479253	21	3 27.3	18.7
116748 2004 DX_{51}	15.7	X	169.49823	114.39346	152.89234	9.80894	0.1359127	0.20981806	2.8048360	21	—	—
116749 2004 DE_{52}	16.8	X	109.68067	19.84866	134.62389	5.75606	0.0192766	0.29839965	2.2178756	21	6 10.4	19.4
116750 2004 DG_{52}	16.3	X	21.14911	62.85160	157.10620	13.31000	0.1950261	0.23560014	2.5962850	21	5 18.9	18.9
116751 2004 DT_{52}	15.8	X	335.26292	273.28359	34.79673	4.81707	0.1494872	0.24411711	2.5355406	21	6 22.0	18.4
116752 2004 DZ_{52}	15.9	X	338.60393	136.53921	78.01582	4.49589	0.1734999	0.28617039	2.2806199	21	1 29.8	18.3
116753 2004 DD_{60}	16.1	X	104.87857	82.83868	183.36650	2.65026	0.1502677	0.25928070	2.4356933	21	11 19.1	19.8
116754 2004 DT_{60}	16.6	X	292.15893	144.99159	159.97800	6.75127	0.1479990	0.29520166	2.2338646	21	4 5.1	19.5
116755 2004 DG_{66}	16.3	X	128.26743	170.12881	149.04047	7.19054	0.1299057	0.27038987	2.3685130	21	—	—
116756 2004 DV_{74}	15.8	X	350.02665	123.66353	238.83052	0.99923	0.0576858	0.20187885	2.8778987	21	10 5.2	19.3
116757 2004 EF_{1}	16.2	X	349.47619	280.71703	39.41482	21.84159	0.0938340	0.36140799	1.9519599	21	9 9.6	18.3
116758 2004 EA_{3}	16.3	X	35.27860	65.22383	124.84293	7.04581	0.0320032	0.29408125	2.2395349	21	4 14.9	18.8
116759 2004 EH_{4}	15.0	X	324.25383	295.96085	104.23861	13.42779	0.2046540	0.26043062	2.4285181	21	10 30.8	17.2
116760 2004 EF_{5}	15.2	X	257.14273	183.10571	150.58479	7.45972	0.0245249	0.17984501	3.1084016	21	4 28.7	19.7
116761 2004 ED_{6}	16.8	X	264.28142	235.15895	335.20055	1.97631	0.1223989	0.27509237	2.3414435	21	—	—
116762 2004 ER_{7}	15.3	X	56.37548	60.03992	171.33154	8.91035	0.1401599	0.18541397	3.0458447	21	7 29.4	19.4
116763 2004 EW_{7}	15.7	X	281.97356	124.83202	179.85803	27.16565	0.2654189	0.23162363	2.6259159	21	3 14.4	19.9
116764 2004 EO_{8}	16.1	X	10.85348	180.70227	0.17849	5.65109	0.0961697	0.28627072	2.2800871	21	2 16.1	18.2
116765 2004 ES_{8}	16.3	X	283.04521	57.84445	172.27843	6.47351	0.0765530	0.27892618	2.3199388	21	—	—
116766 2004 EJ_{10}	16.4	X	204.04151	39.48075	176.25496	1.93696	0.1037680	0.26611297	2.3938229	21	12 27.6	19.6
116767 2004 ET_{11}	16.1	X	329.30750	240.59514	355.45782	10.82428	0.1789563	0.23053426	2.6341817	21	2 26.6	19.2
116768 2004 EE_{13}	16.7	X	17.91919	192.79941	84.19288	3.76081	0.0860312	0.30277072	2.1964777	21	7 31.7	18.6
116769 2004 EN_{14}	15.9	X	140.77614	168.85397	138.58406	6.78247	0.1114058	0.26830372	2.3807745	21	—	—
116770 2004 ED_{15}	15.0	X	143.41897	243.21795	142.82084	15.05270	0.0870858	0.22729537	2.6591469	21	2 15.6	18.6
116771 2004 EN_{17}	15.0	X	142.41858	151.05919	145.16347	13.10471	0.0874616	0.20917532	2.8105788	21	—	—
116772 2004 EP_{17}	14.8	X	7.19391	252.05572	53.16110	12.25551	0.1852585	0.18753569	3.0228279	21	8 29.5	18.3
116773 2004 ED_{18}	15.8	X	50.32609	72.12301	126.58502	13.87745	0.1025548	0.23781353	2.5801503	21	6 3.2	19.1
116774 2004 EV_{18}	14.7	X	337.66409	121.37428	159.52194	11.83548	0.1068916	0.18326001	3.0696645	21	5 28.2	18.7
116775 2004 EW_{21}	16.5	X	326.68587	269.68266	324.38490	1.78005	0.0926783	0.28789354	2.2715106	21	2 20.1	19.0
116776 2004 ED_{22}	15.5	X	240.62230	293.40111	339.74368	11.20434	0.2470079	0.22072644	2.7116470	21	1 8.7	20.4
116777 2004 EJ_{22}	14.7	X	88.60755	55.69451	118.48835	10.11621	0.1531200	0.18185154	3.0854942	21	7 1.5	19.1
116778 2004 EY_{25}	15.4	X	167.08464	262.87001	339.12444	8.41822	0.0822145	0.20643609	2.8353867	21	12 10.4	19.9
116779 2004 EM_{29}	15.2	X	167.69447	287.77111	357.31765	11.77307	0.2495857	0.21056887	2.7981647	21	—	—
116780 2004 EH_{31}	15.8	X	223.08740	296.18221	331.43739	4.76013	0.1171751	0.27464374	2.3439927	21	—	—
116781 2004 EL_{31}	15.5	X	71.01176	301.08847	272.81516	7.46473	0.0599756	0.24361843	2.5389996	21	7 16.4	18.6
116782 2004 EV_{31}	16.0	X	21.32759	246.41254	358.87062	11.39085	0.1431735	0.23858530	2.5745832	21	6 20.6	18.9
116783 2004 EW_{31}	16.3	X	212.95189	289.65984	238.29419	2.38829	0.1638171	0.25990608	2.4317845	21	10 29.2	19.9
116784 2004 EC_{34}	14.2	X	77.47627	239.50139	284.04621	1.23159	0.1082079	0.12489424	3.9637640	21	5 30.2	19.6
116785 2004 EJ_{34}	15.8	X	264.64930	40.36975	207.94281	1.69429	0.2517053	0.22028758	2.7152472	21	—	—
116786 2004 EN_{34}	16.8	X	178.16627	64.85939	181.33649	2.17770	0.1912783	0.26385266	2.4074747	21	12 29.8	20.7
116787 2004 EX_{34}	16.5	X	322.95575	25.54698	162.65681	5.51946	0.1148007	0.27948613	2.3168391	21	—	—
116788 2004 EJ_{35}	15.0	X	61.40811	303.49314	28.83296	14.65372	0.2807660	0.25736514	2.4477641	21	—	—
116789 2004 EU_{38}	14.9	X	358.02179	58.48291	176.49904	16.80466	0.1672405	0.17577557	3.1561942	21	4 28.1	18.6
116790 2004 EX_{38}	15.7	X	268.25672	187.31307	131.57758	6.00805	0.1850472	0.28674545	2.2775698	21	3 24.3	19.1
116791 2004 EZ_{40}	16.0	X	155.64466	68.24329	193.02221	6.05329	0.1164095	0.26395786	2.4068350	21	12 30.9	19.7
116792 2004 ER_{42}	16.1	X	207.55198	216.18754	1.36280	6.50079	0.1420372	0.26530420	2.3986854	21	12 29.6	19.5
116793 2004 EJ_{43}	14.7	X	286.08428	193.54088	135.95788	11.24134	0.1022223	0.18309886	3.0714654	21	5 19.1	19.2
116794 2004 EK_{43}	14.5	X	352.92212	201.60437	88.57142	20.04903	0.2357439	0.18042151	3.1017765	21	6 27.6	17.3
116795 2004 ER_{47}	15.5	X	3.83741	127.18982	130.86649	2.84429	0.1774938	0.18129623	3.0917915	21	6 7.5	18.7
116796 2004 EZ_{48}	16.4	X	289.61812	195.68335	67.15806	6.13461	0.1406344	0.28535014	2.2849883	21	2 7.1	19.5
116797 2004 EC_{57}	15.0	X	240.96066	349.09057	281.74306	16.83184	0.1062484	0.22272484	2.6954024	21	1 8.1	19.0
116798 2004 EN_{59}	15.2	X	243.00268	299.02355	333.38313	12.23924	0.1984569	0.21877870	2.7277173	21	1 11.8	19.9
116799 2004 EQ_{59}	15.6	X	17.63768	317.95057	294.37783	8.59546	0.1668617	0.23752946	2.5822070	21	6 26.3	17.9
116800 2004 ED_{60}	16.1	X	288.67698	228.86786	350.54485	12.86215	0.1227497	0.27625638	2.3348617	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116801 2004 ES_{63}	16.7	X	37.56300	287.91249	175.21495	6.79006	0.0640596	0.27933870	2.3176542	21	—	—
116802 2004 EJ_{66}	14.3	X	282.97953	149.71469	116.54441	16.34856	0.0290251	0.17241380	3.1970888	21	3 10.8	19.0
116803 2004 EJ_{68}	15.8	X	61.97331	329.76616	318.90677	3.85411	0.1547039	0.25498476	2.4629744	21	10 29.9	19.2
116804 2004 EJ_{70}	15.9	X	229.88185	115.57660	173.86868	13.68272	0.1935723	0.22156483	2.7048022	21	1 16.7	20.6
116805 2004 EP_{71}	16.1	X	91.21459	330.18608	2.98336	3.02974	0.1753979	0.26567929	2.3964272	21	—	—
116806 2004 EB_{73}	16.3	X	206.95201	278.04111	327.22853	4.86020	0.0926366	0.26946875	2.3739074	21	—	—
116807 2004 EC_{73}	15.1	X	178.63926	184.33354	186.24225	15.91765	0.2176691	0.23003487	2.6379928	21	3 11.5	19.6
116808 2004 ED_{73}	16.4	X	156.71820	103.25848	217.60330	2.37667	0.0831558	0.27378763	2.3488764	21	—	—
116809 2004 EV_{73}	16.1	X	129.33676	160.21343	76.36236	6.80281	0.0218540	0.25804846	2.4434411	21	11 1.8	19.4
116810 2004 EX_{76}	16.1	X	161.27162	235.10614	14.14275	6.77615	0.0889166	0.26388312	2.4072894	21	12 23.6	19.6
116811 2004 EP_{77}	15.7	X	107.65499	209.53400	108.51197	3.39569	0.2200705	0.26441156	2.4040810	21	—	—
116812 2004 EV_{77}	16.0	X	108.61247	294.43743	27.24621	4.96162	0.2363419	0.26502057	2.4003966	21	—	—
116813 2004 EA_{80}	16.0	X	14.85138	104.69647	129.82901	9.31711	0.1486894	0.23970644	2.5665491	21	5 24.4	18.7
116814 2004 EM_{80}	15.1	X	15.25032	108.55471	116.88412	11.67403	0.1508648	0.17906332	3.1174414	21	5 18.7	18.8
116815 2004 EQ_{80}	15.2	X	91.60463	192.90829	89.73895	15.52591	0.1399329	0.25549672	2.4596831	21	11 27.0	18.9
116816 2004 EY_{83}	16.8	X	308.90522	189.24115	347.63428	2.66514	0.1161372	0.27500331	2.3419490	21	—	—
116817 2004 ER_{86}	16.4	X	282.85122	182.91288	142.52537	6.93515	0.1267457	0.29550484	2.2323364	21	4 26.2	19.2
116818 2004 ER_{94}	14.9	X	251.98802	84.03288	119.25938	14.88639	0.0978139	0.21282943	2.7783157	21	—	—
116819 2004 FM	15.8	X	280.21437	224.62579	189.10766	23.00743	0.0983701	0.36835757	1.9273310	21	9 9.4	17.6
116820 2004 FO	16.2	X	244.27055	258.51470	190.81545	22.82047	0.0526495	0.36700859	1.9320509	21	9 15.7	18.1
116821 2004 FF_{12}	16.0	X	33.16202	341.81537	237.26628	7.99399	0.1098346	0.23809802	2.5780946	21	5 31.9	18.7
116822 2004 FR_{12}	16.2	X	209.40801	307.87459	294.12180	3.75394	0.1615749	0.26794899	2.3828752	21	—	—
116823 2004 FY_{12}	16.2	X	163.15925	38.58038	254.03683	5.22895	0.1176921	0.26902932	2.3764917	21	—	—
116824 2004 FT_{14}	16.5	X	320.24279	272.54096	5.30790	2.32909	0.1546504	0.28969034	2.2621082	21	4 3.7	19.0
116825 2004 FG_{15}	15.2	X	78.37746	6.30065	203.85697	11.63909	0.1492299	0.18479959	3.0525917	21	7 31.1	19.7
116826 2004 FA_{16}	16.1	X	181.93639	321.82510	207.44205	23.72577	0.1115364	0.36888434	1.9254958	21	10 14.2	18.2
116827 2004 FT_{17}	16.4	X	241.11314	239.80989	215.44401	19.99629	0.0806619	0.36594898	1.9357786	21	9 10.7	18.9
116828 2004 FD_{21}	15.5	X	18.38321	232.04563	357.10897	14.62233	0.0613770	0.23708492	2.5854339	21	5 11.9	18.9
116829 2004 FV_{25}	16.4	X	185.17524	27.21420	194.74304	4.75509	0.1963029	0.26034406	2.4290564	21	12 6.4	20.2
116830 2004 FU_{26}	14.6	X	17.76176	36.05809	196.06803	17.17253	0.1820841	0.17712345	3.1401617	21	5 31.5	18.3
116831 2004 FA_{31}	14.8	X	348.74650	132.30264	176.42439	28.69739	0.1398733	0.23510525	2.5999271	21	7 19.4	18.2
116832 2004 FR_{32}	15.4	X	76.51105	264.90691	206.49387	8.67785	0.0660574	0.17508429	3.1644963	21	3 13.7	19.8
116833 2004 FB_{35}	14.7	X	314.30233	144.58804	195.39213	12.73140	0.2080084	0.24503821	2.5291826	21	6 20.7	17.7
116834 2004 FB_{36}	15.2	X	296.47924	214.75444	152.72710	4.61808	0.1809847	0.24566598	2.5248720	21	7 5.8	18.1
116835 2004 FL_{36}	15.4	X	286.85017	21.53520	130.47421	4.81560	0.0400533	0.21066233	2.7973370	21	—	—
116836 2004 FL_{38}	16.0	X	59.14859	288.16461	258.63104	3.98725	0.0903383	0.23754362	2.5821044	21	5 26.1	18.8
116837 2004 FZ_{38}	16.6	X	8.38732	58.08592	172.60592	4.29963	0.1694675	0.23414371	2.6070402	21	5 3.1	19.0
116838 2004 FA_{39}	16.4	X	68.73606	185.88937	339.69973	7.07629	0.1428225	0.29287902	2.2456593	21	5 11.7	18.7
116839 2004 FO_{39}	14.7	X	68.84640	56.33059	203.43702	18.02627	0.2251465	0.18785686	3.0193816	21	10 3.2	19.0
116840 2004 FP_{39}	15.3	X	283.99284	262.84749	8.57842	13.05220	0.1370393	0.22416553	2.6838413	21	2 24.3	19.3
116841 2004 FQ_{39}	15.9	X	80.64726	11.01947	162.80662	4.97496	0.1061846	0.29425733	2.2386414	21	6 10.7	18.4
116842 2004 FN_{42}	15.8	X	129.99070	153.95523	150.44025	5.45755	0.1081575	0.21443983	2.7643885	21	—	—
116843 2004 FH_{45}	15.8	X	347.92350	264.09366	44.81832	8.78832	0.1383537	0.29882233	2.2157836	21	7 26.2	17.7
116844 2004 FR_{48}	16.0	X	202.19042	349.95379	358.03354	6.62491	0.1368101	0.28480035	2.2879281	21	2 26.7	19.3
116845 2004 FY_{48}	16.4	X	202.20738	29.74290	255.55017	2.93046	0.1710897	0.27408461	2.3471794	21	—	—
116846 2004 FE_{49}	16.8	X	263.24576	88.25793	197.77769	6.03594	0.1301435	0.28449952	2.2895407	21	2 5.5	20.1
116847 2004 FN_{51}	16.4	X	275.11307	169.26335	114.00029	6.22164	0.1512883	0.28791814	2.2713812	21	2 15.2	19.5
116848 2004 FE_{52}	16.4	X	313.18481	71.04574	177.33315	12.96869	0.2290395	0.22684660	2.6626528	21	2 9.3	20.2
116849 2004 FN_{55}	16.0	X	116.81116	259.12560	76.73736	3.91570	0.1760313	0.26789240	2.3832108	21	—	—
116850 2004 FS_{60}	15.3	X	115.24983	25.07054	147.78593	9.58780	0.1411585	0.18386539	3.0629228	21	7 27.6	20.0
116851 2004 FJ_{64}	16.7	X	92.11580	291.01605	157.23587	5.77944	0.1395958	0.28533156	2.2850875	21	2 27.1	18.8
116852 2004 FL_{65}	16.2	X	65.20395	348.69010	163.43476	3.67957	0.0484034	0.23214676	2.6219695	21	4 13.1	19.5
116853 2004 FN_{65}	15.8	X	105.81740	12.89055	117.76817	2.75406	0.0307666	0.23502351	2.6005299	21	5 7.7	19.1
116854 2004 FW_{65}	15.8	X	333.37304	94.30484	185.59982	7.30587	0.1982374	0.23255276	2.6189169	21	5 1.8	18.5
116855 2004 FW_{66}	15.8	X	104.00014	229.74534	129.83893	7.43430	0.1372498	0.27228061	2.3575355	21	—	—
116856 2004 FV_{76}	15.8	X	56.00902	303.30453	14.26285	2.25249	0.1890555	0.25703735	2.4498447	21	12 5.7	19.1
116857 2004 FC_{78}	16.0	X	344.77247	44.87564	152.80794	2.44171	0.0177098	0.22610715	2.6684548	21	2 18.9	19.4
116858 2004 FZ_{84}	15.3	X	199.17669	159.15986	174.97866	14.76291	0.1280301	0.22798136	2.6538100	21	2 10.4	19.6
116859 2004 FB_{90}	15.8	X	249.90084	171.32281	113.92995	6.15831	0.1567907	0.22221205	2.6995475	21	2 1.4	20.1
116860 2004 FM_{90}	15.2	X	300.18970	39.47651	178.99546	13.32754	0.1298679	0.21982921	2.7190203	21	1 4.1	19.4
116861 2004 FR_{90}	14.9	X	336.84242	181.33377	81.49602	10.02825	0.1014260	0.17502096	3.1652596	21	5 4.7	19.0
116862 2004 FZ_{91}	16.4	X	273.17522	152.26301	102.76705	8.58701	0.0823897	0.28138322	2.3064140	21	1 14.1	19.6
116863 2004 FK_{92}	16.7	X	335.66562	129.24048	195.31337	2.36240	0.1493904	0.30151734	2.2025605	21	7 20.1	18.3
116864 2004 FG_{93}	15.0	X	35.04976	155.60060	97.68429	5.16092	0.1438846	0.18361331	3.0657255	21	7 28.3	18.6
116865 2004 FE_{98}	15.5	X	137.59229	173.71948	166.35737	23.78698	0.1092198	0.27298522	2.3534770	21	—	—
116866 2004 FA_{99}	16.6	X	294.19810	332.31664	327.91672	2.78675	0.1280809	0.29491162	2.2353290	21	4 1.0	19.3
116867 2004 FF_{105}	16.5	X	127.84921	219.42516	352.91576	4.10249	0.1014960	0.30651709	2.1785436	21	10 5.4	19.3
116868 2004 FG_{105}	15.4	X	353.72019	268.86377	310.14463	21.41476	0.0444100	0.23140054	2.6276033	21	3 15.0	19.3
116869 2004 FJ_{105}	14.7	X	155.98590	257.82895	300.42736	15.59196	0.0883517	0.19673023	2.9278938	21	9 28.2	19.5
116870 2004 FR_{105}	15.1	X	277.56822	126.46596	53.33812	11.58641	0.1610708	0.21573718	2.7532949	21	—	—
116871 2004 FM_{107}	15.6	X	116.74977	349.75337	227.32137	3.67847	0.1273492	0.19167178	2.9791836	21	9 20.4	20.3
116872 2004 FJ_{108}	16.5	X	160.86382	127.35350	160.39383	1.71422	0.1698999	0.26773795	2.3841272	21	—	—
116873 2004 FP_{108}	15.8	X	287.70684	346.58781	185.57087	1.53294	0.1149614	0.21257236	2.7805552	21	—	—
116874 2004 FZ_{109}	15.2	X	26.98814	242.90950	19.50536	16.24913	0.1846142	0.18290994	3.0735799	21	8 7.9	19.0
116875 2004 FJ_{110}	16.5	X	150.53819	128.66084	16.37266	4.04146	0.0565515	0.30065565	2.2067670	21	7 29.4	19.2
116876 2004 FQ_{110}	15.1	X	172.46671	112.23206	198.71127	11.59257	0.2207513	0.21158409	2.7892068	21	—	—
116877 2004 FV_{111}	16.0	X	301.88816	359.20629	285.01817	7.00041	0.1144905	0.28850307	2.2683101	21	3 19.8	18.9
116878 2004 FX_{114}	15.9	X	46.69943	176.28928	116.85566	2.52391	0.1009574	0.19327144	2.9627222	21	10 2.3	19.9
116879 2004 FZ_{114}	15.7	X	102.62580	207.78332	102.19917	3.21539	0.0400729	0.20580720	2.8411599	21	12 22.7	19.6
116880 2004 FB_{116}	14.4	X	289.70938	154.31100	143.47235	11.17036	0.1948241	0.17415217	3.1757778	21	4 1.7	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116881 2004 FT_{116}	14.7	X	336.14979	146.32149	115.59778	11.33473	0.1704785	0.17446474	3.1719837	21	4 26.7	18.7
116882 2004 FO_{118}	14.9	X	84.27254	34.73181	188.43209	10.32774	0.0469085	0.18705874	3.0279641	21	8 10.2	19.3
116883 2004 FW_{120}	14.8	X	290.84872	155.29495	154.39688	15.38681	0.2594560	0.17416547	3.1756163	21	4 9.3	19.6
116884 2004 FY_{121}	15.4	X	170.76968	151.58793	192.96219	21.11864	0.1753077	0.27636801	2.3342330	21	1 21.1	19.4
116885 2004 FH_{122}	14.5	X	6.90853	224.52903	45.57007	16.67290	0.2122347	0.17902481	3.1178884	21	7 1.9	17.9
116886 2004 FQ_{122}	15.1	X	6.22104	279.99783	333.92644	16.13882	0.2043476	0.23575128	2.5951751	21	5 29.0	17.8
116887 2004 FK_{123}	16.6	X	32.19959	104.64112	170.70951	4.53765	0.0229732	0.24713684	2.5148440	21	8 10.3	19.8
116888 2004 FW_{123}	14.9	X	309.18872	126.78075	68.15887	12.90722	0.2689149	0.22143484	2.7058606	21	—	—
116889 2004 FB_{126}	15.4	X	308.21820	336.24828	12.71260	15.30825	0.1315575	0.24424513	2.5346545	21	7 9.9	18.7
116890 2004 FT_{126}	15.9	X	108.85060	335.75002	2.19519	4.88141	0.0855365	0.26778694	2.3838364	21	—	—
116891 2004 FS_{128}	14.6	X	4.76219	157.48445	111.38020	17.73557	0.1634649	0.17987710	3.1080319	21	6 25.4	18.0
116892 2004 FF_{132}	16.1	X	306.82033	339.15533	347.58163	5.64180	0.2014424	0.29868210	2.2164771	21	5 14.7	18.7
116893 2004 FC_{137}	15.8	X	239.56268	115.21506	129.86014	8.61054	0.1783651	0.21403278	2.7678923	21	—	—
116894 2004 FA_{139}	14.5	X	284.77644	87.68811	213.51036	12.51812	0.2732317	0.17223529	3.1992975	21	3 15.9	19.7
116895 2004 FP_{139}	14.9	X	357.54323	45.27058	208.67268	16.75899	0.1834861	0.17688721	3.1429570	21	5 20.3	18.4
116896 2004 FQ_{139}	15.4	X	148.71068	37.23058	161.04792	4.31192	0.1154361	0.19371773	2.9581700	21	9 30.9	20.1
116897 2004 FB_{140}	15.4	X	352.01415	320.90833	269.89045	10.65278	0.1392175	0.23020713	2.6366766	21	3 26.3	18.7
116898 2004 FF_{140}	14.6	X	355.37405	234.40279	71.32433	17.27331	0.2192530	0.18125085	3.0923075	21	8 1.2	17.9
116899 2004 FB_{142}	16.4	X	155.14806	157.70926	195.05945	4.49201	0.0416471	0.27861708	2.3216543	21	1 1.1	19.3
116900 2004 FO_{143}	15.0	X	203.43722	171.89201	104.88656	13.69908	0.1761837	0.26947262	2.3738847	21	—	—
116901 2004 FX_{147}	12.5	X	11.39580	149.80765	210.68234	11.68821	0.0143349	0.08505523	5.1207711	21	10 13.9	19.2
116902 2004 FR_{160}	15.2	X	280.65215	211.88696	187.31575	9.33387	0.0995741	0.19592059	2.9359545	21	8 5.4	19.3
116903 Jeromeapt	17.1	X	111.07806	128.71054	147.06538	1.53494	0.1737988	0.25717954	2.4489416	21	12 7.2	21.0
116904 2004 GB_{1}	15.6	X	112.85622	176.49307	64.49434	14.16157	0.1825200	0.25393657	2.4697475	21	10 31.2	19.6
116905 2004 GE_{1}	14.9	X	174.14095	169.88595	71.22338	16.05721	0.0938910	0.20524879	2.8463107	21	12 15.7	19.2
116906 2004 GV_{1}	16.8	X	120.81729	37.27048	147.37179	0.76862	0.1266513	0.30210634	2.1996968	21	8 22.4	19.8
116907 2004 GF_{2}	15.6	X	240.32866	40.37581	227.54552	24.77399	0.1920081	0.27503895	2.3417467	21	—	—
116908 2004 GT_{2}	14.7	X	315.21439	86.96717	145.68212	37.72657	0.1718886	0.16641404	3.2734779	21	2 13.6	19.3
116909 2004 GG_{3}	16.4	X	307.80667	234.98173	202.57794	2.91003	0.0535835	0.25885982	2.4383326	21	11 22.8	19.0
116910 2004 GR_{9}	16.0	X	190.12044	249.04799	58.18364	11.52613	0.1749677	0.27248205	2.3563734	21	—	—
116911 2004 GY_{10}	14.5	X	355.42008	143.20668	94.23800	17.17639	0.1783375	0.17597305	3.1538324	21	4 30.8	18.3
116912 2004 GF_{11}	15.5	X	256.12766	307.32431	325.87104	10.42097	0.1641843	0.21972934	2.7198441	21	1 24.7	19.9
116913 2004 GP_{12}	15.9	X	174.48903	71.63615	97.06224	5.61844	0.0616249	0.25041022	2.4928799	21	9 28.4	19.4
116914 2004 GB_{14}	14.8	X	347.32300	115.72233	174.83739	14.61154	0.1628973	0.17935180	3.1140976	21	6 20.9	18.6
116915 2004 GG_{14}	16.0	X	216.43480	104.18547	94.00542	7.80326	0.0783338	0.26130789	2.4230797	21	12 22.5	18.9
116916 2004 GD_{15}	14.5	X	312.39444	225.80830	40.10454	28.00767	0.1714092	0.17202573	3.2018952	21	4 3.6	19.1
116917 2004 GZ_{15}	14.9	X	282.82578	268.20704	39.23148	15.80868	0.0990222	0.17433171	3.1735971	21	4 17.3	19.4
116918 2004 GB_{17}	14.8	X	263.86150	19.90904	161.79764	19.85124	0.0250402	0.20875000	2.8143951	21	—	—
116919 2004 GZ_{22}	15.1	X	274.99088	85.16312	223.85536	7.62672	0.1943246	0.17165023	3.2065631	21	3 25.3	20.1
116920 2004 GW_{23}	15.4	X	240.50664	80.32027	170.24515	12.78868	0.1710232	0.21420872	2.7663765	21	—	—
116921 2004 GA_{24}	15.0	X	2.05362	92.79458	138.61595	5.96412	0.0700829	0.17493672	3.1662757	21	5 3.5	19.1
116922 2004 GS_{24}	15.8	X	333.00266	182.95580	79.89815	5.26402	0.0587241	0.23231880	2.6206748	21	4 26.6	19.0
116923 2004 GK_{26}	14.8	X	28.00219	178.63498	107.55205	8.04138	0.1663581	0.18483450	3.0522073	21	9 4.9	18.5
116924 2004 GL_{26}	16.0	X	244.98709	48.42825	136.17935	6.69569	0.0772404	0.26369189	2.4084531	21	—	—
116925 2004 GR_{26}	14.8	X	311.37706	194.76418	78.56261	8.73338	0.1443777	0.17178437	3.2048937	21	4 6.9	19.2
116926 2004 GY_{26}	14.2	X	299.31679	123.92149	177.29471	17.56894	0.1480455	0.17161901	3.2069520	21	4 23.8	18.8
116927 2004 GA_{27}	14.8	X	351.84854	129.86923	190.50229	16.44598	0.2323033	0.18017737	3.1045778	21	8 6.1	18.1
116928 2004 GL_{27}	15.1	X	279.08484	219.07991	122.95630	12.77333	0.2030290	0.23052527	2.6342502	21	5 10.7	19.1
116929 2004 GO_{27}	15.1	X	211.19678	159.59257	169.03023	17.65272	0.1301200	0.22040420	2.7142893	21	2 16.6	19.5
116930 2004 GE_{29}	12.1	X	59.58842	109.10523	205.18083	18.22587	0.0114254	0.08335454	5.1901893	21	10 17.1	18.9
116931 2004 GS_{29}	15.9	X	271.46467	31.19966	179.45413	2.40353	0.0766087	0.21515086	2.7582946	21	—	—
116932 2004 GT_{29}	15.4	X	80.70785	85.69718	207.34428	10.05988	0.1366263	0.19567229	2.9384378	21	11 17.6	19.8
116933 2004 GH_{30}	15.3	X	264.65416	87.61153	202.59809	12.29490	0.1845061	0.22256572	2.6966869	21	2 14.7	19.9
116934 2004 GF_{31}	15.0	X	4.83750	50.93999	209.38912	4.68986	0.1184574	0.17788330	3.1312128	21	6 12.6	18.8
116935 2004 GA_{36}	15.7	X	344.29886	79.04276	343.57354	6.48872	0.1147843	0.26187527	2.4195786	21	—	—
116936 2004 GA_{38}	14.7	X	235.41400	142.66423	209.13196	12.78031	0.2075115	0.22365085	2.6879572	21	4 4.5	19.3
116937 2004 GP_{38}	15.7	X	154.04212	33.10608	295.42165	6.25108	0.1197095	0.27237669	2.3569811	21	—	—
116938 2004 GS_{38}	16.1	X	20.25467	258.59752	308.42800	5.55358	0.1134238	0.29022520	2.2593281	21	4 7.9	18.1
116939 Jonstewart	16.0	X	219.58209	23.14556	201.47669	7.85854	0.1628988	0.26407005	2.4061532	21	—	—
116940 2004 GX_{39}	14.9	X	330.35771	316.73723	3.19075	11.25087	0.1943519	0.18070192	3.0985669	21	6 26.5	18.6
116941 2004 GE_{40}	14.9	X	226.69527	181.96309	99.39246	13.32592	0.1509732	0.21507783	2.7589190	21	1 8.0	19.3
116942 2004 GG_{41}	15.2	X	298.11887	334.56400	316.95440	10.94167	0.1705043	0.22919642	2.6444225	21	3 22.9	19.0
116943 2004 GV_{42}	14.8	X	354.99850	161.57156	124.69966	12.98240	0.2957130	0.17869357	3.1217403	21	6 25.5	17.4
116944 2004 GK_{44}	16.9	X	274.80051	101.09202	198.82881	1.00180	0.1250949	0.28756061	2.2732635	21	3 9.9	19.9
116945 2004 GL_{45}	16.0	X	301.71563	110.30801	231.15790	2.90750	0.0224532	0.24319004	2.5419804	21	7 1.9	19.2
116946 2004 GT_{45}	16.7	X	80.76504	174.14902	185.92328	5.88905	0.1291320	0.26552156	2.3973762	21	—	—
116947 2004 GH_{66}	16.1	X	45.67156	91.74759	228.79919	0.90871	0.1030987	0.19638529	2.9313212	21	11 4.2	19.9
116948 2004 GH_{71}	15.1	X	156.18277	297.82119	21.62049	9.56238	0.1666661	0.21014329	2.8019412	21	—	—
116949 2004 GA_{74}	16.7	X	43.28752	59.10280	191.30504	3.29284	0.1445287	0.24053306	2.5606656	21	8 8.2	19.6
116950 2004 GL_{75}	14.8	X	235.31217	57.96204	114.12851	16.00318	0.0883612	0.20515191	2.8472068	21	12 3.5	19.0
116951 2004 GN_{76}	15.6	X	287.45694	209.95559	84.18089	9.97496	0.0665074	0.23065389	2.6332708	21	4 7.8	19.3
116952 2004 GP_{76}	14.4	X	226.09674	123.55110	131.44347	16.10434	0.1187147	0.15573640	3.4214429	21	—	—
116953 2004 GA_{78}	14.5	X	242.90931	287.01893	288.06088	13.82414	0.2079112	0.21109017	2.7935559	21	—	—
116954 2004 HS_{1}	12.8	X	49.40611	188.54203	146.34209	9.84306	0.0994230	0.08374809	5.1739166	21	11 10.7	19.6
116955 2004 HK_{2}	16.4	X	275.41146	294.23219	241.94782	4.25965	0.1733708	0.26928457	2.3749898	21	—	—
116956 2004 HG_{3}	14.7	X	5.43522	256.09026	11.63752	14.51494	0.2541335	0.17869937	3.1216727	21	6 26.5	17.9
116957 2004 HL_{3}	14.6	X	43.98910	225.55256	76.97013	15.21007	0.2028441	0.18774048	3.0206294	21	10 29.8	18.8
116958 2004 HZ_{3}	15.4	X	301.63287	81.02539	151.42940	7.24848	0.1956677	0.22024478	2.7155990	21	1 14.8	19.5
116959 2004 HB_{6}	14.8	X	176.34098	140.53462	214.50105	13.28956	0.2027958	0.21672238	2.7449443	21	2 16.9	19.6
116960 2004 HD_{6}	16.2	X	301.93718	343.45546	200.26569	6.06710	0.0507311	0.27099490	2.3649864	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
116961 2004 HH_6	15.1	X	17.43223	109.67775	58.80262	12.36631	0.1399487	0.22444897	2.6815813	21	2 27.4	18.2
116962 2004 HE_7	15.4	X	141.40938	317.15358	358.56179	4.12636	0.2004849	0.20877859	2.8141381	21	—	—
116963 2004 HC_8	15.2	X	313.51260	305.62833	30.17026	15.31844	0.0949936	0.24396081	2.5366235	21	7 2.5	18.5
116964 2004 HD_8	14.7	X	165.26300	243.69911	188.54054	14.04392	0.2789126	0.18142656	3.0903107	21	5 21.3	20.3
116965 2004 HB_9	16.1	X	297.19493	320.14557	45.29827	7.61140	0.2301394	0.29991612	2.2103931	21	6 24.8	18.6
116966 2004 HH_{10}	15.3	X	222.06162	244.96120	31.55569	9.36284	0.1222374	0.21375539	2.7702864	21	—	—
116967 2004 HO_{10}	15.6	X	280.58118	216.90429	73.64797	9.73964	0.1355452	0.22471766	2.6794434	21	3 17.1	19.6
116968 2004 HJ_{11}	16.1	X	199.21254	279.27591	64.72273	3.48327	0.1917865	0.28015837	2.3131315	21	2 21.4	19.8
116969 2004 HZ_{11}	12.1	X	351.15556	183.31825	210.72523	28.16968	0.1257669	0.08278706	5.2138806	21	10 28.7	18.3
116970 2004 HJ_{15}	13.5	X	331.88555	183.73148	228.64852	2.92327	0.0234614	0.08546477	5.1043992	21	10 26.3	20.1
116971 2004 HH_{16}	15.6	X	56.51989	345.95563	212.16637	4.21458	0.1345753	0.23491336	2.6013427	21	6 14.4	18.7
116972 2004 HZ_{16}	15.4	X	36.83344	76.24128	185.40576	0.65860	0.1197564	0.18585321	3.0410438	21	8 7.6	19.1
116973 2004 HZ_{17}	16.6	X	0.17171	195.07990	347.70100	4.85831	0.1017485	0.28255632	2.3000258	21	1 31.3	18.9
116974 2004 HQ_{18}	15.7	X	241.64484	7.51614	286.55198	4.13454	0.1388298	0.22053571	2.7132102	21	2 4.1	20.1
116975 2004 HC_{25}	15.2	X	345.74331	124.51236	147.93600	1.92529	0.1110273	0.17810515	3.1286122	21	5 27.9	18.9
116976 2004 HH_{26}	14.7	X	189.82720	269.40786	55.45030	13.91197	0.1748470	0.21436648	2.7650191	21	1 31.5	19.5
116977 2004 HO_{27}	16.2	X	307.19222	106.35396	68.01725	6.93301	0.0395386	0.27182557	2.3601658	21	—	—
116978 2004 HK_{28}	15.5	X	158.42998	187.34919	127.13852	5.21640	0.0595691	0.21064388	2.7975004	21	—	—
116979 2004 HY_{28}	15.4	X	279.33192	59.76897	196.76589	12.15349	0.1372942	0.21746817	2.7386651	21	1 25.5	19.8
116980 2004 HD_{29}	16.0	X	112.21619	323.76200	342.62822	1.36550	0.0465363	0.20442415	2.8539602	21	12 29.4	20.2
116981 2004 HP_{30}	14.9	X	0.66137	298.22193	39.80934	10.57171	0.1152607	0.18870012	3.0103797	21	9 25.1	18.6
116982 2004 HU_{30}	15.0	X	284.75009	95.38806	55.43306	15.71645	0.0938155	0.20563705	2.8427269	21	—	—
116983 2004 HT_{33}	15.8	X	14.74251	301.57982	109.07540	7.90278	0.0654635	0.26252571	2.4155803	21	—	—
116984 2004 HW_{33}	14.6	X	283.80739	223.82024	95.03236	10.45824	0.0675721	0.17414081	3.1759160	21	5 8.4	19.2
116985 2004 HY_{33}	15.5	X	88.89972	75.63559	77.70133	13.05105	0.0273717	0.23308332	2.6149411	21	5 16.6	18.9
116986 2004 HC_{34}	15.9	X	325.40185	273.98926	95.85757	10.40049	0.0645209	0.24476208	2.5310844	21	9 18.8	19.0
116987 2004 HF_{34}	15.7	X	1.17323	37.49883	185.59279	10.85821	0.1241952	0.22830290	2.6513177	21	4 10.2	18.5
116988 2004 HM_{34}	15.0	X	339.43532	159.67549	183.42141	8.22573	0.2046099	0.23878403	2.5731545	21	8 19.9	17.2
116989 2004 HW_{42}	14.8	X	34.61325	271.15361	18.53158	6.29165	0.0946490	0.18714704	3.0270115	21	9 9.8	18.7
116990 2004 HT_{44}	15.0	X	250.71949	245.63774	33.84126	13.47982	0.1724647	0.21735013	2.7396565	21	1 30.2	19.7
116991 2004 HK_{45}	14.8	X	332.17965	72.41217	222.45602	9.07568	0.2019491	0.17711092	3.1403098	21	5 24.9	18.4
116992 2004 HS_{45}	14.9	X	349.09877	238.83576	45.01295	9.90202	0.0665622	0.17904424	3.1176629	21	6 18.9	19.0
116993 2004 HZ_{45}	14.0	X	270.71767	74.51801	249.71578	24.70818	0.2701482	0.17397599	3.1779215	21	3 24.9	19.6
116994 2004 HC_{47}	15.2	X	339.75215	160.04754	137.84773	6.43878	0.1407243	0.17949616	3.1124277	21	6 18.8	18.9
116995 2004 HN_{47}	14.5	X	2.24392	161.67118	82.23688	18.50809	0.1463897	0.17618029	3.1513587	21	5 20.1	18.2
116996 2004 HQ_{48}	15.1	X	196.67863	320.41091	352.51449	13.13650	0.1312690	0.21605723	2.7505752	21	1 21.5	19.6
116997 2004 HC_{50}	16.3	X	353.37652	194.10227	40.41961	4.76534	0.0541786	0.28771586	2.2724457	21	4 10.6	18.6
116998 2004 HV_{50}	14.7	X	332.37699	161.85883	124.96721	19.04233	0.1405340	0.17823120	3.1271369	21	5 27.5	18.9
116999 2004 HG_{53}	15.7	X	35.15073	309.26633	285.13032	6.21623	0.1511484	0.23629893	2.5911639	21	7 2.5	18.4
117000 2004 HU_{54}	14.9	X	317.58978	252.99179	45.14513	4.73627	0.1465127	0.17604206	3.1530081	21	5 12.2	18.9
117001 2004 HX_{55}	16.1	X	314.34857	132.60025	146.85702	12.16756	0.1805881	0.22932744	2.6434151	21	4 5.5	19.6
117002 2004 HY_{59}	16.2	X	86.04661	42.85919	87.86833	7.46194	0.0396643	0.28635705	2.2796288	21	4 8.9	18.9
117003 2004 HZ_{59}	16.3	X	120.19305	344.06902	181.80551	7.92792	0.1973936	0.29772961	2.2212019	21	7 30.9	19.7
117004 2004 HG_{60}	15.6	X	228.17548	57.65325	235.31488	4.62483	0.1744934	0.21603382	2.7507738	21	1 21.0	20.2
117005 2004 HU_{60}	14.8	X	188.93441	192.86573	185.35898	12.77405	0.1717840	0.22131053	2.7068737	21	3 30.3	19.1
117006 2004 HD_{61}	16.1	X	171.81116	314.52715	248.97080	5.72159	0.0822248	0.25510949	2.4621716	21	11 5.2	19.6
117007 2004 HE_{61}	15.2	X	327.14880	341.55715	264.12516	4.08279	0.0889028	0.17046842	3.2213662	21	3 26.4	19.6
117008 2004 HS_{62}	15.2	X	123.16215	43.28347	173.33529	11.67725	0.0497959	0.18915772	3.0055227	21	9 21.7	19.6
117009 2004 HX_{63}	15.2	X	12.73333	153.88969	77.56188	14.88176	0.1107197	0.23214783	2.6219614	21	5 16.1	18.1
117010 2004 JG_1	14.8	X	349.34295	184.52240	123.67014	16.94429	0.0682949	0.18122405	3.0926124	21	7 22.4	18.8
117011 2004 JZ_2	15.3	X	289.65738	229.06325	53.92908	1.87196	0.1249233	0.16816906	3.2506633	21	3 22.1	19.9
117012 2004 JZ_4	15.8	X	268.13743	239.08998	354.23067	0.62029	0.1627895	0.21511041	2.7586404	21	—	—
117013 2004 JA_5	15.1	X	17.90491	311.47458	333.43021	9.80838	0.2761240	0.18121844	3.0926763	21	8 25.9	17.9
117014 2004 JG_5	15.4	X	73.14078	304.64999	251.07974	12.43175	0.0476266	0.23693793	2.5865030	21	6 22.1	18.7
117015 2004 JR_6	15.6	X	308.34393	274.61389	28.99492	2.29719	0.1977321	0.22854537	2.6494421	21	4 22.8	19.0
117016 2004 JH_8	14.7	X	328.15332	205.56726	104.15370	12.42427	0.1290728	0.17843309	3.1247777	21	6 16.6	18.5
117017 2004 JN_8	14.4	X	312.23550	231.46569	78.99125	23.62414	0.1009605	0.17667053	3.1455261	21	5 29.5	18.6
117018 2004 JB_9	15.8	X	327.20007	278.52521	351.78918	2.56951	0.1991025	0.22846323	2.6500771	21	4 5.1	19.0
117019 2004 JB_{10}	14.8	X	69.63058	166.59515	119.93318	11.69678	0.0952849	0.19016024	2.9949500	21	10 26.3	19.2
117020 Janeconlin	14.9	X	200.26463	246.99345	105.06786	16.11869	0.0756090	0.22194140	2.7017417	21	3 13.9	19.2
117021 2004 JH_{10}	14.9	X	262.24511	181.27376	157.82496	12.73747	0.1361951	0.22656075	2.6648919	21	4 25.4	19.0
117022 2004 JX_{10}	15.2	X	52.01639	137.49275	153.36426	9.26736	0.0926438	0.18846601	3.0128721	21	10 6.1	19.3
117023 2004 JY_{10}	14.4	X	272.81460	224.87825	83.76341	19.75278	0.1246151	0.16871150	3.2436919	21	4 12.8	19.5
117024 2004 JF_{11}	15.8	X	117.58152	4.66308	161.16694	12.90936	0.1623595	0.24025328	2.5626531	21	7 23.9	19.9
117025 2004 JH_{11}	15.3	X	293.65000	170.90151	114.97034	15.61890	0.0896144	0.22609445	2.6685548	21	4 4.2	19.2
117026 2004 JN_{12}	14.5	X	260.31704	193.89426	123.25408	19.20455	0.0882613	0.16960765	3.2322560	21	4 10.8	19.6
117027 2004 JS_{12}	14.7	X	330.90373	286.54376	357.65876	12.70249	0.1765425	0.17490741	3.1666294	21	5 6.2	18.7
117028 2004 JW_{12}	14.7	X	283.75680	327.25234	339.10407	4.48227	0.1137699	0.17046714	3.2213822	21	4 11.4	19.4
117029 2004 JG_{15}	15.6	X	159.52686	147.05621	119.69560	2.45592	0.1448375	0.20172052	2.8794044	21	12 30.2	20.3
117030 2004 JJ_{15}	15.7	X	145.85462	250.37320	237.79721	12.84628	0.0579200	0.23672217	2.5880744	21	6 26.4	19.4
117031 2004 JK_{17}	16.2	X	298.62525	279.84260	255.64143	4.31044	0.0480265	0.26920318	2.3754684	21	—	—
117032 Davidlane	15.2	X	230.47313	129.58894	200.89931	11.57546	0.1395260	0.22040308	2.7142985	21	3 7.6	19.6
117033 2004 JP_{21}	16.4	X	342.33660	249.19000	221.51644	5.31140	0.0630368	0.26728063	2.3868459	21	—	—
117034 2004 JH_{23}	15.6	X	72.76513	280.87736	313.92585	1.68033	0.0336424	0.18459474	3.0548496	21	8 10.9	19.8
117035 2004 JR_{23}	15.6	X	108.95523	247.16077	56.29639	7.38563	0.1705370	0.19737676	2.9214966	21	12 28.9	20.4
117036 2004 JK_{24}	15.3	X	44.14883	296.07299	275.08825	2.95923	0.0727238	0.17772527	3.1330688	21	6 6.6	19.2
117037 2004 JO_{24}	15.4	X	40.78635	217.64986	74.21315	1.89160	0.1611677	0.18707237	3.0278169	21	9 30.1	19.2
117038 2004 JS_{24}	16.3	X	57.77776	216.21022	221.55434	6.27802	0.0858163	0.27298358	2.3534864	21	—	—
117039 2004 JW_{24}	14.7	X	87.08574	19.12475	52.09809	12.86545	0.1635352	0.21920071	2.7242152	21	2 19.9	18.3
117040 2004 JV_{25}	16.3	X	49.77323	164.30946	15.79015	0.54143	0.1223119	0.23099361	2.6306884	21	5 5.8	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117041 2004 JX_{25}	15.0	X	252.34279	291.34997	48.97322	17.19247	0.2382913	0.22515949	2.6759370	21	4 10.2	19.6
117042 2004 JF_{26}	15.8	X	121.69450	292.52929	225.90370	3.72380	0.1386328	0.23920993	2.5700993	21	7 16.7	19.6
117043 2004 JL_{26}	15.3	X	76.30578	52.41326	201.71710	2.01016	0.0636787	0.18695636	3.0290694	21	9 13.3	19.4
117044 2004 JX_{27}	15.5	X	47.11481	316.20388	255.20074	6.93082	0.1071583	0.23438594	2.6052436	21	6 13.7	18.5
117045 2004 JD_{30}	15.2	X	122.53959	184.54438	106.85002	3.43569	0.0821408	0.19956917	2.9000607	21	12 23.5	19.4
117046 2004 JL_{31}	14.2	X	80.60546	190.76591	120.30856	11.70331	0.0880804	0.19370220	2.9583281	21	12 4.3	18.6
117047 2004 JU_{31}	15.2	X	313.90533	141.63408	160.98243	13.80883	0.1276266	0.23027552	2.6361546	21	5 15.1	18.7
117048 2004 JT_{32}	15.6	X	226.79733	186.10163	121.90026	5.94487	0.1026855	0.21902689	2.7256563	21	2 9.6	19.7
117049 2004 JM_{33}	15.1	X	346.10587	123.87875	167.57080	5.23625	0.1159808	0.17809048	3.1287840	21	6 22.6	19.0
117050 2004 JR_{34}	15.1	X	30.34339	119.32690	134.13768	5.72008	0.0954147	0.17980122	3.1089063	21	7 14.1	19.1
117051 2004 JT_{37}	15.2	X	231.84893	191.31682	110.56417	9.59729	0.1710356	0.21764022	2.7372216	21	2 5.7	19.7
117052 2004 JA_{42}	15.5	X	40.34073	197.20455	32.42200	1.75325	0.1409992	0.17768207	3.1335766	21	7 3.9	19.4
117053 2004 JJ_{43}	14.5	X	324.72699	87.98866	236.59688	13.35170	0.2197237	0.17597439	3.1538164	21	6 17.6	18.2
117054 2004 JD_{44}	15.8	X	240.17194	142.02526	168.46717	9.31560	0.1978346	0.21920697	2.7241633	21	2 19.4	20.4
117055 2004 JT_{44}	14.5	X	294.13814	174.34933	111.10307	7.09119	0.0884011	0.16855098	3.2457510	21	4 7.3	19.1
117056 2004 JJ_{46}	16.0	X	268.24399	317.40405	44.64114	10.62298	0.1478592	0.23707352	2.5855167	21	5 25.0	19.8
117057 2004 KN	15.3	X	97.62331	184.12282	246.92735	22.90383	0.1326037	0.27634610	2.3343563	21	1 31.6	18.5
117058 2004 KW	14.8	X	64.01792	227.19397	256.52912	20.66180	0.0659736	0.22409733	2.6843858	21	2 22.7	18.8
117059 2004 KP_{1}	15.6	X	160.24861	260.35239	320.24612	4.13083	0.1316865	0.19755304	2.9197583	21	11 5.4	20.3
117060 2004 KD_{3}	14.7	X	314.56939	45.04211	223.82488	8.94791	0.0253502	0.17084707	3.2166047	21	4 16.6	19.1
117061 2004 KS_{3}	14.7	X	339.79096	242.60342	59.22597	3.84992	0.2097509	0.17678067	3.1442196	21	6 17.2	17.9
117062 2004 KT_{3}	15.5	X	175.58664	213.24074	30.19091	2.00736	0.0960275	0.20125401	2.8838523	21	12 19.9	20.0
117063 2004 KS_{4}	14.8	X	309.57309	167.70056	162.25453	5.56732	0.1781537	0.17660873	3.1462599	21	6 7.2	18.8
117064 2004 KM_{5}	16.0	X	8.26144	285.16754	221.08967	6.71413	0.0542350	0.27579949	2.3374397	21	—	—
117065 2004 KD_{9}	14.8	X	29.07208	210.04798	94.51492	7.13010	0.2358688	0.18387926	3.0627688	21	10 12.3	18.5
117066 2004 KR_{9}	14.9	X	342.80689	217.44738	57.92550	5.70411	0.1231423	0.17419835	3.1752166	21	5 25.6	18.8
117067 2004 KS_{10}	15.6	X	194.62478	129.45979	168.26335	10.02596	0.1334913	0.21416940	2.7667151	21	—	—
117068 2004 KP_{12}	15.8	X	326.34841	140.15071	180.18019	13.72903	0.0870438	0.23594768	2.5937348	21	6 30.7	19.2
117069 2004 KV_{12}	15.0	X	294.56565	289.94849	115.03776	14.79994	0.1791420	0.24365649	2.5387351	21	8 31.7	18.0
117070 2004 KE_{13}	15.9	X	319.35370	150.00579	175.40307	13.61236	0.1922640	0.23619419	2.5919299	21	6 12.7	19.1
117071 2004 KO_{13}	15.2	X	18.65951	135.55904	155.35664	10.55041	0.1400016	0.18265970	3.0763864	21	8 18.9	18.8
117072 2004 KU_{13}	15.8	X	266.06988	262.33806	120.45885	11.83677	0.0059725	0.24030048	2.5623176	21	7 12.2	19.2
117073 2004 KP_{14}	14.9	X	337.83632	119.36886	179.70288	14.91774	0.1726845	0.17640952	3.1486282	21	6 14.3	18.9
117074 2004 KS_{14}	14.5	X	65.53533	117.86221	103.50054	16.40473	0.0822013	0.17968325	3.1102668	21	7 22.3	18.7
117075 2004 KP_{15}	15.0	X	345.71646	127.81540	171.89132	11.78726	0.2116586	0.17679990	3.1439915	21	6 26.7	18.5
117076 2004 KM_{17}	15.4	X	56.78948	149.14061	74.59402	2.49204	0.1152689	0.17989463	3.1078300	21	7 17.9	19.4
117077 2004 LU_{2}	15.2	X	2.62284	327.03402	314.46691	12.36527	0.2480165	0.23618014	2.5920326	21	7 12.9	17.1
117078 2004 LC_{3}	15.5	X	262.37029	161.81928	123.02720	15.42960	0.0347016	0.22007951	2.7169584	21	2 26.9	19.4
117079 2004 LO_{3}	15.0	X	61.30192	193.24672	117.23550	16.31429	0.1316887	0.24346409	2.5400724	21	11 27.7	18.8
117080 2004 LE_{9}	15.3	X	249.59362	192.97712	166.41920	13.95255	0.1946586	0.22788765	2.6545374	21	5 1.8	19.7
117081 2004 LB_{11}	15.3	X	2.39394	98.57217	188.38610	3.84057	0.0713376	0.17935733	3.1140336	21	7 13.4	19.4
117082 2004 LK_{11}	15.9	X	273.91280	349.77626	251.90234	10.35060	0.0652923	0.27513511	2.3412010	21	—	—
117083 2004 LN_{16}	15.6	X	251.96833	202.70335	119.62448	10.14584	0.2775920	0.21470623	2.7621014	21	3 15.1	20.5
117084 2004 LD_{17}	15.5	X	133.98979	287.34806	76.02214	23.51858	0.0959758	0.26803521	2.3823642	21	—	—
117085 2004 LS_{17}	15.9	X	241.92052	172.15235	103.64763	10.79808	0.1031279	0.26795438	2.3828433	21	1 7.8	19.2
117086 Lóczy	14.7	X	181.34713	311.90567	149.82217	21.58862	0.0778582	0.17893887	3.1188866	21	7 5.5	19.7
117087 2004 LP_{27}	15.9	X	149.01585	207.61712	186.18976	13.78445	0.2036581	0.21817993	2.7327056	21	3 14.7	20.3
117088 2004 LG_{30}	15.4	X	150.35271	63.32495	230.09079	11.89734	0.2146084	0.25619408	2.4552176	21	—	—
117089 2004 LK_{31}	15.6	X	348.12193	87.49816	178.88402	12.73311	0.2435330	0.22535931	2.6743549	21	5 8.2	18.1
117090 2004 MF_{4}	15.8	X	290.12048	229.49929	136.44180	4.88530	0.1626990	0.23513941	2.5996753	21	6 27.4	19.0
117091 2004 NU_{6}	15.6	X	233.50341	202.19960	105.31209	5.67313	0.2175171	0.26739702	2.3861533	21	2 6.3	19.5
117092 2004 NB_{7}	15.0	X	188.31750	342.47337	46.94329	7.45005	0.1367608	0.26875890	2.3780856	21	4 9.6	18.6
117093 Umbria	15.9	X	108.82372	6.03233	219.10357	5.08004	0.1672070	0.24025782	2.5626209	21	9 29.9	19.9
117094 2004 NN_{15}	14.6	X	230.14695	152.88322	289.22069	11.25180	0.0702341	0.17376095	3.1805429	21	8 1.6	19.4
117095 2004 NS_{17}	15.4	X	344.99683	188.20282	108.77652	17.37213	0.2599604	0.22804638	2.6533055	21	6 16.3	17.5
117096 2004 NA_{22}	15.8	X	205.74253	180.53343	162.68040	4.82458	0.2726343	0.26578924	2.3957663	21	2 26.8	19.9
117097 2004 NJ_{22}	14.6	X	0.65367	264.30288	50.05473	5.87310	0.1539475	0.17645260	3.1481156	21	8 22.4	18.2
117098 2004 NF_{25}	14.3	X	5.21509	36.13283	348.97864	7.14238	0.2245076	0.17887735	3.1196017	21	12 7.5	17.8
117099 2004 NB_{27}	14.8	X	351.95503	275.31363	141.87768	10.86517	0.1514643	0.18711518	3.0273551	21	12 21.8	18.5
117100 2004 NL_{30}	15.1	X	265.51115	250.44599	28.54108	26.26762	0.2282021	0.27025761	2.3692857	21	2 8.7	19.6
117101 2004 OC_{1}	15.8	X	255.39770	207.63518	138.92177	10.20753	0.2614297	0.27879603	2.3206608	21	4 12.5	19.7
117102 2004 OF_{3}	13.6	X	52.83741	142.07457	183.34817	3.89176	0.1237328	0.12518959	3.9575272	21	11 11.6	19.1
117103 2004 OT_{3}	15.2	X	83.72412	179.02569	183.89555	1.88714	0.1009563	0.19555085	2.9396541	21	—	—
117104 2004 OB_{4}	16.4	X	307.53863	147.42817	157.27106	8.48678	0.1863299	0.28136179	2.3065310	21	4 22.6	19.2
117105 2004 OF_{5}	16.1	X	248.75651	182.14982	127.34750	6.71473	0.1479459	0.27343735	2.3508819	21	2 24.3	19.7
117106 2004 OT_{6}	14.1	X	41.84099	172.54275	136.48503	3.34388	0.0724662	0.12452044	3.9716925	21	10 3.5	19.4
117107 2004 OL_{10}	15.7	X	317.38527	186.97708	92.13494	8.54229	0.0459915	0.22199844	2.7012790	21	4 30.4	19.3
117108 2004 PU_{1}	14.1	X	65.41445	200.30677	92.79757	6.33352	0.1213320	0.12452582	3.9715782	21	10 21.8	19.7
117109 2004 PA_{4}	16.2	X	175.73205	354.17112	342.04711	0.82315	0.2010634	0.26427609	2.4049025	21	1 23.5	20.0
117110 2004 PE_{5}	15.8	X	155.20273	188.30929	182.24966	6.63954	0.2062654	0.26453771	2.4033166	21	2 14.5	19.6
117111 2004 PR_{5}	14.7	X	142.54306	15.83580	253.02704	9.88743	0.0734833	0.19098955	2.9862740	21	12 15.5	19.2
117112 2004 PH_{9}	14.8	X	272.19030	90.92646	331.77815	4.34179	0.1647336	0.17018581	3.2249314	21	8 16.4	19.2
117113 2004 PG_{11}	14.0	X	51.59777	168.92843	143.61184	9.91486	0.1022017	0.12448297	3.9724894	21	10 25.9	19.5
117114 2004 PU_{12}	16.5	X	222.71602	178.18554	133.22614	1.92610	0.1919612	0.26817621	2.3815290	21	2 1.4	20.4
117115 2004 PV_{12}	15.1	X	159.31761	192.62218	155.52972	2.15114	0.1673336	0.20333279	2.8641632	21	1 28.6	19.5
117116 2004 PV_{14}	15.8	X	308.77486	219.69545	107.81080	5.80555	0.1053803	0.22466789	2.6798390	21	6 11.5	19.1
117117 2004 PJ_{16}	16.0	X	188.84583	104.10461	1.73203	7.09372	0.0458669	0.28377247	2.2934497	21	7 23.1	19.1
117118 2004 PZ_{18}	15.0	X	349.12475	249.23673	149.16464	18.22465	0.1926631	0.18058424	3.0999129	21	11 27.2	18.8
117119 2004 PE_{21}	15.8	X	245.04744	358.94568	331.75229	0.77647	0.1115086	0.21395425	2.7685695	21	3 26.9	20.1
117120 2004 PF_{21}	15.8	X	343.97917	173.81727	156.83930	4.95433	0.1876560	0.23009437	2.6375380	21	8 12.3	18.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117121 2004 PY_{24}	14.6	X	4.28200	291.94471	129.46219	15.44622	0.1199384	0.19095556	2.9866283	21	—	—
117122 2004 PZ_{34}	15.8	X	240.72074	231.59671	143.69336	8.00157	0.1393589	0.21971001	2.7200037	21	5 17.3	20.1
117123 2004 PZ_{35}	15.5	X	216.48302	69.00652	232.02955	4.02986	0.0970868	0.20561731	2.8429088	21	1 22.6	20.0
117124 2004 PA_{38}	16.1	X	182.40485	335.99319	4.43361	2.04338	0.2223834	0.26366803	2.4085984	21	2 5.2	19.9
117125 2004 PF_{38}	16.1	X	262.76119	197.93096	124.09412	5.86217	0.1620565	0.27459402	2.3442756	21	3 26.4	19.6
117126 2004 PN_{39}	15.7	X	240.73423	156.57523	177.17160	2.50826	0.1880538	0.21365604	2.7711451	21	3 21.5	20.2
117127 2004 PQ_{40}	14.8	X	345.97322	127.52071	276.69873	6.89996	0.0521398	0.18265045	3.0764903	21	11 17.7	18.9
117128 2004 PL_{47}	15.6	X	66.58587	213.16763	145.39962	8.41143	0.0781812	0.19240310	2.9716295	21	—	—
117129 2004 PL_{51}	14.8	X	359.67023	176.96853	113.10137	8.59928	0.1380568	0.17028884	3.2236305	21	7 14.2	18.6
117130 2004 PV_{58}	16.4	X	142.06799	152.18897	240.86095	1.50437	0.2220745	0.26371663	2.4083025	21	3 4.2	20.0
117131 2004 PW_{60}	13.5	X	341.06407	259.98931	183.85559	9.51789	0.2441365	0.12638245	3.9325858	21	12 19.8	17.8
117132 2004 PF_{61}	15.6	X	262.72237	124.87244	188.52949	4.84170	0.1510656	0.21445693	2.7642416	21	3 20.0	19.7
117133 2004 PT_{64}	16.1	X	91.86937	119.59190	184.97244	2.50333	0.0779872	0.24360185	2.5391148	21	12 14.5	19.6
117134 2004 PY_{69}	15.8	X	146.76941	229.31266	200.56563	6.22880	0.0954552	0.27009854	2.3702158	21	4 12.6	19.0
117135 2004 PQ_{78}	14.4	X	266.19774	292.39921	152.50830	27.56836	0.1799649	0.17615561	3.1516530	21	9 4.7	18.8
117136 2004 PO_{80}	14.8	X	87.07792	263.78274	183.13212	12.04366	0.2393829	0.20261880	2.8708878	21	3 20.2	18.4
117137 2004 PF_{81}	15.7	X	194.49675	245.32662	107.69407	3.38158	0.0968204	0.20982294	2.8047925	21	3 5.7	20.1
117138 2004 PS_{85}	16.1	X	275.85133	245.17674	77.70574	3.12818	0.2294990	0.27470958	2.3436181	21	4 2.0	19.6
117139 2004 PV_{85}	15.9	X	292.27926	173.16481	158.98959	4.97014	0.1895363	0.27682533	2.3316615	21	5 8.9	18.8
117140 2004 PX_{88}	16.0	X	321.00497	208.99160	166.12803	3.49940	0.2360977	0.22951240	2.6419947	21	8 23.9	18.4
117141 2004 PA_{89}	16.7	X	297.32058	218.91743	166.24552	4.98224	0.1511453	0.28538504	2.2848021	21	8 9.2	19.0
117142 2004 PK_{89}	14.6	X	35.09697	151.10095	229.94467	10.36284	0.1438329	0.18875355	3.0098115	21	—	—
117143 2004 PE_{90}	15.9	X	234.42535	345.72956	1.43386	6.23584	0.1514384	0.27016443	2.3698304	21	3 28.5	19.4
117144 2004 PF_{90}	16.1	X	261.13716	174.52632	171.30686	7.01101	0.2270564	0.27483486	2.3429059	21	4 17.6	19.7
117145 2004 PA_{91}	16.4	X	228.62655	222.04786	173.84276	7.81329	0.1972346	0.27432811	2.3457903	21	5 24.2	20.2
117146 2004 PB_{91}	15.3	X	347.52427	223.92787	157.76695	3.36209	0.2744068	0.23247816	2.6194771	21	11 19.6	17.2
117147 2004 PZ_{97}	15.0	X	134.52444	181.88333	81.20554	12.40779	0.1051615	0.18864250	3.0109926	21	12 2.0	19.6
117148 2004 PJ_{99}	16.0	X	275.57027	150.16927	153.89427	6.87807	0.1158631	0.27328492	2.3517560	21	3 21.0	19.1
117149 2004 PW_{103}	14.8	X	323.54993	151.69555	244.42037	9.06397	0.1662222	0.22847825	2.6499610	21	10 5.1	17.5
117150 2004 PC_{104}	14.7	X	119.13455	57.46019	289.72281	7.00815	0.2137786	0.18961311	3.0007085	21	—	—
117151 2004 PL_{105}	14.9	X	76.85713	222.19564	71.73387	10.89064	0.0705536	0.18511146	3.0491621	21	11 6.3	19.3
117152 2004 QO_{1}	14.3	X	1.08808	268.53930	47.74070	24.69324	0.0785547	0.17527912	3.1621509	21	9 4.7	18.9
117153 2004 QC_{4}	16.0	X	341.14210	25.38674	39.03959	6.62800	0.0842245	0.24049351	2.5609463	21	12 22.3	18.9
117154 2004 QG_{4}	14.6	X	321.08061	233.77881	172.67154	19.14084	0.1198375	0.17471035	3.1690101	21	10 15.3	18.6
117155 2004 QT_{5}	15.8	X	334.93542	58.58016	265.54258	4.75175	0.0902009	0.22674772	2.6634268	21	7 20.5	18.9
117156 Altschwendt	16.2	X	332.80095	77.35334	304.48548	3.17859	0.0828159	0.23200440	2.6230420	21	10 7.7	19.2
117157 2004 QR_{9}	15.7	X	98.41957	346.90830	22.43024	6.61842	0.1368039	0.25413994	2.4684298	21	—	—
117158 2004 QB_{11}	15.9	X	37.06262	166.36003	103.17394	9.39990	0.1010293	0.23025636	2.6363008	21	8 22.3	19.1
117159 2004 QE_{12}	14.5	X	19.58637	280.99940	86.47739	11.61296	0.0615612	0.18235478	3.0798149	21	11 21.9	18.7
117160 2004 QR_{17}	15.2	X	30.17872	38.31540	280.95530	11.10216	0.2016077	0.23264908	2.6181940	21	10 28.7	18.5
117161 2004 QT_{17}	14.7	X	170.94202	129.81002	241.83214	13.19627	0.2647323	0.20319543	2.8654539	21	3 6.9	20.0
117162 2004 QU_{19}	14.4	X	43.83043	51.97525	285.76147	14.99499	0.0525207	0.18367657	3.0650217	21	11 10.8	18.9
117163 2004 QA_{20}	15.3	X	339.85527	291.91033	64.82615	12.46166	0.3196818	0.22951670	2.6419618	21	9 20.7	17.0
117164 2004 RB_{3}	14.2	X	36.82647	46.90713	275.84130	21.47199	0.1108948	0.17581119	3.1557679	21	10 15.5	18.8
117165 2004 RZ_{4}	15.2	X	241.87438	285.09976	136.05531	12.64465	0.1951129	0.22331380	2.6906612	21	7 8.3	19.4
117166 2004 RU_{6}	14.6	X	330.18680	287.91551	139.67235	19.13069	0.1897608	0.18054832	3.1003240	21	11 29.1	18.3
117167 2004 RL_{12}	15.8	X	293.61126	96.52878	210.51802	8.45401	0.0717867	0.21916979	2.7244714	21	4 28.2	19.3
117168 2004 RX_{15}	16.2	X	228.43702	343.87773	37.09866	3.99049	0.2052146	0.21743575	2.7389372	21	5 5.5	20.8
117169 2004 RZ_{33}	15.2	X	50.33506	32.10686	8.98314	10.22431	0.0976070	0.19162459	2.9796726	21	—	—
117170 2004 RK_{36}	15.8	X	289.00662	290.29482	31.15485	5.60290	0.0844161	0.22022175	2.7157883	21	5 8.1	19.3
117171 2004 RD_{48}	15.6	X	167.45314	236.00620	114.35382	2.02403	0.2301975	0.20307069	2.8666272	21	2 12.2	20.5
117172 2004 RR_{50}	16.5	X	284.02920	324.41672	17.03609	3.87565	0.1265413	0.27975728	2.3153418	21	5 18.0	19.3
117173 2004 RK_{51}	15.3	X	184.35833	259.12877	124.83060	5.04357	0.1143638	0.21029133	2.8006261	21	4 3.6	19.7
117174 2004 RC_{59}	14.0	X	327.60216	20.99974	7.74907	23.78732	0.1072977	0.17436074	3.1732448	21	9 30.8	18.0
117175 2004 RF_{59}	15.4	X	199.67489	271.15963	116.93365	4.98048	0.1115858	0.21257163	2.7805615	21	4 23.6	19.8
117176 2004 RN_{59}	14.9	X	64.74040	205.70292	128.15997	5.99846	0.1169451	0.18292567	3.0734037	21	12 13.8	19.3
117177 2004 RR_{61}	16.1	X	22.77075	6.83691	285.17532	1.42707	0.0929100	0.22970768	2.6404971	21	8 26.4	19.0
117178 2004 RC_{65}	15.4	X	74.03721	175.74595	166.22496	9.98795	0.1794637	0.18615899	3.0377128	21	—	—
117179 2004 RH_{77}	16.0	X	234.13054	275.08528	154.41251	6.62979	0.0608667	0.28197901	2.3031640	21	7 26.2	18.9
117180 2004 RH_{78}	15.6	X	251.89271	343.34872	42.40336	6.69877	0.0353427	0.22028746	2.7152482	21	6 22.5	19.4
117181 2004 RP_{78}	14.9	X	349.92173	53.28243	27.20093	22.88276	0.1685823	0.18293382	3.0733125	21	—	—
117182 2004 RV_{78}	16.6	X	203.46102	140.16758	194.32873	2.32680	0.1859629	0.26435334	2.4044339	21	2 12.8	20.6
117183 2004 RY_{78}	15.7	X	180.64319	283.68579	187.77631	8.98153	0.1380492	0.27826560	2.3236089	21	7 15.5	19.3
117184 2004 RG_{79}	15.3	X	38.48494	171.84607	193.06811	0.66250	0.0859229	0.18060729	3.0996491	21	12 14.3	19.4
117185 2004 RS_{90}	15.0	X	187.04525	165.58003	211.04020	9.14643	0.2839799	0.21029460	2.8005971	21	3 28.1	20.0
117186 2004 RS_{94}	16.1	X	210.86478	131.71456	223.67978	6.05465	0.1223622	0.27016109	2.3698500	21	3 14.7	19.8
117187 2004 RH_{99}	16.7	X	153.30904	160.82223	237.90291	2.11449	0.1731970	0.26537919	2.3982335	21	3 17.3	20.1
117188 2004 RN_{136}	14.1	X	310.09726	86.45851	296.77197	12.08711	0.1140696	0.17047637	3.2212660	21	8 21.8	18.4
117189 2004 RB_{137}	14.5	X	145.70979	161.50708	172.50841	17.26151	0.2437207	0.20088389	2.8873935	21	1 6.3	19.4
117190 2004 RQ_{138}	15.6	X	265.52452	157.23284	208.95656	13.91488	0.0794186	0.22223732	2.6993429	21	6 7.9	19.5
117191 2004 RY_{139}	14.6	X	336.59134	160.05465	169.36028	22.91733	0.0226674	0.16834709	3.2483711	21	7 31.2	19.4
117192 2004 RE_{140}	15.4	X	252.18679	264.40153	84.44796	2.51221	0.1694665	0.21626847	2.7487838	21	4 21.7	19.6
117193 2004 RY_{151}	15.4	X	19.14768	259.80206	84.10494	6.87128	0.2499817	0.23262502	2.6183745	21	11 26.7	18.2
117194 2004 RJ_{153}	16.2	X	328.07992	7.47541	288.89380	6.41134	0.1192607	0.28093730	2.3088538	21	5 21.7	18.6
117195 2004 RL_{154}	16.4	X	116.00384	341.85550	278.70802	5.75023	0.1906258	0.30057990	2.2071377	21	11 28.6	19.9
117196 2004 RW_{165}	14.5	X	61.52041	23.26954	297.11173	16.41507	0.2212556	0.18142818	3.0902922	21	12 6.7	19.3
117197 2004 RR_{171}	15.8	X	111.61654	281.36609	191.67281	6.41241	0.0650346	0.27038898	2.3685182	21	4 23.4	18.7
117198 2004 RL_{173}	15.4	X	278.02814	67.41999	30.21304	10.11806	0.1468135	0.22914160	2.6448442	21	10 18.1	18.5
117199 2004 RM_{173}	16.4	X	341.94952	130.30535	227.56915	4.47337	0.1910809	0.28696193	2.2764242	21	9 30.6	17.9
117200 2004 RF_{176}	13.6	X	304.45174	178.43708	289.95912	9.20315	0.2232993	0.12485657	3.9645610	21	11 8.7	18.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117201 2004 RB_{183}	15.0	X	161.19437	146.17616	343.34075	13.77495	0.1436131	0.22084589	2.7106691	21	7 24.6	19.5
117202 2004 RY_{187}	15.8	X	286.23468	67.57525	266.38601	5.83607	0.1429908	0.27810552	2.3245005	21	5 7.4	18.7
117203 2004 RH_{188}	15.3	X	300.97704	199.94093	232.93195	8.98646	0.1694187	0.17427119	3.1743317	21	10 5.9	19.3
117204 2004 RD_{192}	15.3	X	358.37430	46.40391	348.75646	11.59151	0.2479027	0.17804838	3.1292772	21	12 9.9	18.8
117205 2004 RO_{192}	14.3	X	132.36871	345.92838	285.45568	8.71082	0.0572949	0.18172089	3.0869728	21	12 5.7	18.9
117206 2004 RC_{193}	15.7	X	267.34712	193.42318	199.84393	12.38231	0.1781329	0.22282876	2.6945643	21	6 30.8	19.8
117207 2004 RH_{193}	14.5	X	324.50401	200.39737	284.29458	8.88123	0.0419897	0.18705950	3.0279558	21	—	—
117208 2004 RM_{194}	14.3	X	253.31472	258.35138	197.17975	19.42059	0.1947693	0.16816907	3.2506632	21	8 26.9	19.4
117209 2004 RH_{200}	15.4	X	6.82685	355.70517	9.53359	14.41177	0.1152758	0.23320118	2.6140600	21	11 9.4	18.6
117210 2004 RM_{200}	14.4	X	297.73591	95.04680	6.40051	17.39230	0.1293155	0.17310284	3.1885991	21	11 7.5	18.7
117211 2004 RO_{205}	15.2	X	232.06704	336.01576	40.01401	10.53211	0.2097721	0.21518271	2.7580225	21	5 2.5	19.8
117212 2004 RE_{214}	14.4	X	334.75327	137.13303	215.08295	18.20003	0.0722779	0.17048090	3.2212090	21	8 20.4	19.0
117213 2004 RK_{214}	14.9	X	8.60529	108.97032	227.37785	12.18158	0.3146795	0.17536222	3.1611519	21	10 20.7	17.9
117214 2004 RW_{216}	15.2	X	289.83309	41.28040	275.91652	8.74602	0.1749692	0.21744973	2.7388199	21	4 17.3	19.2
117215 2004 RO_{224}	15.4	X	310.59967	299.15093	15.33881	5.88400	0.0831208	0.21813214	2.7331048	21	5 29.1	18.9
117216 2004 RM_{236}	15.4	X	35.03411	45.91401	199.39952	14.11611	0.1263590	0.22242613	2.6978151	21	7 12.2	18.9
117217 2004 RA_{254}	15.0	X	290.87254	261.70834	97.15979	10.84601	0.1323954	0.22402471	2.6849658	21	6 23.9	18.5
117218 2004 RF_{255}	14.4	X	78.71176	240.72525	97.00899	12.48892	0.1297555	0.18551787	3.0447073	21	—	—
117219 2004 RF_{266}	13.9	X	255.30241	96.96578	16.22441	17.83624	0.1481816	0.17031615	3.2232859	21	10 1.8	18.6
117220 2004 RV_{306}	15.0	X	354.74062	280.66735	81.09832	9.30546	0.1768226	0.22922688	2.6441882	21	10 28.6	17.7
117221 2004 RL_{307}	16.0	X	272.10318	310.86845	255.08119	5.67781	0.1816146	0.25777378	2.4451766	21	—	—
117222 2004 RD_{308}	15.6	X	312.39920	38.83237	257.54647	4.05300	0.1415104	0.21692739	2.7432146	21	4 28.2	19.0
117223 2004 RP_{311}	15.7	X	49.42473	219.25644	77.26857	10.07838	0.1824050	0.23530839	2.5984305	21	10 31.0	19.2
117224 2004 RP_{322}	13.7	X	81.12681	262.27594	334.22833	17.64686	0.1236333	0.16922894	3.2370764	21	9 3.1	18.2
117225 2004 RW_{325}	16.8	X	109.15226	353.59317	222.24578	20.41244	0.0413908	0.40150360	1.8197417	21	9 15.7	19.0
117226 2004 RZ_{325}	16.0	X	221.40575	138.05776	249.12020	12.80363	0.1563690	0.27084770	2.3658431	21	5 5.3	19.8
117227 2004 RG_{326}	14.3	X	291.83377	136.11288	0.23402	12.98870	0.0687477	0.17888907	3.1194654	21	12 26.9	18.7
117228 2004 RN_{328}	16.2	X	102.13594	69.54916	225.08785	8.34066	0.1528455	0.24146864	2.5540470	21	12 18.0	20.2
117229 2004 RP_{329}	14.8	X	263.71378	243.72354	214.54048	11.60918	0.0535180	0.17221814	3.1995098	21	10 3.2	19.3
117230 2004 RC_{338}	16.4	X	44.91719	26.52498	179.31903	2.25841	0.1145663	0.27340394	2.3510735	21	5 31.9	18.7
117231 2004 RY_{341}	16.9	X	86.24586	89.28026	187.68581	6.81355	0.1319853	0.29606915	2.2294990	21	11 17.9	20.0
117232 2004 SN_{2}	15.1	X	358.80534	301.58856	48.34942	12.80325	0.2036143	0.22785710	2.6547747	21	10 21.3	17.6
117233 2004 SG_{9}	14.5	X	138.14821	309.36165	269.27131	28.12580	0.0868161	0.23193806	2.6235421	21	10 5.4	19.1
117234 2004 SO_{11}	15.8	X	42.85062	239.68722	73.33430	11.85950	0.1940666	0.23699028	2.5861221	21	11 13.6	19.1
117235 2004 SM_{12}	14.1	X	16.74116	309.91494	317.70971	26.51466	0.1988461	0.17395154	3.1782193	21	7 24.9	17.7
117236 2004 SU_{14}	15.9	X	221.23661	200.18013	100.56410	7.36238	0.1341680	0.26292669	2.4131238	21	1 19.2	19.5
117237 2004 SY_{14}	16.1	X	165.77122	213.74240	94.37365	6.97031	0.1389273	0.25484076	2.4639021	21	—	—
117238 2004 SQ_{17}	15.2	X	354.28103	270.66836	126.25109	11.36787	0.1777559	0.23782679	2.5800545	21	12 16.9	17.9
117239 2004 SM_{18}	14.8	X	153.49593	323.87231	236.06954	3.88558	0.1089401	0.17191900	3.2032202	21	10 3.2	19.8
117240 Zhytomyr	15.9	X	341.31735	213.11021	126.37669	8.88953	0.1946488	0.22883678	2.6471923	21	8 22.0	18.2
117241 2004 SS_{20}	16.8	X	233.67867	319.08914	36.26199	1.84976	0.2019455	0.27029553	2.3690641	21	4 5.5	20.7
117242 2004 SF_{21}	14.9	X	275.49849	268.13310	144.07363	27.00694	0.2235941	0.22351447	2.6890505	21	7 30.8	18.7
117243 2004 SU_{25}	14.0	X	140.99280	230.09890	209.45579	9.28723	0.0653199	0.14799566	3.5397294	21	4 26.2	19.1
117244 2004 SG_{29}	16.3	X	20.39429	155.12113	194.11259	3.48951	0.1258563	0.29514300	2.2341606	21	11 29.7	18.7
117245 2004 SC_{32}	15.7	X	84.38119	140.85818	160.21861	1.95014	0.2348362	0.18241221	3.0791684	21	12 8.1	20.6
117246 2004 SN_{33}	16.4	X	251.36187	196.61041	156.88007	5.42361	0.1638963	0.27312844	2.3526542	21	4 23.9	19.9
117247 2004 SO_{33}	16.1	X	331.79415	295.84747	42.14636	7.75842	0.1560661	0.28414048	2.2914689	21	8 7.1	18.1
117248 2004 SN_{38}	15.3	X	104.32629	62.41926	184.60774	13.31683	0.1310950	0.23364644	2.6107379	21	10 22.1	19.3
117249 2004 SW_{38}	14.9	X	302.00450	293.21407	187.30958	11.20676	0.0646115	0.18309996	3.0714531	21	12 21.9	19.2
117250 2004 ST_{39}	16.9	X	280.48402	92.43022	10.93105	19.58816	0.1056203	0.35276874	1.9837000	21	11 25.2	18.9
117251 2004 SD_{41}	15.3	X	59.93735	256.66522	15.22735	13.78905	0.0819692	0.22798146	2.6538092	21	9 25.0	18.7
117252 2004 SJ_{41}	15.8	X	240.37646	214.06567	159.34758	2.26220	0.1978363	0.21523388	2.7575853	21	5 8.4	20.2
117253 2004 ST_{45}	15.1	X	299.03080	122.82880	230.26580	11.47220	0.1702553	0.22227349	2.6990501	21	6 20.9	18.6
117254 2004 SV_{45}	14.7	X	316.38993	192.47316	281.20442	6.85765	0.0824654	0.18266046	3.0763779	21	—	—
117255 2004 SJ_{46}	16.7	X	265.10387	52.22451	0.46001	7.62000	0.2677907	0.22304213	2.6928455	21	7 15.0	20.8
117256 2004 SQ_{50}	14.7	X	285.26089	290.66799	198.15066	9.00409	0.0415550	0.18164302	3.0878550	21	12 12.1	19.0
117257 2004 SV_{53}	14.6	X	7.07767	192.53314	160.55526	5.84210	0.0356956	0.17338466	3.1851431	21	10 14.3	18.9
117258 2004 SL_{54}	14.7	X	301.35918	233.43691	79.64101	10.10326	0.1287256	0.21572069	2.7534351	21	5 10.6	18.3
117259 2004 SW_{54}	14.8	X	349.91700	227.25102	131.30168	13.44833	0.1910768	0.22804208	2.6533389	21	10 16.7	17.6
117260 2004 SD_{55}	15.2	X	246.63934	298.04128	119.80017	13.36972	0.1819576	0.21709418	2.7418094	21	7 10.4	19.4
117261 2004 SS_{57}	14.7	X	13.44977	191.72277	214.25364	16.05917	0.1305493	0.18025219	3.1037186	21	—	—
117262 2004 ST_{57}	16.4	X	228.59095	328.80290	39.04744	4.20642	0.2531376	0.27070281	2.3666873	21	4 14.9	20.5
117263 2004 SB_{58}	16.1	X	291.49374	304.79854	33.92645	6.83706	0.1995726	0.27803561	2.3248902	21	5 12.7	19.1
117264 2004 SJ_{59}	16.2	X	203.14295	274.82798	50.33362	6.59506	0.2434172	0.26262126	2.4149944	21	2 6.0	20.4
117265 2004 TH_{1}	14.8	X	24.23764	241.18649	58.46638	0.37581	0.1559913	0.17162325	3.2068992	21	9 10.8	18.7
117266 2004 TO_{7}	15.2	X	274.82962	244.61107	88.54199	12.14226	0.1448401	0.21659765	2.7459980	21	5 2.6	19.3
117267 2004 TA_{16}	14.2	X	275.45839	335.24663	149.92077	30.04668	0.2642544	0.17482737	3.1675959	21	10 30.5	19.0
117268 2004 TK_{52}	14.1	X	276.89030	236.26082	220.07109	17.43755	0.1609350	0.17045342	3.2215552	21	9 30.6	18.7
117269 2004 TX_{53}	14.9	X	54.40243	19.32661	41.72035	10.10909	0.0506794	0.18909217	3.0062172	21	—	—
117270 2004 TT_{100}	14.1	X	241.46076	1.13216	136.91533	16.40659	0.2124396	0.17360300	3.1824719	21	10 12.8	19.2
117271 2004 TY_{102}	14.7	X	120.93354	330.47654	351.74004	10.31543	0.1316610	0.18485068	3.0520292	21	—	—
117272 2004 TJ_{109}	15.5	X	268.43496	345.76800	68.55630	13.25894	0.1180873	0.22444287	2.6816299	21	8 15.2	19.3
117273 2004 TX_{109}	14.8	X	7.30659	219.56598	161.42072	15.52758	0.0699735	0.17580637	3.1558255	21	11 22.8	19.2
117274 2004 TR_{110}	15.5	X	250.47574	137.42449	233.19340	4.12270	0.1706590	0.21556836	2.7547321	21	5 16.3	19.5
117275 2004 TC_{113}	15.1	X	121.08473	193.89615	337.58004	8.45097	0.0847816	0.21530180	2.7570054	21	7 29.9	19.1
117276 2004 TQ_{118}	16.4	X	279.74045	184.06020	166.89695	2.30168	0.2346448	0.27781821	2.3261028	21	5 11.7	19.6
117277 2004 TX_{118}	16.3	X	244.85178	326.28951	27.13257	6.82834	0.1324051	0.27576257	2.3376483	21	4 17.5	19.5
117278 2004 TQ_{120}	14.1	X	93.29516	262.31585	75.37113	12.88729	0.1676728	0.19171243	2.9787624	21	—	—
117279 2004 TM_{121}	16.5	X	70.40923	3.12072	219.40285	3.03327	0.0643858	0.28053112	2.3110820	21	7 29.6	19.2
117280 2004 TW_{121}	16.0	X	298.89685	71.95935	242.43340	0.81872	0.1239909	0.21717690	2.7411131	21	5 6.9	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117281 2004 TX_{130}	15.4	X	29.78982	31.57712	359.22770	3.00200	0.1110061	0.18070339	3.0985501	21	—	—
117282 2004 TT_{139}	15.3	X	294.65640	103.62408	304.51855	5.00463	0.1375558	0.22637928	2.6663159	21	9 4.2	18.4
117283 2004 TQ_{168}	14.9	X	42.72609	218.33129	131.86366	3.67581	0.0902385	0.17925809	3.1151828	21	12 2.8	19.1
117284 2004 TA_{170}	15.7	X	339.58367	263.81832	111.59528	3.54483	0.2213790	0.23121267	2.6290265	21	10 15.6	17.7
117285 2004 TK_{173}	14.6	X	345.71557	164.50828	330.93486	8.53140	0.0060110	0.18958855	3.0009676	21	—	—
117286 2004 TJ_{208}	15.4	X	220.54020	356.11698	35.89593	9.76728	0.1866440	0.21292012	2.7775267	21	5 12.3	20.0
117287 2004 TS_{221}	15.4	X	356.56830	198.05338	105.48074	7.57350	0.0512738	0.22310567	2.6923342	21	7 29.5	18.6
117288 2004 TU_{221}	13.0	X	18.47569	295.71037	131.07992	9.79069	0.2239496	0.12539463	3.9532119	21	—	—
117289 2004 TV_{240}	15.0	X	103.80908	234.93524	251.95383	10.64812	0.0654770	0.20905084	2.8116943	21	5 4.9	19.0
117290 2004 TW_{247}	15.5	X	290.48963	317.62520	140.42971	13.92781	0.1468247	0.23245031	2.6196864	21	11 13.0	18.7
117291 2004 TK_{287}	16.4	X	39.93686	157.41366	141.30147	3.44659	0.1841382	0.28833353	2.2691992	21	10 27.4	18.9
117292 2004 TP_{287}	15.4	X	40.89131	120.97509	223.33036	4.43316	0.0882584	0.23443361	2.6048905	21	12 3.2	18.6
117293 2004 TC_{328}	15.7	X	327.69079	221.60326	153.18651	14.83927	0.1175293	0.22963042	2.6410894	21	9 21.6	18.6
117294 2004 TY_{338}	14.8	X	26.33449	317.77449	126.24244	13.05752	0.0726779	0.18746227	3.0236171	21	—	—
117295 2004 TD_{355}	15.4	X	48.80900	165.74586	97.47000	8.22577	0.0167237	0.22559241	2.6725124	21	8 18.6	18.9
117296 2004 UP_{7}	15.6	X	233.51288	175.10323	246.53042	9.04740	0.1831047	0.21779113	2.7359570	21	7 1.0	20.0
117297 2004 UH_{8}	14.8	X	357.11276	190.23232	243.77589	9.22332	0.0473219	0.18098416	3.0953446	21	—	—
117298 2004 UX_{9}	16.6	X	262.92966	329.37448	73.99061	1.14816	0.2385170	0.27978833	2.3151705	21	7 2.4	19.9
117299 2004 UC_{10}	16.2	X	354.80903	132.25445	199.83368	3.92559	0.2344159	0.28560119	2.2836491	21	9 23.9	17.2
117300 2004 VG_{2}	14.7	X	284.52619	197.68595	245.80015	10.08620	0.1230491	0.17013715	3.2255463	21	9 29.6	19.2
117301 2004 VX_{4}	17.0	X	225.12348	116.45138	323.88390	3.46816	0.2055782	0.27702561	2.3305375	21	7 16.9	20.5
117302 2004 VP_{5}	14.4	X	24.66067	35.78603	287.75393	7.84024	0.1873461	0.17090354	3.2158961	21	10 12.4	18.5
117303 2004 VB_{10}	14.9	X	293.49934	267.46442	83.85279	10.46246	0.2140213	0.21945309	2.7221262	21	6 4.6	18.6
117304 2004 VR_{12}	14.9	X	111.77428	10.63713	18.10335	12.40902	0.1481266	0.19258808	2.9697265	21	1 31.6	19.2
117305 2004 VU_{15}	15.1	X	81.58958	281.68578	70.35443	11.90114	0.1230889	0.18616596	3.0376370	21	—	—
117306 2004 VF_{21}	16.4	X	1.71285	261.29604	82.46918	4.06649	0.2054674	0.28825346	2.2696194	21	10 31.2	18.1
117307 2004 VY_{21}	14.4	X	98.62400	66.45795	230.02389	15.49629	0.3074297	0.17930910	3.1145920	21	12 17.9	19.9
117308 2004 VQ_{22}	15.8	X	320.79486	357.19615	34.07385	1.95169	0.0839574	0.22747727	2.6577291	21	10 2.7	19.0
117309 2004 VT_{22}	15.4	X	142.88121	11.37672	19.65133	2.39726	0.0676983	0.19815076	2.9138838	21	2 23.9	19.7
117310 2004 VA_{23}	14.9	X	67.03197	299.78795	88.72612	3.68290	0.1925751	0.18470222	3.0536644	21	—	—
117311 2004 VD_{23}	15.0	X	331.34571	359.12503	62.31172	2.32292	0.1918291	0.17286424	3.1915325	21	11 15.7	18.3
117312 2004 VO_{24}	15.6	X	245.53424	78.15544	326.05475	6.18372	0.1296881	0.21743298	2.7389605	21	6 27.9	19.6
117313 2004 VR_{26}	16.7	X	297.18550	348.06074	0.04386	5.29256	0.1402294	0.27774643	2.3265036	21	6 14.8	19.5
117314 2004 VD_{40}	15.9	X	224.12180	97.41307	224.07208	11.43514	0.0607033	0.20077771	2.8884114	21	2 21.9	20.5
117315 2004 VO_{55}	14.2	X	186.54144	35.22058	31.07202	10.73718	0.0729654	0.15058610	3.4990176	21	5 26.5	19.5
117316 2004 VM_{57}	15.3	X	171.63761	169.71655	271.22225	3.93665	0.0153114	0.20936464	2.8088841	21	5 25.6	19.3
117317 2004 VL_{59}	15.7	X	242.52645	66.13018	9.05672	2.81889	0.0777243	0.21984004	2.7189310	21	8 11.3	19.5
117318 2004 VO_{62}	15.5	X	89.62936	256.40867	102.49265	16.02215	0.2247623	0.24549037	2.5260760	21	—	—
117319 2004 VR_{64}	14.5	X	279.53406	78.02887	68.39627	16.41132	0.0310417	0.17800198	3.1298209	21	12 25.2	18.9
117320 2004 VS_{64}	15.5	X	98.09262	286.91000	202.30037	2.35904	0.1007484	0.20322088	2.8652146	21	5 7.9	19.3
117321 2004 VU_{64}	15.4	X	101.48003	234.91224	147.98467	1.82608	0.0114200	0.18786331	3.0193125	21	—	—
117322 2004 VJ_{72}	15.2	X	94.26385	273.13356	138.88246	2.06386	0.0883073	0.19247574	2.9708819	21	1 24.6	19.2
117323 2004 VE_{78}	15.9	X	339.77703	14.85506	104.86606	24.57619	0.0721458	0.35986149	1.9575482	21	—	—
117324 2004 WW_{4}	16.1	X	200.38055	30.87734	287.27435	4.58919	0.1673455	0.31434254	2.1422358	21	1 13.5	19.3
117325 2004 WU_{8}	14.5	X	21.81442	279.84960	78.31349	9.94383	0.1009568	0.17455913	3.1708401	21	11 16.3	18.6
117326 2004 WV_{8}	15.9	X	294.46018	359.21367	54.18581	6.58731	0.1510747	0.28399273	2.2922636	21	9 22.6	18.2
117327 2004 WD_{9}	15.4	X	286.74746	193.68348	304.04080	6.97546	0.1457662	0.23613716	2.5923471	21	12 27.9	18.2
117328 2004 WH_{9}	14.7	X	46.23716	20.17095	47.32525	10.80881	0.2452318	0.18464420	3.0543041	21	—	—
117329 Spencer	16.0	X	85.52999	238.70361	287.38992	6.92673	0.1590981	0.25965508	2.4333514	21	6 16.3	18.9
117330 2004 XF_{8}	14.4	X	233.62088	111.49344	102.10415	10.29068	0.0612672	0.17736424	3.1373189	21	—	—
117331 2004 XF_{10}	15.1	X	327.10527	306.09053	100.13873	13.66663	0.1634740	0.22670035	2.6637978	21	11 6.7	18.0
117332 2004 XX_{10}	14.7	X	80.35083	13.69650	81.56633	12.85422	0.0838129	0.19216850	2.9740476	21	3 6.9	18.9
117333 2004 XF_{11}	15.3	X	318.05556	287.85118	89.82855	5.33609	0.1313837	0.22275945	2.6951232	21	9 6.4	18.3
117334 2004 XK_{11}	15.9	X	344.01370	239.10019	279.84834	2.05869	0.0422775	0.24528292	2.5275001	21	—	—
117335 2004 XT_{11}	15.0	X	6.04704	261.71644	159.09196	9.65677	0.1969213	0.23726135	2.5841520	21	—	—
117336 2004 XP_{15}	15.2	X	112.77291	45.70134	341.14111	2.86139	0.1402200	0.19082989	2.9879394	21	1 25.6	19.4
117337 2004 XD_{17}	15.9	X	21.20037	11.56364	32.11432	1.99015	0.0864890	0.23482458	2.6019983	21	—	—
117338 2004 XF_{18}	15.0	X	35.67237	114.62689	230.30127	4.13394	0.1601794	0.17283176	3.1919324	21	11 25.3	19.1
117339 2004 XO_{20}	14.0	X	297.58336	31.16419	78.72556	14.45847	0.0736229	0.17282828	3.1919752	21	11 30.8	18.3
117340 2004 XM_{23}	14.7	X	172.84342	120.45516	126.88858	22.73917	0.2569729	0.28132200	2.3067485	21	12 27.2	18.8
117341 2004 XU_{26}	15.3	X	155.37117	222.90105	154.38489	2.48842	0.1096182	0.19650939	2.9300870	21	2 24.6	19.8
117342 2004 XJ_{38}	15.7	X	238.11857	260.54789	174.25166	13.09180	0.1135146	0.21796667	2.7344878	21	7 28.7	19.9
117343 2004 XR_{38}	15.8	X	36.84890	258.66241	158.48661	15.07027	0.0999707	0.24128196	2.5553642	21	—	—
117344 2004 XY_{40}	14.6	X	26.72896	26.79979	69.99212	12.17200	0.1160831	0.18339397	3.0681695	21	—	—
117345 2004 XO_{41}	15.2	X	265.58397	129.62307	287.59694	13.32646	0.1720483	0.21654856	2.7464130	21	7 30.3	19.1
117346 2004 XB_{48}	14.7	X	228.11240	101.73409	77.68247	10.52605	0.0289539	0.17069030	3.2185739	21	12 2.7	19.1
117347 2004 XF_{48}	15.2	X	269.35177	151.59350	271.83617	13.45982	0.1410972	0.21775856	2.7362297	21	8 13.6	19.2
117348 2004 XF_{49}	13.7	X	53.56729	275.74696	103.15873	15.83590	0.2243677	0.17899099	3.1182811	21	—	—
117349 2004 XN_{61}	15.1	X	323.15248	171.56688	277.40978	9.36819	0.2713808	0.17542839	3.1603569	21	12 1.9	18.1
117350 Saburo	14.2	X	153.58247	313.76506	337.54411	17.00471	0.1230270	0.17641112	3.1486091	21	—	—
117351 2004 XE_{63}	15.2	X	279.48629	307.67527	241.01657	13.74660	0.0568177	0.24343856	2.5402500	21	—	—
117352 2004 XQ_{69}	15.7	X	350.65805	67.02629	295.13448	2.53824	0.1988397	0.22722186	2.6597203	21	10 15.8	18.0
117353 2004 XS_{73}	14.6	X	13.63663	113.51032	323.61323	22.35969	0.0732288	0.17619474	3.1511864	21	—	—
117354 2004 XQ_{75}	14.3	X	94.52474	265.64693	93.69661	12.72651	0.0751865	0.17884262	3.1200055	21	—	—
117355 2004 XT_{86}	16.0	X	321.19693	166.76166	330.71339	5.49760	0.1598207	0.29157661	2.2523416	21	—	—
117356 2004 XB_{87}	14.7	X	1.61713	22.98978	47.16438	10.30691	0.0522897	0.17857084	3.1231704	21	—	—
117357 2004 XG_{88}	15.3	X	36.61494	247.33356	66.49407	5.29471	0.1988840	0.22942110	2.6426956	21	11 4.3	18.4
117358 2004 XJ_{95}	16.7	X	120.68159	354.15535	178.32978	2.03024	0.1474474	0.26766367	2.3845683	21	8 5.3	20.0
117359 2004 XS_{102}	15.3	X	83.15134	281.78730	85.91727	14.22576	0.0815162	0.23746217	2.5826948	21	—	—
117360 2004 XC_{103}	15.4	X	247.60879	30.26022	55.22618	9.88478	0.2649307	0.21740370	2.7392065	21	8 10.5	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117361 2004 XV_{103}	15.1	X	49.82194	296.26390	103.23267	14.58154	0.1379761	0.23623430	2.5916364	21	—	—
117362 2004 XW_{103}	15.4	X	193.39584	96.65605	75.59480	9.33577	0.1027337	0.21801191	2.7341095	21	10 19.2	19.6
117363 2004 XX_{104}	15.0	X	52.75669	269.24998	92.39858	15.83742	0.1320994	0.23288494	2.6164260	21	—	—
117364 2004 XM_{105}	14.6	X	44.27688	135.38761	263.44591	9.79649	0.0420467	0.18210828	3.0825935	21	—	—
117365 2004 XR_{106}	14.6	X	329.08951	55.08316	55.88239	11.44868	0.0681607	0.17845693	3.1244994	21	—	—
117366 2004 XK_{107}	16.0	X	327.09242	337.40266	48.28242	4.53479	0.1851742	0.28503087	2.2866943	21	10 13.9	17.3
117367 2004 XO_{107}	15.7	X	41.05998	347.68973	45.98528	5.20127	0.0586808	0.23675673	2.5878226	21	—	—
117368 2004 XY_{119}	16.5	X	59.11568	319.16149	216.88553	0.60182	0.1338973	0.25792231	2.4442377	21	5 15.5	19.1
117369 2004 XL_{121}	15.9	X	16.85068	34.75484	3.06851	2.38744	0.0356263	0.23160794	2.6260344	21	12 31.9	19.4
117370 2004 XC_{129}	15.0	X	57.07741	350.47887	60.09687	11.16820	0.2670152	0.18311914	3.0712386	21	—	—
117371 2004 XK_{144}	13.7	X	280.41622	293.27083	278.29405	24.89144	0.1931132	0.17770208	3.1333413	21	—	—
117372 2004 XH_{145}	15.3	X	24.11241	200.09847	189.70993	5.31011	0.2657990	0.23722954	2.5843830	21	—	—
117373 2004 XL_{145}	14.6	X	358.13648	220.76307	271.67871	10.26697	0.2047655	0.17965208	3.1106266	21	—	—
117374 2004 XQ_{147}	16.6	X	173.43240	187.73418	276.36444	1.83521	0.1614779	0.26695326	2.3887969	21	6 30.2	20.3
117375 2004 XY_{148}	14.8	X	11.68078	170.79078	290.51171	15.79712	0.1149010	0.17922991	3.1155093	21	—	—
117376 2004 XP_{157}	15.3	X	116.09895	341.48930	54.35044	2.27851	0.2639029	0.19098462	2.9863253	21	2 25.5	19.7
117377 2004 XW_{158}	14.2	X	52.68680	308.44643	106.76274	11.21339	0.0860643	0.18150732	3.0893940	21	—	—
117378 2004 XZ_{163}	15.5	X	285.70785	96.61011	274.14122	4.16966	0.0764746	0.21986025	2.7187644	21	7 11.5	19.1
117379 2004 XW_{169}	15.5	X	79.71032	102.93686	45.05128	3.30857	0.0296709	0.20654306	2.8344076	21	4 27.1	19.1
117380 2004 XT_{174}	14.2	X	8.84512	299.33926	85.25973	18.54771	0.1469983	0.17361500	3.1823252	21	12 4.9	18.1
117381 Lindaweiland	15.1	X	330.97754	183.33258	100.56854	3.21670	0.0306041	0.20432818	2.8548538	21	5 26.3	18.7
117382 2004 YE_{2}	16.3	X	186.94278	352.32940	115.97138	9.22639	0.1387153	0.27303466	2.3531929	21	7 19.4	19.8
117383 2004 YD_{4}	15.2	X	117.98564	225.38428	103.31382	11.86284	0.0396776	0.17568836	3.1572385	21	—	—
117384 Halharrison	15.9	X	65.46347	149.48313	25.34117	1.77369	0.1059423	0.25803253	2.4435416	21	5 19.7	18.5
117385 2004 YN_{20}	12.0	X	265.69125	216.55381	125.38116	13.29194	0.0435482	0.08111208	5.2854141	21	5 23.6	19.1
117386 Thomasschlapkohl	15.3	X	178.65263	251.61250	121.80630	10.33861	0.0507653	0.19203762	2.9753987	21	3 16.7	19.8
117387 Javiercerna	15.4	X	161.40149	342.97181	299.63348	10.26165	0.1918068	0.23121949	2.6289748	21	—	—
117388 Jamiemoore	16.7	X	201.24930	258.14129	124.97191	3.13889	0.2011906	0.25989064	2.4318808	21	4 14.4	20.8
117389 2004 YD_{23}	12.3	X	310.66513	194.47557	130.09517	25.18614	0.0747141	0.08388930	5.1681091	21	6 21.4	19.2
117390 Stephanegendron	15.1	X	227.71153	66.07025	160.94804	1.22431	0.1248776	0.17313358	3.1882217	21	—	—
117391 2004 YD_{31}	15.7	X	354.78303	280.97509	130.51859	9.72983	0.1156063	0.23012495	2.6373043	21	12 27.2	18.8
117392 2004 YV_{31}	14.9	X	106.81729	259.10202	86.42884	16.49544	0.2277733	0.24051083	2.5608234	21	—	—
117393 2004 YO_{32}	16.4	X	105.32537	159.64788	5.42077	2.54457	0.1575182	0.26272720	2.4143452	21	7 10.7	19.7
117394 2004 YS_{33}	14.2	X	350.74229	215.85294	312.40588	16.30288	0.2402259	0.17897075	3.1185163	21	1 6.4	17.9
117395 2004 YL_{35}	12.6	X	311.66193	228.52636	87.35190	12.36389	0.0359023	0.08460715	5.1388351	21	6 13.8	19.4
117396 2005 AJ_{1}	15.4	X	54.81098	318.85974	118.79286	2.66268	0.2274167	0.18565099	3.0432517	21	1 14.4	18.5
117397 2005 AW_{1}	16.5	X	118.99201	280.74504	238.65963	1.36013	0.1413578	0.26384954	2.4074937	21	7 16.2	19.8
117398 2005 AZ_{2}	14.7	X	47.65369	328.45102	131.12768	11.72015	0.1247607	0.18193531	3.0845470	21	1 22.5	18.4
117399 2005 AO_{7}	16.7	X	264.29490	151.77387	344.05741	5.57843	0.0985327	0.28548340	2.2842772	21	12 6.1	19.2
117400 2005 AA_{8}	16.4	X	253.35562	143.41015	334.90702	5.48143	0.1206270	0.28056865	2.3108759	21	10 19.4	19.2
117401 2005 AL_{8}	15.4	X	207.38277	33.47935	110.56140	9.88739	0.1212712	0.21564410	2.7540870	21	9 27.7	19.7
117402 2005 AM_{8}	15.4	X	6.59005	321.84553	110.83845	10.54895	0.0990750	0.23230608	2.6207706	21	—	—
117403 2005 AO_{8}	15.9	X	359.69173	120.73287	318.99256	11.70992	0.2162633	0.23388209	2.6089839	21	—	—
117404 2005 AC_{9}	12.1	X	238.68793	284.37114	105.02252	22.81281	0.0288355	0.08505568	5.1207529	21	6 16.9	19.0
117405 2005 AY_{9}	15.7	X	135.00357	172.09579	352.03301	3.73795	0.1030367	0.20876751	2.8142377	21	8 5.7	19.8
117406 2005 AF_{10}	14.6	X	348.33792	332.44026	146.04569	13.41133	0.0769066	0.17719778	3.1392834	21	—	—
117407 2005 AD_{11}	15.2	X	172.58006	120.48573	16.09882	9.90242	0.1966923	0.21026116	2.8008941	21	8 13.2	20.1
117408 2005 AL_{11}	14.9	X	342.12439	333.70577	150.82767	6.91809	0.0966570	0.17648870	3.1476863	21	—	—
117409 2005 AO_{11}	14.7	X	12.33120	219.97670	306.78832	11.59388	0.0906536	0.18710191	3.0274982	21	2 17.2	18.5
117410 2005 AY_{11}	16.0	X	91.22799	0.86152	46.22189	5.28422	0.1619616	0.24540116	2.5266881	21	1 12.6	18.8
117411 2005 AH_{12}	15.0	X	59.67984	341.30436	103.83610	10.61711	0.0470811	0.18252348	3.0779169	21	1 17.2	19.0
117412 2005 AJ_{12}	16.3	X	111.51647	88.07612	42.55238	3.09440	0.1688877	0.19831787	2.9122466	21	6 3.8	20.7
117413 Ramonycajal	16.3	X	106.16854	7.17900	171.90708	2.25755	0.1332332	0.26390922	2.4071307	21	7 26.9	19.5
117414 2005 AG_{14}	15.8	X	335.34574	135.19823	355.71356	13.22057	0.1329377	0.23737791	2.5833060	21	—	—
117415 2005 AY_{14}	16.7	X	27.03822	29.64931	18.93355	1.36986	0.0907404	0.23529679	2.5985159	21	—	—
117416 2005 AC_{15}	15.7	X	348.74853	22.44542	29.83396	4.68086	0.0990054	0.22660882	2.6645151	21	12 15.4	18.8
117417 2005 AS_{15}	15.4	X	173.25331	87.93251	137.70876	13.12519	0.0293416	0.22235981	2.6983515	21	12 5.9	19.4
117418 2005 AE_{16}	14.9	X	321.50086	186.90662	314.64244	7.14719	0.1315874	0.17592403	3.1544182	21	—	—
117419 2005 AD_{17}	14.7	X	35.25316	302.06295	117.91159	13.58505	0.0777876	0.17803527	3.1294307	21	—	—
117420 2005 AM_{17}	15.9	X	189.94929	347.57533	147.03888	1.63851	0.0765490	0.21307622	2.7761700	21	8 26.2	19.9
117421 2005 AA_{18}	16.2	X	311.61011	269.02444	290.39119	5.89609	0.0857312	0.30172968	2.2015270	21	—	—
117422 2005 AG_{18}	16.5	X	160.21113	141.44732	308.68586	2.27585	0.1475054	0.26115925	2.4239990	21	5 28.9	20.1
117423 2005 AP_{18}	12.1	X	36.28762	88.31998	140.70193	9.07289	0.0976225	0.08189658	5.2516068	21	6 23.3	18.7
117424 2005 AX_{19}	15.3	X	216.68700	201.22490	312.14339	10.80848	0.0933270	0.21980065	2.7192558	21	10 12.1	19.6
117425 2005 AK_{20}	15.2	X	56.26682	112.00825	58.28214	2.76113	0.0263969	0.19761405	2.9191573	21	4 25.4	19.2
117426 2005 AM_{20}	16.2	X	146.64383	264.25273	198.56728	1.69560	0.1329261	0.26204217	2.4185510	21	5 31.2	19.7
117427 2005 AY_{21}	15.3	X	309.03320	194.59893	297.24433	14.12336	0.0838757	0.22973025	2.6403242	21	—	—
117428 2005 AS_{22}	16.4	X	124.14656	115.47000	73.19078	6.24302	0.1872633	0.26919616	2.3755097	21	9 6.4	20.1
117429 2005 AR_{25}	16.7	X	110.58586	265.45554	258.69519	4.48299	0.1632284	0.26361567	2.4089174	21	7 15.2	20.0
117430 Achosyx	15.0	X	110.28749	284.95272	116.65617	14.06990	0.1055455	0.18579982	3.0416263	21	2 6.2	19.2
117431 2005 AL_{28}	15.7	X	16.40711	293.72498	136.40038	15.60706	0.0443243	0.23301154	2.6154781	21	—	—
117432 2005 AQ_{28}	17.2	X	317.59973	65.62400	13.71974	2.87864	0.1212953	0.28736913	2.2742732	21	12 18.1	19.2
117433 2005 AC_{29}	14.1	X	327.13080	120.01549	70.12009	29.88481	0.0762945	0.17418638	3.1753620	21	1 22.3	18.9
117434 2005 AE_{29}	15.9	X	277.93112	184.73271	117.68171	6.96926	0.1267616	0.25622502	2.4550199	21	3 24.3	19.4
117435 Severochoa	16.0	X	177.69573	236.69753	275.18853	3.60853	0.0044996	0.21282941	2.7783159	21	9 3.6	19.7
117436 2005 AU_{30}	15.2	X	349.81000	20.63330	78.63803	12.36661	0.2137907	0.23286558	2.6165709	21	—	—
117437 2005 AW_{30}	15.3	X	347.36035	59.72105	95.41706	14.88884	0.1041221	0.23746320	2.5826874	21	—	—
117438 2005 AX_{35}	16.4	X	333.30231	331.24747	158.80190	4.39203	0.1170523	0.23633068	2.5909318	21	—	—
117439 Rosner	16.3	X	265.33733	217.52459	3.45175	2.40978	0.1175058	0.23719581	2.5846280	21	—	—
117440 2005 AM_{37}	15.2	X	262.54415	245.25476	334.54565	7.59959	0.1743725	0.17606715	3.1527086	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117441 2005 AY_{38}	15.3	X	151.36964	146.86176	104.11219	10.29536	0.0788278	0.22437703	2.6821544	21	12 9.8	19.4
117442 2005 AP_{39}	15.7	X	256.02697	111.63185	154.09569	7.43552	0.1440264	0.24336271	2.5407779	21	1 11.1	19.7
117443 2005 AW_{42}	15.9	X	91.33507	241.60352	139.80674	4.91058	0.1974840	0.24159718	2.5531410	21	—	—
117444 2005 AJ_{43}	16.8	X	176.28921	260.83198	298.04167	4.67798	0.1133512	0.27889976	2.3200853	21	11 4.6	20.2
117445 2005 AB_{45}	16.1	X	99.33571	122.00996	74.67032	2.38601	0.1224535	0.26519721	2.3993305	21	8 12.1	19.3
117446 2005 AV_{45}	12.4	X	2.84843	155.73506	112.10779	6.06579	0.0828791	0.08317087	5.1978277	21	6 21.4	18.9
117447 2005 AX_{46}	11.7	X	302.36393	187.21517	134.80302	29.47447	0.0570626	0.08188896	5.2519325	21	6 13.1	18.8
117448 2005 AY_{46}	16.4	X	163.10920	12.35949	160.91550	2.53882	0.1467506	0.27225865	2.3576623	21	9 19.5	20.0
117449 2005 AB_{47}	16.0	X	343.65257	336.83177	67.28622	3.99579	0.1231062	0.22655542	2.6649337	21	11 27.9	18.9
117450 2005 AD_{47}	15.0	X	233.63510	208.45080	125.15424	11.00160	0.0920039	0.19095185	2.9866670	21	3 26.9	19.7
117451 2005 AA_{50}	16.3	X	251.49641	59.30510	227.43215	3.06865	0.0208574	0.24991235	2.4961896	21	2 8.0	19.6
117452 2005 AV_{55}	15.2	X	163.08678	312.23235	301.24243	12.65438	0.1279137	0.22832505	2.6511462	21	12 23.5	19.4
117453 2005 AG_{58}	15.5	X	170.98024	21.74463	74.31574	3.10182	0.1534517	0.20568160	2.8423164	21	6 18.0	20.0
117454 2005 AG_{59}	15.7	X	29.12152	70.84367	118.12376	3.01891	0.0232409	0.19587643	2.9363958	21	4 13.8	19.7
117455 2005 AL_{61}	16.2	X	92.73190	205.96788	341.74080	6.57546	0.0607939	0.26372636	2.4082433	21	7 12.8	19.3
117456 2005 AL_{68}	16.7	X	326.88465	308.67615	151.95273	2.05852	0.1010324	0.29037100	2.2585717	21	—	—
117457 2005 AU_{68}	16.1	X	57.44719	257.02147	32.14599	3.09763	0.0569753	0.21428051	2.7657586	21	10 7.0	19.7
117458 2005 AN_{71}	15.3	X	187.83593	202.48455	114.11328	11.49093	0.0232919	0.18203878	3.0833780	21	1 14.5	19.8
117459 2005 AB_{74}	15.9	X	272.23709	11.26677	345.49466	2.08855	0.2092198	0.26701775	2.3884123	21	5 13.6	19.4
117460 2005 AM_{74}	15.0	X	157.77777	352.00249	328.13429	4.07753	0.1230172	0.17854475	3.1234747	21	—	—
117461 2005 AO_{79}	16.0	X	217.52097	222.37059	43.33475	2.31487	0.1702947	0.23568105	2.5956907	21	—	—
117462 2005 BK_{3}	15.2	X	84.72430	99.51355	51.73263	10.98319	0.0651562	0.19937557	2.9019377	21	5 13.6	19.1
117463 2005 BQ_{7}	14.8	X	341.73961	100.22899	2.46685	13.13449	0.1240218	0.17297399	3.1901824	21	—	—
117464 2005 BT_{8}	15.0	X	257.02935	150.02337	96.96329	10.40028	0.0371885	0.18245001	3.0787431	21	1 9.3	19.4
117465 2005 BJ_{9}	15.6	X	353.55988	270.70174	121.88215	14.60540	0.1251496	0.22478750	2.6788883	21	12 2.5	18.9
117466 2005 BO_{9}	16.9	X	281.09356	98.50017	12.20417	4.38896	0.1602006	0.28453201	2.2893664	21	11 18.4	19.0
117467 2005 BE_{11}	16.3	X	109.26583	200.41510	346.44609	2.28580	0.0767236	0.26564312	2.3966448	21	8 4.6	19.3
117468 2005 BH_{11}	15.7	X	265.84425	332.53961	122.38166	10.66632	0.1364740	0.21899995	2.7258798	21	10 1.5	19.5
117469 2005 BO_{11}	16.3	X	76.40448	244.19167	315.75736	6.24096	0.0707282	0.26238161	2.4164647	21	7 7.9	19.2
117470 2005 BQ_{11}	15.8	X	354.64276	56.84265	54.23114	1.09053	0.2203420	0.17701123	3.1414887	21	—	—
117471 2005 BK_{13}	14.6	X	345.44201	216.53857	303.06454	8.91089	0.0369963	0.18139815	3.0906333	21	1 10.9	18.8
117472 2005 BQ_{13}	16.0	X	264.89152	299.62996	303.88245	4.96551	0.0761587	0.24035215	2.5619504	21	—	—
117473 2005 BS_{13}	16.6	X	140.90762	221.59598	193.03450	1.67219	0.1342929	0.25260761	2.4784021	21	3 22.7	20.1
117474 2005 BE_{18}	15.7	X	133.68963	188.92670	53.39672	3.14758	0.1407608	0.22050047	2.7134992	21	11 11.3	20.1
117475 2005 BK_{22}	15.6	X	184.69282	254.81461	16.43149	1.70227	0.1017749	0.17225473	3.1990567	21	—	—
117476 2005 BP_{22}	14.8	X	109.76515	235.65736	121.09553	10.47589	0.0749413	0.17644096	3.1482541	21	—	—
117477 2005 BC_{25}	15.3	X	266.77939	207.40751	340.64758	2.36001	0.1409686	0.17177945	3.2049548	21	—	—
117478 2005 BD_{26}	17.0	X	203.86194	1.53524	145.70859	2.60508	0.1617158	0.27482369	2.3429693	21	9 25.9	20.4
117479 2005 BT_{26}	14.5	X	109.18409	62.84012	326.11908	9.84702	0.0999092	0.18042216	3.1017691	21	1 21.3	18.8
117480 2005 BO_{28}	14.9	X	44.50886	32.85425	53.06264	14.45289	0.1310385	0.24247325	2.5469876	21	—	—
117481 2005 BD_{44}	16.6	X	24.86845	234.39040	108.47303	3.93452	0.1895044	0.28192853	2.3034389	21	12 5.0	19.0
117482 2005 CD_{2}	15.7	X	16.25005	167.33766	100.40459	3.25039	0.0139095	0.20314638	2.8659151	21	7 7.1	19.4
117483 2005 CZ_{3}	16.1	X	100.57528	179.76084	61.11478	3.50976	0.1308244	0.27024700	2.3693477	21	10 13.8	19.4
117484 2005 CE_{6}	14.7	X	31.04676	281.17326	153.19332	8.47702	0.0381820	0.17288450	3.1912831	21	—	—
117485 2005 CZ_{9}	16.3	X	307.79157	264.93534	73.32178	3.46349	0.0277818	0.26368364	2.4085034	21	7 6.0	19.0
117486 2005 CN_{10}	14.9	X	228.00017	180.04052	128.63803	12.06360	0.0584960	0.18420206	3.0591896	21	2 19.1	19.4
117487 2005 CM_{13}	15.4	X	17.88913	223.12059	236.22166	11.12415	0.1580001	0.23936977	2.5689551	21	—	—
117488 2005 CT_{14}	16.5	X	105.75712	13.64083	30.75593	1.36520	0.0133279	0.24253479	2.5465567	21	1 9.2	19.7
117489 2005 CB_{16}	16.0	X	27.92828	232.56739	208.01262	1.51834	0.0676551	0.23698489	2.5861613	21	—	—
117490 2005 CE_{16}	15.4	X	8.79573	162.02644	143.64322	4.35504	0.0956265	0.20971095	2.8057910	21	8 21.7	18.7
117491 2005 CC_{17}	16.8	X	102.81017	249.44476	163.31927	5.36082	0.1297421	0.30572503	2.1823047	21	1 15.9	19.0
117492 2005 CK_{18}	16.7	X	194.25568	189.20340	285.73218	1.87727	0.1194349	0.26963785	2.3729148	21	8 5.2	20.0
117493 2005 CP_{19}	16.4	X	241.07191	233.32013	158.91250	2.77401	0.1890727	0.26684843	2.3894225	21	5 31.3	20.0
117494 2005 CU_{19}	15.2	X	179.75477	228.21597	160.62610	10.19135	0.0393914	0.19353915	2.9599894	21	4 3.8	19.5
117495 2005 CY_{19}	16.4	X	117.32907	198.80679	30.35493	2.56062	0.1657519	0.27060120	2.3672797	21	10 17.5	20.0
117496 2005 CD_{20}	15.9	X	219.84022	322.72143	226.86839	4.82471	0.1000140	0.22389738	2.6859837	21	12 5.6	19.6
117497 2005 CL_{20}	16.4	X	200.13500	30.16941	67.75977	1.48842	0.0869350	0.26728497	2.3868201	21	7 21.9	19.8
117498 2005 CJ_{21}	15.6	X	98.66482	209.40043	352.47225	7.20314	0.1555137	0.26320201	2.4114407	21	8 23.2	19.0
117499 2005 CQ_{21}	16.3	X	173.75024	342.19479	148.24925	4.22106	0.0821378	0.26675034	2.3900082	21	8 4.1	19.5
117500 2005 CY_{21}	15.1	X	287.15486	301.07244	123.91499	7.90565	0.0279813	0.21690223	2.7434268	21	10 5.9	18.8
117501 2005 CQ_{22}	14.2	X	260.08523	232.41443	333.65340	21.88232	0.1455025	0.17240464	3.1972020	21	—	—
117502 2005 CW_{22}	15.0	X	220.36914	166.80505	341.13325	14.26026	0.1241864	0.21822168	2.7323571	21	10 6.1	19.2
117503 2005 CA_{23}	14.3	X	37.44453	49.14509	343.75492	17.35814	0.2270508	0.17249800	3.1960484	21	—	—
117504 2005 CD_{23}	15.3	X	298.46036	6.76204	115.17586	14.80188	0.1365219	0.22699469	2.6614946	21	12 25.1	18.2
117505 2005 CG_{25}	14.8	X	222.97584	100.01324	39.05986	14.62278	0.1117773	0.21166289	2.7885145	21	10 8.5	19.0
117506 Wildberg	17.0	X	283.44973	188.29480	72.45769	4.54701	0.1276176	0.30511605	2.1852075	21	1 25.2	20.0
117507 2005 CT_{25}	14.4	X	346.09581	147.83002	26.73440	28.41709	0.1493802	0.17489832	3.1667391	21	1 29.2	19.0
117508 2005 CA_{36}	14.8	X	322.30428	302.49873	187.43088	22.47200	0.1180055	0.17338164	3.1851800	21	—	—
117509 2005 CV_{36}	15.3	X	44.06278	185.46459	123.54735	6.88258	0.0573257	0.21499618	2.7596175	21	10 17.9	19.0
117510 2005 CE_{40}	16.2	X	141.46085	260.14010	237.04637	3.18797	0.1325519	0.26007699	2.4307190	21	7 9.9	19.8
117511 2005 CD_{41}	16.3	X	238.21298	93.03191	318.77943	0.88133	0.1822603	0.26890273	2.3772375	21	6 23.5	19.9
117512 2005 CZ_{42}	15.9	X	205.71604	81.29919	132.67367	9.82480	0.0346294	0.22650437	2.6653341	21	12 27.9	19.7
117513 2005 CA_{43}	16.8	X	109.60929	287.98442	291.89251	1.59032	0.1321189	0.26935925	2.3745507	21	9 23.9	20.1
117514 2005 CD_{49}	15.1	X	93.28463	310.23536	156.32800	12.50830	0.1530788	0.18901776	3.0070061	21	4 15.0	19.4
117515 2005 CH_{49}	16.3	X	269.63237	345.33004	163.94822	2.31897	0.0968989	0.22619004	2.6678029	21	12 19.4	19.6
117516 2005 CJ_{49}	15.8	X	288.79417	236.81905	298.61486	3.03279	0.0473507	0.23312757	2.6146102	21	—	—
117517 2005 CE_{50}	16.3	X	84.34847	347.80201	279.35940	1.61425	0.1868228	0.27133549	2.3630069	21	11 3.5	19.6
117518 2005 CW_{50}	16.3	X	128.02039	96.07232	150.08304	6.88856	0.0771086	0.27537832	2.3398224	21	11 17.7	19.6
117519 2005 CM_{51}	16.8	X	84.29812	26.36078	152.25778	0.42383	0.1548960	0.25755204	2.4465798	21	7 1.7	19.9
117520 2005 CP_{51}	16.1	X	43.11301	110.67228	123.65456	4.12317	0.1325525	0.25989351	2.4318629	21	7 14.5	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117521 2005 CU_{51}	16.8	X	229.04304	30.48551	147.40764	3.89963	0.1160514	0.28203472	2.3028607	21	12 10.9	19.7
117522 2005 CB_{52}	17.0	X	203.07158	295.21297	281.62078	1.58047	0.1607177	0.28227569	2.3015499	21	12 24.2	20.0
117523 2005 CD_{52}	15.3	X	316.50177	308.06856	213.59149	2.23953	0.1190379	0.17349600	3.1837801	21	—	—
117524 2005 CA_{53}	16.1	X	307.23507	8.30779	19.99718	2.67580	0.2073305	0.27470020	2.3436715	21	8 25.6	17.9
117525 2005 CJ_{53}	16.6	X	174.08324	49.02696	117.23480	3.18687	0.1485572	0.27093259	2.3653490	21	9 22.2	20.3
117526 2005 CS_{57}	16.0	X	256.72940	307.88117	295.53993	7.59989	0.0519922	0.23901837	2.5714724	21	—	—
117527 2005 CU_{58}	16.6	X	7.35756	2.68359	101.42959	0.79802	0.1385071	0.23689031	2.5868497	21	—	—
117528 2005 CZ_{58}	15.7	X	274.48593	317.03163	288.48736	4.40456	0.1274550	0.24109336	2.5566968	21	1 6.9	19.3
117529 2005 CM_{59}	16.5	X	291.64918	278.01512	282.55852	1.84739	0.1413024	0.23626313	2.5914256	21	—	—
117530 2005 CP_{59}	16.2	X	220.31229	200.58999	230.13418	4.80702	0.1453113	0.26736011	2.3863729	21	7 2.7	19.8
117531 2005 CU_{59}	16.1	X	64.80954	90.59749	157.63160	6.43438	0.0939648	0.26590621	2.3950637	21	9 2.2	19.1
117532 2005 CA_{60}	14.0	X	180.37720	169.69848	124.00225	18.89417	0.1297525	0.17454253	3.1710411	21	—	—
117533 2005 CU_{62}	15.4	X	139.73473	312.72699	349.52185	12.67190	0.0771752	0.22860599	2.6489737	21	—	—
117534 2005 CA_{64}	15.2	X	208.13915	20.46737	354.57088	11.23859	0.0538027	0.19349895	2.9603994	21	4 13.1	19.7
117535 2005 CC_{67}	14.9	X	274.46807	193.62976	29.57722	5.94198	0.0556037	0.17497043	3.1658690	21	—	—
117536 2005 CT_{67}	14.8	X	40.23744	95.65131	298.32891	10.38109	0.0456311	0.17085733	3.2164759	21	—	—
117537 2005 CH_{76}	16.8	X	291.50936	70.46535	212.37777	4.10765	0.0089303	0.31224675	2.1518109	21	3 19.6	19.1
117538 2005 DU	15.0	X	33.00336	176.87604	86.18439	24.39195	0.1804184	0.25990154	2.4318129	21	8 27.1	18.2
117539 Celletti	15.4	X	59.55936	155.34431	279.74900	0.53137	0.1052263	0.17832491	3.1260412	21	1 10.0	19.2
117540 2005 EN	16.9	X	181.55729	289.59131	317.30074	2.86992	0.2139030	0.28148744	2.3058446	21	—	—
117541 2005 EQ	15.3	X	337.98825	75.65025	102.07709	22.97424	0.0628919	0.24079067	2.5588389	21	1 5.9	18.6
117542 2005 EV	16.1	X	221.25664	168.23431	90.02934	1.56468	0.0410973	0.23313806	2.6145318	21	—	—
117543 2005 EM_{1}	16.4	X	94.74353	155.96369	91.65208	2.36729	0.1506837	0.26792424	2.3830220	21	10 17.8	19.8
117544 2005 EZ_{1}	15.9	X	171.63557	304.15576	202.17805	22.58005	0.2351841	0.26845254	2.3798945	21	8 16.9	20.4
117545 2005 EN_{5}	15.6	X	101.97937	135.28625	144.14728	7.89223	0.1418362	0.21336041	2.7737043	21	11 26.8	20.0
117546 2005 ET_{5}	14.8	X	293.85211	38.03156	151.57275	7.10047	0.0610901	0.17173175	3.2055482	21	—	—
117547 2005 ES_{7}	15.0	X	162.53289	154.47852	177.15531	10.14000	0.0773457	0.17224158	3.1992196	21	1 9.2	19.9
117548 2005 EY_{7}	16.1	X	289.99181	266.54399	15.77115	4.20257	0.0559283	0.24562707	2.5251387	21	3 21.2	19.3
117549 2005 EH_{8}	16.4	X	174.17048	243.14873	355.15578	4.91291	0.1444987	0.27852458	2.3221683	21	12 22.2	19.8
117550 2005 EU_{8}	16.9	X	84.88063	208.54209	138.25195	7.16227	0.1831206	0.29174911	2.2514537	21	—	—
117551 2005 EL_{10}	16.2	X	52.70907	298.64160	330.05808	5.94877	0.1311720	0.26442560	2.4039959	21	9 17.8	19.0
117552 2005 EC_{11}	16.4	X	121.90569	278.29919	275.88544	1.95565	0.1760616	0.26495012	2.4008220	21	9 6.1	20.0
117553 2005 EZ_{11}	16.6	X	197.70505	341.87795	114.98342	0.74151	0.1338296	0.26641016	2.3920424	21	7 15.2	19.9
117554 2005 EN_{13}	16.0	X	154.56554	264.77473	35.81516	3.04622	0.1009610	0.22845977	2.6501039	21	—	—
117555 2005 EP_{13}	15.0	X	38.53442	112.31762	118.18567	3.07345	0.0394602	0.19762119	2.9190871	21	6 20.3	18.8
117556 2005 EQ_{14}	16.9	X	169.23557	208.96685	359.25203	5.25760	0.1876524	0.27497057	2.3421349	21	11 5.7	20.7
117557 2005 EG_{22}	15.1	X	289.30638	97.41053	152.24573	5.12751	0.1074155	0.18141853	3.0904018	21	2 9.1	19.5
117558 2005 EN_{23}	16.0	X	164.49436	31.83305	169.83101	12.56829	0.1119036	0.27398943	2.3477229	21	10 31.2	19.6
117559 2005 ED_{24}	15.3	X	204.59654	282.70114	290.38622	11.35184	0.1646735	0.22252962	2.6969786	21	12 10.5	19.6
117560 2005 EL_{24}	16.5	X	119.81863	144.84926	92.19806	3.41829	0.1558508	0.27069156	2.3667528	21	10 30.4	20.1
117561 2005 EY_{24}	16.3	X	112.46186	213.70637	58.94093	4.95290	0.1398086	0.27475662	2.3433506	21	12 5.2	19.7
117562 2005 EB_{25}	16.4	X	140.48778	128.71026	84.06541	3.23350	0.1046331	0.27080827	2.3660728	21	10 18.4	19.8
117563 2005 EK_{25}	16.1	X	50.35224	152.78832	67.54578	3.66383	0.1236642	0.25660537	2.4525934	21	7 4.9	18.8
117564 2005 EW_{26}	16.0	X	191.47947	245.07799	357.72614	2.35997	0.0401780	0.22492733	2.6777780	21	—	—
117565 2005 EN_{29}	14.7	X	215.80099	119.78312	21.08087	13.19342	0.0875111	0.21172589	2.7879613	21	10 2.9	18.9
117566 2005 EG_{30}	16.9	X	84.33816	164.60610	33.95366	2.57526	0.1445103	0.25984960	2.4321369	21	7 29.4	20.0
117567 2005 EJ_{30}	15.2	X	297.31999	295.33256	5.62441	10.13391	0.0931090	0.19138423	2.9821669	21	4 21.5	19.4
117568 Yadame	15.6	X	297.18662	173.93837	84.29175	12.88929	0.2029792	0.24148588	2.5539254	21	2 10.5	19.5
117569 2005 EO_{32}	16.0	X	78.20019	170.78096	138.61341	6.17821	0.1879888	0.27355112	2.3502301	21	12 21.6	19.7
117570 2005 ET_{32}	15.3	X	230.12531	280.50380	9.51210	22.69488	0.0978105	0.23622998	2.5916680	21	1 28.2	19.7
117571 2005 EQ_{33}	15.2	X	154.34110	39.08248	167.01602	8.36978	0.1575010	0.21102655	2.7941174	21	10 18.8	19.8
117572 Hutsebaut	14.1	X	157.21377	145.83084	179.87403	27.43139	0.1794304	0.17124732	3.2115907	21	1 5.7	19.7
117573 2005 EG_{34}	16.1	X	238.28298	314.71999	232.13758	0.91016	0.0226403	0.22495397	2.6775665	21	—	—
117574 2005 EJ_{34}	15.9	X	297.28444	338.58781	192.07313	4.68421	0.0165367	0.23209018	2.6223956	21	—	—
117575 2005 EN_{34}	16.2	X	166.68914	341.84128	197.77676	4.88889	0.2137746	0.27105866	2.3646155	21	9 29.1	20.1
117576 2005 EU_{34}	16.1	X	98.64760	319.27938	321.32734	4.20042	0.1175350	0.27255678	2.3559427	21	11 28.9	19.6
117577 2005 EE_{35}	15.8	X	267.02009	333.59864	189.62208	13.00896	0.0720264	0.22292935	2.6937537	21	—	—
117578 2005 ET_{35}	15.9	X	178.08372	330.07803	227.73421	3.08068	0.1084535	0.21420218	2.7664328	21	10 29.9	20.2
117579 2005 EU_{35}	14.8	X	336.39938	239.19212	304.76529	3.87469	0.0945628	0.17798680	3.1299989	21	1 22.1	18.9
117580 2005 EW_{36}	14.7	X	119.24702	209.04874	177.92196	12.42912	0.1956387	0.23511580	2.5998493	21	1 30.1	18.4
117581 Devinschrader	16.3	X	268.52289	123.75799	348.55196	3.28508	0.1827394	0.27832880	2.3232572	21	10 24.3	18.6
117582 Kenjikawai	16.0	X	9.91875	65.69821	188.47002	10.24287	0.1281674	0.25672458	2.4518341	21	6 10.3	18.5
117583 2005 EN_{41}	15.9	X	267.17425	27.62539	155.66446	0.22347	0.1390998	0.22676289	2.6633080	21	—	—
117584 2005 EP_{41}	14.4	X	302.63182	3.13756	173.65321	14.07808	0.1075366	0.17087431	3.2162628	21	—	—
117585 2005 EH_{43}	17.0	X	103.81704	240.56171	10.96118	2.42769	0.1736151	0.26990134	2.3713702	21	11 1.6	20.7
117586 Twilatho	14.9	X	312.16777	287.21396	325.94943	8.07420	0.0928494	0.18465791	3.0541528	21	3 12.7	19.1
117587 2005 EG_{46}	15.8	X	279.94336	244.64818	170.91634	4.54796	0.0646438	0.21158397	2.7892078	21	9 3.6	19.3
117588 2005 EY_{46}	16.3	X	131.34848	1.73808	246.21565	3.35240	0.1240681	0.27603964	2.3360838	21	11 22.5	19.5
117589 2005 EL_{48}	16.5	X	336.04871	120.42302	165.21873	6.08401	0.1224636	0.25599211	2.4565088	21	5 24.3	19.2
117590 2005 EX_{48}	16.3	X	71.00778	194.62967	258.54946	2.33075	0.1534366	0.24450758	2.5328404	21	2 8.4	18.8
117591 2005 EL_{50}	15.8	X	245.03250	110.79688	357.76336	9.01595	0.1861256	0.21417863	2.7666356	21	9 12.2	20.0
117592 2005 ES_{51}	16.2	X	175.08865	66.64197	192.15172	1.90977	0.1939898	0.28282431	2.2985726	21	—	—
117593 2005 EC_{52}	14.6	X	327.21431	51.90005	120.92819	6.36748	0.1100651	0.17390043	3.1788420	21	—	—
117594 2005 EW_{53}	17.0	X	54.65898	87.86823	20.27647	1.90257	0.1330200	0.24261129	2.5460214	21	1 30.9	19.5
117595 Jemmadavidson	15.1	X	101.40751	34.35098	336.56708	16.21014	0.2163677	0.17607433	3.1526228	21	1 9.4	19.6
117596 Richardkuhns	15.7	X	244.65939	304.09145	165.42232	4.65065	0.0217726	0.21221514	2.7836746	21	10 5.4	19.4
117597 2005 ED_{65}	16.5	X	97.49450	154.15533	6.05986	6.81796	0.0632500	0.25694505	2.4504314	21	6 8.1	19.7
117598 2005 EA_{69}	14.7	X	22.95030	246.38003	211.74722	4.39463	0.1346592	0.17328525	3.1863611	21	—	—
117599 2005 EL_{69}	16.2	X	57.38179	17.88210	228.11310	1.97716	0.1538970	0.25976560	2.4326612	21	8 27.4	19.0
117600 2005 EE_{71}	16.2	X	174.58818	140.56653	200.25784	3.20858	0.1039272	0.23852507	2.5750166	21	1 23.6	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117601 2005 EH_{72}	16.1	X	224.81217	33.44302	44.24381	7.49952	0.0817362	0.26688120	2.3892269	21	7 26.0	19.4
117602 2005 EF_{76}	15.1	X	274.86804	125.47790	178.01701	11.56272	0.1047643	0.18701371	3.0284501	21	3 30.6	19.4
117603 2005 ER_{76}	16.1	X	242.55239	331.26357	305.92422	1.92737	0.0958281	0.23771171	2.5808871	21	1 15.9	20.1
117604 2005 EN_{78}	16.2	X	165.67939	134.44986	98.93264	5.02364	0.0944822	0.27836612	2.3230495	21	12 10.7	19.5
117605 2005 EF_{86}	16.0	X	159.77485	141.87613	129.56009	5.35228	0.1502261	0.28194686	2.3033391	21	—	—
117606 2005 ES_{89}	16.6	X	219.54966	4.71752	198.34351	2.62771	0.0698138	0.28479385	2.2879629	21	—	—
117607 2005 EZ_{89}	14.7	X	168.47320	221.33631	144.51155	11.78379	0.2844529	0.24297830	2.5434569	21	3 2.7	19.1
117608 2005 EE_{90}	15.1	X	281.17580	96.46417	174.60239	10.19080	0.0792524	0.18198527	3.0839825	21	2 28.4	19.5
117609 2005 EP_{90}	16.5	X	9.77680	73.49729	182.59391	3.53940	0.0900624	0.25701878	2.4499627	21	6 11.9	19.1
117610 Keithmahoney	15.1	X	194.33615	100.35023	209.63981	1.06237	0.1141662	0.17649283	3.1476372	21	1 17.6	19.9
117611 2005 EB_{92}	16.9	X	220.39306	187.14838	44.09718	4.68557	0.1808184	0.28458664	2.2890734	21	—	—
117612 2005 EW_{92}	17.0	X	124.50469	155.80589	12.40548	3.48166	0.1736528	0.26138299	2.4226156	21	8 7.5	20.6
117613 2005 EA_{93}	15.3	X	46.24563	301.34128	175.95010	13.38464	0.2732760	0.18322138	3.0700960	21	2 23.9	18.3
117614 Hannahmclain	16.0	X	222.28789	210.91940	158.05373	5.48662	0.0272584	0.19386584	2.9566632	21	4 28.6	20.2
117615 2005 EY_{94}	15.9	X	11.96756	237.23168	34.74405	7.73781	0.1255163	0.25886589	2.4382945	21	7 14.0	18.4
117616 2005 EX_{95}	14.9	X	8.17797	311.42757	186.41768	31.88719	0.2610459	0.23477163	2.6023896	21	—	—
117617 2005 EJ_{96}	15.5	X	303.08752	59.73701	170.96715	15.27884	0.0531780	0.24464270	2.5319078	21	1 27.3	19.1
117618 2005 EN_{96}	14.8	X	358.43981	252.51626	288.58306	9.09333	0.0992825	0.18455992	3.0552338	21	2 13.9	18.8
117619 2005 ES_{98}	16.2	X	284.88487	339.96283	88.16647	1.84755	0.0489533	0.21393661	2.7687217	21	10 1.1	19.8
117620 2005 EE_{100}	14.3	X	10.44155	62.63085	23.62369	12.73419	0.1809530	0.17215106	3.2003410	21	—	—
117621 2005 EU_{100}	15.5	X	228.11856	329.94679	139.56962	10.10292	0.1103288	0.20910429	2.8112152	21	9 3.8	19.6
117622 2005 EK_{101}	15.7	X	140.87626	142.31416	209.19969	2.28999	0.0762598	0.23155912	2.6264036	21	—	—
117623 2005 ER_{115}	14.8	X	21.25785	356.28656	183.70247	14.89629	0.1711598	0.18249022	3.0782908	21	3 24.3	18.1
117624 2005 EX_{117}	15.5	X	269.54867	220.75462	298.18301	12.15091	0.1889640	0.22617619	2.6679117	21	12 19.0	18.8
117625 2005 EN_{118}	14.8	X	15.93364	208.66197	302.62308	9.17196	0.0976871	0.18111588	3.0938437	21	2 5.7	18.5
117626 2005 EO_{118}	16.4	X	28.98969	354.98842	261.68960	5.88734	0.1919375	0.25741222	2.4474657	21	7 29.5	18.6
117627 2005 EW_{118}	16.1	X	301.17249	66.99380	189.82876	14.88638	0.0848728	0.24435766	2.5338763	21	2 22.3	19.7
117628 2005 EH_{119}	14.9	X	257.06835	309.61936	353.01856	9.12370	0.0487765	0.18289503	3.0737470	21	3 15.3	19.4
117629 2005 ET_{121}	16.5	X	66.66108	94.37365	177.74931	6.73837	0.1918613	0.26744028	2.3858960	21	10 23.9	19.7
117630 2005 EE_{124}	14.8	X	45.54165	326.53094	157.95021	10.34526	0.0892237	0.18007011	3.1058105	21	2 17.6	18.6
117631 2005 EM_{124}	16.8	X	243.28783	99.68991	31.90834	2.76151	0.1593180	0.27618728	2.3352512	21	10 19.9	19.8
117632 2005 ES_{126}	14.9	X	207.80374	137.62986	191.41190	12.45180	0.0531429	0.17717536	3.1395483	21	2 18.8	19.7
117633 2005 EM_{127}	15.9	X	50.05430	102.39723	123.35365	3.08587	0.0075380	0.20276095	2.8695459	21	6 26.4	19.7
117634 2005 EJ_{128}	16.2	X	43.81028	338.09690	317.21052	3.63004	0.1731769	0.26709792	2.3879343	21	10 19.5	19.1
117635 2005 EQ_{129}	16.2	X	313.72545	131.32186	151.57679	7.09271	0.1439033	0.25588629	2.4571860	21	4 10.4	19.1
117636 2005 ED_{130}	15.8	X	258.64080	145.45883	197.92268	5.57952	0.1391578	0.25312121	2.4750484	21	4 21.1	19.3
117637 2005 EJ_{131}	15.3	X	224.69283	55.38890	90.62561	9.76108	0.0846673	0.21765222	2.7371209	21	10 23.2	19.3
117638 2005 EN_{132}	16.9	X	12.13341	318.80276	301.14652	1.86667	0.1648961	0.25571128	2.4583071	21	6 25.2	18.7
117639 2005 EE_{133}	14.7	X	2.19611	71.97741	112.79518	16.75156	0.0415175	0.18489949	3.0514921	21	3 8.3	19.0
117640 Millsellie	16.7	X	238.68673	306.47146	24.27064	5.42939	0.1536432	0.30286172	2.1960377	21	3 10.3	19.9
117641 2005 EQ_{137}	15.7	X	285.53966	159.19331	34.22518	5.34853	0.1369585	0.22943861	2.6425611	21	—	—
117642 2005 EB_{138}	15.9	X	250.74507	130.64290	46.46421	3.34046	0.1174365	0.22137756	2.7063273	21	12 24.8	19.3
117643 2005 ED_{138}	14.9	X	235.96648	193.33314	21.12541	14.61291	0.0544973	0.22696166	2.6617528	21	—	—
117644 2005 EC_{139}	16.3	X	199.72219	240.54083	25.89595	5.53836	0.1364830	0.28506741	2.2864989	21	—	—
117645 2005 ER_{139}	15.0	X	240.59498	163.61666	82.84335	2.61007	0.2367175	0.16600412	3.2788645	21	—	—
117646 2005 EW_{139}	15.3	X	62.27274	159.35996	108.16786	3.01138	0.0730628	0.20255362	2.8715037	21	9 17.3	19.1
117647 2005 ED_{140}	15.7	X	148.79509	182.91059	121.99192	12.18527	0.0726955	0.22483087	2.6785439	21	—	—
117648 2005 EF_{147}	16.1	X	155.64389	331.74289	199.54363	9.14745	0.1550315	0.26499702	2.4005387	21	9 6.6	19.9
117649 2005 EG_{147}	16.9	X	198.25856	152.25553	33.77126	2.23425	0.1023458	0.27448966	2.3448698	21	11 13.9	20.0
117650 2005 EO_{151}	16.8	X	56.90941	85.82126	164.04415	6.47175	0.1130220	0.25977147	2.4326245	21	8 25.8	19.5
117651 2005 EC_{153}	16.5	X	141.84544	166.46770	100.26669	1.77306	0.2283817	0.27961646	2.3161192	21	12 25.3	20.3
117652 Joséaponte	16.1	X	195.72770	327.89587	21.23766	8.18062	0.0676038	0.23994780	2.5648278	21	2 27.4	19.8
117653 2005 EG_{168}	15.2	X	149.23946	128.26007	217.93614	0.74021	0.1721242	0.17275481	3.1928802	21	1 22.1	20.2
117654 2005 EA_{172}	16.7	X	154.48929	350.76193	244.85174	1.87112	0.1244754	0.27520564	2.3408010	21	11 29.9	20.2
117655 2005 EG_{182}	15.2	X	189.94247	70.24937	64.90145	2.91960	0.0107402	0.20472782	2.8511373	21	8 30.9	19.2
117656 2005 EJ_{187}	15.5	X	131.01821	213.68733	232.51494	1.37527	0.1228571	0.18759336	3.0222084	21	4 25.7	20.1
117657 Jamieelsila	16.5	X	64.53674	145.44708	226.36548	1.15130	0.1908743	0.28239381	2.3009081	21	—	—
117658 2005 ER_{187}	16.6	X	127.85744	1.16630	195.40356	3.55839	0.1360595	0.26396379	2.4067990	21	9 12.6	20.3
117659 2005 EB_{189}	14.4	X	343.13210	227.23625	282.73698	14.64191	0.0886458	0.17564330	3.1577785	21	—	—
117660 2005 ED_{197}	17.2	X	314.35508	59.31336	193.49404	5.16470	0.1898379	0.30311534	2.1948126	21	2 9.3	20.0
117661 2005 EH_{198}	15.2	X	221.20085	106.98469	198.58449	10.42636	0.0153941	0.17655491	3.1468993	21	2 6.5	19.8
117662 2005 EU_{198}	16.8	X	35.38187	333.34614	308.98012	1.25760	0.2036561	0.25908061	2.4369472	21	9 23.1	19.2
117663 2005 EK_{199}	15.2	X	187.19785	356.60550	152.72192	10.26763	0.2024838	0.21333428	2.7739308	21	9 6.8	19.8
117664 2005 EF_{200}	15.2	X	14.94830	100.54196	194.11201	8.82823	0.1391854	0.19920157	2.9036274	21	8 16.6	18.6
117665 2005 EM_{201}	15.2	X	24.22660	87.23259	47.04983	13.54513	0.1357689	0.24252479	2.5466267	21	1 12.4	18.1
117666 2005 ER_{201}	14.6	X	336.02639	120.54360	27.28628	24.51900	0.0778740	0.17541345	3.1605363	21	—	—
117667 2005 EC_{205}	14.7	X	114.50544	56.43826	50.07567	4.87841	0.1365608	0.12690676	3.9217467	21	5 8.6	20.4
117668 2005 EN_{207}	15.4	X	196.24412	152.96731	18.42744	13.70218	0.1441890	0.21591569	2.7517771	21	10 13.7	19.5
117669 2005 ER_{207}	16.0	X	211.50095	200.62459	93.89235	1.03719	0.1002470	0.23522851	2.5990188	21	1 6.0	19.7
117670 2005 EG_{210}	17.0	X	106.19983	305.00461	334.77510	1.84576	0.1889155	0.27328758	2.3517408	21	12 10.4	20.8
117671 2005 ES_{211}	16.1	X	181.67355	190.43258	160.81171	5.81350	0.1966598	0.24366261	2.5386926	21	2 17.6	20.2
117672 2005 EV_{211}	15.1	X	109.75337	359.24225	120.38983	11.21981	0.0093714	0.19070499	2.9892438	21	5 2.6	19.5
117673 2005 EB_{214}	15.9	X	149.29383	284.37095	314.68133	4.63042	0.1412775	0.27486508	2.3427342	21	11 27.8	19.5
117674 2005 EE_{214}	16.7	X	244.98774	131.63069	353.49390	2.24589	0.1520852	0.27536509	2.3398973	21	10 13.5	19.4
117675 2005 EK_{214}	16.0	X	104.60647	180.28502	75.54829	4.24025	0.0330402	0.21397767	2.7683675	21	10 21.3	19.9
117676 2005 EZ_{219}	15.3	X	277.70308	245.52854	307.04239	12.27798	0.1151131	0.23005589	2.6378321	21	—	—
117677 2005 EL_{221}	15.3	X	218.44904	131.47219	218.26748	3.23759	0.0419047	0.18315313	3.0708585	21	3 28.7	19.7
117678 2005 EX_{222}	14.6	X	99.85183	144.29120	91.93935	16.17786	0.0970931	0.20590111	2.8402959	21	10 4.6	19.1
117679 2005 EF_{223}	15.7	X	240.93538	116.00009	138.65450	5.03830	0.0687872	0.23126644	2.6286190	21	—	—
117680 2005 EW_{223}	17.1	X	200.56797	158.86177	317.77745	1.86340	0.1535809	0.26519542	2.3993414	21	8 12.5	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117681 2005 ES_{226}	14.6	X	185.01627	325.34373	3.32642	17.27155	0.0890306	0.17594195	3.1542041	21	2 5.2	19.7
117682 2005 EW_{227}	14.5	X	329.16681	0.18427	147.19455	16.54006	0.0764403	0.17057899	3.2199739	21	—	—
117683 2005 ER_{233}	15.6	X	157.39101	249.32908	114.03589	10.48340	0.0723056	0.23947117	2.5682299	21	1 31.0	19.1
117684 2005 EL_{246}	17.2	X	162.03988	232.65133	9.11815	2.55772	0.1896502	0.27677059	2.3319689	21	12 12.1	20.8
117685 2005 ED_{247}	16.4	X	54.68832	278.27702	18.52385	2.21612	0.1816165	0.26709757	2.3879364	21	11 7.8	19.5
117686 2005 EU_{251}	14.7	X	146.63689	174.60789	104.47082	12.64912	0.2028349	0.21752807	2.7381623	21	—	—
117687 2005 EX_{259}	16.6	X	131.71230	21.84164	229.74581	2.00273	0.1535594	0.27174383	2.3606390	21	11 27.5	20.2
117688 2005 EX_{268}	15.9	X	68.35352	219.11184	52.55318	2.80188	0.0255382	0.20461386	2.8521959	21	9 23.5	19.7
117689 2005 EY_{268}	15.7	X	39.96212	286.84654	32.35947	7.18464	0.1199439	0.26701744	2.3884141	21	11 8.4	18.6
117690 2005 EK_{270}	16.9	X	176.44961	60.37173	59.16043	2.13562	0.1343799	0.26191119	2.4193573	21	7 23.9	20.7
117691 2005 ES_{276}	16.4	X	346.64937	349.26000	175.21270	0.51859	0.0704080	0.23549017	2.5970932	21	—	—
117692 2005 ED_{277}	15.8	X	145.80827	335.04997	47.04788	22.72587	0.0698298	0.35990887	1.9573764	21	1 18.9	18.4
117693 2005 EF_{279}	16.4	X	216.19616	63.25299	165.97690	6.81275	0.0689337	0.28340467	2.2954335	21	—	—
117694 2005 ED_{282}	15.9	X	144.60204	275.94326	24.05315	22.93404	0.2107421	0.27993677	2.3143520	21	—	—
117695 2005 EE_{282}	14.9	X	111.79240	3.50637	39.53295	11.96976	0.0148295	0.17327178	3.1865262	21	2 2.7	19.6
117696 2005 EU_{282}	14.3	X	315.47744	169.17915	44.75526	24.28818	0.1840693	0.17570437	3.1570467	21	1 24.8	19.2
117697 2005 EA_{287}	15.4	X	94.45820	185.74383	41.91526	9.76034	0.0488328	0.20221140	2.8747425	21	9 6.9	19.5
117698 2005 ED_{290}	16.4	X	184.66833	126.09279	166.55002	3.17201	0.0758230	0.22698640	2.6615593	21	—	—
117699 2005 EK_{290}	15.2	X	180.09802	0.07552	280.09738	11.58371	0.1641608	0.22381133	2.6866721	21	—	—
117700 2005 EZ_{292}	16.2	X	21.10064	98.63368	69.45610	4.13377	0.1654351	0.24249710	2.5468206	21	2 22.9	18.6
117701 2005 EC_{293}	16.1	X	47.77203	145.52972	78.23707	8.55726	0.0666788	0.25434474	2.4671045	21	6 26.9	18.8
117702 2005 EO_{295}	15.9	X	332.55113	290.25533	100.45272	1.76529	0.0780056	0.21352631	2.7722674	21	10 19.3	19.2
117703 2005 EK_{300}	16.5	X	219.25894	236.84779	210.16943	1.27830	0.0324933	0.20516305	2.8471037	21	8 1.3	20.5
117704 2005 EN_{317}	16.6	X	338.01259	186.80302	53.46961	2.64178	0.0867436	0.24652594	2.5189969	21	3 27.6	19.4
117705 2005 FS_{2}	15.3	X	127.20195	199.27755	65.53403	12.15784	0.1818308	0.21231045	2.7828415	21	12 2.0	19.7
117706 2005 FU_{2}	16.0	X	179.37324	258.60101	163.88115	23.50700	0.1412978	0.37362144	1.9091858	21	5 11.0	19.1
117707 2005 FJ_{5}	15.1	X	1.45520	264.60344	180.50244	21.77745	0.0582484	0.22723218	2.6596398	21	—	—
117708 2005 FP_{5}	14.9	X	304.89651	166.52252	157.54577	9.94240	0.0728925	0.19355464	2.9598316	21	6 8.1	19.0
117709 2005 FU_{6}	14.4	X	239.90043	236.65451	48.40396	16.55470	0.1192433	0.17515154	3.1636863	21	2 6.1	19.7
117710 2005 FC_{7}	14.6	X	261.28432	161.26598	170.24885	12.91229	0.0944338	0.18837626	3.0138289	21	4 21.8	19.1
117711 Degenfeld	16.5	X	199.15143	149.38240	94.40815	5.74008	0.0623870	0.22497686	2.6773849	21	—	—
117712 Podmaniczky	16.2	X	291.90538	209.16244	156.43432	3.45433	0.1934183	0.26075892	2.4264793	21	6 24.0	19.2
117713 Kövesligethy	17.0	X	189.75960	163.55348	49.65971	2.73203	0.1550618	0.27603443	2.3361132	21	12 4.8	20.3
117714 Kiskartal	15.4	X	340.32283	42.77510	195.30226	9.63358	0.0602751	0.18346214	3.0674094	21	4 8.0	19.3
117715 Carlkirby	14.6	X	95.04945	265.76556	159.52439	10.33728	0.0881182	0.17827342	3.1266431	21	2 12.9	19.0
117716 2005 GN_{1}	14.4	X	170.34673	261.41082	47.67445	30.74875	0.3838845	0.22049859	2.7135146	21	1 2.9	19.9
117717 2005 GD_{5}	15.1	X	91.95557	137.24136	183.10399	11.62446	0.2216371	0.21243446	2.7817583	21	—	—
117718 2005 GZ_{5}	16.9	X	185.51842	119.27907	100.22187	3.23529	0.1949828	0.27591434	2.3367910	21	12 5.8	20.4
117719 2005 GL_{7}	16.0	X	264.95821	108.40127	135.12957	6.90687	0.0918503	0.29280297	2.2460482	21	—	—
117720 2005 GB_{8}	16.2	X	358.73491	282.00060	196.21843	3.95005	0.1746510	0.23169211	2.6253984	21	—	—
117721 2005 GE_{8}	16.1	X	288.47201	302.52942	3.55448	3.15185	0.1495578	0.30550606	2.1833473	21	3 29.4	18.7
117722 2005 GA_{11}	16.5	X	188.06486	138.88111	103.55186	7.35518	0.0858538	0.28100346	2.3084914	21	—	—
117723 2005 GN_{11}	16.6	X	342.79381	38.43554	138.26185	6.76911	0.0844643	0.29761089	2.2217925	21	—	—
117724 2005 GW_{11}	16.2	X	129.46336	132.61840	96.92484	7.28984	0.0457188	0.26913251	2.3758842	21	10 27.6	19.4
117725 2005 GU_{12}	16.7	X	246.82927	124.41120	46.70272	2.64385	0.0729906	0.27984443	2.3148611	21	—	—
117726 2005 GC_{13}	15.7	X	52.10351	322.05332	168.44525	13.92154	0.1098338	0.24135230	2.5548677	21	2 23.9	18.6
117727 2005 GJ_{13}	15.5	X	240.12210	222.90466	91.89564	14.18353	0.1299035	0.23800093	2.5787958	21	3 4.7	19.7
117728 2005 GT_{13}	15.3	X	162.52796	206.47618	58.41908	10.03860	0.0976681	0.21841124	2.7307759	21	—	—
117729 2005 GZ_{13}	15.6	X	252.23627	147.08610	155.23660	14.53982	0.1908100	0.23651827	2.5895617	21	2 19.0	19.8
117730 2005 GV_{19}	15.1	X	270.78770	290.78703	27.14507	9.30266	0.0723990	0.18441131	3.0568750	21	4 16.3	19.2
117731 2005 GY_{19}	15.2	X	251.38508	324.99553	203.68280	12.43333	0.0820966	0.21888204	2.7268587	21	12 19.2	19.0
117732 2005 GA_{20}	16.1	X	348.47043	309.06705	201.57788	4.37301	0.1925906	0.23390671	2.6088009	21	—	—
117733 2005 GF_{20}	14.9	X	13.43943	102.65701	40.74321	14.39445	0.1033939	0.23557202	2.5964915	21	1 11.3	18.2
117734 2005 GG_{20}	17.1	X	98.30709	40.66834	78.29416	2.26332	0.0908276	0.30737866	2.1744708	21	4 12.6	19.3
117735 2005 GQ_{20}	14.8	X	227.71478	271.59080	47.96901	5.02952	0.3284714	0.23094195	2.6310807	21	2 18.9	19.7
117736 Sherrod	15.3	X	270.73237	130.75600	36.13341	16.60237	0.0968254	0.22153581	2.7050383	21	—	—
117737 2005 GX_{22}	16.0	X	215.42819	180.31703	84.88116	7.57785	0.0916266	0.28913480	2.2650049	21	—	—
117738 2005 GS_{26}	15.9	X	303.40984	39.17517	155.47244	5.42127	0.1248393	0.23123260	2.6288754	21	—	—
117739 2005 GD_{29}	15.6	X	219.08267	293.53686	335.57431	2.59524	0.1451888	0.22761740	2.6566382	21	—	—
117740 2005 GH_{29}	16.8	X	344.18038	281.69159	222.98362	6.65042	0.0674834	0.29219707	2.2491520	21	—	—
117741 2005 GD_{31}	15.1	X	48.63996	10.85787	35.12273	13.57160	0.1541721	0.22836229	2.6508579	21	—	—
117742 2005 GW_{31}	15.8	X	348.07471	140.04507	195.05546	6.17434	0.1403912	0.26279032	2.4139586	21	8 31.6	18.1
117743 2005 GU_{32}	16.7	X	193.21812	24.43630	166.99725	2.45437	0.1703127	0.27381684	2.3487094	21	11 10.2	20.3
117744 2005 GL_{33}	16.7	X	297.03936	326.94422	340.29506	3.60763	0.1742054	0.30734564	2.1746265	21	4 6.0	19.2
117745 2005 GP_{37}	15.5	X	52.29446	44.52772	229.85181	14.76581	0.1919014	0.26020531	2.4299198	21	10 2.3	18.8
117746 2005 GS_{37}	16.1	X	247.36524	312.92485	316.16372	5.38724	0.1404024	0.29284883	2.2458137	21	—	—
117747 2005 GW_{43}	16.6	X	207.19098	266.45974	290.04393	2.84303	0.1163942	0.27714033	2.3298944	21	12 6.8	19.7
117748 2005 GC_{44}	15.3	X	200.32184	258.37983	255.47307	5.88635	0.0758813	0.20917989	2.8105378	21	9 27.9	19.6
117749 2005 GG_{46}	16.3	X	327.30110	196.03149	313.50007	1.00649	0.0264863	0.23062842	2.6334647	21	—	—
117750 2005 GF_{48}	16.9	X	167.24700	336.98409	140.96548	1.67342	0.1432422	0.25933440	2.4353570	21	7 11.9	20.7
117751 2005 GL_{49}	15.9	X	169.39512	341.21433	40.39997	6.26997	0.2854074	0.23966170	2.5668685	21	3 23.3	20.4
117752 2005 GS_{50}	14.9	X	233.92132	133.28083	137.08769	22.94568	0.0868489	0.17252938	3.1956609	21	1 11.1	20.0
117753 2005 GU_{53}	16.0	X	266.58186	224.19191	14.83020	5.85052	0.1899395	0.23240338	2.6200390	21	—	—
117754 2005 GA_{54}	15.5	X	297.48911	178.27123	24.43193	6.57106	0.1654092	0.23088205	2.6315357	21	—	—
117755 2005 GN_{58}	16.7	X	181.25257	108.21154	49.97315	3.39092	0.0597910	0.26618618	2.3933840	21	9 22.4	20.0
117756 2005 GR_{58}	16.3	X	345.24180	129.81320	95.16643	7.40797	0.0898265	0.30387795	2.1911390	21	3 9.5	18.6
117757 2005 GD_{59}	15.5	X	141.71494	187.19985	83.16613	10.03715	0.1100167	0.21453315	2.7635868	21	12 20.5	19.9
117758 2005 GK_{60}	15.3	X	330.80411	220.93780	71.63842	12.32182	0.0597948	0.19109757	2.9851485	21	6 3.8	19.2
117759 2005 GP_{60}	16.5	X	196.83658	305.41187	299.81848	4.75098	0.1236062	0.28304396	2.2973833	21	—	—
117760 2005 GS_{64}	14.9	X	71.02842	8.85046	115.49946	14.84485	0.0108019	0.18330260	3.0691890	21	3 22.9	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117761 2005 GK_{65}	15.6	X	45.79411	180.36154	100.01211	3.23577	0.0241176	0.20281959	2.8689928	21	9 4.9	19.4
117762 2005 GD_{69}	16.1	X	19.19570	342.48785	141.60247	4.46033	0.1285581	0.23538976	2.5978316	21	—	—
117763 2005 GP_{72}	16.2	X	73.49455	266.83431	42.87267	6.32268	0.1911857	0.27175788	2.3605577	21	12 16.8	19.7
117764 2005 GG_{73}	15.1	X	354.03458	25.29755	151.24619	12.21043	0.1667835	0.17774048	3.1328900	21	1 29.2	18.8
117765 2005 GO_{74}	16.7	X	112.78217	338.87370	224.65036	3.99814	0.0796679	0.26218869	2.4176499	21	8 29.8	20.1
117766 2005 GJ_{78}	15.2	X	188.04434	186.40545	140.89979	14.99245	0.2595015	0.22895933	2.6462477	21	1 29.8	19.8
117767 2005 GM_{78}	15.7	X	219.48124	204.29813	112.16885	14.59352	0.0466557	0.23635590	2.5907475	21	2 12.2	19.4
117768 2005 GK_{81}	17.0	X	70.58850	111.52732	146.71993	23.17134	0.0964357	0.38579079	1.8688229	21	10 17.6	19.5
117769 2005 GP_{86}	16.7	X	178.32608	37.05747	180.03141	2.26216	0.1686490	0.27398255	2.3477623	21	11 27.9	20.3
117770 2005 GZ_{88}	16.9	X	151.07523	23.16908	208.55957	7.02287	0.1246951	0.27220034	2.3579989	21	11 21.9	20.5
117771 2005 GD_{93}	15.2	X	172.86642	243.29271	351.84726	13.49276	0.0627166	0.21547191	2.7555541	21	12 9.8	19.6
117772 2005 GZ_{95}	16.1	X	287.21144	308.99579	310.03954	5.87604	0.1721602	0.29745151	2.2225861	21	1 23.1	19.3
117773 2005 GJ_{97}	16.8	X	172.50780	213.06559	143.33137	24.46837	0.0717400	0.35640246	1.9701937	21	1 15.9	19.3
117774 2005 GV_{99}	15.9	X	223.07520	17.53301	211.72008	3.57843	0.0591591	0.22065303	2.7122484	21	—	—
117775 2005 GX_{101}	15.6	X	314.24117	294.09762	44.58105	5.54604	0.2101935	0.25546829	2.4598656	21	6 17.9	18.1
117776 2005 GY_{102}	17.2	X	144.74066	125.22762	12.94476	2.57907	0.1308609	0.25688061	2.4508412	21	7 15.8	20.8
117777 2005 GW_{110}	15.3	X	225.47490	270.59556	346.34008	12.77839	0.2014465	0.22765911	2.6563137	21	—	—
117778 2005 GO_{112}	14.9	X	300.58854	315.02265	243.96619	6.46700	0.0697506	0.17072313	3.2181613	21	—	—
117779 2005 GX_{112}	14.7	X	347.13966	37.13881	145.38422	18.50681	0.1035692	0.17603757	3.1530617	21	2 2.9	18.9
117780 2005 GY_{113}	15.7	X	328.72750	115.46415	128.61154	7.22298	0.1428395	0.24181028	2.5516408	21	3 12.3	18.7
117781 Jamesfisher	15.6	X	184.41829	21.90694	215.72180	4.54664	0.0588660	0.21750400	2.7383643	21	12 27.5	19.6
117782 2005 GL_{115}	14.9	X	228.71284	218.18038	88.10047	10.10889	0.0489062	0.17398250	3.1778422	21	2 21.2	19.7
117783 2005 GJ_{118}	15.1	X	202.84341	110.48713	180.10623	7.81642	0.0235865	0.17050299	3.2209307	21	1 2.4	19.9
117784 2005 GG_{119}	15.5	X	92.97346	191.66291	113.90933	2.85400	0.0648430	0.21432258	2.7653967	21	12 10.5	19.5
117785 2005 GJ_{121}	16.9	X	113.84567	238.50825	313.26236	0.49359	0.1111955	0.26018249	2.4300619	21	8 20.2	20.3
117786 2005 GN_{121}	16.5	X	245.60747	169.58883	59.31628	4.87322	0.0962346	0.28644172	2.2791795	21	—	—
117787 2005 GM_{123}	15.9	X	300.48451	112.15579	40.10015	2.15268	0.2314613	0.22608972	2.6685920	21	—	—
117788 2005 GU_{123}	14.1	X	282.84576	202.33977	100.70117	17.28521	0.2389145	0.17966123	3.1105210	21	3 30.8	19.2
117789 2005 GH_{127}	15.2	X	270.05486	206.44256	120.23432	11.12475	0.0674398	0.18535570	3.0464830	21	5 1.6	19.7
117790 2005 GO_{128}	14.9	X	268.94446	73.58902	156.20292	22.12322	0.1729823	0.16960675	3.2322675	21	—	—
117791 2005 GT_{128}	14.6	X	355.07939	24.60978	142.29983	28.62974	0.1431137	0.17767193	3.1336958	21	1 22.4	18.7
117792 2005 GP_{132}	16.6	X	23.67168	272.11255	72.85735	3.16832	0.1960912	0.26778781	2.3838313	21	12 3.6	19.0
117793 2005 GB_{135}	16.9	X	165.34359	173.09579	336.49398	0.64933	0.1259498	0.26195734	2.4190732	21	8 20.9	20.6
117794 2005 GZ_{138}	14.9	X	313.17394	176.55806	15.54085	5.74016	0.1207076	0.17126338	3.2113900	21	—	—
117795 2005 GJ_{140}	16.2	X	102.18960	131.68925	67.16898	8.66117	0.0785145	0.25786704	2.4445870	21	8 15.2	19.6
117796 2005 GY_{140}	15.3	X	358.28720	183.81956	346.79129	13.42735	0.1660123	0.23831785	2.5765091	21	1 16.8	18.3
117797 2005 GA_{141}	16.1	X	295.79906	20.70243	254.28735	5.43935	0.0797405	0.30090850	2.2055305	21	3 3.2	18.9
117798 2005 GK_{150}	15.4	X	103.80768	156.34746	198.20416	12.69574	0.1490149	0.21977625	2.7194571	21	—	—
117799 2005 GW_{151}	15.6	X	138.13248	87.26790	210.22374	4.33519	0.0981514	0.21828751	2.7318077	21	—	—
117800 2005 GD_{161}	15.5	X	169.08401	112.96893	153.41762	6.54208	0.1043228	0.21943488	2.7222768	21	—	—
117801 2005 GX_{166}	16.7	X	92.26922	98.24703	175.48333	1.42484	0.1602931	0.26618297	2.3934032	21	11 17.5	20.2
117802 2005 GG_{168}	17.0	X	135.68905	65.00173	136.25438	1.92781	0.1303252	0.26334357	2.4105764	21	9 27.9	20.6
117803 2005 GH_{168}	16.2	X	299.52744	189.76912	47.57123	6.84777	0.1333660	0.29529519	2.2333929	21	1 13.9	19.3
117804 2005 GK_{168}	16.8	X	166.84779	247.25077	229.45622	20.75335	0.0286782	0.37610174	1.9007828	21	7 2.0	19.2
117805 2005 GP_{170}	16.0	X	268.21088	279.13200	50.28027	6.33165	0.1848539	0.30459257	2.1877105	21	4 5.3	19.2
117806 2005 GB_{172}	15.8	X	298.54362	137.25044	130.32361	4.27707	0.0733238	0.24189602	2.5510378	21	3 11.6	19.1
117807 2005 GC_{175}	15.3	X	214.98214	317.42733	245.89282	4.18307	0.0542570	0.21778755	2.7359869	21	12 21.3	19.2
117808 2005 GM_{178}	15.5	X	209.16184	33.61590	145.21695	6.99605	0.0894155	0.21149862	2.7899581	21	11 11.8	19.7
117809 2005 GR_{178}	15.1	X	347.28823	304.99808	191.73766	12.79305	0.1503764	0.22876975	2.6477094	21	—	—
117810 2005 GS_{178}	15.3	X	112.38811	124.12919	159.50773	5.16733	0.0294362	0.21228110	2.7830980	21	12 2.9	19.2
117811 2005 GO_{180}	15.9	X	166.23656	153.24087	130.79934	2.70001	0.0329269	0.22396875	2.6854131	21	—	—
117812 2005 GH_{182}	14.7	X	189.38744	213.04250	90.87378	15.92733	0.2684294	0.22274658	2.6952270	21	1 5.6	19.5
117813 2005 HO_{3}	14.8	X	205.97776	102.69210	226.73090	10.36428	0.2062679	0.22917486	2.6445883	21	2 9.9	19.5
117814 2005 HG_{4}	15.4	X	144.69480	114.44059	173.29927	12.16114	0.1105584	0.21644509	2.7472882	21	—	—
117815 2005 HM_{5}	16.4	X	199.51997	54.34997	162.60466	3.29406	0.1130048	0.27625701	2.3348582	21	12 24.8	19.5
117816 2005 HB_{7}	15.7	X	333.54275	307.49570	238.64438	12.63422	0.1102523	0.23463452	2.6034033	21	1 3.4	19.2
117817 2005 JH_{1}	15.9	X	320.47307	153.58822	144.08325	5.00670	0.1756189	0.24473527	2.5312692	21	5 7.6	18.7
117818 2005 JS_{3}	14.9	X	299.84751	286.14853	3.13017	11.72059	0.2826780	0.24026780	2.5625499	21	3 12.4	18.6
117819 2005 JJ_{4}	16.2	X	242.36659	138.69233	73.07481	7.82669	0.0516883	0.28150640	2.3057411	21	—	—
117820 2005 JY_{4}	15.0	X	98.96425	353.92251	178.90296	9.57632	0.0072763	0.19014691	2.9950899	21	6 21.5	19.3
117821 2005 JD_{5}	15.9	X	94.17857	154.80577	111.70182	13.29805	0.1583498	0.26387750	2.4073236	21	11 14.3	19.7
117822 2005 JO_{5}	13.7	X	292.49678	72.95478	275.13382	24.83386	0.2242583	0.17633334	3.1495349	21	5 30.4	18.3
117823 2005 JY_{24}	16.0	X	193.34809	250.74802	216.14757	8.28574	0.0373004	0.25703415	2.4498650	21	7 25.2	19.4
117824 2005 JU_{27}	15.5	X	231.59498	135.58332	144.01381	17.73846	0.1253531	0.22932848	2.6434071	21	1 8.4	19.8
117825 2005 JU_{29}	15.2	X	298.80534	27.75373	206.93362	4.49516	0.2337131	0.23327257	2.6135266	21	1 7.9	19.2
117826 2005 JV_{31}	15.5	X	222.72610	321.00278	232.28119	10.73863	0.1557211	0.21743399	2.7389520	21	12 5.4	19.5
117827 2005 JL_{32}	16.5	X	349.79111	134.09535	53.09005	8.70569	0.1154181	0.29736037	2.2230402	21	1 15.2	19.0
117828 2005 JX_{32}	15.6	X	324.43393	75.52243	148.23550	2.02403	0.2039196	0.17562383	3.1580118	21	2 8.5	19.7
117829 2005 JE_{39}	15.6	X	326.11489	334.95674	48.76831	2.75204	0.0778331	0.20264849	2.8706074	21	9 28.4	19.1
117830 2005 JV_{40}	17.0	X	196.26755	79.78782	206.82780	2.56760	0.0956850	0.28550396	2.2841676	21	—	—
117831 2005 JM_{48}	15.3	X	228.01695	207.29288	147.13718	5.08310	0.2539044	0.23715685	2.5849110	21	4 1.5	19.8
117832 2005 JL_{55}	12.8	X	353.00050	210.00035	184.29607	9.18407	0.0678885	0.08530559	5.1107470	21	11 1.9	19.3
117833 2005 JO_{55}	15.6	X	70.78945	286.56320	10.55017	1.77423	0.0506711	0.20551136	2.8438858	21	10 31.2	19.6
117834 2005 JO_{60}	16.1	X	293.88732	142.04242	141.65679	5.08541	0.1606123	0.23890050	2.5723181	21	3 14.5	19.7
117835 2005 JR_{60}	16.0	X	262.11855	220.31610	87.05444	9.19353	0.1811223	0.23745888	2.5827187	21	3 11.7	20.1
117836 2005 JR_{61}	15.5	X	233.54973	290.61629	46.90184	12.78661	0.0037278	0.24067865	2.5596328	21	4 2.2	19.0
117837 2005 JY_{67}	15.1	X	258.35660	303.04875	243.29593	7.78011	0.0893431	0.21911520	2.7249239	21	—	—
117838 2005 JY_{68}	14.7	X	269.34111	199.38473	115.45678	19.06859	0.2014759	0.17745915	3.1362003	21	4 4.6	19.9
117839 2005 JD_{75}	16.6	X	32.05496	57.83748	233.54618	1.41310	0.1874555	0.25704976	2.4497659	21	9 27.6	19.1
117840 2005 JW_{80}	15.5	X	181.65049	119.28419	128.14136	26.34041	0.1700364	0.21499227	2.7596509	21	12 30.4	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117841 2005 JR_{98}	16.6	X	109.48051	103.33816	166.53242	10.25513	0.2078960	0.26617572	2.3934467	21	12 2.9	20.7
117842 2005 JR_{109}	16.3	X	289.05580	209.24729	60.08928	7.31923	0.1101818	0.29699093	2.2248834	21	2 18.1	19.3
117843 2005 JU_{123}	16.3	X	199.40637	162.49154	23.30064	6.68802	0.0613835	0.27044599	2.3681853	21	11 17.7	19.5
117844 2005 JR_{124}	15.1	X	286.63134	292.55231	211.23106	24.36038	0.1675270	0.21876404	2.7278392	21	12 24.1	18.7
117845 2005 JT_{126}	16.6	X	333.92974	268.06149	323.15727	3.44909	0.1104705	0.30031778	2.2084218	21	2 21.3	18.9
117846 2005 JU_{127}	16.2	X	297.73045	87.25022	114.04964	3.48013	0.0752333	0.22871625	2.6481223	21	—	—
117847 2005 JK_{139}	15.8	X	69.94074	314.00831	263.01050	11.78918	0.1672804	0.25384855	2.4703184	21	8 2.7	19.1
117848 2005 JJ_{146}	15.7	X	203.63963	212.12689	160.47164	14.58385	0.1061788	0.23698038	2.5861941	21	4 7.1	19.7
117849 2005 JV_{146}	16.1	X	256.38119	226.14374	144.31601	13.97374	0.2557268	0.24494621	2.5298158	21	5 16.5	20.4
117850 2005 JM_{150}	16.0	X	156.68892	161.94126	180.11038	6.09817	0.0930040	0.22632162	2.6667687	21	1 7.1	19.9
117851 2005 JE_{151}	12.5	X	34.80774	160.56404	182.74666	14.69020	0.0429024	0.08263200	5.2204009	21	10 26.3	19.3
117852 Constance	15.5	X	19.94169	355.72023	178.40292	11.41807	0.0497575	0.23637961	2.5905742	21	3 3.7	18.7
117853 2005 JH_{151}	16.3	X	247.00750	70.45990	179.83024	5.90458	0.1363298	0.28669714	2.2778256	21	—	—
117854 2005 JE_{156}	16.8	X	115.76183	15.32200	227.07664	6.41948	0.0859114	0.26514733	2.3996314	21	10 26.3	20.1
117855 2005 JO_{167}	15.3	X	211.65733	359.22907	228.27711	12.53409	0.1247204	0.21701749	2.7424553	21	—	—
117856 2005 KD_{5}	16.0	X	346.71265	146.11964	219.35965	3.92619	0.1097186	0.26209083	2.4182517	21	10 15.5	18.2
117857 2005 KQ_{6}	15.0	X	325.01717	101.10181	151.84390	16.31984	0.0485638	0.18042702	3.1017134	21	4 11.9	19.4
117858 2005 KQ_{9}	15.7	X	166.03900	156.39628	97.13664	16.36616	0.0691987	0.21333063	2.7739624	21	12 25.8	19.7
117859 2005 KV_{9}	16.3	X	202.74235	309.16783	251.70268	5.72750	0.0887932	0.27263741	2.3554782	21	12 10.0	19.5
117860 2005 LY	15.6	X	178.76695	79.05022	183.60019	13.67235	0.0426680	0.21742229	2.7390503	21	—	—
117861 2005 LB_{2}	15.8	X	267.00416	152.41989	91.33018	14.69974	0.1449655	0.22844472	2.6502202	21	—	—
117862 2005 LX_{12}	16.9	X	244.72443	68.91209	200.48594	6.43469	0.1506726	0.28875108	2.2670111	21	—	—
117863 2028 P–L	16.2	X	254.13592	337.46328	344.52922	1.98738	0.2095992	0.31826234	2.1246100	21	3 7.0	19.1
117864 2069 P–L	15.9	X	273.36737	167.90696	248.21328	2.61669	0.1711882	0.22436852	2.6822222	21	8 9.7	19.5
117865 2081 P–L	16.1	X	319.55490	74.02701	264.18282	3.18475	0.2568224	0.24087697	2.5582277	21	6 19.9	18.5
117866 2105 P–L	16.1	X	43.47771	354.77534	342.50197	7.24796	0.1685389	0.29297426	2.2451726	21	12 21.1	19.1
117867 2127 P–L	15.5	X	162.75406	30.74723	314.52149	2.53298	0.1685919	0.18456978	3.0551250	21	1 31.5	20.4
117868 2147 P–L	15.1	X	126.93343	45.62917	358.90170	9.41403	0.2595183	0.21758025	2.7377245	21	3 14.3	19.4
117869 2168 P–L	16.8	X	162.48218	45.29733	357.30147	5.32770	0.1577775	0.28417034	2.2913084	21	3 28.7	20.0
117870 2174 P–L	15.8	X	221.73085	311.39029	325.09852	5.25301	0.3388438	0.23479166	2.6022415	21	—	—
117871 2186 P–L	15.5	X	66.44935	244.24266	358.53282	12.96344	0.1279547	0.24086709	2.5582976	21	9 3.3	18.8
117872 2210 P–L	16.7	X	282.83261	156.07529	257.11443	1.25467	0.2011890	0.27347899	2.3506433	21	8 17.8	19.2
117873 2212 P–L	16.8	X	106.13938	208.25372	193.88317	3.08995	0.1644620	0.29772887	2.2212056	21	1 14.0	19.0
117874 Picodelteide	15.9	X	67.51823	55.29966	13.24264	20.77348	0.1078619	0.36207220	1.9495719	21	—	—
117875 2539 P–L	14.8	X	3.19795	95.72601	357.81929	5.19706	0.1513946	0.18167250	3.0875210	21	—	—
117876 2586 P–L	16.6	X	322.06621	234.12022	165.85195	2.58013	0.1637982	0.27502051	2.3418513	21	10 23.5	18.2
117877 2593 P–L	16.6	X	86.58683	307.40029	17.41907	0.19875	0.2550108	0.27848252	2.3224021	21	—	—
117878 2602 P–L	14.9	X	13.92217	14.20059	61.82088	2.82522	0.1950192	0.18110945	3.0939169	21	—	—
117879 2621 P–L	16.4	X	258.39665	304.05500	18.61955	7.61881	0.1385751	0.28584316	2.2823602	21	3 22.5	19.6
117880 2651 P–L	15.9	X	72.05732	0.45650	355.50319	4.88491	0.2218678	0.24627975	2.5206753	21	—	—
117881 2675 P–L	15.7	X	165.07396	15.17615	14.71288	4.84754	0.1508466	0.21910693	2.7249925	21	3 22.5	20.0
117882 2680 P–L	15.9	X	299.69287	10.06808	22.58687	2.40944	0.1648302	0.22494362	2.6776487	21	8 20.2	18.9
117883 2682 P–L	15.1	X	123.95666	209.69452	152.49467	1.74150	0.1553721	0.16761764	3.2577887	21	1 14.7	20.0
117884 2684 P–L	16.0	X	201.74953	237.58106	182.97488	6.53120	0.0591600	0.23839480	2.5759546	21	6 4.9	19.8
117885 2692 P–L	14.7	X	199.67603	285.18012	168.23138	6.00409	0.1324333	0.17366017	3.1817733	21	7 11.3	19.8
117886 2694 P–L	16.5	X	54.86551	7.24313	16.48515	4.24681	0.1933101	0.26242409	2.4162039	21	—	—
117887 2721 P–L	15.7	X	192.45560	297.88502	59.69083	2.95690	0.0789633	0.20289410	2.8682903	21	3 9.7	20.0
117888 2735 P–L	16.8	X	318.47201	329.13190	11.27481	2.69755	0.2109752	0.25672719	2.4518175	21	6 29.5	19.1
117889 2745 P–L	16.5	X	168.04545	127.50972	187.59900	4.77018	0.1974675	0.28152999	2.3056123	21	—	—
117890 2748 P–L	15.7	X	254.11244	232.66611	170.24715	7.31567	0.1868927	0.23955812	2.5676084	21	6 28.2	19.6
117891 2750 P–L	16.7	X	151.21726	176.82696	158.75279	4.02897	0.1478158	0.29758456	2.2219236	21	—	—
117892 2753 P–L	15.0	X	300.82736	65.64137	177.52049	14.27205	0.1162979	0.23552346	2.5968485	21	2 1.9	18.8
117893 2781 P–L	15.7	X	79.24637	320.34736	28.59794	7.08838	0.2308159	0.27878041	2.3207475	21	—	—
117894 2791 P–L	15.4	X	87.63000	337.50659	21.05366	12.36749	0.1891265	0.24686230	2.5167082	21	—	—
117895 2802 P–L	16.1	X	22.79538	46.97129	15.95209	13.22240	0.2518826	0.22968960	2.6406357	21	—	—
117896 2815 P–L	16.4	X	38.09691	39.83823	357.02959	2.37264	0.1589836	0.26212792	2.4180236	21	—	—
117897 2845 P–L	15.6	X	13.16529	3.94436	29.84094	2.79079	0.1291476	0.17954969	3.1118090	21	12 20.6	19.6
117898 3029 P–L	16.6	X	201.23060	113.53900	252.72098	5.83083	0.3302786	0.28481132	2.2878693	21	3 19.6	20.9
117899 3048 P–L	14.7	X	328.44241	128.87594	214.79141	15.59749	0.2380027	0.17745451	3.1362549	21	7 15.8	18.4
117900 3053 P–L	15.8	X	69.36548	48.07755	266.60361	7.65319	0.1697074	0.29339864	2.2430071	21	12 20.8	19.0
117901 3055 P–L	14.9	X	103.09039	14.46346	356.38920	32.86813	0.1492080	0.23162266	2.6259232	21	—	—
117902 3058 P–L	15.0	X	116.86977	325.07803	325.66678	8.34986	0.2668211	0.21451043	2.7637819	21	12 27.8	20.0
117903 3115 P–L	15.4	X	345.89195	68.51089	281.14114	7.36745	0.1885883	0.22598091	2.6694485	21	9 11.3	18.1
117904 3504 P–L	14.9	X	351.21486	39.85978	330.72071	11.50247	0.1966057	0.22670569	2.6637559	21	10 24.5	17.6
117905 3543 P–L	15.1	X	325.82731	150.25503	238.16936	11.90468	0.1683478	0.22591582	2.6699612	21	9 26.5	18.0
117906 4046 P–L	16.3	X	302.82277	41.94548	350.57974	5.02045	0.2337485	0.27382743	2.3486488	21	8 18.2	18.3
117907 4076 P–L	15.1	X	63.44514	358.47357	350.09081	11.69390	0.0666405	0.19692806	2.9259326	21	12 26.4	19.4
117908 4104 P–L	15.9	X	52.54163	172.28830	208.98494	6.10147	0.1222139	0.27861590	2.3216609	21	—	—
117909 4123 P–L	16.0	X	341.57806	146.91320	192.02688	12.22976	0.2875597	0.24212189	2.5494510	21	8 11.9	17.8
117910 4130 P–L	14.7	X	276.41571	109.69366	188.56200	14.11846	0.1605502	0.23712135	2.5851690	21	3 10.7	18.6
117911 4138 P–L	16.5	X	336.49251	131.05915	354.10052	6.46802	0.0944495	0.29580189	2.2308417	21	—	—
117912 4171 P–L	16.6	X	234.57446	101.32409	246.56887	3.33040	0.1610721	0.28580777	2.2825486	21	3 26.5	20.2
117913 4211 P–L	16.1	X	201.33785	139.76784	195.75355	3.95334	0.1976659	0.23508847	2.6000508	21	2 15.4	20.4
117914 4225 P–L	15.2	X	22.17500	73.79011	344.11479	4.96522	0.1756893	0.18074596	3.0980635	21	—	—
117915 4227 P–L	17.2	X	194.22715	20.18357	306.97781	2.05152	0.1778652	0.29941185	2.2128742	21	1 22.3	20.5
117916 4271 P–L	15.5	X	185.51156	187.46436	194.65164	6.00709	0.1632530	0.21983154	2.7190011	21	3 31.4	19.9
117917 4281 P–L	15.2	X	33.13145	87.39544	2.95044	4.49489	0.2057160	0.18278212	3.0750127	21	—	—
117918 4320 P–L	15.2	X	132.80062	39.96899	2.14009	14.57347	0.1193325	0.18571168	3.0425886	21	3 7.8	19.7
117919 4537 P–L	16.7	X	58.68132	53.43560	0.53085	6.44323	0.1426784	0.29623790	2.2286522	21	—	—
117920 4546 P–L	16.5	X	213.41642	34.34736	9.32510	4.26264	0.2073154	0.27050190	2.3678590	21	5 17.5	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
117921 4621 *P–L*	16.7	X	233.30980	199.28627	155.29738	1.69465	0.1977662	0.26982804	2.3717996	21	4 4.6	20.6
117922 4622 *P–L*	15.1	X	226.06181	134.12086	178.70316	13.68160	0.1839267	0.23546395	2.5972859	21	2 7.7	19.5
117923 4660 *P–L*	15.6	X	304.19718	310.75458	9.12572	5.74713	0.1817553	0.25572890	2.4581941	21	5 7.9	18.5
117924 4699 *P–L*	16.9	X	160.58857	132.65682	187.57271	3.23455	0.1700158	0.28147501	2.3059125	21	—	—
117925 4701 *P–L*	16.1	X	122.82722	246.84617	33.46237	3.14454	0.0605087	0.27795094	2.3253623	21	12 23.9	19.2
117926 4703 *P–L*	15.0	X	216.43199	277.75918	8.05139	4.18258	0.1458329	0.18521816	3.0479909	21	1 9.6	19.9
117927 4739 *P–L*	16.3	X	290.76105	12.87411	359.59547	5.89020	0.1262867	0.27287485	2.3541116	21	7 15.8	19.0
117928 4741 *P–L*	16.0	X	245.77628	23.18438	352.19823	2.19190	0.0979993	0.27110472	2.3643476	21	5 21.3	19.2
117929 4742 *P–L*	16.4	X	201.87320	36.21041	15.57321	2.97447	0.1626104	0.27036430	2.3686623	21	5 19.0	20.0
117930 4747 *P–L*	16.6	X	125.99092	44.36577	8.65899	6.81551	0.0950264	0.28325694	2.2962315	21	2 22.9	19.4
117931 4776 *P–L*	15.0	X	298.19313	333.34730	123.66760	2.25749	0.1489495	0.17876522	3.1209061	21	11 8.5	18.8
117932 4781 *P–L*	15.7	X	139.01056	352.70281	1.81273	5.00281	0.1707374	0.21661479	2.7458531	21	1 15.8	19.8
117933 4808 *P–L*	16.5	X	209.33962	203.03488	147.83304	2.81253	0.1137544	0.28467930	2.2885766	21	3 8.3	19.6
117934 4809 *P–L*	16.9	X	316.85963	6.13427	42.31262	3.17874	0.1633183	0.27514241	2.3411596	21	10 24.8	18.5
117935 4863 *P–L*	15.7	X	21.30144	223.45604	179.10511	4.53301	0.1326537	0.22932161	2.6434599	21	—	—
117936 4899 *P–L*	16.5	X	190.38940	161.82502	176.30690	3.66349	0.1857715	0.21843468	2.7305805	21	2 11.6	21.1
117937 5036 *P–L*	16.0	X	304.37814	102.84859	262.76406	3.77884	0.2532048	0.24094026	2.5577797	21	7 3.5	18.9
117938 6101 *P–L*	15.6	X	64.83810	143.60244	214.89147	3.95105	0.1642612	0.21365552	2.7711496	21	—	—
117939 6122 *P–L*	15.2	X	214.17290	215.66813	180.76439	12.24957	0.2643293	0.23785950	2.5798179	21	5 12.0	19.9
117940 6191 *P–L*	15.4	X	338.22890	106.95993	222.02923	4.59771	0.1936663	0.17750599	3.1356485	21	7 23.3	18.9
117941 6202 *P–L*	15.2	X	46.87243	141.45336	234.89971	4.43948	0.1834287	0.18045930	3.1013435	21	—	—
117942 6210 *P–L*	17.1	X	269.73523	149.81319	239.12196	1.92150	0.1824954	0.27257118	2.3558597	21	6 28.2	20.1
117943 6219 *P–L*	17.0	X	42.81057	67.01796	277.30049	1.25165	0.2356552	0.27724037	2.3293339	21	—	—
117944 6257 *P–L*	16.5	X	253.85874	94.94660	324.21965	2.62139	0.2179855	0.23990892	2.5651048	21	7 16.3	20.1
117945 6271 *P–L*	14.7	X	215.84986	6.15567	312.05697	0.94464	0.0619861	0.15416358	3.4446745	21	2 20.2	19.9
117946 6276 *P–L*	15.4	X	20.46241	207.62350	204.62070	1.01965	0.2044815	0.18030114	3.1031569	21	—	—
117947 6301 *P–L*	16.4	X	201.83137	96.38724	356.70605	2.28171	0.1763320	0.27169381	2.3609288	21	7 13.1	20.2
117948 6315 *P–L*	15.0	X	322.78108	247.74029	0.29452	7.41447	0.1502184	0.18841429	3.0134234	21	3 14.7	18.9
117949 6316 *P–L*	16.1	X	276.67777	6.59365	349.04328	1.70449	0.1870089	0.25559622	2.4590447	21	5 21.1	19.5
117950 6337 *P–L*	15.5	X	267.48912	176.84862	190.69026	2.04034	0.0438262	0.20698129	2.8304055	21	6 17.8	19.3
117951 6369 *P–L*	15.3	X	259.88957	321.87875	314.80219	3.54499	0.0759212	0.18651931	3.0337993	21	2 11.9	19.8
117952 6376 *P–L*	16.2	X	170.43282	18.18905	347.70401	2.72538	0.1023896	0.21864508	2.7288285	21	2 23.1	20.3
117953 6511 *P–L*	16.5	X	66.25713	333.41281	31.78738	0.41572	0.2306024	0.26260914	2.4150687	21	—	—
117954 6686 *P–L*	16.4	X	109.83822	318.51350	12.22143	4.59200	0.1559060	0.29590777	2.2303095	21	—	—
117955 6693 *P–L*	16.8	X	73.47784	23.73215	16.06022	6.26493	0.2042032	0.26388429	2.4072823	21	—	—
117956 6695 *P–L*	15.1	X	257.52819	15.58883	11.60578	4.40702	0.1907653	0.17565015	3.1576964	21	6 12.1	20.0
117957 6706 *P–L*	15.9	X	279.69286	50.21934	23.56625	5.55451	0.2531873	0.24128306	2.5553565	21	9 3.3	18.9
117958 6732 *P–L*	16.9	X	347.06843	339.90332	58.01655	3.21328	0.1701056	0.27637052	2.3342188	21	12 14.3	18.7
117959 6763 *P–L*	16.3	X	185.11347	200.53572	179.62981	6.96030	0.1889871	0.28465525	2.2887055	21	3 24.1	19.9
117960 6784 *P–L*	14.9	X	215.95851	19.99302	11.79867	10.21811	0.0790838	0.18964278	3.0003955	21	5 12.5	19.6
117961 6813 *P–L*	15.4	X	78.09119	263.10971	49.21171	4.31528	0.0862332	0.21268687	2.7795571	21	12 3.5	19.2
117962 6854 *P–L*	16.7	X	244.05984	277.19420	22.41319	6.53866	0.0710477	0.30052185	2.2074219	21	2 7.8	19.6
117963 7596 *P–L*	16.3	X	67.21929	334.21711	23.89036	6.15569	0.2294012	0.29483773	2.2357025	21	—	—
117964 7619 *P–L*	16.3	X	37.23217	275.42763	111.24716	3.36117	0.2429712	0.26180343	2.4200212	21	—	—
117965 9064 *P–L*	16.1	X	182.30421	151.68913	218.45305	5.09172	0.2081335	0.28422259	2.2910276	21	3 7.9	19.7
117966 9524 *P–L*	15.4	X	201.20085	255.47108	114.26248	1.88544	0.1240244	0.23660017	2.5889640	21	3 29.9	19.3
117967 9563 *P–L*	16.4	X	79.93659	272.45107	93.01695	3.38269	0.1942145	0.26325462	2.4111194	21	—	—
117968 9564 *P–L*	16.4	X	292.32455	329.55156	60.50979	3.59850	0.2209114	0.27351671	2.3504272	21	7 27.7	18.8
117969 9583 *P–L*	15.6	X	295.35406	182.27208	171.69044	4.78122	0.1939591	0.25648487	2.4533615	21	6 12.8	18.6
117970 9590 *P–L*	15.6	X	134.67812	344.09541	50.84460	4.31030	0.1992789	0.21800770	2.7341447	21	3 5.2	19.8
117971 9613 *P–L*	15.4	X	354.13973	205.50168	193.73452	13.97897	0.1399688	0.21167448	2.7884126	21	12 7.8	18.8
117972 1055 *T–1*	15.6	X	347.06739	315.31886	199.09810	11.69036	0.2723037	0.23336327	2.6128494	21	—	—
117973 1073 *T–1*	16.5	X	179.62536	139.30503	345.34333	3.26924	0.1330267	0.28151797	2.3056779	21	8 3.9	20.0
117974 1077 *T–1*	15.1	X	276.94638	218.12992	343.75095	11.53884	0.0803352	0.21199804	2.7855748	21	—	—
117975 1131 *T–1*	16.6	X	229.69168	299.93351	292.22567	1.45928	0.1817031	0.28886412	2.2664196	21	—	—
117976 1158 *T–1*	15.7	X	56.03704	252.16321	359.01602	6.67679	0.0963675	0.26100213	2.4249717	21	8 26.3	18.5
117977 1192 *T–1*	16.1	X	268.23805	182.15210	2.79479	13.67243	0.1782290	0.23023816	2.6364397	21	—	—
117978 1215 *T–1*	15.3	X	161.23080	153.46869	2.97237	16.81015	0.1022385	0.24271175	2.5453188	21	8 30.2	19.2
117979 1233 *T–1*	16.6	X	210.36646	76.52928	188.51571	20.15669	0.2579475	0.28870370	2.2672591	21	—	—
117980 1256 *T–1*	16.3	X	318.63681	173.07858	3.65734	8.41943	0.0459598	0.29139824	2.2532607	21	—	—
117981 2067 *T–1*	16.1	X	251.74311	132.90200	37.64555	3.81176	0.0883682	0.28781702	2.2719132	21	—	—
117982 2134 *T–1*	16.2	X	73.91981	213.16801	25.80652	5.44147	0.0681237	0.26153566	2.4216727	21	8 30.8	19.2
117983 2240 *T–1*	16.5	X	147.17007	206.02980	26.44252	1.85044	0.1942038	0.26507892	2.4000443	21	11 16.7	20.4
117984 2283 *T–1*	16.9	X	202.58525	33.62186	174.94596	6.07232	0.2385271	0.26711773	2.3878162	21	12 3.7	20.6
117985 3167 *T–1*	17.4	X	287.70072	3.49563	217.25221	1.94751	0.1618324	0.29142194	2.2531385	21	—	—
117986 3176 *T–1*	16.0	X	297.93286	349.44293	189.61107	4.55423	0.1292354	0.23149653	2.6268769	21	—	—
117987 4106 *T–1*	15.3	X	3.48268	112.78418	66.46310	0.94419	0.1461984	0.17623104	3.1507536	21	2 21.3	19.0
117988 4300 *T–1*	16.2	X	26.22964	86.89555	129.89052	2.90628	0.1500112	0.25751423	2.4468193	21	5 16.9	18.3
117989 4371 *T–1*	16.4	X	107.03439	45.53610	152.03750	2.64137	0.1449411	0.28045444	2.3115032	21	8 25.0	19.4
117990 1014 *T–2*	15.0	X	346.82887	333.03581	357.94534	7.25842	0.2361459	0.18446722	3.0562573	21	8 16.9	17.8
117991 1033 *T–2*	15.3	X	79.35172	153.61863	185.34334	9.31001	0.1632147	0.21001775	2.8030578	21	—	—
117992 1039 *T–2*	15.7	X	346.35747	70.62427	358.65704	9.61865	0.2028541	0.22899419	2.6459791	21	—	—
117993 Zambujal	13.2	X	359.12854	349.77814	341.10854	1.85899	0.2688334	0.12161277	4.0347497	21	9 5.6	17.2
117994 1076 *T–2*	16.2	X	137.79827	32.64960	351.95375	8.66919	0.2251790	0.21498645	2.7597007	21	2 26.0	20.4
117995 1086 *T–2*	16.0	X	188.60723	101.17063	248.40326	1.41891	0.2135228	0.25790738	2.4443320	21	2 20.3	20.1
117996 1089 *T–2*	14.7	X	228.39118	249.57726	339.00664	6.45300	0.0739620	0.17070801	3.2183513	21	—	—
117997 Irazu	16.4	X	238.15790	80.02544	359.91095	19.29054	0.1132662	0.36795781	1.9287267	21	8 23.0	18.7
117998 1095 *T–2*	15.9	X	205.08430	159.38409	183.05829	7.82998	0.1080855	0.23777842	2.5804043	21	2 25.4	19.8
117999 1113 *T–2*	17.0	X	95.92090	131.79806	176.62396	2.31562	0.2313821	0.27174613	2.3606257	21	—	—
118000 1128 *T–2*	17.3	X	296.33679	38.63344	347.22262	4.73346	0.1929660	0.30664813	2.1779229	21	8 4.5	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118001 1147 T–2	15.7	X	263.37360	290.79784	4.90313	5.86068	0.1562623	0.23908597	2.5709877	21	2 25.5	19.5
118002 1172 T–2	15.7	X	118.28836	55.95379	358.19082	5.24627	0.1122702	0.21550450	2.7552762	21	2 27.1	19.4
118003 1190 T–2	16.3	X	133.01821	2.71295	295.73451	1.97925	0.1740260	0.27305391	2.3530823	21	—	—
118004 1192 T–2	15.5	X	359.05527	342.02801	356.44485	2.73310	0.0279623	0.22537499	2.6742309	21	9 18.5	18.9
118005 1214 T–2	15.4	X	44.00691	52.61066	5.23603	4.74748	0.1570011	0.17090764	3.2158446	21	—	—
118006 1252 T–2	16.0	X	153.64039	338.34329	10.82940	2.09715	0.1114603	0.23501742	2.6005747	21	1 14.1	19.8
118007 1256 T–2	16.2	X	14.46915	182.43368	203.72696	5.22865	0.1078871	0.27010398	2.3701840	21	—	—
118008 1257 T–2	15.3	X	325.85581	137.79056	355.67319	11.73456	0.1910211	0.23116753	2.6293687	21	—	—
118009 1271 T–2	16.3	X	262.06195	93.03515	255.45141	0.47174	0.1945088	0.26212209	2.4180594	21	4 24.2	20.0
118010 1272 T–2	15.9	X	188.03268	44.29309	4.37656	7.66188	0.2123136	0.26034236	2.4290670	21	5 1.5	20.0
118011 1289 T–2	16.7	X	121.19577	225.97722	211.17455	1.88253	0.1703109	0.25796440	2.4439718	21	4 2.3	20.0
118012 1313 T–2	16.2	X	54.80007	30.47557	357.34059	9.46719	0.1778623	0.23095421	2.6309875	21	—	—
118013 1338 T–2	15.5	X	112.88171	354.43472	15.31971	7.35148	0.1173599	0.21294945	2.7772717	21	—	—
118014 1342 T–2	16.4	X	128.94105	218.55990	191.29901	6.93876	0.1859786	0.27743943	2.3282195	21	3 4.8	19.6
118015 1430 T–2	15.4	X	227.65390	89.51416	205.15387	0.76330	0.1433637	0.17419144	3.1753006	21	1 30.0	20.5
118016 1437 T–2	14.8	X	223.02028	242.37544	352.57559	7.42645	0.0321635	0.17055288	3.2203026	21	—	—
118017 1448 T–2	15.4	X	274.10707	243.92375	158.43124	2.63160	0.0639252	0.20312113	2.8661526	21	8 8.5	19.2
118018 1496 T–2	15.5	X	282.10620	22.14690	35.42176	1.80500	0.1426190	0.18286875	3.0740414	21	8 27.4	19.5
118019 1504 T–2	15.6	X	6.06022	103.97897	221.19262	1.29942	0.0683403	0.20446887	2.8535441	21	9 10.2	19.2
118020 1602 T–2	14.7	X	226.89781	136.50899	202.62373	4.76256	0.1474960	0.17738653	3.1370562	21	3 20.3	19.7
118021 2035 T–2	16.4	X	208.09943	124.41642	179.66004	1.70281	0.0679019	0.29760111	2.2218412	21	—	—
118022 2055 T–2	15.0	X	99.99488	125.13086	193.90439	14.31437	0.1732704	0.21022489	2.8012162	21	—	—
118023 2103 T–2	16.5	X	19.87952	191.71764	199.77809	5.73395	0.1801311	0.29103658	2.2551270	21	—	—
118024 2110 T–2	14.9	X	340.16409	38.52782	358.55689	8.77950	0.1394294	0.18576717	3.0419827	21	10 31.1	18.5
118025 2121 T–2	16.5	X	225.64048	172.60922	188.11944	4.79431	0.2025012	0.30167717	2.2017825	21	4 2.6	20.0
118026 2151 T–2	14.2	X	309.57210	39.82379	352.38377	3.89985	0.3391139	0.18369984	3.0647628	21	8 4.4	17.4
118027 2161 T–2	14.8	X	255.19395	105.03095	187.80587	9.47904	0.1576108	0.17567507	3.1573977	21	2 18.6	19.9
118028 2283 T–2	16.8	X	50.59696	124.55844	204.82256	0.25987	0.1737658	0.29028386	2.2590237	21	12 19.2	19.8
118029 2295 T–2	17.2	X	64.88411	42.96983	350.30604	1.78686	0.2079977	0.29347190	2.2426338	21	—	—
118030 2325 T–2	15.6	X	244.72093	170.54171	177.66121	4.97739	0.0840129	0.24014625	2.5634145	21	4 18.9	19.2
118031 2330 T–2	15.1	X	224.57790	113.70492	4.17465	4.51807	0.0699859	0.24551144	2.5259314	21	9 17.2	18.5
118032 2410 T–2	16.2	X	201.43964	70.43915	227.14748	2.59469	0.2058336	0.27695096	2.3309563	21	—	—
118033 2904 T–2	15.5	X	350.98472	327.01596	45.26010	1.55148	0.2252907	0.18545240	3.0454238	21	10 24.8	18.2
118034 3015 T–2	15.0	X	176.13844	244.75651	160.49869	10.91089	0.1058646	0.17800237	3.1298164	21	4 24.6	20.0
118035 3031 T–2	15.5	X	280.31564	15.84201	14.06249	2.94319	0.1660303	0.22356071	2.6886796	21	7 16.9	18.9
118036 3038 T–2	14.9	X	135.27037	317.66386	16.04521	9.69594	0.0589028	0.17112940	3.2130659	21	—	—
118037 3041 T–2	14.6	X	45.93881	229.27220	167.47335	16.72321	0.0908387	0.16929150	3.2362790	21	—	—
118038 3051 T–2	15.9	X	166.16885	279.93279	151.47072	5.34995	0.1915882	0.26035517	2.4289873	21	5 14.6	19.9
118039 3075 T–2	16.4	X	161.75741	6.38720	70.32339	1.70263	0.2076605	0.26027579	2.4294812	21	5 16.7	20.1
118040 3104 T–2	15.2	X	285.27358	296.84569	46.05155	2.32938	0.0892386	0.20137242	2.8827217	21	6 1.7	19.1
118041 3179 T–2	16.9	X	140.11980	278.34322	94.84705	1.30199	0.1550169	0.27662405	2.3327924	21	1 26.4	19.7
118042 3204 T–2	14.6	X	266.45190	11.43896	20.98620	6.46734	0.1831577	0.18207954	3.0829179	21	6 29.9	19.2
118043 3220 T–2	16.7	X	2.02207	187.33763	147.53604	2.26304	0.1304915	0.26700202	2.3885061	21	10 2.2	19.0
118044 3224 T–2	15.2	X	178.80790	355.63999	79.21478	2.85061	0.1319422	0.19956412	2.9001096	21	5 29.9	19.7
118045 3258 T–2	14.0	X	314.17542	148.04723	13.52323	17.35173	0.1209311	0.17143652	3.2092274	21	—	—
118046 3259 T–2	15.4	X	234.41599	311.39516	57.08712	3.78332	0.1926451	0.17978560	3.1090863	21	4 29.2	20.4
118047 3306 T–2	16.3	X	316.09378	22.62969	37.47433	4.42045	0.1252547	0.30953475	2.1643614	21	11 20.9	18.0
118048 3311 T–2	17.1	X	143.69632	242.56568	124.09570	2.49012	0.2364687	0.27648795	2.3335579	21	2 1.3	20.4
118049 4066 T–2	17.0	X	17.03033	235.43695	98.11065	1.53896	0.1566063	0.30917976	2.1660177	21	11 9.3	18.9
118050 4073 T–2	15.2	X	93.33376	28.70705	20.51458	10.10703	0.0875178	0.17303961	3.1893758	21	1 27.5	19.7
118051 4102 T–2	15.7	X	346.79156	158.47091	19.00240	6.77475	0.0693482	0.25654171	2.4529991	21	1 14.9	18.8
118052 4105 T–2	15.8	X	307.51224	234.18870	174.07634	5.68195	0.3150755	0.18326655	3.0695915	21	8 25.2	19.0
118053 4106 T–2	14.9	X	20.10973	249.95304	88.42788	2.53938	0.1056203	0.18585343	3.0410414	21	10 21.7	18.8
118054 4123 T–2	16.4	X	284.21745	171.74425	170.06964	7.50202	0.1379039	0.26300041	2.4126728	21	5 20.9	19.6
118055 4124 T–2	15.1	X	330.26458	256.17518	151.91553	2.91608	0.0461802	0.18630564	3.0361185	21	11 3.7	19.0
118056 4126 T–2	15.7	X	170.01692	14.44664	89.19148	2.72967	0.1310107	0.26213018	2.4180097	21	6 25.6	19.1
118057 4163 T–2	15.0	X	314.28532	165.68401	166.28707	11.41059	0.1234768	0.18204301	3.0833302	21	6 24.4	19.2
118058 4175 T–2	16.3	X	133.27166	311.59382	14.35781	8.54518	0.1897747	0.29489019	2.2354374	21	—	—
118059 4206 T–2	14.6	X	337.76796	7.69643	20.49762	9.36925	0.1406937	0.18530098	3.0470827	21	10 17.5	18.0
118060 4213 T–2	16.5	X	340.51721	272.22888	125.84465	1.87534	0.1740392	0.26841178	2.3801354	21	11 29.3	18.4
118061 4249 T–2	16.0	X	22.70695	315.16935	20.56880	8.53045	0.1324599	0.28884887	2.2664994	21	11 10.9	18.5
118062 4256 T–2	14.9	X	327.08143	312.09207	28.46082	10.03750	0.1041424	0.18278793	3.0749475	21	8 1.6	18.9
118063 4259 T–2	16.7	X	152.98651	204.71047	113.42599	1.67627	0.2442174	0.27521438	2.3407514	21	—	—
118064 4292 T–2	15.5	X	325.91372	212.10684	138.01182	2.92416	0.0631853	0.22395786	2.6855001	21	8 14.8	18.5
118065 4302 T–2	16.1	X	166.42261	1.71483	66.24212	2.51361	0.1722432	0.26000091	2.4311932	21	5 8.2	19.8
118066 4317 T–2	16.1	X	72.70856	202.21427	141.34906	3.07092	0.2337686	0.27161424	2.3613898	21	—	—
118067 4648 T–2	15.7	X	305.63774	226.42909	163.07673	5.18253	0.1346473	0.22463670	2.6800871	21	8 28.9	18.7
118068 5011 T–2	15.8	X	203.00064	175.06319	214.41783	12.85289	0.1895532	0.23982228	2.5657226	21	4 23.6	20.1
118069 5022 T–2	16.6	X	182.73784	80.08704	233.92023	8.26393	0.2511279	0.27684518	2.3315500	21	1 3.0	20.5
118070 5060 T–2	16.1	X	175.82267	54.01428	291.60161	5.57019	0.1351435	0.27739946	2.3284432	21	1 27.3	19.3
118071 5062 T–2	15.9	X	337.21346	77.05384	265.34247	6.71559	0.2628658	0.24562648	2.5251427	21	8 7.8	17.6
118072 5076 T–2	15.8	X	140.07765	167.35625	215.20924	15.17849	0.1291309	0.23574594	2.5952144	21	2 5.8	19.8
118073 5077 T–2	16.2	X	247.82793	41.83013	296.52736	5.53888	0.1193194	0.26070025	2.4268434	21	3 31.3	19.8
118074 5078 T–2	15.1	X	98.19320	111.14104	294.65643	8.86076	0.1468074	0.21360812	2.7715595	21	1 25.4	18.7
118075 5082 T–2	14.4	X	154.88465	111.85682	220.49604	13.62753	0.1135212	0.17195043	3.2028298	21	1 4.5	19.5
118076 5100 T–2	14.8	X	350.18135	6.99037	313.35384	9.69975	0.0838586	0.18279989	3.0748134	21	8 8.7	18.6
118077 5165 T–2	15.1	X	332.55420	26.49781	276.13348	8.88996	0.1364459	0.18144545	3.0900962	21	6 12.7	18.9
118078 5174 T–2	15.3	X	66.31959	0.58445	342.50636	15.56289	0.1589577	0.22980524	2.6397498	21	—	—
118079 5189 T–2	15.6	X	292.79416	126.62581	245.61139	7.23495	0.1428312	0.18242846	3.0789856	21	7 11.8	19.8
118080 5197 T–2	15.1	X	17.60203	56.28599	280.97204	8.68857	0.1159984	0.18548478	3.0450695	21	10 12.0	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118081 5206 *T–2*	14.3	*X*	99.38126	2.97145	345.67864	16.20729	0.1162313	0.16908683	3.2388900	21	—	—
118082 5207 *T–2*	15.9	*X*	164.52070	50.13853	312.10291	5.54935	0.1261491	0.25680105	2.4513473	21	2 8.1	19.3
118083 5215 *T–2*	14.8	*X*	319.07272	63.63739	256.46072	7.91632	0.1179081	0.18162835	3.0880213	21	6 16.5	18.5
118084 5340 *T–2*	14.8	*X*	343.42390	132.18262	259.83883	8.56346	0.0956263	0.18595242	3.0399621	21	10 30.2	18.7
118085 1019 *T–3*	13.8	*X*	204.39975	100.71363	293.60330	9.03068	0.1993867	0.17201377	3.2020436	21	5 1.2	19.4
118086 1037 *T–3*	15.9	*X*	21.42050	49.35679	298.18401	5.58966	0.1391069	0.27038936	2.3685160	21	11 23.8	18.5
118087 1043 *T–3*	14.4	*X*	209.73652	86.80241	324.86313	8.43610	0.0667749	0.17292737	3.1907557	21	6 2.6	19.3
118088 1090 *T–3*	16.1	*X*	173.91011	330.43349	355.45694	13.04276	0.1633784	0.23367154	2.6105510	21	1 14.4	20.4
118089 1093 *T–3*	15.0	*X*	276.13708	345.34728	329.36503	6.81985	0.1497223	0.23956517	2.5675580	21	3 31.1	18.8
118090 1105 *T–3*	15.4	*X*	263.34173	291.82678	342.07872	13.42064	0.1651575	0.23636834	2.5906565	21	1 31.5	19.5
118091 1124 *T–3*	15.9	*X*	112.44492	94.05435	308.61826	4.88276	0.0865064	0.27871109	2.3211322	21	1 18.1	18.4
118092 1150 *T–3*	16.2	*X*	120.50084	8.96154	333.38719	7.64941	0.1201445	0.29862474	2.2167609	21	—	—
118093 1163 *T–3*	14.2	*X*	172.70972	95.93283	356.68039	16.81483	0.1798067	0.17153449	3.2080053	21	6 15.4	19.8
118094 1852 *T–3*	14.5	*X*	331.39625	288.83288	1.47660	22.20781	0.0879364	0.17358638	3.1826750	21	5 22.9	19.1
118095 2007 *T–3*	15.5	*X*	224.62426	355.79230	348.44717	5.19506	0.3155217	0.23808951	2.5781561	21	3 14.5	20.3
118096 2125 *T–3*	16.5	*X*	305.10875	359.04224	346.14708	6.22344	0.1357383	0.26548831	2.3975764	21	6 25.4	19.2
118097 2148 *T–3*	15.2	*X*	108.79096	191.98521	324.45846	3.82067	0.0947053	0.19534889	2.9416799	21	6 25.0	19.4
118098 2171 *T–3*	16.4	*X*	285.35155	204.18752	223.21827	6.79747	0.2575959	0.24440964	2.5335170	21	8 27.7	19.5
118099 2210 *T–3*	16.0	*X*	83.01037	78.40429	252.43943	3.58076	0.0418400	0.29547411	2.2324912	21	—	—
118100 2224 *T–3*	15.7	*X*	153.22343	203.67528	325.12585	3.71752	0.0162916	0.24406464	2.5359040	21	8 28.9	19.0
118101 2228 *T–3*	16.5	*X*	99.57052	186.66678	230.15440	6.55608	0.0853211	0.27868141	2.3212970	21	1 16.3	19.1
118102 Rinjani	16.3	*X*	129.31683	14.94615	17.25621	21.71692	0.0631417	0.36939087	1.9237351	21	1 2.1	18.7
118103 2279 *T–3*	15.0	*X*	79.30052	167.40757	216.07348	8.80759	0.0733948	0.18529877	3.0471069	21	—	—
118104 2294 *T–3*	16.1	*X*	179.27408	104.84143	232.38266	2.96662	0.1495430	0.23451710	2.6042722	21	1 27.7	20.1
118105 2309 *T–3*	15.5	*X*	232.90271	354.09300	10.56166	13.07354	0.1315963	0.21685906	2.7437908	21	4 21.2	19.8
118106 2343 *T–3*	15.4	*X*	241.49100	40.98000	342.63090	1.26946	0.1110556	0.19591402	2.9360202	21	5 29.7	19.8
118107 2361 *T–3*	15.0	*X*	292.38772	39.13690	213.64004	12.23866	0.2141737	0.23729679	2.5838947	21	1 22.2	19.2
118108 2398 *T–3*	15.9	*X*	195.23790	60.78731	352.36656	4.84088	0.3145264	0.26170322	2.4206389	21	5 13.6	20.5
118109 2445 *T–3*	14.2	*X*	264.90345	35.65914	10.24937	16.80862	0.1285309	0.17499129	3.1656174	21	7 28.4	19.0
118110 2493 *T–3*	16.2	*X*	243.08089	39.06592	0.83912	6.87557	0.1184111	0.26422690	2.4052009	21	6 19.3	19.7
118111 2633 *T–3*	16.0	*X*	332.44177	148.65232	207.92039	8.55278	0.0670012	0.24478241	2.5309443	21	9 1.9	19.1
118112 2665 *T–3*	16.9	*X*	94.77522	129.35851	236.05740	1.25893	0.2585333	0.29845311	2.2176107	21	—	—
118113 3091 *T–3*	16.7	*X*	302.17234	211.10645	201.23728	7.24931	0.0786819	0.26841532	2.3801145	21	10 7.8	19.2
118114 3117 *T–3*	17.1	*X*	293.23379	248.20786	167.83869	1.21791	0.1713020	0.26767614	2.3844942	21	9 14.8	19.2
118115 3118 *T–3*	16.1	*X*	187.37120	270.03824	188.82687	3.50496	0.1233458	0.24107829	2.5568033	21	7 6.8	20.0
118116 3161 *T–3*	15.8	*X*	147.03860	305.29441	126.84487	1.97809	0.1641477	0.25982579	2.4322855	21	4 24.5	19.5
118117 3168 *T–3*	16.2	*X*	208.79651	330.08153	27.75917	4.57218	0.2165060	0.28269021	2.2992995	21	3 18.4	19.9
118118 3169 *T–3*	16.9	*X*	244.38404	269.21893	180.86093	1.13175	0.2044232	0.24317718	2.5420700	21	8 16.9	20.5
118119 3177 *T–3*	15.8	*X*	132.97207	201.43756	198.77879	7.92814	0.2238087	0.21211480	2.7845525	21	3 9.4	20.1
118120 3181 *T–3*	14.6	*X*	262.62058	53.53680	25.28658	13.41562	0.2476163	0.17427524	3.1742826	21	8 20.3	19.5
118121 3211 *T–3*	16.1	*X*	50.76138	151.46254	199.92593	3.69750	0.1199541	0.22724604	2.6595317	21	12 27.3	19.7
118122 3228 *T–3*	15.8	*X*	183.38264	322.70526	44.27254	3.77913	0.1007045	0.23622725	2.5916880	21	3 8.8	19.6
118123 3238 *T–3*	14.9	*X*	25.43929	71.08304	22.25343	15.04830	0.0502644	0.23114628	2.6295299	21	—	—
118124 3253 *T–3*	16.9	*X*	137.73819	0.23428	50.27287	0.89627	0.1152423	0.25820208	2.4424718	21	3 11.3	20.1
118125 3278 *T–3*	15.0	*X*	41.18062	59.84653	32.34084	4.10978	0.0904252	0.18685772	3.0301352	21	—	—
118126 3344 *T–3*	16.2	*X*	104.53256	165.64891	192.33243	3.68754	0.1360877	0.23085880	2.6317124	21	—	—
118127 3399 *T–3*	16.4	*X*	141.50499	263.32333	181.14879	5.63775	0.0743480	0.28309007	2.2971338	21	4 23.6	19.4
118128 3457 *T–3*	16.6	*X*	269.82101	163.15781	191.64112	1.95193	0.2273571	0.26399024	2.4066382	21	5 7.4	19.9
118129 3459 *T–3*	17.2	*X*	5.76882	200.60441	200.56701	1.88600	0.1968245	0.29433655	2.2382397	21	—	—
118130 3469 *T–3*	15.6	*X*	226.58016	138.42054	192.35050	9.34218	0.1329398	0.21468989	2.7622416	21	3 6.0	20.1
118131 3501 *T–3*	16.3	*X*	202.14341	298.15264	43.67853	2.49005	0.2217489	0.25916616	2.4364108	21	2 23.7	20.5
118132 3505 *T–3*	16.3	*X*	241.07148	29.24250	21.46511	2.32790	0.2174363	0.26451215	2.4034714	21	6 21.7	20.0
118133 3523 *T–3*	15.4	*X*	233.37243	0.20147	13.75936	0.25839	0.1890593	0.17329032	3.1862990	21	5 4.8	20.7
118134 3533 *T–3*	16.6	*X*	201.93060	46.43612	7.11166	0.66035	0.1828554	0.26237984	2.4164756	21	5 21.9	20.5
118135 3559 *T–3*	17.1	*X*	309.55621	70.33172	346.96210	0.88162	0.1629507	0.26887464	2.3774031	21	10 20.7	19.2
118136 3756 *T–3*	16.1	*X*	203.39814	286.02743	40.64804	3.20167	0.0880092	0.23532963	2.5982741	21	2 6.9	19.9
118137 3813 *T–3*	16.7	*X*	327.90762	317.88524	24.81045	1.64290	0.1568678	0.24415183	2.5353002	21	7 31.4	19.1
118138 4036 *T–3*	15.2	*X*	272.67353	306.15030	48.23740	6.14429	0.1528966	0.17470703	3.1690503	21	5 23.5	19.9
118139 4041 *T–3*	15.7	*X*	235.99970	244.03894	179.26177	8.59681	0.2062697	0.17392088	3.1785928	21	7 3.7	21.0
118140 4042 *T–3*	15.6	*X*	121.61326	261.88413	61.69982	4.62528	0.1373130	0.23036390	2.6354802	21	—	—
118141 4048 *T–3*	15.5	*X*	33.79045	259.12688	139.35250	5.08837	0.2247020	0.22824910	2.6517343	21	—	—
118142 4117 *T–3*	15.5	*X*	95.09573	313.68645	126.37106	4.81247	0.0772743	0.21218281	2.7839574	21	2 25.7	19.0
118143 4124 *T–3*	15.1	*X*	283.10700	202.69681	126.50516	3.30891	0.0963632	0.19558977	2.9392642	21	5 12.5	19.2
118144 4136 *T–3*	16.9	*X*	116.79977	229.78612	84.28286	3.68581	0.2522839	0.27517563	2.3409712	21	—	—
118145 4142 *T–3*	15.8	*X*	61.80839	14.60027	65.93852	7.26117	0.1202745	0.25508290	2.4623426	21	—	—
118146 4161 *T–3*	16.2	*X*	279.54157	249.79160	69.94802	5.28698	0.1953481	0.26300172	2.4126648	21	4 7.7	19.6
118147 4183 *T–3*	16.7	*X*	149.94320	209.62124	183.91135	11.19164	0.1965395	0.28044192	2.3115720	21	3 7.5	20.0
118148 4204 *T–3*	16.5	*X*	302.50439	252.80398	179.44774	7.58454	0.3388512	0.24508816	2.5288389	21	9 24.9	18.2
118149 4298 *T–3*	14.9	*X*	188.51908	212.57996	35.94392	16.40153	0.1407120	0.22980124	2.6397804	21	—	—
118150 4325 *T–3*	16.3	*X*	175.56129	192.51273	142.46003	5.38175	0.2091308	0.25706191	2.4496887	21	1 22.9	20.3
118151 4391 *T–3*	16.0	*X*	184.41191	241.01628	96.31117	5.09312	0.2855437	0.28049519	2.3112793	21	2 4.8	20.1
118152 5076 *T–3*	14.7	*X*	126.91943	230.06589	72.39926	10.85670	0.0586873	0.18397619	3.0616929	21	—	—
118153 5083 *T–3*	16.1	*X*	235.89346	351.47244	129.73900	7.42029	0.0851968	0.29088585	2.2559059	21	10 12.5	19.0
118154 5110 *T–3*	14.4	*X*	350.49571	280.44293	51.02464	15.89422	0.0191767	0.17634631	3.1493805	21	9 1.8	19.0
118155 5141 *T–3*	15.5	*X*	81.98697	299.55687	104.31142	9.93121	0.1561140	0.20903611	2.8118264	21	1 2.1	18.8
118156 5146 *T–3*	15.3	*X*	23.59863	82.24136	42.81975	22.32705	0.0902312	0.23281285	2.6169661	21	1 2.4	18.8
118157 5157 *T–3*	15.7	*X*	14.39763	253.46571	151.06957	12.34981	0.0914345	0.22759429	2.6568180	21	—	—
118158 5161 *T–3*	14.8	*X*	208.87373	269.12327	83.20105	10.83095	0.1385597	0.19209723	2.9747832	21	3 24.9	19.8
118159 5162 *T–3*	15.8	*X*	228.87890	236.38757	46.89144	16.63134	0.1302308	0.25696832	2.4502834	21	1 6.4	19.9
118160 5646 *T–3*	15.6	*X*	144.72154	232.46596	96.79508	7.09270	0.1173379	0.20929512	2.8095061	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118161 5710 T–3	14.9	X	219.76577	138.14765	51.90822	14.46468	0.0314482	0.22731833	2.6589678	21	12 14.0	18.6
118162 1951 SX	15.9	X	48.52156	212.32771	194.43094	39.10290	0.2538341	0.38392956	1.8748578	21	—	—
118163 1979 MJ_8	15.7	X	275.09557	159.57946	231.46872	4.07000	0.2801559	0.23331970	2.6131747	21	6 24.0	19.6
118164 1981 DC_3	16.1	X	212.63172	336.87273	267.70527	5.29061	0.0917404	0.26259697	2.4151433	21	—	—
118165 1981 EH_2	15.1	X	252.89499	268.62253	221.07716	10.07805	0.1273530	0.18596929	3.0397782	21	10 20.9	19.5
118166 1981 EG_{22}	16.3	X	197.43970	225.57551	349.21778	9.89694	0.1981949	0.25997488	2.4313555	21	12 6.8	20.2
118167 1981 EJ_{30}	17.3	X	356.44368	28.98283	176.10354	4.55204	0.2961429	0.34309113	2.0208297	21	1 5.3	19.4
118168 1981 EQ_{37}	15.7	X	187.83993	128.79390	315.05322	3.38380	0.0686255	0.22716679	2.6601502	21	6 18.8	19.5
118169 1981 EL_{40}	16.1	X	43.19779	202.91861	341.15055	4.64121	0.1137792	0.22354804	2.6887812	21	4 27.9	19.1
118170 1981 EV_{40}	14.8	X	235.10211	39.52732	357.10467	14.51012	0.1306199	0.22731724	2.6589763	21	6 2.8	19.2
118171 1988 DT_1	15.4	X	65.63061	180.86299	278.79318	7.14652	0.1899930	0.20918271	2.8105126	21	2 19.2	18.6
118172 Vorgebirge	15.5	X	84.66918	104.33406	69.58207	14.81573	0.3639282	0.21967665	2.7202790	21	7 27.2	19.9
118173 Barmen	14.8	X	124.23217	170.66165	28.15005	12.37379	0.2134990	0.17528632	3.1620643	21	9 16.7	20.1
118174 1991 RO_{24}	16.3	X	169.25533	179.64551	150.39230	9.58361	0.3083458	0.27919574	2.3184453	21	1 15.6	20.3
118175 1991 TL_{16}	16.7	X	209.52357	308.42762	63.19697	7.18011	0.1497278	0.28298883	2.2976816	21	4 7.3	20.2
118176 1992 BK_3	15.8	X	307.05062	248.08225	278.19122	9.99634	0.0958846	0.26615131	2.3935930	21	—	—
118177 1992 EZ_{13}	14.0	X	284.08904	301.93797	182.86320	8.79182	0.1057491	0.12469173	3.9680544	21	11 18.7	19.4
118178 Rinckart	14.8	X	326.62053	336.37542	38.98325	9.08469	0.2396366	0.23632596	2.5909663	21	9 14.3	16.9
118179 1993 FC_6	15.8	X	277.31027	267.05799	21.61636	6.63886	0.1110412	0.27966996	2.3158237	21	3 3.5	19.0
118180 1993 FF_6	16.1	X	33.04318	21.37332	156.51594	4.94434	0.0495994	0.28166310	2.3048858	21	3 23.9	18.5
118181 1993 FD_7	15.7	X	117.88197	56.98926	105.70922	3.06905	0.0516721	0.21873156	2.7281092	21	7 8.7	19.4
118182 1993 FH_{18}	16.1	X	13.36857	52.55351	114.91753	4.22518	0.0987874	0.27844628	2.3226036	21	1 31.9	18.4
118183 1993 FQ_{22}	16.7	X	246.41011	246.84455	319.59669	1.58933	0.1555241	0.26905715	2.3763279	21	—	—
118184 1993 FX_{22}	16.0	X	298.75864	296.45321	299.46238	1.43758	0.1756688	0.27584752	2.3371683	21	1 8.9	19.2
118185 1993 FF_{29}	16.5	X	96.71829	280.94225	225.84983	5.26918	0.1300642	0.28538112	2.2848230	21	5 29.7	19.1
118186 1993 XC	14.6	X	357.16085	31.68563	169.35799	5.50968	0.0674480	0.15416645	3.4446318	21	3 19.9	19.0
118187 1993 YC_1	15.9	X	290.47283	337.58514	70.83268	8.33097	0.2491004	0.24201505	2.5502014	21	8 16.9	18.9
118188 1994 GO_5	16.0	X	151.14776	121.47802	191.64905	1.98319	0.2306513	0.20474245	2.8510015	21	—	—
118189 1994 PB_{12}	17.1	X	191.95895	117.15268	191.91483	1.64859	0.2210710	0.27469859	2.3436806	21	1 4.0	21.0
118190 1994 PT_{12}	16.5	X	157.76238	97.94868	294.83093	1.95910	0.1661178	0.27727410	2.3291449	21	3 12.3	19.9
118191 1994 PE_{14}	16.3	X	35.07180	197.69266	174.43906	5.28346	0.1050386	0.26341719	2.4101273	21	—	—
118192 1994 RA_{14}	15.2	X	3.65048	121.54174	184.94472	10.84372	0.1013324	0.17957160	3.1115559	21	8 9.5	19.2
118193 1994 RG_{25}	15.1	X	33.20969	61.85292	228.95137	11.59626	0.1958245	0.18231837	3.0802249	21	9 16.0	19.0
118194 Sabinagarroni	16.4	X	131.25697	324.27653	341.96179	5.03896	0.1639889	0.26627310	2.3928631	21	—	—
118195 1994 SP_7	15.5	X	226.43924	61.43296	74.91208	1.22404	0.0863463	0.18269011	3.0760451	21	10 4.9	19.9
118196 1994 TK_8	16.8	X	188.20117	198.95116	81.63142	1.77772	0.1466130	0.26955968	2.3733736	21	—	—
118197 1994 UU_6	16.0	X	180.54464	48.89508	12.01969	4.03878	0.2828380	0.27887505	2.3202223	21	5 12.6	20.1
118198 1994 UA_{10}	16.4	X	235.53087	231.98427	339.03573	2.90263	0.1758751	0.26379888	2.4078019	21	—	—
118199 1995 CY_5	16.4	X	292.36792	286.46172	215.25568	1.43042	0.1645390	0.25489589	2.4635468	21	—	—
118200 1995 CA_8	16.4	X	229.73494	138.18568	323.83498	16.35020	0.1480944	0.35657654	1.9695524	21	8 27.8	18.7
118201 1995 FQ_{19}	15.4	X	319.96253	319.05830	10.91695	10.81846	0.1764960	0.23614469	2.5922920	21	6 21.9	18.4
118202 1995 HQ_3	16.3	X	204.12339	340.91414	138.91757	3.28620	0.0689838	0.23744786	2.5827986	21	8 25.3	19.8
118203 1995 HL_4	15.9	X	267.83063	200.88373	134.80997	3.03084	0.2112678	0.22632678	2.6667282	21	4 16.2	19.9
118204 1995 MS_1	16.0	X	192.05916	226.51067	224.56790	21.38441	0.0596350	0.23132094	2.6282061	21	6 29.5	20.2
118205 1995 MK_7	15.2	X	234.11474	311.98107	99.62762	12.87552	0.1838311	0.23121275	2.6290259	21	6 19.8	19.3
118206 1995 OB_6	16.2	X	120.03720	66.14015	345.50280	2.99708	0.1046260	0.21032881	2.8002934	21	2 25.1	19.9
118207 1995 SJ_{10}	17.3	X	87.69641	109.70357	119.02991	0.73401	0.0702521	0.30216344	2.1994197	21	9 5.8	19.7
118208 1995 TH_{10}	15.5	X	86.98690	156.86258	246.60248	1.03430	0.0689706	0.20290518	2.8681859	21	—	—
118209 1995 UH_{20}	16.1	X	158.58040	29.82963	277.82436	0.93351	0.0558573	0.20106888	2.8856222	21	—	—
118210 1995 UG_{56}	16.7	X	9.73977	281.98936	0.47002	2.10625	0.0614038	0.29640667	2.2278062	21	7 22.7	18.9
118211 1995 VE_{18}	16.7	X	244.04104	75.73062	238.73569	3.48977	0.1579241	0.28629059	2.2799815	21	2 20.9	20.2
118212 1995 XM_4	15.4	X	211.41455	297.49864	116.93804	5.30993	0.0709197	0.21441161	2.7646311	21	6 8.1	19.4
118213 1995 YO_{18}	15.6	X	330.61844	241.75641	182.71043	3.92421	0.1221855	0.18918564	3.0052269	21	11 24.3	19.0
118214 Agnesediboemia	14.8	X	302.64593	295.73572	85.07714	6.53778	0.1951182	0.17875976	3.1209696	21	8 1.4	18.7
118215 1996 BN_1	15.5	X	308.39635	210.96223	78.56003	3.94638	0.0437672	0.20844797	2.8171130	21	5 1.0	19.2
118216 1996 DU_1	17.3	X	23.97165	298.55226	189.61946	3.87124	0.1669202	0.27204798	2.3588792	21	—	—
118217 1996 EO_7	17.0	X	104.04180	96.41003	357.97863	2.31220	0.1788204	0.27771478	2.3266803	21	4 2.6	19.8
118218 1996 GM_{17}	15.8	X	225.51111	163.70337	36.25407	4.82359	0.1272612	0.25817791	2.4426242	21	12 28.5	19.0
118219 1996 HT_{20}	15.8	X	343.20247	357.43478	135.13437	1.18661	0.0868802	0.26339573	2.4102581	21	—	—
118220 1996 HA_{21}	16.3	X	265.16499	332.85772	187.92966	2.24028	0.1457346	0.25864104	2.4397075	21	12 29.4	19.0
118221 1996 HQ_{21}	15.3	X	183.02253	181.27766	42.52017	11.34975	0.1821862	0.25480496	2.4641329	21	12 4.9	19.2
118222 1996 RR_{11}	15.6	X	186.05736	68.67730	16.69262	3.29186	0.0377426	0.22981565	2.6396701	21	6 18.8	19.2
118223 1996 SO_4	14.6	X	153.20705	324.62288	9.19510	35.64806	0.1844288	0.21301318	2.7767177	21	1 18.6	19.7
118224 1996 TT_1	14.8	X	265.61757	125.05800	31.50451	5.23620	0.0985717	0.24404719	2.5360249	21	12 27.4	17.9
118225 1996 TP_{18}	15.8	X	20.67414	25.72671	20.55541	2.01887	0.0667812	0.20252974	2.8717294	21	—	—
118226 1996 TA_{30}	15.6	X	139.71366	38.57678	36.66709	9.44915	0.1660510	0.21804733	2.7338134	21	4 23.7	19.8
118227 1996 TR_{39}	14.8	X	200.39306	61.94844	12.05582	22.03799	0.1055552	0.22811873	2.6527444	21	6 16.5	19.3
118228 1996 TQ_{66}	6.9	X	33.63608	18.57024	10.61240	14.64954	0.1231930	0.00398683	39.3898460	21	12 1.9	22.5
118229 1996 VE_{23}	15.5	X	40.35204	154.98706	335.63964	8.22737	0.0828813	0.21449254	2.7639356	21	2 11.6	18.8
118230 Sado	15.6	X	199.79849	323.52539	64.07512	11.13381	0.2816340	0.22087502	2.7104308	21	4 22.7	20.6
118231 1996 XQ_{18}	15.6	X	193.52267	45.93012	9.41550	15.52927	0.2920075	0.22082637	2.7108288	21	5 13.1	20.8
118232 1997 AY_6	15.2	X	119.32787	129.92704	303.04512	6.72482	0.2098231	0.21045034	2.7992152	21	4 1.6	19.5
118233 1997 BX_6	15.7	X	111.97772	337.60966	324.57221	2.95885	0.0300964	0.31451001	2.1414753	21	—	—
118234 1997 BO_7	15.4	X	168.67688	294.37006	286.87184	4.05396	0.2108953	0.18818060	3.0159176	21	11 11.5	20.7
118235 1997 ES_7	16.6	X	91.16794	29.42887	168.66948	4.82408	0.1190808	0.29642985	2.2276900	21	8 2.3	19.4
118236 1997 EO_{26}	15.4	X	5.44622	309.67384	357.55463	5.22986	0.1317525	0.17600450	3.1534567	21	8 18.9	19.1
118237 1997 GD_{16}	16.4	X	272.39572	28.17616	55.94726	2.75783	0.1148641	0.30407533	2.1901907	21	10 7.3	18.5
118238 1997 JT_5	14.9	X	230.43861	65.69022	62.09569	17.51705	0.1702788	0.17979815	3.1089417	21	9 28.8	20.0
118239 1997 KX	14.3	X	153.97392	137.88080	79.62027	18.30393	0.1492841	0.18023523	3.1039134	21	11 2.7	19.6
118240 1997 LS_3	15.1	X	294.33115	312.99531	173.65355	15.36816	0.1886709	0.18639950	3.0350992	21	12 7.9	19.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118241 1997 LJ_9	16.8	X	139.03561	219.44229	106.37198	2.43584	0.1865689	0.26871481	2.3783457	21	—	—
118242 1997 NM_3	15.8	X	287.82770	83.06228	150.68237	2.67914	0.1789904	0.27432417	2.3458127	21	—	—
118243 1997 QL_1	16.7	X	214.27056	81.19486	200.26353	5.05569	0.1495555	0.26846281	2.3798338	21	—	—
118244 1997 RV_{10}	16.6	X	74.27115	121.34235	220.47695	1.70618	0.1849335	0.25712453	2.4492910	21	—	—
118245 1997 SF_{10}	15.2	X	58.49984	339.44071	64.22829	3.44698	0.1850859	0.25800840	2.4436940	21	—	—
118246 1997 SR_{15}	15.6	X	12.61801	172.78252	231.49203	4.09475	0.0705950	0.25210228	2.4817129	21	—	—
118247 1997 TH_1	16.2	X	98.44892	24.67721	321.84057	1.94603	0.1973695	0.26070562	2.4268100	21	—	—
118248 1997 TS_{19}	16.2	X	250.43958	299.73364	245.47606	2.61039	0.1689009	0.25386174	2.4702328	21	—	—
118249 1997 WF_{15}	16.0	X	117.07710	140.05975	69.81899	6.15437	0.1454890	0.23934034	2.5691657	21	9 21.7	20.0
118250 1998 BY_1	15.7	X	211.24565	333.88581	121.21706	8.08275	0.2101913	0.23257611	2.6187416	21	7 21.7	20.0
118251 1998 BF_{18}	15.8	X	218.83389	82.41349	13.33994	2.12089	0.1719148	0.23153048	2.6266201	21	8 1.9	20.0
118252 1998 BW_{33}	15.0	X	155.73607	141.93398	352.74847	13.45207	0.1893925	0.22709932	2.6606770	21	7 27.9	19.6
118253 1998 BK_{43}	16.3	X	226.96085	224.18331	13.91698	2.01229	0.0103034	0.20566231	2.8424942	21	—	—
118254 1998 CU	15.5	X	103.27747	218.94111	301.36153	12.41411	0.1992683	0.22551593	2.6731166	21	7 7.6	19.4
118255 1998 CZ_2	15.6	X	102.22464	13.75384	153.65319	5.24979	0.2129071	0.22382393	2.6865713	21	7 15.8	19.6
118256 1998 DX_{25}	15.7	X	57.36242	16.95399	115.62643	2.79237	0.1688798	0.21591985	2.7517418	21	3 22.3	18.6
118257 1998 FS_{17}	15.7	X	147.60402	86.12226	44.36927	3.17538	0.1900671	0.22605967	2.6688284	21	7 11.6	20.1
118258 1998 FG_{41}	15.3	X	234.02118	301.88193	171.57813	4.05457	0.2213309	0.23355530	2.6114170	21	9 2.9	19.5
118259 1998 FT_{52}	15.1	X	302.03726	184.73221	3.23485	7.44935	0.1870183	0.20544503	2.8444979	21	—	—
118260 1998 FP_{54}	15.7	X	20.59863	310.68477	184.06299	11.90976	0.1787768	0.21001511	2.8030813	21	1 10.1	18.8
118261 1998 FF_{79}	15.3	X	207.95556	25.49163	121.01761	4.72411	0.1951606	0.23212650	2.6221221	21	9 24.3	19.5
118262 1998 FO_{85}	15.1	X	121.48149	111.97144	11.93926	12.01514	0.2217787	0.22261940	2.6962535	21	6 9.1	19.5
118263 1998 FE_{90}	15.3	X	120.46509	94.56547	22.32631	11.26787	0.1908913	0.22133927	2.7066394	21	5 26.2	19.5
118264 1998 FB_{105}	15.0	X	130.99452	290.55359	307.06406	7.05523	0.2466385	0.18948833	3.0020257	21	11 1.1	20.4
118265 1998 FM_{142}	15.4	X	79.13967	283.48110	207.95527	4.57750	0.1059790	0.21543590	2.7558611	21	4 14.2	18.9
118266 1998 HQ_{17}	14.8	X	85.32882	353.18254	286.08185	5.27445	0.1623923	0.18790845	3.0188290	21	11 5.2	19.4
118267 1998 HR_{56}	14.5	X	86.91797	212.73704	36.01098	12.51504	0.2567754	0.18438511	3.0571646	21	10 14.9	19.3
118268 1998 HG_{61}	15.0	X	123.74416	221.46878	24.00596	9.77322	0.2976063	0.18789115	3.0190143	21	11 7.8	20.5
118269 1998 HL_{74}	14.9	X	20.85737	357.06035	194.71305	7.23748	0.2393051	0.21360863	2.7715551	21	4 3.3	17.1
118270 1998 HN_{129}	15.4	X	1.68536	327.85939	205.61573	7.68219	0.1619133	0.21090788	2.7951654	21	1 28.4	18.6
118271 1998 HO_{149}	16.4	X	98.27197	284.52518	343.13872	2.92033	0.2018074	0.31233287	2.1514153	21	11 23.6	19.6
118272 1998 KU_{10}	15.0	X	336.02896	213.02231	131.89067	10.95387	0.1069213	0.17937509	3.1138280	21	8 18.8	18.7
118273 1998 OX_9	16.7	X	279.21471	155.93550	175.86996	2.00321	0.2635869	0.29243002	2.2479574	21	4 10.5	19.9
118274 1998 QE_{20}	16.0	X	303.41947	119.15968	229.25731	4.18248	0.1569304	0.29641032	2.2277879	21	6 22.5	18.3
118275 1998 QR_{24}	16.2	X	318.06018	150.00456	179.06155	4.05665	0.1323104	0.29642759	2.2277013	21	6 22.9	18.3
118276 1998 QM_{33}	16.6	X	279.46914	142.13958	210.48465	2.99757	0.2208500	0.29357843	2.2420913	21	5 14.2	19.6
118277 1998 QE_{105}	16.3	X	315.09012	202.33673	125.53697	8.23611	0.1782702	0.29527147	2.2335125	21	6 8.4	18.5
118278 1998 RO_{17}	16.5	X	293.59857	86.38382	280.25635	2.28963	0.1807408	0.29668063	2.2264345	21	6 30.2	18.8
118279 1998 RG_{23}	16.6	X	69.24323	315.25861	68.16058	2.46566	0.1854744	0.31404746	2.1435775	21	—	—
118280 1998 RQ_{31}	16.3	X	144.51029	131.56907	235.04874	4.64552	0.1627607	0.27803553	2.3248906	21	1 22.2	19.5
118281 1998 RH_{43}	16.0	X	336.13175	346.39376	244.36829	2.65969	0.1405310	0.28657293	2.2784838	21	2 20.8	18.5
118282 1998 RB_{48}	16.6	X	224.12780	50.23203	267.40998	2.37276	0.1580888	0.28281311	2.2986333	21	2 7.7	20.1
118283 1998 RU_{55}	16.2	X	187.96379	134.45945	294.82039	3.13118	0.1117180	0.28900467	2.2656847	21	5 27.8	19.3
118284 1998 RC_{59}	16.2	X	166.02865	348.84248	344.65405	7.10716	0.1352477	0.27684273	2.3315638	21	1 3.1	19.5
118285 1998 RF_{65}	16.4	X	218.78848	213.84848	189.01268	5.21700	0.1162423	0.28985942	2.2612284	21	5 26.9	19.6
118286 1998 RR_{66}	15.8	X	348.68392	300.75697	338.25971	5.25723	0.1853661	0.29359775	2.2419929	21	5 25.6	17.6
118287 1998 RY_{66}	16.1	X	9.48053	107.45167	281.82629	4.22711	0.1171886	0.30625989	2.1797631	21	—	—
118288 1998 SK_4	16.6	X	181.16818	238.70482	141.10788	1.61207	0.2167922	0.28327715	2.2961223	21	3 21.9	20.3
118289 1998 SN_{10}	16.1	X	156.97137	68.81829	312.49518	6.96954	0.1256467	0.28003239	2.3138252	21	2 19.7	19.3
118290 1998 SZ_{26}	16.2	X	243.15984	160.58173	182.09983	4.97201	0.1920931	0.28678977	2.2773351	21	3 27.9	19.5
118291 1998 SU_{46}	16.1	X	101.45276	89.60780	24.27119	2.93649	0.2461517	0.27976345	2.3153078	21	5 6.8	18.9
118292 1998 SE_{57}	16.1	X	297.74078	263.64785	29.10389	3.90403	0.0972409	0.28871434	2.2672034	21	4 2.8	18.8
118293 1998 SV_{62}	16.2	X	141.11790	182.25224	205.02238	5.70212	0.1271492	0.27804145	2.3248576	21	2 8.8	19.3
118294 1998 SQ_{75}	16.3	X	246.80963	129.29005	188.48026	6.27772	0.1471747	0.28450478	2.2895124	21	2 28.9	19.7
118295 1998 SA_{111}	16.2	X	168.66566	357.93591	2.15165	6.97512	0.1430409	0.27892863	2.3199252	21	2 10.6	19.5
118296 1998 SL_{122}	16.2	X	123.67478	152.62185	208.29712	4.50420	0.2458474	0.27362630	2.3497996	21	1 2.9	19.1
118297 1998 SY_{129}	16.2	X	206.21868	343.73345	20.33022	7.80628	0.1406553	0.28357947	2.2944901	21	3 23.7	19.7
118298 1998 SC_{131}	16.4	X	244.30397	183.04536	213.80884	4.33605	0.1826611	0.29097852	2.2554269	21	6 9.4	19.6
118299 1998 SD_{148}	16.4	X	355.76877	170.10636	276.45080	3.61328	0.1641411	0.26720771	2.3872802	21	—	—
118300 1998 SL_{162}	16.0	X	185.19718	51.95621	232.39958	5.40808	0.1369469	0.27227930	2.3575431	21	—	—
118301 1998 TO_{16}	16.5	X	192.88534	174.02505	229.89379	5.38108	0.1359508	0.28548606	2.2842630	21	4 29.3	19.8
118302 1998 TX_{36}	16.4	X	228.09593	200.38217	185.26529	6.80349	0.1643342	0.28749435	2.2736128	21	5 11.3	19.8
118303 1998 UG	13.9	X	219.25031	119.09563	304.63882	21.80746	0.2300974	0.28930325	2.2641255	21	6 19.7	17.9
118304 1998 UQ_{20}	16.2	X	202.36789	265.08429	96.07913	0.99686	0.2589541	0.28209744	2.3025194	21	3 16.9	20.3
118305 1998 UU_{30}	16.1	X	108.43501	286.81942	131.44451	6.65107	0.1090614	0.27521758	2.3407333	21	2 7.2	18.6
118306 1998 US_{39}	16.5	X	186.35639	92.74566	242.58416	1.25153	0.2357198	0.27879078	2.3206899	21	1 31.1	20.3
118307 1998 VM_1	15.7	X	220.18916	309.10868	30.74889	8.47719	0.2870679	0.28242724	2.3007265	21	3 7.1	19.9
118308 1998 VT_7	16.2	X	155.58945	201.47167	241.69836	5.39542	0.1053616	0.28487593	2.2875234	21	5 10.5	19.3
118309 1998 VR_9	16.2	X	300.23508	300.35090	17.61138	4.65028	0.1870173	0.29073034	2.2567103	21	4 26.1	18.7
118310 1998 VP_{32}	15.2	X	145.44172	6.05412	110.59115	25.64217	0.2163088	0.28400674	2.2921883	21	6 24.6	19.1
118311 1998 VU_{36}	16.2	X	267.66632	285.42928	82.65540	6.52610	0.1536157	0.29156684	2.2523919	21	5 31.1	19.1
118312 1998 VM_{39}	16.5	X	179.34873	147.36918	194.13905	4.29675	0.1965602	0.27681297	2.3317309	21	1 29.7	20.1
118313 1998 WV_2	16.8	X	16.46862	334.62506	230.05778	2.02027	0.0116511	0.28159581	2.3052530	21	4 4.6	19.6
118314 1998 WG_{11}	16.4	X	331.57600	322.81453	99.22553	5.21335	0.1604149	0.30215456	2.1994628	21	12 27.9	17.9
118315 1998 WR_{12}	16.3	X	221.49751	122.91919	254.98961	6.03132	0.1375523	0.28474878	2.2882043	21	4 22.7	19.8
118316 1998 WC_{15}	16.4	X	51.75670	248.98403	147.51471	2.52958	0.2024245	0.26590945	2.3950442	21	—	—
118317 1998 WK_{41}	16.3	X	33.15203	218.81198	220.50714	5.79336	0.0827885	0.26776643	2.3839582	21	—	—
118318 1998 XW	16.1	X	4.97322	76.83345	72.97203	3.10775	0.1452600	0.27155452	2.3617361	21	—	—
118319 1998 XP_{10}	15.4	X	352.79665	201.98914	252.02102	0.54361	0.1437486	0.25937411	2.4351084	21	—	—
118320 1998 XB_{11}	16.0	X	75.92557	241.36872	315.24669	3.11041	0.1904292	0.23422830	2.6064124	21	7 21.3	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118321 1998 XS_{12}	16.2	X	156.50413	299.78641	89.11071	7.64159	0.1182307	0.27698321	2.3307754	21	3 5.9	19.5
118322 1998 XK_{48}	16.0	X	206.83871	14.17414	51.06042	5.08782	0.1871149	0.28519416	2.2858214	21	6 9.6	19.6
118323 1998 XU_{52}	15.9	X	164.18907	206.77219	288.06325	4.49800	0.2025338	0.28489073	2.2874442	21	8 1.2	19.6
118324 1998 XB_{57}	15.9	X	332.62177	344.16831	144.50972	5.17094	0.1355462	0.26348345	2.4097232	21	—	—
118325 1998 XP_{71}	16.1	X	219.84889	104.48509	312.16961	8.69632	0.2149926	0.28699289	2.2762605	21	6 8.9	19.8
118326 1998 YR_{20}	16.6	X	333.14106	41.45157	72.89890	2.40275	0.1419444	0.25986755	2.4320249	21	—	—
118327 1998 YZ_{20}	16.5	X	164.34295	217.72599	131.17287	3.44385	0.1910611	0.27509111	2.3414507	21	1 25.8	20.1
118328 1998 YH_{21}	16.0	X	329.67996	203.75906	289.07481	5.94900	0.0359092	0.26105999	2.4246134	21	—	—
118329 1998 YG_{24}	16.0	X	60.28389	54.67687	41.17812	2.00206	0.1754887	0.27071932	2.3665910	21	1 17.5	17.7
118330 1999 AP	16.4	X	344.81193	155.85231	348.19934	5.00172	0.1682298	0.26699565	2.3885441	21	—	—
118331 1999 AM_{2}	15.6	X	186.33463	52.73770	345.43489	5.67139	0.2132601	0.27901195	2.3194633	21	4 15.9	19.6
118332 1999 AK_{14}	15.9	X	345.20737	5.07006	98.40478	2.30170	0.1443807	0.26015234	2.4302496	21	—	—
118333 1999 AB_{24}	15.2	X	95.59175	128.60855	348.00162	24.14263	0.2884115	0.27436981	2.3455526	21	4 26.8	18.8
118334 1999 AY_{24}	16.4	X	313.46045	11.23037	129.32452	1.65877	0.1070423	0.25752191	2.4467706	21	—	—
118335 1999 BF_{2}	15.8	X	116.42836	239.61926	230.04973	26.55620	0.2289314	0.27794102	2.3254176	21	5 16.8	19.0
118336 1999 BB_{7}	16.0	X	342.79840	238.48466	242.61622	3.63972	0.1628915	0.26218052	2.4177001	21	—	—
118337 1999 BQ_{9}	14.7	X	353.62241	85.20444	63.67499	20.86925	0.3353868	0.26408552	2.4060593	21	—	—
118338 1999 CS	15.7	X	115.39137	96.84833	336.65844	11.98536	0.1299302	0.27135378	2.3629006	21	3 11.4	18.6
118339 1999 CK_{18}	15.1	X	276.91997	122.87508	56.63313	6.81533	0.0966053	0.25917559	2.4363517	21	—	—
118340 1999 CL_{20}	15.7	X	39.11710	85.26913	41.91626	5.69145	0.1480381	0.26839220	2.3802512	21	1 21.8	17.8
118341 1999 CK_{25}	15.5	X	283.31433	81.43734	33.33861	3.65527	0.1094109	0.25271451	2.4777031	21	11 27.9	18.2
118342 1999 CW_{26}	16.4	X	345.86161	78.56084	46.81012	2.77649	0.1600486	0.26122669	2.4235818	21	—	—
118343 1999 CT_{27}	15.8	X	100.53814	174.97188	6.21546	13.15660	0.2098980	0.23607399	2.5928096	21	8 6.7	19.9
118344 1999 CS_{42}	15.9	X	265.67936	295.67918	137.00374	5.52254	0.2209647	0.24581113	2.5238780	21	8 16.9	19.1
118345 1999 CZ_{45}	15.9	X	88.24040	328.79649	121.75414	1.98334	0.1932101	0.27005870	2.3704489	21	3 8.9	18.2
118346 1999 CA_{48}	15.7	X	64.70266	151.26477	319.87040	2.34731	0.1847076	0.26877893	2.3779674	21	2 20.9	17.6
118347 1999 CM_{60}	15.8	X	310.48452	128.31069	321.16678	4.21693	0.0543033	0.25178134	2.4838213	21	12 10.7	18.8
118348 1999 CT_{86}	16.1	X	43.50091	48.99332	33.97947	8.99506	0.2361197	0.26581254	2.3956263	21	—	—
118349 1999 CG_{88}	15.7	X	57.10327	70.73097	54.99702	7.58842	0.1643536	0.27039693	2.3684717	21	3 1.9	17.8
118350 1999 CR_{89}	15.9	X	64.62658	30.78807	73.91221	3.51900	0.1310508	0.26904479	2.3764006	21	2 6.6	18.0
118351 1999 CF_{98}	15.5	X	53.30599	278.76803	309.81468	1.46306	0.1026381	0.23471508	2.6028075	21	7 18.3	18.5
118352 1999 CA_{101}	15.5	X	69.91321	169.21498	359.05676	13.81359	0.1866061	0.23018126	2.6368741	21	5 29.1	19.0
118353 1999 CZ_{104}	15.8	X	198.59522	245.59726	169.38361	6.85474	0.2400031	0.28180117	2.3041329	21	5 21.1	19.8
118354 1999 CY_{149}	15.5	X	147.69650	4.88516	165.50749	10.90303	0.0489275	0.23837802	2.5760754	21	8 24.5	19.0
118355 1999 CA_{154}	16.0	X	286.54535	330.92343	181.03160	6.51257	0.1683725	0.25517872	2.4617262	21	—	—
118356 1999 EM_{3}	15.1	X	174.38496	141.98967	13.02334	15.22667	0.2465504	0.23977083	2.5660896	21	9 8.3	19.7
118357 1999 EM_{11}	16.2	X	29.80756	112.19847	346.84686	5.57787	0.1554951	0.26336102	2.4104700	21	—	—
118358 1999 FH_{2}	16.6	X	280.75870	334.90766	177.83646	2.05786	0.1308176	0.25378402	2.4707371	21	—	—
118359 1999 FZ_{3}	17.2	X	328.32229	101.06844	36.29080	1.03695	0.1661978	0.25942272	2.4348042	21	—	—
118360 1999 FV_{4}	16.0	X	316.29998	297.52243	22.19117	1.24187	0.0625623	0.23027675	2.6361451	21	6 17.7	19.1
118361 1999 FX_{4}	16.4	X	308.66021	97.54325	20.19829	4.04476	0.1934087	0.25240251	2.4797445	21	—	—
118362 1999 FS_{17}	14.8	X	323.46371	358.32779	21.93696	8.48929	0.1632486	0.23915530	2.5704907	21	9 19.9	17.2
118363 1999 FH_{46}	15.9	X	83.92992	193.18136	20.39411	4.28101	0.0620426	0.23558884	2.5963679	21	8 5.8	19.3
118364 1999 FT_{47}	15.9	X	9.91300	138.55031	309.72506	1.64802	0.1601825	0.25850458	2.4405660	21	—	—
118365 1999 FQ_{52}	15.6	X	105.69426	172.25178	4.27556	5.00685	0.0761441	0.23437687	2.6053108	21	7 16.4	19.2
118366 1999 GK	15.5	X	190.33284	333.01453	184.26506	13.24190	0.0842669	0.24200183	2.5502942	21	9 26.4	19.1
118367 1999 GC_{4}	15.6	X	149.86095	319.48168	198.30883	11.88962	0.2017439	0.23591268	2.5939914	21	8 13.8	20.2
118368 1999 GE_{11}	16.1	X	292.12385	197.85243	123.97883	0.41804	0.0432184	0.22941545	2.6427390	21	5 19.5	19.4
118369 1999 GF_{11}	16.7	X	322.64625	56.30360	75.81258	0.32085	0.1553857	0.25618748	2.4552598	21	—	—
118370 1999 GT_{13}	16.2	X	214.80401	115.78554	2.88179	3.41213	0.0397649	0.23995653	2.5647655	21	9 9.1	19.6
118371 1999 GE_{33}	15.7	X	358.34298	194.05869	46.76623	14.69552	0.2019920	0.22474488	2.6792270	21	4 26.3	18.0
118372 1999 GV_{33}	15.6	X	224.19222	334.68207	182.81628	12.43016	0.1841224	0.24518892	2.5281460	21	10 26.1	19.3
118373 1999 GD_{41}	16.1	X	157.26421	85.06466	121.45769	4.98183	0.1738949	0.24214268	2.5493051	21	10 24.9	20.3
118374 1999 GU_{55}	16.7	X	230.41732	46.67673	26.29039	3.40508	0.1128166	0.23614802	2.5922676	21	7 21.1	20.5
118375 1999 HB_{4}	16.3	X	168.20585	317.21258	46.13812	1.33461	0.0937981	0.21574151	2.7532579	21	2 17.7	20.3
118376 1999 HE_{4}	16.4	X	178.85938	295.52627	178.71154	0.73632	0.0865962	0.23253302	2.6190651	21	7 18.5	20.2
118377 1999 HW_{7}	16.0	X	178.94519	295.15308	212.30390	10.93751	0.1583856	0.23709173	2.5853843	21	8 26.0	20.3
118378 1999 HT_{11}	7.6	X	328.28291	189.34320	87.95258	5.04905	0.1168773	0.00339354	43.8564863	21	5 19.1	23.6
118379 1999 HC_{12}	7.6	X	69.69151	95.99750	57.03677	15.34622	0.2310746	0.00322439	45.3771681	21	5 29.7	24.0
118380 1999 JQ_{5}	16.7	X	144.60149	149.01117	51.71921	22.07899	0.0521713	0.37043238	1.9201276	21	10 24.8	19.0
118381 1999 JU_{5}	16.5	X	236.28593	92.97689	47.37224	22.36689	0.0734764	0.37643924	1.8996465	21	11 21.1	18.2
118382 1999 JH_{6}	16.3	X	13.84030	142.09120	199.53242	22.34848	0.1246101	0.36938766	1.9237463	21	11 25.4	18.3
118383 1999 JE_{7}	15.2	X	109.81276	96.39519	76.20104	13.60428	0.1050287	0.23069085	2.6329896	21	7 20.1	19.1
118384 1999 JA_{8}	14.8	X	63.70960	93.46994	58.40737	23.42584	0.1944668	0.26899337	2.3767035	21	5 2.2	17.2
118385 1999 JP_{11}	14.9	X	111.24110	122.22042	71.20368	29.17308	0.0965314	0.23278847	2.6171487	21	8 29.8	19.4
118386 1999 JF_{14}	16.2	X	203.55297	77.48607	56.45816	23.81987	0.0407692	0.36876037	1.9259273	21	10 13.7	18.7
118387 1999 JC_{15}	15.0	X	223.00865	2.88756	86.21519	29.25987	0.0623345	0.23284692	2.6167107	21	8 12.0	19.2
118388 1999 JR_{42}	16.0	X	7.74267	285.71448	254.58532	1.47598	0.1537037	0.26324157	2.4111991	21	2 6.5	18.1
118389 1999 JV_{42}	15.1	X	186.05276	215.99929	48.12490	17.51564	0.1850786	0.20395822	2.8583050	21	—	—
118390 1999 JS_{49}	14.9	X	307.57191	186.65966	63.18957	10.63474	0.1914350	0.21737687	2.7394319	21	2 18.4	18.9
118391 1999 JV_{117}	15.0	X	262.33353	112.05043	226.08832	13.79678	0.0832329	0.22264992	2.6960071	21	4 26.4	18.7
118392 1999 JO_{124}	15.3	X	68.21899	311.07206	223.62052	10.14934	0.0407621	0.22539731	2.6740544	21	5 17.3	18.6
118393 1999 KB_{3}	15.7	X	103.13610	29.57755	70.28711	5.35787	0.1041464	0.22034385	2.7147849	21	4 7.2	19.3
118394 1999 NV_{7}	14.6	X	22.15058	179.87722	131.69180	20.77217	0.3354092	0.18305994	3.0719007	21	10 30.8	18.4
118395 1999 NB_{65}	14.1	X	3.07865	245.09510	121.91783	13.03050	0.2693834	0.18329572	3.0692658	21	11 21.8	17.4
118396 1999 RY_{29}	16.1	X	34.99793	271.53208	316.06570	16.55492	0.0550464	0.35169844	1.9877225	21	6 4.7	18.3
118397 1999 RO_{45}	15.0	X	181.45621	298.41154	241.60178	8.08224	0.0624088	0.18155069	3.0889019	21	10 7.8	19.7
118398 1999 RO_{58}	14.9	X	32.05874	49.02644	316.91743	7.58882	0.1033178	0.18744926	3.0237571	21	12 10.6	19.1
118399 1999 RM_{61}	14.5	X	314.98263	21.93901	338.01825	21.68071	0.0888547	0.17746989	3.1360737	21	8 11.8	18.7
118400 1999 RB_{63}	14.7	X	318.42843	80.29671	322.61788	15.18182	0.1624564	0.18071107	3.0984623	21	9 23.1	18.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118401 LINEAR	15.2	X	272.58823	34.97503	345.90717	0.23474	0.1930624	0.17264276	3.1942615	21	6 20.8	19.9
118402 1999 RK_{78}	15.0	X	293.41534	229.45769	179.01290	5.12011	0.1395350	0.17758743	3.1346897	21	8 29.9	19.1
118403 1999 RY_{92}	14.7	X	347.75388	252.48683	156.65260	5.64779	0.2714170	0.18180158	3.0860593	21	12 11.6	17.6
118404 1999 RC_{93}	14.6	X	348.84720	222.03476	165.14673	9.66204	0.0921481	0.18190640	3.0848738	21	11 5.5	18.5
118405 1999 RM_{104}	14.8	X	332.49936	134.77752	230.15349	8.58281	0.1395115	0.17864636	3.1222902	21	9 1.9	18.7
118406 1999 RM_{168}	14.9	X	58.64827	117.67147	168.07856	6.83697	0.2414538	0.18369035	3.0648684	21	10 28.3	19.3
118407 1999 RA_{201}	14.0	X	26.61028	127.48348	290.92754	13.16967	0.2432785	0.18887303	3.0085420	21	—	—
118408 1999 RV_{220}	14.9	X	314.90140	172.06483	221.24261	8.25895	0.0564940	0.17972768	3.1097542	21	9 19.2	19.1
118409 1999 RB_{234}	14.5	X	250.78402	255.91439	156.44016	22.31255	0.0921580	0.17218714	3.1998938	21	7 17.8	19.5
118410 1999 RD_{239}	14.6	X	301.47163	313.90059	57.45259	7.77437	0.1811486	0.17377862	3.1803273	21	7 19.9	18.7
118411 1999 RV_{251}	16.0	X	273.40969	111.55783	310.53417	17.34257	0.1064637	0.35765174	1.9656031	21	9 2.4	18.1
118412 1999 RG_{253}	14.4	X	214.75687	148.26022	3.29092	14.49428	0.2353589	0.17981014	3.1088034	21	9 27.4	19.5
118413 1999 SP_{1}	15.2	X	282.89110	236.62051	212.01855	13.32106	0.1895837	0.17850386	3.1239516	21	9 26.6	19.4
118414 1999 SU_{10}	14.6	X	299.85917	350.70071	73.25006	10.64844	0.2115929	0.17557929	3.1585459	21	9 25.4	18.6
118415 1999 SV_{19}	14.5	X	349.69709	191.15235	149.92790	11.53354	0.2243103	0.17803502	3.1294337	21	9 6.0	17.4
118416 1999 TD_{9}	14.8	X	251.69250	257.14420	181.97101	7.97970	0.2094684	0.17069952	3.2184580	21	8 5.7	19.8
118417 1999 TW_{12}	14.1	X	298.78289	61.86420	34.73506	17.21949	0.2407445	0.18021407	3.1041563	21	10 27.1	17.5
118418 Yangmei	14.7	X	347.71036	126.46296	208.77293	8.90669	0.1046660	0.17448089	3.1717878	21	8 20.7	18.8
118419 1999 TK_{53}	15.0	X	62.12949	0.01158	236.86535	4.44942	0.0997749	0.17150316	3.2083960	21	8 6.9	19.4
118420 1999 TF_{59}	15.2	X	300.18571	1.49764	3.84899	1.16253	0.1826435	0.17404801	3.1770448	21	7 8.6	19.2
118421 1999 TM_{65}	15.7	X	190.66058	32.52791	178.51215	2.13559	0.0407680	0.18739758	3.0243130	21	11 29.1	20.1
118422 1999 TU_{71}	15.2	X	358.86897	257.86980	36.82518	1.24809	0.1556853	0.17192960	3.2030886	21	7 19.6	18.7
118423 1999 TJ_{84}	14.2	X	190.71979	302.55092	208.60086	25.39987	0.1263615	0.17404505	3.1770808	21	9 6.9	19.6
118424 1999 TL_{111}	14.7	X	299.88579	147.83910	253.14633	4.17887	0.1873938	0.17546769	3.1598850	21	8 21.5	18.8
118425 1999 TG_{114}	16.9	X	302.35974	172.97059	191.78612	2.99768	0.0685514	0.30939475	2.1650142	21	7 31.7	19.1
118426 1999 TX_{136}	15.2	X	10.65361	128.59904	202.89314	4.41901	0.1708289	0.17935614	3.1140473	21	10 1.6	18.8
118427 1999 TM_{148}	15.1	X	63.06337	262.20902	353.17379	5.96485	0.0740894	0.22020213	2.7159496	21	9 3.3	18.5
118428 1999 TG_{157}	14.9	X	269.37295	270.88904	190.90136	18.09718	0.0555997	0.18114465	3.0935161	21	10 18.6	19.1
118429 1999 TE_{163}	15.0	X	269.29309	307.82604	96.45332	3.40571	0.1344388	0.17126349	3.2113886	21	7 24.9	19.7
118430 1999 TZ_{171}	15.2	X	278.75127	322.98790	79.95287	3.35504	0.1679802	0.17131882	3.2106971	21	7 30.6	19.6
118431 1999 TD_{187}	13.9	X	123.24254	186.52637	246.33865	16.18827	0.1299928	0.15640892	3.4116283	21	3 30.8	19.3
118432 1999 TL_{214}	14.9	X	298.69978	334.44102	43.91379	1.39352	0.0789384	0.17259931	3.1947976	21	8 8.1	19.1
118433 1999 TN_{235}	14.9	X	348.83774	290.54299	64.70563	6.64188	0.1556680	0.17706469	3.1408564	21	9 26.1	18.5
118434 1999 TY_{250}	14.7	X	312.29852	143.56532	248.27044	14.11319	0.1910010	0.17562194	3.1580345	21	8 24.0	18.7
118435 1999 TK_{273}	14.0	X	346.07738	116.16779	322.26161	21.83314	0.1615427	0.18601506	3.0392796	21	—	—
118436 1999 TU_{275}	14.9	X	202.74392	277.51775	201.76972	5.25876	0.0457962	0.17322823	3.1870603	21	8 18.9	19.6
118437 1999 TB_{285}	14.9	X	300.52853	49.22901	49.89233	15.60165	0.1645955	0.18062141	3.0994876	21	11 12.6	18.3
118438 1999 UK_{17}	15.2	X	97.15066	68.73988	183.87614	10.45089	0.0790570	0.18154754	3.0889376	21	10 9.1	19.7
118439 1999 UT_{20}	15.9	X	100.42084	191.19705	90.21784	2.38326	0.1508211	0.18452487	3.0556207	21	11 22.9	20.5
118440 1999 UM_{37}	15.7	X	84.51685	206.64675	59.23759	2.10347	0.1461485	0.18099514	3.0952195	21	10 18.9	20.3
118441 1999 UP_{39}	14.5	X	91.55576	194.46442	26.91033	10.91156	0.1603886	0.17467597	3.1694260	21	9 7.6	19.3
118442 1999 UM_{54}	15.6	X	194.49313	289.06160	191.02649	9.76852	0.0824124	0.17332378	3.1858888	21	8 8.1	20.6
118443 1999 UZ_{62}	14.5	X	334.27304	26.96824	301.82847	11.58952	0.0889994	0.17146075	3.2089250	21	7 25.2	18.3
118444 1999 VK_{20}	13.8	X	329.87328	84.08694	339.78094	15.33337	0.2225302	0.18034513	3.1026523	21	11 10.1	17.3
118445 1999 VH_{29}	16.9	X	252.33979	178.50652	226.02667	3.07364	0.1449597	0.30434332	2.1889048	21	7 3.3	19.8
118446 1999 VK_{69}	14.9	X	212.25427	287.63419	206.67014	3.09433	0.1178308	0.17320606	3.1873322	21	9 12.1	19.9
118447 1999 VM_{81}	15.0	X	355.39458	143.36773	206.22183	9.85036	0.2188713	0.17843608	3.1247428	21	9 28.6	18.2
118448 1999 VH_{93}	14.9	X	235.08492	75.82868	22.38756	4.77471	0.1338304	0.17203406	3.2017918	21	8 23.9	19.8
118449 1999 VY_{94}	14.4	X	281.88224	209.55431	211.43966	17.11744	0.0778534	0.17482090	3.1676740	21	9 3.7	19.0
118450 1999 VV_{116}	15.3	X	319.78057	293.16580	27.68767	6.86244	0.1720906	0.17176561	3.2051270	21	6 10.8	19.3
118451 1999 VX_{124}	15.3	X	117.15480	247.63820	96.46888	2.32909	0.0533973	0.18846079	3.0129277	21	—	—
118452 1999 VH_{127}	14.4	X	352.76687	145.62463	197.69132	10.02452	0.2343621	0.17747116	3.1360588	21	9 13.4	17.4
118453 1999 VP_{159}	15.0	X	356.39896	184.06305	272.57677	2.74276	0.1861824	0.18757391	3.0224174	21	—	—
118454 1999 VU_{159}	16.4	X	268.06113	81.25439	8.97926	3.11117	0.0981034	0.31285795	2.1490075	21	10 12.1	18.6
118455 1999 VP_{191}	15.0	X	120.47801	149.14841	65.11115	2.30754	0.1343263	0.17216847	3.2001252	21	9 22.2	20.0
118456 1999 VO_{205}	14.2	X	326.20242	84.01613	278.99107	20.25151	0.1948429	0.17617681	3.1514001	21	8 8.7	18.1
118457 1999 WP_{6}	14.8	X	280.30787	37.40911	89.82970	7.29622	0.1479375	0.17936699	3.1139218	21	11 20.6	18.9
118458 1999 WY_{11}	16.9	X	101.74619	171.98900	100.35380	1.72375	0.1043125	0.31285421	2.1490245	21	11 28.1	19.7
118459 1999 XB_{6}	17.1	X	26.31973	307.99473	78.10395	0.04201	0.1613998	0.31922504	2.1203363	21	—	—
118460 1999 XM_{6}	14.0	X	296.45779	111.46434	52.25244	16.28141	0.3016707	0.18321325	3.0701868	21	—	—
118461 1999 XJ_{10}	14.9	X	344.53128	176.33495	258.51521	12.84714	0.1311506	0.18346438	3.0673844	21	12 28.1	18.5
118462 1999 XQ_{24}	14.3	X	326.33629	313.02908	59.87520	17.60674	0.2019759	0.17416007	3.1756818	21	9 10.8	18.2
118463 1999 XZ_{48}	14.4	X	334.51681	329.41103	63.33063	15.08132	0.2219784	0.17603610	3.1530793	21	10 20.5	17.7
118464 1999 XE_{61}	14.7	X	342.48025	315.65756	92.11895	6.33070	0.1640917	0.17816440	3.1279185	21	11 21.5	18.3
118465 1999 XR_{70}	14.7	X	352.17290	188.55169	177.60003	2.05372	0.2045107	0.17491415	3.1665481	21	10 15.5	17.8
118466 1999 XK_{110}	14.2	X	149.56465	107.85299	56.00031	17.54735	0.1073983	0.16744538	3.2600226	21	8 26.6	19.6
118467 1999 XO_{123}	14.2	X	315.11914	161.84984	267.19499	14.44195	0.2002102	0.17757116	3.1348813	21	10 19.9	18.0
118468 1999 XT_{216}	14.7	X	310.75486	4.49868	104.20204	6.66101	0.0898444	0.17769104	3.1334712	21	12 17.1	18.6
118469 1999 XW_{226}	16.7	X	103.70425	184.99550	116.38215	2.48194	0.0094632	0.31280842	2.1492343	21	—	—
118470 2000 AG_{4}	14.7	X	56.78367	60.50105	98.86280	24.66998	0.2323379	0.28346797	2.2950918	21	5 11.8	17.3
118471 2000 AF_{15}	14.1	X	255.44291	90.21894	90.51470	17.04848	0.1937016	0.17914417	3.1165034	21	12 15.7	18.4
118472 2000 AJ_{31}	16.6	X	14.97726	9.40439	12.97535	1.44057	0.1404074	0.31348025	2.1461625	21	—	—
118473 2000 AO_{34}	15.8	X	346.08635	2.02579	26.68732	5.11420	0.1310186	0.31004944	2.1619655	21	12 2.4	17.5
118474 2000 AH_{41}	13.6	X	208.55971	298.03493	97.54270	13.33619	0.2407456	0.15629955	3.4132196	21	5 12.7	19.6
118475 2000 AJ_{127}	16.1	X	118.04147	234.76561	274.27928	7.45134	0.1024113	0.29264377	2.2468627	21	6 26.2	18.7
118476 2000 AF_{163}	14.6	X	9.35647	302.54059	118.28609	8.96862	0.2236012	0.18264931	3.0765032	21	—	—
118477 2000 AQ_{168}	16.2	X	133.93393	78.67492	117.51494	3.79890	0.0956569	0.30036695	2.2081807	21	9 22.1	19.2
118478 2000 AD_{211}	17.5	X	331.67681	34.68254	304.08733	2.21859	0.1351885	0.30024717	2.2087680	21	8 6.9	19.0
118479 2000 AM_{238}	16.5	X	267.79394	226.65276	248.37863	3.47862	0.0335568	0.31061606	2.1593354	21	11 27.4	18.7
118480 2000 BG_{10}	15.8	X	260.14939	125.16788	132.97025	8.59503	0.2062648	0.27606660	2.3359317	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118481 2000 BK_{32}	16.1	X	322.14350	55.28268	308.39722	8.04515	0.0758096	0.30264401	2.1970907	21	8 31.4	18.3
118482 2000 BT_{51}	16.4	X	287.23275	233.49559	344.08160	3.44916	0.1635467	0.27513688	2.3411910	21	—	—
118483 2000 CJ_{16}	16.2	X	104.58623	85.62417	153.49675	5.80947	0.0773877	0.30259795	2.1973137	21	10 15.5	19.0
118484 2000 CK_{20}	16.7	X	85.50529	312.94066	144.47596	4.58043	0.0861170	0.28316898	2.2967070	21	2 22.1	19.1
118485 2000 CP_{27}	15.8	X	163.18822	50.23121	148.46415	8.50758	0.2191622	0.25628038	2.4546664	21	10 21.9	20.1
118486 2000 CN_{30}	16.3	X	189.97721	280.71701	181.69891	1.76715	0.0695747	0.29559744	2.2318702	21	7 16.4	19.1
118487 2000 CK_{31}	16.2	X	283.55338	356.14960	280.88754	5.42974	0.0925049	0.28331482	2.2959188	21	2 20.2	19.3
118488 2000 CP_{37}	15.7	X	297.33733	216.29406	305.73872	7.56814	0.0810263	0.27181855	2.3602064	21	—	—
118489 2000 CR_{40}	15.8	X	310.99820	85.99332	45.88802	3.32444	0.1192656	0.26858203	2.3791295	21	—	—
118490 2000 CN_{54}	15.9	X	339.58687	33.08355	186.69310	3.27842	0.2004374	0.27965652	2.3158979	21	2 2.4	18.5
118491 2000 CC_{88}	15.7	X	325.03016	288.95594	344.66553	7.58932	0.1252817	0.28582157	2.2824751	21	4 7.9	18.1
118492 2000 CK_{98}	16.2	X	227.99739	313.33399	333.54688	5.28512	0.1335999	0.27490274	2.3425202	21	1 6.9	19.7
118493 2000 DH_{3}	16.3	X	29.93387	339.50201	144.32024	4.90429	0.1784113	0.27781681	2.3261106	21	—	—
118494 2000 DP_{8}	15.9	X	277.13655	70.16434	181.42106	6.66319	0.0854689	0.27683961	2.3315813	21	1 13.4	19.2
118495 2000 DV_{9}	16.6	X	204.91073	319.03052	149.92176	6.13938	0.0897503	0.29852724	2.2172436	21	8 12.2	19.6
118496 2000 DA_{34}	16.6	X	158.38031	300.99393	307.75255	1.69411	0.1646413	0.26076919	2.4264157	21	12 16.3	20.4
118497 2000 DB_{34}	16.4	X	235.01968	84.62098	167.50597	5.65734	0.1961192	0.27030252	2.3690232	21	—	—
118498 2000 DD_{42}	16.4	X	321.43806	75.35386	149.03393	3.91991	0.1286612	0.27889701	2.3201006	21	1 26.2	19.0
118499 2000 DM_{59}	16.8	X	189.31583	308.27770	318.00399	0.82247	0.1544184	0.26606991	2.3940812	21	—	—
118500 2000 DH_{64}	16.3	X	201.38213	161.38229	314.60877	2.90416	0.0927827	0.29741762	2.2227550	21	8 17.7	19.2
118501 2000 DO_{67}	16.1	X	312.73544	270.60135	353.20838	3.33979	0.1039091	0.28234430	2.3011771	21	3 13.2	18.8
118502 2000 DV_{70}	16.2	X	39.85941	128.09767	343.16963	6.70797	0.0494963	0.27558453	2.3386550	21	—	—
118503 2000 DA_{71}	16.7	X	313.95243	37.55113	206.71943	2.21992	0.1408982	0.27890510	2.3200557	21	2 9.8	19.6
118504 2000 DS_{72}	16.6	X	61.45085	314.71126	159.44084	6.78593	0.0560950	0.27871111	2.3211321	21	2 4.0	19.2
118505 2000 DL_{76}	15.8	X	282.48693	57.88424	333.25636	8.00197	0.1770356	0.29796917	2.2200112	21	7 22.8	18.3
118506 2000 DX_{80}	16.4	X	309.52124	201.02661	27.87750	4.00117	0.1119378	0.27934695	2.3176086	21	1 20.9	19.4
118507 2000 DV_{81}	16.1	X	319.67080	294.14774	83.87611	4.68880	0.1702712	0.30358238	2.1925609	21	9 18.2	17.5
118508 2000 DW_{81}	16.2	X	297.22066	230.64404	13.88040	7.06517	0.0739537	0.28040392	2.3117808	21	2 1.8	19.2
118509 2000 DA_{85}	16.0	X	89.85808	157.94192	3.86418	6.98105	0.0363726	0.29003167	2.2603331	21	5 23.1	18.7
118510 2000 DC_{90}	16.3	X	253.43227	346.97143	313.93377	4.22366	0.1488961	0.28250391	2.3003102	21	2 14.9	19.9
118511 2000 DR_{93}	16.9	X	239.03779	212.01832	356.42692	4.56731	0.1546973	0.26722124	2.3871996	21	—	—
118512 2000 DR_{94}	16.5	X	55.55749	56.14331	137.71440	5.02152	0.0722770	0.28876396	2.2669436	21	5 26.4	18.9
118513 2000 DD_{97}	15.7	X	335.98575	237.50567	343.94276	4.84817	0.2106224	0.28025945	2.3125752	21	1 30.7	18.2
118514 2000 DJ_{104}	16.2	X	317.23128	165.90787	109.52110	5.92985	0.1300600	0.28415867	2.2913712	21	4 4.3	18.9
118515 2000 DF_{105}	15.8	X	242.52505	193.67852	143.23330	6.70302	0.1595516	0.28466894	2.2886322	21	3 23.9	19.3
118516 2000 DP_{105}	16.5	X	121.75453	42.92999	102.82819	4.85520	0.0510370	0.29046841	2.2580668	21	6 19.5	19.2
118517 2000 DM_{106}	16.5	X	67.80684	105.30752	112.13432	6.44934	0.0671332	0.29156188	2.2524175	21	7 19.9	18.9
118518 2000 DO_{116}	16.0	X	245.65569	98.53306	55.45467	2.89775	0.1492072	0.26184999	2.4197343	21	11 21.4	19.1
118519 2000 EY_{10}	15.9	X	201.70654	314.16001	354.11719	13.79001	0.1638572	0.27502526	2.3418244	21	1 12.1	19.8
118520 2000 EU_{11}	13.3	X	257.53723	100.15295	44.13818	9.28803	0.1440552	0.12550318	3.9509321	21	11 3.4	18.8
118521 2000 EO_{14}	16.1	X	68.48892	74.06632	50.96121	1.50229	0.1698388	0.28162602	2.3050881	21	3 18.3	17.9
118522 2000 EA_{16}	16.8	X	192.65870	301.75239	325.65072	0.58082	0.1743542	0.26594036	2.3948586	21	—	—
118523 2000 EW_{22}	16.2	X	196.95479	286.42368	329.90813	5.58932	0.1800525	0.26734613	2.3864561	21	—	—
118524 2000 EE_{24}	17.0	X	158.68213	275.02991	182.08259	4.25033	0.0995228	0.28865830	2.2674968	21	6 2.9	20.2
118525 2000 ED_{30}	15.5	X	324.44251	348.60676	41.56700	6.28248	0.1480057	0.30373652	2.1918191	21	10 20.4	17.0
118526 2000 EP_{30}	16.4	X	280.73307	159.09412	37.41884	6.37086	0.1997220	0.26979025	2.3720211	21	—	—
118527 2000 EY_{33}	15.8	X	235.35109	285.40132	103.47039	9.40273	0.2280097	0.29160933	2.2521731	21	5 19.5	19.4
118528 2000 EY_{39}	15.8	X	175.67289	206.52337	47.19675	1.91921	0.1527303	0.26103142	2.4247903	21	—	—
118529 2000 EQ_{41}	15.8	X	252.23485	108.25227	150.95101	2.61240	0.1876578	0.27042084	2.3683321	21	—	—
118530 2000 EW_{48}	16.5	X	179.98691	218.93627	347.30784	6.32588	0.1724899	0.25691017	2.4506531	21	11 10.9	20.6
118531 2000 EH_{60}	16.4	X	161.59486	62.20076	350.40710	5.84363	0.0089791	0.28228054	2.3015236	21	3 26.5	19.3
118532 2000 EJ_{61}	15.8	X	250.48337	275.90956	343.03225	5.97180	0.0942186	0.27223309	2.3578098	21	—	—
118533 2000 EB_{69}	16.4	X	222.78416	240.11268	22.08985	5.56021	0.1338964	0.26800128	2.3825653	21	—	—
118534 2000 ES_{69}	16.1	X	281.96468	212.14360	4.49364	1.99016	0.1591674	0.27037071	2.3686249	21	—	—
118535 2000 EE_{70}	16.5	X	26.39897	15.08905	170.27716	2.20567	0.1070226	0.28117222	2.3075677	21	3 22.5	18.5
118536 2000 EJ_{79}	15.8	X	51.32376	201.51871	11.07437	6.62287	0.0907819	0.28940420	2.2635990	21	6 18.3	18.2
118537 2000 EQ_{80}	16.4	X	327.96535	188.98260	35.07565	4.03041	0.1223559	0.27938964	2.3173725	21	2 6.9	19.0
118538 2000 ER_{86}	15.9	X	82.56264	273.62403	286.99992	3.25286	0.0576272	0.29121889	2.2541857	21	7 15.3	18.2
118539 2000 EE_{87}	16.0	X	81.83079	287.56637	212.04057	3.89107	0.0860675	0.28405959	2.2919039	21	4 18.4	18.3
118540 2000 ES_{90}	15.7	X	308.08013	29.42883	209.20730	6.67468	0.2174271	0.27614105	2.3355118	21	1 15.7	19.2
118541 2000 EC_{96}	16.5	X	122.79608	58.10771	356.02532	5.90350	0.0723381	0.27918327	2.3185144	21	2 16.5	19.2
118542 2000 EL_{113}	16.2	X	165.79637	123.14283	181.63505	6.49241	0.1214182	0.26760114	2.3849397	21	—	—
118543 2000 EX_{120}	16.4	X	8.98132	104.92844	108.44246	4.42302	0.0865066	0.28479071	2.2879797	21	4 4.9	18.7
118544 2000 EG_{121}	15.8	X	345.80618	201.04141	40.08559	5.91911	0.1201290	0.28508586	2.2864003	21	3 31.8	18.0
118545 2000 EC_{124}	17.1	X	161.57581	281.89534	1.15316	3.40117	0.1908939	0.26356445	2.4092294	21	—	—
118546 2000 ET_{132}	16.7	X	133.81978	89.28218	26.90696	0.72396	0.1511198	0.28899443	2.2657382	21	6 4.5	19.9
118547 2000 EJ_{133}	16.0	X	345.60398	358.01882	181.66925	5.66158	0.0627357	0.27591660	2.3367782	21	1 9.7	18.8
118548 2000 EV_{139}	16.2	X	94.48711	56.74796	60.57676	7.86436	0.0533403	0.28196889	2.3032191	21	4 4.4	18.9
118549 2000 EG_{155}	16.3	X	355.45102	238.40814	338.13730	5.86239	0.0816572	0.28076868	2.3097782	21	3 14.2	18.8
118550 2000 EC_{156}	16.1	X	216.07927	278.54262	312.35360	5.74751	0.0729636	0.26471542	2.4022409	21	—	—
118551 2000 EX_{157}	15.6	X	342.87456	258.12561	312.48312	4.50781	0.1098759	0.27833703	2.3232114	21	2 10.4	18.1
118552 2000 EZ_{164}	16.5	X	188.63459	141.48232	149.81096	2.48210	0.2006861	0.26780813	2.3837107	21	—	—
118553 2000 EB_{171}	16.3	X	214.06725	191.99606	61.25099	8.29581	0.0637115	0.26807641	2.3821201	21	—	—
118554 2000 EM_{175}	16.3	X	196.75284	337.06403	115.45713	5.15341	0.0978464	0.29407625	2.2395603	21	7 9.8	19.3
118555 2000 FH_{4}	16.5	X	261.23794	293.22299	311.32635	1.28832	0.1542935	0.27024409	2.3693647	21	—	—
118556 2000 FN_{17}	15.7	X	333.12773	106.72696	127.37469	7.37699	0.0956576	0.28007583	2.3135859	21	3 5.2	18.3
118557 2000 FU_{28}	15.6	X	277.96942	39.02766	225.31993	4.95317	0.2058323	0.27407006	2.3472625	21	1 19.9	19.3
118558 2000 FF_{30}	16.1	X	215.61842	203.28591	45.12524	2.94404	0.1509609	0.26482617	2.4015711	21	—	—
118559 2000 FT_{37}	15.7	X	237.23631	185.03483	79.05376	5.78865	0.1432051	0.26941650	2.3742143	21	—	—
118560 2000 FW_{44}	16.1	X	80.06932	72.50548	63.83836	5.17712	0.1383364	0.28350959	2.2948671	21	4 21.3	18.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118561 2000 FY_{44}	16.3	X	107.33296	356.11352	135.02322	4.82522	0.1125590	0.28616876	2.2806286	21	5 20.2	19.1
118562 2000 FC_{47}	15.0	X	227.43473	200.49296	74.03740	9.81742	0.2309561	0.26813695	2.3817615	21	—	—
118563 2000 FJ_{47}	16.2	X	152.25239	29.43310	98.24276	6.79611	0.0976186	0.29049741	2.2579165	21	7 7.5	19.1
118564 2000 FO_{47}	16.6	X	255.62658	218.84079	53.01192	2.91441	0.2079799	0.27164322	2.3612219	21	1 11.6	20.5
118565 2000 FZ_{54}	17.0	X	100.28109	270.75212	22.40363	1.85151	0.1335970	0.25517828	2.4617290	21	12 15.4	20.6
118566 2000 FL_{58}	16.8	X	131.13329	31.49353	79.95891	2.91039	0.1720276	0.28749540	2.2736073	21	5 28.5	19.9
118567 2000 FQ_{59}	16.0	X	66.60077	32.18155	93.49371	6.53740	0.0536170	0.27928447	2.3179542	21	3 4.7	18.6
118568 2000 GD	16.4	X	198.20829	87.79798	155.61740	0.91702	0.1717867	0.26202626	2.4186490	21	—	—
118569 2000 GF_{1}	15.4	X	31.36642	126.03492	56.32874	23.82774	0.2929537	0.28074502	2.3099080	21	4 18.3	16.8
118570 2000 GP_{1}	16.2	X	106.58720	144.11878	28.67816	7.27138	0.1600793	0.28921071	2.2646085	21	7 25.7	19.4
118571 2000 GB_{5}	15.7	X	300.23746	197.71650	25.21385	6.27678	0.1392554	0.27497041	2.3421358	21	—	—
118572 2000 GR_{12}	16.7	X	169.80198	201.15236	47.77740	2.16415	0.1524140	0.25984817	2.4321458	21	12 27.5	20.4
118573 2000 GY_{12}	16.5	X	173.78681	229.34305	27.69711	3.48803	0.1563794	0.26099257	2.4250310	21	—	—
118574 2000 GL_{18}	15.7	X	192.37395	115.57499	195.92287	11.63828	0.1413313	0.27006226	2.3704281	21	1 2.2	19.5
118575 2000 GL_{23}	16.2	X	338.83889	132.16490	21.65528	6.47658	0.0729629	0.27092389	2.3653996	21	—	—
118576 2000 GK_{27}	16.5	X	176.00363	218.46808	42.99876	2.76896	0.1364786	0.26121655	2.4236445	21	—	—
118577 2000 GM_{31}	16.4	X	81.44738	325.93687	187.61296	5.27876	0.0904016	0.28413484	2.2914993	21	5 10.8	18.9
118578 2000 GL_{40}	15.6	X	210.92807	43.97554	196.16010	6.32296	0.1883471	0.26265112	2.4148114	21	—	—
118579 2000 GX_{44}	15.8	X	165.27240	93.45729	165.49047	2.40425	0.1827527	0.25874653	2.4390443	21	—	—
118580 2000 GA_{46}	16.2	X	91.53241	72.82201	42.42411	2.40040	0.1498090	0.28140938	2.3062710	21	4 9.6	18.6
118581 2000 GO_{50}	15.9	X	24.12206	115.60780	37.56564	4.08319	0.1605837	0.27691818	2.3311403	21	1 26.5	17.8
118582 2000 GG_{52}	16.2	X	165.75606	275.06408	25.35846	2.74671	0.1882341	0.26306890	2.4122541	21	—	—
118583 2000 GU_{54}	16.4	X	286.61062	214.23395	18.09886	6.09797	0.1289196	0.27159530	2.3614997	21	—	—
118584 2000 GE_{58}	16.0	X	112.76003	51.15532	222.62779	2.11134	0.1683436	0.25309482	2.4752204	21	12 5.4	19.8
118585 2000 GR_{60}	15.5	X	41.96033	227.19879	27.06829	12.32731	0.1991888	0.24144516	2.5542126	21	8 28.9	18.5
118586 2000 GK_{65}	16.5	X	7.51172	115.42096	56.44258	3.16074	0.1486305	0.27605304	2.3360082	21	1 23.1	18.7
118587 2000 GM_{68}	16.5	X	153.94975	220.22129	51.54157	1.98923	0.1570995	0.25807880	2.4432495	21	—	—
118588 2000 GL_{69}	16.7	X	1.57780	99.39320	29.12483	2.15369	0.1658198	0.27069399	2.3667387	21	—	—
118589 2000 GA_{71}	15.9	X	246.93049	160.54052	36.16412	2.88777	0.1637520	0.26279202	2.4139481	21	—	—
118590 2000 GR_{72}	16.7	X	327.44397	65.75286	123.51359	1.21461	0.1554696	0.27217632	2.3581377	21	—	—
118591 2000 GD_{76}	15.7	X	308.85886	175.48604	27.08021	5.00869	0.0567472	0.27063266	2.3670962	21	—	—
118592 2000 GF_{76}	16.1	X	3.80713	223.46628	31.74768	5.94828	0.2246259	0.23607953	2.5927690	21	5 27.1	18.0
118593 2000 GQ_{76}	15.7	X	342.92096	259.32116	29.45333	12.74128	0.2897325	0.23553729	2.5967468	21	5 16.2	17.7
118594 2000 GZ_{89}	16.1	X	264.98500	131.04118	109.64258	7.59142	0.0721329	0.27051837	2.3677629	21	—	—
118595 2000 GZ_{91}	15.6	X	19.72194	108.45961	184.10423	17.03133	0.3218096	0.24053463	2.5606544	21	9 28.4	17.7
118596 2000 GD_{93}	16.2	X	323.89924	98.49084	118.18020	4.13524	0.1523372	0.27609000	2.3357997	21	1 16.5	18.8
118597 2000 GE_{97}	16.2	X	21.48766	153.45385	45.94302	2.37658	0.0548524	0.28294324	2.2979285	21	4 5.0	18.7
118598 2000 GK_{101}	16.6	X	132.67192	139.89879	342.34032	5.14000	0.2378237	0.28961532	2.2624988	21	6 19.6	20.1
118599 2000 GZ_{103}	15.8	X	262.39847	169.65670	56.65768	3.16031	0.1374010	0.26803996	2.3823360	21	—	—
118600 2000 GD_{106}	16.0	X	339.93584	158.78034	12.43188	7.08625	0.1367361	0.27252715	2.3561135	21	—	—
118601 2000 GJ_{107}	15.2	X	233.02710	196.19583	67.92376	3.86453	0.1628574	0.26718991	2.3873862	21	—	—
118602 2000 GQ_{111}	16.6	X	211.91296	249.39103	321.42212	1.56728	0.1398477	0.26087545	2.4257567	21	12 24.9	19.8
118603 2000 GU_{111}	16.5	X	121.54609	292.15137	237.50754	5.50721	0.0451994	0.29102596	2.2551818	21	7 21.9	19.4
118604 2000 GL_{114}	16.1	X	116.46748	231.22583	235.32163	3.33397	0.0778100	0.28361932	2.2942752	21	4 19.8	18.8
118605 2000 GR_{116}	16.6	X	156.30854	65.68651	201.30527	3.68823	0.1627684	0.26068407	2.4269438	21	—	—
118606 2000 GG_{120}	16.8	X	229.75197	199.16741	1.04373	0.28011	0.0144908	0.26251329	2.4156565	21	—	—
118607 2000 GG_{130}	16.7	X	98.89920	144.80857	193.86799	1.96485	0.2091051	0.26144410	2.4222380	21	—	—
118608 2000 GQ_{134}	15.7	X	277.59080	155.31102	121.82689	4.71123	0.1233722	0.27609953	2.3357459	21	2 14.1	19.0
118609 2000 GZ_{137}	16.2	X	215.65850	170.11426	65.71627	3.97189	0.1283274	0.26317788	2.4115880	21	—	—
118610 2000 GC_{143}	16.1	X	240.07001	67.55523	155.35329	7.47101	0.0756436	0.26459773	2.4029532	21	—	—
118611 2000 GG_{143}	15.7	X	331.38869	148.32643	98.15225	7.13642	0.0726941	0.27904370	2.3192874	21	3 26.2	18.4
118612 2000 GU_{143}	15.7	X	220.41801	144.74278	137.42088	7.23370	0.1216777	0.26865380	2.3787058	21	—	—
118613 2000 GE_{150}	16.9	X	119.15352	166.46254	192.11927	3.13085	0.1312054	0.26807824	2.3821092	21	—	—
118614 2000 GZ_{150}	16.3	X	97.59977	198.69910	187.06849	1.88923	0.1865570	0.26993771	2.3711572	21	—	—
118615 2000 GT_{159}	16.2	X	22.45778	181.77925	336.12244	6.88218	0.0594177	0.27669229	2.3324088	21	2 6.7	18.6
118616 2000 GV_{159}	16.0	X	339.20289	209.58110	267.90548	4.49403	0.1770680	0.26800831	2.3825236	21	—	—
118617 2000 GP_{162}	16.2	X	311.27047	325.71368	268.90422	1.32906	0.1857681	0.27605926	2.3359731	21	1 19.6	19.2
118618 2000 HB_{8}	16.1	X	2.38247	288.18070	206.39493	6.38654	0.0684250	0.26974487	2.3722871	21	—	—
118619 2000 HR_{9}	16.3	X	223.62790	21.53551	197.66580	4.81713	0.1387435	0.26133346	2.4229217	21	—	—
118620 2000 HR_{13}	16.0	X	181.36738	48.20784	227.52576	1.80790	0.1946063	0.26041470	2.4286171	21	—	—
118621 2000 HK_{16}	16.6	X	148.57383	46.88334	196.61073	2.24387	0.1511912	0.25697880	2.4502168	21	12 1.2	20.5
118622 2000 HZ_{19}	16.1	X	359.97877	239.84359	73.54575	15.37610	0.1519773	0.24127551	2.5554098	21	8 31.7	19.0
118623 2000 HJ_{22}	16.1	X	243.21205	208.93667	33.86862	1.70836	0.1305546	0.26671885	2.3901963	21	—	—
118624 2000 HR_{24}	13.0	X	332.05290	354.02521	223.29806	15.54078	0.1750524	0.08982758	4.9377554	21	2 26.8	19.2
118625 2000 HF_{28}	15.1	X	113.33110	138.86554	44.44513	25.65196	0.2188807	0.28940752	2.2635817	21	9 5.7	19.3
118626 2000 HJ_{29}	15.6	X	305.00785	243.14955	317.80290	5.00732	0.1052662	0.27165978	2.3611260	21	—	—
118627 2000 HE_{36}	15.6	X	291.48756	32.86521	165.53666	12.31988	0.0588955	0.26785532	2.3834307	21	—	—
118628 2000 HW_{40}	15.6	X	283.16662	318.39787	288.97536	4.20522	0.1068551	0.27356011	2.3501786	21	1 14.3	18.9
118629 2000 HC_{42}	15.8	X	120.47023	323.85123	19.25714	1.67969	0.1932377	0.26390134	2.4071786	21	—	—
118630 2000 HA_{47}	16.1	X	217.84226	346.77648	211.07835	1.53083	0.1399821	0.25870986	2.4392748	21	12 14.8	19.3
118631 2000 HB_{48}	15.9	X	132.84051	278.25738	55.73767	3.31007	0.1577838	0.26193570	2.4192064	21	—	—
118632 2000 HR_{48}	16.1	X	103.75422	58.38257	218.15134	6.70193	0.1145685	0.25172781	2.4841735	21	11 27.1	19.7
118633 2000 HM_{57}	15.5	X	188.66902	187.64547	89.14637	3.40482	0.1782206	0.26209069	2.4182525	21	—	—
118634 2000 HA_{58}	17.3	X	95.34124	263.33857	240.45648	2.27885	0.1688744	0.28429829	2.2906209	21	5 29.5	19.9
118635 2000 HE_{60}	16.6	X	222.95982	35.24307	213.55645	5.59500	0.0685817	0.26475678	2.4019907	21	—	—
118636 2000 HW_{64}	16.4	X	338.65966	340.15703	225.63370	4.30641	0.1655589	0.27550743	2.3390913	21	1 19.0	19.1
118637 2000 HD_{66}	15.9	X	358.99152	80.97425	214.08243	3.31219	0.2737670	0.23762128	2.5815418	21	7 23.4	17.5
118638 2000 HR_{71}	15.6	X	351.28942	272.76344	22.50760	11.86742	0.2792503	0.23741960	2.5830035	21	6 28.5	17.5
118639 2000 HM_{73}	16.2	X	333.13923	17.56480	138.72600	11.89255	0.0848621	0.26923157	2.3753014	21	—	—
118640 2000 HP_{94}	16.2	X	358.67247	164.74576	40.33724	6.79878	0.0495789	0.27628400	2.3347061	21	3 11.8	18.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118641 2000 HU_{95}	16.3	X	293.54240	231.85143	343.96995	2.14109	0.1532880	0.27041576	2.3683618	21	—	—
118642 2000 HG_{102}	16.4	X	107.97066	115.07144	223.78180	2.19854	0.1828369	0.25962884	2.4335154	21	—	—
118643 2000 JR_{1}	15.9	X	142.32977	296.61603	359.24693	6.28016	0.1075065	0.25976674	2.4326540	21	—	—
118644 2000 JR_{5}	15.6	X	298.39989	64.74287	170.09151	12.01764	0.1469928	0.22597969	2.6694581	21	1 18.3	19.6
118645 2000 JC_{14}	16.3	X	35.72389	117.41803	37.04297	2.91560	0.1700702	0.27679776	2.3318163	21	2 23.1	18.1
118646 2000 JL_{26}	15.9	X	52.08902	247.11391	297.26568	4.82846	0.2102006	0.28278949	2.2987613	21	5 24.3	17.8
118647 2000 JX_{29}	15.6	X	40.19908	163.00281	10.21602	5.06432	0.1736131	0.27951905	2.3166572	21	4 3.4	17.3
118648 2000 JF_{31}	15.8	X	217.41350	254.23065	11.03737	2.53553	0.1901815	0.26406606	2.4061775	21	—	—
118649 2000 JM_{32}	15.6	X	345.06489	265.58250	49.30389	13.63402	0.2210983	0.23852468	2.5750193	21	7 23.0	18.0
118650 2000 JQ_{33}	15.8	X	218.86980	188.37920	22.60298	2.79182	0.0605708	0.25862882	2.4397843	21	—	—
118651 2000 JV_{33}	15.8	X	184.03940	347.28914	264.83551	5.56899	0.1076536	0.25930056	2.4355689	21	—	—
118652 2000 JM_{36}	15.7	X	271.63408	155.34121	52.37194	7.99965	0.0673426	0.26477647	2.4018716	21	—	—
118653 2000 JU_{36}	15.8	X	304.34399	161.50359	37.52074	2.74766	0.1516962	0.26867263	2.3785946	21	—	—
118654 2000 JE_{38}	16.8	X	306.43674	310.13247	228.84935	0.54777	0.1266864	0.26723748	2.3871029	21	—	—
118655 2000 JB_{40}	15.2	X	160.89728	9.83768	247.12212	7.68430	0.1817688	0.25546121	2.4599111	21	12 26.6	19.2
118656 2000 JR_{40}	15.7	X	97.12734	247.53282	75.76352	7.26107	0.1343761	0.25678268	2.4514642	21	—	—
118657 2000 JA_{57}	15.4	X	39.49789	68.43122	228.33377	11.05622	0.2685883	0.24242407	2.5473320	21	10 27.9	18.5
118658 2000 JO_{58}	15.5	X	357.54555	117.71564	154.03684	5.63176	0.1991593	0.23508347	2.6000876	21	6 10.8	17.8
118659 2000 JH_{77}	16.1	X	260.17500	145.52929	33.31959	1.72585	0.1255676	0.26102123	2.4248534	21	—	—
118660 2000 JK_{77}	16.5	X	335.55164	168.13068	47.38385	3.35638	0.1194354	0.27457429	2.3443879	21	2 7.4	19.1
118661 2000 KL_{6}	16.0	X	291.02103	221.13407	88.28502	6.63933	0.2182112	0.23028453	2.6360858	21	4 8.6	19.8
118662 2000 KD_{11}	16.3	X	18.79025	82.50621	240.21284	12.53977	0.1766585	0.24449731	2.5329114	21	10 13.3	19.1
118663 2000 KK_{11}	16.7	X	9.03553	296.07156	248.89739	0.40850	0.0744387	0.27530531	2.3402360	21	2 21.5	19.2
118664 2000 KP_{15}	15.6	X	324.33221	255.47709	76.62635	6.61905	0.1875154	0.23814657	2.5777443	21	7 2.4	18.2
118665 2000 KE_{34}	16.0	X	309.61634	352.64202	203.59413	7.24875	0.0616467	0.26968104	2.3726614	21	—	—
118666 2000 KZ_{34}	16.1	X	338.52569	182.39777	148.71193	3.66110	0.2279339	0.23862326	2.5743102	21	7 28.2	18.0
118667 2000 KA_{40}	15.7	X	79.48589	320.67535	50.85603	5.35249	0.2075809	0.25984243	2.4321816	21	—	—
118668 2000 KS_{43}	14.8	X	344.55498	117.97801	217.00835	7.32552	0.1381180	0.23606836	2.5928508	21	8 19.5	17.6
118669 2000 KO_{54}	15.7	X	337.99518	179.06226	110.57343	15.39801	0.1688827	0.23523756	2.5989521	21	6 1.0	18.6
118670 2000 KP_{55}	15.4	X	248.17172	96.14155	80.25519	14.81391	0.0965186	0.25787824	2.4445162	21	—	—
118671 2000 KL_{63}	16.1	X	265.31600	339.37855	207.85864	10.89995	0.2565040	0.26396610	2.4067849	21	—	—
118672 2000 KS_{63}	15.9	X	233.33444	95.34895	118.71564	8.21898	0.1322992	0.26164713	2.4209848	21	—	—
118673 2000 KU_{68}	16.6	X	77.64793	237.81090	157.02440	7.00521	0.0845878	0.26311379	2.4119797	21	—	—
118674 2000 KD_{78}	15.9	X	270.93019	81.28584	221.65894	12.15700	0.2594569	0.22612065	2.6683486	21	2 27.9	20.5
118675 2000 KW_{81}	15.5	X	203.97739	310.40818	304.49706	5.68256	0.0920477	0.26244383	2.4160827	21	—	—
118676 2000 LS_{17}	15.2	X	324.44808	3.61022	264.65239	12.18342	0.2613791	0.22798731	2.6537638	21	3 12.2	18.8
118677 2000 LG_{19}	16.0	X	282.70021	53.48181	223.63858	7.08905	0.2989832	0.22355993	2.6886859	21	2 5.9	20.5
118678 2000 LH_{22}	15.4	X	338.49764	130.97410	178.27247	7.31925	0.1974763	0.23694921	2.5864209	21	6 25.2	17.8
118679 2000 LE_{35}	15.6	X	310.61660	218.47582	88.80246	13.93093	0.1788830	0.23422691	2.6064228	21	5 9.0	18.9
118680 2000 LQ_{35}	15.6	X	352.34250	144.87976	155.98459	7.96027	0.1977052	0.23326397	2.6135909	21	7 14.5	18.0
118681 2000 NJ_{1}	16.0	X	19.35570	35.90500	240.59607	3.47110	0.1517774	0.23517520	2.5994115	21	8 3.5	18.7
118682 2000 NJ_{3}	16.0	X	197.43664	215.40879	145.08477	6.65486	0.2116363	0.21859576	2.7292390	21	3 18.3	20.6
118683 2000 NE_{11}	15.5	X	345.84077	328.75166	303.92479	13.95269	0.1466919	0.23028404	2.6360895	21	5 17.2	18.6
118684 2000 NX_{14}	15.0	X	280.58181	210.06662	130.16457	16.19116	0.1336226	0.22726982	2.6593462	21	5 20.6	19.0
118685 2000 NV_{15}	15.2	X	182.87388	268.61655	113.28357	9.91791	0.1517751	0.21850261	2.7300146	21	4 2.5	19.7
118686 2000 NA_{20}	15.7	X	311.51452	135.34095	137.04305	11.82992	0.1428859	0.22464324	2.6800351	21	3 29.9	19.3
118687 2000 NF_{22}	16.2	X	207.44368	218.52230	97.61541	2.32972	0.1899544	0.26406094	2.4062086	21	1 26.2	19.9
118688 2000 NJ_{22}	14.7	X	358.29305	359.15035	302.86839	12.56846	0.2981211	0.23490199	2.6014267	21	8 3.9	16.1
118689 2000 NG_{23}	15.1	X	171.58999	219.70895	133.55808	15.10229	0.2505808	0.21316782	2.7753747	21	2 19.5	19.9
118690 2000 OO_{20}	14.6	X	186.94412	140.52527	253.16209	11.80997	0.2216044	0.21798671	2.7343202	21	4 13.7	19.5
118691 2000 OJ_{23}	15.1	X	69.81484	182.48976	106.81406	8.20954	0.1811801	0.24413716	2.5354018	21	11 15.2	18.8
118692 2000 OS_{28}	15.0	X	1.08967	54.81856	273.75872	13.64162	0.1248484	0.23786670	2.5797658	21	9 5.9	18.1
118693 2000 OL_{31}	15.5	X	254.19534	200.55723	149.21444	15.76996	0.1396092	0.22551072	2.6731577	21	5 1.4	19.8
118694 2000 OG_{42}	15.5	X	268.22924	124.17089	205.71452	5.88835	0.2147714	0.22408128	2.6845139	21	4 7.5	19.5
118695 2000 OW_{44}	14.9	X	190.83250	55.22237	289.23485	9.62794	0.2566844	0.21368120	2.7709276	21	2 19.1	19.9
118696 2000 OA_{46}	14.3	X	230.55026	94.00067	325.03305	13.08382	0.1936251	0.22590101	2.6700779	21	6 26.2	18.7
118697 2000 OL_{47}	15.1	X	244.94304	147.64338	154.85758	11.44006	0.1494874	0.21614882	2.7497981	21	2 17.6	19.4
118698 2000 OY_{51}	8.2	X	334.95030	81.08537	284.93978	11.18614	0.2387524	0.00336540	44.1006412	21	8 15.5	23.7
118699 2000 OK_{53}	14.6	X	189.71598	73.48637	279.62386	7.83608	0.1764920	0.21404228	2.7678104	21	2 26.0	19.3
118700 2000 OQ_{53}	14.7	X	102.37977	29.71793	282.27175	14.23312	0.1006408	0.24569827	2.5246508	21	—	—
118701 2000 OW_{59}	15.8	X	248.84292	110.21402	211.28210	3.76927	0.1043582	0.22136425	2.7064358	21	3 18.5	19.8
118702 2000 OM_{67}	6.8	X	11.56474	349.15732	326.97638	23.30162	0.6088529	0.00098130	100.2924170	21	9 23.6	23.5
118703 2000 PJ_{8}	14.7	X	288.71350	93.50529	292.00303	28.44373	0.2548174	0.23128824	2.6284538	21	7 9.2	18.0
118704 2000 PK_{10}	15.2	X	275.64918	291.60794	50.36971	8.44877	0.1831182	0.22546499	2.6735192	21	5 5.1	19.1
118705 2000 PJ_{16}	15.5	X	226.94561	229.33234	127.79914	5.52500	0.1358352	0.22285874	2.6943226	21	4 10.7	19.7
118706 2000 PL_{17}	15.8	X	253.62664	317.45959	317.02169	7.99191	0.1718776	0.21797128	2.7344493	21	1 22.9	20.2
118707 2000 PC_{20}	15.5	X	183.10688	30.17990	3.56255	7.99071	0.3835868	0.21724136	2.7405709	21	4 15.4	20.9
118708 2000 PO_{21}	15.5	X	359.53803	318.07827	319.80536	3.98764	0.1745238	0.23221552	2.6214519	21	6 26.0	17.8
118709 2000 QS_{5}	15.5	X	196.70561	232.25971	147.31277	6.11817	0.0998844	0.21928389	2.7235262	21	4 9.4	19.7
118710 2000 QN_{12}	15.5	X	12.20027	308.60334	161.36948	2.25864	0.1487197	0.25575108	2.4580520	21	—	—
118711 2000 QT_{15}	15.0	X	242.03641	258.17995	145.41933	22.34431	0.0693564	0.22974165	2.6402368	21	7 1.0	19.1
118712 2000 QU_{16}	15.6	X	156.46022	16.76232	326.42633	7.10698	0.1377247	0.21057995	2.7980665	21	1 17.6	19.8
118713 2000 QY_{22}	15.5	X	310.67198	123.55907	168.02252	13.62761	0.0826642	0.22502791	2.6769800	21	5 2.2	19.1
118714 2000 QF_{27}	15.1	X	152.90894	224.30896	136.55619	4.25236	0.1178006	0.21173549	2.7878770	21	1 31.8	19.2
118715 2000 QW_{35}	15.3	X	311.50977	117.74585	233.43139	2.70819	0.0690434	0.23326977	2.6135476	21	7 23.5	18.6
118716 2000 QR_{46}	15.7	X	225.58099	150.47299	153.25034	8.94600	0.2095910	0.21589946	2.7519150	21	1 31.1	20.4
118717 2000 QK_{48}	15.4	X	218.93346	266.29230	173.46129	1.75991	0.0881008	0.22996292	2.6385430	21	7 17.8	19.1
118718 2000 QT_{49}	15.7	X	231.23949	277.30426	123.32315	1.83822	0.1082425	0.22648915	2.6654536	21	6 8.9	19.6
118719 2000 QK_{55}	15.5	X	198.42787	321.27271	34.74597	3.17385	0.1954924	0.21680487	2.7442481	21	3 13.4	20.1
118720 2000 QB_{58}	15.0	X	214.57283	260.99933	80.16852	5.88325	0.1203336	0.21859472	2.7292476	21	3 11.8	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118721 2000 QM_{63}	15.3	X	196.23575	264.45453	80.25219	7.47571	0.1108596	0.21457584	2.7632203	21	2 27.2	19.7
118722 2000 QV_{64}	15.1	X	247.57014	290.98945	65.64434	7.05514	0.0530237	0.22237066	2.6982637	21	5 8.0	18.8
118723 2000 QC_{79}	15.2	X	128.01640	215.81373	152.56391	6.22877	0.0584171	0.20841050	2.8174507	21	1 5.5	19.2
118724 2000 QF_{79}	15.4	X	185.63885	194.57969	181.06818	4.11753	0.1378039	0.21640301	2.7476443	21	3 23.6	19.8
118725 2000 QD_{82}	14.9	X	352.65460	266.95895	344.42712	12.62469	0.1756236	0.22531439	2.6747104	21	4 23.5	17.9
118726 2000 QO_{85}	15.5	X	177.53745	53.31416	293.35100	5.09686	0.0623748	0.21368061	2.7709327	21	2 3.9	19.6
118727 2000 QS_{89}	15.9	X	158.75769	44.65980	322.25438	6.77674	0.2374714	0.21181663	2.7871650	21	2 22.7	20.6
118728 2000 QN_{93}	16.0	X	56.87161	11.85287	266.73051	3.78125	0.1855676	0.23871237	2.5736695	21	10 12.6	19.5
118729 2000 QC_{95}	15.7	X	239.34692	61.70298	235.45647	1.43345	0.0457592	0.21470098	2.7621464	21	2 11.7	19.7
118730 2000 QL_{100}	15.5	X	203.71410	152.65739	154.39743	9.50663	0.3080284	0.21254684	2.7807777	21	1 19.9	20.7
118731 2000 QX_{115}	14.9	X	223.19973	282.55927	141.48998	27.29959	0.1221703	0.22915648	2.6447297	21	7 1.9	19.3
118732 2000 QY_{123}	14.9	X	210.78962	182.25558	217.32241	8.50457	0.0943706	0.17516749	3.1634942	21	5 20.1	19.7
118733 2000 QN_{125}	15.2	X	244.75653	109.44405	321.81484	11.84052	0.2686814	0.22820248	2.6520954	21	7 18.9	19.5
118734 2000 QO_{126}	15.2	X	267.31758	303.03481	315.17314	11.65949	0.2205080	0.21702451	2.7423962	21	1 13.4	19.8
118735 2000 QM_{129}	15.2	X	156.99746	15.55441	340.80680	3.36347	0.1120018	0.20995348	2.8036297	21	1 31.1	19.3
118736 2000 QF_{132}	15.1	X	307.18635	352.87947	337.69903	9.00847	0.1153358	0.23051077	2.6343607	21	6 10.4	18.5
118737 2000 QZ_{132}	16.1	X	188.64015	3.92672	342.50282	6.40915	0.1564245	0.26301654	2.4125742	21	2 14.9	19.9
118738 2000 QF_{134}	15.7	X	21.56349	256.39117	19.29291	2.05917	0.1310726	0.23352892	2.6116137	21	8 6.4	18.3
118739 2000 QO_{135}	15.7	X	216.04855	256.81255	14.86505	9.21695	0.2458729	0.21219869	2.7838185	21	—	—
118740 2000 QN_{137}	15.2	X	241.38534	225.10082	218.34042	8.38597	0.1323987	0.23346543	2.6120871	21	8 10.1	19.2
118741 2000 QH_{141}	15.5	X	160.91421	264.18466	97.11865	2.85728	0.2344114	0.21043627	2.7993400	21	2 19.6	20.1
118742 2000 QA_{145}	15.4	X	168.47078	242.83676	117.55246	4.77528	0.1296678	0.21182590	2.7870837	21	2 17.9	19.6
118743 2000 QV_{146}	15.5	X	204.67801	0.40139	33.44402	4.25229	0.0978639	0.22069432	2.7119101	21	5 3.0	19.6
118744 2000 QA_{155}	16.0	X	198.71758	78.05890	199.60704	10.85441	0.2773922	0.21091602	2.7950935	21	—	—
118745 2000 QU_{155}	15.1	X	178.66918	110.97028	259.63439	7.86156	0.1126335	0.21635495	2.7480513	21	3 5.7	19.6
118746 2000 QS_{156}	15.2	X	241.74578	185.78429	191.13475	14.14066	0.1386179	0.22528637	2.6749322	21	5 19.6	19.4
118747 2000 QB_{162}	15.4	X	301.38402	190.10625	175.10754	13.54390	0.0695395	0.23292911	2.6160952	21	7 26.1	18.9
118748 2000 QE_{164}	15.5	X	69.56642	62.08279	168.83778	21.79357	0.0319240	0.23322414	2.6138885	21	8 1.1	19.3
118749 2000 QD_{171}	15.3	X	209.96505	75.99817	307.30389	6.09410	0.1099769	0.22063681	2.7123812	21	4 22.3	19.6
118750 2000 QY_{171}	15.4	X	329.24672	274.07742	338.96669	11.20710	0.1403982	0.22139999	2.7061445	21	3 23.1	18.8
118751 2000 QW_{178}	15.5	X	167.36714	117.50195	269.32119	5.09670	0.0547761	0.21699120	2.7426768	21	3 11.2	19.5
118752 2000 QQ_{186}	15.5	X	226.14307	231.39862	110.07009	7.08532	0.0642556	0.21971438	2.7199676	21	3 26.2	19.6
118753 2000 QP_{188}	15.3	X	241.75413	265.54537	2.51107	9.86833	0.3269508	0.21624095	2.7490170	21	1 1.2	20.6
118754 2000 QA_{192}	15.3	X	311.81542	271.21070	12.12467	14.15912	0.1600295	0.22483027	2.6785486	21	4 6.1	18.5
118755 2000 QT_{198}	15.0	X	59.97753	212.24307	350.71877	14.23389	0.0257388	0.22677028	2.6632502	21	6 9.1	18.8
118756 2000 QK_{200}	15.2	X	41.49221	112.43411	156.03093	14.68599	0.1455274	0.18718532	3.0265988	21	8 27.9	18.9
118757 2000 QE_{207}	14.9	X	269.69342	43.87848	352.35850	12.03137	0.1620627	0.18092598	3.0960082	21	7 13.9	19.6
118758 2000 QZ_{207}	15.2	X	134.01408	338.26374	359.35178	15.25353	0.1429690	0.20477744	2.8506768	21	—	—
118759 2000 QR_{213}	15.8	X	354.24118	200.97710	119.38369	2.53835	0.2071669	0.18642948	3.0347738	21	8 17.3	18.6
118760 2000 QU_{213}	15.5	X	129.71303	258.88970	155.94829	5.41000	0.1571146	0.21293515	2.7773960	21	3 19.1	19.5
118761 2000 QB_{220}	16.0	X	194.98307	95.45770	286.90695	2.69992	0.2357273	0.21957506	2.7211180	21	4 8.5	20.7
118762 2000 QM_{222}	14.3	X	323.51008	263.36241	84.19382	9.30249	0.2975363	0.23303400	2.6153101	21	7 6.1	16.4
118763 2000 QU_{222}	14.9	X	160.57922	322.92425	91.21772	10.94896	0.2227819	0.21762098	2.7373828	21	4 25.2	19.7
118764 2000 QC_{224}	15.5	X	157.63008	159.34946	278.28219	3.21017	0.0675864	0.22042030	2.7141571	21	5 6.2	19.3
118765 2000 QB_{225}	15.4	X	86.97519	135.65642	332.71859	10.70995	0.0986101	0.21729165	2.7401480	21	3 20.9	19.0
118766 2000 QQ_{229}	15.7	X	205.67341	316.62119	61.06448	3.11436	0.0943340	0.21962789	2.7206816	21	4 15.1	19.9
118767 2000 QG_{230}	15.1	X	241.57812	288.41361	40.72612	9.38209	0.1602874	0.21795610	2.7345762	21	3 21.8	19.5
118768 2000 QY_{233}	15.5	X	56.72424	300.42289	166.31243	6.41541	0.0825006	0.21099151	2.7944267	21	2 4.1	19.0
118769 2000 QJ_{249}	15.5	X	142.86893	55.30756	335.23710	5.47142	0.0723871	0.21279661	2.7786013	21	2 21.0	19.4
118770 2000 RY_{4}	15.4	X	210.37755	295.60957	18.99296	2.20039	0.1391080	0.21169070	2.7882703	21	2 2.7	19.9
118771 2000 RY_{18}	15.3	X	240.07903	29.25128	276.25227	7.31093	0.1750456	0.21655319	2.7463739	21	2 13.2	20.0
118772 2000 RL_{20}	15.1	X	187.41636	78.57323	226.06532	7.35918	0.1799614	0.20944823	2.8081367	21	1 2.2	19.8
118773 2000 RH_{34}	15.0	X	102.58580	166.07416	264.35375	6.15776	0.1100320	0.21061143	2.7977877	21	2 24.3	18.9
118774 2000 RH_{35}	15.4	X	142.89982	167.82658	238.97165	6.57033	0.1213350	0.21344755	2.7729493	21	3 15.4	19.7
118775 2000 RR_{37}	14.5	X	191.10721	104.81979	267.66751	11.34095	0.2780917	0.21263041	2.7800490	21	3 21.8	19.8
118776 2000 RB_{58}	15.1	X	55.95255	294.48794	216.06385	7.00509	0.2634315	0.21244111	2.7817003	21	4 28.0	17.7
118777 2000 RW_{59}	15.5	X	57.49918	144.34951	345.56684	9.66261	0.0679283	0.21382790	2.7696601	21	3 6.7	19.0
118778 2000 RW_{62}	14.8	X	286.73962	357.69054	333.49023	13.03621	0.1663943	0.22800052	2.6536613	21	4 29.7	18.8
118779 2000 RJ_{68}	15.5	X	249.57199	166.08445	145.28477	9.46135	0.1398630	0.21847174	2.7302717	21	3 6.7	19.8
118780 2000 RM_{79}	15.9	X	311.51614	134.83490	204.52044	5.41194	0.0539357	0.23008801	2.6375866	21	7 8.4	19.2
118781 2000 RN_{79}	15.1	X	210.15451	188.03057	226.21611	13.72890	0.0404885	0.22717797	2.6600629	21	6 7.1	18.9
118782 2000 RP_{80}	15.5	X	122.50986	112.17517	266.53914	3.73356	0.1090283	0.20806356	2.8205818	21	1 18.5	19.3
118783 2000 RJ_{81}	15.3	X	120.90474	132.53871	326.57648	14.32330	0.1332647	0.21772285	2.7365289	21	4 22.7	19.6
118784 2000 RX_{85}	14.9	X	79.82577	97.37969	21.50118	7.78863	0.1795974	0.21169773	2.7882085	21	4 10.5	18.3
118785 2000 RJ_{90}	15.8	X	117.52786	97.21769	317.59158	4.62960	0.0607658	0.21199286	2.7856202	21	2 18.7	19.5
118786 2000 RJ_{98}	15.0	X	6.01716	85.07221	277.75776	9.78777	0.1379456	0.23788214	2.5796542	21	11 11.4	18.0
118787 2000 RA_{99}	14.6	X	204.57008	176.12177	274.85773	12.91149	0.2068426	0.22561471	2.6723363	21	7 9.9	19.1
118788 2000 RN_{99}	15.2	X	304.06006	115.18993	306.32731	13.29421	0.0782731	0.23677329	2.5877019	21	10 11.2	18.7
118789 2000 RM_{101}	13.7	X	104.23978	273.39565	287.48821	14.55365	0.1361499	0.18095532	3.0956734	21	8 14.9	18.5
118790 2000 RD_{104}	14.9	X	240.36739	219.31822	275.77341	12.41166	0.1265621	0.23579120	2.5948823	21	10 14.3	18.7
118791 2000 SP_{6}	15.2	X	195.31828	152.53087	219.29827	8.72118	0.2966643	0.21936208	2.7228790	21	3 27.2	20.2
118792 2000 SZ_{14}	15.8	X	182.41583	118.67675	218.91817	3.59155	0.0762929	0.21205614	2.7850659	21	1 30.0	20.0
118793 2000 SV_{26}	15.8	X	210.73229	95.25197	198.02976	10.85873	0.1494467	0.21172624	2.7879582	21	1 6.9	20.5
118794 2000 SJ_{28}	15.6	X	200.70413	82.18330	303.73434	5.53474	0.0570350	0.22054852	2.7131051	21	4 16.7	19.6
118795 2000 SO_{29}	16.0	X	335.02638	65.58322	318.30267	2.09406	0.1671911	0.23646423	2.5899562	21	10 15.5	18.3
118796 2000 SE_{30}	15.5	X	111.80168	280.87224	72.63853	3.07633	0.0668116	0.20369464	2.8607702	21	—	—
118797 2000 SU_{31}	15.5	X	147.35147	71.49980	339.68292	2.69557	0.0832259	0.21516323	2.7581889	21	3 23.9	19.5
118798 2000 SR_{32}	15.5	X	232.07368	1.72938	25.80900	10.97193	0.0834209	0.22338343	2.6901020	21	5 23.4	19.6
118799 2000 SQ_{35}	15.4	X	127.31293	297.15761	175.22547	13.17057	0.1029266	0.21994562	2.7180608	21	5 23.1	19.6
118800 2000 SC_{41}	15.7	X	252.66165	346.10028	112.37548	5.89212	0.1857863	0.23217525	2.6217550	21	9 10.9	19.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118801 2000 SY_{43}	14.8	X	117.92813	289.50310	197.92877	30.49476	0.1415793	0.22035885	2.7146617	21	6 2.3	19.3
118802 2000 SG_{47}	14.6	X	244.15658	49.82725	290.78387	11.43438	0.1336946	0.22142100	2.7059733	21	3 29.7	19.0
118803 2000 SC_{48}	15.4	X	188.98880	186.36509	219.34069	11.93456	0.1376067	0.22100809	2.7093427	21	5 2.4	19.7
118804 2000 SN_{54}	15.6	X	123.04774	87.07543	345.84270	4.66464	0.0351326	0.21503771	2.7592621	21	3 16.4	19.5
118805 2000 SB_{56}	15.2	X	100.23959	82.91915	306.34737	1.23385	0.0500369	0.20624829	2.8371076	21	—	—
118806 2000 SO_{57}	16.0	X	329.76612	127.42183	170.56801	1.85489	0.0296667	0.22530966	2.6747478	21	6 11.6	19.4
118807 2000 SC_{58}	15.3	X	117.44261	56.08858	27.34355	6.90591	0.0585163	0.21450769	2.7638054	21	3 28.2	19.0
118808 2000 SZ_{59}	15.6	X	219.63498	339.10385	348.02581	4.25751	0.1102257	0.21466144	2.7624856	21	2 25.8	19.7
118809 2000 SE_{65}	15.4	X	197.96430	341.73778	15.05873	5.42995	0.0769449	0.21485155	2.7608557	21	3 12.9	19.5
118810 2000 SD_{69}	15.4	X	136.01793	309.16281	18.99253	1.86847	0.0818219	0.20285983	2.8686134	21	—	—
118811 2000 SS_{73}	15.4	X	283.77253	289.15825	110.26340	4.19159	0.1123610	0.22946958	2.6423234	21	8 13.2	18.8
118812 2000 SG_{80}	14.9	X	200.88942	102.55202	9.72564	6.23221	0.1692887	0.17859489	3.1228901	21	8 5.8	20.0
118813 2000 ST_{80}	15.4	X	224.82673	98.07157	40.54031	7.95103	0.1479318	0.23428457	2.6059951	21	10 6.1	19.2
118814 2000 SB_{97}	15.3	X	140.66541	267.28272	232.70506	10.45295	0.1498102	0.22444536	2.6816100	21	7 12.0	19.7
118815 2000 SM_{108}	12.2	X	319.73606	279.51679	17.46595	1.97349	0.1774749	0.08177474	5.2568221	21	5 16.7	18.5
118816 2000 SA_{109}	14.3	X	205.77926	198.17405	21.91452	7.24195	0.1213394	0.24488515	2.5302363	21	12 29.1	18.0
118817 2000 SC_{119}	15.3	X	48.27282	1.42704	47.53235	3.66856	0.1612888	0.19868649	2.9086435	21	—	—
118818 2000 SJ_{119}	15.1	X	220.59236	290.00818	30.91179	9.57430	0.1878283	0.21298335	2.7769770	21	2 21.8	19.9
118819 2000 SW_{129}	15.1	X	351.95557	109.62237	271.22756	13.63613	0.1327696	0.23939358	2.5687848	21	11 11.6	18.1
118820 2000 SO_{131}	14.7	X	268.61295	190.83411	264.42623	15.39025	0.1086773	0.23583246	2.5945796	21	9 29.4	18.5
118821 2000 SM_{137}	15.3	X	156.82386	130.65968	285.52146	5.29651	0.0527233	0.21595378	2.7514535	21	4 4.9	19.4
118822 2000 SP_{137}	14.9	X	222.01137	64.87802	349.08977	11.13349	0.1026437	0.17624327	3.1506079	21	6 17.2	19.9
118823 2000 SH_{139}	15.3	X	82.25659	81.60864	308.51393	4.73907	0.0822472	0.20231617	2.8737500	21	—	—
118824 2000 SY_{142}	15.4	X	154.54714	17.88432	349.99658	5.38445	0.1082518	0.20898388	2.8122949	21	2 11.7	19.6
118825 2000 SY_{153}	14.4	X	309.03487	77.36775	39.67143	5.65584	0.1303147	0.19312586	2.9642108	21	12 26.4	17.9
118826 2000 SV_{154}	14.7	X	199.15230	12.52801	65.88649	1.85108	0.1893486	0.17277966	3.1925740	21	6 21.6	20.0
118827 2000 SY_{159}	15.0	X	257.10753	126.07921	213.49665	25.79767	0.1788137	0.22356665	2.6886320	21	4 11.5	19.3
118828 2000 SF_{163}	15.0	X	137.99093	288.61032	228.44513	9.07193	0.0702344	0.17377138	3.1804157	21	7 23.8	19.9
118829 2000 SJ_{163}	14.7	X	147.72215	129.90647	356.57818	10.59657	0.1524378	0.17450958	3.1714402	21	7 5.7	19.9
118830 2000 SS_{169}	15.3	X	338.75566	130.64268	263.20573	1.91918	0.1460794	0.23553834	2.5967391	21	11 7.2	17.8
118831 2000 SX_{171}	15.9	X	294.76505	148.93553	277.62935	3.74693	0.0951720	0.23538811	2.5978438	21	10 7.2	19.0
118832 2000 SF_{174}	15.4	X	221.45829	187.62253	274.97872	10.67600	0.1896113	0.22720638	2.6598412	21	8 7.5	19.7
118833 2000 SL_{180}	14.6	X	84.64020	48.11964	243.74385	9.89145	0.0540176	0.18907644	3.0063839	21	11 7.9	18.9
118834 2000 SY_{186}	14.9	X	277.99493	134.11137	294.81059	12.11331	0.1376637	0.23267894	2.6179700	21	9 3.7	18.4
118835 2000 SM_{190}	15.4	X	238.13230	61.36894	239.28650	3.54657	0.0951377	0.21573430	2.7533193	21	2 10.8	19.6
118836 2000 SP_{197}	15.9	X	166.69825	248.18204	142.01526	2.49558	0.0850519	0.21517530	2.7580858	21	3 20.6	19.9
118837 2000 SQ_{202}	15.4	X	351.53334	357.73843	176.12879	5.79756	0.0262463	0.21035894	2.8000260	21	1 29.4	19.1
118838 2000 SO_{205}	15.5	X	105.60227	173.58119	204.12279	1.56757	0.0774687	0.20346391	2.8629326	21	—	—
118839 2000 SA_{208}	15.3	X	11.57807	353.83787	42.09781	4.99470	0.0838275	0.19284782	2.9670593	21	12 18.6	19.2
118840 2000 SM_{213}	14.6	X	37.45996	264.17560	81.10567	11.05519	0.0750509	0.19084090	2.9878244	21	11 21.1	18.7
118841 2000 SR_{228}	15.6	X	135.42083	312.46969	29.20800	2.28779	0.0730800	0.20294036	2.8678544	21	—	—
118842 2000 SN_{229}	15.6	X	51.26603	63.69583	286.22722	0.92589	0.0975802	0.19271334	2.9684395	21	12 16.0	19.6
118843 2000 SW_{239}	15.1	X	52.36774	330.13724	43.32471	2.98536	0.0862219	0.19548987	2.9402654	21	—	—
118844 2000 ST_{242}	15.5	X	127.37703	280.61081	146.57751	5.35323	0.0912468	0.21497301	2.7598158	21	3 24.1	19.4
118845 2000 SP_{245}	15.7	X	261.64856	53.76742	267.50023	2.05064	0.0705520	0.22018853	2.7160614	21	4 5.2	19.7
118846 2000 SU_{245}	16.3	X	5.16583	285.58906	98.72605	2.24104	0.1131891	0.24079774	2.5587888	21	12 9.5	19.2
118847 2000 SF_{248}	15.2	X	311.55546	190.19039	11.53970	6.35016	0.0632912	0.21085801	2.7956061	21	1 10.3	19.1
118848 2000 SZ_{248}	15.3	X	152.07035	194.26008	175.11276	13.64209	0.0651315	0.21076435	2.7964343	21	2 2.7	19.5
118849 2000 SJ_{254}	15.3	X	80.44782	354.77061	104.47172	5.02284	0.1041812	0.21079847	2.7961324	21	3 7.4	18.8
118850 2000 SL_{257}	16.4	X	271.25584	189.47898	225.76422	2.16358	0.1228118	0.22975710	2.6401185	21	8 13.6	20.0
118851 2000 SX_{270}	14.6	X	30.23066	241.11250	52.15713	13.30158	0.1249666	0.18345779	3.0674579	21	9 16.9	18.7
118852 2000 SV_{276}	14.4	X	202.50550	118.06567	26.45208	17.25346	0.1742182	0.18106626	3.0944089	21	9 19.5	19.6
118853 2000 SZ_{286}	15.7	X	142.47530	163.46059	232.49510	3.09380	0.0738231	0.21214537	2.7842850	21	2 25.9	19.6
118854 2000 ST_{289}	15.7	X	151.44677	214.28260	220.56403	6.70948	0.1394170	0.21705311	2.7421552	21	5 2.5	19.9
118855 2000 SC_{298}	15.4	X	41.43247	160.69251	271.79805	5.01612	0.0379988	0.20304465	2.8668723	21	—	—
118856 2000 SS_{299}	14.7	X	190.11943	101.57779	357.07997	15.62290	0.0899247	0.17684986	3.1433995	21	7 14.1	19.8
118857 2000 SZ_{309}	14.3	X	309.44121	111.05964	308.51849	21.47295	0.0520235	0.23654227	2.5893865	21	10 13.7	18.1
118858 2000 SM_{311}	15.0	X	278.63005	3.06976	277.26657	14.29442	0.0524976	0.21906450	2.7253444	21	2 28.2	19.1
118859 2000 SO_{316}	14.5	X	260.64184	180.59558	278.99565	12.80471	0.1179878	0.23565464	2.5958846	21	9 22.9	18.4
118860 2000 SW_{318}	15.0	X	171.03787	113.79481	288.69273	11.05041	0.2823372	0.21368694	2.7708779	21	4 12.4	20.2
118861 2000 SM_{319}	15.0	X	223.98593	179.35213	271.73381	12.44317	0.1360234	0.22568072	2.6718151	21	7 30.8	19.2
118862 2000 SK_{343}	15.3	X	125.45542	201.22192	295.18641	4.34110	0.1425521	0.22372534	2.6873605	21	6 23.3	19.4
118863 2000 SK_{349}	14.1	X	174.80709	50.43459	84.53030	13.93748	0.1614043	0.17642431	3.1484521	21	8 11.5	19.4
118864 2000 SQ_{351}	15.2	X	93.90391	253.37799	74.26532	16.02000	0.2131151	0.19862338	2.9092596	21	—	—
118865 2000 SP_{354}	15.1	X	110.83320	17.26843	64.98671	7.40592	0.1569516	0.21395612	2.7685534	21	4 3.5	19.0
118866 2000 SS_{354}	15.5	X	275.76203	304.94054	97.46654	5.33784	0.2000867	0.23016688	2.6369840	21	7 22.4	19.1
118867 2000 SB_{355}	15.1	X	253.76153	42.35921	69.48338	12.95542	0.2316478	0.23292367	2.6161359	21	9 28.5	19.0
118868 2000 ST_{360}	15.3	X	172.46673	335.56142	31.85320	13.13955	0.1275179	0.21427114	2.7658392	21	3 6.9	19.8
118869 2000 SS_{362}	15.3	X	176.32705	192.48943	117.72088	10.61685	0.1863390	0.20890519	2.8130010	21	—	—
118870 2000 TE_{8}	15.6	X	94.84256	48.46555	29.68228	3.88241	0.0720767	0.21022328	2.8012305	21	2 23.2	19.3
118871 2000 TZ_{12}	15.2	X	41.00444	78.68310	12.87445	5.57816	0.0910779	0.20354304	2.8621905	21	—	—
118872 2000 TW_{13}	15.9	X	341.78839	170.43756	225.96759	0.26846	0.1429297	0.18871298	3.0102429	21	11 5.9	19.2
118873 2000 TY_{14}	16.0	X	318.32553	70.82927	21.53090	1.11105	0.0799232	0.24029346	2.5623675	21	12 23.8	18.7
118874 2000 TK_{28}	15.2	X	287.83565	316.10036	5.80169	8.98137	0.0777225	0.17391874	3.1786189	21	5 9.5	19.7
118875 2000 TD_{29}	15.0	X	256.65155	116.65529	271.56304	13.95535	0.0835518	0.22313118	2.6921290	21	6 25.3	18.5
118876 2000 TB_{41}	15.2	X	307.91800	190.20524	210.04040	5.39745	0.0904340	0.18676086	3.0311829	21	9 16.6	19.1
118877 2000 TM_{44}	15.6	X	171.25062	352.11079	60.48958	10.47120	0.1254681	0.21804831	2.7338052	21	4 26.0	19.9
118878 2000 TT_{49}	15.0	X	311.97748	317.21789	110.75881	10.54404	0.0903403	0.18896909	3.0075224	21	11 4.3	18.9
118879 2000 TT_{54}	14.8	X	318.45771	262.91367	80.78941	13.37783	0.0989786	0.18006440	3.1058763	21	7 20.9	18.9
118880 2000 TJ_{57}	15.0	X	236.69898	351.74007	90.04498	14.42418	0.1402538	0.22883562	2.6472013	21	8 7.5	19.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118881 2000 TK_{57}	15.3	X	246.11050	20.32030	48.60775	15.83790	0.1038438	0.22942792	2.6426432	21	8 9.8	19.4
118882 2000 TL_{59}	15.0	X	220.47703	347.29536	90.82045	13.91441	0.1336712	0.22459483	2.6804202	21	7 14.2	19.2
118883 2000 US_{4}	14.9	X	0.65237	335.30206	40.30961	2.50384	0.1370519	0.18709959	3.0275233	21	11 10.4	18.5
118884 2000 UN_{12}	15.2	X	315.44336	40.34033	32.56818	2.58132	0.1601220	0.18688527	3.0298375	21	11 5.6	18.5
118885 2000 UZ_{23}	15.2	X	333.20118	1.68518	123.26170	6.33591	0.0676412	0.19692408	2.9259720	21	—	—
118886 2000 UL_{27}	14.9	X	45.55904	295.27911	84.75325	11.81732	0.1136556	0.19314880	2.9639762	21	—	—
118887 2000 UH_{35}	15.5	X	349.95085	19.93100	31.95292	9.51084	0.0951354	0.19074521	2.9888237	21	12 6.4	19.3
118888 2000 UX_{35}	15.2	X	30.71063	349.05744	28.62712	3.38505	0.0823968	0.23996789	2.5646846	21	—	—
118889 2000 UJ_{38}	14.8	X	293.63592	131.21449	4.61331	1.99848	0.0931085	0.19265260	2.9690634	21	12 29.3	18.6
118890 2000 UM_{41}	14.3	X	167.02975	104.59870	44.20385	11.09918	0.1366925	0.17513402	3.1638972	21	8 22.9	19.5
118891 2000 UA_{44}	14.8	X	14.21226	166.18937	310.10122	2.33326	0.1241119	0.19999260	2.8959658	21	—	—
118892 2000 UE_{44}	14.9	X	150.49461	66.61212	37.68571	8.46627	0.2456244	0.21563331	2.7541790	21	6 12.9	19.7
118893 2000 UU_{46}	15.9	X	316.58011	111.16355	246.22531	2.04798	0.1004061	0.22658255	2.6647210	21	8 5.5	18.9
118894 2000 UW_{46}	15.1	X	274.86414	225.03202	239.90313	2.29861	0.1983312	0.18466352	3.0540911	21	10 7.3	19.2
118895 2000 UO_{53}	14.6	X	96.56538	79.59377	62.79551	12.49582	0.2104342	0.21315909	2.7754505	21	6 6.4	18.5
118896 2000 UQ_{59}	15.2	X	248.95280	34.94110	315.27088	7.59316	0.0809018	0.17133681	3.2104723	21	4 27.8	20.1
118897 2000 UR_{60}	15.0	X	27.28624	139.59142	357.00444	5.10604	0.0974464	0.20646896	2.8350858	21	2 1.3	18.4
118898 2000 UV_{62}	15.0	X	69.85335	66.85834	6.32695	16.69732	0.0673709	0.20472831	2.8511328	21	1 17.5	19.0
118899 2000 UF_{66}	14.7	X	96.60744	38.65507	308.84422	3.91280	0.0294735	0.24520792	2.5280155	21	—	—
118900 2000 UA_{67}	15.2	X	335.23649	122.47882	338.35083	3.82813	0.0057652	0.19600528	2.9351088	21	—	—
118901 2000 UH_{67}	15.0	X	352.22386	299.37893	16.73929	9.63975	0.0953494	0.18009992	3.1054679	21	8 10.4	19.0
118902 2000 UU_{67}	14.8	X	280.23819	176.01998	243.16127	11.12614	0.0822942	0.18163231	3.0879765	21	8 29.5	19.3
118903 2000 US_{72}	14.3	X	46.22268	27.99876	338.68593	7.10661	0.2300837	0.19241112	2.9715470	21	—	—
118904 2000 UT_{86}	15.7	X	62.66999	268.04194	161.89364	5.50559	0.1650183	0.20161030	2.8804537	21	1 6.7	18.9
118905 2000 UM_{87}	15.2	X	273.30327	339.81453	77.45517	11.05751	0.0734077	0.17949426	3.1124497	21	8 29.7	19.7
118906 2000 UE_{93}	15.1	X	330.71262	96.45222	282.49840	4.32252	0.0334713	0.18422353	3.0589519	21	9 25.1	19.2
118907 2000 UJ_{95}	15.8	X	299.26290	74.94831	358.88751	4.73804	0.1393478	0.18542345	3.0457408	21	10 11.8	19.7
118908 2000 UA_{98}	14.7	X	302.01169	29.29720	22.36300	10.19386	0.1026079	0.18267964	3.0761626	21	9 24.9	18.6
118909 2000 UE_{106}	14.5	X	53.99999	26.84607	239.88917	9.07412	0.0704674	0.18095312	3.0956986	21	8 27.9	18.9
118910 2000 UR_{111}	15.7	X	57.52123	329.35043	72.99079	3.07759	0.0706682	0.19911715	2.9044480	21	—	—
118911 2000 VL_{2}	15.3	X	142.30809	269.42527	272.17022	19.97776	0.0805336	0.36296124	1.9463871	21	8 31.8	18.3
118912 2000 VN_{16}	15.4	X	355.07944	191.83244	205.18051	6.45587	0.1832775	0.18823595	3.0153264	21	12 3.9	18.7
118913 2000 VM_{18}	14.8	X	274.73663	334.16077	70.04234	12.60932	0.0826811	0.17734446	3.1375523	21	8 12.5	19.4
118914 2000 VV_{18}	14.5	X	114.98110	306.45430	203.79486	17.59707	0.0437140	0.17122024	3.2119293	21	6 17.4	19.4
118915 2000 VM_{25}	15.3	X	254.95008	209.29894	129.46889	2.32889	0.1837237	0.17113321	3.2130182	21	4 14.3	20.4
118916 2000 VR_{25}	14.9	X	68.09424	279.84199	47.12791	9.47071	0.0457115	0.19001698	2.9964551	21	11 29.8	19.2
118917 2000 VU_{26}	15.7	X	46.03529	233.60371	120.47263	0.83039	0.2687361	0.19170259	2.9788644	21	—	—
118918 2000 VY_{26}	14.8	X	128.86736	62.78450	233.50893	7.12857	0.1798791	0.19589972	2.9361631	21	—	—
118919 2000 VR_{27}	14.5	X	94.02186	77.04030	67.05497	15.93551	0.1990057	0.21188649	2.7865524	21	6 4.2	18.5
118920 2000 VH_{31}	15.5	X	267.14678	132.61745	221.57156	2.35303	0.1265977	0.21965605	2.7204491	21	5 18.6	19.2
118921 2000 VP_{45}	15.4	X	98.12947	315.71531	75.27383	3.05702	0.0687695	0.20266214	2.8704785	21	—	—
118922 2000 VE_{48}	15.0	X	286.61803	164.67805	324.51101	1.44061	0.1503747	0.18917530	3.0053364	21	12 2.5	18.5
118923 2000 VM_{51}	15.4	X	121.09609	342.64655	329.01186	3.90673	0.0675771	0.24295653	2.5436089	21	—	—
118924 2000 VG_{53}	14.7	X	261.13808	138.99492	13.20254	10.23749	0.0803021	0.19014883	2.9950698	21	12 3.9	18.9
118925 2000 VH_{59}	16.1	X	219.16245	274.50771	255.12736	19.53349	0.0612743	0.37755148	1.8959138	21	12 15.2	17.6
118926 2000 VT_{59}	15.8	X	343.98302	78.78563	49.12475	2.57970	0.0567680	0.19969589	2.8988337	21	—	—
118927 2000 WQ_{2}	15.0	X	284.89241	288.71919	77.83413	6.17559	0.1607504	0.17425364	3.1745449	21	6 22.2	19.4
118928 2000 WB_{3}	16.2	X	189.36249	292.56533	273.28391	18.12196	0.0801242	0.37795527	1.8945633	21	12 23.5	17.7
118929 2000 WK_{5}	15.1	X	195.35001	151.33247	353.50011	7.29831	0.0680919	0.17931754	3.1144942	21	9 12.3	19.8
118930 2000 WB_{8}	15.1	X	340.70967	301.96243	104.68060	9.22529	0.1059369	0.18731472	3.0252048	21	11 19.1	18.9
118931 2000 WD_{21}	16.5	X	343.85639	204.50922	170.60294	0.90128	0.2179433	0.18326259	3.0696357	21	10 11.8	19.5
118932 2000 WC_{24}	15.0	X	2.83194	137.10033	271.92879	9.06979	0.0984932	0.18952082	3.0016826	21	12 23.5	18.6
118933 2000 WA_{27}	14.6	X	293.44400	248.98323	256.05836	9.57861	0.0792567	0.19246489	2.9709935	21	—	—
118934 2000 WG_{31}	14.8	X	244.23703	323.42117	124.54998	6.30510	0.1263419	0.17692544	3.1425041	21	8 21.4	19.5
118935 2000 WE_{42}	14.6	X	261.52521	6.29843	67.03228	8.48291	0.0439049	0.18012031	3.1052334	21	9 7.8	19.1
118936 2000 WT_{43}	14.5	X	330.34027	178.30218	222.70781	9.24726	0.0847256	0.18415498	3.0597110	21	10 22.6	18.5
118937 2000 WT_{46}	14.8	X	191.02569	75.17719	86.41242	11.80271	0.0428133	0.18144135	3.0901427	21	10 5.8	19.5
118938 2000 WM_{47}	13.7	X	317.86920	78.67227	88.03141	13.43430	0.1720599	0.19648321	2.9303472	21	—	—
118939 2000 WL_{51}	14.7	X	43.27390	210.85689	46.42468	5.51020	0.1018620	0.17705476	3.1409737	21	8 11.4	18.8
118940 2000 WH_{58}	14.9	X	300.47006	338.95505	119.71874	2.63126	0.1338212	0.18581434	3.0414678	21	11 17.4	18.6
118941 2000 WW_{60}	14.2	X	218.07597	352.43528	95.90132	28.25239	0.1260760	0.17134716	3.2103430	21	7 24.1	19.4
118942 2000 WK_{62}	14.4	X	247.81730	337.55504	99.64551	17.82308	0.1056477	0.17773663	3.1329353	21	8 17.2	19.2
118943 2000 WF_{67}	16.8	X	80.83578	217.06904	86.83246	23.46384	0.0247190	0.37721564	1.8970390	21	12 22.2	18.3
118944 2000 WU_{67}	14.2	X	184.51745	61.45529	84.72855	17.08854	0.1421334	0.17679866	3.1440063	21	9 7.3	19.6
118945 Rikhill	14.8	X	103.65437	129.39695	58.11779	7.82540	0.0481495	0.17316525	3.1878330	21	7 23.9	19.5
118946 2000 WQ_{69}	15.2	X	24.18080	338.44321	10.00834	11.03114	0.1261889	0.18813109	3.0164468	21	11 8.2	19.1
118947 2000 WV_{69}	14.6	X	263.80822	332.58190	0.55002	9.95408	0.1096078	0.17049944	3.2209755	21	4 20.6	19.4
118948 2000 WN_{83}	14.7	X	24.84674	241.03212	43.90205	17.10840	0.0863709	0.17798341	3.1300387	21	8 25.4	19.1
118949 2000 WM_{88}	13.9	X	245.74854	53.40496	90.85891	18.51204	0.2070642	0.18010245	3.1054388	21	10 28.9	18.8
118950 2000 WG_{89}	15.2	X	12.49024	7.21802	55.15781	12.54516	0.1366163	0.19282377	2.9673060	21	—	—
118951 2000 WU_{89}	14.9	X	267.53039	256.25597	255.56020	7.29135	0.0622391	0.18976117	2.9991475	21	12 16.0	18.9
118952 2000 WA_{92}	15.8	X	184.32910	107.09039	303.05391	1.44172	0.0674102	0.21439708	2.7647560	21	5 1.9	19.9
118953 2000 WN_{94}	15.1	X	348.65987	308.64907	70.98624	13.49287	0.1089444	0.18357713	3.0661283	21	10 29.5	18.9
118954 2000 WR_{99}	14.8	X	313.53473	312.10955	68.77197	6.15495	0.1587348	0.17889540	3.1193919	21	8 26.6	18.6
118955 2000 WU_{100}	15.1	X	10.88186	13.49551	45.84055	1.75309	0.2155024	0.19116573	2.9844389	21	—	—
118956 2000 WA_{103}	14.6	X	264.62959	16.37592	98.37831	14.97728	0.1678830	0.18394350	3.0620557	21	10 19.4	19.1
118957 2000 WE_{115}	14.3	X	138.83961	155.26610	58.73003	18.10259	0.1545009	0.17896758	3.1185530	21	10 16.9	19.5
118958 2000 WR_{121}	14.8	X	264.15908	336.99780	98.55193	15.90339	0.2333527	0.17731923	3.1378498	21	8 16.9	19.6
118959 2000 WQ_{124}	15.2	X	140.22583	66.66003	72.81039	23.23419	0.0844528	0.35803493	1.9642004	21	7 7.8	17.8
118960 2000 WQ_{124}	16.1	X	65.72829	233.74284	58.76219	24.13324	0.0583731	0.37362590	1.9091706	21	11 18.0	17.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
118961 2000 WO_{125}	14.5	X	14.17767	314.95202	89.71776	16.06922	0.1742249	0.18822649	3.0154274	21	—	—
118962 2000 WK_{129}	14.9	X	306.79124	288.14582	50.51463	9.61670	0.0965070	0.17529824	3.1619209	21	6 25.6	19.1
118963 2000 WY_{132}	14.2	X	15.09441	121.80696	347.13967	9.81078	0.1528558	0.19887291	2.9068256	21	—	—
118964 2000 WW_{133}	14.9	X	63.53934	311.26752	14.46897	11.61810	0.1492238	0.19038076	2.9926368	21	12 5.7	19.4
118965 2000 WA_{138}	14.4	X	303.50041	142.04175	45.48381	7.90695	0.2192651	0.19940924	2.9016110	21	—	—
118966 2000 WJ_{141}	16.0	X	118.46290	222.96624	294.50733	17.91543	0.0693219	0.35802928	1.9642210	21	7 6.0	17.9
118967 2000 WL_{144}	14.9	X	121.68355	49.99083	86.65988	10.02159	0.1008685	0.21532917	2.7567717	21	6 14.9	19.0
118968 2000 WP_{150}	16.6	X	160.23654	193.01204	46.48593	26.20050	0.0740950	0.37896415	1.8911993	21	—	—
118969 2000 WC_{156}	15.5	X	269.88269	77.05582	5.74428	6.26260	0.2068685	0.17940500	3.1134819	21	9 3.6	19.8
118970 2000 WE_{160}	14.8	X	193.95972	23.45690	117.60723	2.71850	0.1334696	0.17720523	3.1391954	21	9 3.5	19.7
118971 2000 WR_{162}	14.6	X	244.02801	350.17836	148.76967	11.94596	0.1160884	0.18455238	3.0553171	21	10 28.0	19.2
118972 2000 WV_{171}	14.6	X	50.12884	316.15030	94.92336	15.00162	0.1299693	0.19970449	2.8987505	21	—	—
118973 2000 WD_{173}	14.1	X	198.88413	48.04939	100.39444	15.80971	0.1348095	0.17367144	3.1816357	21	9 23.2	19.4
118974 2000 WU_{173}	14.1	X	198.19116	331.83268	91.93804	14.33089	0.0771971	0.17137971	3.2099365	21	6 7.0	19.0
118975 2000 WB_{180}	15.1	X	333.62080	202.60853	145.63347	2.61512	0.1910920	0.18038915	3.1021474	21	8 12.0	18.5
118976 2000 WL_{181}	14.8	X	61.37785	9.77816	311.10546	11.41179	0.1161581	0.18897035	3.0075090	21	11 22.5	19.2
118977 2000 WQ_{183}	15.1	X	332.04960	200.64111	110.12841	2.30921	0.1700178	0.17546712	3.1598918	21	6 19.4	18.7
118978 2000 WW_{196}	15.1	X	356.61839	359.27968	67.07329	10.23282	0.1759869	0.18889762	3.0082809	21	—	—
118979 2000 XM_{6}	14.5	X	316.02211	92.77376	271.04111	24.56935	0.2343477	0.17943083	3.1131831	21	7 18.3	18.3
118980 2000 XC_{11}	14.6	X	296.40606	116.30359	278.02715	21.02776	0.0958078	0.23007174	2.6377109	21	8 15.9	18.3
118981 2000 XS_{13}	16.3	X	1.73938	265.50052	63.14231	23.41984	0.0893756	0.36854861	1.9266650	21	10 19.6	18.3
118982 2000 XK_{14}	14.7	X	93.28758	41.53778	18.63010	16.54302	0.1878668	0.20347260	2.8628511	21	2 22.8	18.7
118983 2000 XB_{19}	14.7	X	272.54569	113.11379	19.60088	13.74593	0.1707155	0.18649879	3.0340219	21	11 9.8	18.9
118984 2000 XC_{21}	14.7	X	307.58958	283.20686	45.70711	16.28181	0.2899531	0.17587791	3.1549696	21	5 14.0	18.9
118985 2000 XW_{26}	14.5	X	188.47986	115.51905	42.69181	14.69935	0.1235672	0.17682455	3.1436994	21	9 25.1	19.6
118986 2000 XM_{30}	14.9	X	23.93527	8.23423	336.76498	8.63647	0.1437729	0.18483503	3.0522015	21	11 4.9	18.8
118987 2000 XZ_{41}	14.7	X	301.62824	24.25778	23.53920	18.25455	0.1623980	0.17831932	3.1261066	21	9 16.3	18.8
118988 2000 XS_{44}	16.1	X	182.72832	56.40753	43.27497	21.15871	0.1043408	0.36037359	1.9556933	21	7 3.0	19.0
118989 2000 XO_{47}	15.4	X	31.03637	66.32284	329.61291	9.97113	0.0836742	0.19211630	2.9745863	21	—	—
118990 2000 XW_{48}	14.9	X	321.87914	30.57463	21.34821	10.16148	0.0735232	0.18225608	3.0809267	21	10 23.9	18.7
118991 2000 YC_{5}	16.4	X	10.30077	314.91837	302.05938	16.35367	0.0804237	0.35782027	1.9649858	21	6 9.5	18.1
118992 2000 YW_{6}	14.6	X	104.37105	257.32337	309.30712	6.91194	0.2218492	0.21658125	2.7461367	21	9 4.7	19.0
118993 2000 YL_{12}	14.9	X	211.72532	294.63084	259.44240	0.60089	0.1243945	0.18500447	3.0503375	21	11 23.2	19.4
118994 2000 YS_{28}	16.8	X	205.29732	264.94451	242.96974	18.97097	0.0708595	0.36989266	1.9219950	21	10 13.6	19.1
118995 2000 YH_{34}	14.7	X	192.19543	2.16097	144.69261	18.42962	0.1568596	0.17205822	3.2014920	21	9 8.7	19.9
118996 2000 YF_{38}	14.5	X	271.15225	331.95438	93.00794	14.90265	0.0419283	0.17603127	3.1531369	21	9 11.8	19.1
118997 2000 YU_{39}	15.3	X	230.14509	153.91567	331.86726	0.37348	0.1288121	0.17795843	3.1303316	21	9 20.4	20.1
118998 2000 YC_{40}	15.1	X	332.46419	225.91754	171.57833	1.66409	0.1893999	0.18165220	3.0877511	21	10 18.9	18.3
118999 2000 YJ_{51}	14.8	X	193.26509	190.63969	279.89207	3.80330	0.0869233	0.16899155	3.2401072	21	7 27.7	19.7
119000 2000 YV_{55}	13.6	X	269.81292	38.81191	96.20310	24.09606	0.1090720	0.18513874	3.0488625	21	11 27.3	18.0
119001 2000 YX_{60}	14.6	X	200.60254	265.05082	255.08826	4.16439	0.1347736	0.17677699	3.1442632	21	9 29.8	19.7
119002 2000 YW_{61}	14.2	X	155.25728	74.97470	115.76910	20.36161	0.1807534	0.17346975	3.1841013	21	10 4.9	19.9
119003 2000 YF_{69}	15.3	X	52.88871	88.40350	88.80108	3.84211	0.0314228	0.20971780	2.8057299	21	4 30.1	18.9
119004 2000 YK_{69}	14.9	X	359.87556	190.28943	153.95736	1.14277	0.1998384	0.18275327	3.0753363	21	10 2.3	18.1
119005 2000 YP_{72}	14.6	X	151.81745	266.85984	266.35375	11.50103	0.0494691	0.17549069	3.1596089	21	8 24.4	19.5
119006 2000 YG_{75}	14.8	X	311.31314	307.20063	87.39702	11.17826	0.0385029	0.17912188	3.1167619	21	9 26.4	19.2
119007 2000 YT_{75}	14.4	X	66.02829	279.82598	268.64352	13.41152	0.2474419	0.21072565	2.7967766	21	7 4.0	18.0
119008 2000 YH_{79}	14.6	X	186.45024	74.49265	83.40148	14.96241	0.1647323	0.17617126	3.1514664	21	9 22.6	20.0
119009 2000 YY_{79}	15.0	X	326.42439	303.77426	101.56346	5.92173	0.2128228	0.18297992	3.0727963	21	10 18.9	18.2
119010 2000 YC_{80}	14.7	X	213.79580	20.39965	81.49839	10.08402	0.0342874	0.17334801	3.1855920	21	8 16.0	19.4
119011 2000 YN_{82}	14.7	X	260.48223	209.06113	268.72379	7.02704	0.0665916	0.18246661	3.0785564	21	10 21.9	19.2
119012 2000 YK_{105}	16.2	X	185.47478	356.33025	129.76334	24.26555	0.0682338	0.36027197	1.9560610	21	8 19.2	18.4
119013 2000 YM_{121}	14.8	X	5.93197	265.83441	149.34591	20.94061	0.2871692	0.19184755	2.9773636	21	—	—
119014 2000 YA_{124}	14.3	X	312.13570	160.51614	266.88199	20.33010	0.2553820	0.17908525	3.1171869	21	9 29.9	18.2
119015 2000 YX_{136}	14.6	X	207.88093	291.70960	206.95331	15.45423	0.1806290	0.17368584	3.1814599	21	9 6.1	20.0
119016 2001 AD_{5}	14.2	X	281.27508	144.51819	285.86371	15.86253	0.1615272	0.17597166	3.1538489	21	8 30.3	18.8
119017 2001 AE_{27}	14.6	X	332.58773	8.91235	62.65840	10.06160	0.1147819	0.18535294	3.0465132	21	12 4.5	18.1
119018 2001 AQ_{27}	16.5	X	2.53024	275.33449	94.43379	24.89081	0.0867872	0.37189235	1.9150989	21	12 15.9	18.1
119019 2001 AJ_{35}	14.8	X	327.84080	33.40314	38.59496	8.87227	0.2161388	0.18406291	3.0607312	21	11 23.8	17.8
119020 2001 AH_{38}	14.4	X	210.33787	31.76111	78.69328	14.64726	0.0964603	0.17019623	3.2247998	21	8 19.4	19.5
119021 2001 AL_{43}	15.2	X	308.87398	60.94073	18.72403	10.45266	0.0841594	0.18203873	3.0833786	21	11 6.8	19.2
119022 2001 AU_{46}	16.8	X	304.55428	323.44049	56.68487	23.10264	0.0993459	0.36689824	1.9324383	21	9 22.9	19.0
119023 2001 BW_{2}	16.8	X	40.19436	228.98281	334.78200	17.71336	0.0449470	0.35252455	1.9846159	21	4 22.5	19.1
119024 2001 BX_{18}	14.9	X	264.17113	252.80427	159.92994	7.86885	0.1537718	0.17202378	3.2019194	21	7 25.4	19.5
119025 2001 BG_{30}	14.7	X	152.32763	52.22522	143.19898	6.29302	0.0808366	0.17392899	3.1784940	21	9 29.5	19.6
119026 2001 BC_{61}	16.3	X	205.04692	0.32094	166.47341	22.96391	0.0707511	0.36891606	1.9253854	21	11 21.4	18.9
119027 2001 CQ_{2}	14.8	X	236.75339	137.10044	103.99229	3.75010	0.2850284	0.18464754	3.0542672	21	—	—
119028 2001 CB_{33}	15.4	X	268.30568	57.57498	47.23718	17.45146	0.2586963	0.17881404	3.1203380	21	9 28.9	20.1
119029 2001 CV_{39}	14.4	X	112.97671	315.56455	70.90355	9.65480	0.3234730	0.19931697	2.9025064	21	2 20.4	18.9
119030 2001 DO_{8}	14.6	X	232.12035	106.82212	135.15147	12.92679	0.0740785	0.18554587	3.0444009	21	—	—
119031 2001 DQ_{24}	14.7	X	295.45150	102.71588	133.52206	11.48546	0.1187610	0.19462580	2.9489615	21	1 27.4	18.8
119032 2001 DC_{44}	14.8	X	306.06915	241.08474	331.23906	9.09008	0.0325007	0.19343804	2.9610208	21	1 24.9	19.0
119033 2001 EU_{12}	14.0	X	214.52605	93.22641	31.38688	25.56317	0.2312574	0.17265831	3.1940697	21	9 9.9	19.7
119034 2001 FR	14.3	X	16.20677	233.29631	120.79301	14.06008	0.0699925	0.16959393	3.2324303	21	11 3.4	18.9
119035 2001 FD_{23}	14.7	X	216.97898	160.18557	70.96246	3.47654	0.1286011	0.17807084	3.1290140	21	—	—
119036 2001 FQ_{34}	14.2	X	299.09685	117.11378	349.72692	16.52579	0.1520935	0.17992244	3.1075098	21	11 15.1	18.3
119037 2001 FH_{50}	16.3	X	243.61086	94.56769	206.51483	3.08777	0.1693190	0.28902053	2.2656018	21	2 3.5	19.9
119038 2001 FE_{87}	14.5	X	147.31443	165.68652	100.90052	6.69630	0.1439532	0.17343987	3.1844670	21	12 15.6	19.6
119039 2001 FZ_{91}	13.5	X	49.80544	186.05684	27.65949	11.77299	0.2410500	0.10810551	4.3641952	21	7 14.3	19.1
119040 2001 FH_{105}	14.4	X	304.61097	65.86513	347.47472	21.78815	0.2044610	0.17418344	3.1753978	21	9 12.9	18.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119041 2001 FP_{145}	14.8	X	199.61064	123.23508	74.19992	1.90300	0.0580134	0.17570736	3.1570109	21	11 19.4	19.5
119042 2001 HS_{1}	16.6	X	346.73929	52.20564	223.02572	1.75593	0.1820879	0.29711205	2.2242787	21	5 15.9	18.3
119043 2001 HS_{4}	15.0	X	239.54216	40.36524	200.39431	23.14013	0.1909134	0.28129058	2.3069203	21	—	—
119044 2001 HV_{7}	16.7	X	55.09552	264.61232	48.84168	2.00014	0.2563364	0.31244081	2.1509198	21	12 17.1	19.7
119045 2001 HN_{8}	16.1	X	291.17334	248.03906	14.72694	24.12433	0.2621095	0.28733893	2.2744326	21	2 4.8	20.2
119046 2001 HL_{11}	16.8	X	329.99688	240.86283	25.26217	4.94701	0.1228537	0.29465566	2.2366234	21	4 7.6	18.8
119047 2001 HM_{12}	16.4	X	66.20771	154.24151	134.45848	1.79746	0.2325488	0.30851859	2.1691112	21	11 23.6	19.3
119048 2001 HQ_{29}	16.5	X	89.68428	26.07815	223.93262	4.85634	0.1532126	0.30739740	2.1743824	21	10 18.4	19.4
119049 2001 HB_{63}	16.8	X	133.60331	245.57317	32.29609	0.88226	0.0786737	0.31773277	2.1269701	21	—	—
119050 2001 HA_{67}	16.9	X	285.88617	259.67278	43.80552	4.34337	0.1811648	0.29157662	2.2523416	21	3 22.2	19.9
119051 2001 JK_{5}	16.7	X	52.19364	247.80845	76.20502	2.18184	0.1312566	0.31197218	2.1530733	21	12 12.4	19.0
119052 2001 KZ	16.6	X	17.21870	214.85821	61.47769	7.26796	0.1055315	0.29995899	2.2101825	21	8 1.8	18.6
119053 2001 KR_{11}	16.3	X	214.66415	148.67766	131.07974	3.12712	0.2228493	0.27719313	2.3295985	21	—	—
119054 2001 KY_{11}	15.9	X	310.72993	225.11831	88.16717	8.45961	0.2263103	0.29358960	2.2420344	21	5 2.2	18.4
119055 2001 KN_{12}	16.6	X	53.64360	158.08955	102.67991	2.66368	0.1189743	0.30274255	2.1966140	21	9 13.1	18.8
119056 2001 KL_{13}	15.5	X	250.40109	57.97170	240.21852	11.46053	0.2773271	0.28158818	2.3052946	21	1 30.5	19.8
119057 2001 KT_{19}	16.8	X	285.34739	203.35681	104.88187	3.94665	0.2546256	0.29040022	2.2584202	21	3 19.7	20.0
119058 2001 KT_{24}	16.6	X	65.12035	235.54306	45.84922	5.50200	0.0978211	0.30705648	2.1759915	21	10 26.0	19.0
119059 2001 KP_{25}	16.3	X	248.96792	43.07946	267.39200	5.85968	0.2525500	0.28525541	2.2854942	21	2 15.4	20.2
119060 2001 KM_{42}	16.4	X	277.47202	143.96935	158.38858	4.27999	0.2658074	0.28720385	2.2751457	21	3 2.2	19.9
119061 2001 KP_{42}	15.9	X	54.87391	172.11286	135.38520	7.87543	0.2086981	0.30859143	2.1687699	21	12 4.5	18.9
119062 2001 KC_{43}	16.2	X	337.81607	154.94836	160.53891	7.12188	0.1634676	0.29862572	2.2167561	21	7 7.3	17.8
119063 2001 KF_{49}	16.0	X	99.81400	230.65422	83.52136	2.98004	0.2144625	0.26475504	2.4020013	21	—	—
119064 2001 KO_{52}	16.6	X	9.48069	24.38278	269.44655	1.60906	0.1167728	0.30286449	2.1960243	21	8 13.2	18.4
119065 2001 KB_{72}	17.0	X	317.40731	103.01909	184.90046	1.39325	0.1633485	0.29380093	2.2409591	21	4 12.6	19.4
119066 2001 KJ_{76}	6.8	X	317.84867	270.19869	47.71328	6.73856	0.0849467	0.00338343	43.9438466	21	6 19.8	23.0
119067 2001 KP_{76}	6.6	X	303.71249	302.61788	42.86515	7.21054	0.1936464	0.00339325	43.8589986	21	6 19.4	22.7
119068 2001 KC_{77}	6.7	X	17.56533	180.92145	57.84728	12.90436	0.3614871	0.00237775	55.5936173	21	6 28.8	22.5
119069 2001 KN_{77}	7.1	X	326.17240	279.74334	45.44946	2.36332	0.2462108	0.00397897	39.4416964	21	6 22.2	22.2
119070 2001 KP_{77}	7.0	X	23.24257	219.57613	22.15683	3.31741	0.1791287	0.00338031	43.9708985	21	6 26.9	22.7
119071 2001 LC_{1}	15.8	X	259.26929	216.45834	98.50237	5.52657	0.1895029	0.28655595	2.2785738	21	3 10.3	19.3
119072 2001 LF_{4}	15.9	X	278.52676	225.29448	80.48868	8.27961	0.1496066	0.28678247	2.2773738	21	3 24.4	19.1
119073 2001 LD_{9}	16.1	X	330.18045	184.76019	165.00994	7.43804	0.1856883	0.30034947	2.2082664	21	8 17.4	17.4
119074 2001 LC_{15}	16.7	X	287.89135	90.24720	198.75737	5.52227	0.1498378	0.28912803	2.2650402	21	3 6.1	19.9
119075 2001 LK_{15}	16.4	X	308.32876	54.89457	223.57788	3.90733	0.2400728	0.28760333	2.2730384	21	3 3.8	19.5
119076 2001 LE_{19}	16.4	X	266.98959	96.04737	173.16618	5.72986	0.2700766	0.28044661	2.3115462	21	1 12.1	20.4
119077 2001 MQ_{8}	15.8	X	320.10490	105.05517	258.72163	6.00294	0.1527800	0.29471890	2.2363034	21	8 18.4	17.7
119078 2001 MA_{9}	15.9	X	312.68356	282.11113	329.97265	4.73732	0.1808726	0.28517783	2.2859087	21	2 12.7	18.8
119079 2001 MA_{17}	16.8	X	189.46923	274.71105	23.55992	4.27129	0.2167197	0.27278773	2.3546128	21	—	—
119080 2001 MG_{28}	16.1	X	195.64015	138.83155	181.78564	6.28685	0.1602916	0.27570090	2.3379969	21	1 16.9	19.7
119081 2001 NR_{3}	16.4	X	321.14910	323.61703	301.96581	6.93787	0.1072233	0.28734732	2.2743883	21	3 22.6	19.1
119082 2001 NR_{4}	17.0	X	265.16376	151.26082	128.79198	3.54024	0.1633418	0.28134085	2.3066455	21	1 30.9	20.4
119083 2001 NT_{9}	16.8	X	187.44463	56.78268	245.42837	1.73511	0.1963713	0.27242766	2.3566870	21	—	—
119084 2001 NH_{10}	16.4	X	291.47190	303.33371	346.92162	3.38415	0.1912900	0.28587609	2.2821849	21	3 8.5	19.3
119085 2001 NW_{15}	16.1	X	161.56702	353.90352	345.67472	6.66755	0.1477977	0.27310626	2.3527816	21	1 8.3	19.4
119086 2001 NR_{19}	16.5	X	112.86603	146.09875	185.11708	1.68639	0.2160233	0.26473529	2.4021207	21	—	—
119087 2001 NK_{21}	15.8	X	123.94163	205.84516	135.99239	9.47764	0.2677530	0.26540532	2.3980761	21	—	—
119088 2001 NP_{21}	16.2	X	209.54182	306.10888	326.19895	5.96939	0.0999499	0.26900377	2.3766422	21	—	—
119089 2001 NR_{21}	16.2	X	123.21111	185.35806	148.70018	4.06524	0.1471657	0.26440503	2.4041206	21	—	—
119090 2001 OU_{1}	16.7	X	184.35317	300.45646	29.71530	6.25677	0.1566271	0.27463793	2.3440257	21	1 20.9	20.3
119091 2001 OG_{9}	15.8	X	132.45439	84.65535	286.42147	3.76402	0.2177204	0.27047637	2.3680080	21	1 23.8	19.0
119092 2001 OU_{10}	16.5	X	122.71149	294.39156	39.43582	5.38118	0.2165229	0.26604448	2.3942337	21	—	—
119093 2001 OR_{18}	16.3	X	278.23505	90.16903	202.42045	6.42694	0.1201816	0.28416148	2.2913561	21	3 3.5	19.5
119094 2001 OO_{24}	17.7	X	124.54338	149.66852	165.61385	3.60568	0.2458618	0.26494879	2.4008301	21	—	—
119095 2001 OE_{25}	16.3	X	165.84846	173.71422	164.90642	6.47770	0.1387141	0.27234523	2.3571626	21	1 8.9	19.7
119096 2001 OT_{28}	15.8	X	148.20206	351.78712	328.16871	14.95504	0.2783558	0.26856675	2.3792197	21	—	—
119097 2001 OX_{34}	15.9	X	209.40839	299.90365	90.93191	7.60516	0.1180548	0.28505350	2.2865733	21	5 2.5	19.3
119098 2001 OD_{35}	16.1	X	64.26332	180.86824	356.28626	7.85674	0.0846100	0.28967404	2.2621931	21	5 12.5	18.6
119099 2001 OR_{40}	16.3	X	72.31885	321.49013	89.38448	7.38340	0.0930554	0.26658175	2.3910158	21	—	—
119100 2001 OZ_{41}	16.3	X	105.54980	61.79052	268.30417	5.56561	0.1197869	0.26010650	2.4305352	21	—	—
119101 2001 OG_{47}	16.0	X	155.03931	240.09690	128.33820	8.32422	0.2232136	0.27280283	2.3545259	21	2 14.5	19.6
119102 2001 OB_{49}	15.9	X	117.85689	186.82808	180.97146	5.54202	0.2426015	0.26643623	2.3918863	21	1 5.4	18.9
119103 2001 OM_{51}	16.2	X	253.53619	187.02699	86.39975	5.82003	0.1232495	0.27852782	2.3221503	21	1 14.4	19.7
119104 2001 ON_{53}	16.4	X	160.72335	275.37207	53.92140	7.42461	0.1416141	0.26929975	2.3749005	21	—	—
119105 2001 OM_{56}	15.9	X	160.23403	139.74831	234.17985	5.57188	0.1448983	0.27229491	2.3574529	21	2 15.7	19.3
119106 2001 OU_{56}	16.2	X	117.12549	220.56805	121.91240	5.93620	0.2170333	0.26591314	2.3950220	21	—	—
119107 2001 OX_{56}	16.3	X	195.19714	195.92025	130.91709	3.31406	0.2208268	0.27521619	2.3407412	21	1 28.1	20.0
119108 2001 OC_{64}	16.1	X	200.93050	287.15053	110.23233	4.63361	0.2253092	0.28276329	2.2989033	21	4 30.9	19.9
119109 2001 OZ_{64}	15.1	X	226.59308	253.26308	152.47456	15.16263	0.1432429	0.23975337	2.5662142	21	6 9.6	19.3
119110 2001 OT_{70}	16.2	X	162.14337	285.78272	47.81449	1.87577	0.2005695	0.26868212	2.3785386	21	1 6.9	19.6
119111 2001 OK_{71}	15.8	X	85.24314	264.94854	68.26690	3.25981	0.2247029	0.25853388	2.4403816	21	—	—
119112 2001 OV_{75}	16.1	X	14.07406	208.31350	39.06824	6.65646	0.1482444	0.29193004	2.2505233	21	6 4.5	17.9
119113 2001 OE_{77}	16.2	X	198.80934	124.33704	301.42780	6.43690	0.0678528	0.29023870	2.2592581	21	6 4.9	19.4
119114 2001 OY_{77}	16.2	X	185.38336	217.08348	78.13730	6.39684	0.2290951	0.27115806	2.3640376	21	—	—
119115 2001 OJ_{80}	16.9	X	72.47130	274.15665	105.73564	1.88232	0.2334843	0.26102956	2.4248019	21	—	—
119116 2001 OB_{81}	15.2	X	77.58269	6.83699	322.87360	13.92158	0.2368211	0.25665653	2.4522675	21	—	—
119117 2001 OB_{82}	16.2	X	123.86079	178.56743	137.96275	1.89900	0.1947015	0.26471705	2.4022310	21	—	—
119118 2001 OG_{85}	17.4	X	274.12490	60.99528	230.43127	2.77878	0.1773688	0.28301694	2.2975295	21	2 20.3	20.8
119119 2001 OP_{86}	16.1	X	167.43062	215.53370	95.69955	3.12089	0.2353536	0.26987237	2.3715399	21	—	—
119120 2001 OM_{87}	15.9	X	285.86429	298.98768	339.99792	28.76120	0.2826423	0.23260163	2.6185501	21	2 18.8	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119121 2001 OD_{88}	15.8	X	197.74856	330.88425	323.73318	4.64290	0.2275850	0.27286548	2.3541655	21	—	—
119122 2001 OU_{89}	16.9	X	230.15213	186.79808	103.55275	6.11500	0.1874889	0.27656030	2.3331509	21	1 12.2	20.7
119123 2001 OQ_{90}	16.4	X	32.47172	107.33250	141.83380	5.81699	0.1115530	0.29413539	2.2392601	21	7 15.2	18.3
119124 2001 OB_{99}	15.8	X	97.84222	264.22414	138.57877	13.72829	0.2270229	0.26889014	2.3773117	21	1 20.0	18.2
119125 2001 OW_{99}	17.0	X	173.50141	330.38405	334.06369	2.01623	0.2329356	0.27059752	2.3673011	21	—	—
119126 2001 OK_{101}	16.0	X	190.88358	307.50273	100.37385	7.85906	0.1061349	0.28466452	2.2886558	21	5 5.6	19.4
119127 2001 OT_{101}	16.6	X	315.21191	233.37447	30.36297	4.10728	0.0583401	0.28553375	2.2840087	21	3 24.8	19.3
119128 2001 OY_{101}	16.5	X	141.34104	301.27757	1.23114	1.16034	0.1496335	0.26524299	2.3990545	21	—	—
119129 2001 OL_{111}	16.9	X	112.73581	198.24050	139.98765	1.95106	0.2032750	0.26524556	2.3990389	21	—	—
119130 2001 OT_{111}	16.3	X	89.71211	207.90057	180.76429	2.41835	0.1977948	0.26747333	2.3856994	21	—	—
119131 2001 PN	16.4	X	49.39075	274.27118	332.35222	5.29053	0.1164049	0.29653858	2.2271454	21	8 13.4	18.7
119132 2001 PS_{1}	16.3	X	143.59793	201.60556	126.36853	2.09531	0.2000869	0.26952573	2.3735729	21	—	—
119133 2001 PX_{1}	16.7	X	276.21809	232.24675	56.26340	3.65536	0.2359958	0.28337759	2.2955797	21	2 16.4	20.2
119134 2001 PA_{5}	16.7	X	244.74277	58.34745	234.13032	6.02231	0.1140302	0.27841589	2.3227726	21	1 27.4	20.1
119135 2001 PZ_{9}	16.5	X	177.02410	339.36101	340.26236	5.96307	0.1510107	0.27234194	2.3571816	21	—	—
119136 2001 PC_{12}	15.6	X	183.30167	139.63847	148.85878	6.65325	0.1218564	0.26728973	2.3867918	21	—	—
119137 2001 PF_{12}	15.7	X	119.88196	288.45332	134.76896	2.72374	0.1413700	0.27348732	2.3505956	21	3 7.9	18.5
119138 2001 PS_{15}	16.2	X	6.36189	327.02994	8.19997	5.07097	0.1042412	0.25073381	2.4907346	21	10 4.2	18.6
119139 2001 PY_{17}	16.4	X	170.70017	302.46396	58.40142	6.61587	0.1976063	0.27470154	2.3436639	21	2 19.5	20.1
119140 2001 PS_{24}	16.0	X	257.16280	153.98815	148.13550	7.29327	0.1281863	0.23005618	2.6378298	21	3 1.8	19.9
119141 2001 PX_{25}	16.2	X	67.13111	296.00435	113.78720	5.03895	0.1465399	0.26512174	2.3997858	21	—	—
119142 2001 PL_{27}	16.5	X	64.10110	123.37305	298.77958	4.23919	0.1354649	0.26609875	2.3939082	21	—	—
119143 2001 PX_{27}	16.5	X	150.93369	316.24777	35.45089	3.15005	0.2319957	0.27138805	2.3627017	21	1 21.9	20.0
119144 2001 PH_{32}	16.0	X	86.00530	293.97639	58.67001	6.47715	0.1217197	0.26249524	2.4157673	21	—	—
119145 2001 PS_{41}	15.3	X	19.33253	113.76358	326.16806	21.77646	0.2056110	0.26034562	2.4290467	21	—	—
119146 2001 PQ_{45}	16.8	X	81.60952	316.10432	36.78714	6.97327	0.2953696	0.26204150	2.4185552	21	—	—
119147 2001 PF_{47}	15.4	X	222.07060	126.67771	319.31149	24.65594	0.2646827	0.28962588	2.2624439	21	7 22.2	19.3
119148 2001 PS_{49}	15.2	X	95.95072	232.43462	306.16591	22.30023	0.0271013	0.23590836	2.5940230	21	7 1.3	18.9
119149 2001 PY_{55}	16.6	X	11.21874	152.53078	229.69269	1.62728	0.1933329	0.25516675	2.4618032	21	12 31.9	19.4
119150 2001 PR_{60}	16.2	X	122.91983	261.07611	151.61130	2.55898	0.2080384	0.27434100	2.3457168	21	3 6.7	19.3
119151 2001 PW_{61}	15.8	X	359.06693	89.89648	334.96165	11.88548	0.2300220	0.25661827	2.4525112	21	—	—
119152 2001 PB_{63}	15.7	X	102.49799	291.28795	110.55934	3.15032	0.2079303	0.26592356	2.3949595	21	1 24.7	18.3
119153 2001 QH_{3}	16.4	X	234.10012	180.74931	124.05504	3.17792	0.1718765	0.27847551	2.3224411	21	2 2.2	20.1
119154 2001 QS_{3}	16.9	X	247.03989	59.10877	258.58386	1.91843	0.1787014	0.28154567	2.3055267	21	2 27.9	20.4
119155 2001 QJ_{7}	16.4	X	86.93710	46.72494	321.48391	5.11665	0.1901013	0.26360438	2.4089861	21	—	—
119156 2001 QM_{7}	16.4	X	338.40178	198.53805	146.36092	8.49110	0.2883581	0.24638918	2.5199289	21	8 17.4	17.5
119157 2001 QH_{9}	16.2	X	61.77506	23.31873	25.87420	1.27838	0.1821592	0.26448029	2.4036645	21	—	—
119158 2001 QX_{21}	16.2	X	301.60997	27.41244	315.59733	3.45615	0.2958024	0.23987039	2.5653795	21	5 19.5	19.4
119159 2001 QX_{22}	15.7	X	180.50362	5.16467	15.86173	6.47249	0.1918138	0.27707349	2.3302690	21	3 22.7	19.4
119160 2001 QT_{23}	16.4	X	134.39564	204.35931	94.89634	3.36859	0.2123397	0.26294989	2.4129818	21	—	—
119161 2001 QB_{24}	16.3	X	243.40241	183.04820	160.08634	4.17234	0.2112213	0.23216530	2.6218299	21	4 2.1	20.6
119162 2001 QD_{26}	16.7	X	88.30163	270.22796	80.32615	3.50216	0.2305590	0.26127152	2.4233046	21	—	—
119163 2001 QX_{26}	16.0	X	180.25391	178.88403	118.81272	4.38748	0.1814756	0.26841408	2.3801218	21	—	—
119164 2001 QJ_{37}	16.5	X	251.34413	79.11783	189.52908	1.87285	0.1852041	0.27749503	2.3279085	21	1 3.5	20.3
119165 2001 QJ_{38}	15.8	X	29.13455	163.91834	139.99418	7.08637	0.1246172	0.25161390	2.4849231	21	10 3.5	18.6
119166 2001 QJ_{39}	17.1	X	222.50698	124.97229	212.92762	1.98384	0.1725791	0.28094821	2.3087941	21	3 3.6	20.8
119167 2001 QX_{39}	16.8	X	119.94335	80.84634	209.86792	1.25349	0.1997530	0.26218404	2.4176785	21	—	—
119168 2001 QK_{42}	16.5	X	1.73736	150.50759	103.69807	2.03112	0.1474150	0.29088234	2.2559241	21	5 19.7	18.0
119169 2001 QM_{47}	16.1	X	64.17791	204.94210	325.78842	9.52807	0.0715789	0.28559310	2.2836922	21	4 28.9	18.8
119170 2001 QO_{48}	16.8	X	94.26252	343.62170	1.79446	1.22066	0.2008261	0.26258047	2.4152445	21	—	—
119171 2001 QH_{49}	16.0	X	301.37311	57.07052	145.09869	6.66174	0.0572731	0.27273203	2.3549333	21	—	—
119172 2001 QJ_{49}	16.8	X	95.23598	223.57759	141.49829	1.82451	0.2004463	0.26434512	2.4044838	21	—	—
119173 2001 QL_{49}	16.1	X	60.97587	271.48111	121.89512	2.85971	0.1718120	0.26288414	2.4133842	21	—	—
119174 2001 QR_{51}	16.2	X	334.08379	184.05035	78.46329	4.10101	0.0932833	0.28690589	2.2767206	21	4 16.6	18.5
119175 2001 QU_{53}	16.5	X	187.54817	251.64275	61.44660	3.09534	0.2127143	0.27230802	2.3573773	21	1 5.5	20.4
119176 2001 QS_{55}	16.2	X	115.13323	308.70820	86.06386	2.33794	0.1846512	0.26965207	2.3728314	21	1 29.2	18.9
119177 2001 QN_{61}	17.0	X	276.54665	355.41263	281.54310	1.75273	0.1496221	0.28086360	2.3092578	21	2 8.1	20.2
119178 2001 QW_{66}	16.2	X	142.53031	66.54353	234.40254	3.60065	0.1468237	0.26354934	2.4093215	21	—	—
119179 2001 QM_{67}	16.9	X	190.97494	135.27455	192.25209	1.76241	0.2108523	0.27470456	2.3436467	21	1 24.7	20.8
119180 2001 QN_{68}	15.3	X	102.32957	125.51783	283.74298	10.84747	0.1794811	0.26912916	2.3759040	21	1 26.8	17.9
119181 2001 QX_{68}	16.2	X	214.16367	21.95003	289.84888	6.36183	0.1470019	0.27473100	2.3434963	21	1 23.6	19.9
119182 2001 QZ_{80}	15.3	X	157.47785	168.87912	240.50295	6.02237	0.2242661	0.27453473	2.3446131	21	4 6.2	19.0
119183 2001 QV_{82}	16.0	X	325.74294	187.16544	203.19535	13.53396	0.1971496	0.24580185	2.5239415	21	10 5.5	18.0
119184 2001 QK_{87}	15.7	X	26.70609	135.90962	287.00886	11.65301	0.1647845	0.25962263	2.4335542	21	—	—
119185 2001 QJ_{88}	16.9	X	123.39663	313.03143	148.94807	3.15081	0.1200948	0.28187650	2.3037223	21	5 1.2	19.8
119186 2001 QM_{93}	15.5	X	260.51963	180.19258	227.98074	4.48888	0.2548341	0.23569402	2.5955954	21	7 3.7	19.5
119187 2001 QA_{94}	15.4	X	135.19888	23.62770	23.14463	4.71469	0.2433902	0.21932116	2.7232177	21	3 23.2	19.7
119188 2001 QO_{97}	15.8	X	76.22425	65.04668	314.89669	3.74261	0.2056479	0.26031728	2.4292230	21	—	—
119189 2001 QO_{102}	16.1	X	188.71537	22.68820	276.44714	1.71438	0.1794454	0.27247837	2.3563947	21	—	—
119190 2001 QC_{104}	16.1	X	198.93432	64.59088	339.48086	1.28374	0.2264070	0.28101226	2.3084433	21	5 5.5	20.1
119191 2001 QO_{104}	15.9	X	296.39782	202.57050	331.50675	6.66019	0.0602896	0.26829799	2.3808083	21	—	—
119192 2001 QM_{106}	16.5	X	190.54769	133.64103	199.02134	4.26048	0.0921750	0.27455512	2.3444970	21	1 23.0	19.9
119193 2001 QH_{108}	15.7	X	259.52302	162.30750	24.90588	6.18174	0.0268049	0.25971180	2.4329971	21	—	—
119194 2001 QH_{109}	16.0	X	332.89022	205.82234	74.79983	8.70213	0.1256377	0.28994247	2.2607966	21	5 7.6	18.1
119195 2001 QF_{111}	16.2	X	247.32864	10.29851	258.95746	4.83507	0.1384523	0.27627904	2.3347341	21	1 2.2	19.8
119196 2001 QZ_{112}	15.5	X	10.97949	249.43735	238.15406	8.02035	0.1624736	0.26659204	2.3909542	21	—	—
119197 2001 QU_{118}	15.8	X	137.12865	131.97848	282.74031	4.03716	0.1844848	0.27246467	2.3564736	21	3 20.1	19.1
119198 2001 QN_{121}	16.2	X	226.93802	291.34311	359.17388	7.22963	0.1105722	0.27531783	2.3401651	21	1 11.0	19.7
119199 2001 QP_{121}	16.4	X	212.18367	176.19776	91.66604	4.49557	0.1448917	0.27093272	2.3653482	21	—	—
119200 2001 QV_{124}	17.0	X	84.72322	251.14846	77.99652	1.99472	0.1768561	0.25985002	2.4321343	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119201 2001 QL_{126}	16.0	X	269.43657	27.52775	239.85843	5.87702	0.0914816	0.27917178	2.3185780	21	1 23.4	19.3
119202 2001 QN_{128}	16.2	X	217.23741	56.17740	208.85902	7.62524	0.0884398	0.27027259	2.3691981	21	—	—
119203 2001 QU_{128}	16.0	X	112.53245	142.99809	246.83227	5.80656	0.1214394	0.27015238	2.3699009	21	1 7.1	18.7
119204 2001 QV_{128}	16.3	X	60.86905	45.63917	215.98681	5.70626	0.1595366	0.29878405	2.2159729	21	9 28.2	18.9
119205 2001 QN_{141}	16.4	X	99.54487	357.11350	33.80534	1.83536	0.1846451	0.26655006	2.3912053	21	—	—
119206 2001 QW_{145}	16.5	X	73.04327	98.69547	308.60121	1.47827	0.1786096	0.26690263	2.3890990	21	—	—
119207 2001 QB_{149}	16.5	X	77.83969	340.58998	33.11120	3.04923	0.1991224	0.26353491	2.4094095	21	—	—
119208 2001 QJ_{156}	16.6	X	324.50406	61.57441	228.41126	2.22364	0.1659148	0.23864135	2.5741800	21	5 3.4	19.5
119209 2001 QC_{159}	16.2	X	116.84789	318.51049	344.13031	6.61681	0.1124069	0.26061969	2.4273435	21	—	—
119210 2001 QF_{160}	16.6	X	139.32982	211.78579	164.32713	1.38340	0.1944910	0.27105604	2.3646307	21	2 4.1	19.9
119211 2001 QD_{161}	16.3	X	242.91087	319.47187	332.10723	3.61608	0.0366268	0.27636826	2.3342316	21	1 30.5	19.3
119212 2001 QY_{166}	16.1	X	213.45062	150.34862	101.55419	6.44032	0.1875494	0.26946961	2.3739024	21	—	—
119213 2001 QF_{168}	17.2	X	256.39682	101.51698	157.60118	2.15653	0.2037373	0.27766883	2.3269370	21	—	—
119214 2001 QS_{173}	16.4	X	140.93788	104.96017	251.91844	5.44851	0.1243647	0.26962695	2.3729787	21	1 2.5	19.5
119215 2001 QX_{188}	15.8	X	72.79071	312.92131	134.20494	5.96730	0.1428827	0.27239472	2.3568770	21	1 25.4	18.0
119216 2001 QO_{191}	16.5	X	193.82120	293.33443	99.70450	7.21535	0.1219453	0.28272006	2.2991376	21	4 19.8	19.9
119217 2001 QV_{200}	15.1	X	156.03505	214.68794	258.23413	3.46083	0.0801657	0.28092666	2.3089122	21	6 20.1	18.2
119218 2001 QV_{210}	16.0	X	81.43562	101.16186	286.37792	5.01125	0.1241473	0.26421827	2.4052533	21	—	—
119219 2001 QJ_{211}	16.7	X	161.90932	332.03457	311.73265	1.89579	0.1790665	0.26412318	2.4058306	21	—	—
119220 2001 QL_{211}	15.6	X	251.68559	222.55736	195.73434	4.49017	0.1203356	0.24087402	2.5582486	21	7 23.7	19.3
119221 2001 QS_{214}	16.4	X	74.86009	170.27551	226.38453	0.44310	0.1882185	0.26352739	2.4094553	21	—	—
119222 2001 QD_{219}	16.8	X	245.93997	353.06398	268.12501	3.14278	0.2160563	0.27416129	2.3467417	21	—	—
119223 2001 QB_{220}	15.4	X	353.97243	45.09221	301.14372	12.14828	0.1940033	0.24452916	2.5326914	21	9 25.1	17.9
119224 2001 QE_{223}	16.5	X	161.86425	125.42605	330.68531	7.02802	0.0904896	0.28723556	2.2749782	21	6 2.9	19.8
119225 2001 QM_{223}	16.5	X	293.18452	283.49771	329.91147	1.93954	0.1496935	0.28070636	2.3101200	21	1 27.5	19.5
119226 2001 QB_{224}	16.3	X	112.76319	96.55005	196.83858	8.56901	0.1113138	0.25994111	2.4315660	21	12 27.3	20.1
119227 2001 QD_{226}	15.9	X	122.24143	146.74373	291.67617	6.02991	0.0767187	0.27626550	2.3348103	21	3 17.2	18.8
119228 2001 QZ_{226}	15.3	X	86.09174	233.68288	299.13052	10.19460	0.0965659	0.28584243	2.2823641	21	6 15.9	18.0
119229 2001 QV_{232}	16.0	X	44.54874	139.19493	332.33263	3.84519	0.1304780	0.26959014	2.3731948	21	1 7.7	18.0
119230 2001 QV_{236}	16.6	X	156.43563	83.43268	211.88808	1.64214	0.1947674	0.26462445	2.4027914	21	—	—
119231 2001 QQ_{238}	15.8	X	288.86645	156.67915	176.09727	15.54707	0.1433648	0.23621971	2.5917431	21	5 16.8	19.5
119232 2001 QA_{239}	16.0	X	65.67191	89.78111	351.77143	6.44902	0.1024822	0.26727741	2.3868651	21	1 3.5	18.5
119233 2001 QZ_{243}	15.5	X	151.43160	14.12341	359.01993	5.58870	0.0314609	0.22132882	2.7067246	21	2 4.7	19.3
119234 2001 QL_{255}	15.9	X	272.07631	7.36613	267.35204	5.43065	0.0901246	0.27854306	2.3220656	21	2 5.1	19.0
119235 2001 QP_{261}	15.8	X	120.68448	36.39756	292.14827	5.24410	0.0998839	0.26161306	2.4211950	21	—	—
119236 2001 QO_{271}	16.5	X	294.36466	260.30184	352.76434	3.93771	0.1423487	0.28080020	2.3096053	21	1 30.1	19.6
119237 2001 QE_{275}	15.3	X	198.65554	330.02155	113.51145	5.18878	0.2159554	0.23757428	2.5818823	21	6 26.2	19.5
119238 2001 QL_{277}	15.2	X	108.45494	55.26671	7.70518	22.29672	0.2625862	0.27081527	2.3660320	21	3 15.9	18.3
119239 2001 QY_{277}	15.5	X	128.06525	356.86216	49.17485	10.47565	0.2123726	0.27180699	2.3602734	21	3 10.4	18.9
119240 2001 QF_{278}	15.6	X	69.59547	284.09854	70.27713	12.75557	0.2743170	0.25869481	2.4393694	21	—	—
119241 2001 QQ_{282}	16.0	X	302.30604	240.46556	109.84423	5.63578	0.2549857	0.28850065	2.2683228	21	6 6.3	18.3
119242 2001 QL_{286}	16.1	X	183.57442	84.35634	260.25000	9.14795	0.0780096	0.27583790	2.3372227	21	1 27.7	19.4
119243 2001 QZ_{288}	16.3	X	86.02885	189.97884	237.02522	2.25810	0.1534383	0.27114547	2.3641107	21	1 21.5	18.6
119244 2001 QL_{290}	17.0	X	65.13856	217.44464	179.41502	0.82372	0.1838270	0.26392075	2.4070606	21	—	—
119245 2001 QD_{293}	14.3	X	82.39028	174.57297	318.66848	24.92026	0.2128575	0.27043638	2.3682414	21	4 16.9	17.7
119246 2001 QH_{295}	16.5	X	127.61921	159.22619	166.54631	1.00865	0.2007965	0.26215869	2.4178343	21	—	—
119247 2001 QX_{296}	15.4	X	133.30573	161.09292	196.77315	5.17345	0.1328469	0.26497768	2.4006555	21	—	—
119248 2001 RS_{10}	16.5	X	36.41040	128.34089	235.08096	7.95202	0.2739924	0.25573354	2.4581644	21	—	—
119249 2001 RR_{14}	16.1	X	30.35687	228.88587	238.03157	0.57680	0.1450283	0.26856490	2.3792307	21	—	—
119250 2001 RR_{15}	15.5	X	52.41653	149.70605	358.40954	2.39739	0.0273032	0.22854849	2.6494179	21	3 17.7	18.6
119251 2001 RE_{20}	16.3	X	165.57611	114.45454	178.28484	6.23650	0.1680324	0.26660211	2.3908941	21	—	—
119252 2001 RD_{21}	16.1	X	46.56634	87.27537	347.83436	4.46910	0.1697846	0.26541274	2.3980315	21	—	—
119253 2001 RL_{24}	16.9	X	118.67412	156.92158	223.35086	0.56389	0.1889956	0.26834171	2.3805498	21	1 14.9	19.8
119254 2001 RL_{28}	16.1	X	82.90340	293.45631	148.14109	3.71823	0.1902798	0.27112893	2.3642069	21	2 12.6	18.3
119255 2001 RP_{28}	16.9	X	240.46481	39.39224	231.78496	1.59449	0.1733410	0.27429973	2.3459520	21	—	—
119256 2001 RW_{28}	15.7	X	358.92805	177.81072	330.87712	4.31791	0.0782518	0.22110566	2.7085456	21	1 1.1	19.1
119257 2001 RN_{34}	15.5	X	210.60234	239.60075	170.69930	12.94064	0.1306602	0.23630592	2.5911128	21	5 30.8	19.8
119258 2001 RK_{39}	16.2	X	252.41762	236.72285	355.70457	5.07806	0.1756599	0.26999326	2.3708320	21	—	—
119259 2001 RC_{44}	16.2	X	153.66146	132.49428	176.55672	6.02303	0.1229843	0.26458941	2.4030035	21	—	—
119260 2001 RB_{45}	15.9	X	128.11400	47.82672	324.25050	6.04254	0.1440582	0.26801402	2.3824897	21	1 10.7	18.8
119261 2001 RG_{48}	15.2	X	262.67558	150.99910	23.94009	4.64686	0.1231165	0.25747325	2.4470789	21	—	—
119262 2001 RQ_{49}	16.4	X	110.23706	162.07861	309.40694	1.29213	0.1835606	0.27767350	2.3269109	21	5 5.3	19.5
119263 2001 RG_{51}	16.0	X	127.66422	215.72184	69.41954	9.79546	0.2482567	0.26098787	2.4250601	21	—	—
119264 2001 RZ_{55}	16.0	X	325.80433	346.97073	112.24216	3.58123	0.1607032	0.25690483	2.4506871	21	—	—
119265 2001 RJ_{56}	15.8	X	118.02357	20.74194	34.16286	6.27109	0.1395166	0.27209261	2.3586213	21	2 24.4	18.8
119266 2001 RA_{58}	16.1	X	122.49646	228.55921	62.78704	5.74349	0.1939219	0.25975586	2.4327220	21	—	—
119267 2001 RZ_{65}	15.7	X	100.34169	74.42660	291.02620	4.82858	0.1445791	0.26282061	2.4137731	21	—	—
119268 2001 RC_{67}	15.9	X	129.29922	92.58686	219.51037	6.56905	0.1449257	0.26102411	2.4248356	21	—	—
119269 2001 RK_{68}	16.0	X	37.59028	170.24640	258.13346	5.42559	0.1060352	0.26095433	2.4252679	21	—	—
119270 2001 RU_{72}	15.8	X	237.09315	25.59292	239.56121	2.92398	0.1381022	0.26856708	2.3792178	21	—	—
119271 2001 RB_{76}	15.7	X	301.95025	209.24817	198.40277	12.58395	0.1735340	0.24208064	2.5497407	21	9 11.6	18.6
119272 2001 RG_{77}	15.2	X	322.69910	253.09178	154.13617	5.20498	0.1817425	0.24470240	2.5314959	21	10 29.3	17.4
119273 2001 RX_{78}	15.3	X	236.51539	4.01962	52.42191	18.84526	0.2190163	0.23344112	2.6122685	21	6 23.2	19.8
119274 2001 RY_{79}	15.2	X	278.92297	45.27177	92.32088	15.02573	0.1380292	0.25258363	2.4785589	21	12 19.7	17.9
119275 2001 RR_{81}	16.5	X	143.70217	280.09596	16.93639	4.17999	0.2223983	0.26260387	2.4151010	21	—	—
119276 2001 RS_{83}	16.1	X	85.11442	135.98787	340.42910	3.47911	0.1162237	0.27584285	2.3371947	21	3 25.7	18.7
119277 2001 RZ_{88}	16.2	X	80.10170	255.07959	56.90285	2.87369	0.2052010	0.25557618	2.4591733	21	12 24.9	19.9
119278 2001 RG_{91}	16.4	X	90.05105	324.48617	33.90746	2.99012	0.2022838	0.26141510	2.4224171	21	—	—
119279 2001 RV_{91}	16.4	X	335.67141	344.66342	3.72738	8.67928	0.1276042	0.24443433	2.5333464	21	8 29.9	18.9
119280 2001 RW_{92}	16.2	X	261.51339	81.87560	336.53860	1.76518	0.1829194	0.23994729	2.5648313	21	7 28.8	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119281 2001 RQ_{98}	15.9	X	270.25242	277.19691	41.22605	2.08929	0.2180783	0.28638825	2.2794632	21	3 20.9	19.2
119282 2001 RK_{100}	16.7	X	101.74392	345.65589	26.12016	2.88418	0.1187085	0.26588474	2.3951926	21	—	—
119283 2001 RV_{100}	16.9	X	142.21052	283.65964	6.30066	5.04712	0.2237219	0.26346083	2.4098611	21	—	—
119284 2001 RR_{101}	16.9	X	328.19308	214.35926	43.33852	2.42872	0.1518443	0.28432644	2.2904697	21	3 20.4	19.2
119285 2001 RR_{107}	16.4	X	20.53848	221.20141	174.79392	7.29227	0.0930136	0.25731570	2.4480777	21	—	—
119286 2001 RD_{109}	16.6	X	143.96854	97.47613	157.97386	2.47520	0.1423721	0.25827914	2.4419860	21	12 11.8	20.5
119287 2001 RU_{110}	16.2	X	257.58631	209.97183	10.42624	5.37474	0.1718546	0.26911796	2.3759699	21	—	—
119288 2001 RZ_{124}	16.1	X	144.62410	246.88726	46.52245	1.93109	0.1791047	0.26276728	2.4140996	21	—	—
119289 2001 RW_{125}	16.5	X	143.91598	220.94914	91.27122	3.65744	0.0859081	0.26395143	2.4068741	21	—	—
119290 2001 RA_{127}	16.7	X	207.50250	213.92680	92.99282	3.52833	0.2201943	0.27340703	2.3510558	21	1 14.6	20.7
119291 2001 RK_{132}	16.5	X	42.69718	310.81829	82.87486	2.49092	0.1869559	0.25823976	2.4422342	21	—	—
119292 2001 SR_{1}	16.4	X	114.84545	108.14406	259.34342	1.66057	0.0551638	0.26494904	2.4008285	21	—	—
119293 2001 SB_{2}	15.9	X	134.98530	313.71376	2.27066	6.24399	0.1576812	0.26245127	2.4160371	21	—	—
119294 2001 SV_{7}	16.5	X	51.62028	53.06077	358.62572	5.28519	0.1712035	0.26269508	2.4145420	21	—	—
119295 2001 SV_{9}	15.6	X	5.62041	306.47432	5.29389	1.09955	0.0443048	0.23840616	2.5758727	21	8 24.6	18.5
119296 2001 SD_{10}	15.4	X	224.19279	213.87333	213.18662	13.47035	0.1612698	0.23365626	2.6106647	21	6 29.6	19.7
119297 2001 SH_{12}	16.7	X	245.79210	9.77030	271.96733	1.69546	0.2041897	0.27609670	2.3357619	21	1 14.3	20.6
119298 2001 SY_{18}	16.4	X	293.38451	255.38100	140.18346	1.38339	0.0804217	0.24335048	2.5408630	21	8 27.6	19.3
119299 2001 SX_{19}	16.3	X	5.11648	345.36077	127.89814	3.98296	0.1016200	0.26366272	2.4086308	21	—	—
119300 2001 SO_{24}	16.4	X	94.50446	344.16427	315.82281	1.98050	0.1844069	0.25588901	2.4571686	21	12 21.9	20.4
119301 2001 SH_{25}	15.7	X	286.47931	192.85902	18.49584	1.37744	0.0490207	0.21778937	2.7359717	21	—	—
119302 2001 SR_{26}	16.1	X	52.72805	295.19552	184.05560	2.52313	0.1197486	0.27027767	2.3691684	21	2 2.3	18.4
119303 2001 SZ_{26}	15.9	X	8.97001	128.87167	7.35386	5.08548	0.1562226	0.26608912	2.3939660	21	—	—
119304 2001 SQ_{33}	15.4	X	87.27101	193.39062	19.70780	4.71580	0.2246386	0.24029498	2.5623567	21	9 1.6	19.2
119305 2001 SH_{42}	16.5	X	105.22126	244.35484	78.04714	2.40995	0.1985444	0.25994381	2.4315492	21	—	—
119306 2001 SX_{47}	15.9	X	87.45672	27.06785	65.27238	5.61376	0.0733453	0.27167537	2.3610356	21	2 21.2	18.6
119307 2001 SF_{48}	15.6	X	334.94334	25.81252	163.71449	2.78813	0.1138049	0.26972497	2.3724038	21	1 2.2	18.5
119308 2001 SR_{51}	16.2	X	68.45014	240.94429	157.25015	7.31817	0.1117999	0.26192457	2.4192749	21	—	—
119309 2001 SC_{52}	14.9	X	270.35837	19.19702	162.12773	8.35454	0.1504200	0.25869540	2.4393657	21	—	—
119310 2001 SR_{62}	16.1	X	225.23727	175.68074	189.68247	4.99831	0.1276606	0.22921126	2.6443083	21	4 17.3	20.0
119311 2001 SL_{66}	16.6	X	336.29063	321.84116	33.31120	3.96753	0.2876740	0.24400984	2.5362837	21	9 1.3	18.0
119312 2001 SR_{70}	15.0	X	322.55272	263.77379	64.03520	14.45709	0.1419718	0.23597006	2.5935709	21	6 28.3	17.9
119313 2001 SS_{72}	15.7	X	313.13643	261.24857	112.33527	5.09912	0.1762503	0.23997791	2.5646132	21	8 16.0	18.1
119314 2001 SW_{72}	15.5	X	70.68556	191.75679	44.04795	3.71456	0.1564812	0.23894283	2.5720143	21	9 2.6	18.9
119315 2001 SQ_{73}	9.6	X	140.38188	303.81254	16.13192	17.43986	0.1784715	0.01357535	17.4034473	21	1 13.1	22.6
119316 2001 SR_{80}	16.1	X	31.20644	263.63085	185.31000	4.08399	0.1641042	0.26614412	2.3936362	21	—	—
119317 2001 SG_{97}	16.0	X	26.11047	118.38435	317.67488	6.61913	0.2260628	0.25971681	2.4329658	21	—	—
119318 2001 SL_{101}	16.8	X	234.39712	324.66963	300.31345	0.66266	0.1645309	0.27078889	2.3661857	21	—	—
119319 2001 SZ_{104}	16.3	X	350.42387	77.40146	233.38077	4.33443	0.2397272	0.24258903	2.5461771	21	7 24.8	18.2
119320 2001 SH_{109}	14.6	X	333.28611	113.56042	263.93414	13.07931	0.0869546	0.24121839	2.5558132	21	9 28.2	17.9
119321 2001 SX_{114}	16.0	X	350.93361	96.99828	24.94785	3.65749	0.1513325	0.26031215	2.4292549	21	—	—
119322 2001 SA_{119}	16.1	X	221.10882	321.39435	276.12530	5.71141	0.1505433	0.26539813	2.3981195	21	—	—
119323 2001 SQ_{121}	14.5	X	66.46363	106.62553	329.35787	8.60242	0.1592436	0.21671159	2.7450354	21	1 18.6	17.5
119324 2001 SM_{124}	16.1	X	25.82273	238.17989	196.83887	4.88623	0.0472581	0.26341116	2.4101640	21	—	—
119325 2001 SP_{125}	16.6	X	36.48002	23.51616	217.87999	4.20713	0.0976207	0.28980405	2.2615164	21	7 7.9	18.8
119326 2001 SS_{128}	16.1	X	22.19334	208.98513	314.80982	6.15009	0.0489824	0.27563549	2.3383667	21	2 13.6	18.8
119327 2001 SD_{130}	17.0	X	178.22897	26.31652	255.30488	1.33324	0.1683684	0.26537722	2.3982454	21	—	—
119328 2001 SX_{131}	16.0	X	330.43371	324.30839	207.08059	1.53508	0.1543051	0.26772127	2.3842263	21	—	—
119329 2001 SV_{135}	16.4	X	332.15756	190.78047	344.43328	0.84868	0.1289391	0.26845976	2.3798518	21	—	—
119330 2001 SY_{135}	16.1	X	259.80645	265.59692	223.37049	0.85841	0.1128769	0.25105660	2.4885992	21	11 11.2	19.2
119331 2001 SS_{136}	16.0	X	335.69160	255.05202	202.77409	6.93771	0.1664234	0.25598772	2.4565369	21	—	—
119332 2001 SA_{140}	16.2	X	254.70118	277.95016	191.73879	3.68000	0.0524564	0.24778310	2.5104693	21	10 18.3	19.3
119333 2001 SM_{141}	16.5	X	27.58759	112.44770	190.33767	0.21618	0.0526814	0.24400654	2.5363066	21	9 15.4	19.4
119334 2001 SD_{143}	16.3	X	44.44137	16.38754	230.50607	4.59040	0.1813138	0.29199110	2.2502096	21	8 13.5	18.6
119335 2001 SN_{144}	16.2	X	24.37260	181.78710	320.19468	3.59437	0.1212507	0.27089637	2.3655598	21	1 14.4	18.5
119336 2001 SC_{145}	16.4	X	311.69391	355.98745	201.26089	6.54657	0.0512194	0.26977386	2.3721172	21	—	—
119337 2001 SB_{146}	16.3	X	309.76112	201.70983	336.19400	2.11337	0.1341362	0.26636971	2.3922845	21	—	—
119338 2001 SR_{152}	16.2	X	127.18081	182.46101	224.63893	4.57553	0.0588357	0.22104770	2.7090189	21	2 17.7	19.9
119339 2001 SR_{154}	15.4	X	246.62274	169.48024	13.12206	7.70966	0.1856879	0.25590623	2.4570584	21	12 24.0	18.5
119340 2001 SY_{161}	16.4	X	163.52876	147.30419	279.29666	1.78337	0.2052917	0.27706208	2.3303330	21	5 3.6	20.2
119341 2001 SL_{168}	15.3	X	131.36541	43.36895	228.76229	6.19022	0.1189689	0.25296409	2.4760731	21	12 19.0	19.1
119342 2001 SZ_{172}	15.6	X	8.94845	104.70164	44.55174	5.53970	0.1404448	0.26804170	2.3823257	21	—	—
119343 2001 SR_{176}	16.1	X	95.33765	152.85967	152.40740	6.73318	0.1460758	0.25464833	2.4651433	21	12 26.3	19.9
119344 2001 SK_{179}	15.9	X	189.40640	283.31019	90.61955	7.35341	0.1124370	0.27263943	2.3554666	21	3 22.4	19.4
119345 2001 SB_{180}	16.4	X	148.05312	110.36032	326.16225	4.24747	0.1543279	0.28124304	2.3071802	21	4 26.0	19.7
119346 2001 SS_{203}	16.8	X	128.46045	250.16167	31.12606	2.73500	0.1588907	0.25861178	2.4398915	21	12 28.9	20.7
119347 2001 SM_{204}	16.5	X	247.04075	151.12314	147.48424	4.03848	0.1464311	0.22695900	2.6617735	21	2 14.0	20.8
119348 2001 SQ_{209}	16.6	X	91.75184	82.21730	32.45990	2.43754	0.1415236	0.27541242	2.3396292	21	4 8.3	19.0
119349 2001 SP_{212}	16.3	X	22.60639	21.51701	54.67384	3.74364	0.1586596	0.25999048	2.4312582	21	—	—
119350 2001 SM_{220}	15.9	X	358.20721	65.21687	27.23775	4.46469	0.0676014	0.25998661	2.4312823	21	—	—
119351 2001 SR_{222}	17.1	X	240.53804	233.55323	33.13941	2.71446	0.2013249	0.27162182	2.3613459	21	—	—
119352 2001 ST_{226}	16.6	X	14.60893	244.88553	164.10226	6.16037	0.1196592	0.25552938	2.4594736	21	—	—
119353 2001 SV_{231}	16.8	X	151.90545	248.27792	35.70592	2.48773	0.1959806	0.26054769	2.4277907	21	—	—
119354 2001 SR_{232}	16.1	X	70.73982	205.38174	58.80432	2.67668	0.0740106	0.24422263	2.5348102	21	9 28.4	19.4
119355 2001 SU_{232}	15.6	X	25.58919	359.02824	80.32280	1.79505	0.0441216	0.21062599	2.7976588	21	—	—
119356 2001 SF_{235}	16.5	X	101.17141	140.42854	175.14084	0.85691	0.1920210	0.25719893	2.4488186	21	—	—
119357 2001 SM_{238}	15.2	X	190.69353	38.48028	169.98541	9.40890	0.0921979	0.25214777	2.4814144	21	12 3.4	18.9
119358 2001 SW_{238}	16.5	X	110.63878	149.37881	84.74049	3.08719	0.0506037	0.24640073	2.5198502	21	10 6.4	19.9
119359 2001 SN_{242}	16.4	X	10.86774	135.51240	156.07437	2.39711	0.0722993	0.23974810	2.5662518	21	8 4.9	19.1
119360 2001 SL_{244}	16.4	X	316.58859	235.58833	135.86324	5.59041	0.1834854	0.24200042	2.5503041	21	8 18.1	18.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119361 2001 SK_{246}	15.6	X	45.84114	246.76710	183.76383	4.36182	0.0260762	0.21217043	2.7840657	21	—	—
119362 2001 SQ_{246}	15.9	X	290.21259	161.27632	30.95529	6.99842	0.0889721	0.26296968	2.4128608	21	—	—
119363 2001 SX_{246}	16.6	X	115.38979	279.35089	31.37558	6.85470	0.1789853	0.25834264	2.4415858	21	—	—
119364 2001 SY_{246}	15.9	X	270.71445	40.79858	144.82732	2.83484	0.1503818	0.25895114	2.4377593	21	—	—
119365 2001 SK_{250}	15.8	X	305.92681	167.78953	45.49205	7.14687	0.0546818	0.26830036	2.3807943	21	1 5.8	19.0
119366 2001 SZ_{252}	15.4	X	185.53125	306.38745	188.54113	9.29233	0.1505489	0.23741613	2.5830287	21	8 18.1	19.6
119367 2001 SO_{253}	16.1	X	324.38587	201.56741	122.73091	3.32924	0.1408711	0.23788916	2.5796035	21	6 27.2	18.7
119368 2001 SD_{273}	14.8	X	189.41720	328.72160	21.59048	35.85658	0.2119944	0.22008819	2.7168869	21	3 17.4	19.9
119369 2001 SZ_{277}	15.4	X	155.24137	234.85142	241.91918	11.05085	0.0992945	0.23165840	2.6256531	21	6 25.4	19.3
119370 2001 SL_{286}	15.9	X	306.95363	211.01384	156.63204	12.96642	0.1695759	0.24061773	2.5600649	21	7 24.7	19.0
119371 2001 SZ_{286}	15.9	X	213.70429	325.98216	94.82824	7.11112	0.2428902	0.28285042	2.2984312	21	6 8.6	19.7
119372 2001 SP_{292}	16.1	X	46.31598	127.26435	310.89844	5.71777	0.0689828	0.26644257	2.3918484	21	—	—
119373 2001 SS_{308}	15.4	X	119.15292	338.67021	168.55001	14.37206	0.0993378	0.23850876	2.5751339	21	6 25.3	19.3
119374 2001 SL_{311}	15.6	X	293.15988	221.11265	168.09871	14.35813	0.1091868	0.24133722	2.5549741	21	8 11.3	18.9
119375 2001 SG_{315}	15.5	X	204.63313	173.71350	175.63045	13.57071	0.1804503	0.22387839	2.6861356	21	3 8.0	19.9
119376 2001 SP_{316}	15.1	X	226.10122	41.74051	310.08147	13.19857	0.1087181	0.22339614	2.6900000	21	3 25.9	19.6
119377 2001 SK_{318}	15.8	X	208.56523	208.00686	287.13066	1.74711	0.0962992	0.24235672	2.5478039	21	9 16.4	19.4
119378 2001 SD_{321}	16.1	X	54.32543	281.46102	127.61485	7.32280	0.0778545	0.26340533	2.4101996	21	—	—
119379 2001 SS_{323}	15.8	X	189.32546	211.14678	229.18994	11.24864	0.2145102	0.23245034	2.6196861	21	6 14.3	20.4
119380 2001 SK_{325}	15.9	X	265.98051	234.93405	167.31602	12.41675	0.2168938	0.23729582	2.5839017	21	7 6.4	19.8
119381 2001 SH_{326}	16.3	X	144.77078	77.33159	226.50296	6.45601	0.1002382	0.26466599	2.4025400	21	—	—
119382 2001 SX_{346}	15.8	X	137.42878	308.18676	43.03888	9.25360	0.0922428	0.26623958	2.3930640	21	—	—
119383 2001 SC_{349}	15.5	X	172.24984	129.35402	180.06180	9.12638	0.1101763	0.21428116	2.7657530	21	—	—
119384 2001 TG	15.5	X	332.74003	30.73396	211.75945	23.54877	0.1609985	0.28124650	2.3071613	21	2 24.3	18.8
119385 2001 TU_{7}	15.1	X	231.81769	198.05241	32.92245	5.84310	0.1099363	0.26005138	2.4308786	21	—	—
119386 2001 TB_{11}	16.0	X	44.71009	66.40520	28.07784	4.30972	0.0687467	0.26429820	2.4047683	21	—	—
119387 2001 TD_{12}	16.8	X	7.79057	182.16825	240.86405	1.10721	0.1190720	0.25496824	2.4630808	21	—	—
119388 2001 TT_{12}	15.6	X	258.34249	19.94574	44.87775	9.59116	0.1805968	0.23594673	2.5937418	21	8 6.2	19.4
119389 2001 TG_{20}	14.6	X	59.75058	195.35112	274.87290	10.32893	0.1451936	0.26593440	2.3948944	21	2 2.4	17.0
119390 2001 TR_{27}	15.5	X	205.24492	302.33957	3.67291	6.97102	0.0164889	0.21671030	2.7450464	21	1 16.5	19.4
119391 2001 TD_{32}	16.3	X	188.28871	126.79790	266.86359	7.23623	0.1183410	0.27520701	2.3407933	21	4 8.4	19.9
119392 2001 TK_{33}	15.1	X	310.71110	244.02741	29.53525	15.28998	0.0677698	0.22492029	2.6778339	21	4 8.9	18.5
119393 2001 TE_{34}	15.8	X	111.78599	249.32833	277.99122	6.15641	0.0487913	0.28118247	2.3075115	21	7 6.7	18.5
119394 2001 TS_{38}	15.7	X	334.17121	278.03486	20.83073	12.98646	0.1766632	0.23372688	2.6101389	21	5 30.0	18.6
119395 2001 TC_{40}	14.4	X	249.55529	293.76268	42.76123	12.82555	0.2567505	0.22606278	2.6688040	21	3 31.5	19.0
119396 2001 TJ_{40}	14.6	X	212.07166	152.26347	258.12646	21.14504	0.0435986	0.22720090	2.6598839	21	6 4.3	18.4
119397 2001 TQ_{43}	14.8	X	129.09291	111.51168	56.88802	13.67344	0.1988999	0.22548968	2.6733240	21	8 17.5	19.4
119398 2001 TV_{46}	15.5	X	217.21158	106.66182	315.96046	2.25376	0.1778475	0.23352743	2.6116248	21	6 17.7	19.6
119399 2001 TH_{49}	15.9	X	171.13327	140.31682	251.76216	6.03251	0.1103768	0.27416345	2.3467294	21	3 18.9	19.3
119400 2001 TM_{50}	15.2	X	186.04986	125.10818	172.46925	9.33754	0.0166483	0.26446972	2.4037285	21	—	—
119401 2001 TY_{50}	16.8	X	186.23432	130.47820	185.72050	1.01780	0.1947993	0.26963226	2.3729476	21	1 6.9	20.4
119402 2001 TY_{51}	15.9	X	172.14727	78.90135	68.31398	2.76154	0.0539846	0.23995585	2.5647704	21	8 25.6	19.4
119403 2001 TU_{62}	16.2	X	19.38165	289.75749	168.17498	2.33656	0.1385551	0.26025510	2.4296099	21	—	—
119404 2001 TK_{63}	15.2	X	347.23192	38.33547	69.00720	7.28701	0.1048512	0.25682282	2.4512088	21	—	—
119405 2001 TU_{64}	16.2	X	326.61174	142.58224	185.98423	4.39621	0.1519608	0.23858952	2.5745528	21	7 5.8	18.8
119406 2001 TY_{64}	15.9	X	232.52743	32.50934	51.30732	6.08021	0.0740762	0.23820773	2.5773030	21	8 13.4	19.6
119407 2001 TG_{69}	16.2	X	242.24596	288.03482	191.92243	1.65240	0.1696961	0.24461039	2.5321307	21	9 27.5	19.7
119408 2001 TS_{70}	15.9	X	228.15048	193.60649	1.89759	1.24310	0.0715989	0.25471698	2.4647003	21	—	—
119409 2001 TH_{72}	15.7	X	272.52067	180.53179	43.14647	5.19612	0.0851076	0.26448838	2.4036154	21	—	—
119410 2001 TU_{72}	15.7	X	338.02899	324.81052	188.67236	4.24973	0.1388655	0.26151576	2.4217955	21	—	—
119411 2001 TJ_{73}	16.4	X	315.15497	326.94855	26.28560	3.35274	0.1845778	0.23975433	2.5662073	21	7 18.1	19.0
119412 2001 TE_{76}	15.5	X	167.35616	94.85424	205.98900	8.06494	0.0639377	0.26056330	2.4276937	21	—	—
119413 2001 TF_{78}	16.1	X	265.07809	235.87534	198.38693	3.79584	0.2347155	0.23917653	2.5703386	21	8 14.4	19.6
119414 2001 TQ_{80}	14.7	X	310.26796	244.10927	162.39378	6.93581	0.2382022	0.24051084	2.5608233	21	9 20.7	16.9
119415 2001 TC_{84}	15.7	X	231.37546	17.50287	245.42275	3.85592	0.0730809	0.21753799	2.7380790	21	—	—
119416 2001 TD_{87}	16.1	X	2.25101	239.28003	268.73671	3.63395	0.1677648	0.26596683	2.3946997	21	—	—
119417 2001 TH_{88}	15.3	X	35.88720	160.77082	286.61858	3.11693	0.0741085	0.21313198	2.7756858	21	—	—
119418 2001 TX_{88}	16.1	X	330.91223	259.79242	252.95603	1.77166	0.1281610	0.26271275	2.4144337	21	—	—
119419 2001 TO_{91}	16.3	X	173.86325	151.11869	229.74317	4.26347	0.0662449	0.22401647	2.6850317	21	3 11.9	20.2
119420 2001 TL_{92}	15.9	X	126.40349	159.94074	235.63361	3.88814	0.1179661	0.21892079	2.7265369	21	2 11.1	19.8
119421 2001 TG_{94}	15.9	X	5.37290	140.74872	7.65881	6.56690	0.0775081	0.26695131	2.3888086	21	—	—
119422 2001 TS_{94}	15.8	X	179.32190	72.16672	266.92185	5.00614	0.0776969	0.21912393	2.7248515	21	1 27.5	19.8
119423 2001 TH_{98}	16.2	X	330.76139	53.70016	288.88462	1.85631	0.1386566	0.24034456	2.5620043	21	8 6.6	18.6
119424 2001 TG_{104}	15.3	X	335.64394	291.79212	46.72697	14.57182	0.1219571	0.23889111	2.5723856	21	8 20.0	18.4
119425 2001 TA_{107}	15.4	X	88.86732	156.37633	237.80325	9.92880	0.2521511	0.25978667	2.4325296	21	—	—
119426 2001 TW_{107}	15.0	X	92.43391	276.43879	80.60720	13.01369	0.2150130	0.25495689	2.4631539	21	—	—
119427 2001 TZ_{116}	15.3	X	306.01703	0.98991	25.72522	4.00968	0.1926503	0.23813919	2.5777975	21	8 20.2	18.0
119428 2001 TP_{120}	14.9	X	115.81476	234.58711	231.15550	21.26831	0.2783501	0.27314347	2.3525679	21	5 17.1	18.2
119429 2001 TH_{123}	15.6	X	148.18206	224.43774	223.25524	14.31539	0.1150976	0.22907444	2.6453611	21	5 13.2	19.6
119430 2001 TK_{124}	16.2	X	1.91025	77.08530	244.72531	9.09273	0.1206408	0.24384416	2.5374324	21	9 1.4	19.1
119431 2001 TM_{128}	15.7	X	286.68460	323.64410	111.91246	9.63078	0.1177485	0.24468733	2.5315999	21	10 12.7	18.8
119432 2001 TL_{131}	16.5	X	70.38695	226.46456	103.97957	6.80405	0.1573723	0.25635760	2.4541735	21	—	—
119433 2001 TT_{132}	15.5	X	166.95647	289.70767	232.22977	12.44097	0.0380103	0.24273217	2.5451760	21	9 1.1	19.4
119434 2001 TL_{133}	15.7	X	125.02805	355.71574	178.60190	14.69340	0.0836572	0.23607733	2.5927851	21	8 3.3	19.7
119435 2001 TP_{133}	15.1	X	340.81533	302.19663	89.04938	10.07608	0.1663402	0.24732799	2.5135481	21	11 15.2	17.4
119436 2001 TL_{135}	15.1	X	109.79563	219.95948	252.05185	9.55148	0.1293517	0.22622112	2.6675585	21	4 30.6	18.9
119437 2001 TZ_{136}	16.5	X	60.79036	232.36373	108.26983	8.82670	0.2482714	0.25579016	2.4578016	21	—	—
119438 2001 TE_{138}	16.0	X	200.02787	164.18859	116.29869	7.17176	0.1130529	0.26898341	2.3767621	21	—	—
119439 2001 TJ_{138}	15.7	X	284.09230	144.62463	25.18314	7.18417	0.0578002	0.26380732	2.4077505	21	—	—
119440 2001 TN_{140}	16.6	X	62.23479	242.36821	128.85080	6.06163	0.2486783	0.25873099	2.4391420	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119441 2001 TR_{141}	15.9	X	29.73198	109.75707	40.98305	10.68557	0.1760348	0.27068270	2.3668045	21	2 9.2	18.0
119442 2001 TC_{147}	15.6	X	11.34149	46.36262	77.43748	7.23943	0.0808871	0.26444841	2.4038576	21	—	—
119443 2001 TF_{147}	15.7	X	208.58084	332.48071	176.97954	12.39971	0.0808691	0.24540701	2.5266480	21	10 9.4	19.2
119444 2001 TY_{148}	15.6	X	201.45856	149.99669	80.58016	7.56565	0.0776951	0.25708777	2.4495244	21	—	—
119445 2001 TM_{154}	15.6	X	220.56414	71.13633	134.91962	8.58967	0.0729320	0.25746617	2.4471238	21	—	—
119446 2001 TT_{154}	15.9	X	31.93743	215.74731	76.47390	9.87513	0.1254976	0.24419026	2.5350342	21	9 23.8	19.0
119447 2001 TC_{164}	16.2	X	208.36887	96.33651	23.76434	4.79481	0.1476490	0.23929351	2.5695009	21	8 26.2	20.1
119448 2001 TX_{169}	15.4	X	16.40467	304.29654	358.41434	13.97941	0.1055105	0.24048614	2.5609987	21	9 6.3	18.2
119449 2001 TX_{170}	15.0	X	154.92358	31.77751	54.88802	14.20262	0.2250431	0.22785442	2.6547956	21	5 24.4	19.5
119450 2001 TO_{174}	15.5	X	298.29722	311.99309	26.30197	13.79495	0.2605645	0.24028939	2.5623964	21	5 11.9	19.0
119451 2001 TJ_{175}	15.6	X	162.88278	284.65106	238.77908	3.61408	0.0993508	0.24361736	2.5390070	21	9 2.4	19.5
119452 2001 TQ_{185}	16.4	X	359.78649	291.58430	259.15426	1.97817	0.1009281	0.27228669	2.3575004	21	2 11.6	18.9
119453 2001 TF_{186}	15.5	X	76.98350	231.02111	353.32420	3.19129	0.1167833	0.23781237	2.5801587	21	8 18.9	18.8
119454 2001 TS_{189}	15.5	X	187.64359	149.95062	353.49023	5.26358	0.0982591	0.23815337	2.5776952	21	9 5.1	19.2
119455 2001 TV_{189}	15.9	X	131.52617	317.17972	261.95190	5.47192	0.1158363	0.29259463	2.2471142	21	10 16.2	19.2
119456 2001 TQ_{191}	15.6	X	237.05216	98.21900	243.52379	5.05959	0.0631510	0.22511346	2.6763017	21	4 1.9	19.5
119457 2001 TS_{191}	16.1	X	333.89701	129.38393	239.39664	5.41308	0.0672865	0.24192644	2.5508240	21	9 21.9	19.2
119458 2001 TJ_{192}	15.8	X	352.07311	45.02499	258.07195	4.84232	0.1846480	0.23824185	2.5770569	21	7 17.9	17.9
119459 2001 TV_{192}	14.8	X	132.11704	213.68470	261.56888	20.91956	0.0739272	0.22421132	2.6834759	21	5 26.6	18.6
119460 2001 TQ_{194}	15.3	X	290.77351	88.93791	353.49578	5.70865	0.1592506	0.24248278	2.5469208	21	10 15.6	18.0
119461 2001 TA_{202}	16.3	X	316.32267	251.59075	108.81728	7.02053	0.1857010	0.29306608	2.2447036	21	8 3.5	18.1
119462 2001 TE_{203}	15.8	X	126.87721	240.84023	91.64636	7.75826	0.1431418	0.26352843	2.4094490	21	—	—
119463 2001 TL_{208}	15.8	X	248.10867	294.50396	159.67903	8.84260	0.0494068	0.24036357	2.5618692	21	9 18.7	19.1
119464 2001 TX_{226}	15.9	X	254.29465	65.51250	35.05243	17.93301	0.2602507	0.24266654	2.5456349	21	9 13.6	19.9
119465 2001 TG_{233}	15.2	X	73.02832	108.61999	62.50893	13.64770	0.1189099	0.22981731	2.6396573	21	5 29.9	18.4
119466 2001 UK_{5}	15.9	X	233.21758	32.07744	39.17019	2.39088	0.0768003	0.23562460	2.5961052	21	7 25.9	19.4
119467 2001 UB_{7}	15.8	X	340.35596	162.11531	186.14595	2.18482	0.1704868	0.24167063	2.5526237	21	9 3.2	17.8
119468 2001 UH_{8}	16.2	X	172.58354	104.32218	82.15375	3.44954	0.1122607	0.29501808	2.2347912	21	10 20.8	19.4
119469 2001 UE_{11}	15.6	X	266.06166	257.52022	83.13404	9.83248	0.1353652	0.22836201	2.6508601	21	5 1.3	19.5
119470 2001 UN_{13}	15.0	X	252.60513	342.59828	70.69288	3.50752	0.0279697	0.23520463	2.5991946	21	8 2.7	18.5
119471 2001 UZ_{13}	15.3	X	283.56290	259.90669	82.41124	13.29844	0.1523813	0.23065731	2.6332448	21	5 21.0	18.9
119472 2001 UM_{16}	15.3	X	46.84458	310.34643	80.11998	2.78733	0.1903901	0.25260748	2.4784029	21	—	—
119473 2001 UO_{18}	7.8	X	350.52254	46.97356	36.31955	3.66746	0.2848049	0.00395820	39.5795813	21	11 28.7	22.3
119474 2001 UW_{19}	16.2	X	308.68790	345.34082	135.72308	7.17139	0.0863208	0.25571487	2.4582840	21	—	—
119475 2001 UF_{28}	16.1	X	158.76641	121.22637	124.49220	2.90770	0.0860712	0.25399801	2.4693492	21	12 15.0	19.6
119476 2001 UG_{28}	16.0	X	84.65123	127.88100	179.98454	5.93850	0.1476539	0.25350420	2.4725549	21	12 19.1	19.8
119477 2001 UH_{30}	16.0	X	122.23745	211.96990	118.79948	6.22114	0.1206072	0.26094453	2.4253286	21	—	—
119478 2001 US_{32}	15.9	X	314.61654	37.72365	139.58893	2.78938	0.1528880	0.26340153	2.4102228	21	—	—
119479 2001 UT_{33}	16.1	X	181.44416	334.68786	85.27373	7.88988	0.0989906	0.27827547	2.3235540	21	5 10.8	19.4
119480 2001 UE_{34}	16.5	X	258.25479	344.09698	98.40346	7.52050	0.3150215	0.23870385	2.5737307	21	8 9.9	20.4
119481 2001 UK_{34}	15.7	X	340.20920	279.30581	66.95898	11.29768	0.2113615	0.24279938	2.5447063	21	9 7.2	18.0
119482 2001 UJ_{38}	16.5	X	29.46729	102.88373	187.98852	3.49310	0.2360337	0.24472593	2.5313336	21	9 29.6	19.1
119483 2001 UH_{47}	15.8	X	13.64900	98.28456	133.03497	3.12379	0.0073384	0.22873464	2.6479803	21	5 15.0	19.3
119484 2001 UT_{50}	15.2	X	242.97229	8.47053	72.12261	14.61179	0.1495212	0.23686247	2.5870523	21	8 14.7	19.2
119485 2001 UU_{53}	15.4	X	48.95548	213.65700	65.49221	5.39105	0.1135252	0.24126042	2.5555164	21	9 26.3	18.5
119486 2001 UD_{55}	16.0	X	92.39258	242.53692	89.78074	3.12404	0.1823424	0.25751805	2.4467951	21	—	—
119487 2001 UT_{59}	16.4	X	203.57094	3.89462	14.26569	2.77968	0.1352754	0.22722242	2.6597160	21	4 11.3	20.6
119488 2001 UK_{63}	15.5	X	341.37026	286.89026	82.35862	6.25870	0.1317732	0.24376577	2.5379763	21	10 12.5	18.1
119489 2001 UM_{64}	15.9	X	219.47092	248.68162	223.48829	7.88573	0.1213936	0.23884609	2.5727088	21	8 24.4	19.8
119490 2001 UA_{68}	16.3	X	221.22833	157.65046	54.69066	1.96305	0.1306891	0.25659468	2.4526615	21	—	—
119491 2001 UM_{72}	15.1	X	227.44587	356.16399	131.27750	14.21839	0.1048288	0.24279488	2.5447378	21	10 3.7	18.9
119492 2001 UF_{78}	16.3	X	167.21324	240.10335	41.97016	8.54214	0.2202665	0.26253060	2.4155503	21	—	—
119493 2001 UA_{79}	15.9	X	177.34689	72.63320	41.70720	3.16108	0.1677401	0.23303128	2.6153304	21	7 17.8	20.1
119494 2001 UK_{80}	16.6	X	215.10960	204.42399	208.97511	2.78035	0.2098777	0.23162051	2.6259395	21	6 2.9	21.0
119495 2001 UW_{80}	16.3	X	197.94025	241.82668	198.81516	2.01856	0.1170846	0.23236360	2.6203380	21	6 24.6	20.4
119496 2001 UW_{93}	15.6	X	195.22587	31.41825	103.75096	10.56577	0.1342764	0.23795705	2.5791127	21	9 3.9	19.7
119497 2001 UR_{105}	15.8	X	18.19839	104.24918	48.79737	2.23133	0.1674987	0.21663166	2.7457106	21	2 1.3	18.6
119498 2001 UU_{109}	15.8	X	195.95539	94.10846	81.39441	3.97946	0.1077327	0.29299292	2.2450773	21	11 1.1	18.9
119499 2001 UV_{113}	16.0	X	89.76312	186.84500	42.63100	5.19806	0.0556546	0.23947660	2.5681910	21	9 4.7	19.4
119500 2001 UO_{116}	15.4	X	273.97245	349.17279	101.23563	2.53410	0.0541740	0.19377004	2.9576376	21	10 12.2	19.5
119501 2001 UL_{119}	15.7	X	206.56121	150.16967	60.31764	2.68652	0.0500383	0.25123606	2.4874139	21	12 27.8	19.0
119502 2001 UH_{120}	15.9	X	170.73239	20.94147	107.96782	3.60342	0.1408260	0.23425561	2.6062099	21	7 29.7	20.0
119503 2001 UR_{124}	15.6	X	79.26710	203.56538	140.29735	11.98764	0.2910447	0.25763583	2.4460493	21	—	—
119504 2001 UQ_{126}	16.3	X	151.98763	278.69100	208.55476	2.47463	0.1224224	0.23262641	2.6183641	21	7 7.4	20.2
119505 2001 UR_{127}	15.1	X	40.56029	251.36651	72.54044	14.83876	0.1231496	0.24573589	2.5243931	21	11 15.8	18.3
119506 2001 UQ_{128}	16.0	X	254.28495	341.24809	55.77489	6.96433	0.2851883	0.23709387	2.5853688	21	6 9.9	20.2
119507 2001 UP_{131}	15.7	X	61.47188	167.29184	42.88374	4.81582	0.0848609	0.23200215	2.6230589	21	7 2.0	19.0
119508 2001 UD_{132}	15.6	X	338.72112	82.42909	225.61517	11.38851	0.1920294	0.23523747	2.5989527	21	6 23.6	18.2
119509 2001 UH_{133}	15.9	X	276.62373	319.48016	241.11600	1.78072	0.1134882	0.26271698	2.4144078	21	—	—
119510 2001 UW_{134}	15.5	X	6.35237	259.10772	31.62697	12.75309	0.2376580	0.23808206	2.5782099	21	8 14.7	17.8
119511 2001 UX_{134}	15.5	X	282.18461	74.60235	336.62014	1.57914	0.0148097	0.23893097	2.5720994	21	9 10.8	18.8
119512 2001 UC_{136}	15.8	X	171.22511	336.40558	205.55033	9.64145	0.1438422	0.24142762	2.5543364	21	10 4.6	19.7
119513 2001 UU_{138}	16.4	X	297.20022	14.39247	169.23151	1.30456	0.1230817	0.26149059	2.4219509	21	—	—
119514 2001 UT_{141}	16.2	X	336.81391	241.16807	60.96188	2.39522	0.1490528	0.23635324	2.5907669	21	6 16.2	18.6
119515 2001 UL_{149}	15.8	X	238.94299	267.77469	80.36451	4.63932	0.0730222	0.22614155	2.6681842	21	4 15.4	19.7
119516 2001 UP_{150}	15.5	X	351.30638	96.10175	228.22563	8.11028	0.0966998	0.23824623	2.5770254	21	8 16.2	18.5
119517 2001 US_{150}	15.7	X	198.44471	106.95319	62.36053	6.59256	0.0950156	0.29300357	2.2450229	21	10 28.4	18.6
119518 2001 UJ_{154}	14.8	X	26.18491	224.81554	58.49506	6.80939	0.2753945	0.23824121	2.5770616	21	9 22.5	17.3
119519 2001 UJ_{157}	16.0	X	186.08174	359.59311	120.87693	1.82296	0.0468069	0.23501441	2.6005970	21	8 5.3	19.4
119520 2001 UB_{159}	16.4	X	159.77036	286.94656	204.92447	6.47894	0.2193425	0.23008703	2.6375940	21	7 22.8	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119521 2001 UU_{161}	15.1	X	328.95238	221.64233	95.96589	2.47475	0.1852330	0.23488410	2.6015587	21	6 19.6	17.6
119522 2001 UX_{162}	15.7	X	246.56844	349.45882	142.25437	1.69131	0.2223193	0.24308644	2.5427025	21	10 11.4	19.3
119523 2001 UU_{164}	15.7	X	314.32795	17.65113	126.17555	8.32424	0.0695498	0.26122247	2.4236079	21	—	—
119524 2001 UW_{167}	15.0	X	351.40271	297.07055	343.99200	12.18208	0.2049730	0.23361214	2.6109934	21	6 7.9	17.6
119525 2001 UC_{169}	13.7	X	299.56077	333.99285	16.15145	14.72042	0.1895915	0.23209922	2.6223275	21	6 12.6	17.3
119526 2001 UF_{175}	15.6	X	197.87402	63.31668	150.05119	5.57776	0.0795342	0.25259234	2.4785020	21	12 17.9	19.1
119527 2001 UH_{177}	15.8	X	236.22348	357.31789	215.76993	3.54151	0.1464333	0.25812758	2.4429417	21	—	—
119528 2001 US_{179}	12.0	X	8.15253	127.25341	128.43387	15.72215	0.1037657	0.08365954	5.1775670	21	6 16.6	18.5
119529 2001 UY_{187}	15.8	X	226.13947	334.69791	173.17729	6.72982	0.0388568	0.24574420	2.5243362	21	11 3.5	19.1
119530 2001 VE_{1}	15.3	X	57.19667	344.93023	60.26884	24.95899	0.1877642	0.26131569	2.4230315	21	—	—
119531 2001 VX_{1}	15.6	X	224.35597	106.37135	19.83339	4.95577	0.2217608	0.23975518	2.5662013	21	9 11.9	19.7
119532 2001 VD_{9}	15.7	X	157.53594	36.17505	9.12226	2.59661	0.0656942	0.22064049	2.7123511	21	3 26.4	19.7
119533 2001 VV_{9}	15.5	X	109.82368	220.01728	51.47382	7.99012	0.1095953	0.24613118	2.5216896	21	11 24.9	19.2
119534 2001 VL_{10}	15.0	X	30.31618	318.08158	272.08062	13.92762	0.0741082	0.23066429	2.6331917	21	6 9.4	18.1
119535 2001 VR_{11}	15.1	X	3.59067	73.45602	277.63148	10.99878	0.1879850	0.24514457	2.5284510	21	10 26.9	17.8
119536 2001 VP_{12}	15.3	X	55.13056	158.37561	303.16972	7.90218	0.2149149	0.26263088	2.4149354	21	1 19.9	16.8
119537 2001 VF_{14}	15.6	X	334.09849	158.48750	290.65263	6.68166	0.0951110	0.25109592	2.4883394	21	—	—
119538 2001 VD_{15}	15.0	X	88.69629	132.17592	41.64725	14.06141	0.1248565	0.22662742	2.6643692	21	6 25.9	18.8
119539 2001 VL_{15}	15.2	X	58.72148	193.56477	302.25526	7.99178	0.0703505	0.21807136	2.7336126	21	3 11.9	18.7
119540 2001 VJ_{18}	15.7	X	8.69544	300.64357	28.17838	4.33583	0.1211047	0.24286855	2.5442231	21	9 30.8	18.4
119541 2001 VP_{20}	16.1	X	54.37300	322.69159	270.62145	1.16742	0.0694288	0.28365049	2.2941071	21	7 22.6	18.6
119542 2001 VB_{26}	16.1	X	292.22703	359.25243	85.52202	4.64679	0.1774737	0.24403788	2.5360894	21	10 23.2	18.7
119543 2001 VE_{26}	15.6	X	241.45250	23.72215	69.98872	15.96836	0.0956604	0.23794975	2.5791655	21	9 10.7	19.5
119544 2001 VR_{26}	15.1	X	44.18215	266.05087	242.45347	7.78133	0.1441302	0.21695400	2.7429903	21	3 11.9	18.2
119545 2001 VY_{26}	15.3	X	2.17489	328.14651	52.62151	5.60920	0.0690566	0.24635575	2.5201569	21	11 25.6	18.2
119546 2001 VC_{29}	15.3	X	177.02458	306.66398	65.80996	6.77802	0.0664925	0.21898256	2.7260241	21	3 11.1	19.3
119547 2001 VG_{29}	14.9	X	302.54344	283.80113	78.35567	15.61436	0.1381281	0.23635515	2.5907530	21	7 16.3	18.1
119548 2001 VZ_{29}	15.5	X	158.21282	66.95372	59.98182	11.21373	0.1119820	0.22997581	2.6384444	21	7 14.6	19.7
119549 2001 VO_{33}	15.8	X	115.63711	294.81903	105.64786	3.13748	0.2077307	0.26490056	2.4011215	21	2 11.4	18.7
119550 2001 VG_{34}	15.2	X	4.42709	179.31905	70.60391	15.72703	0.0454878	0.22660670	2.6645316	21	5 26.9	18.3
119551 2001 VX_{34}	14.4	X	280.45920	219.98139	71.91349	14.46865	0.1707847	0.22234286	2.6984886	21	3 17.5	18.7
119552 2001 VN_{35}	15.2	X	328.46884	299.18206	37.47678	3.34937	0.1748481	0.23632186	2.5909963	21	7 20.9	17.7
119553 2001 VH_{36}	15.0	X	316.71745	324.06884	50.83222	3.85981	0.1176168	0.23851535	2.5750866	21	9 2.4	17.9
119554 2001 VQ_{36}	15.1	X	256.19767	264.72288	63.61674	6.24929	0.2306225	0.22580017	2.6708728	21	3 27.4	19.5
119555 2001 VW_{39}	15.2	X	311.69231	57.59198	252.82252	5.10939	0.0811809	0.22948205	2.6422277	21	5 25.8	18.6
119556 2001 VS_{41}	15.4	X	305.69183	234.87987	60.12351	15.76996	0.1215683	0.22736276	2.6586214	21	4 24.7	19.0
119557 2001 VV_{41}	15.4	X	77.53449	240.37578	53.04753	10.27606	0.0765955	0.24458972	2.5322733	21	11 13.7	18.7
119558 2001 VS_{42}	15.3	X	304.30581	143.85322	302.40716	1.86090	0.1220282	0.24503238	2.5292226	21	11 20.5	18.0
119559 2001 VE_{45}	15.7	X	170.72932	205.70803	262.39246	10.71627	0.1494323	0.22788623	2.6545485	21	7 2.0	20.0
119560 2001 VM_{46}	14.9	X	189.21954	47.85005	76.73008	11.52067	0.1639903	0.23072363	2.6327401	21	8 13.8	19.3
119561 2001 VO_{48}	15.5	X	348.54662	110.31194	237.86093	2.73062	0.2891606	0.24171839	2.5522874	21	9 27.2	16.8
119562 2001 VC_{66}	15.2	X	68.36721	8.23881	48.52573	17.22890	0.2072145	0.21007223	2.8025731	21	1 1.8	18.4
119563 2001 VX_{68}	16.6	X	121.44744	173.71492	307.19608	1.40950	0.1503950	0.27581617	2.3373455	21	5 27.9	19.6
119564 2001 VR_{69}	16.1	X	254.31999	14.93598	331.42492	8.55997	0.1730978	0.22933012	2.6433945	21	4 14.5	20.4
119565 2001 VL_{72}	16.8	X	329.99534	9.95212	273.25313	3.53710	0.2482777	0.23515143	2.5995867	21	4 17.9	19.5
119566 2001 VN_{72}	16.0	X	248.52134	290.35979	243.89767	5.34228	0.1078249	0.25364813	2.4716195	21	12 26.9	19.0
119567 2001 VV_{79}	15.3	X	173.95886	250.81217	212.53334	16.68305	0.1133303	0.23013811	2.6372038	21	6 27.2	19.7
119568 2001 VP_{81}	15.5	X	122.16812	269.35648	208.78927	10.81789	0.1515641	0.22452920	2.6809425	21	5 28.5	19.5
119569 2001 VD_{82}	15.2	X	158.58628	209.62945	266.79328	12.29612	0.1317692	0.22650196	2.6653530	21	6 30.4	19.3
119570 2001 VC_{84}	15.6	X	274.91887	306.94448	97.08220	6.62868	0.0919664	0.23669677	2.5882596	21	8 11.2	18.9
119571 2001 VJ_{88}	15.5	X	243.32734	269.19555	187.24830	7.48989	0.2429650	0.23472821	2.6027105	21	8 17.6	19.6
119572 2001 VM_{88}	16.3	X	194.79796	23.06664	81.43825	5.57475	0.1435300	0.28435172	2.2903340	21	7 23.2	19.8
119573 2001 VP_{90}	14.9	X	77.78542	116.27017	103.35938	14.60988	0.0262906	0.23472059	2.6027668	21	7 30.5	18.3
119574 2001 VT_{90}	15.6	X	6.05252	247.91867	88.68709	15.24628	0.1056210	0.24281244	2.5446151	21	10 14.2	18.8
119575 2001 VK_{91}	15.4	X	144.32832	0.72285	117.79830	12.68759	0.1016128	0.22864187	2.6486966	21	6 17.7	19.4
119576 2001 VF_{93}	15.2	X	30.80620	199.63421	121.43899	15.01013	0.1718167	0.24417516	2.5351387	21	11 9.2	18.5
119577 2001 VB_{96}	15.4	X	119.34698	323.49560	126.86439	13.18720	0.0783133	0.22093873	2.7099097	21	4 15.1	19.4
119578 2001 VX_{96}	15.1	X	334.01109	236.22423	132.74655	14.41383	0.1635403	0.24085406	2.5583899	21	9 28.3	17.7
119579 2001 VU_{97}	15.7	X	293.06974	242.30457	149.30557	12.45258	0.2956081	0.23854885	2.5748455	21	7 14.9	19.1
119580 2001 VD_{101}	15.2	X	106.12092	306.92151	243.64639	13.89946	0.0893329	0.23407290	2.6075659	21	7 31.0	19.2
119581 2001 VK_{103}	15.6	X	131.30958	275.32199	265.33961	6.02685	0.0613162	0.23554554	2.5966861	21	8 17.3	19.3
119582 2001 VL_{103}	15.5	X	331.25032	297.41837	335.01234	1.21682	0.0218050	0.22822130	2.6519496	21	5 9.4	18.8
119583 2001 VM_{103}	15.9	X	193.93490	206.11432	269.16211	3.93609	0.0862998	0.23534404	2.5981681	21	8 4.8	19.6
119584 2001 VS_{108}	15.7	X	264.54635	133.57439	274.22000	2.42157	0.0134259	0.23659596	2.5889947	21	8 11.9	19.1
119585 2001 VX_{108}	16.4	X	149.94295	115.22594	5.59726	3.15709	0.0713753	0.22936489	2.6431273	21	6 23.9	20.3
119586 2001 VZ_{108}	15.9	X	214.06710	356.36000	309.48918	2.53494	0.0576133	0.21551791	2.7551620	21	1 25.5	20.0
119587 2001 VA_{110}	16.0	X	309.76360	284.28247	36.72678	2.48831	0.1997941	0.23353219	2.6115893	21	5 18.1	18.9
119588 2001 VV_{110}	15.6	X	271.80714	55.81702	278.34464	3.80213	0.1592324	0.22918243	2.6445300	21	4 21.3	19.5
119589 2001 VK_{113}	15.4	X	162.42319	111.14743	41.13310	8.22466	0.1380611	0.23321284	2.6139729	21	8 24.2	19.6
119590 2001 VS_{117}	14.6	X	23.43300	250.63085	62.81976	15.60757	0.2220893	0.24069658	2.5595057	21	10 24.8	17.5
119591 2001 VD_{118}	16.0	X	80.63328	35.92242	13.37115	1.39617	0.1814472	0.26006857	2.4307715	21	—	—
119592 2001 VJ_{125}	15.4	X	171.84510	344.31897	166.78895	10.86645	0.1311686	0.23472619	2.6027254	21	8 27.1	19.4
119593 2001 VA_{126}	15.9	X	317.39514	52.79504	228.18769	4.08339	0.0922426	0.22760156	2.6567615	21	4 21.6	19.2
119594 2001 WC_{8}	15.7	X	191.11709	293.34659	202.29876	8.06338	0.1106771	0.23615965	2.5921826	21	8 25.8	19.7
119595 2001 WY_{8}	15.6	X	17.40848	245.01988	75.34130	13.56087	0.2503980	0.24360134	2.5391183	21	10 29.0	18.3
119596 2001 WT_{9}	16.0	X	155.30238	294.60223	111.64879	6.85713	0.0982126	0.27074076	2.3664661	21	3 25.8	19.3
119597 2001 WS_{11}	15.5	X	223.14654	77.31774	214.69074	11.07577	0.1117710	0.21590006	2.7519099	21	1 15.1	20.1
119598 2001 WT_{11}	15.7	X	116.97632	72.82459	74.25628	13.01046	0.1245966	0.22785091	2.6548228	21	6 25.2	19.5
119599 2001 WB_{12}	15.4	X	15.37426	124.88128	173.85247	5.64528	0.1507979	0.23838858	2.5759993	21	8 30.3	18.0
119600 2001 WM_{12}	15.4	X	162.56355	21.26260	130.05647	6.11152	0.0878178	0.23424482	2.6062899	21	8 19.1	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119601 2001 WA_{14}	15.9	X	243.59174	284.77351	136.79185	4.61584	0.2202179	0.23210080	2.6223156	21	7 7.9	19.9
119602 2001 WD_{15}	15.7	X	135.15931	251.08357	242.72746	1.43911	0.0685885	0.22924288	2.6440651	21	6 23.3	19.5
119603 2001 WW_{16}	15.9	X	153.06062	113.18782	33.90436	2.45490	0.1099310	0.23528209	2.5986242	21	8 4.2	19.7
119604 2001 WT_{18}	16.0	X	110.14597	159.02786	3.07950	2.26550	0.0146744	0.23243878	2.6197730	21	6 22.4	19.5
119605 2001 WY_{18}	15.9	X	14.61856	204.35221	29.42786	2.55558	0.0241395	0.22944366	2.6425224	21	5 18.4	19.1
119606 2001 WM_{19}	15.7	X	244.34066	247.84657	242.08829	2.05851	0.1480980	0.24444062	2.5333030	21	10 15.6	19.0
119607 2001 WT_{20}	15.0	X	2.68098	214.98290	79.59519	10.75557	0.1649163	0.23637484	2.5906091	21	8 1.6	17.5
119608 2001 WC_{23}	15.0	X	53.58613	185.07410	316.39546	23.89944	0.1957619	0.26638932	2.3921671	21	3 5.3	17.4
119609 2001 WN_{26}	15.4	X	197.06106	48.26535	56.68776	22.89891	0.0455130	0.23486316	2.6017134	21	8 4.7	19.6
119610 2001 WV_{26}	15.4	X	279.76682	50.84602	223.18731	12.29615	0.0990410	0.22139047	2.7062221	21	2 18.2	19.5
119611 2001 WY_{26}	15.6	X	326.12914	260.28356	65.04855	13.73692	0.1370657	0.23602370	2.5931779	21	7 2.3	18.6
119612 2001 WY_{27}	15.8	X	156.12060	103.20178	98.06784	4.49486	0.0805968	0.24150218	2.5538106	21	10 17.7	19.5
119613 2001 WT_{32}	15.7	X	181.12944	268.66314	157.81676	3.49579	0.0442591	0.22752183	2.6573821	21	5 19.7	19.4
119614 2001 WM_{35}	16.1	X	292.87820	197.26304	173.65298	4.73479	0.1823886	0.23674320	2.5879211	21	7 4.8	19.4
119615 2001 WO_{35}	15.8	X	94.20199	125.75664	116.18471	7.01321	0.0451597	0.28921484	2.2645870	21	10 2.3	18.7
119616 2001 WH_{36}	15.7	X	304.01046	323.11613	101.82984	7.20374	0.1008035	0.24326647	2.5414479	21	10 26.6	18.6
119617 2001 WL_{38}	14.6	X	41.98898	270.15926	239.01320	23.82247	0.1440789	0.21566723	2.7538901	21	3 2.1	18.3
119618 2001 WL_{39}	15.8	X	157.81135	262.11402	109.16724	7.71944	0.1254905	0.26615615	2.3935640	21	2 12.8	19.2
119619 2001 WP_{39}	15.4	X	81.03082	299.83511	107.61047	6.79583	0.1616905	0.25991170	2.4317495	21	—	—
119620 2001 WY_{42}	15.7	X	232.87119	172.91835	55.57597	7.24098	0.0647141	0.26094219	2.4253431	21	—	—
119621 2001 WQ_{43}	16.5	X	225.65874	296.99423	191.87502	2.57745	0.0562145	0.24265003	2.5457504	21	10 4.1	19.7
119622 2001 WY_{48}	15.5	X	335.85491	45.62093	259.70330	3.64608	0.1174757	0.23246404	2.6195832	21	6 22.8	18.4
119623 2001 WK_{53}	16.0	X	246.79107	80.34654	238.04649	5.57442	0.1663972	0.22558625	2.6725610	21	3 6.0	20.4
119624 2001 WM_{73}	16.1	X	155.52794	64.47025	77.99558	2.41208	0.0520075	0.23402257	2.6079397	21	7 29.0	19.7
119625 2001 WZ_{81}	15.7	X	269.38256	116.89105	204.73305	2.59129	0.1214761	0.22593596	2.6698025	21	4 8.8	19.4
119626 2001 WD_{91}	15.3	X	229.09804	53.80107	37.33737	9.47586	0.0454692	0.23644288	2.5901121	21	8 24.7	19.0
119627 2001 WJ_{99}	15.1	X	339.40499	169.48464	95.22112	15.15948	0.0778971	0.22575655	2.6712169	21	5 11.5	18.6
119628 2001 WQ_{100}	16.0	X	209.40190	84.70996	238.81080	6.07752	0.1436553	0.21848431	2.7301670	21	2 8.3	20.5
119629 2001 WP_{101}	15.3	X	224.12497	260.43652	71.64545	2.09275	0.1901001	0.17319437	3.1874756	21	3 10.3	20.5
119630 2001 XJ_{5}	15.4	X	46.82209	265.91418	69.44512	16.48318	0.0540701	0.24637984	2.5199926	21	11 26.9	18.6
119631 2001 XC_{7}	15.3	X	106.55657	345.55690	168.07823	13.56131	0.1786707	0.22530575	2.6747788	21	6 28.8	19.5
119632 2001 XE_{11}	15.1	X	357.33430	325.42732	334.85573	13.08565	0.0229177	0.23348164	2.6119662	21	7 28.9	18.5
119633 2001 XR_{13}	15.4	X	31.58499	63.30267	50.66112	7.37792	0.0195254	0.21016097	2.8017842	21	1 9.2	19.2
119634 2001 XM_{16}	15.4	X	251.42572	301.76953	119.77258	4.10884	0.1426560	0.23255111	2.6189293	21	7 25.8	18.9
119635 2001 XB_{17}	15.4	X	296.22220	57.83515	291.19214	8.64210	0.1508862	0.23225957	2.6211204	21	6 14.7	18.8
119636 2001 XB_{18}	16.2	X	152.79836	331.99070	60.28027	8.16240	0.2830895	0.21874046	2.7280352	21	3 26.6	21.0
119637 2001 XC_{19}	14.8	X	9.55698	132.23240	55.88320	13.44532	0.1056175	0.21485210	2.7608511	21	3 17.4	18.3
119638 2001 XG_{24}	15.5	X	59.82094	97.40341	311.08194	5.54338	0.1304628	0.25528382	2.4610505	21	—	—
119639 2001 XV_{24}	14.7	X	144.11215	312.24645	90.31143	13.97980	0.1514483	0.21507280	2.7589620	21	3 24.7	19.2
119640 2001 XM_{25}	15.3	X	174.95811	12.88210	94.42477	12.67596	0.1309358	0.22568273	2.6717993	21	7 5.6	19.4
119641 2001 XP_{25}	15.6	X	318.57932	349.78151	60.99842	6.50226	0.2498240	0.24087089	2.5582707	21	10 19.0	17.4
119642 2001 XX_{28}	15.5	X	264.92767	290.78165	124.05831	4.79830	0.2429401	0.23561915	2.5961453	21	7 19.2	19.2
119643 2001 XN_{30}	15.5	X	263.22001	53.60585	29.23926	4.37984	0.2827215	0.23497139	2.6009144	21	8 19.9	19.2
119644 2001 XM_{36}	15.5	X	152.02948	126.92509	21.65605	11.27880	0.0205678	0.23306545	2.6150748	21	8 4.5	19.3
119645 2001 XF_{40}	15.4	X	131.81076	89.52666	63.30165	22.26685	0.0807813	0.22797176	2.6538845	21	7 17.1	19.6
119646 2001 XN_{40}	14.6	X	346.80646	40.31695	305.90661	13.78726	0.2118750	0.23952828	2.5678217	21	9 7.7	16.9
119647 2001 XS_{40}	15.3	X	166.94536	45.61638	48.22722	13.98015	0.0524324	0.22568665	2.6717684	21	6 5.3	19.2
119648 2001 XV_{41}	14.7	X	112.91256	146.99845	55.01049	13.88953	0.1247759	0.23047656	2.6346213	21	9 9.4	18.9
119649 2001 XU_{45}	14.2	X	19.86496	291.34241	50.71423	12.91664	0.3076926	0.24272623	2.5452176	21	12 5.1	17.0
119650 2001 XT_{48}	15.1	X	4.14446	172.76798	112.40599	12.86383	0.0315303	0.23178102	2.6247270	21	7 14.4	18.5
119651 2001 XE_{49}	15.0	X	350.12265	191.93776	66.44376	16.33707	0.0949245	0.22782768	2.6550033	21	5 14.8	18.1
119652 2001 XV_{49}	16.1	X	237.06651	74.06687	73.11429	6.28204	0.1037952	0.24453811	2.5326296	21	11 6.6	19.4
119653 2001 XK_{54}	16.8	X	152.13088	215.56451	174.24134	1.00523	0.1885048	0.26866872	2.3786177	21	3 6.8	20.4
119654 2001 XO_{54}	15.9	X	216.47325	50.43010	74.64497	0.76000	0.0928448	0.23745302	2.5827612	21	9 13.6	19.4
119655 2001 XV_{55}	15.4	X	8.29282	276.71370	103.76115	5.66686	0.0808909	0.24634073	2.5202593	21	12 6.7	18.3
119656 2001 XJ_{58}	15.7	X	331.40705	324.58909	89.22603	5.16964	0.1379482	0.24504482	2.5291371	21	11 25.5	18.1
119657 2001 XQ_{58}	15.5	X	110.48069	278.90897	216.73891	4.34105	0.0510530	0.22418770	2.6836643	21	5 23.9	19.2
119658 2001 XX_{58}	15.5	X	125.57315	49.25692	91.56760	3.25441	0.1734910	0.22531281	2.6747229	21	7 2.1	19.6
119659 2001 XE_{62}	14.9	X	273.42388	224.82684	91.33869	11.79817	0.1895239	0.22542067	2.6738696	21	4 5.0	19.2
119660 2001 XL_{62}	15.4	X	269.82903	144.06723	239.82326	3.84129	0.1519893	0.23215822	2.6218832	21	6 26.2	18.9
119661 2001 XN_{62}	15.8	X	184.52972	265.64851	135.66295	6.29164	0.2362347	0.27468913	2.3437344	21	4 23.9	19.8
119662 2001 XN_{63}	15.5	X	81.05519	14.98529	95.97995	6.09778	0.1152950	0.21472489	2.7619414	21	3 25.8	19.0
119663 2001 XP_{65}	15.3	X	155.76798	331.16501	106.77514	4.87561	0.0803797	0.22104786	2.7090177	21	5 8.0	19.2
119664 2001 XN_{67}	15.3	X	224.91282	198.40700	266.49272	12.73039	0.1243881	0.23412123	2.6072071	21	8 17.7	19.4
119665 2001 XR_{67}	15.0	X	261.88024	237.29874	103.85504	13.55527	0.1780314	0.22421403	2.6834542	21	4 25.8	19.4
119666 2001 XQ_{73}	16.0	X	186.20089	285.31737	169.84747	5.58550	0.2405162	0.22948054	2.6422392	21	6 29.9	20.7
119667 2001 XY_{73}	15.5	X	179.88144	74.01677	76.85701	22.66873	0.0618500	0.23705809	2.5856289	21	9 20.6	19.8
119668 2001 XB_{74}	16.9	X	124.65741	279.43893	123.13606	2.27701	0.1758105	0.26655922	2.3911505	21	2 20.3	19.9
119669 2001 XR_{74}	16.4	X	76.22482	339.71394	141.35981	2.60020	0.1653842	0.26772063	2.3842300	21	3 29.1	18.6
119670 2001 XO_{75}	15.9	X	144.85280	66.84485	60.30458	15.36763	0.0878886	0.23077116	2.6323787	21	6 26.7	19.9
119671 2001 XO_{77}	15.8	X	43.01568	64.98930	160.88211	2.25742	0.0819977	0.22914159	2.6448443	21	6 24.7	19.0
119672 2001 XC_{86}	14.5	X	140.88459	243.07462	271.47550	10.30361	0.2234211	0.22575024	2.6712666	21	8 3.1	19.2
119673 2001 XN_{87}	14.9	X	260.63423	272.54817	83.55781	13.15701	0.2055112	0.22480546	2.6787456	21	5 8.1	19.1
119674 2001 XY_{90}	16.5	X	232.28614	13.22245	5.62683	2.94511	0.1176028	0.22896986	2.6461665	21	5 10.9	20.5
119675 2001 XX_{91}	16.2	X	285.52229	316.60349	28.58728	3.24511	0.0815172	0.23152058	2.6266950	21	6 4.8	19.8
119676 2001 XG_{95}	15.1	X	224.92129	18.68511	68.01078	15.89330	0.0294425	0.23471034	2.6028425	21	8 16.5	19.0
119677 2001 XW_{96}	16.0	X	119.76647	141.59412	280.05089	5.14378	0.1171919	0.26737200	2.3863021	21	2 27.5	19.0
119678 2001 XX_{105}	15.6	X	215.16527	110.93154	41.31856	13.04046	0.0957840	0.24303590	2.5430551	21	10 19.7	19.2
119679 2001 XV_{107}	15.6	X	133.97439	263.84197	114.76189	3.81121	0.1636092	0.26418390	2.4054619	21	1 29.8	18.7
119680 2001 XX_{107}	15.4	X	128.69447	276.25797	148.07799	3.10179	0.0587742	0.21699282	2.7426632	21	3 16.7	19.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119681 2001 XY_{107}	15.1	X	109.78296	236.40293	274.65085	11.06514	0.0962034	0.22668542	2.6639148	21	6 18.8	18.7
119682 2001 XE_{108}	15.1	X	168.77911	342.81090	48.65528	5.59097	0.1212768	0.21866983	2.7286226	21	3 27.8	19.3
119683 2001 XB_{110}	15.1	X	6.83808	183.39743	85.05335	13.89760	0.1896832	0.23374253	2.6100223	21	6 27.6	17.2
119684 2001 XC_{113}	15.6	X	94.36280	244.53370	238.29365	8.14476	0.1172182	0.21887190	2.7269429	21	4 24.2	19.3
119685 2001 XS_{114}	15.4	X	80.61106	104.13166	33.21611	5.99035	0.0278291	0.21895113	2.7262850	21	4 13.2	19.0
119686 2001 XY_{116}	15.2	X	210.73801	284.53889	74.52284	10.09678	0.2443905	0.22033662	2.7148443	21	3 30.1	20.1
119687 2001 XQ_{121}	15.9	X	257.55226	214.04982	113.72807	1.00715	0.0537652	0.22536493	2.6743105	21	4 11.6	19.6
119688 2001 XK_{126}	16.2	X	234.55937	282.07711	219.69070	1.06118	0.0944618	0.24338555	2.5406189	21	10 27.1	19.5
119689 2001 XJ_{129}	14.9	X	357.88691	126.51210	73.88302	15.74501	0.1526547	0.21761586	2.7374258	21	3 10.9	18.3
119690 2001 XP_{130}	15.8	X	267.67424	199.02652	119.83875	2.58308	0.1685046	0.22589352	2.6701369	21	3 30.5	19.7
119691 2001 XK_{132}	15.9	X	279.59506	275.18531	79.93252	5.16840	0.1140038	0.23151978	2.6267011	21	6 5.7	19.2
119692 2001 XN_{140}	15.6	X	186.79190	277.00585	91.46928	10.53322	0.1115982	0.21936787	2.7228311	21	3 20.2	20.0
119693 2001 XD_{145}	15.8	X	238.20909	215.36576	106.34971	5.82441	0.0816722	0.21937353	2.7227842	21	3 12.9	19.9
119694 2001 XE_{146}	15.5	X	198.80049	85.44252	231.89243	4.30463	0.0541078	0.21273309	2.7791545	21	1 21.9	19.6
119695 2001 XP_{148}	15.9	X	70.83120	10.14995	109.67808	6.16949	0.0699239	0.21619737	2.7493863	21	3 15.7	19.4
119696 2001 XC_{152}	16.4	X	65.89106	327.78765	82.23754	2.34095	0.1728085	0.25781742	2.4449006	21	—	—
119697 2001 XT_{152}	16.2	X	1.55517	92.76619	136.52770	3.13034	0.1344762	0.27129154	2.3632621	21	4 12.9	18.3
119698 2001 XA_{155}	16.0	X	151.19220	338.80915	150.71179	2.28591	0.1532126	0.22738142	2.6584759	21	7 11.2	20.2
119699 2001 XV_{155}	15.0	X	9.78761	111.58482	231.43341	3.44325	0.2236093	0.24234031	2.5479190	21	11 5.4	17.3
119700 2001 XE_{156}	15.8	X	9.74759	52.64735	101.30727	4.80118	0.0395404	0.21169413	2.7882401	21	1 29.1	19.3
119701 2001 XW_{156}	16.3	X	117.54700	295.00196	89.08516	3.29403	0.1687457	0.26175027	2.4203488	21	1 17.3	19.0
119702 2001 XM_{157}	15.4	X	92.95374	12.77209	103.54475	4.79671	0.0478516	0.21823267	2.7322653	21	4 7.1	19.0
119703 2001 XG_{158}	15.4	X	236.14197	5.54420	89.03716	11.88753	0.1919803	0.23476707	2.6024232	21	8 19.1	19.5
119704 2001 XW_{164}	15.8	X	66.12343	40.54591	82.46155	3.83927	0.0338772	0.21580212	2.7527424	21	3 8.4	19.3
119705 2001 XP_{169}	16.5	X	8.74312	38.72480	110.38031	2.43434	0.1369922	0.25959410	2.4337325	21	—	—
119706 2001 XW_{183}	15.5	X	198.69826	271.56442	117.16352	13.53756	0.2810378	0.22314909	2.6919850	21	4 25.8	20.6
119707 2001 XA_{185}	15.6	X	241.72189	23.18511	134.35788	0.86952	0.1494077	0.19109295	2.9851966	21	11 9.8	20.0
119708 2001 XN_{185}	15.5	X	126.77311	272.77256	125.91941	6.52747	0.0513331	0.21213263	2.7843965	21	2 9.7	19.3
119709 2001 XR_{186}	15.4	X	172.09527	216.98675	105.18517	3.19835	0.0549973	0.20709115	2.8294044	21	—	—
119710 2001 XP_{191}	15.2	X	351.99062	219.77130	272.16177	5.90416	0.2013172	0.25355982	2.4721933	21	—	—
119711 2001 XP_{193}	15.5	X	261.39247	258.19942	166.94728	3.14342	0.1870192	0.23373045	2.6101122	21	8 4.9	19.0
119712 2001 XU_{195}	15.6	X	94.34539	197.62497	270.11756	6.97273	0.1788971	0.21478269	2.7614458	21	4 12.3	19.4
119713 2001 XV_{203}	15.7	X	215.39854	1.79040	137.65105	5.38035	0.1694554	0.24054538	2.5605782	21	9 25.1	19.6
119714 2001 XG_{205}	15.5	X	188.49147	307.27025	61.91235	6.00318	0.1764241	0.22000028	2.7176106	21	3 21.9	20.0
119715 2001 XX_{207}	15.1	X	301.75717	111.22420	237.89113	13.21569	0.1089889	0.23279571	2.6170944	21	6 28.4	18.4
119716 2001 XH_{208}	15.4	X	167.25959	241.58783	170.14504	3.68124	0.1047508	0.22182390	2.7026958	21	4 17.9	19.4
119717 2001 XX_{220}	16.0	X	98.15581	114.26756	57.81072	5.15228	0.1186521	0.22816681	2.6523718	21	7 5.9	19.6
119718 2001 XZ_{222}	15.5	X	257.00446	223.86058	53.42771	5.77791	0.1350138	0.21776057	2.7362129	21	2 2.1	19.8
119719 2001 XS_{228}	15.3	X	284.15236	277.25692	58.69546	9.92695	0.1771177	0.23040343	2.6351788	21	5 8.3	18.8
119720 2001 XB_{236}	15.8	X	176.33243	323.71337	19.08414	4.26045	0.0614491	0.21361691	2.7714835	21	1 31.2	19.8
119721 2001 XT_{236}	15.7	X	124.43836	13.19663	71.26784	7.10470	0.0082495	0.21966978	2.7203357	21	4 1.8	19.4
119722 2001 XN_{238}	15.4	X	70.75572	339.61858	52.14561	3.37234	0.1029254	0.20451234	2.8531397	21	—	—
119723 2001 XO_{244}	15.8	X	357.97410	203.60860	40.90390	2.85359	0.0341823	0.22800940	2.6535924	21	5 9.0	19.0
119724 2001 XX_{244}	15.4	X	302.66344	322.42107	84.60578	16.06848	0.1089741	0.24273161	2.5451800	21	10 4.5	18.7
119725 2001 XO_{256}	15.2	X	331.43506	304.99243	128.18904	9.65073	0.1178036	0.24829023	2.5070498	21	12 23.2	17.8
119726 2001 XB_{257}	16.1	X	216.17417	250.28375	193.84910	16.61260	0.1493898	0.23268308	2.6179390	21	7 13.3	20.6
119727 2001 XG_{257}	16.1	X	230.49620	309.60355	148.00520	13.71361	0.1132056	0.23668319	2.5883585	21	8 22.0	19.9
119728 2001 XT_{259}	15.5	X	43.08305	161.03691	76.91532	12.61064	0.0720615	0.23342359	2.6123993	21	7 11.4	18.7
119729 2001 XX_{260}	15.4	X	151.25861	158.27018	264.24217	11.32007	0.0881174	0.21845544	2.7304075	21	4 7.6	19.6
119730 2001 YP_{7}	15.2	X	294.80964	17.32430	272.36503	14.02569	0.1147726	0.22454431	2.6808222	21	3 22.7	19.3
119731 2001 YB_{8}	15.7	X	191.52390	49.62929	280.55062	1.37308	0.1822583	0.21613088	2.7499502	21	2 3.9	20.3
119732 2001 YM_{8}	15.9	X	148.55621	32.86130	148.78777	4.10044	0.1980679	0.23292756	2.6161068	21	9 15.2	20.1
119733 2001 YQ_{10}	15.5	X	100.96770	11.86860	50.97873	5.17551	0.0558007	0.21141836	2.7906642	21	2 9.8	19.2
119734 2001 YE_{14}	15.6	X	146.58896	107.98069	316.23340	6.57933	0.0410405	0.22130626	2.7069086	21	3 31.7	19.5
119735 2001 YS_{17}	15.7	X	33.06675	260.91742	263.23998	2.14498	0.1081352	0.21546946	2.7555750	21	3 15.1	18.9
119736 2001 YM_{22}	15.6	X	14.40348	280.88684	268.20261	4.52488	0.0159110	0.21852399	2.7298365	21	3 18.1	19.2
119737 2001 YJ_{23}	16.4	X	149.04834	148.08755	329.15101	1.01437	0.0769841	0.22821948	2.6519637	21	6 18.5	20.1
119738 2001 YV_{23}	15.5	X	237.40787	186.54319	275.67930	7.90447	0.1210686	0.23782263	2.5800845	21	8 31.2	19.4
119739 2001 YN_{24}	15.7	X	85.89729	147.65086	53.50942	5.72300	0.0854077	0.23052181	2.6342766	21	7 25.8	19.2
119740 2001 YP_{28}	15.5	X	238.99968	223.93310	61.56223	8.43200	0.2346847	0.21727170	2.7403158	21	1 21.9	20.3
119741 2001 YC_{37}	15.7	X	8.38020	117.00006	71.32035	6.23772	0.0442963	0.21738100	2.7393971	21	3 14.0	19.2
119742 2001 YJ_{37}	15.4	X	199.54857	251.25620	73.86847	6.91958	0.0376547	0.21415188	2.7668660	21	2 3.7	19.4
119743 2001 YW_{40}	15.4	X	175.74489	274.43042	69.35256	7.23153	0.1039800	0.21399844	2.7681884	21	2 4.5	19.7
119744 2001 YN_{42}	15.4	X	331.19696	40.26377	297.17665	4.02161	0.2564734	0.23734828	2.5835209	21	7 16.2	17.1
119745 2001 YU_{44}	15.0	X	335.95221	284.37928	47.40821	4.17368	0.2190055	0.23639926	2.5904307	21	7 25.5	17.1
119746 2001 YZ_{51}	15.7	X	241.46142	10.83497	340.81253	2.57963	0.0917397	0.22365263	2.6879429	21	4 18.3	19.6
119747 2001 YP_{52}	16.0	X	60.39969	183.27226	291.47135	1.69213	0.1630664	0.26344490	2.4099583	21	2 16.2	17.9
119748 2001 YO_{53}	15.7	X	323.28175	193.48517	72.91035	8.03315	0.0300975	0.22148278	2.7054701	21	4 23.2	19.3
119749 2001 YG_{62}	15.9	X	78.03608	25.91381	68.88850	5.44483	0.0361129	0.21285620	2.7780827	21	2 17.4	19.6
119750 2001 YL_{64}	15.3	X	251.50104	264.45518	73.60065	10.89929	0.2199542	0.22389676	2.6859887	21	4 7.4	19.8
119751 2001 YL_{68}	15.6	X	192.29053	341.14660	59.20459	3.40832	0.2101178	0.22348520	2.6892853	21	4 29.5	20.1
119752 2001 YN_{77}	15.0	X	215.53800	124.09142	93.48281	10.62377	0.0572838	0.19695971	2.9256191	21	—	—
119753 2001 YO_{90}	15.6	X	293.18611	41.94120	100.77640	3.27879	0.0559518	0.19674923	2.9277053	21	—	—
119754 2001 YU_{91}	14.8	X	253.03715	195.07941	297.23055	8.86596	0.0396531	0.18929752	3.0040427	21	11 3.8	19.1
119755 2001 YO_{102}	15.4	X	257.51829	264.17326	94.69297	12.74996	0.0814328	0.22599375	2.6693474	21	5 21.5	19.3
119756 2001 YT_{105}	16.2	X	144.92458	156.88106	251.04333	1.89526	0.0980427	0.21673641	2.7448259	21	3 18.1	20.1
119757 2001 YE_{108}	15.3	X	336.18386	191.63811	214.09922	3.49518	0.2425674	0.24230209	2.5481869	21	11 27.6	17.0
119758 2001 YV_{112}	15.5	X	35.57758	124.51191	25.37735	3.72145	0.1193974	0.21288696	2.7778151	21	3 3.6	18.6
119759 2001 YX_{112}	14.7	X	162.36399	105.62805	74.07525	6.02123	0.1092630	0.18170370	3.0871676	21	9 22.9	19.6
119760 2001 YN_{113}	15.4	X	184.64595	286.89619	151.76455	12.00541	0.2552248	0.22333665	2.6904776	21	6 10.4	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119761 2001 YK_{116}	14.8	X	6.66958	324.01319	353.08991	13.42473	0.1935574	0.23933551	2.5692003	21	9 15.6	16.9
119762 2001 YS_{117}	15.3	X	101.25618	352.41030	93.63908	10.00281	0.1572130	0.21358166	2.7717884	21	3 29.7	19.2
119763 2001 YM_{120}	15.6	X	239.60363	97.43495	278.77676	2.64730	0.1396631	0.22750430	2.6575185	21	5 13.8	19.7
119764 2001 YO_{121}	15.1	X	1.29745	281.83177	32.38041	7.65389	0.2045035	0.23835292	2.5762563	21	9 3.8	17.3
119765 2001 YF_{122}	14.7	X	122.79657	145.44557	47.52214	12.36072	0.2360903	0.23166787	2.6255815	21	9 14.8	19.3
119766 2001 YA_{130}	15.6	X	51.21859	332.55911	25.93581	5.13961	0.0365544	0.19532147	2.9419552	21	12 18.1	19.7
119767 2001 YQ_{133}	16.5	X	120.04064	256.11521	196.53532	0.80219	0.1043264	0.22039948	2.7143281	21	4 16.6	20.1
119768 2001 YA_{136}	15.4	X	0.71155	17.93566	327.08813	12.88077	0.1854615	0.24420923	2.5349029	21	10 8.1	18.0
119769 2001 YD_{136}	15.6	X	188.89813	166.30747	322.53092	13.60591	0.1259850	0.23545938	2.5973195	21	8 16.5	19.5
119770 2001 YK_{136}	15.4	X	111.31461	159.83532	325.08119	11.73345	0.1190237	0.22421667	2.6834332	21	5 16.0	19.4
119771 2001 YV_{151}	15.9	X	183.91096	43.95940	3.80781	6.72184	0.1186016	0.22241154	2.6979330	21	4 27.6	20.1
119772 2002 AV_{3}	15.3	X	171.31982	346.97205	118.29711	12.18751	0.1376425	0.22435838	2.6823031	21	6 29.7	19.6
119773 2002 AB_{11}	14.4	X	73.08006	242.71304	330.24749	16.04923	0.0734153	0.17234491	3.1979407	21	7 23.4	19.0
119774 2002 AP_{28}	15.1	X	292.31545	86.08773	359.43297	9.42355	0.2652159	0.18913420	3.0057718	21	9 27.9	18.7
119775 2002 AX_{29}	14.6	X	122.82450	155.21773	74.76149	10.29445	0.0927308	0.18349388	3.0670557	21	10 14.9	19.4
119776 2002 AF_{35}	15.7	X	159.44094	247.52761	285.47417	3.12152	0.1343696	0.23357083	2.6113012	21	9 10.9	19.9
119777 2002 AN_{35}	15.6	X	173.44470	231.12382	160.16422	0.89186	0.0823717	0.21888939	2.7267976	21	3 28.1	19.5
119778 2002 AF_{38}	15.2	X	101.66019	275.49940	115.15686	8.01764	0.1942071	0.21015871	2.8018042	21	1 19.6	18.7
119779 2002 AX_{44}	16.0	X	209.56503	216.38480	187.54334	1.33247	0.0958531	0.22378357	2.6868943	21	5 21.6	20.0
119780 2002 AA_{46}	15.2	X	70.30377	192.52740	107.53827	2.56370	0.0890018	0.18844411	3.0131055	21	11 7.3	19.4
119781 2002 AF_{49}	15.1	X	155.16565	319.59775	262.73074	3.59464	0.1715470	0.18633917	3.0357542	21	11 2.4	20.1
119782 2002 AC_{51}	15.7	X	62.77420	166.47131	258.94042	0.96044	0.0593488	0.20412905	2.8567101	21	—	—
119783 2002 AZ_{51}	15.3	X	271.10186	43.24073	135.59794	2.91732	0.0372197	0.19745446	2.9207300	21	—	—
119784 2002 AQ_{55}	15.6	X	343.77724	202.90147	245.98385	0.92083	0.0807743	0.19679485	2.9272528	21	—	—
119785 2002 AM_{57}	14.5	X	78.03311	59.59873	150.06789	5.76054	0.1043993	0.17236375	3.1977077	21	7 25.8	18.9
119786 2002 AE_{65}	15.0	X	245.81483	205.30049	303.79247	9.33422	0.0431521	0.18825362	3.0151377	21	11 15.5	19.4
119787 2002 AN_{76}	15.3	X	192.00159	59.66958	350.09617	4.21512	0.0710905	0.17163434	3.2067610	21	5 11.8	20.2
119788 2002 AJ_{81}	15.1	X	266.09225	224.57384	116.31215	11.73273	0.2329641	0.22795425	2.6540204	21	4 22.8	19.5
119789 2002 AG_{85}	15.0	X	244.27308	230.30815	259.43169	9.30041	0.0335945	0.18844403	3.0131064	21	10 21.9	19.4
119790 2002 AQ_{87}	15.5	X	56.85435	281.75988	237.61418	5.36434	0.0181836	0.21578445	2.7528928	21	4 6.9	19.1
119791 2002 AS_{96}	15.4	X	211.32139	218.86222	86.36404	4.57383	0.0648409	0.20830689	2.8183848	21	1 23.7	19.6
119792 2002 AR_{103}	15.2	X	116.43337	191.10367	104.14904	10.62792	0.0387054	0.19283309	2.9672104	21	12 18.4	19.5
119793 2002 AE_{104}	15.9	X	48.77336	35.95285	106.50382	5.05934	0.0443922	0.21291609	2.7775618	21	3 11.3	19.4
119794 2002 AL_{107}	15.4	X	266.25493	112.68655	108.35722	3.21799	0.0103118	0.20311008	2.8662566	21	—	—
119795 2002 AR_{109}	15.6	X	156.59861	8.27094	98.26956	2.89992	0.1089900	0.22277366	2.6950086	21	6 15.1	19.5
119796 2002 AB_{113}	15.7	X	287.41748	174.36760	74.43139	3.30036	0.1649428	0.25748586	2.4469990	21	1 18.2	19.2
119797 2002 AD_{120}	15.4	X	197.89477	88.46461	117.12227	5.60348	0.1910525	0.23838703	2.5760106	21	11 26.3	19.5
119798 2002 AM_{127}	15.7	X	68.81622	37.27458	294.65016	0.52488	0.0510378	0.19205826	2.9751856	21	12 8.7	19.9
119799 2002 AH_{133}	15.3	X	65.61794	60.62345	37.77075	4.83805	0.0347784	0.21108109	2.7936361	21	2 5.1	19.0
119800 2002 AG_{134}	16.0	X	211.54330	268.83350	160.08918	2.44983	0.0519107	0.22864149	2.6486995	21	6 27.6	19.7
119801 2002 AO_{135}	15.0	X	77.97352	35.73828	172.08930	5.82057	0.0745610	0.17451104	3.1714225	21	7 18.7	19.4
119802 2002 AZ_{138}	15.4	X	113.60567	345.29156	68.96863	4.54926	0.0913663	0.20959082	2.8068629	21	2 20.6	19.2
119803 2002 AE_{139}	15.2	X	56.43199	185.20619	105.31147	9.94804	0.0524640	0.23266424	2.6180802	21	10 13.9	18.8
119804 2002 AZ_{139}	16.1	X	179.19316	358.85970	110.07715	7.59465	0.1342727	0.23111421	2.6297731	21	7 11.9	20.2
119805 2002 AR_{140}	15.9	X	130.62940	207.96523	175.09560	1.90394	0.0818204	0.20997278	2.8034580	21	1 29.6	19.8
119806 2002 AA_{149}	15.0	X	280.88029	44.89040	141.21785	4.96477	0.1177740	0.19670864	2.9281080	21	—	—
119807 2002 AD_{151}	15.4	X	114.93993	192.43701	342.80823	4.18656	0.1441133	0.17169303	3.2060301	21	7 31.9	20.3
119808 2002 AX_{152}	14.8	X	248.72061	143.72757	336.10820	9.11346	0.0495668	0.18498016	3.0506048	21	10 11.5	19.3
119809 2002 AD_{154}	15.1	X	151.29331	178.95668	338.51496	6.33237	0.1613176	0.17369723	3.1813207	21	8 15.3	20.2
119810 2002 AA_{156}	14.6	X	200.64897	161.53755	341.40597	9.26662	0.0676080	0.18006899	3.1058235	21	9 14.5	19.1
119811 2002 AC_{156}	14.9	X	340.84950	316.49732	131.48301	16.21941	0.0857270	0.19327581	2.9626776	21	—	—
119812 2002 AS_{157}	15.3	X	96.83881	41.70954	152.58127	1.55487	0.1108954	0.17260673	3.1947060	21	7 30.7	19.9
119813 2002 AV_{159}	16.0	X	133.12894	283.16286	149.52298	4.48017	0.0983468	0.21449812	2.7638877	21	4 7.8	19.9
119814 2002 AY_{159}	14.9	X	116.94955	80.17541	135.50042	9.51209	0.0903204	0.17886082	3.1197939	21	9 18.6	19.6
119815 2002 AY_{169}	15.3	X	130.67772	191.25895	37.05311	1.50138	0.0553589	0.18579845	3.0416412	21	10 14.5	19.6
119816 2002 AC_{170}	15.5	X	139.90530	246.18369	69.54629	2.96440	0.0556033	0.20000709	2.8958259	21	—	—
119817 2002 AY_{170}	15.1	X	49.90610	170.82445	112.35176	2.09137	0.1443641	0.18149160	3.0895723	21	9 28.8	19.2
119818 2002 AO_{172}	15.5	X	148.70854	293.15732	39.39464	2.50282	0.0684242	0.20300303	2.8672641	21	—	—
119819 2002 AE_{173}	15.0	X	30.87781	214.37025	8.13245	0.23797	0.1219886	0.16806298	3.2520310	21	6 6.4	18.8
119820 2002 AG_{175}	15.4	X	215.73375	19.52717	113.59842	2.28636	0.1003217	0.18284112	3.0743511	21	9 18.4	20.0
119821 2002 AL_{195}	14.5	X	300.97074	68.39822	296.83842	16.30709	0.1597408	0.17867604	3.1219445	21	7 13.7	18.6
119822 2002 AY_{202}	15.8	X	98.70201	255.77673	184.48094	4.29796	0.0416448	0.21108582	2.7935944	21	2 23.8	19.7
119823 2002 BB_{2}	14.6	X	208.65537	46.25349	162.30514	9.67394	0.1166816	0.19203908	2.9753837	21	12 10.1	19.3
119824 2002 BO_{3}	15.0	X	107.93538	213.26707	27.01313	11.56569	0.1066287	0.18284910	3.0742617	21	10 9.7	19.6
119825 2002 BZ_{8}	15.4	X	39.93030	348.33381	87.71778	2.57444	0.0519597	0.20052113	2.8908749	21	—	—
119826 2002 BX_{9}	15.0	X	295.94945	20.05903	358.25260	11.97240	0.2687718	0.23240117	2.6200556	21	7 8.2	18.4
119827 2002 BE_{10}	15.7	X	325.85842	199.94181	334.13701	3.32319	0.1957868	0.20134425	2.8829906	21	—	—
119828 2002 BW_{19}	15.4	X	144.47569	293.65278	143.62768	12.37933	0.0668859	0.21744548	2.7388556	21	4 26.1	19.6
119829 2002 BP_{22}	14.3	X	331.14763	1.97743	16.73650	14.03902	0.1622223	0.24007348	2.5639325	21	10 2.9	16.7
119830 2002 BO_{23}	15.4	X	175.13323	74.57384	358.94383	12.96025	0.1448299	0.22325044	2.6911702	21	5 19.9	19.9
119831 2002 BM_{28}	14.7	X	111.47722	139.47852	60.49632	16.65157	0.0442299	0.17872109	3.1214198	21	8 24.1	19.5
119832 2002 CL_{2}	15.0	X	63.10791	51.14937	90.96782	13.78446	0.0939154	0.21150481	2.7899037	21	4 11.5	18.8
119833 2002 CT_{2}	14.9	X	114.48780	294.52236	349.15299	9.79933	0.0578543	0.18963091	3.0005207	21	11 30.8	19.5
119834 2002 CK_{3}	15.2	X	354.70765	335.68952	117.11626	13.56452	0.0668320	0.19636076	2.9315654	21	—	—
119835 2002 CC_{8}	15.1	X	182.67529	104.69310	78.05128	3.57788	0.1411139	0.18491261	3.0513477	21	10 13.7	19.9
119836 2002 CS_{12}	14.9	X	161.70539	43.49707	42.87551	13.70927	0.1556906	0.22255674	2.6967594	21	5 25.8	19.4
119837 2002 CY_{12}	14.9	X	236.09838	81.21378	85.93262	16.20319	0.1491316	0.23938235	2.5688651	21	11 25.3	18.5
119838 2002 CA_{16}	15.6	X	188.25640	18.71809	144.56689	1.38848	0.1261586	0.18014480	3.1049520	21	9 24.9	20.4
119839 2002 CX_{17}	15.2	X	141.52279	283.42400	330.58046	7.77765	0.0616721	0.18991839	2.9974921	21	11 24.8	19.8
119840 2002 CE_{23}	15.4	X	199.87116	266.28126	287.53753	13.58602	0.1256986	0.23683746	2.5872345	21	11 15.5	19.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119841 2002 CN_{27}	15.7	X	57.76943	96.30663	47.39938	4.47454	0.0398153	0.21441430	2.7646079	21	3 24.4	19.3
119842 2002 CN_{35}	15.6	X	89.78725	281.47992	177.89449	3.48459	0.0483806	0.21233489	2.7826280	21	3 9.9	19.2
119843 2002 CO_{39}	15.0	X	182.18938	348.89289	147.90806	2.21304	0.1154781	0.17489632	3.1667633	21	8 17.6	19.9
119844 2002 CC_{40}	14.3	X	161.49906	314.45888	191.02051	15.14243	0.1301364	0.17280472	3.1922653	21	8 4.9	19.6
119845 2002 CD_{46}	14.5	X	198.42542	273.31196	261.08601	13.69890	0.1925417	0.18380866	3.0635531	21	10 8.6	19.8
119846 2002 CL_{46}	15.8	X	183.33830	274.57920	287.55385	6.12698	0.1453883	0.23502412	2.6005254	21	11 8.3	20.0
119847 2002 CF_{48}	14.4	X	58.12892	326.76047	295.42338	20.88002	0.0438346	0.17736337	3.1373293	21	8 19.7	19.0
119848 2002 CJ_{55}	14.8	X	93.53669	342.45763	197.62654	0.74928	0.1106253	0.16824058	3.2497420	21	7 8.9	19.4
119849 2002 CC_{60}	15.8	X	167.21597	313.97517	89.03052	4.04278	0.0276065	0.21597061	2.7513106	21	4 3.4	19.7
119850 2002 CY_{61}	15.0	X	74.03048	286.73589	34.96767	9.02686	0.0913043	0.18864600	3.0109554	21	12 5.8	19.4
119851 2002 CG_{62}	15.1	X	294.39423	28.12000	87.89870	11.78117	0.0701110	0.19126854	2.9833693	21	12 7.9	19.0
119852 2002 CU_{65}	15.0	X	295.33702	112.65166	17.77453	12.29298	0.0977448	0.19247245	2.9709157	21	12 24.2	18.9
119853 2002 CR_{75}	16.0	X	158.60810	227.21828	57.96871	2.43596	0.0815180	0.24505884	2.5290406	21	—	—
119854 2002 CY_{76}	14.8	X	259.31479	13.80544	348.51639	5.37733	0.0414119	0.16982668	3.2294764	21	6 1.2	19.5
119855 2002 CH_{78}	14.8	X	146.79644	107.95916	104.68588	5.93074	0.1028937	0.18218092	3.0817741	21	10 16.8	19.6
119856 2002 CJ_{83}	15.2	X	96.87217	273.36158	144.78002	15.58276	0.1424237	0.20600105	2.8393772	21	2 9.6	18.9
119857 2002 CX_{83}	15.1	X	100.05686	127.02994	108.72505	2.13304	0.1231794	0.17701281	3.1414700	21	9 26.6	19.7
119858 2002 CN_{94}	15.5	X	110.17722	332.85172	128.14791	5.94201	0.1241892	0.21318382	2.7752358	21	4 21.5	19.4
119859 2002 CB_{110}	15.1	X	286.56320	337.59083	88.79600	2.92942	0.0464888	0.18040222	3.1019977	21	9 28.1	19.3
119860 2002 CE_{120}	15.3	X	158.49338	191.39020	142.37002	2.65343	0.0714263	0.20386644	2.8591628	21	1 1.8	19.4
119861 2002 CV_{120}	15.7	X	52.53436	227.18459	203.39649	1.42747	0.0487863	0.20293339	2.8679201	21	—	—
119862 2002 CY_{121}	15.5	X	294.21190	307.44828	247.95591	2.55660	0.0946011	0.20101092	2.8861769	21	—	—
119863 2002 CU_{123}	14.8	X	268.02502	220.92727	148.34797	19.73089	0.1975401	0.17408199	3.1766314	21	6 4.6	20.0
119864 2002 CA_{132}	14.7	X	51.74693	355.99169	232.49896	3.44751	0.0795574	0.16904858	3.2393786	21	7 10.8	19.0
119865 2002 CE_{140}	14.4	X	113.05755	42.17628	176.90851	8.98887	0.0999924	0.17783105	3.1318262	21	9 16.6	19.0
119866 2002 CL_{142}	15.7	X	204.38385	272.47340	221.96798	5.84580	0.3755065	0.22901666	2.6458060	21	8 23.5	20.9
119867 2002 CW_{144}	14.9	X	356.00687	228.28301	164.64796	10.26807	0.0638853	0.18638942	3.0352086	21	11 22.4	19.0
119868 2002 CU_{149}	15.4	X	17.95036	210.42772	134.96132	13.92231	0.0831617	0.18406185	3.0607429	21	10 29.3	19.6
119869 2002 CY_{162}	14.9	X	122.75840	149.80544	71.42453	5.94062	0.0984879	0.18039286	3.1021050	21	10 2.6	19.7
119870 2002 CL_{163}	15.0	X	108.25719	142.03901	86.83752	5.28567	0.1155201	0.17904645	3.1176371	21	9 28.0	19.7
119871 2002 CP_{167}	14.6	X	259.68759	43.80597	348.25742	15.95623	0.2212605	0.17574750	3.1565301	21	6 17.1	19.8
119872 2002 CC_{168}	15.1	X	341.94614	79.54330	357.93231	10.65512	0.0948916	0.19184423	2.9773979	21	12 29.4	19.0
119873 2002 CN_{168}	14.7	X	11.85071	214.79852	55.01474	6.42235	0.1155505	0.16956495	3.2327987	21	7 8.1	18.6
119874 2002 CP_{170}	14.3	X	219.68622	126.31046	352.03217	22.04615	0.1005559	0.17825963	3.1268044	21	9 6.2	19.0
119875 2002 CT_{174}	14.8	X	146.01274	68.40334	82.97535	6.84905	0.1140165	0.17053107	3.2205771	21	8 1.1	19.9
119876 2002 CO_{195}	15.5	X	100.09387	118.60710	133.59511	2.51323	0.1507377	0.18035432	3.1025469	21	10 19.6	20.3
119877 2002 CF_{202}	15.1	X	29.21662	354.89581	46.46750	2.75159	0.0579413	0.19366452	2.9587119	21	—	—
119878 2002 CY_{224}	6.1	X	28.53432	150.74565	317.11539	15.77788	0.3412361	0.00252338	53.4335875	21	2 28.9	22.1
119879 2002 CE_{238}	15.4	X	211.24876	297.61358	180.58391	8.39692	0.1156329	0.17677778	3.1442539	21	8 22.2	20.4
119880 2002 CH_{238}	15.1	X	206.73620	340.77148	175.74937	9.70180	0.0575837	0.18171469	3.0870430	21	10 11.3	19.7
119881 2002 CA_{239}	14.9	X	179.03551	16.51086	178.47772	9.75376	0.0528726	0.18258937	3.0771764	21	10 28.2	19.5
119882 2002 CP_{239}	15.3	X	330.37978	70.21212	226.16106	0.99217	0.0469113	0.21728975	2.7401640	21	6 8.7	18.7
119883 2002 CE_{241}	14.6	X	215.69173	65.14010	334.61015	13.40020	0.2084302	0.21887349	2.7269297	21	5 12.9	19.5
119884 2002 CJ_{241}	14.5	X	24.50373	126.72869	169.11818	22.27129	0.1478087	0.17497668	3.1657936	21	9 4.7	18.3
119885 2002 CZ_{244}	14.5	X	142.22782	284.93747	220.16487	9.72958	0.0977953	0.17161856	3.2069576	21	7 15.9	19.5
119886 2002 CC_{247}	15.4	X	317.57749	277.17640	183.38107	9.10843	0.0771078	0.19005197	2.9960873	21	12 20.4	19.4
119887 2002 CH_{252}	15.5	X	236.55822	258.19051	174.28189	5.54280	0.1904759	0.23098609	2.6307455	21	7 17.2	19.6
119888 2002 CP_{254}	15.7	X	193.70471	145.68533	122.46374	3.05051	0.0276568	0.20043672	2.8916864	21	—	—
119889 2002 CX_{254}	14.5	X	99.40067	349.88282	223.91581	7.82481	0.0990608	0.17510714	3.1642210	21	8 22.6	19.3
119890 2002 CD_{258}	15.8	X	169.03548	181.02330	133.42477	2.97234	0.0811524	0.20159157	2.8806322	21	—	—
119891 2002 CQ_{261}	15.9	X	336.42019	305.41536	109.86542	9.57011	0.2027427	0.24117382	2.5561281	21	12 10.7	18.2
119892 2002 CL_{266}	14.8	X	63.80456	235.28971	98.52948	4.32861	0.2402277	0.18915560	3.0055450	21	12 28.3	19.4
119893 2002 CF_{272}	14.7	X	197.83076	72.97849	92.92210	11.36301	0.0372876	0.18188506	3.0851151	21	10 18.6	19.3
119894 2002 CH_{272}	14.9	X	307.02111	2.34550	58.90504	10.45004	0.0598683	0.18351332	3.0668391	21	10 20.2	19.0
119895 2002 CY_{272}	14.2	X	103.53704	151.39341	44.18200	11.44726	0.0872373	0.17064332	3.2191647	21	8 10.9	19.1
119896 2002 CV_{274}	15.3	X	114.79160	291.84470	343.68533	2.95469	0.0888593	0.18558119	3.0440147	21	11 24.4	19.9
119897 2002 CZ_{277}	15.4	X	313.14456	108.71642	279.49672	2.23169	0.0790284	0.18071219	3.0984495	21	9 9.7	19.4
119898 2002 CO_{289}	14.6	X	36.02266	249.02514	57.58421	11.92152	0.1208126	0.18262511	3.0767749	21	10 10.0	18.7
119899 2002 CM_{299}	15.4	X	162.60787	188.05086	342.20874	3.50352	0.0115450	0.17694942	3.1422202	21	9 6.9	19.8
119900 2002 CK_{306}	14.7	X	299.69145	101.26053	237.25039	6.31175	0.0808586	0.17180914	3.2045856	21	6 17.8	19.0
119901 2002 CP_{306}	14.8	X	336.36421	259.69864	101.10015	18.43889	0.0582291	0.17952313	3.1121160	21	9 19.2	19.2
119902 2002 DH_{8}	14.9	X	316.79131	47.71494	27.59498	13.73625	0.1367122	0.24226972	2.5484138	21	11 23.3	17.6
119903 2002 EE_{6}	14.4	X	214.11185	221.19826	89.11656	11.16566	0.0753014	0.15047849	3.5006856	21	2 12.6	19.8
119904 2002 EX_{6}	14.2	X	105.75049	77.67867	181.81160	7.90953	0.1713766	0.12555060	3.9499372	21	10 29.8	20.3
119905 2002 EH_{10}	15.2	X	293.44010	274.07265	163.64635	22.71374	0.3788218	0.24003853	2.5641814	21	9 5.6	17.7
119906 2002 EO_{10}	14.7	X	202.56896	146.83960	22.04386	18.82435	0.1341840	0.18179400	3.0861452	21	10 14.6	19.4
119907 2002 EJ_{12}	15.6	X	196.06517	355.01366	188.08904	3.27010	0.1750911	0.23216600	2.6218246	21	10 28.2	19.7
119908 2002 EO_{23}	15.2	X	346.01954	11.22164	357.70007	4.09283	0.1464576	0.18147988	3.0897053	21	10 5.6	18.6
119909 2002 EL_{28}	14.5	X	175.87401	305.17179	181.19500	11.28510	0.0396053	0.17251127	3.1958844	21	7 27.5	19.3
119910 2002 ET_{30}	14.8	X	189.73560	128.80799	49.85443	1.07398	0.1123049	0.18051238	3.1007355	21	10 15.1	19.5
119911 2002 EN_{31}	14.9	X	320.77699	207.06949	178.80021	10.81141	0.0432111	0.17992369	3.1074953	21	9 21.7	19.1
119912 2002 EQ_{51}	15.4	X	127.17680	55.60691	117.19573	4.12863	0.1373793	0.21966226	2.7203978	21	8 11.1	19.6
119913 2002 EU_{55}	15.1	X	298.05523	274.28275	170.62714	10.76830	0.0352175	0.18654415	3.0335299	21	11 8.6	19.3
119914 2002 EV_{57}	14.9	X	75.89184	288.98522	320.23027	10.39310	0.0302600	0.17597311	3.1538317	21	8 30.4	19.4
119915 2002 EX_{78}	14.8	X	254.15067	132.84974	317.74381	8.47293	0.0465793	0.17825032	3.1269133	21	9 12.3	19.4
119916 2002 ER_{83}	15.2	X	289.19608	9.35810	58.21833	3.57241	0.0510629	0.17986995	3.1081142	21	10 2.4	19.5
119917 2002 ER_{84}	15.7	X	231.80460	104.66667	47.48980	1.77769	0.1272511	0.18448178	3.0560965	21	10 25.2	20.1
119918 2002 EX_{84}	13.9	X	96.59447	132.95225	128.47830	3.87484	0.1630368	0.12558470	3.9492221	21	10 22.9	19.9
119919 2002 EG_{85}	15.6	X	161.65774	125.04327	91.53172	2.20634	0.1142080	0.18255277	3.0775877	21	11 2.6	20.3
119920 2002 EW_{88}	14.7	X	249.73853	327.01541	169.04349	10.66149	0.1208375	0.18295904	3.0730300	21	10 28.9	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
119921 2002 EE_{101}	14.4	X	171.40214	126.24337	107.16908	10.06366	0.0898365	0.18648383	3.0341841	21	12 3.5	19.1
119922 2002 ES_{112}	14.1	X	27.60346	178.87138	135.20051	3.65866	0.2156310	0.12364037	3.9905172	21	10 7.2	18.9
119923 2002 EP_{121}	14.8	X	42.26149	24.57957	16.36013	10.11064	0.1021503	0.19264558	2.9691355	21	—	—
119924 2002 EB_{125}	15.4	X	191.56485	81.31648	49.05278	3.59263	0.0190879	0.17499423	3.1655819	21	8 24.7	19.9
119925 2002 EY_{129}	14.9	X	152.42272	330.16284	248.65376	10.61130	0.0985261	0.18348317	3.0671750	21	10 24.6	19.7
119926 2002 EL_{132}	15.5	X	305.46661	102.39694	321.88410	7.93879	0.1202687	0.18435719	3.0574732	21	10 8.3	19.4
119927 2002 EK_{135}	14.8	X	274.57665	185.09507	179.32854	11.86823	0.0412868	0.17146903	3.2088217	21	6 23.8	19.6
119928 2002 EZ_{140}	15.3	X	359.22063	52.86514	354.73396	9.47502	0.0577922	0.18855562	3.0119174	21	12 11.7	19.5
119929 2002 FE_{7}	14.4	X	186.34301	97.36343	58.80937	16.21120	0.0532283	0.17740142	3.1368806	21	9 25.6	19.3
119930 2002 FH_{27}	14.2	X	351.84315	158.38131	144.35348	21.44652	0.0334681	0.17060451	3.2196528	21	7 19.1	18.7
119931 2002 FA_{34}	14.9	X	138.88021	158.64494	359.03882	4.94167	0.0828837	0.16894568	3.2406938	21	7 30.5	19.8
119932 2002 FS_{38}	14.8	X	307.24339	282.90379	146.07967	11.83999	0.0580844	0.18261712	3.0768646	21	10 31.0	19.1
119933 2002 GN	14.5	X	257.06331	309.77925	160.05434	18.02518	0.0948033	0.18010479	3.1054118	21	10 9.6	19.0
119934 2002 GW_{4}	15.1	X	177.12445	10.52775	87.92904	18.18158	0.2011722	0.22003736	2.7173052	21	6 26.7	19.6
119935 2002 GD_{23}	13.9	X	133.33712	7.12162	236.42568	1.85787	0.1293503	0.12681364	3.9236663	21	11 1.1	20.0
119936 2002 GC_{27}	14.6	X	46.91460	15.66543	177.72937	1.21816	0.0619820	0.15696238	3.4036038	21	5 19.0	19.1
119937 2002 GR_{49}	14.9	X	163.55259	267.50553	290.11189	8.64709	0.0337017	0.17999029	3.1067287	21	10 7.9	19.6
119938 2002 GQ_{54}	15.3	X	276.59813	69.14295	27.58235	2.73906	0.0537140	0.18003109	3.1062594	21	10 20.5	19.6
119939 2002 GN_{69}	15.0	X	313.08362	229.13941	201.79745	13.22129	0.1896877	0.18112106	3.0937847	21	10 26.6	18.3
119940 2002 GQ_{79}	15.1	X	265.52353	273.77427	119.82740	15.69225	0.0845246	0.22017480	2.7161744	21	7 13.9	18.9
119941 2002 GS_{105}	14.9	X	210.46740	37.52825	126.93086	9.99094	0.0536457	0.18039829	3.1020427	21	10 28.1	19.6
119942 2002 GJ_{129}	14.0	X	71.20231	62.05596	229.42624	4.03792	0.1191406	0.12397501	3.9833331	21	10 23.0	19.5
119943 2002 GJ_{148}	15.0	X	245.17704	98.10441	344.65288	2.50651	0.0654695	0.17317235	3.1877457	21	8 22.8	19.6
119944 2002 GN_{171}	13.7	X	92.66342	227.59743	46.62393	5.38951	0.1108244	0.12586184	3.9434227	21	10 26.8	19.4
119945 2002 JH_{12}	13.9	X	137.45836	10.65408	220.37636	4.96929	0.1237848	0.12381959	3.9866655	21	10 21.1	20.1
119946 2002 JD_{53}	13.2	X	148.24037	187.05917	35.33660	9.50850	0.1539530	0.12488017	3.9640616	21	10 22.9	19.5
119947 2002 JZ_{71}	14.6	X	150.47292	171.21325	111.37278	10.42563	0.0969207	0.18237992	3.0795319	21	—	—
119948 2002 JH_{121}	14.9	X	150.98195	109.36118	101.95791	14.39305	0.2034634	0.22635390	2.6665152	21	10 28.4	19.7
119949 2002 KD	14.8	X	300.88616	148.28640	97.73463	15.97796	0.1151466	0.20092782	2.8869726	21	2 18.4	19.0
119950 2002 KF_{2}	13.8	X	109.57839	78.75324	189.86302	12.45651	0.1124286	0.12542239	3.9526284	21	11 7.6	19.8
119951 2002 KX_{14}	4.7	X	274.03466	67.29582	287.11067	0.39845	0.0470409	0.00404989	38.9798716	21	6 14.1	20.6
119952 2002 LD_{51}	14.8	X	44.52726	266.56130	119.66575	10.59678	0.0851639	0.18004977	3.1060445	21	—	—
119953 2002 ML	16.5	X	337.05714	185.92984	196.80909	20.07677	0.0925539	0.37471550	1.9054678	21	11 21.4	18.1
119954 2002 NR_{24}	16.3	X	255.32979	350.73348	133.51241	24.36467	0.0493626	0.37381520	1.9085260	21	12 11.3	18.7
119955 2002 OB_{2}	16.3	X	159.87243	48.48640	155.97371	22.87671	0.0494300	0.37177032	1.9155180	21	11 19.6	19.1
119956 2002 PA_{149}	6.2	X	89.16530	155.46604	105.47774	4.04845	0.1747955	0.00338876	43.8977510	21	10 5.1	22.7
119957 2002 RB_{106}	16.2	X	226.56122	170.52987	209.98423	5.77765	0.1803056	0.29432171	2.2383149	21	4 30.7	19.6
119958 2002 RU_{121}	16.4	X	328.72524	322.67468	311.26682	7.37786	0.2430019	0.30027778	2.2086179	21	3 21.2	18.8
119959 2002 SY_{21}	16.3	X	102.51290	273.74233	180.12658	4.93922	0.0859176	0.28878378	2.2668399	21	3 13.6	18.8
119960 2002 TO_{25}	16.5	X	201.98405	208.67104	212.03589	4.88142	0.0834022	0.29753713	2.2221597	21	6 1.9	19.5
119961 2002 TQ_{57}	16.2	X	247.86188	281.01006	196.93018	21.36625	0.0908851	0.36819339	1.9279040	21	11 4.8	18.0
119962 2002 TM_{60}	15.9	X	93.84474	179.61120	54.00026	21.93867	0.0734262	0.36161422	1.9512177	21	10 11.1	18.5
119963 2002 TE_{68}	16.3	X	138.94294	32.83763	201.38309	22.50253	0.0376747	0.36919630	1.9244110	21	11 29.4	18.8
119964 2002 TU_{226}	16.1	X	145.10288	177.45894	148.10115	5.58123	0.1587170	0.27606549	2.3359380	21	—	—
119965 2002 TT_{265}	15.9	X	35.64954	172.82557	257.11441	4.04102	0.1393324	0.26997905	2.3709151	21	—	—
119966 2002 TX_{286}	16.6	X	249.26881	26.49009	3.33030	7.70723	0.1405438	0.29891167	2.2153421	21	6 8.2	19.7
119967 Daniellong	16.5	X	89.86034	318.08505	157.25028	9.61005	0.1673669	0.28721498	2.2750869	21	4 12.1	19.0
119968 2002 UF	16.5	X	319.64673	292.10886	208.43755	5.50171	0.1284233	0.27049980	2.3678713	21	—	—
119969 2002 UU_{17}	16.1	X	219.42622	93.27533	52.24397	4.18297	0.0567624	0.30830045	2.1701343	21	10 28.4	18.6
119970 2002 VL_{21}	16.3	X	25.91342	143.19488	322.22004	5.49925	0.0641671	0.27668308	2.3324606	21	—	—
119971 2002 VZ_{70}	16.3	X	282.10524	199.51257	101.42030	5.78073	0.1931353	0.29391453	2.2403817	21	3 14.1	19.5
119972 2002 VG_{124}	17.0	X	227.76753	58.88462	314.40597	2.57675	0.1122152	0.29220251	2.2491241	21	4 24.3	20.3
119973 2002 VK_{124}	17.0	X	129.73809	356.75569	172.24713	5.43636	0.0801271	0.29910390	2.2143928	21	8 5.3	19.8
119974 2002 VP_{127}	16.6	X	258.00384	349.15744	23.35200	20.63080	0.0908314	0.35041876	1.9925588	21	5 23.1	19.3
119975 2002 VB_{128}	15.6	X	187.59007	295.36316	266.66583	18.15297	0.0268314	0.36647978	1.9339090	21	12 20.4	17.5
119976 2002 VR_{130}	11.1	X	49.69643	218.17174	181.81669	3.52752	0.3842974	0.00847287	23.8295427	21	1 30.9	24.2
119977 2002 WB_{3}	16.1	X	334.06326	319.61652	124.84158	7.04568	0.0814392	0.26399105	2.4066333	21	—	—
119978 2002 WK_{4}	15.9	X	262.03642	8.10823	247.29346	6.02971	0.0845242	0.27823863	2.3237591	21	1 1.7	19.2
119979 2002 WC_{19}	4.7	X	321.05093	44.84277	109.67867	9.20185	0.2579724	0.00299949	47.6179683	21	12 24.4	20.7
119980 2002 XW_{3}	16.7	X	138.47696	166.11538	250.81670	4.22600	0.0572061	0.28433755	2.2904100	21	3 6.2	19.7
119981 2002 XP_{4}	15.9	X	137.83488	296.25401	217.80328	3.74691	0.2284991	0.23717232	2.5847986	21	8 2.1	20.3
119982 2002 XX_{29}	16.0	X	209.74469	186.21831	267.51477	6.30035	0.1027586	0.29567749	2.2314674	21	7 25.3	19.0
119983 2002 XB_{39}	16.4	X	219.83299	301.09515	33.46665	2.76562	0.0623972	0.28414781	2.2914295	21	2 27.3	19.3
119984 2002 XE_{46}	16.6	X	358.95886	174.21149	193.92204	3.81288	0.1356355	0.31031086	2.1607511	21	11 27.2	18.4
119985 2002 XO_{47}	16.2	X	233.74298	181.99329	322.60746	4.25008	0.1367704	0.25644474	2.4536174	21	10 23.7	19.5
119986 2002 XZ_{52}	16.0	X	280.51360	246.26988	106.80250	4.77380	0.2247415	0.29610840	2.2293020	21	5 16.5	18.8
119987 2002 XA_{54}	14.6	X	359.88335	138.42680	82.43402	13.95916	0.2302581	0.22653649	2.6650822	21	4 2.8	17.3
119988 2002 XT_{63}	15.5	X	153.86683	97.90832	16.10886	4.76252	0.1013752	0.23825829	2.5769384	21	6 21.1	19.4
119989 2002 XB_{76}	16.3	X	303.11448	300.31811	58.75264	7.16640	0.1269383	0.29913070	2.2142606	21	7 16.1	18.5
119990 2002 XU_{78}	16.3	X	59.55808	177.99081	310.89362	4.81732	0.1051436	0.27882513	2.3204993	21	2 25.5	18.4
119991 2002 XV_{81}	16.4	X	317.90816	7.80907	7.81813	4.10205	0.1266418	0.30193758	2.2005163	21	9 11.5	18.2
119992 2002 XZ_{87}	15.3	X	171.46291	108.97906	312.69684	13.86196	0.0801663	0.23417369	2.6068177	21	4 25.3	19.5
119993 2002 XT_{105}	16.4	X	186.41613	106.82582	35.03659	4.26438	0.0571843	0.30261967	2.1972085	21	9 10.0	19.2
119994 2002 YJ	16.2	X	217.85406	323.76567	76.93132	4.89087	0.1761490	0.29098917	2.2553719	21	5 19.6	19.6
119995 2002 YU	16.1	X	139.77673	304.49362	109.20873	7.76552	0.0906863	0.28008403	2.3135407	21	3 15.0	19.2
119996 2002 YO_{1}	16.3	X	116.70751	325.65220	150.99553	5.40074	0.1063610	0.28408640	2.2917597	21	5 11.7	19.2
119997 2002 YD_{6}	16.8	X	303.79728	135.90945	264.91237	2.01870	0.1341104	0.30558056	2.1829925	21	9 21.2	18.7
119998 2002 YN_{6}	16.0	X	343.19712	201.83235	298.74992	5.42860	0.0953679	0.26782461	2.3836129	21	—	—
119999 2002 YC_{8}	16.5	X	86.95826	287.41096	230.52695	5.76703	0.1188796	0.28459419	2.2890329	21	5 29.9	19.0
120000 2002 YA_{11}	16.7	X	191.39782	109.44167	289.42212	0.76533	0.0917460	0.28688720	2.2768195	21	4 20.0	19.8