Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456001 2005 XF_{109}	18.0	X	44.03271	177.89967	81.06577	5.46946	0.0528892	0.29398157	2.2400411	21	8 14.4	20.4
456002 2005 YZ_{5}	18.1	X	88.50864	133.31604	97.34657	2.55203	0.0492560	0.29456393	2.2370877	21	9 6.9	20.7
456003 2005 YV_{6}	17.4	X	55.56807	80.51912	308.71988	1.64505	0.2072402	0.19235388	2.9721365	21	—	—
456004 2005 YM_{20}	16.2	X	121.65810	227.44258	103.17811	12.28303	0.1017269	0.18952213	3.0016687	21	—	—
456005 2005 YR_{21}	17.4	X	72.81205	152.74867	299.82872	3.87376	0.0597103	0.20123349	2.8840484	21	2 9.4	21.1
456006 2005 YC_{23}	17.7	X	203.34533	138.12941	104.90604	22.07589	0.0558622	0.37688793	1.8981385	21	—	—
456007 2005 YE_{45}	17.6	X	62.65576	294.21548	150.98826	2.22810	0.1600081	0.19915735	2.9040571	21	1 27.4	20.7
456008 2005 YG_{45}	16.8	X	73.39024	190.08909	281.90601	13.89319	0.1038866	0.20432668	2.8548678	21	3 4.7	20.8
456009 2005 YQ_{51}	17.0	X	341.55873	334.45729	115.98299	7.19653	0.1592689	0.18628733	3.0363174	21	—	—
456010 2005 YS_{58}	16.8	X	20.33611	309.13746	131.30257	11.87374	0.1000025	0.18946641	3.0022572	21	—	—
456011 2005 YX_{65}	17.1	X	73.97956	339.24595	100.12442	9.12606	0.2206331	0.20145973	2.8818888	21	2 18.9	20.4
456012 2005 YT_{68}	18.4	X	214.52688	250.36016	297.50826	4.76960	0.0449041	0.30588288	2.1815538	21	12 21.0	21.0
456013 2005 YX_{68}	17.1	X	90.85653	127.20210	293.18811	10.95514	0.0206741	0.19885295	2.9070201	21	1 19.9	21.0
456014 2005 YS_{69}	17.7	X	0.77959	30.02423	91.66419	5.50343	0.2110412	0.19258871	2.9697200	21	—	—
456015 2005 YT_{73}	16.2	X	33.52079	145.67310	292.54081	9.11574	0.0843318	0.19339847	2.9614247	21	—	—
456016 2005 YC_{77}	16.6	X	143.15125	39.71588	311.79817	4.75949	0.0747989	0.19720473	2.9231953	21	1 8.2	20.7
456017 2005 YO_{81}	16.6	X	159.03781	262.39679	107.04314	10.14418	0.1481893	0.20447428	2.8534938	21	2 23.9	21.2
456018 2005 YY_{81}	16.3	X	359.12226	184.55314	283.62328	9.21831	0.0632898	0.19030425	2.9934388	21	—	—
456019 2005 YM_{83}	17.8	X	209.35741	82.75185	126.50089	5.85206	0.0569628	0.30743937	2.1741845	21	—	—
456020 2005 YU_{83}	16.3	X	289.98831	251.33255	280.17021	9.17149	0.0455002	0.18811599	3.0166083	21	—	—
456021 2005 YY_{84}	18.3	X	332.70338	251.96178	117.56792	3.23135	0.1811906	0.29967799	2.2115638	21	10 4.1	19.5
456022 2005 YW_{86}	18.1	X	244.93483	146.93541	289.07593	6.87573	0.0883131	0.29256443	2.2472688	21	8 14.6	20.8
456023 2005 YB_{88}	17.7	X	144.15212	125.77248	112.08740	3.42356	0.1317270	0.29956938	2.2120984	21	11 26.5	20.9
456024 2005 YN_{93}	17.5	X	315.19143	310.01585	75.62046	7.08199	0.2682796	0.30111907	2.2045023	21	9 7.4	18.6
456025 2005 YQ_{94}	17.5	X	256.70249	341.41539	96.81305	27.38878	0.2536663	0.29652640	2.2272065	21	8 15.5	21.0
456026 2005 YN_{102}	18.1	X	314.98025	101.77887	270.68244	4.10769	0.1580943	0.29710822	2.2242978	21	8 22.7	20.0
456027 2005 YY_{104}	17.2	X	339.93709	39.28444	87.19854	2.42840	0.1112081	0.19062463	2.9900839	21	—	—
456028 2005 YZ_{104}	16.2	X	71.50367	130.54506	282.98654	8.17363	0.0069228	0.19440884	2.9511552	21	—	—
456029 2005 YA_{114}	18.0	X	330.65970	80.35237	355.41438	3.76854	0.0658232	0.30729434	2.1748685	21	—	—
456030 2005 YP_{114}	16.4	X	109.91030	65.93634	311.03056	8.38987	0.0479452	0.19358212	2.9595514	21	—	—
456031 2005 YV_{114}	16.1	X	73.73558	249.31287	105.28806	12.43300	0.0428857	0.18304949	3.0720176	21	—	—
456032 2005 YY_{115}	18.3	X	220.17712	73.57929	75.20377	3.51608	0.1211503	0.29801110	2.2198029	21	10 23.9	21.0
456033 2005 YZ_{115}	18.1	X	280.57577	98.44270	309.31776	7.24941	0.1849970	0.29524944	2.2336236	21	8 10.3	20.5
456034 2005 YE_{132}	17.4	X	97.43998	305.31446	118.90483	4.58694	0.2453185	0.20223415	2.8745269	21	3 7.9	21.2
456035 2005 YX_{140}	16.6	X	8.14498	21.29196	87.73568	6.03538	0.1254167	0.19276715	2.9678870	21	—	—
456036 2005 YW_{154}	16.8	X	82.27637	115.78483	334.46135	5.61455	0.0315044	0.20079736	2.8882230	21	2 16.8	20.5
456037 2005 YB_{158}	17.3	X	81.77369	244.16559	121.94943	5.42455	0.2137242	0.25562067	2.4588879	21	—	—
456038 2005 YH_{164}	16.4	X	108.00339	233.98658	275.80512	8.16435	0.1039463	0.21863719	2.7288942	21	6 16.1	20.1
456039 2005 YL_{166}	16.2	X	308.69065	262.32130	264.54761	9.46439	0.1528687	0.18967748	3.0000296	21	—	—
456040 2005 YU_{176}	16.8	X	191.47024	305.85817	107.47590	12.80872	0.0329806	0.21489129	2.7605154	21	5 18.7	20.9
456041 2005 YE_{180}	17.1	X	182.51238	350.27436	111.56177	24.83674	0.1911649	0.28508067	2.2864280	21	7 6.3	20.7
456042 2005 YF_{200}	16.3	X	211.67010	274.33407	110.01874	9.59053	0.1210183	0.21486080	2.7607765	21	5 2.3	20.7
456043 2005 YC_{205}	16.3	X	10.89663	205.24555	297.17502	15.72635	0.0573978	0.19682684	2.9269357	21	1 17.7	19.9
456044 2005 YP_{215}	16.5	X	356.53355	353.69043	77.38843	12.78918	0.1344828	0.18992568	2.9974153	21	—	—
456045 2005 YA_{216}	16.7	X	273.64177	196.33654	19.42631	1.88898	0.1553271	0.19211646	2.9745847	21	—	—
456046 2005 YT_{216}	16.6	X	287.32673	152.58921	26.82713	3.22397	0.1166171	0.18882195	3.0090846	21	—	—
456047 2005 YS_{239}	16.7	X	317.41295	256.44993	253.70048	3.68010	0.0599064	0.18949223	3.0019845	21	—	—
456048 2005 YX_{264}	18.9	X	330.59647	19.15476	351.43246	1.47373	0.1625881	0.29731562	2.2232633	21	9 27.7	20.3
456049 2005 YB_{266}	17.4	X	8.75945	20.67711	128.70049	7.58948	0.1602552	0.19709988	2.9242319	21	1 15.1	20.8
456050 2005 YR_{267}	17.0	X	136.28511	88.70882	296.21167	9.92412	0.1045698	0.20078907	2.8883025	21	2 10.0	21.3
456051 2006 AW	18.8	X	265.19783	113.17315	281.46824	10.45313	0.5980975	0.29922844	2.2137783	21	5 18.7	23.3
456052 2006 AS_{14}	16.0	X	345.90813	354.92219	124.94273	11.05782	0.0695586	0.18769069	3.0211635	21	—	—
456053 2006 AY_{22}	17.3	X	281.89972	47.60076	296.63278	22.03124	0.0767789	0.28262161	2.2996715	21	5 26.5	20.6
456054 2006 AA_{24}	16.1	X	45.77166	74.07333	125.95520	10.76831	0.0607250	0.21000004	2.8032154	21	5 25.3	19.9
456055 2006 AG_{30}	18.3	X	191.74106	45.42087	134.30132	5.45209	0.1045441	0.29817599	2.2189845	21	11 3.9	21.3
456056 2006 AW_{35}	16.3	X	3.76059	346.68044	118.53995	10.65994	0.0393452	0.18968579	2.9999420	21	—	—
456057 2006 AF_{37}	18.1	X	207.82358	105.96069	78.46967	2.58405	0.1504273	0.30003466	2.2098108	21	11 21.8	21.1
456058 2006 AB_{38}	16.9	X	80.67484	157.98821	304.93862	9.15861	0.0592455	0.20200438	2.8767063	21	3 2.1	20.8
456059 2006 AV_{38}	16.9	X	118.79263	333.52743	114.54078	3.25206	0.0281971	0.20686153	2.8314978	21	4 1.6	20.8
456060 2006 AZ_{46}	16.2	X	214.10457	42.02883	276.11737	13.93399	0.1427891	0.20338683	2.8636559	21	2 5.9	21.0
456061 2006 AY_{53}	16.4	X	270.99176	350.10271	292.78883	14.13326	0.1187257	0.20251545	2.8718645	21	2 19.3	20.9
456062 2006 AK_{58}	18.2	X	157.08683	297.50464	259.70872	2.66068	0.1402652	0.29270007	2.2465745	21	10 15.1	21.5
456063 2006 AA_{60}	17.1	X	318.01670	233.55594	289.37603	2.65688	0.0765499	0.19115811	2.9845182	21	—	—
456064 2006 AT_{61}	16.3	X	51.22767	244.00978	140.96282	8.56054	0.1010006	0.18538770	3.0461323	21	—	—
456065 2006 AX_{63}	17.1	X	84.45653	313.12152	113.35260	3.73266	0.1665933	0.20036523	2.8923742	21	2 8.4	20.6
456066 2006 AH_{65}	18.0	X	297.45815	53.85169	300.65669	4.28576	0.0537830	0.28665970	2.2780240	21	7 10.5	20.5
456067 2006 AF_{70}	18.6	X	278.32968	247.86898	177.17337	0.70819	0.2425231	0.29770318	2.2213333	21	8 23.3	21.0
456068 2006 AS_{74}	15.7	X	269.48676	211.20824	332.05441	20.77187	0.2751803	0.18129909	3.0917590	21	12 27.9	20.1
456069 2006 AR_{80}	16.7	X	319.53598	240.94585	268.04282	3.06811	0.0714590	0.18824283	3.0152529	21	—	—
456070 2006 AV_{92}	18.6	X	207.63667	119.17552	10.23047	1.70050	0.1309062	0.29267354	2.2467103	21	9 9.8	21.7
456071 2006 AF_{105}	16.7	X	66.29468	287.75824	123.39336	16.32370	0.1593661	0.19197444	2.9760515	21	—	—
456072 2006 BC_{11}	18.0	X	213.98634	356.63204	112.62643	5.49748	0.1813270	0.29025381	2.2591796	21	8 16.5	21.3
456073 2006 BZ_{17}	16.0	X	331.11084	351.16514	112.22499	11.03308	0.1790108	0.18332161	3.0689769	21	—	—
456074 2006 BK_{23}	16.7	X	124.56946	281.21059	124.86286	15.78630	0.1506191	0.20281293	2.8690556	21	3 5.9	21.0
456075 2006 BB_{35}	18.2	X	133.59600	117.91237	114.16654	6.98303	0.0968771	0.29577838	2.2309599	21	11 9.4	21.4
456076 2006 BM_{36}	17.0	X	16.17596	209.67207	20.81580	3.59929	0.1260024	0.20840697	2.8174825	21	5 19.4	20.0
456077 2006 BT_{38}	17.5	X	339.44661	258.52903	121.83650	7.72284	0.1875430	0.30406237	2.1902529	21	11 13.6	19.0
456078 2006 BE_{56}	16.3	X	54.17195	20.43607	148.45849	15.81678	0.0755218	0.20432949	2.8548416	21	4 30.3	20.2
456079 2006 BU_{59}	13.9	X	18.90692	107.90237	128.74835	17.91363	0.0352485	0.08420340	5.1552487	21	6 8.1	20.7
456080 2006 BZ_{66}	18.2	X	304.38256	56.60416	344.89202	3.52668	0.0987222	0.29545761	2.2325744	21	9 26.8	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456081 2006 BA_{68}	17.0	X	14.71734	66.19398	13.74004	1.31424	0.1520420	0.18798153	3.0180466	21	—	—
456082 2006 BF_{71}	18.7	X	288.09498	13.69590	50.47772	4.00330	0.1136277	0.29584214	2.2306393	21	10 3.3	20.7
456083 2006 BT_{76}	16.1	X	150.93827	143.20016	124.29132	17.46696	0.0836672	0.17669185	3.1452732	21	12 21.5	21.2
456084 2006 BW_{84}	16.7	X	196.49899	231.02906	122.69510	7.09439	0.0933878	0.20282966	2.8688978	21	3 10.3	21.1
456085 2006 BF_{88}	16.8	X	311.09253	75.56300	43.79510	1.35444	0.1383338	0.18136060	3.0910599	21	12 28.9	20.4
456086 2006 BK_{88}	16.5	X	267.41128	97.12962	129.91712	10.23259	0.0614680	0.18969160	2.9998807	21	—	—
456087 2006 BF_{106}	18.6	X	203.53997	34.63623	113.72741	3.68843	0.0678366	0.29446185	2.2376047	21	10 9.3	21.4
456088 2006 BL_{113}	17.4	X	35.44229	345.88832	130.43176	15.50708	0.2336530	0.19613211	2.9338433	21	1 21.5	20.1
456089 2006 BM_{114}	17.5	X	160.70567	250.30910	343.27795	5.71584	0.1470421	0.29562617	2.2317256	21	12 4.6	20.9
456090 2006 BR_{123}	18.6	X	227.54687	312.55398	139.62697	2.10834	0.1856767	0.28885385	2.2664733	21	8 5.8	21.7
456091 2006 BE_{128}	17.2	X	311.35254	2.57389	323.60339	10.09014	0.1596346	0.27802073	2.3249731	21	5 30.9	19.9
456092 2006 BD_{137}	17.4	X	218.49690	100.49312	311.48506	7.86325	0.0968384	0.28032687	2.3122045	21	6 8.4	20.7
456093 2006 BM_{152}	17.1	X	63.04214	39.49313	68.68553	2.73047	0.1266483	0.19842451	2.9112031	21	2 25.2	20.5
456094 2006 BH_{164}	13.7	X	311.41693	344.58658	320.03356	22.57554	0.0646861	0.08457287	5.1402235	21	5 24.5	20.7
456095 2006 BO_{167}	16.2	X	191.97606	87.77827	143.87210	17.30813	0.1024146	0.17497660	3.1657946	21	12 19.4	21.3
456096 2006 BC_{177}	18.5	X	130.31040	177.14678	54.30794	2.69899	0.0719330	0.29451002	2.2373607	21	11 1.7	21.6
456097 2006 BZ_{177}	17.7	X	340.60287	203.47835	120.13815	8.28825	0.1548641	0.28678604	2.2773549	21	7 30.3	19.3
456098 2006 BS_{194}	18.5	X	225.47402	318.56311	230.02640	1.93322	0.1019500	0.30298273	2.1954529	21	12 27.3	20.9
456099 2006 BJ_{214}	16.2	X	289.29278	258.11494	296.60801	9.09838	0.2932275	0.18399271	3.0615096	21	—	—
456100 2006 BZ_{222}	18.3	X	193.71895	349.56204	161.26176	0.96006	0.1552041	0.29126621	2.2539415	21	9 21.5	21.7
456101 2006 BE_{225}	18.3	X	124.97699	296.83998	240.44150	1.77436	0.1619843	0.28242250	2.3007522	21	8 17.9	21.6
456102 2006 BO_{226}	16.5	X	13.53500	172.92413	330.76975	10.97313	0.1077698	0.19293863	2.9661282	21	1 23.3	20.2
456103 2006 BZ_{227}	18.2	X	195.19762	187.46593	151.99295	24.01402	0.0213801	0.38795863	1.8618546	21	1 8.4	20.5
456104 2006 BN_{230}	16.3	X	322.59205	4.00403	114.22112	10.69743	0.0299134	0.18274209	3.0754617	21	—	—
456105 2006 BO_{238}	16.4	X	335.18060	118.99425	118.73525	9.39351	0.0819098	0.20371941	2.8605383	21	3 30.4	20.2
456106 2006 BS_{250}	15.7	X	173.69243	101.80030	148.84031	19.71064	0.1570003	0.17334405	3.1856405	21	12 21.3	21.2
456107 2006 BZ_{253}	17.0	X	350.13079	231.81346	321.32582	9.77885	0.0883960	0.19697392	2.9254784	21	2 17.7	20.6
456108 2006 BY_{274}	18.5	X	202.03371	187.69633	326.21545	6.02922	0.0815899	0.29269167	2.2466175	21	10 8.4	21.5
456109 2006 BT_{277}	17.0	X	97.11382	305.21197	162.02847	2.28342	0.0213818	0.20298127	2.8674691	21	3 27.8	20.7
456110 2006 BF_{284}	14.1	X	353.44072	304.56313	341.02254	3.33511	0.0396771	0.08388336	5.1683529	21	6 30.1	20.7
456111 2006 CV_{2}	17.5	X	109.19622	78.43746	318.64863	1.08733	0.1272618	0.19683637	2.9268411	21	1 30.2	21.4
456112 2006 CW_{19}	18.6	X	234.18428	208.12453	294.82357	3.28617	0.0884647	0.29855950	2.2170838	21	11 5.4	21.2
456113 2006 CR_{32}	18.1	X	196.44161	195.42001	257.78678	4.11135	0.0965959	0.28329568	2.2960222	21	7 10.0	21.3
456114 2006 CP_{35}	16.8	X	32.24906	81.25263	107.06366	8.73853	0.2378391	0.20482124	2.8502704	21	5 3.5	19.5
456115 2006 CF_{50}	17.5	X	108.55772	244.76869	339.66195	7.48770	0.0619036	0.28840029	2.2688490	21	9 22.8	20.5
456116 2006 CS_{56}	18.3	X	162.93926	296.96151	288.38832	1.09027	0.1388943	0.29616370	2.2290244	21	11 27.6	21.5
456117 2006 CY_{56}	13.5	X	293.01756	6.52489	325.04033	24.69388	0.0876506	0.08452016	5.1423603	21	5 31.2	20.6
456118 2006 DK_{2}	16.9	X	296.02368	267.25499	336.96793	6.46062	0.2608810	0.19098138	2.9863591	21	1 22.4	21.5
456119 2006 DN_{24}	18.9	X	265.88104	95.01605	353.48349	2.92430	0.1338776	0.29362819	2.2418379	21	9 26.9	21.2
456120 2006 DC_{25}	14.4	X	56.94100	147.25496	71.55859	1.74451	0.0502051	0.08256627	5.2231713	21	7 2.6	21.2
456121 2006 DZ_{27}	18.2	X	205.18043	203.40140	354.04541	7.26150	0.1154786	0.29770886	2.2213051	21	12 8.7	21.2
456122 2006 DZ_{54}	16.6	X	284.29384	244.59100	358.05057	5.40677	0.1459765	0.18863119	3.0111129	21	1 22.3	21.2
456123 2006 DD_{63}	16.6	X	38.77777	155.28335	353.99895	12.09181	0.0675373	0.19575641	2.9375959	21	3 8.5	20.2
456124 2006 DH_{76}	16.6	X	228.41083	96.72016	151.77449	12.37923	0.0144556	0.18387183	3.0628514	21	—	—
456125 2006 DQ_{83}	16.6	X	301.56557	49.73597	173.77922	10.90749	0.2087412	0.18852112	3.0122849	21	1 7.9	21.2
456126 2006 DT_{86}	16.6	X	208.65207	307.47069	3.15893	8.85203	0.0575514	0.18900423	3.0071496	21	2 1.7	21.2
456127 2006 DY_{87}	17.5	X	301.90009	39.07245	169.15937	12.59866	0.1053507	0.18706506	3.0278958	21	1 3.9	22.1
456128 2006 DD_{99}	18.2	X	135.70592	198.64596	329.09483	2.50801	0.0911408	0.28235111	2.3011400	21	8 12.5	21.4
456129 2006 DO_{99}	16.7	X	335.46295	2.23644	166.25688	6.52560	0.1144592	0.18978280	2.9989195	21	—	—
456130 2006 DO_{100}	16.9	X	310.09227	335.06849	153.40519	11.42798	0.0813210	0.17974022	3.1096096	21	—	—
456131 2006 DY_{103}	16.1	X	24.75830	100.45917	354.34125	10.40124	0.0168316	0.18411168	3.0601907	21	—	—
456132 2006 DF_{106}	16.8	X	265.47792	231.22227	8.49467	3.54084	0.1693131	0.18468702	3.0538319	21	—	—
456133 2006 DZ_{108}	16.6	X	39.26204	107.10525	342.28321	7.25430	0.1225170	0.18706989	3.0278437	21	—	—
456134 2006 DT_{110}	16.8	X	293.97977	332.53904	185.34579	11.68706	0.1135960	0.17758874	3.1346744	21	—	—
456135 2006 DO_{132}	16.7	X	14.60990	95.49984	2.74455	11.13839	0.1761866	0.18699098	3.0286955	21	—	—
456136 2006 DD_{134}	18.1	X	182.96139	36.97342	93.24225	2.63094	0.0849185	0.28458543	2.2890799	21	8 16.6	21.1
456137 2006 DQ_{139}	17.5	X	242.45194	263.64154	120.96003	5.67082	0.0810739	0.27578157	2.3375410	21	6 2.4	20.7
456138 2006 DN_{142}	15.7	X	26.29927	73.26623	4.27534	9.71617	0.0718025	0.18302616	3.0722786	21	—	—
456139 2006 DZ_{144}	18.0	X	85.36822	285.29648	357.29420	6.05216	0.1219284	0.29089744	2.2558460	21	11 19.4	21.2
456140 2006 DA_{145}	16.2	X	4.46152	248.20501	160.46571	16.03435	0.0725849	0.17395502	3.1781770	21	12 20.2	20.7
456141 2006 DN_{148}	16.4	X	255.27153	98.01645	176.86988	8.53869	0.1090551	0.18914618	3.0056448	21	1 31.3	21.1
456142 2006 DY_{177}	16.6	X	80.85441	193.12345	156.46566	9.66543	0.0757476	0.17504895	3.1649222	21	—	—
456143 2006 DH_{188}	16.9	X	316.96405	115.12157	67.67997	1.76790	0.1034019	0.18573273	3.0423587	21	—	—
456144 2006 EQ_{2}	18.2	X	163.40838	277.05638	340.40124	6.40379	0.1975678	0.29889363	2.2154313	21	—	—
456145 2006 EN_{9}	16.4	X	359.92022	110.43844	3.20542	9.95603	0.0385135	0.18271332	3.0757846	21	—	—
456146 2006 EH_{26}	16.6	X	69.56221	248.07172	164.66938	9.42451	0.0524241	0.18746180	3.0236222	21	—	—
456147 2006 ES_{44}	18.5	X	106.51295	43.01964	191.29143	5.06166	0.1696920	0.28308965	2.2971361	21	10 15.3	21.8
456148 2006 EB_{53}	16.5	X	33.01074	77.14772	8.89478	8.36238	0.1257879	0.18449172	3.0559867	21	—	—
456149 2006 EA_{73}	18.1	X	139.47681	234.00289	21.08112	6.41189	0.1191433	0.29386383	2.2406393	21	12 11.7	21.5
456150 2006 FE_{2}	16.6	X	229.55444	193.39685	24.36351	5.42995	0.1513641	0.17423716	3.1747451	21	—	—
456151 2006 FV_{5}	17.0	X	318.76798	215.62432	7.79382	1.91995	0.1384814	0.19078529	2.9884051	21	2 7.8	20.9
456152 2006 FZ_{14}	18.2	X	157.44109	134.52004	33.00709	3.06756	0.1426930	0.28265984	2.2994642	21	9 8.1	21.6
456153 2006 FZ_{15}	17.8	X	302.29095	101.67466	5.46605	7.84586	0.0777087	0.29985986	2.2106695	21	—	—
456154 2006 FQ_{20}	16.7	X	317.91534	169.85178	46.16251	4.91441	0.1083792	0.18777212	3.0202900	21	2 3.8	20.9
456155 2006 FP_{30}	16.5	X	301.15739	335.45904	199.22818	15.15806	0.2107383	0.18027672	3.1034371	21	—	—
456156 2006 FU_{33}	16.8	X	168.36329	217.74954	339.88173	24.41555	0.1318452	0.28846499	2.2685097	21	10 14.1	20.7
456157 2006 FT_{53}	16.6	X	358.93445	327.82988	201.72556	14.55718	0.1913155	0.18984697	2.9982437	21	1 19.7	20.3
456158 2006 GJ_{1}	16.6	X	299.07689	53.57259	188.71570	3.93459	0.2007765	0.18577636	3.0418824	21	1 28.9	21.1
456159 2006 GO_{2}	16.2	X	342.21703	164.06603	100.61574	9.46326	0.3075876	0.19675821	2.9276162	21	4 18.4	19.1
456160 2006 GJ_{7}	16.3	X	47.26182	271.44947	163.89227	12.77456	0.1326874	0.18335749	3.0685764	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456161 2006 GG_{17}	16.9	X	342.31733	12.34926	187.73928	10.02174	0.0349219	0.19060026	2.9903388	21	2 21.0	21.1
456162 2006 GS_{18}	16.7	X	285.24786	142.40529	75.97464	3.07546	0.0640602	0.18235138	3.0798532	21	1 4.2	21.2
456163 2006 GW_{21}	17.0	X	259.76146	162.90036	98.43521	3.16327	0.2543621	0.18146886	3.0898303	21	1 12.3	22.3
456164 2006 GJ_{37}	17.8	X	6.84878	15.79929	163.05810	24.08637	0.0996917	0.38445165	1.8731601	21	1 6.3	20.0
456165 2006 GA_{41}	17.4	X	153.65368	48.02122	138.46002	7.44010	0.1610984	0.28494727	2.2871416	21	9 30.9	21.0
456166 2006 GD_{51}	15.6	X	316.68975	83.83498	101.71756	11.46750	0.0837253	0.18568331	3.0428986	21	—	—
456167 2006 HF_{3}	18.0	X	92.09724	109.22765	137.34171	2.92572	0.1896697	0.28029908	2.3123572	21	10 19.1	21.4
456168 2006 HS_{4}	18.3	X	174.17393	332.22913	178.60386	6.68562	0.0346222	0.28163826	2.3050213	21	9 3.1	21.1
456169 2006 HV_{9}	16.0	X	79.43493	30.24848	62.73965	12.84726	0.1064668	0.19015185	2.9950380	21	3 6.8	20.1
456170 2006 HX_{9}	16.5	X	279.31896	184.05887	67.48242	11.00562	0.1204962	0.18585558	3.0410179	21	2 1.4	21.2
456171 2006 HQ_{11}	15.9	X	270.09966	140.56616	64.62706	13.32721	0.1434612	0.17702889	3.1412798	21	—	—
456172 2006 HY_{22}	16.3	X	197.46764	104.52674	193.87015	10.14066	0.0317392	0.17949239	3.1124713	21	1 3.5	21.0
456173 2006 HC_{26}	18.3	X	102.09287	67.17383	192.38501	3.38185	0.1520980	0.28273007	2.2990833	21	11 11.2	21.7
456174 2006 HG_{27}	15.7	X	258.18254	172.32486	74.25261	18.75241	0.1584239	0.17815068	3.1280791	21	—	—
456175 2006 HU_{33}	16.6	X	357.18465	110.63483	38.10428	11.76896	0.0940757	0.18371413	3.0646039	21	1 7.6	20.7
456176 2006 HE_{36}	15.8	X	63.46236	75.52117	3.75593	9.42744	0.0915913	0.18728512	3.0255236	21	1 20.2	19.8
456177 2006 HJ_{41}	15.7	X	189.51397	189.66705	94.83529	14.92313	0.0861340	0.17205364	3.2015488	21	—	—
456178 2006 HZ_{43}	18.1	X	112.12574	99.80064	117.15161	3.13092	0.1483115	0.27879712	2.3206547	21	9 27.4	21.4
456179 2006 HP_{48}	16.0	X	184.80982	233.23151	54.58306	10.17406	0.0585346	0.17493753	3.1662660	21	—	—
456180 2006 HR_{48}	16.3	X	264.79116	62.64565	141.50958	2.21174	0.1656872	0.17611311	3.1521600	21	—	—
456181 2006 HS_{58}	17.0	X	339.39824	109.08255	101.82265	8.16226	0.3012789	0.18930715	3.0039408	21	1 28.2	20.5
456182 2006 HP_{65}	16.6	X	317.75924	67.93628	119.99083	2.23472	0.2054587	0.18233168	3.0800750	21	—	—
456183 2006 HS_{65}	16.6	X	254.42571	96.56590	151.29388	1.58339	0.1353097	0.17854628	3.1234569	21	—	—
456184 2006 HY_{68}	17.0	X	335.62094	343.37633	206.48645	4.44200	0.2190474	0.18583425	3.0412506	21	1 8.1	20.8
456185 2006 HG_{70}	16.3	X	259.74780	178.92695	62.67167	4.25479	0.1406911	0.18199616	3.0838594	21	—	—
456186 2006 HU_{74}	16.7	X	3.11762	106.79988	72.36928	10.25656	0.0517534	0.18754260	3.0227537	21	3 1.3	20.8
456187 2006 HN_{77}	16.4	X	277.82028	146.52749	139.91882	10.66100	0.0611214	0.18832660	3.0143587	21	3 20.5	20.7
456188 2006 HD_{78}	16.2	X	225.56693	132.08180	155.70265	4.61922	0.2023814	0.18154011	3.0890219	21	1 17.7	21.4
456189 2006 HB_{85}	16.2	X	302.39155	338.85317	265.92557	8.97061	0.2899661	0.18599392	3.0395099	21	1 23.4	21.0
456190 2006 HM_{89}	16.9	X	8.36621	171.83654	89.81333	15.95085	0.1546158	0.26687891	2.3892406	21	6 18.6	18.7
456191 2006 HT_{89}	15.9	X	275.56644	89.37529	156.47552	22.36350	0.2490669	0.18156508	3.0887387	21	1 7.6	21.3
456192 2006 HB_{99}	18.5	X	122.11077	48.92123	178.49388	1.66243	0.1424440	0.28199892	2.3030556	21	10 20.0	21.9
456193 2006 HN_{102}	16.6	X	223.95524	72.00826	209.33988	8.22898	0.2047654	0.17578271	3.1561086	21	1 9.2	22.1
456194 2006 HB_{118}	16.0	X	298.98724	102.52033	92.45532	17.27416	0.1870217	0.17878688	3.1206540	21	—	—
456195 2006 HE_{119}	18.5	X	146.38931	123.30360	74.72612	6.26507	0.1087494	0.28281313	2.2986332	21	10 8.5	21.8
456196 2006 HU_{119}	16.1	X	308.96490	101.29765	53.33069	16.95814	0.0781404	0.17545843	3.1599961	21	—	—
456197 2006 HJ_{121}	15.6	X	98.69574	312.72131	118.47525	15.47541	0.0621684	0.18368827	3.0648914	21	2 23.9	19.9
456198 2006 HE_{151}	15.8	X	232.51396	122.30186	129.28529	15.24590	0.2261945	0.17600882	3.1534050	21	—	—
456199 2006 JX_{10}	18.1	X	44.21257	331.42571	299.02360	1.32076	0.2157903	0.27282399	2.3544041	21	9 23.9	20.5
456200 2006 JM_{12}	15.6	X	156.05374	250.57945	83.65860	12.98133	0.0754012	0.17422863	3.1748487	21	1 6.1	20.3
456201 2006 JY_{13}	15.5	X	326.85351	67.50540	66.76105	18.45797	0.0540396	0.17328615	3.1863500	21	—	—
456202 2006 JQ_{16}	17.8	X	215.46823	35.03799	151.12308	2.63417	0.1386164	0.29341506	2.2429234	21	12 3.8	20.5
456203 2006 JL_{19}	16.4	X	318.18996	99.17082	63.78153	11.23602	0.0595150	0.17650118	3.1475380	21	—	—
456204 2006 JV_{19}	17.1	X	337.94864	213.31521	109.88740	8.27515	0.1316987	0.27008014	2.3703235	21	7 24.5	19.3
456205 2006 JG_{31}	16.2	X	356.58280	84.42794	72.96451	13.38869	0.1180250	0.18345580	3.0674801	21	1 14.9	20.2
456206 2006 JH_{31}	17.4	X	133.79156	177.76635	92.37688	6.37765	0.1555606	0.28977340	2.2616759	21	12 24.9	20.7
456207 2006 JA_{32}	18.0	X	91.59550	28.70986	176.03874	3.99412	0.1657985	0.27340036	2.3510940	21	8 18.1	21.1
456208 2006 JQ_{36}	17.2	X	21.15766	160.88216	103.32404	14.76153	0.1142759	0.26828213	2.3809022	21	7 17.9	19.4
456209 2006 JP_{45}	16.3	X	186.97155	219.55142	130.06465	15.71003	0.2702144	0.17198853	3.2023569	21	3 4.2	22.1
456210 2006 JD_{60}	15.8	X	75.12784	355.22430	54.34020	12.25468	0.0650331	0.17623775	3.1506737	21	—	—
456211 2006 KA_{1}	18.0	X	63.02457	123.12548	237.27723	17.12980	0.1181309	0.35712963	1.9675183	21	—	—
456212 2006 KL_{12}	15.9	X	244.08269	173.74011	99.21048	13.17421	0.0886173	0.18177058	3.0864103	21	1 22.9	20.7
456213 2006 KS_{19}	17.2	X	15.23973	36.20983	254.39917	11.28147	0.2703439	0.26927207	2.3750633	21	9 1.0	19.3
456214 2006 KM_{29}	15.8	X	295.10901	106.96862	143.08218	10.44995	0.0932622	0.18645546	3.0344919	21	2 18.0	20.0
456215 2006 KS_{30}	16.2	X	276.44491	133.62672	50.56232	3.95305	0.0440483	0.17160590	3.2071153	21	—	—
456216 2006 KB_{34}	17.8	X	69.55420	214.22884	72.46725	5.97926	0.2246734	0.27891323	2.3200106	21	11 19.5	21.2
456217 2006 KX_{36}	16.5	X	29.64844	78.08958	69.75113	13.58302	0.0470249	0.18534229	3.0466298	21	2 28.9	20.8
456218 2006 KH_{37}	15.8	X	61.10316	348.07598	113.52321	17.73633	0.0752633	0.18591344	3.0403870	21	2 11.9	19.8
456219 2006 KW_{40}	16.1	X	239.41252	235.96188	43.87790	29.20630	0.2701480	0.17926104	3.1151486	21	1 23.3	22.1
456220 2006 KH_{44}	15.9	X	235.69395	192.76728	112.38167	15.70355	0.1333265	0.18517529	3.0484614	21	2 20.4	20.9
456221 2006 KW_{44}	15.9	X	80.94388	244.29537	136.04382	11.60260	0.0635918	0.17297420	3.1901798	21	—	—
456222 2006 KU_{46}	18.2	X	67.30151	209.83485	65.61448	3.48126	0.1999630	0.27798857	2.3251524	21	10 30.8	21.4
456223 2006 KD_{51}	15.5	X	274.59362	181.48927	74.63213	13.19005	0.1537145	0.18145093	3.0900340	21	1 29.8	20.4
456224 2006 KT_{52}	17.4	X	243.39211	184.50541	68.09492	22.93143	0.0504185	0.37200270	1.9147202	21	—	—
456225 2006 KV_{53}	16.3	X	255.61867	161.04920	80.77658	10.00849	0.0275130	0.17646364	3.1479843	21	1 3.7	20.9
456226 2006 KK_{58}	17.8	X	139.32927	128.80764	98.40864	6.43841	0.1628626	0.28449266	2.2895775	21	11 7.9	21.4
456227 2006 KC_{62}	17.3	X	164.49884	345.87086	82.32944	15.40966	0.0370571	0.25915968	2.4364515	21	5 3.6	20.8
456228 2006 KL_{62}	18.0	X	125.34891	116.65121	100.73054	7.24783	0.1263259	0.28010790	2.3134093	21	10 12.8	21.5
456229 2006 KT_{66}	16.3	X	299.64175	112.46991	65.45880	11.44458	0.0855196	0.17529246	3.1619905	21	—	—
456230 2006 KG_{73}	16.3	X	308.31272	15.45817	193.99208	11.72174	0.1023831	0.18097348	3.0954664	21	1 13.3	20.9
456231 2006 KW_{86}	17.8	X	129.56748	89.99663	236.32097	19.82055	0.0864205	0.36234827	1.9485816	21	—	—
456232 2006 KB_{93}	17.3	X	164.07250	241.04640	205.58026	4.04360	0.0495382	0.26385910	2.4074355	21	5 23.6	20.5
456233 2006 KF_{95}	16.5	X	320.54621	299.36964	226.15024	12.15069	0.0694460	0.17601569	3.1533230	21	—	—
456234 2006 KU_{99}	18.0	X	349.51251	276.55663	207.69673	20.33681	0.0904179	0.36788456	1.9289828	21	—	—
456235 2006 KL_{117}	16.8	X	245.56407	218.04807	148.79840	15.69222	0.1992591	0.25773627	2.4454138	21	5 6.8	21.0
456236 2006 KC_{123}	15.9	X	275.17068	163.95797	118.12616	18.35192	0.1620659	0.18475204	3.0531154	21	3 1.7	20.7
456237 2006 MM_{6}	17.3	X	80.96054	339.63247	302.21367	8.32226	0.3032029	0.27504827	2.3416938	21	11 28.6	21.3
456238 2006 MA_{8}	17.4	X	90.05302	190.33201	117.67910	7.02356	0.1306671	0.28168477	2.3047676	21	12 28.1	20.7
456239 2006 MQ_{9}	15.8	X	259.24606	148.25062	133.65918	17.83139	0.1802735	0.17686414	3.1432302	21	2 10.3	20.8
456240 2006 OW	16.5	X	188.60367	111.46693	245.19783	9.56941	0.1738533	0.23837418	2.5761031	21	2 25.6	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456241 2006 ON_6	17.0	X	148.94229	235.59443	160.18583	4.79368	0.3240565	0.23072110	2.6327594	21	3 26.8	21.7
456242 2006 OH_8	17.2	X	235.78811	198.07736	132.46872	2.43187	0.2021297	0.24464047	2.5319231	21	3 10.4	21.3
456243 2006 OW_{18}	15.9	X	251.87244	295.83754	339.77264	13.78066	0.2598539	0.17530172	3.1618792	21	1 25.9	21.5
456244 2006 PK_5	17.5	X	188.77731	316.09409	327.43966	17.95682	0.0401753	0.36008686	1.9567313	21	—	—
456245 2006 PL_6	16.5	X	116.97926	272.76884	318.96156	22.37649	0.2745523	0.27598475	2.3363935	21	10 13.4	21.0
456246 2006 PD_{34}	17.2	X	347.49270	2.30260	289.83412	9.30164	0.2023991	0.25922864	2.4360193	21	6 17.8	19.0
456247 2006 PZ_{37}	16.3	X	155.42309	45.34358	299.59089	31.43053	0.2051815	0.22887689	2.6468831	21	1 20.6	20.4
456248 2006 QG_4	17.6	X	188.14349	228.56287	146.92661	4.96048	0.1911292	0.23700707	2.5859999	21	3 26.6	22.0
456249 2006 QP_4	16.1	X	285.45164	18.99014	278.45798	8.41784	0.2378198	0.18137590	3.0908861	21	3 13.7	21.0
456250 2006 QF_7	16.9	X	183.56805	21.07858	347.55126	14.73118	0.2727624	0.23462989	2.6034375	21	3 14.6	21.6
456251 2006 QZ_{10}	16.3	X	280.80208	154.05260	228.61380	2.06566	0.2817970	0.12263287	4.0123436	21	6 21.2	22.1
456252 2006 QJ_{24}	17.0	X	219.99300	212.68362	110.86764	3.29649	0.1803577	0.23768633	2.5810708	21	2 18.3	21.2
456253 2006 QE_{39}	16.0	X	262.75693	137.81710	152.64467	12.77762	0.2182961	0.17670983	3.1450598	21	2 19.5	21.1
456254 2006 QD_{88}	16.9	X	182.44197	198.83948	163.21744	13.79018	0.1642051	0.23527836	2.5986516	21	3 3.1	21.1
456255 2006 QR_{101}	16.5	X	163.04401	162.44354	261.20512	13.61379	0.0830424	0.24490309	2.5301127	21	4 20.4	20.4
456256 2006 QZ_{112}	17.0	X	20.63792	315.79619	325.35275	15.63742	0.1987574	0.26140953	2.4224516	21	8 22.6	19.1
456257 2006 QM_{132}	17.3	X	264.96503	244.94636	8.82835	21.26893	0.1374225	0.37016879	1.9210390	21	—	—
456258 2006 QM_{148}	16.9	X	184.33401	338.20083	7.33367	11.45443	0.1061537	0.23192784	2.6236192	21	2 14.7	21.0
456259 2006 QT_{148}	17.9	X	167.50461	257.67800	138.39951	5.35285	0.2947010	0.23487007	2.6016623	21	4 8.7	22.5
456260 2006 QY_{164}	17.5	X	180.30771	129.60966	205.56780	11.62787	0.2859614	0.23138115	2.6277501	21	1 31.4	22.4
456261 2006 QL_{184}	16.8	X	113.77839	53.76914	3.28656	15.35321	0.0991875	0.23011351	2.6373917	21	2 25.0	20.4
456262 2006 QX_{185}	17.8	X	166.48486	274.36704	123.88393	2.17915	0.1769410	0.23599061	2.5934203	21	4 3.5	22.0
456263 2006 RW_8	17.5	X	167.22802	86.85387	296.23698	1.50136	0.2633337	0.23360221	2.6110674	21	3 19.9	21.9
456264 2006 RP_{21}	17.5	X	181.60821	208.56590	182.64308	12.76124	0.2771519	0.23648259	2.5898221	21	4 11.4	22.1
456265 2006 RM_{23}	17.4	X	159.19231	37.05839	351.97249	4.63171	0.2541587	0.23236916	2.6202962	21	3 20.6	21.8
456266 2006 RG_{27}	16.6	X	134.40323	351.99047	19.22994	14.52043	0.2603143	0.22448755	2.6812741	21	2 14.4	21.0
456267 2006 RT_{33}	17.8	X	180.94046	82.59381	300.23959	2.26437	0.2460187	0.23689186	2.5868384	21	3 28.6	22.2
456268 2006 RE_{42}	17.8	X	136.91156	308.85734	128.00508	0.57372	0.1877259	0.23457876	2.6038158	21	4 23.7	21.8
456269 2006 RQ_{47}	17.6	X	215.33855	187.89459	170.33798	4.12532	0.2222985	0.23892736	2.5721253	21	3 26.9	22.1
456270 2006 RK_{49}	17.6	X	162.56137	247.46966	193.65790	14.23762	0.1398917	0.24008102	2.5638788	21	5 22.1	21.7
456271 2006 RX_{49}	18.0	X	191.30539	169.36359	209.47821	0.87694	0.2042122	0.23630727	2.5911029	21	3 31.9	22.3
456272 2006 RS_{54}	17.2	X	121.07070	34.95449	27.32957	6.90064	0.0662118	0.22987799	2.6391928	21	3 5.9	20.8
456273 2006 RU_{68}	17.6	X	198.29820	13.77696	12.49293	5.19557	0.1845266	0.24033589	2.5620659	21	4 14.9	21.9
456274 2006 RM_{75}	17.6	X	97.19425	231.51213	170.03949	3.78684	0.1852006	0.22265627	2.6959558	21	1 22.2	20.9
456275 2006 RV_{79}	17.9	X	77.46543	92.72567	157.74346	2.96616	0.1616585	0.26321818	2.4113419	21	10 2.7	21.2
456276 2006 RB_{80}	17.3	X	194.53557	237.44982	88.81557	1.29173	0.1215136	0.23041073	2.6351231	21	1 29.4	21.3
456277 2006 RC_{85}	17.9	X	190.65928	81.82634	334.25490	0.82803	0.0426139	0.24355146	2.5394649	21	5 15.2	21.5
456278 2006 RX_{105}	17.9	X	80.24082	304.44291	203.18546	3.54381	0.1627393	0.23739144	2.5832078	21	5 15.6	21.1
456279 2006 RL_{108}	17.9	X	59.83480	73.12526	191.50250	2.50114	0.1736786	0.26197882	2.4189409	21	9 30.4	21.0
456280 2006 SB_1	17.1	X	125.00352	246.08965	186.15839	11.70073	0.1782799	0.23320088	2.6140623	21	4 4.9	20.9
456281 2006 SC_8	17.4	X	188.25652	158.07633	191.75924	23.22475	0.0847058	0.36569348	1.9366802	21	1 22.1	20.3
456282 2006 ST_8	17.2	X	157.17889	182.75423	181.96151	13.97107	0.2641846	0.23072577	2.6327239	21	2 17.2	21.7
456283 2006 SB_{17}	18.1	X	198.29568	77.86302	302.16167	3.19146	0.2566136	0.23796724	2.5790392	21	4 6.8	22.6
456284 2006 SY_{26}	17.0	X	161.86149	82.17329	277.40677	4.83210	0.1896697	0.22920960	2.6443210	21	2 10.5	21.2
456285 2006 SK_{56}	17.4	X	135.93575	253.63493	118.55607	9.11329	0.2911164	0.22496911	2.6774464	21	2 14.9	21.7
456286 2006 SB_{74}	17.7	X	150.75955	248.94714	173.11460	6.43521	0.2922077	0.23278481	2.6171762	21	4 27.0	22.2
456287 2006 SS_{76}	17.2	X	195.54772	205.84382	195.07633	15.46755	0.1372808	0.24515252	2.5283963	21	5 2.8	21.2
456288 2006 SH_{77}	17.9	X	158.64196	281.55651	108.06065	6.15852	0.3743228	0.23131837	2.6282255	21	3 30.9	22.8
456289 2006 SU_{82}	17.5	X	165.39104	182.59007	165.13534	3.81151	0.1178362	0.22703554	2.6611753	21	1 25.8	21.6
456290 2006 SO_{92}	17.6	X	208.73378	174.02577	203.88274	8.03214	0.1016991	0.23842187	2.5757596	21	4 15.9	21.6
456291 2006 SD_{95}	18.1	X	164.56686	234.45045	176.49038	2.35435	0.1785427	0.23475821	2.6024887	21	4 17.1	22.1
456292 2006 SQ_{96}	17.4	X	154.06256	30.12191	27.40619	9.57023	0.0869458	0.23434061	2.6055796	21	4 8.5	21.0
456293 2006 SE_{105}	16.5	X	161.57866	47.32664	1.40655	31.70799	0.2659458	0.23273499	2.6175496	21	4 6.3	21.3
456294 2006 SS_{110}	16.5	X	178.80250	25.65424	13.88406	18.19190	0.1911362	0.23718888	2.5846783	21	4 13.1	20.9
456295 2006 SD_{116}	16.7	X	171.15408	286.54875	77.51324	11.49399	0.2903270	0.23118137	2.6292638	21	3 8.3	21.6
456296 2006 SB_{119}	17.2	X	239.09681	10.87013	264.31261	17.80200	0.0506528	0.36194007	1.9500464	21	—	—
456297 2006 SB_{121}	17.3	X	198.39999	272.45687	73.74277	5.00334	0.2738156	0.23376566	2.6098502	21	3 2.6	22.0
456298 2006 SG_{122}	17.0	X	175.92939	86.56429	288.20847	11.42305	0.2956048	0.23254019	2.6190113	21	3 12.7	21.9
456299 2006 SN_{128}	15.7	X	284.18855	210.42258	119.94879	13.09644	0.3345004	0.18385300	3.0630604	21	4 19.6	20.7
456300 2006 SX_{128}	17.4	X	155.11210	81.05643	303.12157	11.16032	0.2910130	0.23011939	2.6373468	21	3 9.7	22.1
456301 2006 SV_{134}	18.7	X	328.39629	64.42714	217.17397	21.53715	0.4809301	0.38619202	1.8675283	21	2 6.7	22.0
456302 2006 SU_{138}	17.3	X	110.70838	330.07787	18.98145	21.64326	0.1200528	0.35296928	1.9829485	21	—	—
456303 2006 SY_{143}	18.2	X	134.61897	83.98860	305.00312	1.20471	0.2208529	0.22716985	2.6601263	21	2 24.7	22.3
456304 2006 SX_{144}	17.4	X	185.67152	12.17428	7.58612	10.16604	0.2125430	0.23559630	2.5963132	21	3 28.8	21.6
456305 2006 SP_{145}	17.2	X	108.17819	212.05035	176.58632	3.46337	0.0916212	0.22239280	2.6980847	21	1 7.2	20.6
456306 2006 ST_{171}	17.7	X	168.53727	71.90243	0.04088	7.96086	0.1443592	0.24124405	2.5556319	21	5 12.2	21.8
456307 2006 SQ_{187}	15.8	X	311.92452	327.53399	43.25545	3.06717	0.0667637	0.12292913	4.0058946	21	8 16.4	21.1
456308 2006 SH_{188}	17.9	X	46.87424	120.84634	134.90626	1.98414	0.1631288	0.25807519	2.4432723	21	8 28.0	20.5
456309 2006 SS_{199}	17.4	X	154.64481	27.56166	8.30281	13.86835	0.2644103	0.23203032	2.6228466	21	3 26.7	21.9
456310 2006 SJ_{211}	18.2	X	164.60696	134.48481	272.93576	1.01981	0.2110099	0.23632039	2.5910070	21	4 13.4	22.5
456311 2006 SN_{215}	17.8	X	178.73014	307.50728	73.46166	3.37004	0.2295979	0.23430990	2.6058073	21	3 27.1	22.2
456312 2006 SM_{238}	17.5	X	174.97747	45.34268	22.88768	4.93628	0.1963788	0.24059612	2.5602181	21	5 16.8	21.7
456313 2006 SV_{239}	17.2	X	85.26630	246.29732	180.57042	12.12378	0.0545691	0.22569463	2.6717054	21	1 17.5	20.8
456314 2006 SZ_{239}	17.4	X	233.13975	213.92292	152.40322	2.24456	0.0607259	0.24309963	2.5426106	21	4 30.7	20.9
456315 2006 SG_{246}	18.4	X	210.78635	46.78202	10.96523	3.37926	0.1692114	0.24692191	2.5163032	21	6 5.0	22.3
456316 2006 SY_{268}	17.5	X	192.41650	91.55641	288.60734	3.41937	0.1348433	0.23585889	2.5943858	21	3 31.8	21.6
456317 2006 SZ_{283}	17.2	X	43.77307	256.61787	49.28249	10.07870	0.2000776	0.26581454	2.3956143	21	11 9.2	20.1
456318 2006 SC_{287}	16.6	X	176.80737	61.95319	267.09935	11.58310	0.2658985	0.22832968	2.6511103	21	1 22.0	21.3
456319 2006 SM_{289}	17.4	X	146.94623	204.04108	161.53789	12.09499	0.1987930	0.22695332	2.6618180	21	2 5.1	21.5
456320 2006 SZ_{296}	18.0	X	204.86658	201.66267	193.50143	12.23211	0.1925217	0.24164814	2.5527821	21	5 3.8	22.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456321 2006 SH_{310}	17.6	X	175.06978	110.59120	288.33548	1.77769	0.1280544	0.23639298	2.5904766	21	4 7.9	21.5
456322 2006 SD_{316}	17.8	X	172.26455	234.71572	182.77835	9.51271	0.1951291	0.23761838	2.5815628	21	5 4.0	22.1
456323 2006 SY_{319}	17.4	X	14.29684	202.33373	91.83395	3.64213	0.1881981	0.25808698	2.4431979	21	8 30.9	19.5
456324 2006 SB_{328}	17.2	X	67.05092	329.77131	109.16248	3.03492	0.0548294	0.22235083	2.6984241	21	1 10.4	20.5
456325 2006 SS_{336}	17.5	X	119.28852	234.30367	168.73195	10.43896	0.1762400	0.22611122	2.6684228	21	2 19.4	21.2
456326 2006 SG_{344}	16.9	X	332.00272	275.68688	9.69640	11.17168	0.1026238	0.24622918	2.5210204	21	5 14.5	20.0
456327 2006 SZ_{344}	17.6	X	172.89269	112.04157	260.01887	2.86422	0.1372730	0.23140076	2.6276017	21	3 3.9	21.7
456328 2006 SB_{345}	17.4	X	147.91969	213.75883	212.27756	10.25821	0.1617646	0.23428980	2.6059563	21	4 18.1	21.3
456329 2006 SW_{347}	17.9	X	135.35428	209.09780	211.36451	5.03268	0.1694373	0.23084379	2.6318265	21	3 29.7	21.8
456330 2006 SK_{350}	17.7	X	160.80800	105.67812	345.40385	9.00448	0.0494246	0.24471900	2.5313814	21	5 23.4	21.4
456331 2006 SU_{350}	17.0	X	117.59804	326.73648	16.87293	11.75289	0.1756285	0.21983741	2.7189527	21	—	—
456332 2006 SC_{356}	16.8	X	187.75879	343.07259	41.45975	8.14353	0.2066572	0.23559407	2.5963295	21	4 7.3	21.1
456333 2006 SB_{364}	16.8	X	141.37180	3.54872	35.15040	13.97630	0.2626369	0.22660728	2.6645271	21	3 24.3	21.3
456334 2006 SN_{366}	18.1	X	147.13521	69.15367	19.09688	4.15809	0.2544021	0.23293377	2.6160603	21	5 21.5	22.5
456335 2006 SG_{400}	18.0	X	151.61880	136.28327	281.95735	0.57837	0.0933731	0.23472248	2.6027529	21	4 5.9	21.9
456336 2006 SB_{403}	17.9	X	129.12991	48.62382	344.80653	1.29655	0.1470669	0.22542675	2.6738215	21	2 16.3	21.5
456337 2006 SA_{410}	17.7	X	152.44042	239.45735	199.71124	8.17306	0.1370732	0.23953270	2.5677900	21	5 8.5	21.5
456338 2006 SE_{413}	17.6	X	163.52046	262.18642	154.73326	12.00253	0.2861549	0.23435952	2.6054394	21	5 1.9	22.4
456339 2006 TO_{1}	17.7	X	358.55026	111.41826	23.56937	22.68010	0.0853750	0.35367705	1.9803022	21	—	—
456340 2006 TW_{12}	17.3	X	148.53402	109.69165	256.87660	7.34542	0.2745217	0.22680166	2.6630044	21	2 12.9	21.8
456341 2006 TD_{14}	17.2	X	9.04743	17.91687	302.67873	3.99254	0.2035788	0.26140831	2.4224591	21	9 29.1	19.3
456342 2006 TK_{17}	18.0	X	147.81733	228.76116	173.12296	2.22310	0.2148756	0.23011037	2.6374157	21	3 24.4	22.2
456343 2006 TW_{19}	17.4	X	184.39764	5.52674	28.52998	14.57393	0.1491470	0.23544869	2.5973982	21	4 13.6	21.6
456344 2006 TN_{21}	16.6	X	70.89876	273.64116	214.89762	21.24377	0.0542075	0.22986902	2.6392615	21	3 15.6	20.3
456345 2006 TY_{23}	17.3	X	81.48934	250.76898	204.94109	11.20390	0.1618531	0.22447814	2.6813490	21	3 4.8	20.7
456346 2006 TN_{38}	17.7	X	234.53539	317.45539	40.62461	4.29478	0.2508261	0.24045565	2.5612151	21	4 9.9	22.0
456347 2006 TT_{48}	17.7	X	214.27617	181.48998	208.23401	2.80949	0.1763942	0.23990185	2.5651552	21	5 4.4	21.9
456348 2006 TU_{52}	17.4	X	195.57182	184.31385	210.76228	10.91152	0.2323589	0.23675891	2.5878066	21	4 24.7	21.9
456349 2006 TE_{56}	18.5	X	165.45187	10.20009	40.79459	2.45451	0.2197225	0.23331812	2.6131865	21	4 19.9	22.8
456350 2006 TX_{67}	16.5	X	149.16710	156.46329	236.50161	14.14785	0.2439922	0.22987542	2.6392125	21	3 11.4	21.1
456351 2006 TT_{72}	17.2	X	156.33034	17.78094	20.26134	14.18046	0.2577240	0.23111727	2.6297499	21	3 31.6	21.6
456352 2006 TR_{77}	17.3	X	170.32359	150.18125	205.93266	8.39629	0.1639664	0.22781345	2.6551138	21	2 11.1	21.7
456353 2006 TM_{78}	17.3	X	62.39518	217.05097	203.43950	5.54642	0.1043863	0.21511656	2.7585879	21	—	—
456354 2006 TA_{83}	17.1	X	194.54654	85.46787	252.34166	4.55010	0.2316391	0.23041595	2.6350833	21	2 13.4	21.8
456355 2006 TG_{83}	18.0	X	125.23043	62.40885	7.68054	8.54923	0.2190540	0.22879806	2.6474910	21	4 6.1	21.8
456356 2006 TT_{84}	17.8	X	218.84536	119.77017	266.11493	3.71074	0.1450357	0.24043651	2.5613510	21	5 3.8	21.9
456357 2006 TO_{86}	17.6	X	123.96315	55.99835	25.66335	12.67851	0.1614130	0.22989768	2.6390421	21	4 13.7	21.4
456358 2006 TV_{88}	17.2	X	136.83043	225.61076	235.82267	7.54852	0.0673683	0.23698310	2.5861743	21	5 12.3	20.8
456359 2006 TY_{92}	17.1	X	218.28123	166.98199	218.94091	16.33281	0.1328557	0.24105460	2.5569708	21	5 5.0	21.1
456360 2006 TB_{94}	18.1	X	159.69848	278.39470	107.06748	2.33199	0.1521835	0.22932471	2.6434361	21	3 11.3	22.1
456361 2006 TP_{104}	17.2	X	185.05612	337.12848	52.57300	6.34904	0.3309091	0.23532723	2.5982919	21	4 13.5	22.1
456362 2006 TG_{107}	16.0	X	323.49040	251.67275	113.04863	0.88892	0.3267961	0.12430830	3.9762098	21	7 23.5	20.4
456363 2006 TH_{109}	17.2	X	177.88977	0.00121	48.38027	18.03194	0.0459102	0.23594992	2.5937184	21	4 23.9	20.9
456364 2006 TW_{112}	17.1	X	344.73105	63.13274	160.42711	13.83900	0.0945129	0.23378979	2.6096706	21	3 16.4	20.2
456365 2006 TB_{114}	18.3	X	114.67243	326.34760	122.45172	8.00463	0.3058126	0.22842953	2.6503377	21	5 2.9	22.6
456366 2006 TT_{121}	17.9	X	169.47395	199.94941	240.18573	3.52415	0.0954209	0.23904980	2.5712470	21	5 24.4	21.8
456367 2006 TP_{122}	17.1	X	177.36813	270.63049	104.67524	11.82310	0.2820012	0.23185918	2.6241371	21	3 25.3	22.0
456368 2006 US_{1}	16.5	X	133.49778	155.30580	234.06995	11.30364	0.2743628	0.22568185	2.6718062	21	2 25.3	20.9
456369 2006 UE_{14}	16.9	X	201.59473	306.35173	50.03029	13.07037	0.1108687	0.23171120	2.6252542	21	3 19.9	21.1
456370 2006 UT_{15}	17.1	X	141.75146	271.50716	160.44802	3.01370	0.1833461	0.23107525	2.6300687	21	4 22.9	21.2
456371 2006 UK_{23}	17.7	X	101.71080	148.24486	245.95950	3.71717	0.1285258	0.22062579	2.7124716	21	1 11.2	21.1
456372 2006 UL_{24}	17.2	X	225.39786	18.97539	25.17917	15.38878	0.0605923	0.24537194	2.5268887	21	6 7.2	21.0
456373 2006 UO_{44}	17.3	X	267.77539	306.33838	45.02530	3.93055	0.0706991	0.24224723	2.5485716	21	5 21.5	20.7
456374 2006 UX_{44}	16.8	X	221.61470	285.72637	46.68298	24.69252	0.1175969	0.23099392	2.6306860	21	3 18.4	21.4
456375 2006 UJ_{48}	17.1	X	120.16717	74.15888	331.35835	11.08218	0.1928194	0.22792649	2.6542359	21	2 25.8	20.7
456376 2006 UP_{53}	17.3	X	158.40227	140.66614	208.13388	2.89832	0.2741114	0.22384458	2.6864061	21	2 2.4	21.9
456377 2006 UU_{57}	17.5	X	104.74976	180.60805	195.33099	6.23178	0.1610934	0.21751701	2.7382550	21	—	—
456378 2006 UA_{62}	17.6	X	217.23963	146.84574	227.97987	12.67411	0.2075993	0.24081660	2.5586552	21	4 15.6	22.1
456379 2006 US_{76}	17.5	X	149.04486	181.30845	245.29848	5.85415	0.2756161	0.23283476	2.6168018	21	4 27.6	21.9
456380 2006 UO_{78}	17.8	X	150.09254	163.64940	267.70066	2.77487	0.1590180	0.23467099	2.6031335	21	4 26.1	21.7
456381 2006 UK_{79}	18.0	X	113.68847	167.92387	285.72000	2.83036	0.2253609	0.23016425	2.6370041	21	4 24.1	21.9
456382 2006 UK_{81}	17.2	X	139.76590	148.78492	259.43885	4.64566	0.2499698	0.22885553	2.6470477	21	3 25.6	21.6
456383 2006 UY_{83}	17.5	X	145.55533	40.71812	9.37041	6.57894	0.2379104	0.22979190	2.6398520	21	4 2.8	21.8
456384 2006 UQ_{85}	17.7	X	108.81535	139.85909	242.43921	4.22447	0.2486750	0.21945525	2.7221083	21	1 23.2	21.4
456385 2006 UY_{91}	17.5	X	173.50421	157.05073	188.54704	3.10284	0.1198261	0.22635525	2.6665046	21	1 31.5	21.6
456386 2006 UF_{93}	17.6	X	106.37542	261.58611	151.72798	2.33336	0.2063669	0.22336859	2.6902211	21	2 22.6	21.2
456387 2006 UV_{122}	17.8	X	342.37287	81.38067	189.80314	4.83408	0.0311623	0.24352256	2.5396659	21	5 23.3	21.0
456388 2006 UY_{138}	17.7	X	182.57417	109.91151	277.53815	4.41421	0.2846071	0.23395521	2.6084403	21	4 4.5	22.5
456389 2006 UX_{139}	17.3	X	121.57029	217.17370	247.44126	10.29172	0.0664722	0.23360127	2.6110744	21	4 25.8	21.0
456390 2006 UL_{140}	17.4	X	207.91243	152.79708	240.45825	13.73901	0.1096709	0.23815845	2.5776585	21	5 3.5	21.4
456391 2006 UQ_{149}	17.9	X	200.18059	351.00454	37.79724	2.89599	0.1908174	0.23890780	2.5722657	21	4 20.6	22.1
456392 2006 UW_{149}	16.6	X	140.70615	299.53669	86.06695	15.72591	0.1722871	0.22650945	2.6652942	21	2 28.3	20.9
456393 2006 UE_{150}	17.2	X	138.02449	278.42946	144.75663	12.75689	0.2596215	0.23048147	2.6345840	21	4 18.7	21.7
456394 2006 UG_{170}	17.6	X	131.30616	28.09641	96.81268	3.60606	0.0640656	0.24140708	2.5544812	21	6 5.9	20.9
456395 2006 UU_{179}	17.5	X	162.98342	264.23147	127.85557	4.75751	0.2453392	0.23117018	2.6293487	21	3 29.2	21.9
456396 2006 UX_{179}	17.1	X	154.24810	320.66867	76.11104	7.91466	0.2280304	0.22994548	2.6386764	21	3 28.8	21.5
456397 2006 UQ_{183}	17.2	X	199.34865	299.83496	68.42682	13.00405	0.3161483	0.23552471	2.5968393	21	4 2.1	22.2
456398 2006 UX_{190}	17.0	X	222.54556	128.48203	256.85270	11.29765	0.1678905	0.24266143	2.5456706	21	5 4.7	21.3
456399 2006 UE_{199}	16.9	X	194.45337	267.96581	47.69325	7.83008	0.2265410	0.22511318	2.6763039	21	1 22.9	21.6
456400 2006 UK_{204}	16.5	X	163.08137	354.71170	0.89506	14.34681	0.2450231	0.22624126	2.6674001	21	2 17.4	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456401 2006 UP_{207}	17.5	X	129.73246	84.27338	293.49872	9.54211	0.2973052	0.22421137	2.6834754	21	2 12.9	21.8
456402 2006 UY_{210}	17.7	X	198.71346	21.96323	12.49214	4.44514	0.1386321	0.23684192	2.5872020	21	4 25.6	21.9
456403 2006 US_{211}	17.7	X	208.65463	114.84734	270.05028	4.31436	0.2106934	0.23771638	2.5808532	21	4 21.0	22.1
456404 2006 UA_{220}	17.4	X	156.50193	271.63470	107.33496	3.27619	0.2182855	0.22887955	2.6468625	21	3 5.9	21.7
456405 2006 UH_{220}	17.2	X	163.04053	189.94083	236.25751	3.84617	0.2471960	0.23482603	2.6019876	21	5 7.3	21.5
456406 2006 US_{231}	17.7	X	147.87794	270.70880	139.79256	5.12506	0.2659794	0.23162077	2.6259375	21	4 9.6	22.1
456407 2006 UL_{240}	17.5	X	114.76991	260.69317	235.77365	4.50725	0.0158087	0.24124074	2.5556553	21	5 24.2	20.9
456408 2006 UP_{247}	17.0	X	226.91738	165.82443	218.14568	14.45255	0.1039257	0.24222305	2.5487412	21	5 13.5	20.8
456409 2006 UF_{250}	17.4	X	154.10066	150.09740	207.26901	1.35510	0.0999804	0.22402837	2.6849366	21	1 24.6	21.4
456410 2006 UA_{268}	17.3	X	179.80960	97.24623	259.22700	11.01360	0.2878938	0.22946516	2.6423573	21	2 22.9	22.3
456411 2006 UC_{268}	18.0	X	95.00327	260.69232	220.98240	1.28977	0.1563027	0.23086142	2.6316925	21	4 29.7	21.3
456412 2006 UN_{275}	18.2	X	180.49839	32.69355	349.60528	1.99996	0.1814029	0.23404488	2.6077740	21	3 26.5	22.6
456413 2006 UR_{282}	17.0	X	48.21178	118.27539	34.00931	17.75083	0.1888490	0.22759656	2.6568003	21	4 6.1	19.7
456414 2006 UU_{284}	17.4	X	75.83758	199.76351	217.39207	7.29016	0.1414804	0.21796453	2.7345057	21	1 3.9	20.7
456415 2006 UC_{285}	17.6	X	174.75332	149.92774	241.49063	1.82213	0.0849180	0.23283723	2.6167834	21	3 27.3	21.3
456416 2006 UD_{322}	17.6	X	191.30042	11.40251	30.18722	9.78404	0.1618923	0.23912106	2.5707361	21	4 27.7	21.6
456417 2006 UU_{328}	16.8	X	268.13269	318.89490	55.02377	12.49256	0.1224936	0.24456958	2.5324123	21	6 13.4	20.4
456418 2006 UG_{333}	16.9	X	355.45117	97.63769	187.33349	13.97432	0.1404229	0.25279853	2.4771540	21	6 27.4	19.6
456419 2006 UM_{334}	17.8	X	150.68957	196.66038	220.02083	4.06698	0.1815761	0.22955470	2.6416702	21	4 10.8	21.9
456420 2006 UB_{335}	16.0	X	96.21552	199.13184	287.35720	24.63063	0.0959649	0.22267301	2.6958207	21	4 19.1	20.2
456421 2006 UA_{336}	17.9	X	119.90181	89.98440	1.11134	3.73182	0.1619477	0.23242625	2.6198671	21	4 19.8	21.6
456422 2006 UW_{348}	17.1	X	113.22266	199.44300	39.85573	8.42889	0.1598239	0.26008187	2.4306886	21	10 25.4	20.7
456423 2006 UU_{360}	17.3	X	198.60385	151.31804	204.99135	3.76777	0.1154285	0.22917601	2.6445794	21	3 9.4	21.3
456424 2006 VQ_{3}	17.1	X	167.85283	338.75559	47.51281	8.66569	0.0948353	0.23143762	2.6273227	21	3 19.1	21.0
456425 2006 VY_{10}	18.0	X	141.03262	168.93397	227.91452	2.48600	0.2452525	0.22692964	2.6620032	21	3 13.9	22.3
456426 2006 VR_{16}	17.9	X	144.80967	159.16376	249.86608	3.58869	0.2254936	0.22882113	2.6473130	21	3 29.6	22.1
456427 2006 VE_{17}	17.5	X	122.10987	36.05735	42.41942	5.08099	0.1011825	0.22894945	2.6463238	21	3 31.9	21.1
456428 2006 VX_{17}	17.5	X	145.17721	348.12531	26.18573	2.91935	0.1515863	0.22395734	2.6855043	21	2 11.9	21.5
456429 2006 VJ_{24}	17.3	X	70.83413	80.08387	63.37243	11.08547	0.2335224	0.22712124	2.6605059	21	5 9.1	20.3
456430 2006 VL_{27}	17.5	X	109.61116	171.10931	240.45637	3.34854	0.3119709	0.22242341	2.6978370	21	3 9.2	21.4
456431 2006 VX_{27}	17.6	X	222.74925	106.33812	241.19207	2.40653	0.2170462	0.23477472	2.6023667	21	3 18.8	22.0
456432 2006 VQ_{28}	17.3	X	193.88944	328.41152	51.34768	14.77825	0.1752899	0.23281032	2.6169850	21	4 9.7	21.7
456433 2006 VS_{28}	17.1	X	113.40357	28.70727	45.56952	9.77653	0.2933017	0.22475911	2.6791139	21	4 11.8	21.2
456434 2006 VY_{28}	17.3	X	171.97700	151.63801	257.52512	8.29228	0.0684981	0.23210717	2.6222676	21	4 12.8	21.3
456435 2006 VR_{31}	17.4	X	170.65048	13.74727	5.00564	5.13841	0.2984155	0.23047247	2.6346525	21	3 20.1	22.0
456436 2006 VZ_{35}	17.9	X	198.38536	326.49726	53.13675	2.80357	0.2268712	0.23525401	2.5988309	21	4 8.9	22.3
456437 2006 VD_{36}	17.3	X	171.91357	323.99020	54.72151	3.76173	0.2065186	0.22986405	2.6392995	21	3 18.3	21.6
456438 2006 VY_{46}	18.1	X	181.06194	46.95680	321.19948	1.41792	0.2211328	0.23075719	2.6324849	21	3 11.6	22.5
456439 2006 VO_{47}	17.9	X	119.48349	133.96295	328.92004	1.41041	0.1649143	0.23166571	2.6255979	21	5 5.5	21.8
456440 2006 VY_{59}	17.8	X	144.82897	337.09323	121.61014	2.69492	0.1030632	0.23542716	2.5975565	21	5 22.7	21.6
456441 2006 VP_{61}	17.4	X	147.85248	3.65449	49.24656	3.59641	0.2388619	0.22911148	2.6450760	21	4 9.6	21.7
456442 2006 VF_{63}	17.4	X	29.81848	233.88530	243.85739	6.78929	0.1778872	0.21494685	2.7600397	21	1 4.1	20.2
456443 2006 VZ_{66}	16.5	X	268.18129	42.11583	230.50082	13.37024	0.0564838	0.22811552	2.6527693	21	2 6.4	20.5
456444 2006 VM_{68}	17.7	X	184.52464	125.30486	252.36268	1.21412	0.2266067	0.23095581	2.6309754	21	3 25.6	22.3
456445 2006 VB_{77}	17.5	X	133.15086	309.28319	190.12953	3.69246	0.1288402	0.23993327	2.5649313	21	7 3.7	21.4
456446 2006 VW_{84}	16.9	X	242.61573	101.64885	262.90336	15.31351	0.1876877	0.24113206	2.5564232	21	4 24.1	21.3
456447 2006 VG_{87}	16.7	X	128.84872	136.56241	246.03404	13.86926	0.1056671	0.22160541	2.7044719	21	1 23.8	20.7
456448 2006 VD_{96}	16.9	X	166.26104	30.47948	51.05670	12.62744	0.0172085	0.23692093	2.5866267	21	5 17.7	20.2
456449 2006 VV_{97}	17.8	X	164.78926	60.53828	10.09284	5.11883	0.1482891	0.23489278	2.6014946	21	5 8.6	21.8
456450 2006 VN_{101}	17.9	X	158.12529	325.87674	82.39624	5.58447	0.2934858	0.23169558	2.6253722	21	4 16.8	22.5
456451 2006 VG_{102}	17.8	X	187.68412	149.77423	242.38814	6.52463	0.1896966	0.23538867	2.5978397	21	4 12.4	22.2
456452 2006 VR_{108}	17.6	X	243.41193	75.73480	284.32669	2.42961	0.2277953	0.24059954	2.5601939	21	4 19.1	21.8
456453 2006 VS_{108}	17.0	X	251.87882	119.18533	248.60275	13.55941	0.0922685	0.24120809	2.5558860	21	5 21.0	20.6
456454 2006 VR_{109}	16.8	X	169.94537	315.59494	78.65561	14.22084	0.2618606	0.23202018	2.6229230	21	4 11.9	21.6
456455 2006 VF_{112}	16.4	X	191.40026	88.63567	247.23197	26.28133	0.2499614	0.22814016	2.6525784	21	1 31.4	21.6
456456 2006 VZ_{122}	15.9	X	9.41336	280.21358	247.37392	24.65053	0.3262798	0.21655789	2.7463342	21	1 6.7	18.6
456457 2006 VL_{125}	17.3	X	142.05977	177.29591	245.68170	12.16767	0.2672789	0.22924708	2.6440328	21	4 15.3	21.9
456458 2006 VY_{125}	17.0	X	96.24794	131.64353	257.50084	2.92016	0.1282900	0.21873773	2.7280579	21	—	—
456459 2006 VZ_{125}	17.8	X	147.72251	58.51189	7.86419	4.10898	0.2325072	0.23292130	2.6161536	21	4 23.4	22.1
456460 2006 VK_{128}	17.1	X	103.42541	56.63162	8.29623	5.63923	0.0477865	0.22287010	2.6942311	21	2 12.2	20.7
456461 2006 VW_{131}	17.5	X	29.83865	33.26212	72.50163	9.76561	0.0769343	0.21494415	2.7600628	21	—	—
456462 2006 VU_{135}	18.0	X	102.24089	71.69957	45.70175	2.12289	0.1639929	0.22917916	2.6445552	21	5 4.8	21.6
456463 2006 VK_{136}	17.5	X	151.92860	96.14174	258.41210	1.49286	0.1726098	0.22104755	2.7090202	21	1 26.9	21.5
456464 2006 VS_{137}	17.5	X	22.35921	76.61515	79.63298	2.96014	0.0207951	0.22310098	2.6923720	21	2 17.3	20.9
456465 2006 VC_{140}	17.0	X	21.60516	270.27042	237.37178	7.33047	0.0144540	0.22062274	2.7124966	21	2 1.8	20.8
456466 2006 VA_{170}	17.6	X	98.54798	173.17667	235.59439	2.75297	0.1760861	0.21862670	2.7289814	21	2 1.7	21.1
456467 2006 WO_{8}	17.8	X	181.54780	199.46650	199.85173	4.01750	0.1817657	0.23312928	2.6145975	21	4 17.8	21.9
456468 2006 WV_{14}	17.5	X	153.36039	169.16349	247.16027	10.36399	0.1883505	0.22981086	2.6397067	21	4 10.9	21.9
456469 2006 WO_{15}	17.4	X	200.67696	294.59178	30.08111	3.73061	0.1920457	0.22952915	2.6418662	21	2 5.2	21.8
456470 2006 WP_{37}	17.8	X	83.89056	294.00060	115.33214	4.41410	0.1954852	0.21686369	2.7437518	21	1 15.8	21.0
456471 2006 WL_{40}	17.4	X	189.78266	149.07859	224.59530	13.10110	0.2791689	0.23243108	2.6198309	21	3 23.0	22.3
456472 2006 WM_{40}	17.9	X	175.18429	267.71107	116.42110	5.95261	0.1833078	0.22986642	2.6392814	21	3 27.6	22.2
456473 2006 WU_{41}	18.0	X	350.95208	262.58604	138.55901	3.27839	0.1828865	0.26594408	2.3948363	21	12 25.3	20.1
456474 2006 WV_{59}	17.3	X	120.89002	259.48621	232.62978	12.20418	0.2134158	0.23637930	2.5905765	21	6 19.1	21.4
456475 2006 WM_{60}	17.0	X	149.18418	273.24638	127.89936	13.59695	0.2653242	0.22970008	2.6405554	21	4 2.7	21.6
456476 2006 WK_{67}	15.0	X	190.41457	102.77698	92.27186	13.00125	0.1096997	0.12546556	3.9517217	21	11 2.6	21.2
456477 2006 WJ_{70}	17.9	X	170.71802	5.11551	35.53296	3.91649	0.1865887	0.23242417	2.6198827	21	4 10.5	22.1
456478 2006 WA_{72}	17.8	X	108.79679	253.11829	250.92900	3.00108	0.1582170	0.23591321	2.5939875	21	6 16.1	21.3
456479 2006 WP_{78}	16.5	X	191.05803	67.41050	260.60324	9.14298	0.2798975	0.22600281	2.6692760	21	1 31.4	21.4
456480 2006 WU_{92}	16.0	X	21.73062	259.51948	82.55319	4.87529	0.0929831	0.12620815	3.9362056	21	10 19.1	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456481 2006 WJ_{97}	18.2	X	178.56364	34.99226	11.64394	0.71949	0.1719505	0.23373509	2.6100777	21	4 23.5	22.5
456482 2006 WL_{99}	16.9	X	32.15500	54.64649	72.94299	8.59405	0.0642436	0.21890023	2.7267076	21	1 25.7	20.4
456483 2006 WW_{102}	17.4	X	50.07797	302.16827	243.86745	2.38057	0.1439914	0.23106481	2.6301479	21	5 17.9	20.1
456484 2006 WJ_{114}	18.1	X	70.65760	20.56205	152.59438	5.20498	0.1479966	0.23266704	2.6180593	21	6 4.4	21.4
456485 2006 WG_{116}	17.6	X	128.38913	133.21835	277.83555	4.05177	0.1625289	0.22543993	2.6737174	21	3 9.1	21.5
456486 2006 WJ_{124}	17.4	X	166.46424	243.56268	156.31282	5.71063	0.1582718	0.23010715	2.6374403	21	4 5.5	21.6
456487 2006 WT_{132}	17.8	X	255.43405	120.24705	232.97680	1.33651	0.0593372	0.23873447	2.5735106	21	5 10.3	21.2
456488 2006 WM_{138}	17.1	X	108.15919	189.46777	262.67678	11.68110	0.2158324	0.22608503	2.6686288	21	4 11.9	21.1
456489 2006 WE_{139}	17.3	X	186.69902	256.83733	117.58072	6.73638	0.3351005	0.23313797	2.6145325	21	3 29.2	22.2
456490 2006 WS_{140}	17.4	X	42.20933	262.63278	241.17124	9.01463	0.1792528	0.22272057	2.6954369	21	3 1.8	20.3
456491 2006 WJ_{148}	16.9	X	172.95469	283.42037	88.45710	13.32019	0.3103119	0.22910218	2.6451475	21	3 20.7	21.9
456492 2006 WF_{151}	16.9	X	178.15989	289.44558	47.57344	11.95329	0.1909045	0.22589150	2.6701529	21	2 4.3	21.5
456493 2006 WA_{154}	17.6	X	169.02374	109.81312	227.47474	4.10207	0.2452847	0.22542103	2.6738667	21	1 25.9	22.2
456494 2006 WG_{160}	16.4	X	102.39984	202.76335	299.30207	12.23694	0.1062819	0.22621213	2.6676292	21	5 28.3	20.2
456495 2006 WR_{164}	17.8	X	107.43250	164.89419	266.85711	2.05538	0.0912812	0.22396781	2.6854206	21	3 1.3	21.3
456496 2006 WH_{180}	17.7	X	113.02396	217.33313	156.04729	1.01423	0.0865831	0.21488171	2.7605974	21	—	—
456497 2006 WQ_{180}	17.1	X	64.25935	75.52767	77.42529	9.39302	0.0166977	0.23011212	2.6374023	21	4 13.0	20.7
456498 2006 WS_{181}	17.4	X	144.11122	216.58349	242.24933	9.99772	0.0908804	0.23452175	2.6042377	21	5 20.2	21.1
456499 2006 WW_{183}	17.0	X	188.80348	108.82159	283.50148	11.34708	0.2851018	0.23066098	2.6332169	21	4 11.9	22.0
456500 2006 WX_{191}	17.0	X	97.56465	41.94805	67.61584	13.70851	0.1252779	0.22703066	2.6612134	21	4 18.5	20.7
456501 2006 WB_{199}	17.7	X	136.50789	352.99616	80.07665	7.83050	0.2227544	0.23014674	2.6371379	21	4 24.8	22.0
456502 2006 WH_{199}	16.9	X	334.12039	348.97393	254.32902	5.21286	0.0687108	0.22979095	2.6398592	21	3 26.9	20.4
456503 2006 WY_{201}	17.9	X	127.70201	48.88493	44.22014	2.66737	0.1766872	0.22533984	2.6745090	21	5 4.2	22.0
456504 2006 WR_{202}	17.2	X	206.01605	299.61692	84.06037	9.71051	0.2074478	0.23561700	2.5961611	21	4 23.1	21.7
456505 2006 XK_{12}	17.2	X	171.78045	119.83403	261.53438	10.45497	0.3141225	0.22961163	2.6412335	21	3 19.4	22.2
456506 2006 XK_{24}	16.6	X	122.10816	288.30386	97.15159	14.13899	0.2129176	0.21878095	2.7276986	21	2 10.9	20.7
456507 2006 XG_{29}	17.4	X	155.56583	174.42762	217.04328	3.63622	0.1848063	0.22632636	2.6667315	21	3 15.4	21.7
456508 2006 XV_{29}	16.6	X	191.83914	292.53900	103.70604	12.96019	0.2788987	0.23302330	2.6153902	21	4 29.1	21.5
456509 2006 XJ_{39}	17.1	X	96.29776	350.31193	103.88911	10.23966	0.1340988	0.22027718	2.7153327	21	3 29.3	20.8
456510 2006 XW_{40}	16.9	X	99.49301	341.25472	91.17973	15.00462	0.2267747	0.22222333	2.6994562	21	3 21.8	20.8
456511 2006 XA_{53}	17.4	X	123.83930	42.69868	5.17553	3.12345	0.2724581	0.22199412	2.7013140	21	3 16.1	21.6
456512 2006 XX_{62}	16.9	X	72.12349	114.10792	97.96730	13.99827	0.2201705	0.23141899	2.6274637	21	8 13.6	20.6
456513 2006 XR_{64}	16.9	X	182.32005	115.06077	251.49938	11.78325	0.2945746	0.22963159	2.6410804	21	3 8.1	21.9
456514 2006 XD_{72}	17.5	X	179.42746	279.56598	125.66270	3.16039	0.1157714	0.23336745	2.6128182	21	4 22.4	21.5
456515 2006 XM_{73}	16.9	X	338.28998	78.20620	105.21344	8.62809	0.1584898	0.21047360	2.7990090	21	1 7.4	20.2
456516 2006 YJ_{12}	16.9	X	61.87733	3.11537	108.65568	6.23424	0.1157905	0.21530846	2.7569485	21	2 24.0	20.2
456517 2006 YG_{19}	16.9	X	132.08308	169.89855	321.94198	11.65484	0.1127480	0.22958557	2.6414334	21	6 22.3	21.0
456518 2006 YT_{21}	17.6	X	123.23516	221.00183	227.73026	11.23328	0.1298248	0.23063831	2.6333894	21	4 16.1	21.3
456519 2006 YL_{32}	17.3	X	155.41121	125.80195	327.55442	5.22096	0.2002280	0.23143755	2.6273232	21	5 31.8	21.7
456520 2006 YP_{32}	16.4	X	228.36505	30.43625	310.02457	10.76045	0.1628110	0.22524266	2.6752782	21	3 14.0	20.9
456521 2006 YS_{33}	16.7	X	60.41302	185.57436	320.98467	8.21224	0.2368583	0.21974077	2.7197498	21	4 20.6	19.7
456522 2006 YE_{41}	16.9	X	81.66032	184.51072	240.08664	2.09322	0.0495902	0.21412225	2.7671212	21	1 13.5	20.5
456523 2006 YX_{44}	16.6	X	147.73825	338.45667	104.53542	34.89707	0.2036090	0.23361805	2.6109494	21	5 26.5	21.4
456524 2006 YC_{45}	16.8	X	183.78962	319.03620	82.33694	13.95506	0.1146223	0.23233047	2.6205871	21	4 26.4	21.0
456525 2006 YR_{53}	17.4	X	102.54442	158.97513	353.34872	4.73785	0.1487533	0.22814202	2.6525640	21	6 18.5	21.1
456526 2006 YC_{54}	17.0	X	163.38335	129.66495	298.59265	6.39006	0.1140611	0.22583709	2.6705817	21	5 1.6	21.2
456527 2006 YK_{54}	16.6	X	96.31348	172.35650	306.47328	14.20429	0.0311131	0.22079966	2.7110475	21	4 1.1	20.6
456528 2007 AP_{1}	16.4	X	84.06475	314.85821	115.33897	16.63220	0.1732102	0.21354141	2.7721367	21	2 12.2	19.8
456529 2007 AL_{20}	17.4	X	171.02061	88.16680	314.47299	10.50236	0.2871026	0.22768857	2.6560846	21	4 11.8	22.4
456530 2007 AV_{23}	16.4	X	86.17836	256.59419	285.00817	11.98599	0.2208937	0.22865313	2.6486096	21	7 17.3	20.0
456531 2007 AC_{25}	16.7	X	81.29022	201.75817	294.14636	13.82530	0.1224266	0.22263020	2.6961662	21	4 18.4	20.5
456532 2007 AX_{27}	16.4	X	179.04419	299.37515	112.48233	17.76674	0.1829920	0.22814454	2.6525444	21	5 8.5	21.1
456533 2007 AS_{28}	16.8	X	124.08412	46.72187	114.47549	8.80384	0.1501846	0.23133321	2.6281131	21	7 25.0	20.6
456534 2007 AG_{29}	16.3	X	75.61329	238.17926	302.63834	14.43569	0.0958529	0.22664680	2.6642174	21	6 13.9	19.9
456535 2007 AJ_{30}	17.1	X	72.10745	324.32137	126.56241	8.95457	0.1921291	0.21496607	2.7598751	21	2 22.5	20.2
456536 2007 BA	18.9	X	172.88293	204.74959	293.21946	12.81420	0.3096242	0.44519320	1.6986492	21	8 13.9	21.7
456537 2007 BG	19.5	X	62.70118	133.38953	168.29546	12.75493	0.3305785	1.41251563	0.7866965	21	2 9.1	17.5
456538 2007 BX_{1}	17.6	X	173.83995	217.20432	199.64149	1.63337	0.0755243	0.22791417	2.6543315	21	4 28.8	21.4
456539 2007 BR_{2}	16.6	X	133.26593	118.45961	330.54251	12.63433	0.1441291	0.22304393	2.6928311	21	4 25.5	21.0
456540 2007 BA_{6}	16.7	X	161.78167	119.51634	337.55239	12.36767	0.1423639	0.23228354	2.6209401	21	6 8.4	21.0
456541 2007 BN_{9}	16.4	X	41.97935	37.95704	105.02918	14.79800	0.1377830	0.21593944	2.7515753	21	3 10.7	19.7
456542 2007 BK_{10}	17.1	X	83.55276	58.33792	23.53087	3.46828	0.0695084	0.21249679	2.7812144	21	2 11.5	20.7
456543 2007 BG_{12}	16.7	X	160.76691	67.73230	319.68736	10.58608	0.1414284	0.21900865	2.7258076	21	3 10.5	21.0
456544 2007 BE_{18}	17.0	X	91.41423	174.02072	315.11585	7.01638	0.2158262	0.22249403	2.6972662	21	5 12.4	20.8
456545 2007 BG_{18}	16.1	X	20.74865	187.26999	307.34507	24.76188	0.1053024	0.20953668	2.8073465	21	1 18.9	19.4
456546 2007 BX_{24}	17.0	X	14.98546	334.02292	120.54527	15.09098	0.1500316	0.20342268	2.8633195	21	—	—
456547 2007 BX_{27}	16.9	X	92.52696	206.38212	313.06824	11.16531	0.0908170	0.22770811	2.6559326	21	6 6.0	20.6
456548 2007 BC_{42}	16.7	X	55.34438	203.72326	311.60261	13.74564	0.1021432	0.21896683	2.7261547	21	4 1.0	20.3
456549 2007 BS_{47}	16.2	X	263.53062	93.32659	132.09159	15.15634	0.1403786	0.19878240	2.9077078	21	—	—
456550 2007 BP_{53}	17.4	X	195.03804	285.97148	96.69777	3.94668	0.1018361	0.22383796	2.6864590	21	4 10.9	21.5
456551 2007 BL_{55}	16.4	X	185.13312	325.49380	111.33797	22.77977	0.0314585	0.23150902	2.6267824	21	6 10.5	20.3
456552 2007 BF_{57}	17.5	X	118.64038	304.58363	108.00553	9.89251	0.3494282	0.21963367	2.7206339	21	3 29.9	22.0
456553 2007 BS_{58}	16.4	X	145.21618	150.91530	306.51371	12.12153	0.1467263	0.22638482	2.6662724	21	5 22.6	20.8
456554 2007 BV_{61}	17.8	X	157.40938	102.99025	317.15540	4.84679	0.3496761	0.22945960	2.6424000	21	4 28.9	22.7
456555 2007 BJ_{62}	16.3	X	26.94862	224.65401	331.10510	28.36133	0.2243182	0.21682652	2.7440654	21	4 2.5	19.5
456556 2007 BU_{76}	17.3	X	134.32618	112.62088	304.53350	7.30784	0.1697645	0.22080181	2.7110298	21	3 22.8	21.5
456557 2007 BW_{77}	16.6	X	353.02099	299.78915	331.07970	13.82799	0.0929076	0.22669057	2.6638744	21	6 2.8	20.0
456558 2007 BE_{100}	17.3	X	151.59469	82.39945	309.71401	5.28942	0.0210859	0.21648670	2.7469362	21	2 25.2	21.0
456559 2007 BC_{101}	16.3	X	289.68481	311.80240	310.20025	8.25134	0.1070875	0.21247729	2.7813845	21	2 18.3	20.2
456560 2007 CT_{1}	16.7	X	35.39983	332.22850	298.99534	13.73091	0.0866881	0.23983577	2.5656264	21	8 14.1	19.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456561 2007 CE_6	17.2	X	153.98289	274.26350	102.53301	9.48584	0.3827591	0.22297355	2.6933977	21	3 15.5	22.3
456562 2007 CX_6	16.1	X	299.63816	350.56790	290.19548	11.89779	0.1559819	0.22258550	2.6965272	21	3 12.6	20.1
456563 2007 CO_{16}	17.3	X	82.08293	166.98768	297.86532	11.82750	0.1756364	0.21898035	2.7260425	21	3 17.4	20.9
456564 2007 CQ_{16}	17.1	X	22.73165	269.00917	293.30811	10.12386	0.1432369	0.22254381	2.6968639	21	4 14.6	20.3
456565 2007 CH_{20}	17.3	X	111.49414	337.69004	132.28589	9.49565	0.1806891	0.22377394	2.6869714	21	5 12.2	21.3
456566 2007 CC_{21}	16.4	X	33.37502	38.70128	134.53461	14.58391	0.1407131	0.21726479	2.7403738	21	4 5.8	19.6
456567 2007 CN_{30}	16.4	X	50.65184	143.36408	316.83569	7.86944	0.1002159	0.20955020	2.8072257	21	1 20.6	19.7
456568 2007 CD_{32}	17.8	X	119.78190	277.91922	131.95973	2.61407	0.0870402	0.21333803	2.7738982	21	2 19.7	21.6
456569 2007 CH_{33}	17.1	X	334.86824	303.55927	315.39925	4.40208	0.1141579	0.22126524	2.7072431	21	4 14.1	20.5
456570 2007 CO_{44}	17.4	X	64.28970	211.14005	316.67998	10.35611	0.1415720	0.22238162	2.6981751	21	5 12.7	20.9
456571 2007 DY_3	17.3	X	36.41412	17.81528	165.93877	11.18908	0.2220859	0.21632177	2.7483323	21	5 2.2	20.0
456572 2007 DB_{13}	16.8	X	54.58397	210.97800	332.68921	17.35894	0.1703307	0.22077546	2.7112455	21	5 21.9	20.4
456573 2007 DQ_{16}	16.5	X	131.78579	135.33149	340.65530	21.46879	0.0661686	0.22525426	2.6751863	21	5 18.6	20.8
456574 2007 DV_{16}	17.3	X	64.67397	355.35441	74.32455	2.97033	0.0440619	0.20409691	2.8570100	21	—	—
456575 2007 DW_{18}	17.4	X	123.01766	93.08099	0.95025	0.87582	0.1118032	0.21951269	2.7216334	21	4 22.7	21.3
456576 2007 DV_{20}	17.4	X	40.08686	251.26568	345.96040	8.47539	0.3419087	0.22133263	2.7066935	21	8 19.9	20.2
456577 2007 DZ_{21}	17.5	X	28.86506	259.99661	324.42263	1.43535	0.0262869	0.22332046	2.6906076	21	5 26.6	20.8
456578 2007 DL_{27}	17.1	X	59.44239	160.78442	6.56770	4.44426	0.2246336	0.21800987	2.7341265	21	5 20.2	20.1
456579 2007 DK_{28}	17.1	X	58.00591	81.33401	140.23396	6.87435	0.0727690	0.22647017	2.6656025	21	7 10.3	20.5
456580 2007 DF_{32}	16.6	X	258.86450	53.86385	158.19078	13.02423	0.2110210	0.19247637	2.9708754	21	—	—
456581 2007 DG_{33}	16.7	X	97.98946	150.14545	350.61329	13.79106	0.0422168	0.22013345	2.7165145	21	5 6.8	20.6
456582 2007 DU_{34}	17.1	X	346.10926	88.83137	163.06559	10.92106	0.1433486	0.21601661	2.7509199	21	4 26.4	20.3
456583 2007 DJ_{39}	17.3	X	52.84195	20.80099	162.69259	13.89554	0.1344717	0.21713349	2.7414784	21	5 22.5	20.8
456584 2007 DC_{50}	16.3	X	64.05056	200.84390	14.54166	20.06259	0.2195661	0.22466351	2.6798739	21	8 14.3	20.2
456585 2007 DK_{51}	16.2	X	34.08764	248.24829	336.84544	13.02827	0.2136471	0.22173017	2.7034574	21	6 26.6	19.1
456586 2007 DL_{55}	16.7	X	188.78185	254.29438	72.99604	2.97433	0.0677980	0.20376979	2.8600668	21	1 27.2	20.8
456587 2007 DU_{58}	16.7	X	104.60582	280.71113	163.28898	15.00965	0.1264485	0.21364093	2.7712758	21	3 22.9	20.4
456588 2007 DH_{60}	17.0	X	74.12770	21.45714	158.52628	11.65990	0.1619894	0.22329096	2.6908447	21	6 21.4	20.7
456589 2007 DN_{60}	16.4	X	33.62804	232.79766	345.13975	12.86031	0.1452433	0.22107874	2.7087654	21	6 1.6	19.7
456590 2007 DD_{93}	16.9	X	105.20214	354.86322	148.24222	14.29133	0.1860840	0.22374761	2.6871822	21	6 16.2	21.1
456591 2007 DO_{103}	16.8	X	20.27732	188.31769	349.01682	8.98482	0.0992431	0.21145771	2.7903180	21	3 13.0	20.0
456592 2007 ES_{12}	17.1	X	40.80235	1.68526	164.88590	15.13361	0.2340750	0.21433582	2.7652828	21	4 18.3	19.8
456593 2007 EX_{14}	17.0	X	82.87563	35.91652	165.76048	3.03073	0.2440176	0.22672128	2.6636339	21	8 12.4	20.9
456594 2007 EB_{25}	16.3	X	136.20608	109.91554	16.68475	17.26615	0.1439298	0.22242003	2.6978644	21	6 21.0	20.8
456595 2007 EJ_{41}	16.8	X	9.40323	273.16738	287.33080	1.74160	0.1995403	0.21201019	2.7854683	21	3 20.4	19.4
456596 2007 EO_{75}	16.5	X	196.14439	33.35250	6.21579	6.46053	0.0517246	0.21660305	2.7459524	21	4 30.3	20.5
456597 2007 EF_{82}	16.4	X	75.19055	186.38114	17.57895	16.98398	0.1973130	0.22454264	2.6808355	21	8 7.7	20.4
456598 2007 EQ_{104}	17.5	X	92.98937	99.20145	2.05322	7.38046	0.1867289	0.21425982	2.7659366	21	4 5.2	21.2
456599 2007 ET_{138}	17.0	X	25.62043	94.44830	145.24816	12.72982	0.2263144	0.22329103	2.6908441	21	6 30.7	19.6
456600 2007 ED_{146}	17.5	X	234.52776	195.39812	148.90426	6.64129	0.0309791	0.21482737	2.7610629	21	4 10.2	21.4
456601 2007 EE_{146}	16.5	X	236.64204	353.66934	20.99515	6.25786	0.0673226	0.22179298	2.7029469	21	5 14.6	20.5
456602 2007 EY_{155}	16.5	X	64.44674	169.19518	344.14656	12.55724	0.0968794	0.21397871	2.7683586	21	4 15.2	20.2
456603 2007 EB_{157}	16.6	X	24.46054	205.34647	32.94449	9.97922	0.1187980	0.21805747	2.7337286	21	6 13.7	19.8
456604 2007 EK_{161}	16.9	X	84.91025	311.40893	146.75795	5.77949	0.1314834	0.21075968	2.7964755	21	3 15.5	20.5
456605 2007 ER_{188}	16.8	X	348.62714	50.96989	179.67125	12.62381	0.1497452	0.21310502	2.7759199	21	3 28.9	19.7
456606 2007 EV_{217}	16.6	X	323.82173	237.51063	34.12857	5.30170	0.1120178	0.21142527	2.7906034	21	4 18.3	19.9
456607 2007 ET_{218}	16.9	X	35.41345	134.32903	44.26863	11.29169	0.2447965	0.21284659	2.7781664	21	4 23.0	19.3
456608 2007 FU_7	16.9	X	123.89289	87.62712	295.80672	1.03645	0.0797816	0.20279797	2.8691966	21	1 23.5	20.9
456609 2007 FR_{35}	15.7	X	191.22894	111.15270	136.91805	26.80064	0.2172091	0.17976511	3.1093226	21	12 31.1	21.2
456610 2007 FL_{42}	16.1	X	71.47430	24.76117	197.65859	36.03314	0.2996868	0.22407860	2.6845353	21	8 30.3	20.6
456611 2007 GV_{11}	16.4	X	324.39646	118.84762	171.54074	19.81796	0.3281377	0.21307786	2.7761558	21	4 12.3	19.8
456612 2007 GD_{14}	16.8	X	62.21089	128.39202	47.58074	9.86598	0.1374601	0.21806239	2.7336875	21	5 23.2	20.1
456613 2007 GE_{36}	16.8	X	37.61640	138.01447	50.90398	9.34214	0.1222190	0.21208239	2.7848361	21	4 30.3	19.9
456614 2007 GP_{39}	16.6	X	271.71628	256.82954	47.47857	7.11483	0.0617956	0.20667635	2.8331889	21	4 1.9	20.6
456615 2007 GQ_{60}	15.8	X	147.79830	36.84257	233.43092	8.85807	0.0847588	0.17619061	3.1512356	21	12 19.8	20.7
456616 2007 GB_{71}	17.2	X	20.19733	42.36097	169.58051	2.58267	0.1106701	0.21422183	2.7662637	21	4 30.8	20.2
456617 2007 GK_{77}	16.4	X	223.80076	279.55473	64.88180	10.44659	0.0586544	0.20352674	2.8623434	21	3 31.2	20.7
456618 2007 HB	19.6	X	247.78688	103.79848	67.34865	23.27008	0.3973851	0.32192155	2.1084793	21	11 21.8	22.1
456619 2007 HU_3	16.8	X	36.88187	170.34810	71.28952	16.17295	0.2032243	0.21844492	2.7304952	21	7 27.1	20.0
456620 2007 HQ_{40}	16.7	X	157.54133	217.64663	106.80288	2.23732	0.2179872	0.18414905	3.0597767	21	1 6.9	21.5
456621 2007 HE_{41}	16.0	X	176.49738	15.87150	230.86641	13.04081	0.1617832	0.17568010	3.1573374	21	12 17.1	21.2
456622 2007 HW_{41}	16.8	X	186.97974	183.52858	41.86269	0.36400	0.1175028	0.18127563	3.0920257	21	12 5.6	21.6
456623 2007 HU_{74}	16.1	X	194.84017	173.22812	61.70131	11.64522	0.0865162	0.17744268	3.1363943	21	12 25.5	20.9
456624 2007 HS_{95}	16.2	X	175.43583	52.74942	234.27153	6.07764	0.1141674	0.18175405	3.0865974	21	—	—
456625 2007 JR_{19}	16.3	X	197.24238	16.41339	222.37861	12.14257	0.0605477	0.18073817	3.0981525	21	—	—
456626 2007 JL_{25}	16.5	X	174.93697	159.15853	88.12066	10.56361	0.0539808	0.17505112	3.1648961	21	12 21.4	21.3
456627 Cristianmartins	16.7	X	331.54446	180.95372	92.41766	10.20464	0.1134203	0.21274989	2.7790081	21	5 6.1	20.1
456628 2007 LG_{16}	16.0	X	89.31461	268.39505	144.18697	11.62700	0.1101466	0.18943786	3.0025589	21	1 21.8	20.0
456629 2007 LK_{19}	16.0	X	147.68745	216.67706	121.68436	18.27730	0.2050541	0.18137186	3.0909320	21	1 13.6	21.0
456630 2007 LP_{33}	15.4	X	197.39813	357.42765	319.23504	24.46475	0.2837248	0.17743362	3.1365011	21	2 1.6	21.1
456631 2007 PN_{11}	17.5	X	27.12269	355.83717	325.58242	9.50109	0.2207492	0.28849842	2.2683345	21	11 10.2	20.2
456632 2007 PJ_{15}	15.9	X	227.39565	299.71400	342.44104	10.09320	0.2880614	0.18104290	3.0946751	21	1 13.6	21.6
456633 2007 PJ_{19}	17.2	X	283.29207	358.98257	310.49397	3.82533	0.1986207	0.26695122	2.3888091	21	3 24.3	20.7
456634 2007 PE_{25}	17.6	X	320.27049	208.79511	110.87712	7.86970	0.2806606	0.27528152	2.3403709	21	5 18.9	19.9
456635 2007 PD_{38}	16.9	X	271.05938	48.49944	309.28535	5.37818	0.2704041	0.26747914	2.3856649	21	5 4.9	20.7
456636 2007 PN_{45}	16.4	X	265.49701	329.53992	103.17125	24.12016	0.1477878	0.28114324	2.3077262	21	9 8.9	19.7
456637 2007 PR_{48}	16.8	X	255.31743	342.67933	20.73502	24.33565	0.2023828	0.26803174	2.3823848	21	4 29.2	20.6
456638 2007 QN_6	17.7	X	243.64646	24.32730	331.14796	9.01431	0.2275134	0.26423763	2.4051358	21	4 8.9	21.8
456639 2007 QP_6	17.6	X	279.31764	113.67078	244.22256	0.43711	0.2021594	0.27171671	2.3607961	21	5 24.9	20.8
456640 2007 QJ_9	17.4	X	271.20959	208.62604	167.92117	7.54464	0.2371563	0.27166587	2.3610907	21	6 6.3	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456641 2007 QL_{9}	18.2	X	283.04312	158.23268	201.96070	1.29308	0.2460051	0.27179399	2.3603486	21	5 26.6	21.1
456642 2007 QM_{13}	17.7	X	249.39409	128.83717	326.02605	4.89865	0.1708519	0.28015249	2.3131638	21	9 4.5	20.5
456643 2007 QC_{15}	15.8	X	129.57623	41.47391	337.00021	7.94322	0.0776280	0.17465422	3.1696890	21	1 30.6	20.4
456644 2007 QL_{17}	17.9	X	252.00773	101.70288	273.03815	1.45071	0.1736499	0.26816933	2.3815698	21	5 20.0	21.3
456645 2007 RJ_{4}	17.7	X	323.51725	337.03075	358.20773	6.27056	0.2362928	0.27692817	2.3310842	21	6 27.3	19.6
456646 2007 RJ_{5}	16.4	X	52.20944	324.69951	132.55176	10.73400	0.0626300	0.17743204	3.1365197	21	1 23.5	20.6
456647 2007 RH_{15}	17.7	X	311.13435	113.85518	203.56180	2.16240	0.2560080	0.27099915	2.3649616	21	5 2.7	20.4
456648 2007 RK_{18}	17.8	X	239.29583	139.01586	246.05458	0.36435	0.2114457	0.26540240	2.3980937	21	5 17.9	21.4
456649 2007 RU_{18}	17.8	X	306.52529	115.58675	188.00193	1.68620	0.2081755	0.26891027	2.3771931	21	4 14.4	20.8
456650 2007 RY_{18}	17.4	X	254.70521	346.37292	14.25035	2.61217	0.2065796	0.26510840	2.3998664	21	4 30.8	21.1
456651 2007 RT_{19}	18.3	X	196.45582	96.60506	197.93902	24.38432	0.3767352	0.38777317	1.8624482	21	—	—
456652 2007 RA_{21}	17.8	X	295.87406	207.08289	142.49390	1.78619	0.1968940	0.27352216	2.3503960	21	6 5.8	20.3
456653 2007 RB_{21}	18.1	X	243.83593	205.72609	146.60332	1.76522	0.2029774	0.26343936	2.4099920	21	4 11.6	21.9
456654 2007 RV_{22}	18.0	X	277.90245	136.21250	228.94178	1.59356	0.2326610	0.27142017	2.3625153	21	5 29.0	21.1
456655 2007 RY_{23}	18.0	X	302.36240	112.13044	240.54801	1.18997	0.2580932	0.27437765	2.3455079	21	6 9.4	20.5
456656 2007 RF_{33}	17.1	X	330.14782	259.26925	64.47641	7.30759	0.1382355	0.27560881	2.3385176	21	7 8.5	19.2
456657 2007 RO_{33}	17.7	X	278.60554	294.13889	47.46448	5.46250	0.2548806	0.26764950	2.3846525	21	4 25.9	21.3
456658 2007 RF_{37}	17.7	X	254.07989	358.38871	12.36564	1.26340	0.2019847	0.26615393	2.3935773	21	5 14.1	21.4
456659 2007 RL_{37}	17.8	X	260.88611	334.57701	21.89726	1.59746	0.1990074	0.26583885	2.3954682	21	5 2.6	21.4
456660 2007 RN_{38}	17.7	X	76.36992	186.79141	140.48520	5.51801	0.2065928	0.29692222	2.2252266	21	—	—
456661 2007 RD_{54}	17.5	X	271.05286	35.16246	308.92980	4.36092	0.1948376	0.26593911	2.3948661	21	4 25.8	21.2
456662 2007 RF_{55}	17.9	X	19.17294	351.36841	300.55858	3.92869	0.0746875	0.27693189	2.3310633	21	8 21.7	20.4
456663 2007 RJ_{55}	17.2	X	302.01314	162.62423	183.32659	11.08346	0.2458703	0.27104933	2.3646697	21	6 2.6	20.2
456664 2007 RQ_{55}	16.7	X	203.03915	124.68534	245.63669	3.89059	0.1375737	0.18447550	3.0561658	21	4 3.5	21.7
456665 2007 RH_{59}	17.5	X	262.11538	255.05402	177.08293	8.90388	0.2227058	0.27702600	2.3305354	21	8 10.8	20.7
456666 2007 RO_{60}	17.9	X	305.47217	168.99156	202.95196	5.10247	0.1836511	0.27757504	2.3274611	21	7 27.3	20.1
456667 2007 RK_{66}	17.9	X	240.35564	224.89185	171.68697	4.80022	0.2275683	0.26865459	2.3787011	21	6 2.3	21.7
456668 2007 RX_{76}	17.9	X	286.88366	195.55661	165.63612	6.64021	0.1466488	0.27324857	2.3519646	21	6 18.2	20.8
456669 2007 RJ_{78}	18.5	X	237.36163	218.37022	174.06242	3.92653	0.2140700	0.26748427	2.3856344	21	5 26.2	22.2
456670 2007 RH_{80}	16.3	X	305.55280	274.48621	345.27252	13.40180	0.1342859	0.18915792	3.0055205	21	3 7.8	20.2
456671 2007 RK_{82}	18.2	X	245.27872	17.98722	352.48785	5.87680	0.2348246	0.26547284	2.3976695	21	4 30.8	22.1
456672 2007 RM_{82}	18.2	X	112.75419	262.56330	355.20018	4.47857	0.1506110	0.29324954	2.2437674	21	11 18.8	21.6
456673 2007 RG_{91}	17.9	X	258.63773	210.66057	158.00563	1.64466	0.1850591	0.26672289	2.3901722	21	5 18.6	21.2
456674 2007 RF_{98}	17.7	X	239.07192	269.60623	159.73353	6.85096	0.0827196	0.27169153	2.3609420	21	7 29.1	20.8
456675 2007 RG_{112}	18.2	X	245.94186	179.83934	187.64807	2.41808	0.2014326	0.26389659	2.4072075	21	5 2.8	22.0
456676 2007 RM_{112}	18.1	X	152.08908	261.87715	359.04496	6.08407	0.1683879	0.29940818	2.2128923	21	—	—
456677 Yepeijian	17.6	X	238.84907	190.33918	154.78982	4.19098	0.2030429	0.26017067	2.4301355	21	3 29.8	21.4
456678 2007 RF_{124}	17.6	X	244.16942	233.10405	140.46182	2.06796	0.2229263	0.26537785	2.3982416	21	5 7.5	21.3
456679 2007 RX_{126}	17.9	X	281.59124	164.79503	172.41939	1.17297	0.2032316	0.26675542	2.3899779	21	4 29.8	21.1
456680 2007 RK_{134}	17.7	X	267.88123	279.95746	67.91665	4.16081	0.2170512	0.26647196	2.3916725	21	4 27.9	21.1
456681 2007 RO_{134}	17.9	X	279.26170	254.60458	108.68185	3.12462	0.2456025	0.27024321	2.3693698	21	5 26.8	21.0
456682 2007 RV_{139}	17.7	X	261.39002	34.08576	330.05377	1.58291	0.2295670	0.26758110	2.3850588	21	5 9.6	21.3
456683 2007 RP_{151}	15.7	X	208.54240	344.87634	291.24260	9.29600	0.1861276	0.17556959	3.1586622	21	—	—
456684 2007 RL_{156}	16.2	X	40.96463	301.76924	173.63548	9.01094	0.0566477	0.17530465	3.1618439	21	1 29.2	20.4
456685 2007 RZ_{156}	17.8	X	233.24799	334.70185	26.35642	1.43337	0.1787072	0.26245689	2.4160026	21	4 13.8	21.7
456686 2007 RD_{158}	17.5	X	226.56617	250.80808	127.79379	3.03250	0.2262511	0.26255243	2.4154165	21	4 28.9	21.5
456687 2007 RQ_{163}	18.2	X	284.45084	216.46370	200.04095	6.09698	0.1076042	0.28182298	2.3040140	21	9 10.6	20.8
456688 2007 RR_{163}	16.1	X	323.60703	222.48294	301.79171	6.18674	0.0863216	0.17061870	3.2194743	21	—	—
456689 2007 RU_{165}	18.0	X	75.84315	340.25170	323.23447	4.13055	0.1512664	0.29356372	2.2421662	21	12 11.1	21.2
456690 2007 RY_{165}	15.8	X	348.09239	191.44768	346.94603	28.28391	0.1535231	0.17776631	3.1325866	21	2 5.3	20.0
456691 2007 RE_{195}	17.8	X	230.60528	46.91069	339.92531	3.73231	0.2089831	0.26336137	2.4104678	21	5 11.2	21.7
456692 2007 RJ_{206}	18.5	X	223.69192	301.99781	108.54773	2.13441	0.1663798	0.26583309	2.3955028	21	6 8.5	22.1
456693 2007 RM_{207}	17.7	X	260.06087	233.24376	129.24371	3.14598	0.1847521	0.26593255	2.3949055	21	5 12.6	21.2
456694 2007 RB_{210}	18.2	X	210.52646	328.23278	115.24664	3.41562	0.1750303	0.26791640	2.3830684	21	7 8.3	21.8
456695 2007 RT_{212}	17.5	X	239.13604	123.23807	250.78919	4.41896	0.2136586	0.26455111	2.4032354	21	5 2.7	21.4
456696 2007 RK_{213}	18.1	X	271.26591	170.38776	183.08783	1.09167	0.2010558	0.26844543	2.3799365	21	5 9.9	21.4
456697 2007 RO_{219}	17.5	X	286.30262	255.56021	100.78221	6.63899	0.2852537	0.27114585	2.3641085	21	5 20.9	20.7
456698 2007 RT_{223}	17.9	X	233.61309	57.29439	20.60534	7.90361	0.0714458	0.26990433	2.3713527	21	8 9.2	21.1
456699 2007 RL_{234}	17.7	X	294.61396	197.11530	129.53840	6.08848	0.2459782	0.26832542	2.3806461	21	4 27.4	20.9
456700 2007 RU_{240}	17.3	X	254.41743	127.08865	230.54659	5.56007	0.1631193	0.26580837	2.3956514	21	4 30.9	20.8
456701 2007 RV_{241}	17.9	X	255.03126	161.30148	197.61341	0.73918	0.3112047	0.26532224	2.3985767	21	4 20.9	21.9
456702 2007 RL_{244}	18.4	X	201.09571	332.32158	60.17792	2.02310	0.1971413	0.25775075	2.4453222	21	4 25.0	22.5
456703 2007 RM_{244}	18.5	X	222.72382	345.72370	57.27843	2.28029	0.1819390	0.26353179	2.4094285	21	5 27.5	22.1
456704 2007 RY_{244}	18.4	X	332.29959	195.42072	165.21259	5.53446	0.1174828	0.27870805	2.3211491	21	9 13.4	20.2
456705 2007 RZ_{251}	17.4	X	278.24802	194.29591	211.62259	6.03529	0.1186328	0.27600849	2.3362595	21	8 12.4	20.3
456706 2007 RF_{253}	17.6	X	261.20027	20.76855	33.86017	6.61606	0.1674617	0.26975020	2.3722559	21	7 28.2	20.8
456707 2007 RV_{265}	18.2	X	229.54914	107.97751	262.65456	0.70243	0.2152776	0.26210062	2.4181915	21	4 20.5	22.1
456708 2007 RL_{273}	17.5	X	217.58467	106.47209	275.55757	1.56715	0.1701748	0.25974772	2.4327728	21	4 25.8	21.5
456709 2007 RV_{286}	18.3	X	280.28804	64.58537	286.69641	0.59658	0.2058935	0.26937301	2.3744699	21	5 16.4	21.2
456710 2007 RX_{287}	18.5	X	192.91800	226.47513	156.40066	3.60886	0.2136070	0.25469818	2.4648216	21	4 7.2	22.5
456711 2007 RG_{289}	16.4	X	88.91155	290.76681	11.87540	15.65675	0.1449965	0.22390025	2.6859607	21	12 9.1	20.8
456712 2007 RD_{290}	17.4	X	277.04449	1.13950	0.53498	12.19674	0.2324978	0.26818918	2.3814522	21	5 19.2	21.0
456713 2007 RU_{290}	17.8	X	231.14255	23.68024	37.32422	5.51886	0.2209926	0.26710034	2.3879199	21	6 25.4	21.6
456714 2007 RF_{292}	18.4	X	190.12016	321.50514	133.67391	1.69131	0.1474999	0.26610408	2.3938762	21	7 4.7	22.2
456715 2007 RG_{292}	18.0	X	204.14993	297.16209	159.16022	2.35193	0.1665499	0.26853284	2.3794200	21	7 19.2	21.6
456716 2007 RY_{293}	18.2	X	175.46005	72.52465	61.36983	2.99365	0.1086152	0.27195794	2.3593999	21	8 12.4	21.7
456717 2007 RV_{295}	17.6	X	273.66334	289.04527	33.00133	6.40815	0.1500623	0.26221001	2.4175189	21	4 8.3	20.8
456718 2007 RP_{298}	18.2	X	229.62332	14.15967	32.03985	5.17129	0.2081867	0.26552573	2.3973511	21	6 4.9	22.2
456719 2007 RL_{301}	18.2	X	238.41621	224.55695	199.81802	1.08877	0.1598079	0.27036682	2.3686476	21	7 12.8	21.7
456720 2007 RY_{316}	17.7	X	46.71664	95.36507	213.43984	4.79670	0.1833475	0.28728936	2.2746942	21	11 18.3	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456721 2007 RK_{318}	18.0	X	271.60241	341.95831	20.95177	1.34636	0.2041284	0.26878004	2.3779609	21	5 22.2	21.3
456722 2007 RK_{322}	17.9	X	265.96137	336.44405	42.28676	3.92402	0.1994347	0.27013564	2.3699988	21	6 6.7	21.1
456723 2007 RK_{323}	17.8	X	156.90604	263.04598	207.30929	8.35882	0.2018485	0.26145478	2.4221721	21	6 23.8	21.9
456724 2007 SZ_{5}	17.7	X	225.35736	69.52774	317.67786	2.23764	0.2381602	0.26198907	2.4188778	21	5 6.1	21.7
456725 2007 SF_{7}	15.6	X	198.70840	284.10489	20.35995	15.81725	0.2235163	0.17327849	3.1864439	21	1 22.3	21.3
456726 2007 SO_{7}	18.1	X	224.56096	266.16516	131.60451	2.03820	0.1686410	0.26317410	2.4116112	21	5 23.8	21.9
456727 2007 SY_{13}	17.8	X	283.78255	56.73664	284.36167	1.07922	0.2319503	0.26756394	2.3851608	21	5 2.9	21.1
456728 2007 SA_{14}	17.8	X	239.90074	100.00619	269.25066	1.09876	0.2511567	0.26234819	2.4166699	21	4 25.4	22.0
456729 2007 SC_{16}	18.2	X	345.47744	196.63237	165.92951	6.77982	0.1312349	0.28477512	2.2880632	21	10 17.3	20.1
456730 2007 SQ_{22}	17.9	X	253.33464	8.58153	19.49959	1.30622	0.1879785	0.26847531	2.3797599	21	6 6.9	21.2
456731 Uligrözinger	17.7	X	208.16305	86.94368	317.50564	3.84558	0.2518921	0.25928279	2.4356802	21	5 13.3	22.0
456732 2007 TP_{9}	17.7	X	263.25609	14.84404	7.06570	4.59051	0.1954435	0.26863489	2.3788174	21	6 8.3	21.1
456733 2007 TD_{12}	17.5	X	253.32288	139.68665	233.77300	1.22725	0.2350531	0.26457827	2.4030710	21	5 14.1	21.3
456734 2007 TZ_{12}	17.9	X	230.38529	4.59693	23.44847	2.95290	0.1986478	0.26299860	2.4126839	21	5 13.9	21.8
456735 2007 TA_{14}	18.1	X	160.01930	135.90406	196.91810	19.12517	0.1583727	0.38340282	1.8765747	21	—	—
456736 2007 TG_{14}	17.7	X	257.46845	15.70977	0.09852	4.38058	0.1906642	0.26608649	2.3939817	21	5 24.7	21.3
456737 2007 TU_{15}	17.9	X	246.48295	158.66615	256.10237	3.13188	0.2764132	0.26821870	2.3812776	21	6 26.5	21.5
456738 2007 TX_{17}	18.2	X	257.60821	6.94696	19.95593	4.77819	0.1764293	0.26718287	2.3874281	21	6 11.1	21.6
456739 2007 TR_{21}	17.8	X	9.25292	283.06310	49.47261	5.12970	0.1922576	0.28360957	2.2943278	21	10 25.1	19.6
456740 2007 TF_{23}	17.4	X	230.50591	47.85493	1.45825	6.47951	0.2157258	0.26443493	2.4039393	21	6 9.1	21.3
456741 2007 TV_{25}	15.8	X	284.15055	80.29155	289.16594	0.50305	0.1666250	0.12681508	3.9236367	21	6 24.8	21.4
456742 2007 TU_{26}	17.7	X	206.56257	58.71281	21.61741	5.38377	0.1378845	0.26565558	2.3965698	21	7 2.7	21.4
456743 2007 TS_{28}	18.2	X	266.25036	26.91995	300.06729	0.26055	0.1949291	0.25977397	2.4326089	21	3 31.9	21.8
456744 2007 TG_{29}	18.0	X	178.44070	259.60581	203.88984	1.92137	0.1421246	0.26282171	2.4137663	21	7 3.9	21.8
456745 2007 TA_{35}	17.7	X	329.71314	212.63504	137.14494	1.95116	0.2011489	0.27552571	2.3389878	21	8 13.1	19.4
456746 2007 TM_{43}	18.0	X	218.43680	14.50686	48.77566	5.12170	0.1653715	0.26253814	2.4155041	21	6 19.9	21.7
456747 2007 TF_{46}	17.5	X	266.08704	24.70361	357.64498	3.57595	0.2517557	0.26709185	2.3879705	21	6 5.1	20.9
456748 2007 TA_{51}	15.8	X	341.86015	234.17525	211.05866	9.53557	0.0622430	0.15062796	3.4983694	21	12 25.7	20.6
456749 2007 TN_{52}	18.0	X	4.56247	302.71889	22.02981	6.91010	0.1333894	0.27770776	2.3267196	21	9 24.5	20.0
456750 2007 TM_{56}	17.9	X	246.26652	33.94026	358.63482	1.52775	0.1764192	0.26473819	2.4021032	21	6 6.6	21.3
456751 2007 TP_{58}	15.9	X	146.78320	165.74417	170.66337	11.82084	0.1013539	0.16972017	3.2308273	21	1 1.8	20.9
456752 2007 TF_{73}	17.9	X	296.92326	161.31492	201.05390	6.54759	0.1397479	0.27081966	2.3660065	21	7 5.5	20.6
456753 2007 TY_{79}	18.2	X	157.70063	118.56944	221.05148	21.53788	0.0908826	0.38397949	1.8746953	21	—	—
456754 2007 TQ_{80}	18.0	X	288.67084	303.69879	53.25333	3.81904	0.2218843	0.26984642	2.3716919	21	6 1.5	21.0
456755 2007 TJ_{81}	17.9	X	256.49465	200.97467	189.24013	2.14820	0.2141721	0.26758422	2.3850403	21	6 10.6	21.4
456756 2007 TX_{84}	17.9	X	55.87062	94.03315	3.35577	19.48537	0.1548384	0.38099518	1.8844722	21	—	—
456757 2007 TZ_{91}	17.4	X	229.28786	338.40888	79.84372	4.02242	0.1950665	0.26673237	2.3901156	21	6 21.9	21.1
456758 2007 TP_{93}	17.7	X	196.33619	341.34250	79.94310	2.52585	0.1659921	0.25863408	2.4397512	21	5 27.4	21.4
456759 2007 TX_{93}	17.8	X	23.17357	128.84868	194.18497	7.16542	0.1519476	0.28075328	2.3098627	21	10 28.9	20.1
456760 2007 TU_{94}	17.5	X	311.39163	219.35719	106.29048	3.49938	0.2727082	0.27049189	2.3679174	21	5 13.1	20.1
456761 2007 TO_{98}	16.0	X	239.37127	269.19218	25.66650	18.83909	0.3508369	0.18137489	3.0908976	21	2 7.7	22.0
456762 2007 TB_{99}	17.6	X	234.36592	243.94295	192.82441	9.98957	0.1114204	0.27080449	2.3660948	21	7 28.3	21.0
456763 2007 TJ_{103}	17.6	X	141.31828	319.24074	195.51932	4.93497	0.0827939	0.26449302	2.4035873	21	7 29.2	21.0
456764 2007 TW_{103}	18.6	X	250.32664	224.47445	158.03115	2.16187	0.2035666	0.26367862	2.4085339	21	5 26.5	22.1
456765 2007 TL_{105}	17.9	X	237.70101	184.15061	201.67509	2.90754	0.1334757	0.26294026	2.4130408	21	5 24.2	21.5
456766 2007 TV_{107}	16.1	X	266.50333	177.72229	203.65950	2.29532	0.2673709	0.12557583	3.9494081	21	6 7.3	22.0
456767 2007 TJ_{113}	17.1	X	249.40284	332.92753	34.53869	14.57541	0.2622871	0.26397729	2.4067169	21	4 29.9	21.0
456768 2007 TO_{121}	18.8	X	223.80138	248.88314	154.96086	1.05869	0.1718610	0.26246928	2.4159265	21	5 30.6	22.5
456769 2007 TW_{121}	17.5	X	312.15027	323.11187	32.28969	6.92308	0.2088584	0.27354302	2.3502765	21	7 12.4	19.8
456770 2007 TC_{125}	18.0	X	279.56933	299.37755	80.98654	2.30520	0.1955412	0.27021050	2.3695611	21	6 27.2	20.8
456771 2007 TE_{131}	17.8	X	209.53108	287.34151	210.37060	4.28909	0.1071969	0.27561230	2.3384979	21	9 22.6	21.2
456772 2007 TW_{135}	17.3	X	219.46627	27.87560	331.46481	12.24490	0.2953694	0.25793281	2.4441714	21	3 23.7	21.9
456773 2007 TQ_{143}	15.6	X	249.45232	269.10692	12.00424	25.64988	0.2198556	0.18028066	3.1033919	21	2 9.4	21.2
456774 2007 TW_{143}	17.9	X	328.65929	49.23675	294.33534	0.63827	0.1777170	0.27662282	2.3327993	21	8 2.2	19.7
456775 2007 TY_{144}	18.2	X	247.65960	108.50440	278.99944	0.91928	0.2149898	0.26571337	2.3962223	21	5 28.7	21.8
456776 2007 TQ_{145}	17.7	X	208.59572	358.86091	45.77822	2.93862	0.2179174	0.25944233	2.4346815	21	5 15.7	21.9
456777 2007 TS_{155}	18.0	X	263.79526	33.91827	339.59736	3.42247	0.1913368	0.26688277	2.3892175	21	5 28.9	21.4
456778 2007 TQ_{157}	17.5	X	12.19229	91.52419	235.21342	5.33297	0.1534215	0.28167735	2.3048081	21	10 12.3	19.7
456779 2007 TV_{162}	17.6	X	4.74191	22.53667	296.36840	1.10530	0.2207249	0.27947253	2.3169142	21	9 24.2	19.0
456780 2007 TT_{169}	17.5	X	291.94870	272.82846	78.60491	4.24432	0.2406813	0.26947864	2.3738493	21	5 26.7	20.2
456781 2007 TY_{170}	17.9	X	65.57663	86.84188	202.20147	2.11393	0.1551061	0.28566041	2.2833335	21	11 10.5	20.9
456782 2007 TV_{171}	18.0	X	257.85966	301.51861	72.06876	3.12343	0.2272227	0.26598493	2.3945911	21	5 19.6	21.5
456783 2007 TF_{174}	15.2	X	146.89729	275.67593	23.12546	14.96573	0.0902866	0.15689669	3.4045537	21	—	—
456784 2007 TZ_{174}	16.3	X	258.95833	19.54621	6.01799	2.35077	0.2653927	0.12287420	4.0070882	21	6 5.1	22.4
456785 2007 TE_{175}	18.5	X	185.91250	247.89886	187.21986	2.02971	0.1882864	0.25888371	2.4381826	21	6 4.7	22.6
456786 2007 TX_{177}	17.7	X	215.66048	197.85174	222.37351	3.58911	0.0821283	0.26233436	2.4167548	21	6 18.3	21.0
456787 2007 TB_{187}	17.9	X	285.72827	261.06889	93.93064	2.32413	0.2102811	0.26885756	2.3775038	21	5 28.3	20.8
456788 2007 TA_{195}	18.1	X	161.65518	228.80260	207.93194	1.60453	0.1696832	0.25457813	2.4655964	21	5 14.9	22.0
456789 2007 TD_{200}	18.0	X	208.97938	31.93067	18.96940	1.54959	0.1829686	0.26058784	2.4275413	21	5 24.8	22.0
456790 2007 TK_{200}	18.3	X	215.39348	89.29832	311.07683	2.16608	0.1113838	0.26531780	2.3986035	21	5 19.6	21.8
456791 2007 TK_{204}	18.0	X	185.15692	8.73342	78.20082	4.02381	0.1446009	0.25992805	2.4316475	21	6 18.9	21.7
456792 2007 TE_{205}	17.9	X	245.80846	321.88291	85.70013	3.70452	0.0884138	0.26626723	2.3928983	21	7 7.5	20.9
456793 2007 TH_{205}	17.9	X	316.13802	275.91783	77.60285	3.85221	0.1407936	0.27194947	2.3594489	21	7 28.6	20.1
456794 2007 TC_{210}	18.2	X	217.82423	333.29593	32.32208	2.27575	0.1951789	0.25975362	2.4327360	21	4 5.7	22.3
456795 2007 TK_{230}	18.0	X	294.08558	249.39522	104.98069	2.49167	0.2075742	0.26893837	2.3770275	21	6 8.4	20.7
456796 2007 TE_{236}	17.8	X	315.82617	198.45844	138.70020	1.89192	0.1893840	0.27169894	2.3608991	21	6 22.3	20.1
456797 2007 TB_{239}	17.7	X	317.47455	152.17829	185.12730	6.26005	0.1858728	0.27203754	2.3589396	21	6 26.1	20.0
456798 2007 TL_{244}	17.0	X	323.06560	70.56056	312.18510	6.94586	0.1057595	0.27959089	2.3162603	21	9 26.4	19.3
456799 2007 TC_{246}	17.0	X	340.68893	62.15520	228.93494	22.34147	0.2678464	0.27125029	2.3635016	21	5 17.5	18.5
456800 2007 TY_{247}	18.1	X	58.85457	354.00034	279.09346	3.33519	0.1467045	0.27961114	2.3161485	21	10 6.9	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456801 2007 TA_{259}	17.8	X	205.02254	99.19443	7.52062	7.37819	0.1099217	0.27094723	2.3652637	21	8 9.8	21.2
456802 2007 TH_{265}	17.4	X	226.15576	94.16015	352.79931	6.78657	0.1022609	0.27115062	2.3640808	21	8 7.3	20.6
456803 2007 TN_{270}	17.9	X	328.05855	7.36861	340.90935	2.02771	0.2247464	0.27553669	2.3389257	21	8 3.3	19.5
456804 2007 TL_{291}	18.0	X	263.29820	96.16665	247.79821	1.36395	0.1852042	0.26436178	2.4043827	21	4 20.1	21.5
456805 2007 TZ_{291}	16.5	X	261.56852	164.26330	226.23299	2.00194	0.2891738	0.12557987	3.9493234	21	6 11.1	22.6
456806 2007 TZ_{299}	17.8	X	342.20415	105.11786	226.34149	1.52045	0.2373970	0.27618449	2.3352669	21	8 11.2	19.0
456807 2007 TW_{304}	17.9	X	192.23782	232.22456	167.92869	9.13484	0.2851383	0.26000190	2.4311870	21	4 29.6	22.3
456808 2007 TS_{312}	18.0	X	259.44971	313.36772	75.80633	3.39181	0.2016809	0.26786598	2.3833675	21	6 13.7	21.5
456809 2007 TQ_{351}	15.7	X	184.76570	182.41972	152.82412	12.28849	0.0559663	0.17789336	3.1310949	21	2 3.5	20.5
456810 2007 TV_{356}	16.5	X	216.11685	252.56517	30.71328	0.50946	0.0065018	0.17067094	3.2188173	21	1 9.6	21.0
456811 2007 TD_{357}	18.2	X	260.10360	324.78049	40.81491	2.87244	0.2210884	0.26447828	2.4036766	21	5 11.6	21.8
456812 2007 TS_{358}	17.3	X	226.46949	301.93159	200.24831	28.72895	0.2411927	0.28201963	2.3029429	21	10 3.2	20.7
456813 2007 TV_{363}	18.3	X	195.74860	198.15925	216.58266	1.91653	0.1868728	0.25538896	2.4603750	21	5 18.4	22.2
456814 2007 TP_{366}	17.5	X	248.63309	92.24071	304.41041	3.24138	0.1620524	0.26530148	2.3987018	21	6 16.5	20.8
456815 2007 TK_{372}	16.3	X	48.13786	353.15667	36.20368	7.24904	0.0763069	0.15630296	3.4131700	21	—	—
456816 2007 TP_{375}	17.5	X	228.04483	262.86627	118.63205	3.25593	0.2047683	0.26312317	2.4119223	21	5 4.9	21.5
456817 2007 TJ_{377}	15.8	X	284.15924	229.99731	12.99249	16.21226	0.0413874	0.17320872	3.1872996	21	2 12.5	20.6
456818 2007 TN_{389}	17.8	X	199.90366	242.41561	147.31012	3.30605	0.1818887	0.25658878	2.4526991	21	4 21.5	21.8
456819 2007 TZ_{392}	18.1	X	226.50163	33.66422	4.43883	2.01146	0.1878045	0.26271131	2.4144425	21	5 24.0	22.0
456820 2007 TA_{393}	18.1	X	187.94006	34.57370	24.01797	1.23050	0.2098620	0.25761302	2.4461937	21	5 16.1	22.0
456821 2007 TO_{410}	17.3	X	282.53744	251.60834	121.34810	8.27020	0.1730437	0.26946370	2.3739371	21	6 24.6	20.4
456822 2007 TN_{412}	17.3	X	0.58730	38.79361	291.96067	6.73278	0.1296604	0.27902999	2.3193634	21	9 19.3	19.6
456823 2007 TN_{413}	17.8	X	336.71920	299.94756	23.12006	2.56604	0.2081897	0.27402954	2.3474938	21	7 14.1	19.5
456824 2007 TY_{418}	18.1	X	199.17883	29.97873	48.34665	7.40635	0.1018679	0.26247369	2.4158995	21	6 22.8	21.7
456825 2007 TW_{420}	16.9	X	288.51329	300.31141	86.35379	12.30153	0.1854121	0.27393697	2.3480226	21	7 22.8	19.6
456826 2007 TH_{422}	7.7	X	21.63451	312.19795	96.32315	28.58231	0.2765147	0.00400421	39.2757771	21	12 21.1	22.5
456827 2007 TA_{425}	17.9	X	40.66169	91.35593	214.93754	4.44045	0.1811601	0.28168481	2.3047674	21	11 5.1	20.4
456828 2007 TS_{425}	18.0	X	125.35419	99.90610	70.98197	2.97519	0.1092943	0.26409271	2.4060156	21	8 6.3	21.3
456829 2007 TE_{427}	18.1	X	167.51483	55.34084	58.78442	2.39124	0.1554710	0.26205652	2.4184627	21	7 7.8	21.8
456830 2007 TF_{428}	17.7	X	208.54746	335.87434	67.95560	4.37551	0.1030969	0.25782121	2.4448767	21	5 18.4	21.1
456831 2007 TN_{433}	17.9	X	9.30606	145.56148	151.30518	2.41813	0.2129401	0.27419292	2.3465612	21	8 26.9	19.3
456832 2007 TA_{434}	18.4	X	266.80372	88.05254	303.66176	2.50488	0.1826815	0.26839171	2.3802541	21	6 28.6	21.5
456833 2007 TC_{435}	17.8	X	313.52203	89.29337	224.69982	2.53521	0.1333424	0.26274567	2.4142320	21	5 23.8	20.5
456834 2007 TK_{435}	17.2	X	93.49103	336.53507	117.03229	4.86556	0.0422633	0.24336244	2.5407797	21	3 3.4	20.4
456835 2007 TP_{444}	17.9	X	292.92141	56.89678	314.89451	3.06074	0.1591704	0.27216015	2.3582311	21	7 11.2	20.5
456836 2007 TX_{445}	17.4	X	294.72917	139.61161	242.91734	9.63848	0.1568202	0.27415955	2.3467517	21	7 27.1	20.1
456837 2007 TK_{446}	17.8	X	250.92482	269.43984	119.93971	3.21200	0.1891396	0.26532903	2.3985358	21	6 6.6	21.2
456838 2007 UU_{4}	18.0	X	226.59212	98.84165	308.42746	1.72466	0.1860196	0.26460242	2.4029248	21	6 5.4	21.6
456839 2007 UP_{11}	17.2	X	310.22705	259.57509	89.10330	4.67896	0.2522197	0.27191714	2.3596359	21	6 17.9	19.3
456840 2007 UC_{22}	17.6	X	84.29220	197.80317	50.72252	7.61190	0.0912085	0.27523137	2.3406551	21	10 2.8	20.7
456841 2007 UK_{24}	18.0	X	237.80253	217.30053	159.49160	2.83840	0.1847094	0.26032782	2.4291574	21	5 8.9	21.7
456842 2007 UM_{25}	18.2	X	314.59246	131.87046	197.33801	0.91901	0.1922176	0.26787753	2.3832989	21	6 7.1	20.4
456843 2007 UG_{43}	17.9	X	199.92408	16.84587	55.46857	3.00382	0.1823495	0.26150686	2.4218505	21	6 13.3	21.9
456844 2007 UQ_{49}	18.1	X	103.03546	307.71974	130.76582	2.66949	0.2596656	0.24009055	2.5638110	21	3 29.5	21.4
456845 2007 UL_{53}	18.3	X	270.46648	155.46015	233.99654	4.14371	0.1098141	0.26802472	2.3824263	21	7 10.7	21.3
456846 2007 UM_{53}	17.8	X	28.73152	76.67161	238.05160	4.78092	0.1829534	0.28029799	2.3123633	21	10 29.2	20.2
456847 2007 UQ_{81}	17.9	X	163.79109	174.18548	100.62016	2.89109	0.1930298	0.30283875	2.1961487	21	—	—
456848 2007 UQ_{82}	17.9	X	341.51718	72.05121	243.22418	3.22291	0.1560496	0.27028568	2.3691216	21	7 16.0	19.7
456849 2007 UD_{83}	18.4	X	262.70651	346.32698	37.83496	3.02649	0.1648143	0.26814605	2.3817076	21	6 15.2	21.5
456850 2007 UN_{84}	17.7	X	185.03898	229.85920	226.52090	5.55889	0.0704478	0.26150779	2.4218448	21	7 1.4	21.2
456851 2007 UZ_{99}	17.9	X	278.47880	103.52211	237.70873	2.79685	0.0693822	0.25878511	2.4388019	21	5 21.5	21.0
456852 2007 UB_{106}	18.2	X	204.58495	241.39214	179.20640	1.26292	0.1807494	0.25933674	2.4353423	21	6 2.9	22.2
456853 2007 UE_{107}	17.9	X	273.27395	35.69569	329.29682	0.97584	0.2166375	0.26545173	2.3977966	21	5 25.5	21.4
456854 2007 UT_{107}	17.4	X	327.93851	324.07353	19.94538	6.74649	0.1377717	0.27476844	2.3432834	21	8 9.3	19.6
456855 2007 UO_{123}	17.7	X	229.92654	158.69688	244.24940	4.68285	0.0546622	0.26136332	2.4227371	21	6 14.5	21.0
456856 2007 UY_{126}	18.1	X	184.08480	66.08810	71.24858	4.37215	0.1967245	0.26525551	2.3989789	21	8 24.1	22.0
456857 2007 UX_{127}	17.7	X	255.79755	352.49053	76.39458	8.25761	0.0920423	0.26959953	2.3731396	21	8 23.6	20.8
456858 2007 UK_{137}	17.9	X	264.30881	101.82012	289.79778	5.68273	0.1312712	0.26776509	2.3839661	21	7 2.9	21.0
456859 2007 UN_{140}	17.4	X	79.54620	221.78018	227.14935	8.82455	0.1723901	0.23753358	2.5821772	21	2 18.4	20.4
456860 2007 UG_{141}	17.3	X	251.01430	286.24150	67.44691	9.21402	0.2095715	0.25853740	2.4403595	21	4 22.2	21.2
456861 2007 VB_{4}	17.7	X	252.50661	94.53762	297.99820	4.34596	0.1681608	0.26562550	2.3967507	21	6 14.5	21.2
456862 2007 VR_{4}	17.4	X	289.28575	72.22667	314.62734	7.53371	0.2727471	0.27201011	2.3590982	21	7 8.4	20.1
456863 2007 VX_{7}	19.5	X	136.05330	105.43487	243.88357	16.81364	0.3756733	0.38345325	1.8764101	21	—	—
456864 2007 VE_{9}	17.3	X	1.88229	219.00436	107.61479	6.55016	0.2498403	0.27731745	2.3289022	21	10 10.0	18.9
456865 2007 VF_{11}	16.8	X	236.38842	342.46993	72.61890	14.92513	0.2166274	0.26419274	2.4054082	21	6 22.2	20.7
456866 2007 VH_{13}	18.1	X	277.93114	349.66155	0.02391	1.26534	0.1996729	0.26596136	2.3947326	21	5 12.2	21.4
456867 2007 VP_{15}	18.0	X	133.59372	24.71756	99.22960	2.30119	0.1333400	0.25632704	2.4543685	21	6 14.2	21.6
456868 2007 VC_{39}	16.0	X	112.65976	212.11031	171.81599	18.24053	0.2316624	0.17367853	3.1815491	21	2 3.4	20.9
456869 2007 VR_{39}	18.0	X	272.27420	284.77799	65.87316	2.17456	0.1378510	0.26259872	2.4151326	21	5 15.9	21.4
456870 2007 VQ_{42}	17.2	X	198.03316	7.47073	355.15045	3.98713	0.2948490	0.24434340	2.5339749	21	3 18.4	21.7
456871 2007 VT_{43}	17.3	X	148.93899	275.60973	247.12328	12.33819	0.1532219	0.26604185	2.3942495	21	8 16.4	21.3
456872 2007 VO_{49}	17.3	X	294.60337	40.01839	278.81296	5.61520	0.1293539	0.25991087	2.4317546	21	4 30.6	20.4
456873 2007 VJ_{61}	18.3	X	198.11665	130.55234	273.12938	1.82831	0.2173324	0.25494597	2.4632242	21	5 5.7	22.6
456874 2007 VM_{68}	17.9	X	213.26276	193.94323	222.80200	1.70987	0.2028735	0.26060378	2.4274423	21	6 4.9	22.0
456875 2007 VP_{76}	17.9	X	275.56460	278.30351	82.85607	2.16097	0.1679206	0.26504040	2.4002768	21	5 30.2	21.0
456876 2007 VP_{78}	17.5	X	244.42734	315.32702	52.46603	11.02953	0.2511233	0.26074623	2.4265581	21	4 29.3	21.4
456877 2007 VY_{91}	18.5	X	210.50547	52.72113	357.37975	1.68031	0.2033558	0.25851942	2.4404726	21	5 24.5	22.6
456878 2007 VL_{92}	17.7	X	220.71689	60.33781	23.01457	10.46016	0.2151864	0.26454243	2.4032881	21	7 17.9	21.7
456879 2007 VX_{93}	18.1	X	257.95773	47.21583	336.69265	2.47266	0.2086256	0.26509593	2.3999416	21	6 3.8	21.7
456880 2007 VM_{102}	18.0	X	91.32647	2.54621	60.91014	22.69937	0.0835953	0.37950663	1.8893966	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456881 2007 VP_{103}	17.7	X	196.83362	80.14487	52.72447	7.80095	0.0418683	0.27561647	2.3384743	21	9 12.2	20.9
456882 2007 VU_{104}	17.3	X	174.43772	70.85523	45.36630	6.63560	0.0981452	0.26188922	2.4194926	21	7 18.2	20.9
456883 2007 VO_{105}	18.3	X	189.20384	108.56190	320.27413	0.85879	0.1681982	0.25660795	2.4525770	21	5 30.2	22.2
456884 2007 VP_{108}	18.1	X	186.59572	86.84505	66.56983	2.04822	0.1263140	0.27069751	2.3667182	21	9 18.6	21.6
456885 2007 VZ_{108}	18.4	X	208.09100	31.45732	50.97463	2.96716	0.1685970	0.26222780	2.4174095	21	7 5.2	22.1
456886 2007 VY_{120}	17.6	X	156.41872	262.45422	9.95611	6.57022	0.1228487	0.29440923	2.2378713	21	—	—
456887 2007 VU_{122}	17.6	X	120.23169	302.21372	187.77697	2.34855	0.1337991	0.25779706	2.4450293	21	6 7.2	20.9
456888 2007 VF_{123}	18.3	X	265.93939	15.66404	351.20351	0.95266	0.2042663	0.26689135	2.3891663	21	5 21.2	21.7
456889 2007 VP_{123}	17.4	X	292.22356	208.62084	163.57691	12.18890	0.1965616	0.27080630	2.3660842	21	7 3.1	20.5
456890 2007 VC_{131}	18.4	X	188.07491	310.00622	142.81782	1.79047	0.1527720	0.26147682	2.4220359	21	6 29.5	22.1
456891 2007 VN_{144}	18.5	X	181.20322	335.06670	142.34454	2.39507	0.1406886	0.26187227	2.4195970	21	7 25.2	22.0
456892 2007 VZ_{147}	16.8	X	26.99162	45.25974	81.14368	13.36531	0.0402497	0.23333611	2.6130522	21	1 12.5	20.1
456893 2007 VX_{157}	18.1	X	292.24877	252.86576	109.80579	2.71473	0.2072329	0.26845574	2.3798756	21	6 17.8	20.8
456894 2007 VJ_{158}	17.8	X	161.28945	222.44615	151.26365	2.36233	0.2625237	0.24422471	2.5347958	21	3 4.1	22.1
456895 2007 VM_{176}	18.1	X	281.16813	333.05517	25.71528	2.72336	0.0455587	0.26873873	2.3782045	21	6 23.1	21.0
456896 2007 VX_{178}	17.9	X	142.01934	57.91631	123.79295	1.78404	0.1150515	0.27060137	2.3672787	21	9 8.8	21.3
456897 2007 VZ_{180}	18.3	X	263.86238	334.12173	40.90140	2.30233	0.1944302	0.26580156	2.3956923	21	5 31.2	21.7
456898 2007 VG_{184}	17.4	X	267.43517	155.87719	146.91316	16.11039	0.6711595	0.26759095	2.3850003	21	2 4.1	22.9
456899 2007 VV_{185}	17.3	X	203.28259	322.21343	104.39463	9.38976	0.1984147	0.25944614	2.4346577	21	6 9.6	21.3
456900 2007 VW_{188}	15.6	X	208.96049	282.76754	38.92054	12.95517	0.1155979	0.16988021	3.2287978	21	2 20.5	20.9
456901 2007 VL_{201}	17.8	X	119.12561	157.72352	40.41283	4.65587	0.1368197	0.26947105	2.3738939	21	9 8.9	21.3
456902 2007 VT_{206}	17.9	X	291.73825	179.45243	193.94284	6.41945	0.1938269	0.27022566	2.3694724	21	7 4.3	20.8
456903 2007 VT_{216}	18.1	X	274.38163	1.15706	353.16783	1.14891	0.1807395	0.26234442	2.4166931	21	5 17.2	21.2
456904 2007 VC_{222}	17.6	X	207.03321	62.19058	358.29897	6.83942	0.2622198	0.26390838	2.4071358	21	5 31.9	21.9
456905 2007 VG_{225}	18.1	X	208.38709	324.65150	95.92438	2.62197	0.1717570	0.26154349	2.4216243	21	6 6.6	21.8
456906 2007 VU_{239}	17.9	X	248.78580	315.52244	67.89829	8.41842	0.2460902	0.26218184	2.4176920	21	5 22.3	21.8
456907 2007 VZ_{277}	18.4	X	189.35847	272.02354	193.37659	1.47339	0.1909139	0.26217841	2.4177131	21	7 16.3	22.2
456908 2007 VG_{286}	17.1	X	147.91498	138.00782	262.80641	8.92655	0.1073387	0.24176669	2.5519475	21	3 6.5	21.0
456909 2007 VQ_{319}	18.2	X	196.46405	354.76850	99.51134	1.90178	0.1240761	0.26197768	2.4189479	21	7 10.8	21.8
456910 2007 VR_{325}	17.7	X	102.00634	109.41038	321.70541	3.31430	0.1583815	0.23901161	2.5715208	21	3 1.3	20.9
456911 2007 VQ_{331}	18.1	X	246.30634	10.10385	10.02612	3.38046	0.1815370	0.26091768	2.4254950	21	5 20.2	21.8
456912 2007 VO_{335}	17.1	X	137.48055	343.33915	132.93511	14.13997	0.1821418	0.24214804	2.5492675	21	6 14.6	21.3
456913 2007 WC_{21}	17.0	X	164.34278	17.93843	145.37573	5.30826	0.1304426	0.25717514	2.4489696	21	9 7.3	20.7
456914 2007 WM_{39}	17.5	X	198.86403	293.34783	85.63552	7.83880	0.1174628	0.25177948	2.4838336	21	4 9.9	21.3
456915 2007 WQ_{58}	18.6	X	192.53244	88.54385	337.38765	0.77947	0.1699440	0.25580396	2.4577132	21	5 29.6	22.5
456916 2007 WQ_{61}	17.7	X	195.95818	89.59937	254.59290	18.29964	0.1103834	0.38671098	1.8658571	21	1 20.2	20.2
456917 2007 XP_{28}	17.7	X	186.30955	58.53549	77.64255	7.78364	0.1269734	0.26443234	2.4039550	21	8 28.7	21.4
456918 2007 XL_{29}	17.7	X	222.70542	181.71393	242.92812	6.51563	0.0842400	0.26341153	2.4101618	21	7 2.1	21.1
456919 2007 XS_{29}	18.1	X	222.22709	343.91285	72.62600	3.46266	0.1945911	0.26171795	2.4205481	21	6 13.0	22.0
456920 2007 XG_{43}	17.6	X	139.57276	256.87150	268.54242	5.33365	0.0662960	0.26151551	2.4217970	21	8 9.1	21.0
456921 2007 XM_{45}	18.1	X	214.76094	211.06645	186.26960	1.40029	0.1740300	0.25457240	2.4656334	21	5 13.9	22.1
456922 2007 XS_{45}	16.8	X	150.07035	154.75993	259.87202	12.61625	0.1065289	0.24309537	2.5426403	21	3 25.1	20.8
456923 2007 XD_{49}	17.0	X	187.22520	181.83951	280.94336	8.80437	0.1539532	0.25683201	2.4511503	21	7 11.5	20.9
456924 2007 XH_{50}	15.5	X	199.15636	264.61874	80.12566	16.62732	0.2125035	0.17385085	3.1794464	21	3 11.9	21.2
456925 2007 XQ_{51}	16.8	X	80.26810	219.58187	280.52012	13.47075	0.0604896	0.24157097	2.5533257	21	4 11.1	20.4
456926 2007 XN_{52}	17.7	X	192.90845	173.34086	251.48896	3.91300	0.2908426	0.25328668	2.4739703	21	5 28.1	22.1
456927 2007 XT_{52}	17.7	X	66.42780	68.95325	84.56101	5.73467	0.2079877	0.23874790	2.5734141	21	5 10.5	20.5
456928 2007 XS_{53}	17.4	X	183.77984	23.38906	63.06439	3.39423	0.1348031	0.25342354	2.4730795	21	6 17.0	21.1
456929 2007 XV_{57}	16.8	X	75.31742	84.96575	70.91803	9.63784	0.1641284	0.24452307	2.5327334	21	5 19.9	19.7
456930 2007 YQ_{2}	17.8	X	128.06241	313.28455	97.47931	23.17346	0.1021431	0.38040364	1.8864253	21	2 3.3	19.6
456931 2007 YP_{16}	18.6	X	201.09268	143.88967	302.59383	0.62864	0.1479963	0.25927630	2.4357208	21	7 4.3	22.4
456932 2007 YU_{28}	17.7	X	125.34914	89.24610	322.11269	1.67049	0.1358179	0.23879138	2.5731017	21	3 2.4	21.2
456933 2007 YJ_{42}	18.0	X	254.22730	77.40335	108.44585	24.61860	0.0510968	0.35735556	1.9666890	21	—	—
456934 2007 YG_{43}	17.9	X	164.79999	312.99538	112.19608	15.71338	0.2030605	0.24539637	2.5267210	21	5 11.3	22.3
456935 2007 YN_{43}	17.7	X	108.23571	27.16364	110.28090	12.66908	0.1862964	0.24376104	2.5380092	21	6 11.5	21.4
456936 2007 YC_{53}	17.8	X	148.75669	5.27282	128.60608	3.83911	0.1565322	0.25183563	2.4834643	21	7 14.9	21.8
456937 2007 YX_{53}	17.0	X	252.31492	104.84505	302.63735	7.68967	0.2093618	0.26662322	2.3907678	21	6 30.3	20.5
456938 2007 YV_{56}	21.0	X	326.05237	265.72180	102.39969	6.24453	0.6220641	0.49835200	1.5755974	21	5 19.9	21.7
456939 2007 YY_{67}	16.8	X	186.07922	249.98545	99.73515	5.12492	0.1053497	0.23392881	2.6086366	21	2 18.7	20.7
456940 2007 YH_{72}	17.3	X	86.64706	119.13211	48.31431	4.81807	0.1667331	0.24303627	2.5430525	21	6 21.1	20.6
456941 2008 AG	16.6	X	18.59629	267.83228	294.35850	26.56183	0.3561641	0.23277563	2.6172450	21	3 10.1	18.9
456942 2008 AG_{5}	17.1	X	169.27560	92.75496	312.61750	3.86701	0.2735604	0.24347298	2.5400106	21	4 15.8	21.7
456943 2008 AB_{17}	17.4	X	83.67441	35.03589	191.37967	0.70636	0.1401846	0.25353104	2.4723804	21	9 2.9	20.8
456944 2008 AO_{24}	18.0	X	167.35378	343.30514	58.46708	2.80646	0.2171214	0.23976525	2.5661294	21	4 10.3	22.2
456945 2008 AW_{29}	17.5	X	274.58501	264.01770	89.34457	16.32990	0.2342506	0.26021815	2.4298399	21	5 14.7	21.3
456946 2008 AF_{32}	21.2	X	345.14959	80.21400	105.30492	27.18285	0.1108380	0.73994875	1.2106027	21	—	—
456947 2008 AX_{41}	17.4	X	177.54118	94.18317	315.20234	16.56088	0.2321038	0.24460140	2.5321927	21	4 18.9	22.1
456948 2008 AU_{51}	17.8	X	138.14160	336.80813	112.23659	5.81997	0.1064204	0.24345070	2.5401656	21	5 3.9	21.5
456949 2008 AJ_{55}	17.7	X	193.55589	99.91220	302.49370	8.75317	0.1687328	0.24678411	2.5172398	21	4 27.4	21.9
456950 2008 AD_{56}	17.7	X	197.26524	200.86036	187.80231	0.87935	0.2259966	0.24684293	2.5168399	21	4 17.5	21.8
456951 2008 AZ_{56}	16.9	X	345.85756	43.34903	120.78267	14.97316	0.0937489	0.22431709	2.6826323	21	—	—
456952 2008 AP_{57}	17.5	X	26.29802	105.28660	131.55923	8.15495	0.1740375	0.24487837	2.5302830	21	6 21.1	19.9
456953 2008 AV_{57}	17.5	X	87.70843	57.03145	147.70970	2.54617	0.1453078	0.25117496	2.4878173	21	8 10.0	20.8
456954 2008 AT_{59}	17.8	X	46.41959	83.37841	125.36240	8.20802	0.1652811	0.24284034	2.5444202	21	6 17.4	20.5
456955 2008 AB_{62}	17.8	X	149.37908	283.25703	119.53289	6.01114	0.2545756	0.23879375	2.5730847	21	3 31.8	22.1
456956 2008 AR_{62}	17.6	X	173.19358	205.98826	285.31515	11.31392	0.0999821	0.25666852	2.4521911	21	8 2.2	21.3
456957 2008 AR_{65}	17.9	X	221.66318	116.05653	306.51008	1.73797	0.1883520	0.25526447	2.4611748	21	6 20.9	21.8
456958 2008 AO_{68}	17.8	X	88.12917	172.37263	10.04687	3.10590	0.1194604	0.24563106	2.5251113	21	7 7.2	21.0
456959 2008 AS_{68}	18.5	X	121.98018	317.25786	130.63171	4.61663	0.2722754	0.23933094	2.5692330	21	5 3.0	22.5
456960 2008 AU_{70}	16.9	X	11.28161	296.44716	315.68654	11.50833	0.1257204	0.24282909	2.5444987	21	6 9.2	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
456961 2008 AD_{79}	18.1	X	83.65172	298.62201	124.46977	22.76389	0.0981882	0.37276707	1.9121019	21	—	—
456962 2008 AN_{83}	17.3	X	80.30197	232.84296	305.93593	11.79283	0.1758466	0.24533910	2.5271142	21	7 1.1	20.6
456963 2008 AN_{87}	17.9	X	102.52493	318.94792	114.03565	23.59779	0.1292883	0.38057613	1.8858552	21	1 26.0	18.9
456964 2008 AF_{89}	18.2	X	201.72269	318.84148	130.31098	2.82840	0.1857503	0.25659903	2.4526338	21	7 6.8	22.0
456965 2008 AF_{92}	16.9	X	111.99746	109.90607	97.73803	10.41234	0.1911778	0.25631808	2.4544257	21	9 20.7	20.9
456966 2008 AQ_{95}	17.2	X	11.05462	68.32695	116.24722	5.39379	0.1350502	0.23159830	2.6261073	21	3 3.7	19.9
456967 2008 AD_{97}	15.1	X	248.27175	34.74984	101.69177	13.10729	0.0411581	0.12526876	3.9558595	21	11 2.3	20.9
456968 2008 AG_{100}	17.2	X	157.30977	292.88096	271.11959	5.57755	0.1248179	0.26399682	2.4065982	21	10 20.0	21.0
456969 2008 AV_{101}	17.7	X	124.51831	313.44961	233.13235	1.30048	0.1580487	0.25658683	2.4527116	21	8 28.3	21.4
456970 2008 AX_{108}	17.8	X	164.53772	14.53669	131.94577	4.46626	0.1312927	0.25653088	2.4530682	21	8 16.1	21.4
456971 2008 AC_{113}	17.7	X	103.25153	304.52228	127.56121	22.41735	0.0975479	0.37937144	1.8898455	21	1 20.7	18.9
456972 2008 AE_{118}	17.6	X	114.20768	37.23545	147.73895	8.09350	0.0894136	0.25312605	2.4750168	21	8 8.1	21.0
456973 2008 BS_{2}	18.0	X	69.76106	351.09588	311.09075	14.14572	0.4713181	0.49315935	1.5866381	21	—	—
456974 2008 BY_{6}	17.9	X	115.86287	11.83045	141.77422	5.53318	0.1214089	0.24675204	2.5174579	21	7 2.4	21.5
456975 2008 BB_{12}	17.3	X	198.56029	324.09567	136.57188	7.10561	0.1204929	0.25560174	2.4590094	21	7 21.2	21.0
456976 2008 BS_{19}	17.8	X	162.05278	323.94086	188.03576	0.85949	0.1269659	0.25846476	2.4408166	21	8 20.2	21.5
456977 2008 BN_{21}	17.5	X	184.27662	265.83607	148.80416	3.78672	0.2457422	0.24428446	2.5343825	21	5 10.6	21.9
456978 2008 BS_{30}	17.6	X	130.58853	304.54366	147.30096	4.38331	0.2587779	0.24119179	2.5560011	21	5 14.0	21.8
456979 2008 BE_{32}	17.6	X	140.01683	283.06486	142.45663	2.10293	0.2355179	0.23793330	2.5792844	21	4 17.2	21.6
456980 2008 BU_{33}	17.9	X	86.18045	0.23971	135.12718	5.36859	0.2148799	0.23705380	2.5856601	21	5 16.9	21.2
456981 2008 BM_{34}	17.9	X	133.61437	158.73455	329.21704	14.32819	0.2086772	0.24452121	2.5327463	21	6 28.0	22.2
456982 2008 BS_{35}	17.5	X	142.36998	100.80493	354.13497	4.96502	0.3000924	0.24274101	2.5451143	21	5 28.2	21.9
456983 2008 BD_{38}	16.8	X	143.55884	238.43342	146.81373	14.48756	0.1431316	0.22800460	2.6536297	21	2 21.4	20.7
456984 2008 BN_{49}	17.7	X	94.15439	277.53358	158.33553	23.78953	0.1260058	0.37162464	1.9160186	21	1 14.5	19.6
456985 2008 CW_{5}	17.3	X	181.68649	339.22002	153.94403	6.85409	0.2789599	0.25616617	2.4553960	21	8 12.3	21.8
456986 2008 CE_{7}	17.1	X	21.24016	51.49206	141.41041	15.31158	0.1510581	0.23077691	2.6323349	21	4 8.3	20.0
456987 2008 CU_{9}	17.7	X	68.00791	237.35012	322.85005	10.66144	0.1844611	0.24296099	2.5435777	21	7 15.9	20.8
456988 2008 CQ_{14}	17.0	X	130.11401	26.45607	122.01964	7.68910	0.0420887	0.24651322	2.5190836	21	7 3.8	20.5
456989 2008 CK_{17}	17.5	X	48.35115	359.61194	168.15656	4.24896	0.1180209	0.23300263	2.6155448	21	4 16.2	20.3
456990 2008 CY_{27}	17.4	X	45.62311	104.25036	112.28461	7.04554	0.2240894	0.24070533	2.5594437	21	7 7.1	19.8
456991 2008 CS_{30}	16.3	X	352.33882	268.51904	328.84390	14.35149	0.1057958	0.23662472	2.5887849	21	4 5.9	19.6
456992 2008 CM_{35}	17.7	X	112.27998	33.14978	131.54199	4.75608	0.1222398	0.24629536	2.5205689	21	7 13.2	21.3
456993 2008 CU_{35}	16.8	X	40.24100	243.72105	332.59192	12.13557	0.1352989	0.23992085	2.5650198	21	6 11.7	19.8
456994 2008 CF_{42}	17.6	X	82.80366	308.83718	198.48501	4.69222	0.1186287	0.23669239	2.5882915	21	5 12.1	20.8
456995 2008 CF_{45}	17.5	X	164.53953	336.37936	109.96146	5.07507	0.1915411	0.24345100	2.5401635	21	5 31.9	21.7
456996 2008 CO_{45}	17.5	X	63.04044	85.14552	99.10516	5.08799	0.0847098	0.23762231	2.5815344	21	5 28.8	20.5
456997 2008 CC_{50}	17.9	X	95.91611	261.91829	138.65894	24.70341	0.1197531	0.36885782	1.9255881	21	—	—
456998 2008 CH_{50}	17.7	X	91.18059	107.86467	334.14902	18.63730	0.0992422	0.37573780	1.9020100	21	1 21.9	19.2
456999 2008 CJ_{50}	17.6	X	90.73314	184.97038	342.51275	11.95336	0.2187608	0.24226771	2.5484279	21	7 6.6	21.3
457000 2008 CL_{51}	17.9	X	78.42781	191.94003	319.06350	3.57519	0.1309733	0.24161035	2.5530483	21	5 10.1	21.0
457001 2008 CN_{54}	17.7	X	143.11244	268.41072	142.37561	22.30545	0.0829148	0.38201217	1.8811261	21	2 21.9	19.3
457002 2008 CV_{70}	17.5	X	123.32076	62.21772	67.83371	6.18580	0.1361667	0.24417881	2.5351135	21	6 11.1	21.1
457003 2008 CU_{76}	17.9	X	123.48203	44.01201	329.10061	18.44925	0.0822449	0.36980616	1.9222946	21	—	—
457004 2008 CZ_{76}	14.8	X	231.21363	52.57188	114.92255	12.64074	0.0759582	0.12556472	3.9496411	21	11 13.7	20.7
457005 2008 CN_{77}	18.0	X	345.96720	79.36865	133.51958	23.58732	0.0631621	0.37786704	1.8948582	21	2 3.6	19.6
457006 2008 CO_{80}	17.2	X	194.87670	336.93129	129.78588	11.93967	0.1988443	0.25462905	2.4652677	21	7 22.7	21.3
457007 2008 CX_{82}	17.4	X	52.87500	38.23732	125.99931	5.19639	0.1193834	0.23392782	2.6086439	21	4 20.4	20.3
457008 2008 CA_{83}	17.3	X	162.49215	18.36061	129.84698	6.99055	0.0762803	0.25329643	2.4739068	21	8 15.5	20.7
457009 2008 CB_{87}	16.8	X	86.16457	117.21611	139.16008	14.86011	0.1741308	0.25470448	2.4647809	21	10 25.6	20.7
457010 2008 CO_{87}	17.2	X	169.11265	42.80497	41.01535	4.52629	0.1827544	0.24465024	2.5318557	21	5 31.3	21.3
457011 2008 CY_{92}	17.9	X	144.24001	105.93125	348.80557	4.77917	0.2038120	0.24174981	2.5520663	21	5 22.9	22.1
457012 2008 CZ_{92}	17.8	X	197.37574	297.58759	338.56789	17.90260	0.0127026	0.35917444	1.9600438	21	—	—
457013 2008 CY_{109}	18.0	X	157.30635	283.78949	171.59172	12.78973	0.2290935	0.24400113	2.5363440	21	6 8.3	22.5
457014 2008 CT_{115}	17.0	X	113.78192	40.40991	80.01945	14.71268	0.1425278	0.24019429	2.5630727	21	5 21.6	20.6
457015 2008 CY_{116}	17.2	X	102.89491	19.88255	117.09498	11.98551	0.1584629	0.24003108	2.5642344	21	6 1.9	20.9
457016 2008 CZ_{119}	17.8	X	127.25225	215.59237	145.58043	24.50072	0.0780564	0.36600640	1.9355761	21	—	—
457017 2008 CN_{120}	17.8	X	195.74194	332.80956	331.63352	19.61104	0.0278949	0.36796053	1.9287172	21	—	—
457018 2008 CT_{120}	17.8	X	107.86058	254.46352	133.19525	23.81773	0.1287975	0.36848571	1.9268842	21	—	—
457019 2008 CL_{123}	18.3	X	102.84162	14.74527	152.93932	6.70077	0.1934557	0.24499493	2.5294804	21	7 14.6	22.1
457020 2008 CP_{131}	16.5	X	303.04443	337.01489	334.76099	13.07552	0.1718793	0.23996175	2.5647284	21	4 22.8	20.1
457021 2008 CL_{134}	16.7	X	323.14701	330.20963	311.61782	13.83579	0.1003731	0.24012624	2.5635570	21	4 22.0	20.2
457022 2008 CX_{137}	17.7	X	122.75290	159.29589	345.22048	12.39778	0.1015643	0.24422151	2.5348180	21	6 27.4	21.5
457023 2008 CP_{141}	17.4	X	101.35548	208.37629	333.80544	16.96396	0.0970716	0.24529576	2.5274119	21	7 25.2	21.0
457024 2008 CZ_{142}	17.4	X	5.93081	65.71748	154.52431	3.98834	0.1684207	0.23094440	2.6310620	21	4 12.3	19.9
457025 2008 CQ_{144}	17.9	X	64.27124	213.48636	276.72630	2.96630	0.0888956	0.23059093	2.6337501	21	3 14.9	21.1
457026 2008 CG_{145}	17.7	X	356.71200	6.59745	179.35022	3.11861	0.0524082	0.22659809	2.6645991	21	2 15.7	20.9
457027 2008 CQ_{146}	16.8	X	59.48419	232.67713	319.15940	16.10134	0.1352429	0.23950419	2.5679938	21	6 9.7	20.1
457028 2008 CY_{148}	17.6	X	60.99124	296.28391	263.13877	2.88600	0.1475823	0.24240462	2.5474683	21	6 25.5	20.3
457029 2008 CD_{159}	18.1	X	109.54292	203.27655	301.68834	6.25135	0.2330278	0.24192153	2.5508585	21	6 27.4	21.9
457030 2008 CH_{160}	18.0	X	147.47062	171.53370	292.75248	3.48508	0.2306011	0.24360315	2.5391057	21	6 9.8	22.2
457031 2008 CD_{166}	17.4	X	359.58054	231.48912	10.49006	2.17185	0.0986152	0.23465933	2.6032198	21	5 3.8	20.3
457032 2008 CZ_{169}	17.3	X	48.98606	246.25147	312.15417	8.28548	0.0769401	0.23935038	2.5690938	21	5 22.8	20.5
457033 2008 CU_{172}	16.8	X	73.91414	293.30321	169.48028	13.29290	0.1328086	0.22884016	2.6471663	21	2 27.6	19.8
457034 2008 CA_{179}	18.1	X	274.21261	228.47901	352.03349	19.33136	0.0480162	0.36367883	1.9438259	21	—	—
457035 2008 CM_{181}	17.6	X	251.95604	252.59108	322.87757	16.29887	0.0723285	0.35644768	1.9700270	21	—	—
457036 2008 CT_{186}	16.0	X	129.33545	245.93597	157.01792	30.68375	0.2450653	0.23270063	2.6178073	21	3 12.2	20.0
457037 2008 CB_{191}	18.1	X	137.18082	141.75969	326.21905	2.60917	0.1701741	0.24313794	2.5423435	21	5 31.1	22.0
457038 2008 CT_{193}	17.2	X	351.61861	284.68504	349.58602	12.48367	0.2281227	0.23753443	2.5821710	21	5 22.5	19.7
457039 2008 CV_{196}	18.3	X	114.34108	128.30229	5.89656	3.06686	0.1594807	0.24071983	2.5593409	21	6 9.0	21.9
457040 2008 CR_{199}	17.7	X	32.50588	326.87980	183.04615	2.42917	0.1261568	0.22484773	2.6784099	21	2 21.4	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457041 2008 CW_{201}	16.3	X	300.88308	301.35169	10.27139	30.95468	0.2487553	0.22986263	2.6393104	21	4 9.2	20.0
457042 2008 CT_{203}	17.7	X	78.64966	70.87568	122.93372	3.86742	0.1546018	0.24264635	2.5457761	21	7 15.1	20.7
457043 2008 CV_{203}	18.2	X	122.57342	304.57600	171.88121	2.86425	0.2568492	0.24084985	2.5584197	21	6 5.8	22.2
457044 2008 CA_{206}	17.2	X	55.84988	124.84660	114.88426	16.02215	0.0821977	0.25122072	2.4875152	21	8 5.6	20.2
457045 2008 CT_{214}	17.2	X	12.85984	339.03830	202.65269	4.18221	0.1622533	0.22579731	2.6708954	21	2 26.8	19.8
457046 2008 DD_{4}	17.1	X	165.55112	17.59172	51.06116	6.28321	0.2430842	0.24334187	2.5409229	21	5 11.9	21.4
457047 2008 DQ_{10}	17.1	X	312.91909	255.34783	339.74809	4.74287	0.0799071	0.22896020	2.6462409	21	2 16.3	20.4
457048 2008 DY_{10}	18.0	X	85.79018	53.69769	119.37692	3.87946	0.0631465	0.24435955	2.5338633	21	6 11.6	21.2
457049 2008 DN_{17}	16.4	X	279.01023	356.86097	345.40927	13.39884	0.1524285	0.24110175	2.5566374	21	5 6.3	20.2
457050 2008 DJ_{25}	17.9	X	87.14002	96.62011	68.65310	5.62481	0.1542593	0.24062150	2.5600381	21	6 16.8	21.1
457051 2008 DJ_{27}	17.1	X	40.28295	323.78431	186.55616	9.75423	0.1497988	0.22700744	2.6613949	21	3 8.0	19.7
457052 2008 DH_{31}	17.8	X	159.67398	309.91309	108.20138	3.94688	0.1538604	0.23998123	2.5645895	21	4 20.9	21.8
457053 2008 DA_{49}	17.7	X	103.31531	56.67865	5.83486	21.11105	0.1156904	0.37302922	1.9112059	21	1 18.9	19.8
457054 2008 DZ_{49}	17.4	X	13.85136	171.50334	65.78775	6.66554	0.1186909	0.24130887	2.5551743	21	5 23.1	20.0
457055 2008 DT_{50}	17.3	X	188.99975	31.43243	308.06691	5.30995	0.0079289	0.22181601	2.7027599	21	2 4.1	21.1
457056 2008 DV_{53}	17.6	X	74.47071	182.37596	340.76037	4.75985	0.2120512	0.23560828	2.5962252	21	6 4.9	20.9
457057 2008 DZ_{59}	16.9	X	2.41311	232.26540	350.14973	11.83404	0.1374303	0.22823932	2.6518100	21	4 5.3	19.9
457058 2008 DN_{75}	17.3	X	15.66527	76.41282	155.85125	8.05153	0.0602427	0.23796190	2.5790777	21	5 20.5	20.5
457059 2008 EG	20.0	X	111.68649	355.51549	327.45336	26.78732	0.7390471	1.07654181	0.9428634	21	—	—
457060 2008 ET_{3}	16.9	X	19.55245	91.98350	99.68730	6.93763	0.1792812	0.22937570	2.6430443	21	4 1.2	19.4
457061 2008 EM_{5}	17.2	X	18.72947	229.55791	1.76726	13.34517	0.1152795	0.23659736	2.5889845	21	5 18.4	20.2
457062 2008 EJ_{23}	16.7	X	294.42710	84.67094	137.34872	14.85078	0.2186369	0.21528583	2.7571417	21	—	—
457063 2008 EC_{37}	18.3	X	45.08110	169.22894	321.63963	19.11506	0.0566395	0.37568785	1.9021785	21	1 11.3	20.0
457064 2008 EX_{44}	16.9	X	323.59992	293.71205	0.25764	14.77170	0.1049827	0.23460720	2.6036054	21	5 11.3	20.3
457065 2008 EZ_{44}	17.9	X	42.52259	32.40936	184.08766	3.31047	0.1723829	0.23569965	2.5955541	21	6 22.4	20.6
457066 2008 EB_{45}	17.5	X	20.28620	268.27755	332.27459	1.21936	0.1298606	0.23544392	2.5974332	21	6 10.3	20.1
457067 2008 ER_{47}	16.9	X	326.32668	253.52524	43.32873	8.68648	0.2021600	0.23146569	2.6271103	21	5 10.9	19.7
457068 2008 EK_{49}	17.2	X	88.10774	3.69191	183.48481	12.06503	0.1261735	0.24127596	2.5554066	21	7 12.5	20.9
457069 2008 EJ_{53}	17.3	X	64.94669	50.49572	148.73151	12.25046	0.1994469	0.23779123	2.5803116	21	7 9.9	20.6
457070 2008 EG_{54}	17.3	X	154.91300	342.91606	130.56304	8.58174	0.1107729	0.24207868	2.5497544	21	6 22.5	21.2
457071 2008 EP_{57}	17.6	X	49.40451	113.50950	89.61093	4.80437	0.1287257	0.23550865	2.5969573	21	6 8.7	20.4
457072 2008 EM_{66}	17.6	X	161.42662	118.65461	290.57437	3.85855	0.1712136	0.23301163	2.6154775	21	4 9.3	21.8
457073 2008 EO_{68}	17.9	X	243.01816	252.89436	15.14355	19.94040	0.0629905	0.36486050	1.9396267	21	—	—
457074 2008 EE_{69}	17.5	X	137.66577	90.64149	11.63696	24.04998	0.2484412	0.23997791	2.5646132	21	5 22.8	22.2
457075 2008 EK_{72}	17.3	X	19.38299	210.76204	4.91471	13.46258	0.1248135	0.23386412	2.6091176	21	4 26.7	20.1
457076 2008 EP_{77}	17.6	X	107.73547	23.86736	157.23299	8.14085	0.1334685	0.24361255	2.5390404	21	7 30.5	21.3
457077 2008 EU_{82}	16.5	X	94.82288	217.85776	332.47660	16.73580	0.1176915	0.24397678	2.5365127	21	7 30.5	20.1
457078 2008 EN_{90}	16.8	X	177.27852	61.60768	0.89358	22.30594	0.0463748	0.23504220	2.6003920	21	4 28.1	20.8
457079 2008 EN_{92}	16.7	X	109.77115	74.91997	84.94483	14.53776	0.1319479	0.24188262	2.5511321	21	7 4.9	20.4
457080 2008 EA_{96}	17.1	X	31.84069	205.64028	11.04300	13.26716	0.1804337	0.23570878	2.5954871	21	5 28.6	19.8
457081 2008 EZ_{98}	17.2	X	90.15201	261.31291	258.54263	5.83184	0.1637583	0.24122121	2.5557933	21	6 15.0	20.3
457082 2008 EE_{100}	18.2	X	330.97977	199.74353	359.66763	21.91382	0.0556469	0.36812820	1.9281315	21	—	—
457083 2008 EE_{107}	17.1	X	240.56075	288.01545	24.89191	14.36562	0.0729061	0.22335024	2.6903685	21	3 8.3	21.2
457084 2008 ER_{111}	17.1	X	325.77126	184.05682	57.79945	4.17904	0.0983735	0.22706374	2.6609550	21	3 14.0	20.4
457085 2008 EA_{113}	17.5	X	109.18666	155.26733	341.12171	8.45634	0.1918662	0.23829881	2.5766462	21	6 9.8	21.4
457086 2008 ES_{114}	17.1	X	48.60285	193.98748	352.73173	15.03796	0.0962155	0.23216244	2.6218514	21	5 3.2	20.5
457087 2008 EV_{117}	18.1	X	63.34548	241.29935	329.77573	3.76497	0.1368055	0.24319573	2.5419407	21	7 15.0	21.0
457088 2008 EF_{121}	17.3	X	17.76229	159.02189	38.94834	3.23114	0.1270307	0.22825786	2.6516664	21	4 4.3	20.1
457089 2008 ER_{123}	17.2	X	12.88613	43.45173	141.05788	11.92385	0.1399116	0.23002051	2.6381026	21	3 7.2	19.9
457090 2008 ET_{123}	17.8	X	79.34399	228.79261	323.25961	10.92015	0.1235279	0.24485540	2.5304413	21	7 10.7	21.1
457091 2008 EQ_{124}	17.7	X	167.88089	187.17193	208.43933	4.74402	0.2563416	0.23772338	2.5808026	21	4 3.9	22.2
457092 2008 EH_{127}	17.7	X	34.29818	14.05226	197.98853	4.84926	0.0976284	0.23344599	2.6122322	21	5 23.3	20.6
457093 2008 ER_{127}	18.2	X	103.79548	356.18038	129.11810	6.59670	0.1941171	0.23755282	2.5820377	21	5 22.8	21.9
457094 2008 EL_{131}	17.8	X	112.59216	355.66660	129.62339	5.40372	0.1576979	0.23688373	2.5868975	21	5 27.7	21.5
457095 2008 EW_{134}	17.7	X	66.14757	90.02863	76.04861	3.11208	0.0903488	0.23298152	2.6157028	21	5 8.9	20.7
457096 2008 EL_{136}	17.0	X	183.26702	284.09008	170.47091	13.05465	0.1557646	0.24447673	2.5330535	21	6 27.1	21.3
457097 2008 EU_{144}	17.6	X	296.67193	154.98427	171.09626	0.88659	0.0595407	0.24189877	2.5510185	21	5 28.6	20.7
457098 2008 EB_{147}	17.5	X	137.76011	80.58144	16.95406	12.90626	0.2405930	0.23913722	2.5706203	21	5 21.3	21.9
457099 2008 EN_{147}	17.2	X	343.59773	217.18914	28.38329	5.50330	0.1088451	0.22954114	2.6417742	21	4 12.0	20.2
457100 2008 ET_{151}	17.4	X	81.57017	14.51541	116.41819	2.71155	0.0847840	0.22871086	2.6481639	21	4 13.8	20.7
457101 2008 EK_{152}	17.5	X	10.75483	277.16746	289.33205	1.41202	0.0674977	0.22787427	2.6546413	21	4 4.1	20.7
457102 2008 EF_{157}	17.8	X	111.50571	283.35653	194.36909	11.46650	0.1335150	0.23384303	2.6092744	21	5 13.6	21.5
457103 2008 EY_{157}	17.3	X	313.28573	103.83523	174.81037	12.83025	0.1916904	0.22739723	2.6583527	21	3 29.6	20.6
457104 2008 EV_{160}	17.6	X	348.55394	33.95834	217.97487	1.59856	0.1482771	0.23077166	2.6323749	21	4 24.9	20.4
457105 2008 EQ_{164}	16.7	X	340.96971	47.16817	137.42249	9.99804	0.2101148	0.21963912	2.7205889	21	1 2.4	20.1
457106 2008 EJ_{167}	17.6	X	231.37778	144.60553	175.75770	23.36709	0.0511236	0.37398750	1.9079398	21	2 1.8	20.2
457107 2008 FH_{1}	17.8	X	9.01051	76.55679	153.57248	3.98668	0.2590720	0.23165890	2.6256493	21	5 1.2	19.5
457108 2008 FR_{6}	17.6	X	62.19686	63.07296	136.24606	6.23975	0.1390835	0.23646677	2.5899376	21	6 26.0	20.6
457109 2008 FO_{11}	17.5	X	104.38720	153.73381	342.12763	10.39875	0.0652019	0.23906303	2.5711521	21	5 12.8	21.1
457110 2008 FF_{12}	18.1	X	115.19138	288.75359	208.77217	1.05160	0.1302983	0.24184258	2.5514136	21	6 11.3	21.7
457111 2008 FA_{13}	18.2	X	140.37934	194.63620	49.73233	1.73391	0.1431972	0.26090472	2.4255753	21	11 24.9	21.9
457112 2008 FC_{13}	17.7	X	21.13769	67.62642	171.08218	4.49253	0.1029208	0.23592499	2.5939012	21	6 8.3	20.5
457113 2008 FH_{13}	17.7	X	40.09170	35.61725	182.00224	6.99923	0.0716034	0.23631452	2.5910499	21	6 7.5	20.8
457114 2008 FW_{15}	17.3	X	96.51742	109.35043	70.48696	8.31352	0.1335488	0.23886366	2.5725826	21	7 17.2	20.9
457115 2008 FT_{16}	17.0	X	38.19658	186.32085	8.16860	5.99265	0.1365249	0.23363091	2.6108536	21	5 5.3	19.9
457116 2008 FL_{19}	17.4	X	42.85174	148.41715	6.45653	4.27410	0.1525168	0.22771706	2.6558630	21	3 21.4	20.0
457117 2008 FS_{24}	17.5	X	47.58185	72.15063	91.95722	7.34507	0.1001909	0.22672665	2.6635918	21	4 11.6	20.6
457118 2008 FZ_{26}	17.0	X	333.51007	232.35345	28.98728	13.45785	0.2318660	0.22423212	2.6833099	21	4 2.4	19.9
457119 2008 FR_{27}	17.1	X	77.68648	25.55931	151.38105	12.66431	0.0907865	0.23615570	2.5922115	21	6 11.6	20.7
457120 2008 FB_{30}	17.8	X	118.73969	147.75899	340.24991	7.40345	0.1492969	0.24067021	2.5596927	21	6 3.8	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457121 2008 FS_{33}	18.2	X	106.47482	2.77153	174.68669	5.31395	0.1289680	0.24473751	2.5312538	21	7 23.5	21.9
457122 2008 FP_{38}	17.5	X	329.84012	108.87903	155.01152	5.42712	0.1178741	0.22764845	2.6563966	21	4 15.9	20.7
457123 2008 FV_{49}	18.1	X	12.37881	67.62082	181.45864	3.42908	0.1449819	0.23440581	2.6050964	21	6 8.6	20.6
457124 2008 FS_{51}	17.5	X	263.76435	265.70184	52.01784	3.31949	0.0486391	0.22806825	2.6531359	21	4 7.1	21.0
457125 2008 FF_{52}	17.1	X	353.84929	207.79720	29.49914	4.72088	0.0432929	0.23020262	2.6367111	21	4 22.2	20.4
457126 2008 FJ_{52}	17.4	X	350.93249	88.32361	185.77578	15.13333	0.1244373	0.23490167	2.6014290	21	6 5.0	20.5
457127 2008 FF_{58}	16.7	X	322.26857	184.01609	43.77672	11.42341	0.0610251	0.21881178	2.7274424	21	3 1.5	20.5
457128 2008 FP_{58}	17.3	X	2.33295	140.58787	83.54360	3.82631	0.1216282	0.22553808	2.6729416	21	4 15.2	20.3
457129 2008 FQ_{63}	17.8	X	95.73546	81.32817	106.32150	4.79666	0.1238674	0.24108731	2.5567395	21	7 24.9	21.4
457130 2008 FB_{65}	18.0	X	72.94087	350.27777	195.91985	13.84221	0.1877541	0.23516236	2.5995061	21	6 30.4	21.6
457131 2008 FB_{68}	17.8	X	357.95732	292.39370	198.46156	20.73812	0.0971497	0.35784817	1.9648837	21	—	—
457132 2008 FA_{71}	17.5	X	16.38254	106.20336	146.06967	12.33082	0.2321475	0.23283132	2.6168276	21	6 28.5	19.8
457133 2008 FG_{75}	17.5	X	354.57542	110.34325	167.04556	11.85421	0.1360462	0.23555965	2.5965824	21	6 16.1	20.4
457134 2008 FB_{80}	17.1	X	328.61933	232.97653	15.35548	1.95901	0.1503214	0.22526563	2.6750963	21	3 17.5	20.1
457135 2008 FN_{80}	17.4	X	17.22613	324.41649	195.95897	11.98017	0.1233689	0.22141386	2.7060315	21	2 6.5	20.6
457136 2008 FD_{86}	17.4	X	124.22397	99.33770	8.84327	13.10619	0.1048134	0.23562332	2.5961147	21	5 6.4	21.2
457137 2008 FA_{91}	17.4	X	358.95248	222.66488	17.86155	2.22867	0.1254968	0.23590474	2.5940496	21	4 28.8	20.0
457138 2008 FW_{96}	17.6	X	2.94263	49.50656	179.01731	9.18277	0.1899854	0.22576261	2.6711690	21	4 18.3	20.0
457139 2008 FK_{99}	17.2	X	357.23784	118.70458	92.35276	7.79506	0.0892023	0.22341385	2.6898578	21	3 24.6	20.5
457140 2008 FF_{101}	17.4	X	56.40431	27.41306	145.63493	6.77523	0.1521660	0.22976925	2.6400255	21	5 14.1	20.4
457141 2008 FG_{103}	17.5	X	110.56515	345.00295	137.18834	4.89905	0.1796975	0.23183128	2.6243476	21	5 24.4	21.3
457142 2008 FP_{114}	17.9	X	109.56560	344.04609	18.60578	21.07699	0.0949280	0.35455148	1.9770448	21	—	—
457143 2008 FT_{122}	16.8	X	341.14553	189.33681	76.10829	12.16110	0.1572327	0.22851451	2.6496806	21	5 4.2	19.8
457144 2008 FL_{126}	17.0	X	227.36389	154.50599	174.51204	6.58444	0.0359710	0.21977043	2.7195051	21	3 9.5	20.7
457145 2008 FV_{126}	16.8	X	21.10265	161.67308	56.69596	14.65938	0.1950178	0.22882140	2.6473110	21	5 13.3	19.1
457146 2008 FE_{128}	17.5	X	94.98480	91.32574	52.12337	6.26659	0.0804126	0.23145435	2.6271961	21	5 17.2	20.7
457147 2008 FZ_{129}	17.9	X	127.38941	336.27116	180.25922	4.61125	0.1819055	0.24173516	2.5521694	21	7 23.9	22.0
457148 2008 FP_{130}	17.3	X	18.12528	83.73089	154.10540	13.45902	0.2233536	0.23110687	2.6298288	21	6 10.1	19.8
457149 2008 FY_{132}	18.3	X	27.60670	227.79144	342.96787	1.43068	0.1351335	0.22989330	2.6390756	21	5 10.8	21.0
457150 2008 FD_{133}	13.6	X	305.44921	269.48480	51.28894	30.41446	0.0252849	0.08405797	5.1611933	21	6 7.1	20.6
457151 2008 FE_{133}	17.1	X	119.58974	91.36004	74.95214	4.87529	0.1154628	0.23928575	2.5695564	21	7 24.2	20.9
457152 2008 FQ_{133}	18.0	X	31.67625	49.03513	164.40203	2.96740	0.0615481	0.23276223	2.6173454	21	5 18.3	21.0
457153 2008 FN_{134}	17.8	X	11.67049	191.44967	16.75871	2.30447	0.1395676	0.22617392	2.6679296	21	4 6.7	20.3
457154 2008 FW_{136}	16.1	X	306.97499	276.95607	267.98499	10.34668	0.1811113	0.21100889	2.7942733	21	—	—
457155 2008 GU	16.9	X	120.05389	48.81541	92.94336	13.27855	0.2446275	0.24093928	2.5577866	21	7 4.3	21.0
457156 2008 GS_{5}	17.5	X	155.63037	306.74732	169.20368	15.73909	0.1200956	0.24462429	2.5320348	21	6 26.6	21.7
457157 2008 GT_{7}	17.2	X	33.44486	115.41690	109.20868	3.14218	0.0694260	0.23272425	2.6176302	21	6 6.3	20.1
457158 2008 GW_{11}	16.7	X	352.04149	182.91707	37.17889	14.55930	0.1874066	0.22183819	2.7025797	21	3 20.6	19.7
457159 2008 GY_{11}	16.4	X	12.75986	315.34456	218.79512	16.54027	0.2243169	0.21986387	2.7187345	21	2 6.7	19.4
457160 2008 GF_{14}	17.1	X	351.24136	218.07773	25.24018	6.87726	0.1698340	0.22917519	2.6445857	21	4 15.2	19.8
457161 2008 GP_{34}	17.2	X	107.37065	55.52340	13.86085	11.63738	0.1462446	0.22271371	2.6954922	21	3 11.0	20.8
457162 2008 GV_{34}	17.5	X	48.63593	198.33372	15.87276	1.10722	0.1272567	0.23630048	2.5911525	21	6 23.3	20.4
457163 2008 GJ_{38}	17.4	X	78.86650	31.63786	149.67418	2.84507	0.2231629	0.23454417	2.6040718	21	7 8.7	20.8
457164 2008 GA_{44}	16.9	X	123.17694	53.79235	27.70942	11.12567	0.1687289	0.22486825	2.6782470	21	4 14.1	20.8
457165 2008 GR_{52}	17.3	X	334.73547	215.53985	25.94465	5.38008	0.1292987	0.22542747	2.6738158	21	3 21.9	20.4
457166 2008 GD_{57}	17.5	X	22.75330	147.45687	55.43623	3.71457	0.1102733	0.22658816	2.6646770	21	4 20.9	20.3
457167 2008 GA_{67}	17.3	X	73.89925	103.58115	24.49478	13.52696	0.1454943	0.22657482	2.6647816	21	4 7.7	20.3
457168 2008 GE_{67}	17.3	X	44.53788	337.04446	196.23420	3.85034	0.0552778	0.22709806	2.6606869	21	4 11.7	20.5
457169 2008 GL_{69}	17.3	X	121.45812	355.22029	154.12816	5.25686	0.1903624	0.23838209	2.5760461	21	7 9.9	21.3
457170 2008 GM_{69}	16.6	X	357.57347	44.74340	155.86878	12.86344	0.1849540	0.22379379	2.6868125	21	2 23.7	19.4
457171 2008 GA_{73}	17.4	X	71.74686	113.56120	19.33283	15.87708	0.1512686	0.22884654	2.6502062	21	4 10.1	20.4
457172 2008 GY_{73}	17.3	X	131.51577	323.01807	108.91007	6.97026	0.1135436	0.22454955	2.6807805	21	4 7.8	21.2
457173 2008 GS_{80}	16.6	X	149.75083	270.66073	101.78785	7.05113	0.0850745	0.21546801	2.7555873	21	2 8.9	20.5
457174 2008 GA_{81}	17.8	X	21.25479	164.05198	54.98657	4.32380	0.1502730	0.23143691	2.6273280	21	5 11.8	20.3
457175 2008 GO_{98}	12.9	X	221.47145	53.70120	192.56603	15.55644	0.2794008	0.12464454	3.9690558	21	—	—
457176 2008 GF_{100}	17.3	X	102.19455	159.73167	36.78844	8.75440	0.1677380	0.24251861	2.5466700	21	8 23.1	21.2
457177 2008 GC_{105}	17.7	X	149.91834	50.05843	85.83039	5.39080	0.0868376	0.24182180	2.5515598	21	7 15.4	21.3
457178 2008 GU_{105}	16.9	X	352.90093	180.85548	51.99103	10.42549	0.1659911	0.22635499	2.6665066	21	4 8.3	19.7
457179 2008 GX_{110}	16.0	X	346.17534	209.57735	78.28486	34.28766	0.1694061	0.23305249	2.6151718	21	6 10.9	18.5
457180 2008 GD_{115}	17.2	X	118.75916	13.92649	94.32593	6.16859	0.2189841	0.23253794	2.6190282	21	5 19.8	21.1
457181 2008 GF_{115}	17.1	X	221.07404	186.71290	120.63481	5.91870	0.1412808	0.21124122	2.7922241	21	2 3.5	21.6
457182 2008 GW_{120}	16.6	X	358.92773	164.32779	62.44944	13.50469	0.1013452	0.22796398	2.6539449	21	4 17.7	19.7
457183 2008 GZ_{123}	17.0	X	4.92546	239.26597	6.54131	12.93042	0.2282987	0.23070345	2.6328937	21	5 10.2	19.3
457184 2008 GE_{124}	17.3	X	266.71077	274.09301	20.56913	21.50156	0.1031637	0.37315177	1.9107875	21	2 23.5	20.1
457185 2008 GW_{124}	17.6	X	124.15787	36.29506	124.54670	5.98579	0.1537158	0.24372791	2.5382392	21	7 24.9	21.5
457186 2008 GS_{137}	17.3	X	50.81686	331.64578	201.41794	11.36965	0.1280743	0.22698889	2.6615399	21	4 29.9	20.2
457187 2008 GN_{139}	17.0	X	36.35451	265.63877	235.18645	4.31620	0.1145534	0.21847452	2.7302486	21	2 15.5	20.0
457188 2008 GO_{143}	17.2	X	354.55584	216.31224	18.69986	8.31134	0.1565104	0.22594985	2.6696931	21	4 11.1	19.9
457189 2008 GB_{144}	16.6	X	21.28782	95.38605	111.12763	12.07951	0.2124754	0.22872106	2.6480851	21	5 1.4	19.1
457190 2008 GC_{144}	15.5	X	77.78432	187.50794	76.73521	25.12065	0.2185962	0.17330240	3.1861508	21	10 28.8	20.7
457191 2008 GA_{146}	17.6	X	42.86900	330.33223	232.59162	5.39331	0.2569026	0.23146225	2.6271363	21	6 16.4	19.9
457192 2008 HV	17.8	X	86.11326	323.89370	201.31857	1.97990	0.1100986	0.23545011	2.5973877	21	6 8.8	21.1
457193 2008 HS_{6}	17.2	X	16.58353	14.73793	207.19816	11.02112	0.1480248	0.22984305	2.6394603	21	5 7.6	19.7
457194 2008 HN_{13}	17.5	X	22.10291	47.49329	210.58770	8.33110	0.1280392	0.23743217	2.5829124	21	7 8.9	20.4
457195 2008 HQ_{16}	16.9	X	37.90477	354.08698	277.22126	4.52815	0.2464120	0.23941586	2.5686254	21	9 14.2	19.7
457196 2008 HZ_{17}	17.4	X	124.66625	359.61763	157.66714	9.17330	0.2794671	0.24219408	2.5489444	21	7 29.7	21.8
457197 2008 HJ_{22}	16.4	X	309.48070	119.71095	103.34095	16.30894	0.0609184	0.21213770	2.7843520	21	2 3.9	20.3
457198 2008 HH_{25}	18.1	X	31.63889	207.13142	354.70211	1.68440	0.1321442	0.22917067	2.6446205	21	5 5.1	20.9
457199 2008 HC_{39}	17.3	X	336.30560	258.51864	12.87831	12.96153	0.1532053	0.23168475	2.6254541	21	4 26.3	20.2
457200 2008 HC_{44}	17.1	X	11.91704	326.18548	191.10994	5.22935	0.1016123	0.21678156	2.7444447	21	1 29.1	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457201 2008 HQ_{44}	17.3	X	80.85503	101.91335	99.18132	13.20595	0.2112353	0.23667053	2.5884508	21	8 7.8	21.0
457202 2008 HV_{48}	17.3	X	77.78066	59.02905	147.13570	8.71015	0.1826468	0.23821634	2.5772409	21	8 3.8	20.8
457203 2008 HT_{55}	17.4	X	56.70833	92.60285	107.58564	2.51341	0.1287496	0.23102690	2.6304357	21	6 16.9	20.3
457204 2008 HL_{62}	17.6	X	76.14428	42.16355	163.07209	10.81614	0.1683091	0.23636583	2.5906749	21	7 28.2	21.1
457205 2008 JA_{3}	17.0	X	359.98924	55.10553	219.44931	14.48740	0.1138643	0.23310687	2.6147650	21	6 20.9	20.1
457206 2008 JM_{8}	17.3	X	56.42899	113.81864	90.06070	6.23445	0.2271664	0.23584733	2.5944706	21	7 8.5	20.1
457207 2008 JL_{9}	16.8	X	51.65681	90.68576	97.03286	13.28578	0.1260788	0.22925048	2.6440067	21	5 24.2	20.0
457208 2008 JK_{20}	15.7	X	85.77154	188.63787	90.03689	16.60575	0.2415033	0.17571983	3.1568615	21	11 17.5	20.9
457209 2008 JR_{21}	17.0	X	285.15032	127.40153	154.10414	9.29137	0.0875680	0.21973749	2.7197769	21	3 13.8	20.8
457210 2008 JY_{22}	17.6	X	76.48751	340.39302	197.25170	13.02373	0.2031221	0.23540563	2.5977149	21	6 26.4	21.2
457211 2008 JD_{26}	16.0	X	280.71076	195.67851	62.01280	13.08305	0.0926680	0.21170607	2.7881353	21	2 11.3	20.3
457212 2008 JR_{26}	19.8	X	283.73483	96.62463	230.71072	16.81438	0.1774921	0.59870247	1.3942116	21	3 4.6	21.4
457213 2008 JG_{29}	17.0	X	18.15776	148.47165	90.99539	14.08295	0.1981217	0.23069288	2.6329741	21	6 9.7	19.2
457214 2008 JK_{30}	17.8	X	25.23870	13.99880	215.64850	5.82573	0.1482634	0.22949463	2.6421311	21	6 5.7	20.4
457215 2008 JS_{33}	16.8	X	328.18615	75.02698	193.35648	12.33982	0.2427713	0.22218774	2.6997444	21	3 28.9	19.7
457216 2008 JM_{36}	17.3	X	279.44126	114.23467	188.81697	14.02597	0.0916537	0.21933328	2.7231173	21	4 1.8	21.1
457217 2008 KE_{2}	16.8	X	240.63827	96.60851	217.07141	12.37274	0.2113933	0.21034758	2.8001268	21	2 20.6	21.8
457218 2008 KC_{4}	17.5	X	94.64517	323.83689	204.26511	13.26671	0.1902449	0.23349592	2.6118598	21	7 3.9	21.5
457219 2008 KM_{6}	15.7	X	116.52630	220.67934	87.99767	17.66709	0.3341903	0.18236906	3.0796541	21	—	—
457220 2008 KY_{6}	16.8	X	36.30643	102.66920	109.69048	14.51445	0.1813671	0.22842456	2.6503761	21	6 7.8	19.6
457221 2008 KZ_{8}	13.9	X	46.18075	357.09111	226.68253	11.98556	0.1768632	0.08288489	5.2097772	21	7 7.7	20.4
457222 2008 KG_{14}	17.0	X	190.89348	228.81110	143.45988	11.71955	0.1254029	0.21612891	2.7499670	21	3 27.4	21.4
457223 2008 KM_{17}	17.7	X	70.20304	86.16012	72.39580	13.79691	0.2011450	0.22892335	2.6465249	21	5 23.3	20.8
457224 2008 KM_{18}	16.7	X	120.58754	24.29585	125.37036	13.73167	0.1980336	0.23716767	2.5848324	21	7 10.6	20.7
457225 2008 KN_{18}	17.0	X	46.78798	7.95884	174.70332	14.08911	0.1805302	0.22700948	2.6613789	21	5 15.6	20.0
457226 2008 KK_{23}	16.8	X	20.92195	174.49380	83.01510	15.37999	0.2158708	0.23190905	2.6237609	21	7 17.7	19.2
457227 2008 KY_{29}	17.3	X	56.70296	60.18157	150.42148	12.52217	0.2309889	0.23313499	2.6145548	21	7 18.2	20.4
457228 2008 KM_{33}	17.2	X	81.47939	343.62510	211.89678	13.61546	0.1935502	0.23586127	2.5943683	21	7 23.2	21.1
457229 2008 KB_{40}	17.2	X	305.38414	149.79346	138.28171	7.72832	0.0686213	0.22220974	2.6995662	21	4 22.2	20.8
457230 2008 KU_{40}	17.1	X	335.06996	119.44298	113.18658	6.07217	0.0541627	0.22062547	2.7124742	21	3 22.9	20.6
457231 2008 KM_{41}	17.6	X	344.12993	88.24444	146.14900	9.60981	0.2047533	0.22052559	2.7132932	21	3 18.8	20.5
457232 2008 KF_{43}	16.4	X	336.88220	356.49667	282.78169	11.86434	0.1741755	0.21993961	2.7181104	21	5 7.7	19.5
457233 2008 KH_{43}	16.9	X	285.72505	155.39153	132.87918	17.95068	0.2296515	0.21506207	2.7590538	21	3 7.7	21.2
457234 2008 LC_{7}	17.2	X	304.33305	98.01747	168.46942	9.38832	0.1763545	0.21697137	2.7428439	21	3 4.4	21.0
457235 2008 LT_{8}	16.1	X	283.23614	44.85929	269.60297	12.06206	0.1835916	0.21403607	2.7678640	21	4 3.2	20.5
457236 2008 LO_{9}	17.3	X	20.97066	134.73881	152.01048	12.14090	0.1891252	0.23683201	2.5872742	21	8 29.4	19.7
457237 2008 LJ_{14}	17.2	X	34.48005	82.46513	120.92629	12.11093	0.1022088	0.22665840	2.6641264	21	5 15.9	20.5
457238 2008 LN_{14}	17.1	X	75.12664	65.79690	105.63862	14.88740	0.2034075	0.23081756	2.6320259	21	6 18.0	20.4
457239 2008 NU_{4}	16.4	X	46.36965	268.71455	312.10871	10.71266	0.1713313	0.22320116	2.6915663	21	7 7.5	19.4
457240 2008 OT_{6}	16.1	X	97.14434	42.80875	282.71141	9.90595	0.2774564	0.17394800	3.1782625	21	—	—
457241 2008 OY_{8}	16.2	X	1.16337	359.96086	274.64610	12.88423	0.2198004	0.22202522	2.7010617	21	6 24.3	18.5
457242 2008 OC_{19}	16.0	X	107.90440	41.74824	316.35116	21.26466	0.1797184	0.18069611	3.0986333	21	—	—
457243 2008 OC_{21}	16.6	X	60.07336	77.74217	328.12432	13.23352	0.2339688	0.17621302	3.1509685	21	—	—
457244 2008 OT_{21}	16.6	X	42.99233	63.83988	341.44989	9.37075	0.1076281	0.17390459	3.1787913	21	—	—
457245 2008 OH_{22}	16.5	X	99.11068	23.95089	326.93277	4.42984	0.1588644	0.17562017	3.1580557	21	—	—
457246 2008 PV_{1}	16.3	X	49.87530	98.64282	147.44334	14.08064	0.1280205	0.22740246	2.6583120	21	8 9.8	19.5
457247 2008 PF_{3}	15.8	X	98.60422	20.63538	326.93211	16.84711	0.2066033	0.17555170	3.1588768	21	—	—
457248 2008 QH	16.3	X	92.87066	48.74890	324.80428	26.57283	0.1627669	0.17981141	3.1087888	21	—	—
457249 2008 QR_{8}	15.7	X	73.51904	236.57153	157.27338	19.42444	0.2570864	0.17670283	3.1451429	21	—	—
457250 2008 QD_{12}	16.0	X	149.23372	26.11482	266.53763	8.62607	0.1314960	0.17873039	3.1213116	21	—	—
457251 2008 QC_{15}	16.2	X	318.90360	120.28762	178.77602	20.07970	0.1886589	0.21287755	2.7778970	21	5 9.4	19.8
457252 2008 QQ_{28}	18.1	X	2.30938	222.72231	124.04819	3.23117	0.1685906	0.30910295	2.1663766	21	11 5.6	19.7
457253 2008 QS_{31}	16.0	X	98.69420	40.09932	334.77811	16.47842	0.2363890	0.17688271	3.1430102	21	1 13.7	20.4
457254 2008 QL_{35}	15.6	X	100.67733	270.35885	78.17166	25.33805	0.3248744	0.17319262	3.1874971	21	—	—
457255 2008 QQ_{47}	16.4	X	23.25808	279.95000	184.47688	18.31743	0.1175670	0.17864237	3.1223367	21	—	—
457256 2008 RO_{4}	16.1	X	150.52242	353.04201	348.01459	8.72940	0.1322381	0.18318042	3.0705536	21	1 14.1	20.9
457257 2008 RR_{8}	18.6	X	346.40555	142.54862	225.30522	2.41313	0.1918974	0.30664257	2.1779492	21	11 6.5	19.8
457258 2008 RU_{12}	16.2	X	188.98880	108.99139	194.86221	9.16469	0.0340403	0.18921390	3.0049277	21	—	—
457259 2008 RV_{15}	16.7	X	78.97865	98.98041	280.20423	3.50646	0.1265925	0.17429642	3.1740254	21	—	—
457260 2008 RY_{24}	17.9	X	287.01209	130.67034	285.00656	4.38334	0.4598419	0.29852480	2.2172557	21	7 15.5	20.4
457261 2008 RY_{25}	16.7	X	65.76750	257.68150	9.77711	26.76344	0.4304549	0.23328320	2.6134473	21	10 29.1	21.4
457262 2008 RO_{32}	16.6	X	76.25755	35.74433	354.33805	12.50799	0.1691018	0.17573523	3.1566771	21	—	—
457263 2008 RX_{32}	16.8	X	34.33379	186.87817	342.27348	10.66336	0.0347335	0.19811403	2.9142439	21	3 22.4	20.7
457264 2008 RT_{33}	15.7	X	29.25459	10.43152	342.20173	7.92051	0.1374459	0.15920631	3.3715468	21	11 17.4	20.2
457265 2008 RU_{39}	16.4	X	176.20335	351.18527	356.20354	10.65675	0.1001308	0.18924387	3.0046105	21	2 13.4	21.1
457266 2008 RL_{41}	18.9	X	299.57913	194.66247	178.01570	0.34558	0.1126475	0.29693858	2.2251449	21	8 1.6	21.1
457267 2008 RP_{41}	16.1	X	17.54604	93.81899	3.36974	13.66134	0.0053637	0.17750140	3.1357026	21	—	—
457268 2008 RS_{42}	16.6	X	67.18298	25.31776	10.89396	9.39590	0.0725621	0.17435198	3.1733511	21	—	—
457269 2008 RC_{45}	18.6	X	278.36844	359.74183	18.32885	2.87260	0.1844065	0.29323302	2.2438516	21	6 23.7	21.4
457270 2008 RA_{46}	18.0	X	318.20865	19.18815	8.30805	4.42891	0.1277964	0.30337024	2.1935830	21	10 1.3	19.7
457271 2008 RG_{54}	16.5	X	171.22886	7.67567	309.87186	8.62424	0.0907099	0.18548518	3.0450650	21	1 2.3	21.1
457272 2008 RZ_{55}	16.3	X	314.45037	227.31055	317.99363	9.66551	0.0607828	0.18734331	3.0248970	21	—	—
457273 2008 RE_{64}	18.3	X	8.57960	346.38465	8.99108	7.60903	0.1428175	0.30962606	2.1639359	21	11 22.7	20.3
457274 2008 RA_{76}	15.9	X	43.59505	275.00698	169.46234	26.22169	0.2331033	0.17721453	3.1390856	21	1 3.3	19.7
457275 2008 RK_{78}	18.2	X	299.45945	69.60114	328.11939	5.41755	0.1746946	0.29837288	2.2180082	21	8 31.2	20.1
457276 2008 RP_{80}	16.6	X	156.82028	160.12854	182.33988	14.72082	0.1751562	0.18453527	3.0555059	21	1 21.1	21.7
457277 2008 RZ_{83}	16.4	X	29.61595	105.73933	319.36154	6.44074	0.1859944	0.17393111	3.1784681	21	—	—
457278 2008 RN_{86}	16.1	X	186.47343	14.41005	322.42625	10.24161	0.0631376	0.18810436	3.0167325	21	2 7.1	20.5
457279 2008 RQ_{86}	16.8	X	185.65147	355.00687	321.36377	9.66217	0.1654766	0.18558891	3.0439303	21	1 19.1	21.8
457280 2008 RR_{86}	16.5	X	172.27859	30.62578	319.08151	9.16913	0.1115956	0.18796731	3.0181987	21	2 9.9	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457281 2008 RS_{86}	16.8	X	227.55738	72.55580	226.66974	9.79769	0.0873970	0.19011579	2.9954168	21	1 31.7	21.6
457282 2008 RZ_{99}	16.1	X	31.64386	55.85553	359.57075	16.32332	0.0968028	0.16960975	3.2322294	21	—	—
457283 2008 RQ_{103}	16.1	X	85.73301	42.19887	344.86302	15.25812	0.0795714	0.17624253	3.1506167	21	—	—
457284 2008 RK_{105}	16.0	X	214.96177	236.07972	19.79834	8.75951	0.0505697	0.17487321	3.1670423	21	—	—
457285 2008 RK_{111}	16.0	X	240.29548	269.82157	20.94097	10.10973	0.0706432	0.19113047	2.9848059	21	2 11.9	20.6
457286 2008 RM_{112}	16.2	X	51.14542	250.13329	177.30562	23.02908	0.1473960	0.17827374	3.1266394	21	—	—
457287 2008 RU_{113}	16.6	X	32.16164	223.15387	194.90955	4.92401	0.1259358	0.17154587	3.2078635	21	—	—
457288 2008 RL_{118}	16.4	X	105.45549	358.00008	10.54743	9.73230	0.0802238	0.17476635	3.1683332	21	—	—
457289 2008 RU_{125}	16.1	X	107.58750	172.00134	198.11555	9.62191	0.0915767	0.17998865	3.1067476	21	—	—
457290 2008 RU_{128}	18.5	X	307.47331	80.28367	325.72291	0.64737	0.1181635	0.30116716	2.2042675	21	10 9.5	20.3
457291 2008 RA_{129}	16.3	X	163.12326	341.66474	344.51665	15.13346	0.2541398	0.18303250	3.0722077	21	1 19.8	21.7
457292 2008 RY_{131}	16.0	X	54.04137	245.59611	163.85949	16.60510	0.2865148	0.17322252	3.1871302	21	—	—
457293 2008 RK_{135}	17.7	X	305.64324	31.47144	331.99811	9.34233	0.1043915	0.29778695	2.2209167	21	8 1.5	19.9
457294 2008 RW_{137}	16.2	X	35.70893	240.06807	198.37533	15.68420	0.2364286	0.17310107	3.1886208	21	—	—
457295 2008 RX_{138}	16.0	X	78.87872	30.00021	33.04053	12.08035	0.1656521	0.18030995	3.1030558	21	2 4.4	20.1
457296 2008 RL_{140}	15.9	X	191.71287	50.60398	287.16511	9.18143	0.1013690	0.18943043	3.0026373	21	2 11.6	20.7
457297 2008 RT_{140}	16.6	X	87.22610	148.82048	235.01307	9.28119	0.0652436	0.17614704	3.1517552	21	—	—
457298 2008 RN_{142}	15.6	X	71.05864	143.27919	235.30978	15.54020	0.2060170	0.17314229	3.1881148	21	—	—
457299 2008 RP_{142}	15.9	X	112.20338	92.13217	304.55346	24.99343	0.2312084	0.18506603	3.0496610	21	2 11.8	20.6
457300 2008 RV_{142}	16.4	X	116.52552	23.00771	347.15222	8.40699	0.1103568	0.18124861	3.0923331	21	1 8.9	20.8
457301 2008 RG_{143}	16.7	X	76.93588	193.70249	204.33516	5.28201	0.1942809	0.17692409	3.1425201	21	—	—
457302 2008 RL_{143}	18.2	X	242.98080	71.56085	11.65315	5.59171	0.0666200	0.29964212	2.2117403	21	8 30.7	20.8
457303 2008 SC_{8}	18.4	X	294.60191	100.50441	257.83357	2.97707	0.2292313	0.29491636	2.2353051	21	6 10.1	20.8
457304 2008 SS_{23}	16.1	X	98.60922	17.05515	350.01736	12.75986	0.1273644	0.17780975	3.1320763	21	—	—
457305 2008 SV_{32}	15.7	X	100.61776	27.21145	353.59184	16.46082	0.1958751	0.17754161	3.1352291	21	1 18.3	20.2
457306 2008 SN_{34}	16.7	X	63.32229	204.21256	190.28180	4.67057	0.1598842	0.17147777	3.2087127	21	—	—
457307 2008 SV_{34}	16.6	X	33.27101	238.94550	195.23121	12.39246	0.1355089	0.17164856	3.2065839	21	—	—
457308 2008 SK_{36}	16.5	X	72.69624	359.55449	23.13305	11.22611	0.1011159	0.17096324	3.2151474	21	—	—
457309 2008 SN_{42}	16.2	X	146.02317	341.05375	9.56093	8.68446	0.1814286	0.18167842	3.0874540	21	1 26.5	21.1
457310 2008 SQ_{50}	16.8	X	59.83958	73.50615	2.21031	8.91670	0.0676713	0.18073909	3.0981421	21	1 9.3	21.0
457311 2008 SO_{54}	16.1	X	31.44813	99.76484	14.81661	13.37079	0.2781836	0.17574258	3.1565891	21	1 23.5	19.2
457312 2008 SE_{61}	16.2	X	135.35976	163.10901	189.81469	6.85496	0.1670953	0.18157837	3.0885880	21	1 13.6	21.0
457313 2008 SM_{65}	18.0	X	301.16460	3.69921	11.75100	2.97974	0.1797425	0.29503401	2.2347108	21	7 29.3	20.0
457314 2008 ST_{65}	16.0	X	133.58286	334.55426	27.09562	9.58455	0.0775732	0.17776604	3.1325897	21	1 15.3	20.7
457315 2008 SY_{79}	16.6	X	122.32710	154.48981	192.09697	12.70372	0.1473884	0.17757212	3.1348699	21	—	—
457316 2008 SL_{82}	16.4	X	157.92595	20.46224	324.23860	14.24929	0.0397370	0.18204320	3.0833281	21	1 17.8	20.9
457317 2008 ST_{89}	16.0	X	27.48478	87.32777	350.43492	15.44159	0.1508534	0.17425582	3.1745185	21	—	—
457318 2008 SU_{89}	16.5	X	73.93400	37.84832	359.72331	11.41636	0.0688800	0.17469988	3.1691367	21	—	—
457319 2008 SV_{95}	16.6	X	284.14225	41.62777	253.74556	2.72543	0.1421301	0.20020170	2.8939490	21	3 22.6	20.8
457320 2008 ST_{100}	17.8	X	57.84740	192.66978	94.48248	3.52140	0.1797208	0.30580263	2.1819355	21	11 5.9	20.4
457321 2008 SC_{101}	17.9	X	293.86770	276.64245	143.28413	4.24892	0.1185284	0.30136388	2.2033082	21	10 7.6	19.8
457322 2008 SB_{115}	17.7	X	348.22016	223.21863	56.72263	5.78024	0.1524136	0.28960064	2.2625753	21	5 31.7	19.4
457323 2008 SW_{131}	16.4	X	148.69168	119.74825	230.66323	4.23017	0.1708810	0.18061630	3.0995460	21	1 24.2	21.3
457324 2008 SO_{138}	18.3	X	240.74170	216.61978	154.52630	1.89832	0.1935681	0.28014774	2.3131900	21	5 2.4	21.9
457325 2008 SB_{142}	17.8	X	23.07626	280.56990	40.22419	6.55860	0.1047033	0.30182151	2.2010805	21	10 21.3	20.0
457326 2008 SJ_{146}	16.6	X	181.96260	346.05668	331.04071	9.17004	0.0754767	0.18388246	3.0627333	21	1 12.8	21.3
457327 2008 SX_{161}	18.2	X	306.26128	183.46222	160.97833	4.26846	0.2195240	0.29419967	2.2389338	21	6 10.1	20.4
457328 2008 SD_{162}	16.0	X	83.48415	28.32679	12.62551	27.71100	0.1319754	0.17793098	3.1306535	21	1 12.6	20.7
457329 2008 SA_{166}	16.4	X	161.26101	325.82367	25.42086	11.04417	0.1339528	0.18578592	3.0417780	21	2 7.6	21.3
457330 2008 SQ_{168}	16.2	X	43.40922	101.69792	346.58637	11.42766	0.1143466	0.18033752	3.1027396	21	1 3.5	20.2
457331 2008 SC_{172}	16.2	X	124.50099	15.14990	334.38228	8.54063	0.1462344	0.17950889	3.1122806	21	—	—
457332 2008 SE_{174}	15.8	X	164.33936	317.67714	17.51939	20.45167	0.0951139	0.18112119	3.0937832	21	1 22.7	20.9
457333 2008 SW_{179}	16.7	X	184.40345	89.40949	183.73241	1.46964	0.0493227	0.17155762	3.2077170	21	—	—
457334 2008 SP_{181}	18.9	X	232.68720	283.09724	114.18497	0.95249	0.2094920	0.28407844	2.2918026	21	5 27.2	22.3
457335 2008 SA_{190}	16.3	X	159.90190	137.93761	216.16051	6.22265	0.1395511	0.18468959	3.0538036	21	2 3.8	21.2
457336 2008 SY_{194}	17.9	X	313.88194	163.46782	189.29459	2.69651	0.2347566	0.29503648	2.2346983	21	7 4.8	19.8
457337 2008 SZ_{194}	18.3	X	295.75089	18.30378	29.53353	4.20517	0.1156082	0.29874469	2.2161675	21	9 21.5	20.4
457338 2008 SG_{203}	17.4	X	183.08754	131.47607	169.97651	4.68382	0.1292942	0.25506233	2.4624750	21	—	—
457339 2008 SS_{203}	16.6	X	51.72823	199.19385	189.81259	9.96187	0.2168788	0.16582717	3.2811966	21	—	—
457340 2008 SU_{207}	15.5	X	115.00014	278.43693	79.30715	16.83498	0.2329915	0.17574844	3.1565189	21	1 8.4	20.2
457341 2008 SD_{215}	16.6	X	104.26033	210.05975	181.98660	5.60032	0.1466037	0.18138856	3.0907422	21	1 22.5	20.9
457342 2008 SK_{215}	16.7	X	20.63193	77.80450	9.38468	9.33578	0.0683053	0.17495399	3.1660674	21	—	—
457343 2008 SY_{218}	16.1	X	90.49712	186.71603	196.82955	17.31985	0.1963899	0.17681707	3.1437881	21	1 1.6	20.5
457344 2008 SA_{220}	16.4	X	171.92043	142.60869	198.40264	11.03599	0.1467664	0.18685600	3.0301539	21	1 30.2	21.4
457345 2008 SP_{222}	16.8	X	58.21075	60.12184	343.22860	9.09753	0.2177052	0.17281867	3.1920935	21	—	—
457346 2008 SZ_{222}	16.8	X	83.51107	185.17471	203.15024	9.74334	0.0795473	0.17663548	3.1459423	21	—	—
457347 2008 SA_{223}	18.4	X	340.92875	11.90545	340.52345	5.19208	0.1645597	0.30260398	2.1972845	21	9 21.2	19.8
457348 2008 SY_{225}	16.2	X	132.17498	303.56470	34.38815	10.35864	0.0947328	0.17706604	3.1408404	21	—	—
457349 2008 SD_{234}	16.6	X	207.47318	253.77909	39.51817	6.31447	0.0415107	0.18367457	3.0650439	21	1 9.9	21.1
457350 2008 SF_{237}	16.8	X	4.42903	126.24865	327.56845	2.29846	0.0706527	0.17350186	3.1837084	21	—	—
457351 2008 SC_{250}	16.7	X	46.40426	297.16792	156.72606	9.82613	0.0696932	0.17869451	3.1217294	21	1 10.9	20.9
457352 2008 SG_{257}	16.4	X	109.03572	350.54914	31.59622	10.28345	0.0609012	0.17558282	3.1585036	21	1 8.4	20.9
457353 2008 SA_{258}	16.7	X	97.48317	211.53270	207.97680	10.35543	0.0645896	0.18218684	3.0817073	21	2 2.6	21.2
457354 2008 SQ_{259}	18.2	X	269.04629	272.53138	164.23161	4.85194	0.1140264	0.30048245	2.2076148	21	9 19.5	20.5
457355 2008 SC_{262}	16.7	X	174.44018	243.21759	53.86161	1.50787	0.1320738	0.17808587	3.1288380	21	—	—
457356 2008 SV_{263}	16.9	X	78.39791	342.13665	57.45252	3.00013	0.1302805	0.17388204	3.1790661	21	—	—
457357 2008 SA_{265}	16.1	X	337.79520	328.90849	206.17312	16.66664	0.1432685	0.17931966	3.1144697	21	1 3.7	20.5
457358 2008 SC_{267}	15.5	X	126.35640	284.92647	57.78677	16.93519	0.2138665	0.17706127	3.1408968	21	—	—
457359 2008 SM_{267}	18.0	X	325.00444	18.38623	355.17287	8.47823	0.1482310	0.30072040	2.2064502	21	9 20.6	19.6
457360 2008 SN_{269}	16.3	X	345.03591	297.23826	214.11344	10.86959	0.0495727	0.17646429	3.1479766	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457361 2008 SX_{269}	16.4	X	14.78472	234.03585	22.46391	25.48913	0.0892203	0.21240782	2.7819910	21	6 18.8	20.3
457362 2008 SJ_{271}	16.2	X	123.43791	312.17984	31.80352	16.01817	0.0527547	0.17183249	3.2042952	21	—	—
457363 2008 SY_{288}	17.9	X	351.64722	25.18080	331.56742	4.82992	0.1788139	0.30290896	2.1958094	21	10 25.3	19.4
457364 2008 SZ_{288}	16.3	X	38.31989	60.84353	9.58673	9.60987	0.0312907	0.17351949	3.1834928	21	—	—
457365 2008 SU_{289}	18.0	X	310.73502	337.08889	64.73771	5.52185	0.1313825	0.30119368	2.2041382	21	10 11.5	19.8
457366 2008 SV_{290}	16.5	X	211.95715	9.83992	279.84934	4.05349	0.0914872	0.18324930	3.0697841	21	1 9.6	21.2
457367 2008 SY_{291}	18.1	X	331.56443	66.92580	299.50936	4.13841	0.2194018	0.30274410	2.1966065	21	9 19.4	19.1
457368 2008 SC_{301}	16.1	X	82.05758	18.21049	347.88354	17.89461	0.1715172	0.16974441	3.2305197	21	—	—
457369 2008 SU_{303}	16.5	X	359.89398	67.42020	287.95608	11.65554	0.2907710	0.22700651	2.6614021	21	11 4.9	18.9
457370 2008 SA_{307}	18.1	X	21.30681	226.61264	116.13194	4.49720	0.2078933	0.30887158	2.1674583	21	12 8.9	20.3
457371 2008 TR_{11}	18.1	X	313.95570	222.10914	122.54758	4.15361	0.1925136	0.29554221	2.2321483	21	6 29.8	19.9
457372 2008 TU_{16}	18.0	X	344.79758	225.48665	127.44559	5.14028	0.2287816	0.30412074	2.1899726	21	10 12.7	19.0
457373 2008 TZ_{20}	18.7	X	260.49400	238.73475	216.96827	1.47475	0.0784417	0.29988053	2.2105679	21	10 9.6	21.1
457374 2008 TE_{24}	18.7	X	317.12440	88.76863	295.35240	1.14181	0.1656406	0.30055280	2.2072704	21	9 18.4	20.2
457375 2008 TJ_{24}	16.4	X	156.62127	351.69102	342.69825	4.26783	0.1724428	0.18162036	3.0881119	21	1 14.9	21.4
457376 2008 TO_{29}	18.2	X	292.56118	51.41799	16.18274	5.42915	0.1131690	0.30471634	2.1871180	21	10 16.2	20.0
457377 2008 TR_{29}	16.3	X	121.16376	337.22546	12.05391	5.19380	0.1266779	0.17715228	3.1398210	21	—	—
457378 2008 TD_{32}	16.8	X	117.31104	177.41248	195.84877	9.33013	0.1013578	0.17761008	3.1344233	21	1 9.9	21.4
457379 2008 TK_{34}	16.3	X	277.56335	21.74133	197.44952	15.75458	0.0386710	0.17805474	3.1292026	21	—	—
457380 2008 TJ_{39}	18.4	X	272.82854	169.29059	273.21581	1.34581	0.1188025	0.30011116	2.2094353	21	10 2.1	20.8
457381 2008 TG_{40}	16.3	X	64.32847	162.87968	266.66283	8.16046	0.1277835	0.17720950	3.1391451	21	1 11.8	20.2
457382 2008 TW_{43}	16.3	X	225.77344	238.20510	32.92255	15.97825	0.1616944	0.17902015	3.1179426	21	1 1.4	21.7
457383 2008 TC_{44}	16.8	X	74.54953	334.19828	26.01242	5.50345	0.1619487	0.16503097	3.2917417	21	—	—
457384 2008 TK_{44}	18.6	X	215.35688	225.03819	227.97089	3.32949	0.0963327	0.28878737	2.2668211	21	7 31.5	21.7
457385 2008 TX_{49}	16.7	X	216.04829	329.28633	22.27963	6.27386	0.0857840	0.19671003	2.9280942	21	3 27.1	21.0
457386 2008 TT_{52}	17.0	X	132.90415	166.33599	188.95762	9.19106	0.0656311	0.17909157	3.1171135	21	1 2.3	21.6
457387 2008 TV_{53}	16.6	X	91.14639	241.22530	143.46773	3.09122	0.1309479	0.17551034	3.1593731	21	—	—
457388 2008 TZ_{56}	16.7	X	67.73619	9.95590	26.34548	2.79710	0.1326362	0.17177589	3.2049991	21	—	—
457389 2008 TV_{58}	16.5	X	170.65535	259.58157	62.81751	1.57580	0.0298750	0.17890631	3.1192651	21	1 3.1	21.0
457390 2008 TR_{60}	16.8	X	91.33444	153.67826	211.92456	11.25531	0.1068981	0.17074569	3.2178778	21	—	—
457391 2008 TW_{63}	16.5	X	311.43294	8.46888	209.93835	3.79317	0.0883620	0.18564666	3.0432990	21	1 29.7	20.7
457392 2008 TX_{63}	18.7	X	334.73146	134.42344	206.83254	0.71311	0.1499483	0.29711194	2.2242792	21	8 16.9	20.1
457393 2008 TB_{68}	16.3	X	85.07628	345.71711	49.34010	10.01742	0.0715053	0.17379904	3.1800782	21	—	—
457394 2008 TS_{70}	18.2	X	296.62068	1.42000	44.06240	9.67254	0.0614691	0.29910297	2.2143974	21	9 29.9	20.6
457395 2008 TA_{73}	15.7	X	221.30254	12.24562	227.92921	10.19402	0.0597753	0.16936415	3.2353534	21	—	—
457396 2008 TA_{75}	16.4	X	42.37240	239.45946	215.48687	8.08234	0.0641233	0.17523851	3.1626395	21	1 6.7	20.6
457397 2008 TU_{76}	18.7	X	260.46861	220.13202	178.45242	2.25902	0.2550095	0.29124360	2.2540582	21	6 20.8	21.9
457398 2008 TJ_{90}	18.4	X	295.87315	289.37954	79.34885	1.51744	0.2146696	0.29282132	2.2459543	21	6 30.9	20.7
457399 2008 TA_{97}	18.0	X	286.88911	77.35993	333.40292	5.73523	0.1340639	0.29970924	2.2114101	21	9 4.6	19.9
457400 2008 TG_{100}	16.6	X	116.67994	167.05088	187.52382	9.19733	0.0884003	0.17548200	3.1597132	21	—	—
457401 2008 TS_{104}	16.5	X	60.79855	187.35879	210.70234	12.46474	0.2051032	0.17041056	3.2220953	21	—	—
457402 2008 TQ_{108}	16.2	X	8.75615	89.34347	36.82314	10.34415	0.0767950	0.17885047	3.1199142	21	—	—
457403 2008 TU_{115}	17.9	X	41.76626	49.88291	272.40803	5.34643	0.2057815	0.30963854	2.1638777	21	12 7.2	20.5
457404 2008 TK_{122}	17.9	X	3.70386	204.36556	151.02375	3.91537	0.1662119	0.30509992	2.1852845	21	11 20.4	19.8
457405 2008 TP_{122}	15.8	X	82.11817	7.25763	33.85322	10.03535	0.0812556	0.17407961	3.1766603	21	—	—
457406 2008 TD_{124}	16.4	X	111.00454	139.47675	246.33905	5.25595	0.0983754	0.18053703	3.1004533	21	1 16.8	20.7
457407 2008 TB_{126}	16.4	X	181.17736	319.00327	1.05878	12.57521	0.1218972	0.18338152	3.0683084	21	1 19.9	21.4
457408 2008 TR_{130}	18.2	X	205.57716	215.25317	218.89838	7.79704	0.1764193	0.28403126	2.2920563	21	6 20.7	21.9
457409 2008 TH_{136}	18.1	X	328.70800	18.74659	22.25597	7.07776	0.1106205	0.30506345	2.1854587	21	11 13.3	19.8
457410 2008 TK_{148}	16.5	X	163.90573	167.36989	184.68111	11.21633	0.0156108	0.18522788	3.0478843	21	1 25.7	21.1
457411 2008 TN_{148}	16.3	X	92.70182	45.67093	29.16524	9.48754	0.1139665	0.18546357	3.0453016	21	3 1.1	20.5
457412 2008 TA_{155}	16.5	X	247.76889	299.64668	336.63317	11.23027	0.1050125	0.18674562	3.0313477	21	1 30.1	21.2
457413 2008 TG_{160}	16.2	X	327.62875	203.85720	43.91699	8.74400	0.1766481	0.19846789	2.9107789	21	3 19.5	19.8
457414 2008 TE_{163}	16.2	X	70.18372	232.66457	157.46568	14.59077	0.2727404	0.17139555	3.2097388	21	—	—
457415 2008 TQ_{163}	16.7	X	86.18299	164.65608	226.78246	4.88621	0.1306874	0.17350907	3.1836203	21	—	—
457416 2008 TM_{170}	18.0	X	280.47884	180.82749	248.93211	6.07192	0.0523141	0.29952862	2.2122990	21	10 3.8	20.4
457417 2008 TU_{177}	16.0	X	79.78762	210.81575	183.64912	16.36194	0.1899945	0.17331514	3.1859947	21	—	—
457418 2008 TV_{180}	15.7	X	131.81872	25.98689	331.79360	17.76367	0.1105632	0.18148888	3.0896031	21	1 14.2	20.4
457419 2008 TU_{184}	16.4	X	156.02502	172.20818	187.72494	9.25426	0.0935181	0.18250550	3.0781190	21	2 3.1	21.2
457420 2008 TP_{185}	15.9	X	88.19278	184.55279	210.92202	16.85392	0.1972522	0.17305328	3.1892079	21	1 12.4	20.4
457421 2008 UH_{8}	16.2	X	115.88439	344.60041	10.17007	9.90122	0.0963520	0.17721515	3.1390783	21	—	—
457422 2008 UX_{13}	16.4	X	55.29409	221.80986	211.59911	11.43522	0.1296508	0.17661308	3.1462082	21	1 2.2	20.4
457423 2008 UR_{17}	16.3	X	220.92942	240.87465	30.43559	7.99074	0.1425137	0.18170504	3.0871524	21	—	—
457424 2008 UB_{23}	18.1	X	345.39447	4.20758	33.26270	4.59129	0.1578255	0.30820818	2.1705674	21	12 18.9	19.8
457425 2008 UA_{28}	17.8	X	289.12648	315.57673	51.37749	5.59556	0.1474881	0.29008552	2.2600533	21	6 29.7	20.3
457426 2008 UU_{32}	16.1	X	60.58384	33.28630	59.39564	10.22966	0.0760796	0.17782327	3.1319176	21	2 3.1	20.3
457427 2008 UC_{34}	16.4	X	277.13744	185.23480	58.39358	13.34430	0.0840349	0.18110683	3.0939467	21	1 25.7	21.2
457428 2008 US_{37}	16.0	X	9.61115	250.75474	243.24401	8.36509	0.0455038	0.17460719	3.1702582	21	1 10.0	20.3
457429 2008 UA_{40}	18.4	X	321.31072	155.62491	232.38017	4.66800	0.1317979	0.29974558	2.2112314	21	10 6.0	20.1
457430 2008 UE_{49}	18.5	X	274.52039	53.05525	30.18700	4.68883	0.1537729	0.29729219	2.2233801	21	10 1.7	20.8
457431 2008 UL_{53}	18.4	X	16.64869	133.15509	208.11296	1.57154	0.2135094	0.30405947	2.1902668	21	11 28.9	20.4
457432 2008 UH_{69}	16.5	X	235.26856	149.64345	181.18077	10.69078	0.1093402	0.19620383	2.9331283	21	3 19.2	20.9
457433 2008 UT_{76}	16.1	X	206.39100	78.91306	247.55420	9.21002	0.0600540	0.18184966	3.0855154	21	2 12.3	20.9
457434 2008 UN_{78}	15.9	X	119.32154	338.01732	62.72957	11.60377	0.1140232	0.18170262	3.0871798	21	2 21.8	20.5
457435 2008 US_{79}	16.2	X	76.46304	113.07548	270.63370	4.54449	0.1174314	0.17055901	3.2202254	21	—	—
457436 2008 UC_{80}	16.5	X	179.54528	337.77483	344.93713	2.52615	0.0985423	0.17909719	3.1170483	21	1 17.9	21.2
457437 2008 UK_{102}	19.0	X	326.46585	57.18696	340.95687	1.64100	0.1713675	0.30436496	2.1888010	21	11 6.4	20.2
457438 2008 UP_{105}	18.5	X	300.36482	4.72753	53.21838	5.48603	0.1280244	0.29845154	2.2176185	21	10 15.4	20.3
457439 2008 UB_{110}	18.0	X	293.76987	148.45943	252.32339	5.79371	0.1466612	0.29678275	2.2259237	21	8 26.7	20.2
457440 2008 UX_{116}	16.3	X	208.15963	26.99028	257.95762	9.02908	0.0800022	0.17637387	3.1490524	21	1 1.1	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457441 2008 UV_{117}	18.5	X	260.54957	150.17534	321.00306	3.62900	0.0453167	0.30306934	2.1950347	21	11 5.9	20.9
457442 2008 UU_{121}	15.7	X	159.74828	323.31547	7.92365	9.09714	0.0679008	0.17469016	3.1692543	21	1 7.1	20.5
457443 2008 UM_{122}	15.9	X	4.71560	237.68599	264.18109	10.27044	0.0594828	0.17470627	3.1690595	21	1 12.2	20.2
457444 2008 UW_{125}	18.3	X	314.23800	85.48010	281.29040	4.96810	0.2080841	0.29420756	2.2388938	21	8 3.5	20.1
457445 2008 UU_{126}	18.0	X	329.24902	153.69555	216.73819	5.43743	0.2189503	0.29787918	2.2204583	21	9 19.3	19.2
457446 2008 UL_{129}	18.8	X	244.42228	92.96330	17.24148	3.83933	0.0693190	0.29991624	2.2103925	21	10 8.9	21.3
457447 2008 UV_{129}	16.7	X	24.87634	100.56770	337.36643	1.53321	0.0863468	0.16835250	3.2483016	21	—	—
457448 2008 UE_{131}	19.0	X	257.44649	155.06556	238.63771	3.53285	0.1486036	0.28758127	2.2731547	21	6 24.1	22.1
457449 2008 UE_{143}	16.3	X	227.82715	30.62611	222.62185	10.61848	0.0517653	0.17189158	3.2035609	21	—	—
457450 2008 UU_{150}	16.2	X	14.13221	51.42708	45.27455	10.41756	0.0503453	0.17093036	3.2155597	21	—	—
457451 2008 UC_{152}	17.0	X	53.60367	318.50793	79.45470	2.37810	0.1378840	0.16803305	3.2524171	21	—	—
457452 2008 UL_{154}	18.3	X	17.75753	139.03088	207.41995	4.82094	0.1926868	0.30747199	2.1740307	21	12 5.8	20.4
457453 2008 UT_{156}	16.6	X	103.39113	305.41566	56.38266	6.12152	0.1293587	0.16927036	3.2365484	21	—	—
457454 2008 UP_{159}	15.9	X	231.18318	1.38804	263.46417	9.53226	0.0934625	0.17613050	3.1519525	21	—	—
457455 2008 UK_{164}	16.2	X	297.00424	327.31333	235.62730	8.63459	0.0604537	0.17798614	3.1300066	21	—	—
457456 2008 UU_{167}	16.6	X	207.62560	184.39110	114.43446	2.12569	0.1427685	0.18130408	3.0917023	21	1 16.7	21.4
457457 2008 UE_{168}	16.2	X	205.47536	271.85678	53.66837	10.21947	0.0406368	0.18418588	3.0593688	21	2 18.5	20.8
457458 2008 UF_{168}	16.4	X	202.84433	67.99727	207.74699	9.56331	0.1898800	0.17554127	3.1590020	21	—	—
457459 2008 UU_{174}	15.9	X	59.81745	172.81266	261.29737	9.07491	0.1312385	0.17604803	3.1529368	21	1 10.9	19.8
457460 2008 UZ_{177}	18.1	X	317.15260	109.22402	275.92220	1.56371	0.1541098	0.29969352	2.2114874	21	9 20.8	19.8
457461 2008 UD_{181}	16.1	X	282.98945	158.87280	44.50496	10.13705	0.0454096	0.17438128	3.1729956	21	—	—
457462 2008 UZ_{182}	18.1	X	222.94957	258.55284	201.27565	8.55951	0.1205280	0.29233016	2.2484693	21	8 15.2	21.2
457463 2008 UO_{187}	18.0	X	224.49484	210.12911	214.94908	5.96071	0.0822510	0.28254248	2.3001009	21	7 4.8	21.2
457464 2008 UA_{207}	16.4	X	349.48412	85.05884	15.15615	10.89170	0.0498844	0.16967441	3.2314081	21	—	—
457465 2008 UO_{210}	16.1	X	58.30080	208.40274	226.12324	8.58029	0.0476142	0.17499183	3.1656109	21	1 2.8	20.5
457466 2008 UZ_{213}	16.3	X	195.08223	291.95445	351.20357	9.68293	0.1262164	0.25450529	2.4660668	21	—	—
457467 2008 UO_{216}	18.1	X	252.48030	308.73341	72.53396	7.48403	0.1279637	0.28145420	2.3060262	21	6 3.3	21.3
457468 2008 UY_{218}	16.1	X	182.55693	266.23843	32.50631	9.44374	0.0698334	0.17375169	3.1806560	21	—	—
457469 2008 UF_{221}	18.4	X	64.26760	343.33206	322.52899	3.86628	0.1520083	0.30685644	2.1769372	21	12 3.5	21.2
457470 2008 UQ_{221}	17.8	X	334.93424	343.85202	13.98421	6.06737	0.1832154	0.29809805	2.2193713	21	9 17.7	19.0
457471 2008 UX_{221}	15.7	X	191.09501	38.79743	254.31442	9.98502	0.1067171	0.17339214	3.1850514	21	—	—
457472 2008 UY_{229}	17.9	X	211.86723	106.01316	32.71337	6.24259	0.1007352	0.29320289	2.2440053	21	10 2.1	20.9
457473 2008 UO_{232}	16.5	X	83.83765	196.45504	230.93427	7.84652	0.0643603	0.17922141	3.1156078	21	1 26.9	20.8
457474 2008 UC_{234}	16.5	X	1.52094	256.24870	221.33248	15.32782	0.0621949	0.17449158	3.1716583	21	—	—
457475 2008 UB_{239}	15.7	X	92.26884	104.23093	256.73830	22.02504	0.2589939	0.17319215	3.1875028	21	—	—
457476 2008 UX_{240}	17.9	X	349.94288	75.20131	267.14696	5.84193	0.1783119	0.29834940	2.2181246	21	9 22.9	19.6
457477 2008 UP_{247}	18.2	X	232.53665	49.12829	55.59426	5.90223	0.1157931	0.29139419	2.2532815	21	9 10.0	21.2
457478 2008 UR_{252}	16.2	X	197.46982	83.98229	221.89400	8.93932	0.1142952	0.17952497	3.1120947	21	1 13.7	21.3
457479 2008 UL_{269}	16.1	X	15.33059	78.09345	56.20174	12.37678	0.0691035	0.17689891	3.1428183	21	1 20.2	20.4
457480 2008 UL_{286}	16.2	X	29.64239	74.76419	61.61953	9.39950	0.1657990	0.17880737	3.1204156	21	2 14.9	19.8
457481 2008 UT_{289}	17.8	X	233.63812	49.04450	79.17604	7.19319	0.0446394	0.29746489	2.2225195	21	10 26.1	20.4
457482 2008 UN_{292}	16.4	X	90.82573	158.98396	222.92785	6.79852	0.1640095	0.17278228	3.1925417	21	—	—
457483 2008 US_{294}	18.1	X	343.53527	341.50663	20.20413	3.45067	0.2134673	0.30139403	2.2031613	21	10 19.4	19.1
457484 2008 UF_{303}	16.2	X	89.88042	333.00991	52.38314	19.72052	0.1106337	0.16969890	3.2310973	21	—	—
457485 2008 UD_{315}	17.6	X	14.54186	64.07357	237.45565	6.48206	0.1722597	0.29293691	2.2453635	21	9 8.9	19.6
457486 2008 UM_{315}	16.1	X	145.84819	72.95616	244.53833	9.30311	0.0865062	0.17264218	3.1942687	21	—	—
457487 2008 UY_{315}	18.8	X	312.11074	187.87550	223.90451	2.03314	0.1148083	0.29956259	2.2121318	21	10 28.3	20.6
457488 2008 UK_{324}	18.4	X	316.01827	34.71911	357.88203	7.03495	0.2322597	0.30069030	2.2065974	21	9 23.6	19.1
457489 2008 UD_{330}	18.2	X	311.69413	163.09631	224.90286	4.48889	0.2017666	0.29870348	2.2163714	21	9 4.6	19.7
457490 2008 UA_{336}	15.9	X	247.35937	26.98299	255.48989	8.57401	0.0238337	0.18065794	3.0990697	21	2 7.5	20.5
457491 2008 UP_{350}	16.0	X	61.80394	48.60389	46.18577	10.13428	0.0773733	0.17844597	3.1246273	21	2 8.2	20.2
457492 2008 UX_{359}	18.1	X	281.57161	317.76317	85.53313	7.15414	0.1000229	0.29143956	2.2530477	21	8 24.1	20.6
457493 2008 UO_{360}	16.1	X	243.58277	11.85676	240.74870	8.44454	0.0470673	0.17441952	3.1725318	21	1 1.0	20.8
457494 2008 UM_{362}	18.2	X	242.02321	210.75880	238.86511	20.48705	0.0967813	0.37425423	1.9070331	21	8 26.6	20.9
457495 2008 UD_{367}	18.1	X	358.06605	279.00279	89.14694	6.01758	0.2126226	0.30648372	2.1787017	21	12 7.0	19.7
457496 2008 UQ_{367}	15.6	X	128.88424	287.81786	63.56426	11.59182	0.1091362	0.17519642	3.1631460	21	—	—
457497 2008 UN_{369}	18.4	X	249.01316	199.79204	191.80637	3.29651	0.2350589	0.28390771	2.2927213	21	6 2.5	22.0
457498 2008 VP_{2}	17.9	X	311.59257	337.11642	26.99243	6.61020	0.3143267	0.29531484	2.2332939	21	7 3.6	19.9
457499 2008 VD_{4}	18.2	X	2.02813	326.23040	25.32545	3.38378	0.2450037	0.30520555	2.1847803	21	11 23.1	19.6
457500 2008 VH_{11}	18.2	X	304.88927	307.44078	99.40397	4.02755	0.1761159	0.29879266	2.2159303	21	10 1.1	19.8
457501 2008 VV_{15}	18.6	X	271.57503	346.43699	56.29526	3.84571	0.2397978	0.29232614	2.2484899	21	7 12.3	21.5
457502 2008 VV_{22}	17.6	X	345.50091	275.54995	84.13718	5.14913	0.1812118	0.30037333	2.2081495	21	10 21.0	19.0
457503 2008 VQ_{24}	15.8	X	20.50981	272.39799	226.22514	11.21633	0.1727062	0.17195880	3.2027260	21	1 25.5	19.7
457504 2008 VN_{29}	16.2	X	17.59016	213.84140	280.63645	7.04573	0.0359168	0.17767534	3.1336557	21	1 21.3	20.4
457505 2008 VY_{29}	16.2	X	338.49563	258.77355	269.34188	8.05384	0.0464614	0.17544919	3.1601071	21	1 11.2	20.5
457506 2008 VM_{36}	17.9	X	324.61632	288.62816	81.10188	6.02351	0.1809917	0.29782271	2.2207390	21	9 14.9	19.4
457507 2008 VS_{51}	18.0	X	350.47229	40.89155	301.33575	2.50626	0.1644757	0.30034652	2.2082809	21	9 26.0	19.4
457508 2008 VC_{55}	16.7	X	101.01955	125.33920	245.16766	3.87675	0.1341071	0.17301258	3.1897080	21	—	—
457509 2008 VV_{58}	18.0	X	270.22166	291.70110	101.99734	4.76743	0.1569633	0.29033321	2.2587677	21	7 9.9	20.7
457510 2008 VS_{61}	16.3	X	42.69159	75.77139	49.19272	16.52423	0.1023355	0.17896995	3.1185255	21	2 24.4	20.5
457511 2008 VT_{61}	16.0	X	130.60236	338.95806	49.11357	11.04252	0.0925393	0.18040326	3.1019857	21	2 16.5	20.7
457512 2008 VQ_{63}	15.6	X	162.53103	235.37859	76.05189	17.62088	0.2167891	0.17516838	3.1634835	21	—	—
457513 2008 VZ_{65}	18.3	X	318.48547	281.32624	98.88530	2.74757	0.1696561	0.29708497	2.2244139	21	9 16.4	19.7
457514 2008 VX_{66}	15.7	X	10.35176	159.23662	243.29361	8.93648	0.0921337	0.15391815	3.4483353	21	12 16.9	20.2
457515 2008 VP_{67}	18.7	X	238.66520	90.76752	42.62181	1.99094	0.0957835	0.30116437	2.2042812	21	10 29.9	21.2
457516 2008 VX_{70}	18.9	X	272.72836	95.69988	323.75369	3.16380	0.1186975	0.29269943	2.2465778	21	8 27.6	21.2
457517 2008 WK_{3}	15.6	X	258.95369	350.63276	229.91731	16.23858	0.0911535	0.17255379	3.1953594	21	—	—
457518 2008 WE_{4}	15.9	X	299.89718	347.78121	236.65206	16.99488	0.1088844	0.18182192	3.0858292	21	1 17.4	20.6
457519 2008 WE_{7}	18.3	X	352.69694	309.38690	41.67291	5.82868	0.2212235	0.30219905	2.1992469	21	10 27.3	19.4
457520 2008 WZ_{8}	16.8	X	280.91877	50.37379	177.02479	3.97923	0.0322823	0.17858593	3.1229946	21	1 13.8	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457521 2008 WL_{22}	18.1	X	279.22820	38.35964	357.76120	3.76644	0.1611678	0.29310167	2.2445219	21	7 27.3	20.5
457522 2008 WP_{22}	16.2	X	49.71695	200.55413	236.35634	14.51031	0.0265059	0.17424253	3.1746798	21	—	—
457523 2008 WK_{34}	18.3	X	352.12204	235.06738	93.45322	2.15763	0.2427854	0.29903358	2.2147400	21	9 15.4	19.0
457524 2008 WO_{43}	15.2	X	77.14175	196.07982	248.47643	25.90833	0.0397194	0.17637492	3.1490399	21	1 28.4	20.1
457525 2008 WW_{43}	16.2	X	34.96300	48.15040	59.97035	8.98935	0.0340446	0.17272575	3.1932383	21	1 15.2	20.7
457526 2008 WX_{46}	17.9	X	17.26127	102.91816	241.17688	4.49473	0.2179831	0.30371842	2.1919062	21	12 4.7	19.9
457527 2008 WF_{49}	16.2	X	85.36664	8.94150	43.44044	13.55751	0.1213601	0.17412014	3.1761674	21	1 25.6	20.6
457528 2008 WP_{54}	18.3	X	294.34055	84.99199	271.99967	4.57694	0.2144331	0.28830019	2.2693741	21	6 10.5	20.8
457529 2008 WE_{55}	17.8	X	276.73028	335.88281	70.71688	6.37314	0.0862470	0.29177939	2.2512979	21	8 23.9	20.4
457530 2008 WP_{66}	18.1	X	248.53411	292.06371	77.46427	4.11465	0.2235326	0.28066130	2.3103673	21	5 5.6	21.8
457531 2008 WU_{69}	18.1	X	260.70783	135.84515	258.06818	4.52874	0.1465330	0.28478555	2.2880074	21	6 28.8	21.0
457532 2008 WT_{77}	18.4	X	210.59137	54.84905	95.03442	4.84918	0.0646762	0.29682536	2.2257107	21	10 21.7	21.2
457533 2008 WV_{81}	18.1	X	246.48280	289.05604	110.66715	3.56923	0.1946640	0.28379175	2.2933458	21	6 14.6	21.6
457534 2008 WS_{91}	17.8	X	196.20782	187.36192	273.51917	3.38823	0.1829454	0.27585621	2.3371193	21	7 17.0	21.4
457535 2008 WV_{99}	16.0	X	314.77833	323.82607	217.58670	9.51768	0.0427798	0.17345614	3.1842678	21	—	—
457536 2008 WG_{107}	18.0	X	51.91507	245.78676	65.45756	5.94349	0.1194644	0.30453986	2.1879629	21	11 21.6	20.7
457537 2008 WO_{126}	18.0	X	236.30541	170.89449	252.41844	4.23534	0.1951246	0.28078353	2.3096968	21	7 5.3	21.3
457538 2008 WY_{126}	18.4	X	265.35510	329.81864	88.43722	4.65568	0.0889055	0.28977793	2.2616523	21	8 21.8	21.0
457539 2008 WG_{134}	17.6	X	276.31905	341.83281	80.83488	7.19903	0.1313229	0.29272419	2.2464511	21	9 9.9	20.1
457540 2008 WA_{141}	18.2	X	217.93360	284.08293	113.38303	3.76783	0.1764470	0.27821483	2.3238916	21	5 16.6	21.7
457541 2008 XV	17.4	X	292.26218	101.49263	249.65117	18.90385	0.0936865	0.36124232	1.9525566	21	6 16.8	19.1
457542 2008 XA_{15}	18.1	X	263.22294	340.43006	88.88876	3.37024	0.1635731	0.29104848	2.2550655	21	8 21.9	20.8
457543 2008 XL_{34}	16.1	X	125.62627	331.17410	52.66087	10.13514	0.0800435	0.17481916	3.1676950	21	2 3.7	20.8
457544 2008 XD_{43}	18.4	X	205.90142	66.06707	36.99038	3.87889	0.1940605	0.28018574	2.3129808	21	7 30.3	22.0
457545 2008 XX_{52}	15.6	X	137.71936	77.92323	266.49820	19.93323	0.2107327	0.17371620	3.1810891	21	1 10.2	20.7
457546 2008 YM	17.8	X	190.51205	211.02769	280.63975	6.09719	0.1172304	0.28276367	2.2989012	21	8 22.2	21.3
457547 2008 YX_{18}	18.6	X	224.20815	123.28846	322.87384	1.96536	0.1200425	0.28008247	2.3135493	21	7 31.4	21.8
457548 2008 YL_{20}	18.1	X	186.64612	298.49283	111.37965	3.19455	0.1852535	0.26676737	2.3899065	21	5 4.6	22.0
457549 2008 YT_{43}	18.3	X	148.58434	242.57255	247.54215	3.48891	0.1644267	0.27615712	2.3354212	21	7 10.0	21.8
457550 2008 YN_{53}	18.0	X	173.20048	156.86171	66.36706	4.05007	0.1813079	0.29257053	2.2472376	21	12 2.0	21.1
457551 2008 YW_{62}	17.5	X	71.92893	26.38043	271.12984	5.93763	0.1215861	0.29266297	2.2467644	21	11 25.2	20.4
457552 2008 YX_{62}	18.6	X	260.68651	258.42400	171.58142	2.30860	0.2038738	0.28724919	2.2749062	21	8 10.7	21.5
457553 2008 YL_{64}	17.8	X	91.42224	6.47539	264.94812	5.84785	0.1107665	0.28922259	2.2645465	21	11 10.8	21.0
457554 2008 YL_{74}	18.0	X	132.16627	34.35969	96.17284	8.12312	0.0584352	0.27034959	2.3687483	21	6 13.3	21.1
457555 2008 YP_{80}	16.2	X	179.72171	264.31151	99.18570	9.90605	0.0879777	0.17466770	3.1695260	21	3 10.3	21.2
457556 2008 YC_{89}	17.9	X	305.21601	109.23152	284.10337	5.14242	0.0579013	0.28883097	2.2665930	21	9 16.7	20.4
457557 2008 YG_{90}	18.2	X	265.74170	161.41412	273.28133	4.49917	0.1596359	0.28976540	2.2617175	21	8 30.1	20.9
457558 2008 YV_{90}	18.3	X	163.91739	214.12380	275.45776	4.98847	0.1333000	0.27626738	2.3347998	21	7 23.5	21.9
457559 2008 YX_{96}	17.6	X	221.31265	277.19142	106.87591	7.46335	0.2086198	0.26974910	2.3722623	21	5 3.4	21.6
457560 2008 YQ_{100}	17.2	X	81.69093	333.48837	294.12510	6.53982	0.1045160	0.28665844	2.2780307	21	10 22.1	20.4
457561 2008 YV_{100}	17.8	X	242.93710	282.33848	105.46277	3.63048	0.1697121	0.27510983	2.3413444	21	5 28.8	21.2
457562 2008 YL_{103}	18.2	X	241.26310	152.64789	279.08414	3.12787	0.1351718	0.28213124	2.3023354	21	7 29.2	21.2
457563 2008 YM_{105}	17.6	X	81.99077	136.30453	120.30682	9.22993	0.0791571	0.28352875	2.2947637	21	10 11.7	20.7
457564 2008 YU_{107}	17.9	X	255.06071	123.21767	305.34980	6.21135	0.0777730	0.28264727	2.2995323	21	8 19.9	20.7
457565 2008 YV_{112}	19.0	X	271.47277	323.77548	74.45190	1.89736	0.2513929	0.28475581	2.2881667	21	7 3.5	22.1
457566 2008 YB_{120}	18.2	X	241.12379	359.53861	88.44506	6.16304	0.1176518	0.28601286	2.2814573	21	8 27.1	21.1
457567 2008 YX_{122}	17.8	X	180.08516	24.54799	138.66238	3.60702	0.1736599	0.28462540	2.2888656	21	9 23.9	21.2
457568 2008 YX_{123}	18.1	X	157.39397	176.69957	256.99613	3.17880	0.1595030	0.26542078	2.3979830	21	5 4.8	21.8
457569 2008 YZ_{124}	18.3	X	271.31626	325.28047	87.30377	3.69756	0.1814718	0.28627092	2.2800860	21	8 5.2	20.9
457570 2008 YB_{127}	18.1	X	147.06747	54.91606	101.06167	5.69602	0.1571839	0.27538326	2.3397944	21	8 13.5	21.7
457571 2008 YL_{134}	17.7	X	335.59637	313.78564	87.29128	6.74207	0.1546002	0.30299841	2.1953772	21	12 2.9	19.1
457572 2008 YZ_{138}	15.9	X	1.82630	333.88490	130.01889	14.84740	0.1127521	0.15504615	3.4315900	21	—	—
457573 2008 YN_{139}	17.8	X	329.76425	257.23849	117.13666	7.48107	0.1617383	0.29155022	2.2524776	21	10 6.4	19.5
457574 2008 YV_{140}	17.6	X	188.00149	282.65235	276.55717	6.50260	0.0986008	0.29326884	2.2436689	21	11 22.2	20.5
457575 2008 YG_{143}	17.6	X	135.17330	294.99373	280.00569	6.03077	0.0570437	0.28634547	2.2796902	21	10 10.9	20.8
457576 2008 YV_{145}	17.5	X	135.57342	330.74115	126.51650	7.72804	0.0575067	0.26181934	2.4199231	21	5 5.5	20.8
457577 2008 YT_{150}	17.4	X	61.05533	126.47087	117.26990	7.11089	0.0875148	0.27734277	2.3287604	21	8 22.5	20.1
457578 2008 YB_{155}	17.6	X	353.63701	53.37820	300.43678	23.80846	0.1803395	0.28911352	2.2651160	21	10 5.0	20.3
457579 2008 YQ_{155}	18.3	X	276.11708	111.35757	281.67069	6.27680	0.1115419	0.28057935	2.3108171	21	7 24.1	21.1
457580 2008 YV_{162}	18.3	X	301.85736	75.87545	302.82569	2.31314	0.1764430	0.28622936	2.2803067	21	8 3.7	20.5
457581 2008 YO_{165}	18.5	X	211.48197	104.59026	315.48795	1.77519	0.2140687	0.27372165	2.3492539	21	6 6.5	22.2
457582 2008 YA_{173}	18.1	X	147.22931	314.07487	189.35445	2.27250	0.0552891	0.27346261	2.3507372	21	7 19.9	21.2
457583 2009 AW_{10}	18.6	X	205.98698	65.17471	43.34164	1.30991	0.2155431	0.28100451	2.3084857	21	8 4.5	22.1
457584 2009 AY_{14}	18.2	X	147.98067	200.81008	320.72135	0.80208	0.1241838	0.27585703	2.3371146	21	8 19.1	21.6
457585 2009 AF_{20}	18.3	X	124.04389	50.65266	104.73662	3.15748	0.1513257	0.27058318	2.3673848	21	7 17.9	21.6
457586 2009 AY_{20}	18.4	X	225.43818	138.20456	302.44301	4.92133	0.2265193	0.28050235	2.3112400	21	7 15.7	21.8
457587 2009 AV_{27}	17.9	X	295.90555	329.26529	113.91059	7.20014	0.1121986	0.29491957	2.2352888	21	11 17.1	20.0
457588 2009 AM_{28}	17.7	X	145.83454	319.93206	298.09366	6.01605	0.0958243	0.29778972	2.2209030	21	12 24.4	20.7
457589 2009 AF_{31}	17.8	X	221.58171	181.15540	292.44964	4.35321	0.0767933	0.28476948	2.2880934	21	9 7.4	20.8
457590 2009 AN_{33}	17.9	X	141.39166	82.63073	116.91818	5.47442	0.1988138	0.27936102	2.3175308	21	10 6.5	21.7
457591 2009 AX_{40}	18.1	X	131.53156	329.30453	268.93881	2.43291	0.1089239	0.28929216	2.2641834	21	11 11.4	21.4
457592 2009 AD_{44}	18.1	X	155.36890	77.74426	135.65135	5.59878	0.2261177	0.28578787	2.2826545	21	11 4.4	21.9
457593 2009 AH_{45}	18.2	X	223.55181	131.27273	310.37690	6.35584	0.1510141	0.27795719	2.3253274	21	7 21.7	21.6
457594 2009 AU_{47}	17.1	X	228.07852	326.73883	167.78433	23.27551	0.1656458	0.28202263	2.3029265	21	10 7.8	20.4
457595 2009 BO_{10}	18.3	X	234.20499	325.07090	169.09842	5.78432	0.2135989	0.28979490	2.2615640	21	10 7.2	21.3
457596 2009 BU_{16}	17.8	X	285.81023	236.07035	137.80648	6.00255	0.1762832	0.28031537	2.3122677	21	6 29.7	20.5
457597 2009 BA_{23}	18.2	X	162.50513	73.90996	103.08764	6.66883	0.1523073	0.28026255	2.3125582	21	9 27.6	21.8
457598 2009 BP_{31}	18.7	X	253.92775	60.99719	0.38698	1.82825	0.0613647	0.27978383	2.3151953	21	8 12.3	21.6
457599 2009 BU_{31}	18.0	X	236.70081	52.58078	356.14796	2.11247	0.1860085	0.27652087	2.3333727	21	6 17.2	21.4
457600 2009 BS_{35}	17.7	X	187.71355	227.80893	335.39561	6.87768	0.0374193	0.29384841	2.2407177	21	12 3.5	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457601 2009 BZ_{36}	18.0	X	289.53424	94.88005	317.23948	9.00819	0.1089850	0.28644691	2.2791520	21	9 10.9	20.5
457602 2009 BA_{40}	18.4	X	224.30572	115.83281	358.47806	2.98427	0.1351132	0.28326079	2.2962107	21	9 7.2	21.4
457603 2009 BH_{40}	17.7	X	258.69329	203.58312	172.45127	1.86132	0.1384761	0.27521339	2.3407571	21	6 2.8	20.9
457604 2009 BB_{41}	18.1	X	189.85627	40.73727	102.16594	3.66977	0.1646858	0.28021999	2.3127924	21	9 7.3	21.6
457605 2009 BB_{42}	17.4	X	62.96196	77.43980	132.14736	6.13381	0.1442010	0.26449268	2.4035894	21	7 12.8	20.2
457606 2009 BG_{43}	18.4	X	123.97608	87.43610	100.06105	2.53448	0.0754542	0.27440748	2.3453379	21	8 24.8	21.4
457607 2009 BX_{54}	18.2	X	200.54585	157.87536	321.95028	5.71695	0.1716130	0.27972651	2.3155116	21	8 16.2	21.6
457608 2009 BY_{54}	18.0	X	199.54271	176.85240	343.18659	2.63399	0.1142874	0.28665171	2.2780663	21	10 11.8	21.2
457609 2009 BC_{66}	17.8	X	117.05551	25.23054	136.52800	4.00993	0.1044304	0.26688900	2.3891803	21	7 12.9	21.1
457610 2009 BX_{67}	17.9	X	138.05134	32.50448	322.57774	19.80872	0.0935227	0.39533210	1.8386314	21	—	—
457611 2009 BF_{68}	17.7	X	246.11091	114.08558	310.05540	2.21265	0.1399426	0.27727969	2.3291136	21	7 24.4	20.9
457612 2009 BQ_{68}	17.2	X	257.12652	337.99025	126.71419	24.23467	0.1860940	0.28883207	2.2665873	21	10 8.3	20.5
457613 2009 BF_{69}	17.6	X	261.13138	119.82082	311.80165	7.84599	0.1507597	0.28639421	2.2794316	21	8 21.2	20.4
457614 2009 BA_{81}	17.4	X	130.95974	193.95009	14.10038	5.24257	0.2018583	0.28031054	2.3122942	21	10 5.7	21.0
457615 2009 BD_{85}	17.7	X	132.54731	287.62519	286.94053	2.97450	0.1916098	0.28108809	2.3080281	21	10 13.4	21.3
457616 2009 BH_{86}	17.7	X	258.45892	66.86349	312.97481	1.82842	0.2072830	0.27490264	2.3425207	21	5 29.8	21.0
457617 2009 BK_{86}	18.1	X	163.22794	216.46953	316.68141	5.67019	0.1557965	0.28029792	2.3123636	21	9 17.5	21.7
457618 2009 BJ_{89}	18.3	X	250.60995	289.08164	141.08518	3.54938	0.1816066	0.28290901	2.2981138	21	8 1.6	21.4
457619 2009 BW_{89}	16.3	X	232.75481	31.12926	137.00065	15.16387	0.0239566	0.21718323	2.7410599	21	12 6.3	20.3
457620 2009 BJ_{93}	18.1	X	207.70174	300.09661	148.69347	6.99560	0.0732385	0.27418345	2.3466153	21	7 18.3	21.3
457621 2009 BZ_{93}	18.6	X	121.94597	247.78927	258.72991	0.80020	0.1123660	0.26619538	2.3933289	21	6 28.9	21.8
457622 2009 BK_{94}	18.1	X	115.56785	11.10410	141.04955	2.07332	0.1251790	0.26561066	2.3968400	21	6 30.5	21.3
457623 2009 BA_{96}	18.2	X	198.76015	359.40639	145.49928	3.51551	0.1726622	0.28383949	2.2930886	21	9 17.7	21.6
457624 2009 BX_{100}	17.3	X	65.25056	351.35104	299.98078	5.24121	0.1689651	0.28647524	2.2790017	21	11 13.1	20.4
457625 2009 BK_{104}	18.2	X	132.14078	33.60653	149.14379	5.20367	0.0962585	0.27417037	2.3466899	21	8 28.9	21.4
457626 2009 BZ_{109}	17.7	X	163.37953	53.09512	162.23067	6.63931	0.0818760	0.28575990	2.2828035	21	11 18.3	20.9
457627 2009 BS_{118}	18.2	X	271.61029	290.96118	132.15821	5.45151	0.0939744	0.28509342	2.2863599	21	9 5.8	20.7
457628 2009 BB_{123}	18.0	X	155.13915	3.14994	196.17474	1.94980	0.1593905	0.28196137	2.3032601	21	10 15.9	21.4
457629 2009 BY_{126}	18.4	X	132.18474	44.54732	150.52752	6.33688	0.1534308	0.27663198	2.3327478	21	9 19.1	21.9
457630 2009 BV_{129}	18.5	X	160.44378	124.05052	341.44594	6.38226	0.2041053	0.26792746	2.3830029	21	6 21.2	22.5
457631 2009 BY_{129}	18.3	X	159.26287	43.41222	137.87806	5.48648	0.1588380	0.27925247	2.3181313	21	9 28.3	21.9
457632 2009 BY_{135}	18.7	X	184.12424	286.05246	220.14069	1.10100	0.1775132	0.28048817	2.3113179	21	9 3.4	22.1
457633 2009 BF_{143}	18.4	X	228.21490	79.68796	20.36261	2.77793	0.1724106	0.28188938	2.3036522	21	8 19.6	21.7
457634 2009 BO_{145}	17.7	X	187.30646	343.91844	130.87396	6.84718	0.0483774	0.27418694	2.3465953	21	7 31.2	20.8
457635 2009 BD_{148}	17.5	X	193.25506	23.91479	163.08251	6.58481	0.0967592	0.28794995	2.2712139	21	11 14.3	20.6
457636 2009 BN_{155}	17.7	X	112.22065	244.69198	325.04675	4.73133	0.1053920	0.27688276	2.3313390	21	9 11.1	21.0
457637 2009 BM_{156}	18.2	X	179.17596	336.71089	153.75445	1.35244	0.1314013	0.27418161	2.3466257	21	8 10.1	21.7
457638 2009 BH_{157}	18.1	X	198.73269	333.51982	142.30834	2.58105	0.1628018	0.27606395	2.3359466	21	8 9.4	21.6
457639 2009 BQ_{157}	17.9	X	98.24618	74.43868	143.51211	5.39774	0.1879814	0.27017052	2.3697948	21	9 17.0	21.3
457640 2009 BK_{174}	17.9	X	271.24255	236.83815	151.77187	6.26562	0.1920893	0.27684161	2.3315700	21	6 28.2	21.4
457641 2009 BX_{174}	18.4	X	182.15816	320.73980	154.03155	2.61534	0.1585747	0.27201741	2.3590560	21	7 22.5	22.1
457642 2009 BZ_{181}	18.3	X	125.27392	28.24912	158.79554	1.54483	0.1216780	0.26725194	2.3870168	21	8 28.2	21.7
457643 2009 BW_{184}	17.6	X	80.40837	163.25752	91.09684	7.12999	0.1034160	0.27656219	2.3331403	21	10 8.4	20.7
457644 2009 BG_{185}	17.9	X	264.23304	134.97946	345.65416	8.92931	0.1415414	0.29452166	2.2373017	21	11 5.9	20.4
457645 2009 BW_{189}	18.7	X	233.40912	94.40248	340.81939	1.13381	0.1922618	0.27705471	2.3303743	21	7 19.3	22.1
457646 2009 BD_{190}	18.3	X	188.31848	288.05125	144.52395	2.55277	0.1895953	0.26915301	2.3757636	21	6 3.4	22.2
457647 2009 CZ	17.9	X	194.24995	188.95776	46.61335	21.97576	0.7171586	0.28678794	2.2773448	21	11 28.9	23.2
457648 2009 CE_{5}	17.8	X	158.45487	44.49712	136.81774	7.94869	0.1121992	0.28358553	2.2944574	21	9 29.1	21.2
457649 2009 CK_{8}	18.0	X	203.24344	273.98671	270.89732	4.23573	0.1056665	0.29414407	2.2392160	21	11 20.6	21.0
457650 2009 CV_{21}	17.9	X	202.66442	217.73493	310.56420	6.85118	0.0334857	0.28942784	2.2634758	21	11 3.1	20.8
457651 2009 CW_{23}	17.8	X	214.76168	118.66576	272.29798	3.09505	0.2174831	0.26626398	2.3929178	21	5 2.5	21.8
457652 2009 CN_{28}	18.4	X	181.20574	139.01977	357.11526	1.93735	0.1557009	0.27637601	2.3341880	21	8 19.9	22.0
457653 2009 CL_{29}	18.2	X	177.19184	331.05831	123.21039	4.18805	0.1614582	0.26864677	2.3787472	21	6 20.9	21.9
457654 2009 CT_{34}	18.5	X	253.07993	11.33432	39.10008	3.63374	0.1974306	0.28044426	2.3115591	21	7 6.5	21.7
457655 2009 CJ_{38}	18.1	X	234.49945	104.25772	4.95636	4.61953	0.0844319	0.28530878	2.2852092	21	9 19.9	20.9
457656 2009 CJ_{41}	18.0	X	112.19934	212.08892	303.79994	1.92597	0.1305019	0.26658281	2.3910094	21	7 2.5	21.3
457657 2009 CJ_{42}	18.5	X	188.81026	335.93191	152.22440	4.18282	0.2158712	0.27590423	2.3368481	21	8 13.9	22.5
457658 2009 CZ_{46}	17.8	X	122.43557	270.40346	338.14715	6.29524	0.1456496	0.28803814	2.2707503	21	11 14.7	21.3
457659 2009 CX_{47}	17.4	X	202.48596	146.80790	346.40257	22.42270	0.1510275	0.27938336	2.3174072	21	9 7.2	20.7
457660 2009 CR_{48}	18.5	X	175.88151	35.28410	137.65441	2.07713	0.1331536	0.28454150	2.2893154	21	10 3.7	21.7
457661 2009 CB_{56}	18.6	X	243.75387	44.50958	20.52374	2.40181	0.2012513	0.27869113	2.3212430	21	7 15.9	21.8
457662 2009 DZ	22.0	X	34.13391	335.84742	151.47208	14.11665	0.3020570	0.56291598	1.4526924	21	—	—
457663 2009 DN_{1}	20.3	X	354.83359	314.25773	280.89045	7.85926	0.2851967	0.56927315	1.4418572	21	—	—
457664 2009 DY_{8}	17.6	X	229.36649	138.14584	317.85631	6.03712	0.1341315	0.27744334	2.3281977	21	8 17.8	20.7
457665 2009 DO_{15}	17.7	X	297.37693	87.14551	347.52499	8.54972	0.1267503	0.29134040	2.2535588	21	10 28.4	19.9
457666 2009 DQ_{19}	18.0	X	208.32110	33.47656	78.48182	9.26949	0.2464427	0.27974172	2.3154277	21	8 11.7	21.9
457667 2009 DJ_{34}	17.8	X	58.64353	137.64085	121.04001	3.74538	0.1734167	0.26566515	2.3965123	21	9 22.9	20.8
457668 2009 DW_{35}	18.2	X	227.43872	351.42495	139.89317	1.92645	0.1214022	0.28124031	2.3071952	21	10 6.2	21.1
457669 2009 DL_{43}	17.6	X	139.91829	113.91455	93.05798	7.04337	0.0621220	0.28108377	2.3080517	21	10 12.6	20.8
457670 2009 DX_{46}	17.5	X	124.29354	203.85826	342.60130	7.46712	0.1830579	0.27106565	2.3645748	21	8 31.6	21.2
457671 2009 DN_{49}	17.6	X	88.33529	94.23242	154.88634	2.80236	0.1766546	0.27115342	2.3640645	21	10 15.9	20.9
457672 2009 DP_{49}	17.7	X	92.81939	0.23888	162.76397	5.36262	0.1356517	0.25780923	2.4449524	21	6 18.5	20.9
457673 2009 DW_{50}	17.8	X	69.06300	71.55913	185.02495	1.33557	0.1586876	0.26832505	2.3806483	21	9 29.9	20.9
457674 2009 DP_{54}	17.9	X	140.21562	186.63873	4.76151	2.83701	0.0897212	0.27705838	2.3303538	21	9 18.8	21.1
457675 2009 DG_{71}	17.7	X	106.27618	180.50689	28.52502	1.72630	0.1327284	0.27251053	2.3562093	21	9 7.6	20.9
457676 2009 DG_{72}	17.9	X	205.84562	127.48437	333.67317	6.37604	0.1705731	0.27474033	2.3434432	21	7 28.8	21.5
457677 2009 DA_{73}	17.2	X	203.84049	188.73770	347.79005	26.27008	0.1811181	0.28779565	2.2720256	21	10 18.5	21.1
457678 2009 DT_{78}	18.1	X	237.86364	29.73937	83.94972	3.20918	0.1475515	0.28486913	2.2875598	21	9 22.8	21.1
457679 2009 DM_{81}	18.3	X	180.75613	24.91492	110.08095	3.23139	0.1413992	0.27246422	2.3564762	21	8 18.4	21.8
457680 2009 DZ_{82}	17.9	X	81.70664	123.97253	58.23108	2.47137	0.1298736	0.25827734	2.4419973	21	6 29.2	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457681 2009 DS_{85}	17.5	X	251.34791	185.45986	144.19724	6.60877	0.1436910	0.25244396	2.4794731	21	3 27.9	21.2
457682 2009 DS_{86}	17.5	X	117.22764	288.58243	303.41334	2.33789	0.1493284	0.27647854	2.3336108	21	10 19.3	21.0
457683 2009 DQ_{91}	18.1	X	169.31385	347.32296	156.57209	4.86758	0.1592340	0.27242106	2.3567251	21	8 17.4	21.7
457684 2009 DR_{100}	18.4	X	198.56547	85.72333	30.68878	6.53859	0.0471188	0.27244770	2.3565715	21	8 20.4	21.6
457685 2009 DB_{103}	17.4	X	50.11766	152.85487	124.48215	6.80711	0.1848105	0.26901807	2.3765580	21	10 11.0	20.3
457686 2009 DF_{112}	17.5	X	124.98482	42.65608	150.76773	7.18364	0.0523501	0.27296346	2.3536021	21	8 31.5	20.6
457687 2009 DL_{112}	18.4	X	151.64819	43.16447	147.42083	2.65922	0.1463363	0.27815981	2.3241980	21	10 1.8	22.0
457688 2009 DM_{130}	17.9	X	120.25439	307.98533	227.45385	0.62610	0.1226362	0.26609073	2.3939563	21	8 6.7	21.2
457689 2009 DT_{130}	17.3	X	176.34035	336.10845	191.58965	24.98015	0.1708611	0.27453660	2.3446024	21	9 23.0	21.0
457690 2009 DA_{137}	18.1	X	221.15311	136.48801	335.58683	3.51713	0.1011982	0.27695695	2.3309227	21	9 3.2	21.0
457691 2009 DE_{140}	17.1	X	156.99806	313.29026	240.46221	6.06810	0.1105235	0.28027247	2.3125036	21	10 8.6	20.5
457692 2009 EB_{4}	17.2	X	180.77868	10.74051	145.65960	7.94868	0.1310144	0.27713745	2.3299105	21	9 17.4	20.6
457693 2009 EL_{4}	17.8	X	152.51586	39.41640	155.30898	7.12620	0.1370731	0.27728943	2.3290591	21	10 9.1	21.3
457694 2009 EL_{13}	17.6	X	44.02245	307.44774	319.72526	1.64449	0.1925683	0.27024107	2.3693824	21	9 14.6	20.0
457695 2009 ET_{13}	18.0	X	166.11279	218.99047	300.74574	1.40216	0.1379766	0.27525148	2.3405411	21	9 4.2	21.4
457696 2009 EO_{14}	18.2	X	209.73094	84.32566	20.31917	6.06717	0.1840074	0.27677751	2.3319300	21	8 6.7	21.8
457697 2009 EZ_{16}	18.0	X	210.41581	306.92338	226.26725	1.89553	0.1424088	0.28773131	2.2723644	21	11 8.7	21.1
457698 2009 ED_{17}	17.9	X	169.75419	43.89995	117.90712	5.80084	0.1703254	0.27725771	2.3292367	21	9 13.0	21.5
457699 2009 EB_{23}	18.1	X	147.24926	30.30315	199.68976	1.97065	0.1535042	0.28104927	2.3082406	21	11 16.5	21.6
457700 2009 EE_{25}	18.3	X	184.25235	280.28594	215.50586	0.68410	0.1246437	0.27382758	2.3486480	21	8 22.5	21.8
457701 2009 EN_{25}	18.2	X	161.37229	352.42348	189.82509	4.94417	0.1020766	0.27724536	2.3293059	21	9 29.8	21.6
457702 2009 EM_{29}	17.6	X	129.00719	117.28842	48.97532	3.27946	0.1067656	0.26222095	2.4174516	21	8 4.1	21.0
457703 2009 FP_{1}	17.3	X	90.57552	210.44182	28.04435	5.39323	0.1975099	0.26981822	2.3718572	21	10 6.4	20.7
457704 2009 FO_{5}	17.8	X	227.24191	153.82757	342.32200	6.87043	0.0449508	0.28507642	2.2864508	21	10 20.4	20.7
457705 2009 FN_{6}	18.1	X	174.27450	186.38625	165.25899	18.73772	0.0457503	0.40090122	1.8215641	21	—	—
457706 2009 FP_{13}	17.6	X	107.06263	210.49514	344.77076	7.24640	0.0476805	0.26822530	2.3812384	21	8 11.0	20.7
457707 2009 FJ_{14}	17.8	X	139.88633	218.89518	353.04464	22.25201	0.1720354	0.27864310	2.3215098	21	10 9.4	21.7
457708 2009 FO_{14}	17.9	X	99.05856	203.44582	35.77388	1.62828	0.1524626	0.27148431	2.3621432	21	10 11.2	21.3
457709 2009 FN_{22}	17.6	X	132.43204	21.45722	195.35270	5.33682	0.1698625	0.27455943	2.3444725	21	10 16.7	21.2
457710 2009 FC_{29}	17.5	X	154.30352	66.25390	145.17161	10.90703	0.2026707	0.27996193	2.3142134	21	11 2.6	21.5
457711 2009 FU_{32}	17.0	X	232.29258	21.30129	112.60669	23.62516	0.1964733	0.28519652	2.2858088	21	10 17.6	20.8
457712 2009 FX_{36}	17.5	X	99.40175	344.18042	169.16261	12.37456	0.0936246	0.25606337	2.4560530	21	6 8.5	20.9
457713 2009 FT_{39}	17.6	X	165.35535	139.27322	68.23793	7.01844	0.2223497	0.28146317	2.3059771	21	11 4.2	21.4
457714 2009 FM_{45}	18.0	X	73.35836	343.01223	234.38894	0.47863	0.1377584	0.26279117	2.4139534	21	8 7.9	20.9
457715 2009 FD_{49}	17.0	X	83.15373	97.60236	133.28425	21.90564	0.2590141	0.26511009	2.3998562	21	10 1.0	21.0
457716 2009 FY_{49}	18.2	X	116.53857	22.20366	131.24544	6.57952	0.2375594	0.26196618	2.4190187	21	7 15.3	21.8
457717 2009 FE_{50}	18.1	X	179.43341	64.63246	91.18571	3.60743	0.1678196	0.27809244	2.3245734	21	9 14.2	21.7
457718 2009 FA_{55}	17.9	X	23.59692	178.49839	76.69019	3.51117	0.1673636	0.25695285	2.4503818	21	7 14.2	20.1
457719 2009 FT_{55}	17.2	X	210.96781	112.94027	72.06589	23.05814	0.1963746	0.28849032	2.2683769	21	11 21.8	20.6
457720 2009 FP_{60}	17.8	X	68.43729	287.70023	318.89397	0.73847	0.1043501	0.26616471	2.3935127	21	9 6.4	20.6
457721 2009 FT_{60}	17.7	X	134.12699	22.92637	208.57777	6.43655	0.1062935	0.27969727	2.3156730	21	11 5.1	20.9
457722 2009 FD_{63}	17.6	X	102.96868	66.85798	117.31714	2.19145	0.1520747	0.26173465	2.4204451	21	8 2.1	21.0
457723 2009 FM_{63}	18.0	X	98.69480	37.89477	151.98508	2.13983	0.1143316	0.26153841	2.4216557	21	7 30.3	21.2
457724 2009 FP_{65}	17.6	X	143.04255	126.95588	39.38499	7.22687	0.0788607	0.26596614	2.3947039	21	8 21.2	21.0
457725 2009 FE_{66}	17.8	X	44.71111	189.46238	61.31940	4.72050	0.0915712	0.26122410	2.4235978	21	8 6.9	20.5
457726 2009 FA_{68}	18.0	X	138.81480	57.33623	138.86973	1.97609	0.1304434	0.27175753	2.3605597	21	9 25.3	21.4
457727 2009 FG_{68}	17.8	X	26.69275	123.15483	121.42915	3.29631	0.1545378	0.25486087	2.4637725	21	7 1.5	20.0
457728 2009 FS_{69}	17.9	X	104.25639	96.60017	83.11212	2.88565	0.1816941	0.26156494	2.4214919	21	8 1.7	21.4
457729 2009 FD_{70}	16.1	X	122.57550	35.82319	170.02765	17.19314	0.1353429	0.18883671	3.0089278	21	9 14.5	20.6
457730 2009 FH_{70}	17.6	X	107.07737	189.74083	30.04377	6.34468	0.1688382	0.26834410	2.3805356	21	9 27.0	21.1
457731 2009 FB_{74}	18.1	X	148.91025	85.64080	60.91133	3.38561	0.1412390	0.26626521	2.3929104	21	8 1.6	21.7
457732 2009 GT_{3}	17.3	X	99.45836	223.77182	18.42801	5.32562	0.1847264	0.26995730	2.3710425	21	10 17.6	20.8
457733 2009 HS	17.6	X	143.41633	103.44475	39.76373	3.78502	0.1685247	0.26378751	2.4078711	21	7 23.9	21.4
457734 2009 HJ_{3}	17.1	X	173.81068	136.76779	60.81217	24.74296	0.1994989	0.27803511	2.3248929	21	11 4.4	21.0
457735 2009 HA_{12}	17.0	X	182.27607	64.05335	137.09209	23.32310	0.1599833	0.28075016	2.3098798	21	11 20.4	21.1
457736 2009 HY_{12}	15.4	X	176.37367	172.21245	45.82670	4.90041	0.1371346	0.12370688	3.9890867	21	11 9.8	21.7
457737 2009 HW_{13}	16.8	X	89.35580	225.52715	52.36809	25.34696	0.1906198	0.27382974	2.3486356	21	11 21.2	20.5
457738 2009 HE_{14}	17.9	X	177.75696	71.16414	90.73271	4.29627	0.2210882	0.27469175	2.3437195	21	9 18.9	21.8
457739 2009 HJ_{14}	17.6	X	124.41169	106.60689	101.97120	3.48016	0.1151850	0.26917749	2.3756195	21	9 26.5	21.0
457740 2009 HR_{15}	17.8	X	85.77735	191.04235	45.74563	3.00954	0.1468807	0.26771856	2.3842423	21	9 23.2	20.9
457741 2009 HK_{16}	17.2	X	271.34365	224.41699	145.62739	8.22705	0.0962176	0.26082353	2.4260786	21	6 17.7	20.4
457742 2009 HG_{19}	17.9	X	144.03419	100.56561	78.03473	2.07683	0.1242284	0.26907969	2.3761951	21	9 7.5	21.3
457743 Balklavs	18.0	X	120.57882	70.75177	99.49900	3.47266	0.1136834	0.26143283	2.4223076	21	7 30.7	21.4
457744 2009 HG_{24}	17.6	X	7.13978	189.23346	91.71011	9.12655	0.0969844	0.25596697	2.4566697	21	7 15.9	20.0
457745 2009 HU_{40}	17.3	X	247.51122	23.42657	80.86414	6.63460	0.1406110	0.28032806	2.3121979	21	9 24.9	20.3
457746 2009 HT_{43}	17.4	X	123.14606	112.58095	93.83834	3.30240	0.1459449	0.26866689	2.3786285	21	9 24.3	20.9
457747 2009 HB_{49}	17.2	X	144.78142	39.97188	191.22509	8.71228	0.2655039	0.27584121	2.3372040	21	11 15.8	21.3
457748 2009 HK_{54}	17.3	X	6.66078	30.57195	191.60775	11.28313	0.1037896	0.24351338	2.5397297	21	4 17.8	19.9
457749 2009 HZ_{58}	17.3	X	120.73528	37.21778	178.04898	2.03109	0.1546511	0.27011387	2.3701261	21	10 2.3	21.0
457750 2009 HE_{62}	17.9	X	124.27035	56.59548	146.10770	6.60793	0.0438577	0.27061645	2.3671908	21	9 12.5	21.0
457751 2009 HB_{68}	17.9	X	124.09547	30.10765	125.00679	3.02948	0.1633136	0.26021040	2.4298882	21	7 18.4	21.4
457752 2009 HK_{68}	17.7	X	152.17125	107.74809	45.04689	6.69344	0.0553216	0.26344571	2.4099533	21	8 11.7	21.1
457753 2009 HU_{69}	17.8	X	144.54825	127.32812	126.71049	1.35113	0.1136685	0.28180785	2.3040965	21	12 14.5	21.0
457754 2009 HD_{77}	17.6	X	60.95653	154.27278	135.26994	3.78851	0.1837863	0.26947880	2.3738484	21	11 8.3	20.8
457755 2009 HL_{80}	17.5	X	125.04889	55.92739	167.10251	4.97501	0.1440535	0.27337957	2.3512132	21	10 17.4	21.0
457756 2009 HL_{83}	17.1	X	67.67176	193.50654	82.54527	10.72176	0.3055455	0.26479324	2.4017702	21	11 13.2	20.8
457757 2009 HP_{88}	17.9	X	132.05390	173.52236	15.28679	2.20966	0.1578790	0.26742621	2.3859796	21	9 9.7	21.5
457758 2009 HV_{95}	17.8	X	65.91951	56.39701	181.56848	1.35620	0.1690063	0.26185221	2.4197206	21	8 31.7	20.8
457759 2009 HY_{99}	17.6	X	89.05471	124.89502	73.25967	10.15998	0.1576882	0.25824190	2.4422207	21	8 8.2	21.0
457760 2009 HN_{105}	17.7	X	174.56429	59.40107	161.63293	9.96290	0.1730546	0.28122166	2.3072972	21	12 1.4	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457761 2009 JT_3	17.5	X	107.74748	149.52687	122.78392	7.53398	0.1997753	0.27419195	2.3465668	21	12 4.7	21.3
457762 2009 JX_8	13.8	X	317.48726	197.04380	109.83408	12.77394	0.1519633	0.08517034	5.1161560	21	5 30.7	20.2
457763 2009 JD_9	17.4	X	67.84357	88.56434	154.71664	14.65989	0.1349942	0.26268679	2.4145928	21	9 6.6	20.3
457764 2009 JS_{11}	17.4	X	6.72511	67.75355	130.11426	14.04069	0.1127208	0.23865349	2.5740927	21	3 17.5	20.4
457765 2009 JD_{18}	17.2	X	253.63247	213.39284	101.60422	8.52901	0.1483982	0.23374398	2.6100115	21	3 15.4	21.3
457766 2009 KT_2	17.2	X	69.20816	153.52529	70.62930	15.74743	0.1428827	0.25806504	2.4433364	21	8 19.3	20.6
457767 2009 KF_4	17.1	X	88.01053	111.20932	89.03250	6.16039	0.0615504	0.25633220	2.4543356	21	7 23.5	20.3
457768 2009 KN_4	18.3	X	142.20363	38.30314	308.23297	9.14386	0.5248343	0.36441266	1.9412155	21	1 25.2	21.1
457769 2009 KZ_4	17.8	X	168.52940	155.84918	39.58896	2.94372	0.1415596	0.27915870	2.3186504	21	10 24.0	21.1
457770 2009 KA_6	13.7	X	283.61035	220.27063	112.45607	18.65991	0.1425584	0.08403222	5.1622477	21	5 22.2	20.7
457771 2009 KD_{11}	16.9	X	243.52484	224.12260	108.60002	14.64487	0.1929441	0.23405946	2.6076657	21	3 27.3	21.4
457772 2009 KQ_{37}	17.3	X	192.54993	297.13603	210.74713	20.57487	0.2672241	0.27422149	2.3463983	21	9 4.1	21.7
457773 2009 LK_4	16.7	X	220.60092	227.71698	123.07333	19.65950	0.1764944	0.23277398	2.6172574	21	3 30.6	21.3
457774 2009 MP_1	17.1	X	208.53037	55.07876	87.68025	23.25231	0.2027691	0.27430163	2.3459412	21	10 4.4	21.3
457775 2009 MG_8	16.6	X	291.03480	1.14836	287.30423	13.02064	0.2321147	0.22962027	2.6411672	21	3 1.5	20.8
457776 2009 NE_2	16.4	X	99.20686	30.70247	318.28562	9.69827	0.1576858	0.19265974	2.9689900	21	—	—
457777 2009 OA_1	17.8	X	216.08655	3.03403	312.58723	18.99323	0.1022093	0.37918225	1.8904740	21	1 14.1	20.1
457778 2009 OQ_3	16.3	X	282.79349	337.33807	303.66512	14.34147	0.1780911	0.22565228	2.6720396	21	2 20.5	20.5
457779 2009 OE_{21}	16.4	X	279.35347	358.19902	312.63075	14.58407	0.1821053	0.22722919	2.6596632	21	3 22.2	20.7
457780 2009 OD_{25}	17.8	X	250.31812	348.76157	338.43439	19.33994	0.1023030	0.38572172	1.8690460	21	3 5.6	20.0
457781 2009 PP_9	17.0	X	195.44172	9.97898	338.87726	8.35274	0.2089198	0.21080345	2.7960884	21	3 2.0	21.8
457782 2009 PR_9	16.1	X	239.78208	156.74581	148.80258	21.14286	0.0916716	0.21028737	2.8006613	21	2 21.1	20.3
457783 2009 PS_9	17.2	X	359.02654	34.80070	256.01421	11.68320	0.2537735	0.24405277	2.5359862	21	7 13.6	19.0
457784 2009 PL_{10}	17.0	X	311.32589	310.64637	323.66588	12.71674	0.2459352	0.23017595	2.6369147	21	3 7.6	20.6
457785 2009 PJ_{15}	17.3	X	237.19364	175.74913	162.73253	11.55822	0.1747226	0.22149078	2.7054049	21	3 25.7	21.7
457786 2009 PQ_{16}	16.5	X	49.98485	37.50903	354.41267	14.32398	0.2582081	0.18277544	3.0750876	21	—	—
457787 2009 QB	17.9	X	145.39198	236.12336	170.37682	22.41508	0.0933854	0.38182310	1.8817471	21	2 17.1	19.8
457788 2009 QU_2	16.8	X	143.27833	305.75860	35.02313	2.74603	0.1830305	0.19865944	2.9089075	21	1 7.7	21.2
457789 2009 QC_4	16.3	X	335.50506	316.22370	327.39692	14.25818	0.1582221	0.23259811	2.6185765	21	5 9.3	19.5
457790 2009 QE_{20}	18.0	X	88.61099	284.27347	150.27621	22.42338	0.0878193	0.37332644	1.9101914	21	—	—
457791 2009 QM_{23}	16.8	X	264.75940	342.21214	342.34503	11.57854	0.1918325	0.22573735	2.6713683	21	3 27.6	21.0
457792 2009 QC_{24}	17.0	X	217.56050	25.62627	300.03517	3.46158	0.0627963	0.21291033	2.7776119	21	2 21.7	21.1
457793 2009 QR_{28}	18.5	X	147.78633	189.29852	160.60377	23.80281	0.1076280	0.36853223	1.9267221	21	—	—
457794 2009 QS_{30}	16.3	X	221.68965	1.59235	335.33088	20.01115	0.2903965	0.21495519	2.7599683	21	3 4.3	21.4
457795 2009 QX_{30}	17.6	X	245.39310	296.32160	357.32999	21.23708	0.0362293	0.37897558	1.8911613	21	1 23.6	20.1
457796 2009 QB_{33}	18.0	X	244.52279	136.32681	148.93418	24.10047	0.0683706	0.38022800	1.8870062	21	1 2.0	20.7
457797 2009 QR_{36}	16.5	X	22.54024	123.47867	216.65463	12.58641	0.2546979	0.25602324	2.4563097	21	12 2.8	19.3
457798 2009 QH_{38}	17.9	X	34.99998	342.85248	176.43027	21.65579	0.0209287	0.38192905	1.8813991	21	2 1.4	20.0
457799 2009 QP_{60}	16.9	X	311.30228	144.65203	155.41902	14.35580	0.2799829	0.23176378	2.6248571	21	4 12.9	20.4
457800 2009 QT_{60}	15.7	X	50.44640	41.85185	304.15525	15.99455	0.2373718	0.17633077	3.1495655	21	12 27.7	20.3
457801 2009 RC_3	16.4	X	275.17165	23.50843	286.07523	10.98948	0.1746179	0.22359885	2.6883739	21	3 18.9	20.7
457802 2009 RY_6	17.9	X	146.85323	348.72436	350.70293	18.84940	0.0618631	0.36424750	1.9418022	21	—	—
457803 2009 RS_7	16.3	X	238.94770	336.98110	354.80069	14.30738	0.2166554	0.21622075	2.7491882	21	3 15.8	21.0
457804 2009 RV_8	17.9	X	99.30968	131.06385	214.26034	2.01990	0.2317554	0.27091841	2.3654315	21	—	—
457805 2009 RA_{11}	17.3	X	248.53185	132.29641	188.92551	5.29662	0.0716836	0.21547113	2.7555607	21	3 22.0	21.3
457806 2009 RT_{11}	16.7	X	61.34291	180.93143	186.77761	0.74264	0.2361611	0.18104912	3.0946041	21	—	—
457807 2009 RK_{14}	16.7	X	57.33302	244.73292	188.30849	8.93724	0.0968474	0.19253487	2.9702736	21	—	—
457808 2009 RY_{21}	17.9	X	137.67815	138.85388	172.82329	22.19686	0.0514295	0.35979045	1.9578059	21	—	—
457809 2009 RF_{26}	16.5	X	177.34989	6.20218	353.65884	10.98396	0.3418956	0.21056136	2.7982312	21	3 6.6	21.8
457810 2009 RF_{27}	17.1	X	89.96191	104.51868	248.31252	5.62487	0.2492983	0.18793350	3.0185608	21	—	—
457811 2009 RM_{30}	17.2	X	50.10736	69.81379	349.97982	7.53044	0.2458243	0.18641998	3.0348769	21	—	—
457812 2009 RL_{49}	16.1	X	46.20774	37.58732	11.73265	8.99009	0.1052412	0.18404212	3.0609617	21	—	—
457813 2009 RD_{50}	17.1	X	181.91608	146.93683	195.43804	12.48325	0.1495190	0.20349326	2.8626573	21	2 7.4	21.9
457814 2009 RK_{53}	17.8	X	125.06790	255.08425	184.40264	5.23611	0.1018572	0.29176960	2.2513483	21	3 27.8	20.3
457815 2009 RZ_{53}	16.8	X	69.16909	190.97125	143.20293	1.64596	0.1748140	0.17487746	3.1669910	21	12 24.1	21.4
457816 2009 RS_{54}	16.6	X	65.53551	158.89784	190.62604	10.54869	0.2152020	0.17698656	3.1417806	21	—	—
457817 2009 RB_{55}	16.7	X	210.24889	165.84126	187.77189	9.59512	0.1695121	0.21203220	2.7852756	21	3 19.1	21.2
457818 2009 RB_{58}	16.6	X	283.33166	327.30759	331.67579	16.23785	0.1945018	0.22306000	2.6927017	21	3 13.5	20.8
457819 2009 SY_{11}	17.2	X	217.18337	101.09078	234.16856	1.39300	0.0993294	0.21363431	2.7713330	21	3 4.4	21.5
457820 2009 SU_{46}	16.5	X	50.38462	319.24347	216.07394	13.18813	0.1392125	0.21225166	2.7833553	21	5 4.8	19.7
457821 2009 SW_{47}	16.6	X	25.88281	105.55695	14.22466	13.30281	0.0903525	0.19303378	2.9651534	21	1 13.7	20.5
457822 2009 SB_{48}	16.6	X	73.14639	49.97196	297.10051	2.21804	0.2881181	0.17952963	3.1120409	21	—	—
457823 2009 SP_{52}	17.6	X	83.73909	273.75872	151.31752	2.76596	0.1444899	0.19697829	2.9254351	21	2 2.2	21.3
457824 2009 SW_{55}	16.5	X	2.67846	220.41480	235.55633	10.45396	0.0873712	0.18395070	3.0619757	21	—	—
457825 2009 SV_{59}	16.5	X	90.17481	248.74759	346.95039	8.81631	0.1588259	0.24155683	2.5534254	21	9 23.1	20.1
457826 2009 SW_{59}	17.0	X	47.33007	216.75608	221.01416	11.35092	0.1711897	0.18900670	3.0071234	21	—	—
457827 2009 SF_{60}	16.4	X	229.57202	278.23349	347.53589	9.09363	0.0531356	0.19554962	2.9396665	21	—	—
457828 2009 SX_{61}	17.1	X	96.05851	72.79411	342.70313	8.06390	0.1130875	0.20171115	2.8794935	21	2 3.9	20.9
457829 2009 ST_{65}	17.1	X	127.63594	210.64172	182.14204	9.30630	0.0564373	0.20466434	2.8517269	21	2 2.9	21.3
457830 2009 SB_{72}	16.9	X	114.70975	44.68925	352.36304	8.90983	0.1003245	0.20073605	2.8888110	21	2 3.9	21.0
457831 2009 SX_{75}	17.0	X	244.28323	175.45627	147.26017	5.50525	0.1454190	0.21346645	2.7727857	21	3 15.3	21.4
457832 2009 SM_{76}	16.7	X	82.03026	239.02224	153.65144	6.62355	0.2191616	0.18830101	3.0146319	21	1 2.4	20.3
457833 2009 SN_{79}	16.9	X	34.94681	3.97488	269.80863	3.78963	0.2222992	0.24343426	2.5402799	21	9 9.4	19.6
457834 2009 SQ_{86}	17.3	X	69.11801	100.54205	310.14012	3.44055	0.0935249	0.18989690	2.9977182	21	—	—
457835 2009 ST_{90}	17.1	X	197.19803	39.86400	278.43836	4.09964	0.1087918	0.20454311	2.8528536	21	1 25.1	21.6
457836 2009 SF_{92}	17.0	X	54.10673	170.25806	223.87271	6.14453	0.2768840	0.18402183	3.0611867	21	—	—
457837 2009 SS_{92}	16.5	X	23.34549	43.27861	38.20892	14.23070	0.2469692	0.17921435	3.1156897	21	—	—
457838 2009 SW_{97}	15.9	X	110.56319	287.34699	23.97559	15.80005	0.1909426	0.17991861	3.1075538	21	—	—
457839 2009 SX_{100}	17.3	X	92.23043	64.80654	0.53018	3.84577	0.1329756	0.20053215	2.8907689	21	2 13.4	21.1
457840 2009 SW_{107}	16.7	X	282.74593	108.95705	203.20461	9.10227	0.1252769	0.21838357	2.7310065	21	4 12.8	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457841 2009 SZ_{113}	17.1	X	294.25917	4.80672	278.93124	4.00484	0.1297099	0.21965004	2.7204987	21	3 18.4	20.8
457842 2009 SD_{123}	16.6	X	35.83431	11.53840	218.91526	11.36714	0.1379191	0.22843061	2.6503294	21	6 24.9	19.7
457843 2009 SK_{123}	17.1	X	17.12448	83.59120	329.69972	6.88932	0.1464080	0.17852654	3.1236871	21	—	—
457844 2009 SX_{123}	16.7	X	274.91801	301.00883	334.73815	6.31406	0.0557627	0.20952660	2.8074365	21	2 26.5	20.5
457845 2009 SH_{128}	16.8	X	94.69042	339.42453	350.72909	4.82442	0.1388262	0.18086974	3.0966499	21	—	—
457846 2009 SK_{136}	16.6	X	47.30821	138.40864	206.40976	13.25928	0.2775941	0.17322663	3.1870798	21	12 25.0	21.4
457847 2009 SA_{142}	17.1	X	206.65493	69.77041	236.10068	1.69925	0.0640991	0.20110868	2.8852415	21	1 19.7	21.4
457848 2009 SS_{147}	16.8	X	285.77456	12.50947	305.32686	5.11700	0.0503573	0.22345770	2.6895059	21	5 2.5	20.5
457849 2009 SX_{149}	16.5	X	150.79200	153.78712	203.19419	8.13036	0.0733319	0.20051517	2.8909321	21	1 20.1	20.8
457850 2009 SR_{153}	17.2	X	137.39919	126.36990	262.77791	0.99908	0.0772946	0.20297381	2.8675393	21	2 14.6	21.4
457851 2009 SY_{154}	17.2	X	322.28165	304.63599	351.99475	10.47472	0.1640639	0.23305071	2.6151851	21	5 5.6	20.5
457852 2009 SJ_{164}	17.3	X	174.13169	273.46743	72.41172	2.66658	0.0764877	0.19932001	2.9024770	21	2 4.4	21.7
457853 2009 SE_{168}	17.1	X	73.83824	172.38033	236.21153	6.44705	0.2865742	0.19099724	2.9861938	21	1 17.6	20.4
457854 2009 SQ_{170}	16.2	X	39.92891	26.69021	341.13498	16.00311	0.2065750	0.17676963	3.1443504	21	—	—
457855 2009 SH_{172}	16.9	X	99.31092	224.61996	140.47877	2.94589	0.1735801	0.18726741	3.0257143	21	—	—
457856 2009 SR_{173}	16.6	X	192.08287	110.89042	253.80345	11.91180	0.2195190	0.21106098	2.7938135	21	3 12.6	21.7
457857 2009 SL_{175}	17.9	X	182.83280	10.00644	7.24587	21.97826	0.0714888	0.37863429	1.8922975	21	3 6.2	20.1
457858 2009 SU_{179}	17.5	X	332.71627	148.23128	127.24212	6.09616	0.1979481	0.23067782	2.6330887	21	4 25.8	20.4
457859 2009 SL_{190}	16.9	X	177.18390	95.30182	290.24955	3.79801	0.0671186	0.21241051	2.7819675	21	3 22.7	21.1
457860 2009 SO_{192}	16.8	X	31.63440	141.52330	219.94678	5.32914	0.1532792	0.17280969	3.1922041	21	12 9.1	21.0
457861 2009 SX_{192}	17.4	X	264.08046	51.41464	254.84911	2.72953	0.0816631	0.21533723	2.7567029	21	3 18.8	21.3
457862 2009 SO_{194}	16.3	X	305.57410	292.08965	204.43204	8.19994	0.2416651	0.17816398	3.1279234	21	12 30.5	19.7
457863 2009 SB_{201}	17.1	X	220.60319	144.48727	156.63953	2.33304	0.0398769	0.20184448	2.8782254	21	1 29.1	21.2
457864 2009 SM_{215}	16.2	X	51.84619	142.40203	189.70241	7.43963	0.1881537	0.17376418	3.1805035	21	12 5.1	20.7
457865 2009 SD_{219}	17.1	X	130.33528	85.26577	303.36991	6.92629	0.1759241	0.20249231	2.8720832	21	2 16.9	21.3
457866 2009 SB_{220}	16.3	X	350.75387	291.84284	159.50690	9.97397	0.0623395	0.18315358	3.0708536	21	—	—
457867 2009 SC_{222}	17.3	X	264.28248	28.24493	296.99383	3.16514	0.1172164	0.22194375	2.7017227	21	4 7.0	21.2
457868 2009 SC_{223}	16.6	X	163.12945	184.51505	202.84273	8.91386	0.1598126	0.20962018	2.8066009	21	3 16.8	21.2
457869 2009 SY_{240}	16.2	X	64.99841	88.79073	253.83995	13.00157	0.2524468	0.17771637	3.1331734	21	—	—
457870 2009 SK_{243}	16.2	X	87.34330	141.66601	281.58220	14.78465	0.2181933	0.19745093	2.9207649	21	2 10.5	20.1
457871 2009 SX_{248}	16.8	X	214.83620	17.44253	288.06044	3.43406	0.1745706	0.20292422	2.8680065	21	1 27.0	21.4
457872 2009 SF_{252}	16.6	X	307.38406	289.22670	358.55551	10.93331	0.1258821	0.22066288	2.7121676	21	4 9.7	20.2
457873 2009 SG_{254}	17.3	X	43.46975	132.48720	277.13158	2.88449	0.1618388	0.18316532	3.0707223	21	—	—
457874 2009 SQ_{261}	17.7	X	42.56396	61.98176	13.99221	19.14883	0.1147651	0.35564082	1.9730056	21	—	—
457875 2009 SN_{278}	16.4	X	250.60082	163.83861	147.96469	4.90059	0.0597204	0.21308215	2.7761185	21	3 15.4	20.4
457876 2009 SA_{281}	17.1	X	202.93195	299.72398	59.22674	5.23656	0.0853126	0.21198868	2.7856567	21	3 22.4	21.3
457877 2009 SO_{287}	17.1	X	92.27810	206.79299	238.89132	6.64823	0.0969959	0.20261094	2.8709621	21	3 1.3	21.0
457878 2009 SD_{288}	17.0	X	42.48841	147.69185	249.16280	5.17566	0.1915648	0.18054786	3.1003293	21	—	—
457879 2009 SE_{289}	16.9	X	169.16726	232.48078	118.05136	3.04687	0.1377636	0.20148489	2.8816489	21	2 8.3	21.3
457880 2009 SF_{303}	17.0	X	169.47018	189.83177	184.57811	4.36416	0.0886974	0.20974586	2.8054796	21	3 3.6	21.2
457881 2009 SG_{322}	17.1	X	308.87319	225.49097	31.54719	4.71404	0.0294323	0.21585418	2.7522998	21	3 21.8	20.7
457882 2009 SH_{327}	16.2	X	54.61942	107.04992	280.49955	11.75582	0.1759164	0.18179469	3.0861374	21	—	—
457883 2009 SS_{338}	16.6	X	36.79955	8.26665	46.93127	11.88096	0.2891797	0.18057093	3.1000652	21	—	—
457884 2009 SE_{339}	16.4	X	57.14562	135.56024	224.47492	15.87538	0.2281416	0.17489409	3.1667903	21	—	—
457885 2009 SJ_{344}	16.3	X	83.93838	168.02819	194.74399	14.15787	0.1374895	0.18525620	3.0475737	21	—	—
457886 2009 SP_{347}	17.4	X	164.27065	286.02359	71.14208	5.96811	0.1164945	0.20171451	2.8794616	21	2 11.6	21.9
457887 2009 SG_{350}	17.1	X	50.51280	0.54147	45.67633	5.16759	0.1375502	0.18214147	3.0822190	21	—	—
457888 2009 SM_{354}	16.7	X	23.47232	79.53835	31.90270	10.62989	0.1298882	0.18740461	3.0242374	21	—	—
457889 2009 SJ_{357}	16.3	X	96.25986	13.98562	40.78350	8.11519	0.0756291	0.19058343	2.9905148	21	2 1.3	20.4
457890 2009 TZ_{3}	17.0	X	60.62954	132.86567	240.65942	8.33904	0.1067180	0.18167078	3.0875405	21	—	—
457891 2009 TR_{12}	16.9	X	65.36513	357.89043	41.06161	1.31207	0.2661076	0.18683534	3.0303773	21	—	—
457892 2009 TE_{14}	16.7	X	78.37313	191.41612	220.07333	5.42661	0.1508166	0.19222539	2.9734608	21	1 9.3	20.4
457893 2009 TJ_{19}	17.4	X	48.27067	316.70081	65.97590	0.15029	0.1444880	0.17800699	3.1297622	21	—	—
457894 2009 TY_{23}	17.7	X	191.82795	120.79510	203.47990	22.01531	0.0820648	0.37075037	1.9190295	21	—	—
457895 2009 TK_{25}	17.7	X	347.07036	86.31953	25.35592	20.32996	0.0923346	0.35095860	1.9905150	21	—	—
457896 2009 TW_{30}	17.1	X	159.42032	343.06485	70.27602	4.70310	0.0954406	0.21157751	2.7892646	21	4 12.8	21.3
457897 2009 TC_{32}	16.0	X	55.68066	320.60984	36.70344	12.16639	0.2253391	0.17784166	3.1317016	21	—	—
457898 2009 TD_{32}	16.8	X	68.51724	340.12049	68.40604	6.14670	0.2868076	0.18881158	3.0091948	21	1 10.4	19.8
457899 2009 TJ_{33}	16.0	X	36.46755	169.35152	205.11778	27.17710	0.1544911	0.17475064	3.1685230	21	12 27.7	20.8
457900 2009 TE_{37}	17.5	X	144.86183	129.94119	312.18017	4.30523	0.1307149	0.29690051	2.2253351	21	4 26.4	20.5
457901 2009 TM_{42}	17.0	X	41.00036	199.75795	215.60699	4.28230	0.1739684	0.18136586	3.0910001	21	—	—
457902 2009 TD_{46}	15.5	X	307.73416	87.72364	66.97394	26.37917	0.2113625	0.17200547	3.2021466	21	—	—
457903 2009 TG_{48}	16.2	X	304.10738	138.29714	28.65796	8.97661	0.1194784	0.18639581	3.0351392	21	—	—
457904 2009 UA_{6}	16.6	X	40.26912	85.23827	351.73398	9.85514	0.1063704	0.18799161	3.0179386	21	—	—
457905 2009 UG_{6}	17.4	X	272.36246	168.83329	186.16686	2.48752	0.2050339	0.22950599	2.6420439	21	5 15.3	21.4
457906 2009 UR_{7}	17.5	X	289.07429	217.29877	60.23209	4.60246	0.0592949	0.21393761	2.7687131	21	3 19.4	21.3
457907 2009 UD_{10}	17.4	X	55.86267	286.28315	96.45883	2.64586	0.1810880	0.18102828	3.0948417	21	—	—
457908 2009 UA_{13}	16.3	X	81.91109	330.68281	46.66396	18.62699	0.2832375	0.18597492	3.0397169	21	—	—
457909 2009 UY_{14}	17.2	X	198.38655	295.49430	72.60245	6.86452	0.0975714	0.21197043	2.7857851	21	3 29.9	21.5
457910 2009 UH_{16}	15.5	X	72.27238	275.49156	51.86282	16.39063	0.3026307	0.17529468	3.1619638	21	—	—
457911 2009 UT_{17}	16.5	X	249.46947	335.65153	338.06371	13.46483	0.2477373	0.21622104	2.7491857	21	2 28.9	21.1
457912 2009 UW_{18}	19.6	X	94.81292	59.85082	227.21459	16.98617	0.4390794	0.68127280	1.2791516	21	—	—
457913 2009 UN_{27}	17.2	X	204.95855	124.65275	230.52266	3.46226	0.0814863	0.20963667	2.8064537	21	3 16.2	21.6
457914 2009 UP_{28}	16.3	X	84.95933	343.85015	43.47933	12.11776	0.0605607	0.18549779	3.0449271	21	—	—
457915 2009 UU_{28}	16.4	X	89.83372	164.71505	217.35039	8.72770	0.0908516	0.18572604	3.0424317	21	—	—
457916 2009 UU_{34}	16.6	X	3.82939	41.94717	58.26381	11.10972	0.2029806	0.17708274	3.1406430	21	—	—
457917 2009 UH_{43}	17.3	X	49.48910	234.71463	179.63363	1.55787	0.1701662	0.18418787	3.0593467	21	—	—
457918 2009 UZ_{45}	16.2	X	18.88703	29.35955	43.84120	11.31282	0.0691970	0.17970971	3.1099615	21	—	—
457919 2009 UR_{46}	17.1	X	15.50778	88.68588	45.77808	5.90205	0.2406573	0.18578649	3.0417718	21	1 5.5	20.2
457920 2009 UT_{47}	17.0	X	328.22355	67.81048	34.70292	9.73836	0.1237273	0.17223920	3.1992491	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
457921 2009 UN_{56}	16.4	X	71.62248	27.41171	34.45453	8.63540	0.1375886	0.18901740	3.0070099	21	1 13.9	20.2
457922 2009 UQ_{75}	16.9	X	357.27347	192.56481	264.44675	2.42703	0.1793095	0.17958903	3.1113546	21	—	—
457923 2009 UO_{79}	16.2	X	124.70135	132.30321	235.83551	9.26151	0.1190876	0.19241427	2.9715146	21	1 11.5	20.6
457924 2009 UU_{82}	17.1	X	124.94650	182.99362	195.97126	4.15960	0.1696176	0.19294790	2.9660333	21	1 31.7	21.5
457925 2009 UJ_{90}	17.4	X	346.16677	81.93468	54.90693	22.83823	0.0729626	0.35669961	1.9690993	21	—	—
457926 2009 UX_{92}	15.4	X	327.32299	248.62762	243.19121	24.94455	0.2518949	0.17204264	3.2016854	21	—	—
457927 2009 UA_{101}	16.7	X	346.60069	89.00895	61.15122	9.73397	0.0299571	0.18897249	3.0074863	21	—	—
457928 2009 UU_{103}	16.4	X	60.07586	56.05697	25.28275	11.35283	0.1681525	0.19071772	2.9891108	21	1 25.3	20.0
457929 2009 UC_{110}	16.5	X	147.17276	110.17170	233.86461	10.33665	0.2266720	0.19225181	2.9731884	21	1 17.4	21.4
457930 2009 UY_{113}	17.0	X	62.06892	55.55029	38.98102	5.44693	0.1649046	0.19623002	2.9328673	21	2 11.8	20.4
457931 2009 UV_{123}	16.1	X	61.99409	302.51668	64.94779	13.75070	0.0691093	0.17702822	3.1412877	21	—	—
457932 2009 UE_{128}	16.4	X	103.10405	42.47329	59.38867	15.91706	0.1111911	0.20212333	2.8755775	21	4 16.6	20.6
457933 2009 UE_{133}	16.3	X	7.45813	347.81170	75.68502	6.28120	0.2135688	0.17466670	3.1695381	21	—	—
457934 2009 UO_{139}	15.4	X	25.29596	300.95359	96.15460	25.95416	0.2282309	0.17447407	3.1718705	21	—	—
457935 2009 UN_{142}	17.5	X	96.08326	218.31231	198.09482	0.95087	0.1747910	0.19309299	2.9645472	21	2 13.6	21.5
457936 2009 UW_{150}	17.1	X	30.27836	38.18089	69.94758	6.15849	0.2113239	0.18603867	3.0390224	21	1 2.8	20.1
457937 2009 UL_{151}	16.5	X	37.48869	95.62899	275.62377	14.70730	0.2530803	0.17465891	3.1696323	21	—	—
457938 2009 UL_{154}	16.3	X	64.77113	34.59434	30.32196	10.57755	0.0444247	0.18685119	3.0302059	21	—	—
457939 2009 VG_{1}	15.9	X	345.15933	206.64394	235.59801	14.86691	0.0524301	0.17216956	3.2001117	21	12 29.9	20.4
457940 2009 VD_{2}	15.9	X	50.58452	99.16015	266.93356	24.12616	0.2603638	0.17518552	3.1632772	21	—	—
457941 2009 VX_{2}	16.5	X	49.95278	93.69803	326.57342	12.84362	0.2629965	0.18244579	3.0787906	21	—	—
457942 2009 VC_{9}	16.9	X	351.22654	187.96761	288.16790	2.41654	0.1417855	0.18085813	3.0967825	21	—	—
457943 2009 VW_{11}	16.5	X	334.37103	61.86666	38.75485	11.15666	0.0610400	0.17497129	3.1658587	21	—	—
457944 2009 VY_{15}	17.1	X	331.46895	349.01713	201.95598	3.45230	0.0640361	0.19507149	2.9444680	21	1 23.4	21.1
457945 2009 VO_{28}	15.7	X	55.02879	347.76498	48.38409	12.24559	0.1265133	0.18058826	3.0998669	21	—	—
457946 2009 VQ_{31}	16.2	X	296.20804	303.23060	269.02314	8.61249	0.0705558	0.19075960	2.9886733	21	1 6.2	20.3
457947 2009 VK_{32}	16.8	X	12.14682	37.14759	52.35627	16.64149	0.2464134	0.17632639	3.1496177	21	—	—
457948 2009 VB_{33}	15.8	X	341.89366	257.06505	266.67355	10.68335	0.1405392	0.18465778	3.0541543	21	—	—
457949 2009 VT_{38}	15.6	X	55.49152	25.67204	51.40550	20.04942	0.0953574	0.18551291	3.0447616	21	1 3.5	19.7
457950 2009 VY_{38}	15.9	X	106.86446	343.51480	53.14968	9.80717	0.0645568	0.18938635	3.0031033	21	1 21.5	20.2
457951 2009 VB_{40}	16.2	X	137.21764	298.62413	65.97554	8.09687	0.2267619	0.19230200	2.9726710	21	2 6.4	21.0
457952 2009 VG_{40}	16.7	X	110.12956	22.38311	4.07433	1.74429	0.2000067	0.19173433	2.9785356	21	1 30.0	20.8
457953 2009 VF_{46}	16.5	X	52.12696	25.59720	49.62622	11.37681	0.1075939	0.18591580	3.0403612	21	—	—
457954 2009 VX_{53}	17.4	X	253.62065	56.19849	256.63433	1.71839	0.0647844	0.20948685	2.8077916	21	3 18.1	21.3
457955 2009 VH_{54}	16.6	X	56.28068	199.96182	36.77242	14.69116	0.1942432	0.22915649	2.6447296	21	8 26.6	20.2
457956 2009 VJ_{63}	17.3	X	78.38455	260.38307	139.96699	1.34829	0.2498132	0.18525343	3.0476041	21	1 12.1	20.8
457957 2009 VE_{65}	16.3	X	50.59083	161.13227	254.97491	9.68292	0.0737380	0.18096109	3.0956077	21	—	—
457958 2009 VN_{65}	16.3	X	104.46325	37.56412	46.69747	12.23608	0.1025709	0.19861306	2.9093603	21	3 25.6	20.5
457959 2009 VK_{67}	15.8	X	263.81299	278.26228	259.78672	8.96484	0.0720803	0.17153921	3.2079465	21	—	—
457960 2009 VU_{67}	16.2	X	72.14289	327.57332	50.85245	8.95449	0.0661748	0.17724001	3.1387848	21	—	—
457961 2009 VV_{69}	17.2	X	77.79033	114.43207	269.84171	3.28204	0.1675786	0.18094695	3.0957689	21	—	—
457962 2009 VQ_{70}	16.8	X	68.80274	1.01765	36.20748	5.89674	0.1350944	0.18122241	3.0926311	21	—	—
457963 2009 VL_{78}	17.0	X	69.59815	183.44945	201.10118	8.47342	0.2526342	0.18165572	3.0877111	21	—	—
457964 2009 VM_{79}	16.0	X	10.94740	351.05997	268.28574	12.48687	0.0939271	0.22192283	2.7018925	21	6 19.9	19.0
457965 2009 VB_{80}	16.0	X	71.62472	264.32729	94.07055	14.76364	0.2182779	0.18015490	3.1048360	21	—	—
457966 2009 VQ_{83}	16.7	X	29.04449	74.41042	41.13682	9.85895	0.1224999	0.18645835	3.0344605	21	1 12.9	20.4
457967 2009 VZ_{83}	16.5	X	332.85468	110.75601	54.75716	20.60077	0.2654114	0.17961687	3.1110331	21	—	—
457968 2009 VR_{85}	16.7	X	65.42797	209.90938	211.62747	4.90376	0.1312568	0.18539832	3.0460160	21	1 1.9	20.4
457969 2009 VE_{88}	16.5	X	102.48421	121.22401	267.25428	9.03757	0.1411798	0.18659213	3.0330099	21	1 14.1	20.7
457970 2009 VH_{88}	16.1	X	19.67986	24.77307	59.47570	16.07377	0.0431855	0.17701722	3.1414178	21	—	—
457971 2009 VV_{88}	16.6	X	43.27520	108.48562	34.60734	14.61548	0.1148406	0.20220922	2.8747632	21	3 15.3	20.2
457972 2009 VO_{94}	17.1	X	29.24265	21.92088	41.10233	5.33068	0.1567816	0.17797353	3.1301545	21	—	—
457973 2009 VV_{94}	15.6	X	180.71028	13.51823	256.19777	9.40370	0.0553387	0.17589542	3.1547603	21	—	—
457974 2009 VX_{95}	16.3	X	29.36114	230.31795	228.42584	16.15404	0.1143910	0.18491921	3.0512750	21	—	—
457975 2009 VG_{96}	16.4	X	340.29911	258.06580	236.67042	8.67080	0.1870372	0.17777682	3.1324630	21	—	—
457976 2009 VX_{104}	15.8	X	104.73177	59.87793	305.12510	12.29055	0.1611786	0.18699094	3.0286959	21	—	—
457977 2009 VB_{107}	16.0	X	7.59997	175.66762	268.93979	9.41918	0.1943445	0.17767664	3.1336404	21	—	—
457978 2009 VE_{107}	15.6	X	345.28211	200.90606	258.30155	9.80611	0.0622408	0.17728576	3.1382448	21	—	—
457979 2009 VD_{109}	17.8	X	357.95139	243.33729	234.54208	19.26694	0.0851100	0.35294215	1.9830501	21	—	—
457980 2009 VK_{110}	16.3	X	21.26899	120.77630	266.83259	9.55780	0.1825679	0.17047630	3.2212668	21	12 29.4	20.4
457981 2009 VS_{111}	16.2	X	58.61880	348.02634	73.86042	10.92082	0.1258381	0.18552683	3.0446093	21	—	—
457982 2009 VY_{113}	16.1	X	104.50391	271.90393	82.78337	9.01293	0.1935260	0.18079916	3.0974557	21	—	—
457983 2009 VD_{114}	16.3	X	6.00986	189.23130	260.46004	7.52744	0.0571503	0.17476881	3.1683034	21	—	—
457984 2009 VC_{116}	16.2	X	25.00614	358.64393	56.21400	19.96785	0.0780951	0.17277235	3.1926641	21	—	—
457985 2009 WG_{3}	16.9	X	160.42469	159.43338	217.86925	8.89346	0.0763040	0.19968160	2.8989720	21	2 23.2	21.4
457986 2009 WU_{9}	16.1	X	107.98945	285.21155	83.97475	13.88877	0.2331331	0.18715339	3.0269430	21	1 12.1	20.4
457987 2009 WC_{10}	17.6	X	346.95003	48.71981	73.95701	25.47795	0.0912991	0.34787384	2.0022649	21	—	—
457988 2009 WF_{11}	15.9	X	338.67230	163.08152	284.47039	9.34568	0.0192073	0.17107854	3.2137026	21	12 28.8	20.4
457989 2009 WV_{19}	15.8	X	354.40628	179.42847	272.60684	16.41453	0.1780036	0.17738949	3.1370213	21	—	—
457990 2009 WS_{28}	16.7	X	347.17673	163.40269	296.47101	0.28670	0.1301079	0.17336998	3.1853228	21	—	—
457991 2009 WT_{31}	16.1	X	223.41713	207.30359	69.93929	13.76950	0.0610560	0.18766555	3.0214333	21	1 6.4	20.7
457992 2009 WF_{32}	16.5	X	153.63285	214.90751	135.36130	1.99254	0.1643314	0.19130853	2.9829536	21	1 27.5	21.0
457993 2009 WZ_{35}	17.2	X	26.15593	343.77347	94.17267	2.48006	0.1973527	0.18308383	3.0716335	21	—	—
457994 2009 WP_{37}	17.2	X	118.82842	77.68368	317.25420	2.15258	0.1759674	0.19257805	2.9698295	21	2 15.1	21.3
457995 2009 WB_{39}	16.4	X	13.49367	159.69035	257.87352	7.55544	0.1135895	0.17156123	3.2076720	21	—	—
457996 2009 WP_{42}	16.7	X	46.57003	179.08090	267.89733	9.74609	0.0500548	0.18321307	3.0701888	21	1 1.2	20.7
457997 2009 WN_{62}	16.6	X	47.28182	263.56425	140.68227	4.18038	0.1997440	0.17880360	3.1204594	21	—	—
457998 2009 WK_{63}	16.2	X	55.14379	321.11569	87.26650	9.68658	0.0793407	0.18012584	3.1051699	21	—	—
457999 2009 WK_{65}	17.1	X	39.21573	80.53144	337.37869	1.78606	0.1429372	0.17759568	3.1345927	21	—	—
458000 2009 WP_{65}	16.5	X	280.83040	149.32958	61.45533	9.61185	0.0151528	0.18825508	3.0151222	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458001 2009 WR_{70}	17.3	X	41.57942	317.43742	83.39778	1.83803	0.2086313	0.17712331	3.1401633	21	—	—
458002 2009 WK_{76}	16.5	X	100.35305	339.72712	42.88468	10.02763	0.0778705	0.18421904	3.0590016	21	—	—
458003 2009 WL_{82}	16.4	X	1.98332	124.18258	25.91643	10.79861	0.0777462	0.18910362	3.0060958	21	1 17.8	20.4
458004 2009 WM_{84}	16.4	X	6.61283	77.02505	49.42446	16.35558	0.1568762	0.18266883	3.0762840	21	—	—
458005 2009 WJ_{85}	16.6	X	257.75921	278.69195	44.28370	13.97871	0.2385133	0.21314278	2.7755921	21	3 25.9	21.3
458006 2009 WK_{85}	16.1	X	294.13786	145.92457	40.29236	12.47651	0.0789864	0.18088666	3.0964567	21	—	—
458007 2009 WJ_{88}	16.8	X	20.10022	61.34334	139.72262	2.78121	0.0135063	0.20531503	2.8456985	21	4 15.8	20.7
458008 2009 WB_{90}	16.2	X	102.32274	109.71145	266.98654	15.20616	0.1369999	0.18369945	3.0647672	21	—	—
458009 2009 WY_{91}	16.5	X	351.29038	257.84339	266.34355	12.45400	0.0984091	0.18960021	3.0008446	21	1 13.2	20.5
458010 2009 WW_{92}	16.2	X	56.83828	317.58457	93.52658	13.75251	0.2035275	0.17929037	3.1148089	21	—	—
458011 2009 WQ_{99}	16.7	X	88.64060	130.27261	252.76360	4.19980	0.1424137	0.18533996	3.0466554	21	—	—
458012 2009 WW_{105}	17.9	X	217.52625	242.84214	266.62752	14.64554	0.3879627	0.30799415	2.1715729	21	9 16.5	22.1
458013 2009 WN_{120}	17.0	X	105.10769	136.99305	248.99894	6.79545	0.1540594	0.18848028	3.0127199	21	1 15.7	21.2
458014 2009 WP_{120}	16.3	X	224.17919	329.36024	251.42387	8.33017	0.0554986	0.17459586	3.1703954	21	—	—
458015 2009 WC_{128}	16.4	X	335.94447	225.17122	236.51301	4.08636	0.1241914	0.16999200	3.2273822	21	—	—
458016 2009 WN_{139}	16.3	X	95.03824	4.04220	24.54017	9.68589	0.0695134	0.18441105	3.0568779	21	—	—
458017 2009 WN_{140}	16.7	X	85.30186	312.85132	80.09415	11.33822	0.0850629	0.18560250	3.0437817	21	—	—
458018 2009 WJ_{143}	16.6	X	309.48193	277.05791	214.48021	8.77691	0.2049040	0.17421597	3.1750026	21	—	—
458019 2009 WU_{143}	16.5	X	73.73723	7.49133	39.45694	7.19050	0.0883678	0.18847053	3.0128238	21	—	—
458020 2009 WD_{146}	17.6	X	99.00839	42.17604	37.84197	22.61124	0.0775802	0.36672011	1.9330640	21	2 9.9	20.0
458021 2009 WB_{148}	16.3	X	48.82864	292.51931	89.64227	10.69882	0.0758157	0.17426723	3.1743799	21	—	—
458022 2009 WC_{149}	16.7	X	98.77642	332.89776	79.78720	14.29222	0.0937203	0.19226320	2.9730709	21	2 4.6	20.9
458023 2009 WU_{156}	16.7	X	110.46824	85.91067	284.75133	8.88629	0.1186473	0.18727269	3.0256574	21	—	—
458024 2009 WV_{160}	16.3	X	345.20842	68.85043	56.45799	16.46636	0.0870074	0.17889958	3.1193433	21	—	—
458025 2009 WU_{177}	15.7	X	80.46381	90.82233	261.94426	16.51851	0.0975224	0.17423890	3.1747239	21	—	—
458026 2009 WB_{179}	16.5	X	99.16046	330.55265	39.04259	8.58783	0.1708957	0.18326784	3.0695771	21	—	—
458027 2009 WR_{179}	16.9	X	313.58278	314.04396	334.65903	3.17432	0.0685325	0.21242088	2.7818770	21	4 30.8	20.5
458028 2009 WO_{181}	16.3	X	181.10558	227.64639	90.56595	12.72587	0.0230294	0.18606400	3.0387466	21	1 8.0	20.6
458029 2009 WE_{183}	16.4	X	347.10508	206.89095	272.40666	9.43028	0.0242759	0.18020726	3.1042345	21	—	—
458030 2009 WD_{184}	16.1	X	230.87558	71.08315	236.48906	8.71008	0.0076277	0.19240443	2.9716159	21	2 17.1	20.4
458031 2009 WD_{190}	16.7	X	244.58984	67.77996	249.87354	9.63806	0.0684473	0.20280714	2.8691102	21	3 10.6	21.1
458032 2009 WF_{196}	16.7	X	357.79106	86.36420	10.32028	23.47536	0.3088968	0.17534153	3.1614005	21	—	—
458033 2009 WS_{199}	16.6	X	349.52552	338.93845	121.04321	5.43333	0.1593080	0.17320997	3.1872842	21	—	—
458034 2009 WY_{205}	16.1	X	88.72999	357.35448	49.38567	11.71547	0.1099424	0.18763932	3.0217149	21	1 16.9	20.2
458035 2009 WQ_{206}	16.7	X	115.72504	97.06738	262.44695	7.56085	0.1011543	0.18407340	3.0606149	21	—	—
458036 2009 WD_{212}	16.4	X	332.42474	309.43669	222.34767	8.39477	0.2657624	0.18031953	3.1029459	21	—	—
458037 2009 WK_{212}	15.8	X	104.54274	83.66694	266.89974	10.68491	0.1093564	0.17915557	3.1163711	21	—	—
458038 2009 WN_{212}	16.2	X	318.19161	140.81388	50.28507	10.40247	0.0276588	0.18771567	3.0208954	21	1 15.9	20.6
458039 2009 WQ_{214}	16.7	X	271.05139	250.67263	79.46597	9.44768	0.2107901	0.21412288	2.7671158	21	4 16.5	21.0
458040 2009 WQ_{219}	16.8	X	96.24941	176.56272	219.26843	9.20224	0.1021533	0.18828637	3.0147882	21	1 8.6	20.9
458041 2009 WP_{221}	16.7	X	59.62702	337.42344	96.13972	4.62446	0.1666326	0.18729129	3.0254571	21	1 11.5	20.1
458042 2009 WX_{223}	16.2	X	86.11378	297.52326	74.21331	11.85609	0.0851818	0.18097965	3.0953960	21	—	—
458043 2009 WP_{225}	17.1	X	304.41359	269.23833	311.88628	0.88100	0.0082844	0.19810043	2.9143773	21	2 3.5	21.2
458044 2009 WY_{226}	16.5	X	98.19013	317.58109	64.02608	9.95927	0.0774537	0.18658474	3.0330901	21	—	—
458045 2009 WF_{229}	17.1	X	62.81501	220.85480	211.98864	7.37915	0.1168388	0.18842982	3.0132578	21	1 9.1	20.9
458046 2009 WG_{234}	16.7	X	210.10098	255.37981	51.34433	12.77736	0.0323648	0.19699980	2.9252222	21	1 28.9	21.1
458047 2009 WH_{235}	16.2	X	303.32071	336.89512	244.79142	14.59967	0.0489532	0.19310602	2.9644139	21	1 24.2	20.7
458048 2009 WV_{242}	17.4	X	52.29920	215.18649	163.08036	1.96045	0.2155988	0.17418442	3.1753860	21	—	—
458049 2009 WO_{246}	16.4	X	114.43468	100.18310	244.34186	11.70507	0.1920867	0.18183604	3.0856695	21	—	—
458050 2009 WU_{246}	16.5	X	46.38749	201.45813	259.67223	11.68597	0.1462497	0.18793493	3.0185454	21	1 19.4	20.1
458051 2009 WW_{249}	16.0	X	2.00467	81.47855	75.33211	16.05242	0.0240417	0.18831488	3.0144839	21	1 30.9	20.3
458052 2009 WL_{256}	15.9	X	88.65618	288.57801	76.41519	14.18265	0.0468797	0.17595085	3.1540976	21	—	—
458053 2009 WO_{257}	15.9	X	46.64948	299.60142	75.33639	27.56359	0.1824889	0.17043008	3.2218493	21	—	—
458054 2009 WY_{259}	16.3	X	55.17009	313.32584	75.57297	10.71218	0.0726037	0.17297938	3.1901162	21	—	—
458055 2009 WU_{260}	17.1	X	19.53257	46.16348	26.95656	1.23478	0.1625310	0.17482598	3.1676127	21	—	—
458056 2009 WH_{263}	15.7	X	300.40641	283.23568	285.58985	9.54317	0.1292101	0.17563741	3.1578491	21	1 3.1	20.3
458057 2009 XR	16.4	X	135.26391	187.79839	162.84470	5.77033	0.2184957	0.18871926	3.0101761	21	1 15.7	21.2
458058 2009 XB_{6}	16.0	X	22.52585	17.22618	95.80212	12.46220	0.1785611	0.18135642	3.0911074	21	—	—
458059 2009 XB_{15}	16.3	X	142.59378	95.63687	290.32200	9.10313	0.1144905	0.18881633	3.0091443	21	2 19.9	20.9
458060 2009 XE_{15}	16.0	X	322.39953	257.56987	293.06853	10.13856	0.0517516	0.18044380	3.1015211	21	1 16.9	20.1
458061 2009 XV_{23}	16.2	X	91.28726	124.71520	269.61212	15.39326	0.3439723	0.18645983	3.0344445	21	2 1.5	20.4
458062 2009 YO	18.8	X	238.86383	1.83087	266.34236	32.00355	0.5628344	0.70293418	1.2527361	21	—	—
458063 Gustavomuler	16.4	X	38.07039	196.41026	254.10755	11.01496	0.2452589	0.18018800	3.1044557	21	—	—
458064 2009 YT_{8}	16.7	X	13.18226	200.89831	274.01211	9.28692	0.1871048	0.17670452	3.1451228	21	—	—
458065 2009 YW_{11}	16.2	X	14.92107	172.26440	297.21222	9.61441	0.0983640	0.17555335	3.1588571	21	—	—
458066 2009 YD_{18}	15.8	X	294.35224	104.21528	100.95669	12.46632	0.0471158	0.17568458	3.1572838	21	1 2.5	20.3
458067 2009 YR_{18}	16.3	X	64.35969	15.12841	59.27012	13.54723	0.1801706	0.18560265	3.0437801	21	1 25.8	20.0
458068 2009 YR_{21}	16.4	X	67.39493	135.37867	312.42492	9.47498	0.0472303	0.18198313	3.0840066	21	1 30.6	20.5
458069 2009 YS_{21}	15.8	X	45.31599	176.30360	305.18551	10.40561	0.0731706	0.18389433	3.0626015	21	2 10.7	19.8
458070 2010 AB_{2}	15.5	X	55.33562	340.44880	114.13282	10.85458	0.0466439	0.18208959	3.0828044	21	1 22.9	19.6
458071 2010 AP_{4}	16.3	X	85.45193	113.35040	279.70008	16.55912	0.1788522	0.18184378	3.0855819	21	1 4.0	20.2
458072 2010 AY_{9}	16.5	X	78.53684	21.55629	42.29221	8.34601	0.0877687	0.18713671	3.0271229	21	1 21.4	20.6
458073 2010 AH_{10}	16.1	X	254.96082	180.19260	85.30681	10.20656	0.0684681	0.18335873	3.0685626	21	1 27.4	20.7
458074 2010 AJ_{13}	15.9	X	54.50753	182.00597	269.84952	12.77096	0.1185818	0.18543783	3.0455833	21	1 19.9	19.7
458075 2010 AG_{21}	16.8	X	346.54546	28.51727	109.10685	1.85510	0.1422425	0.17626679	3.1503277	21	—	—
458076 2010 AQ_{22}	15.9	X	12.45713	192.27752	298.69136	10.74276	0.1432016	0.17563658	3.1578589	21	1 6.4	19.5
458077 2010 AW_{23}	16.3	X	49.90810	133.66497	316.41013	8.73606	0.0858065	0.17623948	3.1506530	21	1 14.5	20.4
458078 2010 AR_{41}	16.6	X	58.33571	307.22185	97.13832	18.88719	0.2988973	0.17714506	3.1399063	21	—	—
458079 2010 AH_{44}	16.2	X	353.51524	188.22831	312.59900	14.03996	0.1600213	0.17294511	3.1905375	21	—	—
458080 2010 AN_{46}	15.8	X	68.73892	129.34973	288.45892	10.18801	0.0465622	0.17521128	3.1629671	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458081 2010 AZ_{48}	16.1	X	350.06805	8.88332	140.41783	17.82527	0.0617913	0.17469442	3.1692028	21	1 3.2	20.6
458082 2010 AW_{49}	15.8	X	105.06022	92.97384	289.62516	14.76602	0.0745390	0.17319643	3.1874503	21	1 5.5	20.3
458083 2010 AS_{52}	15.7	X	342.22681	36.36433	120.86103	28.36076	0.1226709	0.17510074	3.1642981	21	—	—
458084 2010 AS_{60}	16.8	X	27.21346	49.86236	81.72272	9.95681	0.2175687	0.18199429	3.0838805	21	1 31.9	19.9
458085 2010 AE_{61}	16.4	X	17.74484	313.75906	140.41878	15.04342	0.2680440	0.17420018	3.1751944	21	—	—
458086 2010 AS_{62}	16.2	X	5.94608	25.00134	95.67512	14.47451	0.1395641	0.17798210	3.1300540	21	—	—
458087 2010 AY_{62}	16.0	X	358.93605	283.13054	221.64293	16.27589	0.3362568	0.17692668	3.1424894	21	—	—
458088 2010 AO_{66}	16.3	X	328.96027	39.58591	149.21553	6.45596	0.1497886	0.17286863	3.1914785	21	1 11.1	20.6
458089 2010 AJ_{72}	16.1	X	318.78503	237.46643	319.83662	11.60114	0.3565341	0.17111078	3.2132989	21	—	—
458090 2010 AK_{74}	15.7	X	36.72818	316.79667	114.36178	28.04801	0.2015528	0.17473542	3.1687070	21	—	—
458091 2010 AO_{74}	15.9	X	20.73784	10.06587	122.16456	13.68079	0.1565884	0.18022205	3.1040647	21	1 19.5	19.3
458092 2010 AM_{76}	15.8	X	344.76484	205.22572	321.91948	16.83546	0.1449591	0.17762259	3.1342760	21	1 9.9	19.9
458093 2010 AU_{91}	14.8	X	107.77659	188.15784	74.66406	11.18128	0.2197653	0.12562193	3.9484419	21	11 9.1	21.1
458094 2010 AM_{95}	15.8	X	324.99471	149.48017	97.43054	15.60527	0.1350912	0.17684872	3.1434129	21	3 28.2	20.2
458095 2010 BW_{19}	17.5	X	226.25676	269.71813	149.51516	7.46550	0.2474500	0.22586999	2.6703224	21	6 17.9	22.1
458096 2010 BY_{24}	16.1	X	14.40588	150.95140	289.27257	13.97087	0.0619187	0.18175219	3.0866184	21	—	—
458097 2010 BK_{56}	16.3	X	41.84710	271.26363	119.28389	6.86837	0.1327088	0.17762852	3.1342063	21	—	—
458098 2010 BV_{79}	16.3	X	25.55366	260.85773	232.96421	12.50122	0.1668753	0.19191234	2.9766935	21	1 22.4	19.8
458099 2010 BZ_{105}	15.7	X	105.27120	353.63040	301.84780	27.21205	0.1740284	0.17253950	3.1955359	21	12 16.0	21.1
458100 2010 BO_{126}	16.4	X	118.33269	13.05241	9.45587	13.76623	0.1740333	0.19302643	2.9652287	21	2 4.8	20.9
458101 2010 CS_{11}	16.0	X	14.36261	357.01198	98.66184	13.62022	0.1671100	0.17967011	3.1104185	21	—	—
458102 2010 CT_{23}	15.6	X	69.60175	92.57874	315.17925	14.82745	0.0812229	0.17096232	3.2151589	21	—	—
458103 2010 CQ_{24}	16.2	X	334.61857	222.73526	310.35055	9.10385	0.0696940	0.17478038	3.1681635	21	1 11.3	20.5
458104 2010 CK_{27}	16.0	X	67.35786	127.76352	311.80525	9.84399	0.0625162	0.17668216	3.1453882	21	1 23.6	20.2
458105 2010 CM_{40}	16.3	X	337.91533	232.03488	344.25230	8.18859	0.1945526	0.17736236	3.1373411	21	2 21.1	20.1
458106 2010 CG_{41}	16.0	X	339.06413	64.80914	142.33343	16.98553	0.1768241	0.17762287	3.1342728	21	2 12.9	19.9
458107 2010 CK_{55}	15.5	X	40.94804	322.45688	119.04461	15.95825	0.2721428	0.17516301	3.1635482	21	—	—
458108 2010 CU_{55}	16.1	X	40.41403	281.89740	141.74504	25.39099	0.3315749	0.17438125	3.1729961	21	—	—
458109 2010 CP_{58}	16.2	X	269.45489	320.61930	143.76281	33.28837	0.2214192	0.23277382	2.6172586	21	10 9.8	20.1
458110 2010 CF_{61}	16.6	X	52.39904	116.16393	303.88092	6.71292	0.1533508	0.17418154	3.1754209	21	—	—
458111 2010 CJ_{76}	15.8	X	66.85889	87.29864	335.07703	24.60077	0.2091138	0.17296666	3.1902725	21	1 26.4	19.8
458112 2010 CS_{113}	16.5	X	256.38233	221.20312	33.86609	2.49883	0.0186611	0.17314486	3.1880832	21	1 22.2	21.1
458113 2010 CP_{124}	15.4	X	41.59388	220.97802	155.35648	15.45090	0.0833958	0.15471430	3.4364952	21	12 26.4	20.4
458114 2010 CC_{128}	16.2	X	26.83056	110.04066	344.99628	11.23184	0.2945991	0.17399461	3.1776948	21	—	—
458115 2010 CH_{128}	15.6	X	11.02954	169.55099	5.97549	14.23810	0.2559381	0.18071435	3.0984247	21	2 27.0	18.6
458116 2010 DA	20.2	X	234.65028	122.24326	162.32197	20.53484	0.5656435	0.94229077	1.0304164	21	—	—
458117 2010 DN_{42}	16.0	X	333.70672	32.44700	173.48836	14.11435	0.1197145	0.17418918	3.1753280	21	2 9.7	20.3
458118 2010 DC_{45}	16.1	X	209.62038	298.79298	300.39427	4.51069	0.0405711	0.15274570	3.4659587	21	—	—
458119 2010 DO_{70}	16.4	X	320.38731	77.72903	80.34016	10.68553	0.2009062	0.17463287	3.1699474	21	—	—
458120 2010 DP_{78}	15.3	X	353.22463	2.37755	188.22966	27.57519	0.1129706	0.17547251	3.1598271	21	2 18.2	19.7
458121 2010 EK_{7}	16.9	X	23.54899	28.78616	77.61140	10.45986	0.1101914	0.18103455	3.0947702	21	—	—
458122 2010 EW_{45}	17.6	X	315.58553	135.44894	233.00002	2.11459	0.6688397	0.33231220	2.0642955	21	5 9.6	20.3
458123 2010 EW_{82}	15.5	X	297.96194	76.92633	170.32765	20.99457	0.1961816	0.17071398	3.2182762	21	2 4.5	20.5
458124 2010 ET_{84}	16.3	X	4.27163	43.79550	153.45719	20.26452	0.0915670	0.18420991	3.0591027	21	3 22.2	20.2
458125 2010 EY_{105}	15.8	X	342.82238	189.49671	7.17691	27.86801	0.1203704	0.17411242	3.1762612	21	2 26.6	20.2
458126 2010 ED_{131}	18.6	X	185.29380	63.75643	86.16841	4.74718	0.1455423	0.29887147	2.2155408	21	9 15.3	21.8
458127 2010 EM_{137}	15.5	X	5.83085	93.42176	68.55633	22.69097	0.1584747	0.17280132	3.1923072	21	2 9.9	19.7
458128 2010 EX_{139}	18.7	X	187.07114	179.00476	19.27198	3.54778	0.0867228	0.30885148	2.1675523	21	11 23.8	21.3
458129 2010 EA_{140}	15.4	X	88.48492	271.10644	163.63024	22.71453	0.1063004	0.17844260	3.1246666	21	2 18.2	19.7
458130 2010 ES_{164}	16.5	X	16.85702	296.42393	157.71501	5.07146	0.1356078	0.17716308	3.1396933	21	—	—
458131 2010 FY_{5}	17.5	X	22.99500	69.13108	200.75843	21.97445	0.2058264	0.27949088	2.3168128	21	8 5.6	20.1
458132 2010 FU_{51}	15.5	X	296.13018	279.87743	293.02278	23.31834	0.2352544	0.17501480	3.1653339	21	—	—
458133 2010 FA_{58}	15.7	X	330.26773	202.25966	310.56665	12.19275	0.1012281	0.17431623	3.1737850	21	—	—
458134 2010 FV_{92}	18.0	X	127.27686	82.08348	100.48964	6.00516	0.1756535	0.29129219	2.2538075	21	9 1.1	21.4
458135 2010 GE_{25}	20.2	X	275.34470	235.24246	324.52515	21.65279	0.4688323	0.33199852	2.0655955	21	—	—
458136 2010 GE_{95}	15.9	X	8.78353	150.52072	319.10169	26.55705	0.1472910	0.17185877	3.2039686	21	—	—
458137 2010 GW_{135}	18.1	X	91.47464	215.71424	82.22652	3.97426	0.2427853	0.30028154	2.2085995	21	12 26.8	21.6
458138 2010 HJ_{18}	16.9	X	286.39148	230.24684	123.27590	15.67428	0.2281113	0.25996921	2.4313908	21	5 29.0	20.4
458139 2010 HF_{27}	16.0	X	16.81261	69.06342	33.75833	15.52506	0.2456530	0.17323333	3.1869977	21	—	—
458140 2010 HX_{49}	13.1	X	351.17902	352.25586	288.84045	28.08452	0.0435400	0.08275293	5.2153141	21	6 24.3	19.9
458141 2010 HV_{58}	18.0	X	76.11323	336.46617	303.24372	3.36019	0.1791814	0.28389214	2.2928051	21	11 11.3	21.3
458142 2010 HS_{61}	16.8	X	5.05292	230.77015	265.57388	5.45582	0.1333255	0.17441518	3.1725844	21	1 1.4	20.6
458143 2010 HP_{84}	15.4	X	267.57495	93.04789	138.44415	22.64143	0.0764660	0.17051858	3.2207344	21	1 2.3	20.5
458144 2010 HQ_{95}	16.6	X	335.59498	150.63925	164.33841	15.13856	0.2791878	0.17473071	3.1687639	21	6 19.3	20.1
458145 2010 JH_{1}	16.8	X	208.48331	154.82671	183.38741	13.55275	0.4436370	0.23303258	2.6153207	21	2 24.4	22.3
458146 2010 JH_{28}	15.7	X	3.68777	281.31346	149.12054	19.08487	0.1071211	0.15896275	3.3749898	21	—	—
458147 2010 JE_{30}	17.9	X	75.30464	172.32215	118.67243	3.44573	0.1640421	0.29407661	2.2395584	21	11 26.8	21.0
458148 2010 JW_{38}	18.0	X	127.04912	125.86074	120.58312	7.55263	0.1009085	0.30096167	2.2052708	21	11 21.6	21.2
458149 2010 JA_{48}	17.7	X	287.47606	212.84096	130.19019	5.78985	0.1618711	0.26937517	2.3744572	21	5 22.7	20.8
458150 2010 JD_{57}	17.7	X	201.87921	44.07856	302.80368	4.88879	0.2716343	0.23464337	2.6033378	21	3 1.7	22.4
458151 2010 JF_{77}	18.7	X	200.55227	47.78108	139.89491	0.58632	0.0893517	0.30553681	2.1832008	21	11 25.9	21.3
458152 2010 JP_{83}	17.9	X	85.01556	155.54703	92.85711	7.75347	0.2283245	0.28970865	2.2620129	21	10 21.7	21.4
458153 2010 JP_{85}	18.1	X	131.09761	33.20020	219.88500	4.85925	0.1825367	0.30048016	2.2076261	21	12 3.2	21.4
458154 2010 JR_{117}	17.9	X	108.28446	144.93228	118.69783	3.45717	0.1390854	0.29723632	2.2236587	21	11 23.9	21.0
458155 2010 JT_{117}	15.7	X	172.74515	118.65320	96.69318	4.57646	0.1699807	0.12702698	3.9192719	21	11 5.2	21.9
458156 2010 JO_{124}	15.5	X	31.52347	45.09576	88.58240	13.46618	0.1319099	0.17762760	3.1342171	21	2 14.1	19.4
458157 2010 JT_{155}	17.7	X	337.58660	138.45430	203.60196	6.72513	0.2060117	0.28192726	2.3034458	21	8 17.6	19.2
458158 2010 JD_{159}	17.3	X	200.34878	147.99153	176.64275	13.55627	0.1896706	0.24125871	2.5555284	21	1 30.8	21.7
458159 2010 KV_{6}	15.5	X	89.81427	240.92871	162.28330	18.70989	0.1282533	0.17110248	3.2134029	21	1 17.1	20.0
458160 2010 KM_{36}	17.6	X	303.53036	99.62898	204.71736	5.67406	0.1357995	0.26657651	2.3910471	21	4 23.5	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458161 2010 KZ_{45}	17.0	X	165.60279	117.38314	270.47589	11.15385	0.2728785	0.23121129	2.6290370	21	3 19.9	21.8
458162 2010 KG_{50}	17.2	X	189.79608	238.95665	128.13932	13.25337	0.3182620	0.23274256	2.6174929	21	3 23.8	22.2
458163 2010 KQ_{78}	16.9	X	116.43061	200.58372	195.08736	18.14309	0.2473170	0.22076576	2.7113250	21	2 14.4	21.1
458164 2010 KF_{110}	16.3	X	356.22788	16.45747	274.03429	16.18596	0.2370398	0.26297021	2.4128575	21	7 6.1	17.6
458165 2010 LU_{14}	17.9	X	42.12500	163.16213	121.78636	7.18525	0.1188947	0.28444471	2.2898347	21	10 1.2	20.5
458166 2010 LB_{17}	17.2	X	224.78562	117.55711	211.63481	11.79550	0.1054433	0.23569740	2.5955707	21	2 26.6	21.3
458167 2010 LB_{52}	17.0	X	188.18275	321.60899	52.45075	9.91234	0.1379316	0.23480864	2.6021161	21	3 26.7	21.2
458168 2010 LE_{84}	17.2	X	190.87100	352.42436	8.85489	12.06658	0.1957746	0.23209320	2.6223728	21	3 13.3	21.6
458169 2010 LR_{100}	16.9	X	129.22091	265.93994	99.80273	10.18429	0.2410181	0.21629255	2.7485797	21	1 27.4	21.0
458170 2010 ME_4	17.1	X	192.19537	27.99706	291.86197	4.81260	0.2441418	0.22850552	2.6497501	21	1 23.9	21.8
458171 2010 MK_{11}	17.1	X	214.12082	34.19716	332.14419	11.40407	0.2059672	0.23801169	2.5787181	21	3 30.9	21.6
458172 2010 MP_{17}	16.9	X	175.76997	4.30849	16.99932	7.23630	0.3273991	0.22952890	2.6418681	21	3 28.1	21.6
458173 2010 MH_{33}	17.3	X	155.35114	236.26467	177.10006	11.54704	0.2568181	0.23033175	2.6357255	21	4 18.5	21.8
458174 2010 MT_{49}	17.0	X	170.32438	28.08735	340.25956	13.85130	0.1739016	0.22667941	2.6639619	21	3 1.2	21.2
458175 2010 MW_{56}	16.8	X	132.88138	178.26863	167.64048	10.18924	0.2739363	0.21312458	2.7757500	21	1 9.7	21.2
458176 2010 MM_{71}	17.9	X	32.98083	9.45829	273.32478	4.43973	0.2223451	0.26798512	2.3826610	21	9 21.9	20.4
458177 2010 MF_{113}	17.4	X	18.53895	162.68128	136.13266	8.43514	0.2504493	0.27407376	2.3472414	21	10 1.9	19.4
458178 2010 ND_1	17.1	X	116.49400	151.25441	122.45509	27.40679	0.2381799	0.29491263	2.2353240	21	12 20.3	21.3
458179 2010 NQ_4	17.0	X	330.81923	16.30570	297.50081	15.61580	0.2575354	0.26350387	2.4095987	21	6 3.2	19.4
458180 2010 NW_{22}	17.9	X	198.53596	204.40654	195.97443	9.01843	0.1608325	0.23881471	2.5729341	21	5 4.8	22.1
458181 2010 NH_{26}	16.2	X	307.69767	75.59804	358.72322	22.43444	0.1588763	0.18207579	3.0829601	21	10 15.8	20.1
458182 2010 NC_{49}	17.3	X	106.91224	82.15541	336.95776	16.27104	0.3211552	0.21594075	2.7515641	21	3 15.2	21.5
458183 2010 NF_{50}	17.4	X	133.89591	125.30458	257.92218	1.89202	0.1165648	0.21891318	2.7266001	21	2 5.4	21.1
458184 2010 NO_{69}	17.9	X	64.41542	79.71109	207.84765	5.41029	0.2575289	0.27581696	2.3373410	21	11 18.7	21.3
458185 2010 NP_{69}	17.1	X	110.02262	85.71604	333.59238	8.06538	0.1789424	0.21850792	2.7299703	21	3 2.7	20.8
458186 2010 NU_{72}	17.6	X	159.88124	29.25919	17.55978	13.81720	0.2484931	0.22809478	2.6529302	21	4 11.2	22.1
458187 2010 NA_{77}	17.3	X	235.66860	144.35447	201.82809	12.67572	0.2777676	0.23819424	2.5774003	21	3 24.3	22.0
458188 2010 NK_{80}	16.6	X	168.84398	317.50723	81.39874	15.07913	0.2230467	0.22930035	2.6436233	21	4 15.6	21.3
458189 2010 OC_{25}	17.7	X	224.16862	337.88912	36.82240	12.65181	0.1990312	0.23909990	2.5708877	21	4 23.8	22.0
458190 2010 OY_{92}	17.4	X	208.35911	170.63961	193.41501	3.59224	0.1994085	0.23212016	2.6221698	21	3 28.4	21.7
458191 2010 OM_{97}	16.9	X	135.83558	2.99928	52.10300	12.66825	0.1697028	0.22270571	2.6955568	21	3 31.1	21.1
458192 2010 PX_{10}	16.7	X	155.28783	270.15035	137.86755	18.40772	0.2043047	0.22530498	2.6747848	21	4 13.3	21.4
458193 2010 PM_{16}	16.7	X	87.40196	316.47809	110.90975	10.19832	0.1854272	0.21207174	2.7849293	21	2 15.8	20.1
458194 2010 QG_3	18.1	X	124.39223	115.81469	189.78626	2.67543	0.1793689	0.29814059	2.2191602	21	—	—
458195 2010 QJ_3	17.1	X	184.27581	220.95004	157.89103	14.38532	0.2869298	0.23406277	2.6076411	21	3 31.4	21.9
458196 2010 QW_3	16.7	X	218.97318	173.99172	154.13342	15.48411	0.1470995	0.23372215	2.6101741	21	2 22.9	20.9
458197 2010 QK_4	17.4	X	340.81941	96.43824	232.74035	7.72132	0.2902234	0.26641580	2.3920085	21	7 23.9	18.8
458198 2010 RT_{11}	18.9	X	238.01769	17.64168	221.77808	2.25760	0.4060469	0.31942597	2.1194470	21	—	—
458199 2010 RL_{28}	17.0	X	45.60329	102.25715	322.81063	5.42310	0.0187210	0.21323473	2.7747941	21	—	—
458200 2010 RZ_{39}	16.9	X	185.14539	52.63527	325.77473	11.80783	0.2793801	0.23271319	2.6177131	21	3 24.0	21.8
458201 2010 RY_{42}	18.1	X	103.36272	87.49053	195.39982	6.17492	0.1490650	0.28539451	2.2847515	21	12 11.9	21.7
458202 2010 RA_{46}	16.7	X	228.84429	144.50574	172.10836	13.22699	0.0834591	0.23400073	2.6081020	21	2 18.5	20.6
458203 2010 RS_{48}	17.8	X	174.81925	221.08173	187.32001	1.70502	0.2239037	0.23411493	2.6072538	21	4 24.6	22.3
458204 2010 RG_{53}	16.9	X	190.18884	31.33425	344.50334	18.72338	0.2321316	0.23314443	2.6144842	21	3 23.5	21.6
458205 2010 RT_{61}	16.7	X	129.24136	354.37819	330.40307	1.13140	0.0751257	0.20459861	2.8523376	21	—	—
458206 2010 RV_{61}	16.7	X	171.20527	37.71627	7.66318	14.90383	0.1466880	0.23269675	2.6178364	21	4 11.6	20.9
458207 2010 RD_{64}	17.0	X	251.76932	39.65822	244.69792	11.81411	0.1861535	0.23127249	2.6285731	21	1 25.8	21.6
458208 2010 RJ_{65}	17.0	X	168.48943	83.72744	273.48667	7.80894	0.2140220	0.22738598	2.6584404	21	2 13.9	21.6
458209 2010 RA_{69}	17.2	X	58.02376	13.40045	272.12736	6.04396	0.1177794	0.27319080	2.3522962	21	10 16.7	20.2
458210 2010 RX_{75}	17.4	X	137.62389	92.87100	317.35045	11.45709	0.3348931	0.22513755	2.6761108	21	3 30.2	22.2
458211 2010 RF_{79}	17.6	X	10.15072	357.26499	347.54557	2.53807	0.2012714	0.27363202	2.3497668	21	11 11.9	19.9
458212 2010 RG_{79}	17.0	X	187.58701	22.19138	337.62112	12.69041	0.2654327	0.22917583	2.6445808	21	3 7.3	21.6
458213 2010 RP_{79}	16.7	X	180.97105	0.93131	0.74469	14.36569	0.2612708	0.22614464	2.6681599	21	3 8.5	21.3
458214 2010 RP_{101}	16.6	X	76.44744	270.56188	199.67714	14.20075	0.0499666	0.22582916	2.6706442	21	2 28.6	20.2
458215 2010 RE_{104}	17.6	X	138.54032	75.81745	356.92880	4.35208	0.1897935	0.22891401	2.6465969	21	4 19.3	21.7
458216 2010 RU_{112}	17.1	X	107.39069	147.19611	240.67203	6.17005	0.1366759	0.21361266	2.7715203	21	1 13.1	20.8
458217 2010 RZ_{114}	17.7	X	180.31195	42.02591	340.26842	6.18586	0.2393596	0.23064879	2.6333096	21	3 27.2	22.2
458218 2010 RL_{116}	17.6	X	162.28092	309.14891	65.65982	4.16918	0.1801858	0.22436265	2.6822690	21	3 4.6	21.9
458219 2010 RS_{128}	17.7	X	309.67640	69.83607	291.70665	4.53075	0.0985534	0.26107908	2.4244953	21	8 2.0	20.4
458220 2010 RX_{135}	17.3	X	269.92436	143.10607	185.30822	10.23052	0.0999926	0.24147940	2.5539712	21	4 21.3	20.8
458221 2010 RO_{136}	17.3	X	69.57633	259.63597	187.34851	8.06679	0.2197637	0.21329993	2.7742286	21	2 13.3	20.4
458222 2010 RL_{142}	16.8	X	90.43139	255.39829	195.99151	21.72178	0.0528677	0.22559836	2.6724654	21	2 22.9	20.7
458223 2010 RK_{145}	17.3	X	93.36354	92.50529	5.82073	12.19070	0.2656814	0.22117836	2.7079520	21	4 11.8	21.0
458224 2010 RL_{148}	17.5	X	125.59247	16.04872	252.71727	2.71022	0.1495980	0.28759179	2.2730992	21	12 15.3	20.8
458225 2010 RN_{165}	17.7	X	200.31892	214.35223	172.79517	12.57002	0.1714470	0.24010589	2.5637018	21	4 21.1	22.0
458226 2010 RZ_{165}	17.5	X	172.91025	55.68469	320.55805	3.12231	0.2514162	0.22840753	2.6505079	21	3 15.7	22.2
458227 2010 RT_{180}	17.4	X	206.86862	15.25595	357.60842	7.47441	0.1573713	0.23451079	2.6043189	21	4 5.8	21.7
458228 2010 SA_3	17.4	X	113.37350	28.24556	349.82427	6.56870	0.1573787	0.21037604	2.7998743	21	1 14.9	21.3
458229 2010 SD_{17}	16.9	X	144.69891	297.27078	2.04976	1.66669	0.0479730	0.20442388	2.8539628	21	—	—
458230 2010 SE_{17}	16.9	X	125.55375	39.51486	18.95434	13.50549	0.2531531	0.22330519	2.6907303	21	3 29.9	21.0
458231 2010 SJ_{25}	18.2	X	120.07659	234.95893	167.33381	2.30195	0.2843509	0.21921309	2.7241126	21	3 7.0	22.1
458232 2010 TG_6	16.4	X	96.90237	246.52063	23.69621	4.42728	0.1702853	0.18522762	3.0478872	21	11 7.3	21.2
458233 2010 TW_7	17.1	X	180.85477	152.55254	187.15528	4.54647	0.1012234	0.22399591	2.6851960	21	1 30.6	21.2
458234 2010 TJ_9	17.2	X	89.59047	222.55037	191.07622	11.91440	0.1328155	0.21485614	2.7608165	21	1 18.9	20.8
458235 2010 TD_{12}	17.0	X	108.22235	221.69779	217.91050	12.69639	0.2293422	0.22339895	2.6899774	21	3 31.2	20.9
458236 2010 TV_{12}	17.8	X	105.59170	171.53816	263.97140	3.71843	0.1243048	0.22298684	2.6932906	21	3 7.9	21.3
458237 2010 TZ_{13}	17.5	X	124.59221	230.48001	207.72759	11.02125	0.1806582	0.22758119	2.6569200	21	4 11.8	21.4
458238 2010 TC_{14}	17.6	X	160.22876	172.93919	225.26285	5.13200	0.2032170	0.22873941	2.6479435	21	3 28.5	21.9
458239 2010 TY_{29}	17.2	X	122.79938	318.93078	226.96028	3.92776	0.1451912	0.25822977	2.4422972	21	8 23.6	21.0
458240 2010 TP_{37}	17.2	X	210.13295	26.41260	305.23989	4.88766	0.2713754	0.22989943	2.6390287	21	2 18.8	21.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458241 2010 TA_{40}	17.3	X	139.27209	85.42731	343.07367	5.43151	0.1494661	0.22920408	2.6443635	21	4 10.0	21.3
458242 2010 TO_{41}	17.9	X	192.40928	138.45927	240.09939	2.03124	0.2148727	0.23281024	2.6169856	21	4 1.4	22.4
458243 2010 TT_{41}	17.6	X	132.79902	222.53964	11.50030	12.79642	0.1678787	0.27513830	2.3411829	21	11 3.7	21.4
458244 2010 TA_{49}	16.7	X	162.00505	180.17135	196.42561	21.91361	0.0128515	0.22330759	2.6907110	21	2 13.1	20.9
458245 2010 TD_{51}	17.7	X	195.38223	238.82142	154.40087	4.57545	0.0911527	0.23768555	2.5810764	21	4 23.1	21.6
458246 2010 TK_{56}	16.6	X	106.05010	100.65024	8.78880	28.47081	0.1565236	0.22895386	2.6462898	21	4 17.8	20.5
458247 2010 TE_{58}	17.4	X	134.97936	75.44003	16.02869	7.98993	0.2773067	0.22844373	2.6502279	21	5 16.1	21.9
458248 2010 TJ_{63}	17.4	X	110.45816	66.50422	321.61086	2.45270	0.1015494	0.21431531	2.7654591	21	1 13.6	21.1
458249 2010 TB_{74}	17.8	X	106.91773	291.21606	199.58075	8.26715	0.0886890	0.23711379	2.5852239	21	5 18.2	21.3
458250 2010 TB_{96}	18.1	X	43.42489	249.05540	35.30218	2.81057	0.1800160	0.26847467	2.3797637	21	10 7.4	20.7
458251 2010 TZ_{105}	17.4	X	102.21590	325.19832	228.16316	4.31286	0.0736441	0.25319144	2.4745907	21	8 1.4	20.8
458252 2010 TJ_{108}	18.2	X	179.42347	85.39212	325.39697	1.67058	0.1807440	0.23538671	2.5978541	21	4 29.1	22.4
458253 2010 TR_{115}	17.9	X	230.28104	166.27697	199.07850	6.00836	0.0808250	0.23892867	2.5721160	21	4 24.7	21.7
458254 2010 TE_{129}	17.2	X	150.21905	344.44893	48.69034	8.88309	0.2426062	0.22431810	2.6826242	21	3 22.4	21.7
458255 2010 TJ_{139}	17.2	X	73.95585	101.14949	3.38642	7.20904	0.1729911	0.21680376	2.7442574	21	3 12.2	20.3
458256 2010 TE_{149}	17.2	X	177.29002	7.30302	43.97352	9.85920	0.1364558	0.23317009	2.6142924	21	4 27.8	21.1
458257 2010 TN_{152}	17.7	X	131.21322	300.06717	151.49684	4.81805	0.0695758	0.23485969	2.6017390	21	4 24.7	21.3
458258 2010 TR_{162}	15.8	X	89.91019	177.40500	267.82613	21.14887	0.0372340	0.22619903	2.6677322	21	2 6.3	19.7
458259 2010 TK_{164}	17.2	X	208.23605	167.48804	201.87419	13.24350	0.2654194	0.23338189	2.6127105	21	4 2.4	21.9
458260 2010 TB_{166}	16.3	X	174.15951	163.93092	231.68477	13.99021	0.2639991	0.23022338	2.6365526	21	4 7.2	21.0
458261 2010 TD_{173}	17.1	X	174.10268	112.71247	264.46565	9.89814	0.2991826	0.22863681	2.6487357	21	3 15.6	22.1
458262 2010 TF_{173}	17.5	X	150.35268	150.91405	260.11991	5.86373	0.3018528	0.22576118	2.6711803	21	4 10.6	22.2
458263 2010 UU_{4}	16.5	X	233.64094	306.44790	29.46877	14.58727	0.1047559	0.23034392	2.6356327	21	3 25.2	20.6
458264 2010 UR_{9}	17.7	X	206.63603	346.75744	37.48873	2.43037	0.2173870	0.23566493	2.5958091	21	4 20.3	22.1
458265 2010 UV_{9}	16.7	X	38.87089	238.87305	220.94778	12.20158	0.1465337	0.20664181	2.8335045	21	—	—
458266 2010 UR_{12}	17.0	X	193.56075	352.44845	11.08515	6.37577	0.1895337	0.22862902	2.6487958	21	3 16.9	21.5
458267 2010 UG_{15}	17.6	X	151.25220	273.86440	111.77329	3.10321	0.2094040	0.22248968	2.6973014	21	3 9.2	21.8
458268 2010 UV_{15}	16.4	X	122.94254	315.53261	65.84066	6.72892	0.0480786	0.21241208	2.7819538	21	1 14.3	20.3
458269 2010 UT_{20}	17.6	X	209.80337	195.02217	151.34258	0.43104	0.1196609	0.22862000	2.6488654	21	3 9.4	21.6
458270 2010 UJ_{26}	17.2	X	173.90473	328.24211	38.92638	5.56987	0.1253724	0.22072946	2.7116222	21	3 3.5	21.4
458271 2010 UM_{26}	17.6	X	235.22887	120.30704	234.88627	3.88077	0.3252557	0.23820385	2.5773310	21	4 1.9	22.4
458272 2010 UR_{28}	16.0	X	289.74079	255.64141	217.97720	9.58191	0.0580525	0.18158367	3.0885278	21	11 27.8	20.1
458273 2010 UU_{30}	17.5	X	102.94604	105.91832	297.89704	3.31199	0.0737226	0.21176908	2.7875822	21	1 19.8	21.1
458274 2010 UM_{32}	17.3	X	50.31123	208.55619	254.16044	7.43016	0.1934137	0.20962923	2.8065201	21	1 26.0	20.1
458275 2010 UN_{36}	16.9	X	97.10453	140.58747	26.67548	12.48442	0.1203989	0.23334911	2.6129551	21	6 28.0	20.7
458276 2010 UF_{45}	17.4	X	246.52473	18.37603	345.12682	6.04733	0.0957008	0.24029898	2.5623283	21	5 6.5	21.1
458277 2010 UK_{46}	17.4	X	174.80678	35.99062	7.66875	4.67668	0.1206354	0.23136534	2.6278699	21	4 13.9	21.5
458278 2010 UY_{51}	16.8	X	196.06239	159.86887	206.80607	15.81278	0.2263783	0.22925519	2.6439705	21	3 19.7	21.5
458279 2010 UB_{55}	17.5	X	250.07766	330.69004	23.72708	2.65198	0.2286511	0.24038968	2.5616837	21	4 18.8	21.6
458280 2010 UP_{55}	17.5	X	123.71764	341.92957	50.83604	2.73467	0.2240985	0.21396110	2.7685104	21	2 21.9	21.6
458281 2010 UZ_{55}	17.0	X	94.30086	38.76872	38.49177	10.67539	0.1077379	0.21381076	2.7698081	21	3 1.7	20.8
458282 2010 UJ_{60}	16.9	X	113.65265	175.40301	250.84818	3.96359	0.1458321	0.21444098	2.7643787	21	3 10.5	20.8
458283 2010 UR_{61}	16.5	X	154.88130	65.50819	19.52795	29.69002	0.3347510	0.23323477	2.6138090	21	5 16.9	21.7
458284 2010 UQ_{64}	17.6	X	194.12852	44.38215	2.02572	2.71760	0.0723948	0.23472862	2.6027074	21	5 6.6	21.3
458285 2010 UZ_{66}	16.7	X	160.58923	271.99750	54.29767	8.85546	0.1417557	0.21120279	2.7925628	21	1 1.1	21.0
458286 2010 UA_{71}	16.9	X	190.79434	28.59858	355.15421	9.90928	0.1773768	0.23056211	2.6339696	21	4 4.5	21.4
458287 2010 UK_{72}	16.3	X	245.70495	295.99566	41.56555	11.33180	0.2779202	0.23583561	2.5945565	21	3 27.3	20.9
458288 2010 UA_{73}	16.9	X	112.21306	323.75700	75.08962	5.78789	0.3134143	0.21315040	2.7755259	21	3 2.1	21.0
458289 2010 UX_{78}	17.1	X	150.43874	168.61912	259.79528	8.15353	0.1723555	0.22740007	2.6583306	21	4 22.9	21.4
458290 2010 UQ_{79}	16.6	X	165.28007	141.36998	258.55443	10.43774	0.0714762	0.22530591	2.6747775	21	3 23.2	20.7
458291 2010 UL_{81}	17.5	X	160.92542	64.25168	340.71706	1.73906	0.0813858	0.22646088	2.6656753	21	3 30.0	21.3
458292 2010 US_{81}	17.5	X	359.22591	25.14200	243.68037	2.76027	0.1202594	0.24498419	2.5295543	21	6 11.5	20.0
458293 2010 UQ_{83}	17.0	X	140.43650	194.51157	242.08830	12.91439	0.2251420	0.22347583	2.6893604	21	4 29.1	21.4
458294 2010 UB_{93}	17.0	X	183.28360	359.52385	24.85425	13.31841	0.1726475	0.23087936	2.6315562	21	4 2.8	21.3
458295 2010 UC_{96}	16.9	X	187.56850	219.84615	170.37598	5.51539	0.2815620	0.23023834	2.6364383	21	4 14.8	21.7
458296 2010 UM_{96}	17.3	X	337.13035	233.01495	144.36895	7.26538	0.1309682	0.26673752	2.3900848	21	10 20.9	19.6
458297 2010 UV_{96}	16.7	X	186.25072	48.81036	7.06963	31.85346	0.2637432	0.23503006	2.6004815	21	4 28.2	21.8
458298 2010 UN_{101}	17.2	X	95.57037	51.65504	41.81514	3.12313	0.1009513	0.22248902	2.6973067	21	3 17.8	20.6
458299 2010 VV_{14}	16.6	X	168.56712	214.02244	231.07878	12.95102	0.1244784	0.23461351	2.6035587	21	5 31.4	20.6
458300 2010 VZ_{15}	17.6	X	146.22092	133.87439	305.45115	5.49200	0.1514423	0.23044948	2.6348278	21	4 30.7	21.7
458301 2010 VN_{16}	16.7	X	309.64668	263.39677	5.41872	11.46050	0.1151263	0.23384898	2.6092302	21	3 21.9	20.0
458302 2010 VK_{18}	17.3	X	123.66025	283.62902	113.34909	6.10317	0.1870957	0.21566839	2.7538803	21	2 22.6	21.3
458303 2010 VB_{25}	17.7	X	60.31521	213.36537	261.79711	1.04027	0.1786365	0.21086221	2.7955690	21	3 3.7	20.7
458304 2010 VT_{28}	16.4	X	154.89508	322.87838	59.63665	12.72101	0.1080242	0.22053635	2.7132049	21	3 5.9	20.7
458305 2010 VP_{37}	17.1	X	202.40007	317.96613	77.62900	8.11682	0.1439998	0.23496406	2.6009685	21	5 3.8	21.3
458306 2010 VE_{42}	17.8	X	115.76327	114.53121	274.56407	2.16585	0.1045949	0.21354069	2.7721429	21	1 21.6	21.5
458307 2010 VO_{44}	17.4	X	109.79909	241.09463	250.84938	5.08235	0.1370490	0.23392724	2.6086483	21	5 29.3	20.9
458308 2010 VD_{47}	17.0	X	51.76503	198.41579	248.60166	8.52881	0.1862093	0.20335448	2.8639596	21	1 9.6	20.0
458309 2010 VC_{50}	17.3	X	145.76643	71.18280	32.31380	13.45155	0.2377438	0.23106821	2.6301221	21	6 5.9	21.9
458310 2010 VE_{57}	17.7	X	106.99914	219.74848	165.77587	2.79472	0.1907332	0.20851383	2.8165198	21	1 19.4	21.4
458311 2010 VM_{60}	17.0	X	269.95468	322.25889	0.72380	12.03045	0.1920943	0.23956207	2.5675802	21	3 31.4	20.9
458312 2010 VA_{70}	17.6	X	190.38217	131.90630	250.84475	4.16142	0.1853058	0.22956824	2.6415663	21	4 3.6	22.1
458313 2010 VZ_{70}	17.1	X	142.42827	302.23706	73.82902	14.83580	0.2219052	0.21626463	2.7488163	21	2 24.8	21.7
458314 2010 VQ_{84}	17.1	X	213.18977	294.96460	64.66895	2.42376	0.0650352	0.22554960	2.6728505	21	3 31.6	20.9
458315 2010 VV_{84}	17.6	X	215.51013	153.32651	231.49395	1.83995	0.1158955	0.23404100	2.6078028	21	5 1.5	21.6
458316 2010 VC_{85}	17.1	X	103.66099	294.80187	237.69569	12.44745	0.0847429	0.23817996	2.5775033	21	7 6.0	20.8
458317 2010 VY_{88}	16.6	X	70.86959	193.89183	258.19141	7.16225	0.1804789	0.20928291	2.8096154	21	2 16.4	19.9
458318 2010 VE_{89}	16.6	X	176.09776	337.11855	44.12899	8.83915	0.0622198	0.22137375	2.7063584	21	3 20.7	20.6
458319 2010 VB_{95}	16.8	X	108.71330	348.47837	54.03460	9.10345	0.2216669	0.21222320	2.7836042	21	2 20.3	20.8
458320 2010 VG_{96}	16.0	X	138.59727	189.81621	73.35054	11.65194	0.0861230	0.17830528	3.1262707	21	12 3.4	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458321 2010 VR_{104}	17.4	X	174.06859	107.34219	303.99659	5.68729	0.2451474	0.22980642	2.6397408	21	4 25.7	22.2
458322 2010 VT_{104}	17.3	X	80.34357	11.75338	76.09545	5.88155	0.1394433	0.21077619	2.7963295	21	2 26.1	20.8
458323 2010 VZ_{105}	17.5	X	124.99058	246.00579	194.83482	5.31705	0.1586510	0.22270908	2.6955296	21	4 14.2	21.5
458324 2010 VD_{107}	17.1	X	132.85527	350.17461	28.76211	12.70991	0.1292605	0.21322434	2.7748842	21	2 7.6	21.3
458325 2010 VS_{111}	16.9	X	181.65019	328.76419	66.31805	15.07866	0.0619245	0.22732482	2.6589172	21	4 15.7	21.0
458326 2010 VZ_{114}	17.2	X	130.25372	166.02524	255.18332	12.64664	0.1889208	0.21858830	2.7293010	21	3 23.9	21.6
458327 2010 VS_{118}	16.8	X	115.90993	41.37023	34.30611	9.65193	0.1787667	0.21800473	2.7341695	21	4 2.5	20.7
458328 2010 VN_{121}	16.8	X	106.48579	338.41850	79.33702	10.63069	0.1541372	0.21196056	2.7859031	21	2 27.6	20.8
458329 2010 VO_{122}	17.3	X	355.85285	263.80163	350.80346	5.26261	0.1641769	0.23905382	2.5712181	21	5 9.0	19.8
458330 2010 VK_{132}	16.6	X	176.33781	287.07864	82.81992	13.23220	0.1991448	0.22470993	2.6795048	21	3 16.8	21.3
458331 2010 VU_{132}	17.5	X	171.15870	33.36522	343.13113	3.30368	0.2325770	0.22364763	2.6879830	21	3 14.8	22.1
458332 2010 VB_{133}	16.6	X	96.80962	254.10029	219.99598	14.02243	0.0819774	0.22519938	2.6756210	21	4 9.3	20.2
458333 2010 VX_{133}	17.5	X	164.77630	263.41666	140.65738	5.35989	0.2855501	0.22768869	2.6560836	21	4 16.3	22.2
458334 2010 VV_{134}	17.2	X	202.01646	298.46152	56.74700	13.48966	0.1889905	0.22694898	2.6618519	21	3 20.3	21.9
458335 2010 VY_{135}	17.1	X	161.12325	122.30755	228.34734	3.00483	0.1159348	0.21370009	2.7707643	21	1 26.7	21.2
458336 2010 VM_{136}	16.9	X	307.14810	231.83628	55.73621	7.08487	0.1334911	0.23362942	2.6108646	21	4 11.7	20.2
458337 2010 VU_{139}	17.6	X	341.46110	41.89761	5.41862	20.90378	0.0786577	0.36556474	1.9371348	21	—	—
458338 2010 VL_{152}	17.0	X	115.33525	327.88507	80.15288	14.68214	0.1887476	0.21164630	2.7886601	21	3 5.2	21.2
458339 2010 VR_{152}	16.6	X	161.52997	341.48919	81.38040	15.67826	0.2348006	0.22622647	2.6675164	21	5 6.9	21.3
458340 2010 VE_{162}	17.4	X	161.78694	110.42286	269.41439	1.74858	0.1081360	0.22030496	2.7151044	21	3 2.2	21.5
458341 2010 VJ_{163}	17.1	X	120.34531	35.58427	32.47159	6.35109	0.0865097	0.21813033	2.7331198	21	3 16.6	20.9
458342 2010 VO_{165}	17.5	X	114.80237	41.15341	57.06496	7.18113	0.0982389	0.22215791	2.6999861	21	4 18.4	21.2
458343 2010 VP_{168}	17.2	X	325.22416	62.86965	238.88265	9.92944	0.0777736	0.24080421	2.5587430	21	6 3.8	20.3
458344 2010 VB_{169}	17.0	X	163.12461	109.27150	239.08405	4.38012	0.0508667	0.20984662	2.8045815	21	1 20.3	21.0
458345 2010 VA_{172}	16.0	X	295.93649	66.21773	63.35154	17.29355	0.1974277	0.18095965	3.0956241	21	12 8.8	19.6
458346 2010 VP_{173}	17.0	X	124.87968	80.71095	65.62027	13.27415	0.1383407	0.23395012	2.6084782	21	7 5.1	21.0
458347 2010 VT_{174}	16.9	X	136.81760	347.21240	37.11898	9.69321	0.1638261	0.21494728	2.7600360	21	2 21.5	21.1
458348 2010 VE_{176}	17.5	X	179.73113	134.55483	255.89502	12.57630	0.2830749	0.22895086	2.6463129	21	4 3.9	22.5
458349 2010 VZ_{177}	17.2	X	133.70787	27.24479	48.40903	6.55977	0.1344774	0.22409877	2.6843743	21	4 15.4	21.2
458350 2010 VG_{179}	17.1	X	177.99659	307.72214	57.47773	7.33168	0.0340264	0.21899223	2.7259439	21	3 1.2	21.0
458351 2010 VK_{184}	17.4	X	154.46050	125.29427	290.79321	3.76367	0.1624093	0.22742788	2.6581139	21	4 11.1	21.6
458352 2010 VM_{184}	17.0	X	115.11959	187.66194	268.05799	5.43954	0.1155959	0.22584020	2.6705572	21	4 13.1	20.8
458353 2010 VU_{184}	17.9	X	141.02733	147.56130	256.69028	1.97812	0.3041664	0.22012754	2.7165631	21	3 28.4	22.4
458354 2010 VU_{189}	17.1	X	223.51847	314.87967	53.39268	9.29313	0.0825823	0.23112518	2.6296899	21	4 22.8	21.0
458355 2010 VH_{193}	17.4	X	132.01658	50.57445	19.99346	5.38852	0.1269562	0.22160719	2.7044574	21	4 5.2	21.4
458356 2010 VD_{196}	16.6	X	47.88229	281.27464	111.86754	4.92156	0.1705056	0.19410649	2.9542190	21	—	—
458357 2010 VB_{199}	17.3	X	236.81185	122.90837	222.41070	9.61880	0.2224309	0.23411981	2.6072176	21	3 25.9	21.9
458358 2010 VM_{199}	16.8	X	110.78997	214.29304	218.42733	16.59224	0.2451562	0.21637470	2.7478840	21	3 27.4	20.9
458359 2010 VG_{200}	17.0	X	151.08196	292.22750	117.95400	13.78984	0.2657170	0.22348096	2.6893192	21	4 16.5	21.9
458360 2010 VV_{206}	17.3	X	171.21523	14.69752	36.88840	4.82672	0.1059407	0.23071954	2.6327713	21	4 20.6	21.2
458361 2010 VX_{209}	17.5	X	174.88023	91.17608	289.07242	4.44188	0.1667579	0.22548500	2.6733610	21	3 17.2	21.8
458362 2010 VV_{210}	17.4	X	142.70787	76.36531	355.16220	6.89659	0.1044413	0.22677808	2.6631891	21	4 13.1	21.4
458363 2010 VK_{214}	17.3	X	136.75680	51.87367	17.34291	12.99877	0.1306507	0.22709946	2.6606759	21	4 8.2	21.1
458364 2010 VN_{218}	17.3	X	142.87836	162.53040	264.64660	5.09895	0.1299968	0.22497558	2.6773634	21	4 10.3	21.4
458365 2010 VU_{218}	17.6	X	173.99115	171.54404	255.41794	3.21520	0.1733524	0.23282254	2.6168934	21	5 14.7	21.9
458366 2010 VV_{218}	16.9	X	183.91775	40.91014	347.68236	14.04458	0.1326583	0.23022780	2.6365188	21	4 1.1	21.2
458367 2010 VB_{220}	17.1	X	174.02984	128.78337	279.74614	12.02964	0.2144659	0.23112597	2.6296840	21	4 19.0	21.8
458368 2010 WJ	18.4	X	180.17937	107.64978	262.54325	27.02281	0.2851797	0.40877866	1.7980865	21	2 11.9	21.7
458369 2010 WQ_{2}	16.9	X	179.16996	301.27215	77.90970	7.25161	0.0587409	0.22212103	2.7002849	21	3 21.4	20.9
458370 2010 WL_{3}	17.3	X	248.94128	23.79032	298.81622	1.23399	0.2099450	0.23173017	2.6251110	21	3 11.6	21.6
458371 2010 WO_{3}	17.4	X	154.26525	172.11749	263.18472	2.28037	0.0715661	0.22956155	2.6416176	21	4 29.1	21.1
458372 2010 WX_{4}	17.6	X	154.55243	136.93997	300.97774	3.48950	0.0360087	0.22897783	2.6461051	21	4 28.9	21.2
458373 2010 WA_{7}	17.0	X	144.63031	297.01342	73.71402	5.80453	0.0762941	0.21026483	2.8008614	21	1 31.9	21.0
458374 2010 WW_{7}	16.5	X	89.23757	140.91850	279.39419	11.93510	0.1531435	0.20981250	2.8048855	21	1 30.6	20.1
458375 2010 WY_{8}	21.3	X	92.56636	81.41096	88.85873	5.98386	0.1355608	0.60460946	1.3851158	21	6 21.9	20.3
458376 2010 WF_{25}	17.2	X	194.75310	100.60920	262.42955	4.93117	0.0314052	0.22054889	2.7131020	21	3 11.5	21.1
458377 2010 WF_{29}	17.1	X	136.55689	311.37433	103.22122	10.88281	0.2595881	0.22024093	2.7156306	21	4 8.8	21.7
458378 2010 WW_{29}	17.4	X	253.71953	119.12569	227.62789	2.38129	0.2520906	0.23764831	2.5813461	21	4 10.5	21.6
458379 2010 WW_{31}	16.9	X	108.87335	357.90454	66.26482	14.21265	0.2050937	0.21394969	2.7686089	21	3 20.7	21.1
458380 2010 WY_{33}	16.8	X	334.53345	76.42160	79.66245	7.04547	0.0424283	0.20105143	2.8857893	21	—	—
458381 2010 WP_{65}	16.0	X	342.74966	27.78267	80.66588	5.49894	0.0793878	0.18499135	3.0504818	21	—	—
458382 2010 WG_{66}	17.4	X	171.80992	41.75280	31.84269	3.28886	0.1967899	0.23388339	2.6089743	21	5 21.6	21.7
458383 2010 WL_{67}	17.1	X	173.87476	74.97104	286.05430	3.32586	0.0878514	0.21506770	2.7590057	21	2 18.7	21.2
458384 2010 WX_{67}	16.9	X	230.36793	116.58771	261.76520	12.18337	0.1178664	0.23461849	2.6035218	21	5 6.9	20.9
458385 2010 WU_{68}	17.6	X	137.60441	37.96249	347.34375	2.77065	0.1620756	0.21249799	2.7812040	21	2 19.4	21.7
458386 2010 WZ_{69}	17.2	X	158.70541	158.83310	256.22847	12.24317	0.1632092	0.22333486	2.6904920	21	4 12.2	21.7
458387 2010 XE_{3}	17.2	X	80.71687	215.42755	235.29544	8.41804	0.2467091	0.21155147	2.7894935	21	3 12.2	20.7
458388 2010 XV_{8}	17.5	X	140.09431	249.86677	189.57386	5.53745	0.0574100	0.22300890	2.6931131	21	4 18.2	21.1
458389 2010 XA_{9}	17.0	X	0.40509	309.27006	111.29634	11.76847	0.0579035	0.18289445	3.0737535	21	12 29.2	21.1
458390 2010 XT_{9}	16.7	X	167.90169	206.04799	89.63937	13.47156	0.0636496	0.19565812	2.9385796	21	—	—
458391 2010 XU_{9}	16.8	X	69.53557	256.50248	218.99198	6.77228	0.1739004	0.21220474	2.7837656	21	3 17.4	20.0
458392 2010 XU_{11}	16.5	X	61.20285	50.66884	105.78215	10.62179	0.1317143	0.21531859	2.7568620	21	4 29.8	20.0
458393 2010 XA_{12}	17.4	X	104.93037	171.26632	278.10195	3.38207	0.1749011	0.21238175	2.7822187	21	4 2.9	21.3
458394 2010 XG_{12}	16.1	X	73.95738	277.37503	105.14052	9.21421	0.0965056	0.18804534	3.0173637	21	—	—
458395 2010 XJ_{12}	17.2	X	183.53362	85.81290	290.18876	6.20617	0.3046248	0.22307378	2.6925908	21	3 22.9	22.3
458396 2010 XY_{14}	16.9	X	117.11820	355.23083	89.16828	13.47072	0.1601514	0.21900237	2.7258598	21	4 16.9	21.1
458397 2010 XS_{38}	15.9	X	317.20578	57.75809	96.34291	28.12321	0.1508589	0.18539926	3.0460057	21	—	—
458398 2010 XO_{46}	17.1	X	171.43610	139.61936	254.36250	6.78054	0.2367319	0.22145546	2.7056926	21	4 2.8	21.9
458399 2010 XA_{57}	18.1	X	299.64300	275.69524	233.16867	4.68740	0.1006790	0.28422802	2.2909984	21	—	—
458400 2010 XP_{58}	17.0	X	232.24910	186.69719	185.38589	5.30911	0.1978502	0.23639576	2.5904562	21	4 28.5	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458401 2010 XR_{59}	17.5	X	325.85492	274.51624	284.86062	18.73104	0.1010938	0.38535762	1.8702231	21	—	—
458402 2010 XB_{62}	16.5	X	303.92976	313.50188	241.57145	10.34813	0.0915272	0.20499106	2.8486960	21	—	—
458403 2010 XV_{64}	16.6	X	57.70299	177.79643	228.56678	9.11399	0.1947260	0.19633127	2.9318589	21	—	—
458404 2010 XV_{65}	16.6	X	357.76263	145.19147	252.15130	4.21677	0.1335749	0.17976080	3.1093723	21	12 1.8	20.4
458405 2010 XC_{66}	18.9	X	98.14099	8.76086	99.87266	22.66828	0.0810688	0.40103800	1.8211499	21	3 22.1	21.0
458406 2010 XH_{69}	17.0	X	239.14218	167.84584	214.97122	6.01985	0.0936373	0.23702994	2.5858336	21	5 26.8	20.6
458407 2010 XU_{69}	16.1	X	167.22043	6.57810	71.56445	34.69261	0.1865968	0.23376353	2.6098660	21	5 26.5	20.4
458408 2010 YM_{1}	16.9	X	212.74299	137.27988	255.40204	12.19086	0.1916445	0.23294358	2.6159868	21	5 4.7	21.4
458409 2011 AP	17.1	X	64.08645	84.53582	84.23134	3.16975	0.1436930	0.21613284	2.7499336	21	5 18.7	20.3
458410 2011 AK_{2}	17.5	X	10.88385	75.72650	6.83153	3.03431	0.2670955	0.18796083	3.0182681	21	—	—
458411 2011 AM_{2}	17.2	X	10.94186	19.69705	63.62956	4.92546	0.1983789	0.18726246	3.0257676	21	—	—
458412 2011 AD_{5}	16.6	X	215.06389	357.48208	324.95985	9.21284	0.1174416	0.20983378	2.8046959	21	2 15.7	20.8
458413 2011 AH_{8}	17.1	X	7.94499	303.71781	90.69582	2.22850	0.1557468	0.17480005	3.1679259	21	12 15.5	20.8
458414 2011 AP_{9}	16.1	X	222.24482	165.28440	109.64787	21.76993	0.1189404	0.19272565	2.9683131	21	1 1.1	20.8
458415 2011 AP_{10}	16.3	X	22.76095	342.53785	112.38087	12.01468	0.0670312	0.18964783	3.0003423	21	—	—
458416 2011 AS_{10}	16.4	X	166.25394	94.74210	291.05111	12.28618	0.0627236	0.21049580	2.7988122	21	3 6.5	20.8
458417 2011 AT_{10}	16.2	X	52.38007	250.36068	116.63747	10.13795	0.0679435	0.17635583	3.1492671	21	12 30.5	20.7
458418 2011 AM_{12}	19.5	X	91.44690	237.69866	124.78623	38.50749	0.5376701	0.39026689	1.8545060	21	—	—
458419 2011 AW_{12}	16.1	X	59.39047	102.44921	284.40393	8.58645	0.0941677	0.18367750	3.0650113	21	—	—
458420 2011 AG_{14}	16.3	X	308.95406	81.91064	98.95298	9.19673	0.1653930	0.18682721	3.0304651	21	—	—
458421 2011 AU_{21}	16.6	X	153.57969	283.15797	102.91200	6.12772	0.1744110	0.20885794	2.8134253	21	3 11.9	21.1
458422 2011 AH_{26}	16.3	X	328.93685	197.81123	78.36844	16.20772	0.0540991	0.22272928	2.6953666	21	5 12.8	19.8
458423 2011 AJ_{26}	16.1	X	7.97852	49.57567	27.21946	8.75593	0.1081213	0.18340344	3.0680639	21	—	—
458424 2011 AX_{30}	16.3	X	345.62073	339.52562	120.79345	11.35564	0.1005471	0.18033228	3.1027997	21	—	—
458425 2011 AV_{31}	17.4	X	126.55744	126.62317	339.04723	4.55755	0.1225677	0.21957308	2.7211344	21	5 11.8	21.4
458426 2011 AV_{33}	15.6	X	154.46788	163.73102	102.48676	19.18384	0.1001949	0.17207425	3.2012933	21	12 21.9	20.7
458427 2011 AS_{36}	16.4	X	220.93496	320.68852	312.65462	10.29546	0.0818279	0.18664846	3.0323997	21	—	—
458428 2011 AP_{37}	17.6	X	281.05811	241.82251	309.25093	18.86989	0.0570595	0.37411461	1.9075076	21	—	—
458429 2011 AA_{40}	16.9	X	107.68851	328.53183	89.71239	11.63030	0.1015839	0.20370729	2.8606519	21	2 22.9	21.0
458430 2011 AQ_{42}	16.7	X	306.16351	133.53194	68.90588	4.56876	0.1305397	0.19208003	2.9749607	21	—	—
458431 2011 AF_{43}	17.1	X	51.56950	98.51006	98.03284	2.59587	0.1268285	0.21726384	2.7403818	21	6 3.5	20.4
458432 2011 AG_{43}	17.7	X	185.46972	338.86470	303.89171	19.21238	0.0831593	0.37208404	1.9144412	21	—	—
458433 2011 AW_{43}	17.2	X	47.97126	120.77755	359.44698	2.08441	0.1433796	0.19979208	2.8979032	21	2 16.5	20.3
458434 2011 AJ_{46}	16.4	X	299.09732	4.49407	139.52616	5.51672	0.1667188	0.17427709	3.1742602	21	—	—
458435 2011 AW_{47}	16.5	X	355.39214	329.63479	119.65154	18.44804	0.1433594	0.18234507	3.0799243	21	—	—
458436 2011 AL_{52}	17.4	X	73.39540	171.74551	272.70629	13.42697	0.6353713	0.20981088	2.8049000	21	4 24.4	21.7
458437 2011 AS_{52}	17.1	X	346.56337	353.36463	104.91130	7.69540	0.2658647	0.18199102	3.0839175	21	—	—
458438 2011 AK_{56}	16.0	X	91.24057	256.40798	123.18857	16.99312	0.1140366	0.18706892	3.0278542	21	—	—
458439 2011 AW_{56}	16.1	X	294.26644	270.23647	308.85668	10.22063	0.1154596	0.18932376	3.0037651	21	1 8.2	20.4
458440 2011 AZ_{57}	16.4	X	33.04789	290.38636	124.19529	11.86253	0.1253863	0.18427431	3.0583899	21	—	—
458441 2011 AY_{65}	16.7	X	54.00973	308.79816	110.64284	6.17117	0.1430579	0.18855310	3.0119443	21	—	—
458442 2011 AX_{73}	16.7	X	64.71441	194.95771	305.69200	7.50089	0.0943253	0.21131602	2.7915652	21	3 30.9	20.3
458443 2011 AD_{76}	17.4	X	357.96433	70.84381	50.10373	3.52087	0.2293168	0.18974862	2.9992797	21	—	—
458444 2011 AA_{78}	16.7	X	63.12559	127.74738	323.04867	7.81480	0.1880447	0.20137266	2.8827194	21	2 7.9	19.7
458445 2011 AM_{78}	16.2	X	53.95661	251.99234	120.25377	11.75130	0.0740853	0.17689110	3.1429108	21	—	—
458446 2011 BY_{1}	16.3	X	48.61078	81.12312	308.70643	9.29546	0.0837294	0.18105951	3.0944858	21	—	—
458447 2011 BW_{3}	16.5	X	47.08305	285.47600	113.68489	10.12240	0.0409885	0.18151443	3.0893132	21	—	—
458448 2011 BV_{4}	16.7	X	194.04747	243.11795	125.08399	16.90310	0.1231678	0.21388757	2.7691449	21	3 28.5	21.3
458449 2011 BB_{5}	15.8	X	241.06595	275.75360	285.91687	10.39848	0.0312104	0.17789141	3.1311178	21	—	—
458450 2011 BZ_{7}	16.9	X	109.79927	297.23026	117.84213	6.80178	0.0709089	0.20213865	2.8754323	21	2 14.2	20.9
458451 2011 BG_{9}	16.2	X	131.92895	33.28238	312.43281	7.83450	0.0926822	0.18984428	2.9982720	21	—	—
458452 2011 BR_{15}	19.9	X	121.96989	72.12724	216.82289	10.22810	0.2769551	1.20752541	0.8733839	21	—	—
458453 2011 BF_{16}	18.1	X	148.61683	257.42713	127.88003	23.33086	0.0597578	0.39095648	1.8523246	21	1 13.9	19.8
458454 2011 BK_{22}	16.0	X	49.69952	102.04656	316.13346	15.82521	0.0984206	0.18302442	3.0722982	21	—	—
458455 2011 BK_{25}	16.6	X	35.26402	328.70688	196.53193	7.97005	0.2164567	0.20445663	2.8536579	21	3 29.9	19.1
458456 2011 BD_{27}	17.2	X	218.65760	280.83694	65.88697	1.19757	0.0782366	0.21074671	2.7965903	21	3 22.1	21.3
458457 2011 BM_{28}	16.9	X	331.41870	38.94060	88.27632	2.07766	0.1272473	0.18064619	3.0992040	21	—	—
458458 2011 BV_{29}	16.3	X	242.59477	142.68308	101.76321	12.72756	0.0754455	0.18742213	3.0240489	21	—	—
458459 2011 BS_{30}	16.1	X	356.11974	109.92940	321.75005	16.90375	0.1175427	0.17619005	3.1512423	21	—	—
458460 2011 BJ_{34}	16.5	X	331.45697	179.99881	356.25959	6.25788	0.2400886	0.18634337	3.0357087	21	—	—
458461 2011 BU_{36}	16.1	X	44.44260	243.99383	137.82603	17.54550	0.1892101	0.17696227	3.1420681	21	—	—
458462 2011 BT_{37}	16.6	X	241.98896	331.41704	250.97192	3.64123	0.1192044	0.17554835	3.1589171	21	—	—
458463 2011 BZ_{38}	16.6	X	9.55780	312.08557	162.89664	21.26229	0.1085833	0.18227298	3.0807363	21	—	—
458464 2011 BG_{44}	16.7	X	13.57330	30.34697	246.23844	3.50907	0.0833586	0.22731417	2.6590002	21	7 18.4	19.7
458465 2011 BC_{51}	15.9	X	338.65836	175.48591	285.20879	9.38655	0.1013544	0.17540340	3.1606571	21	—	—
458466 2011 BY_{55}	16.5	X	52.00977	328.34381	141.95374	13.28640	0.0441380	0.19968090	2.8989788	21	2 2.4	20.4
458467 2011 BG_{61}	17.0	X	185.70834	313.01394	55.93807	5.29262	0.0853918	0.21327316	2.7744608	21	3 16.6	21.3
458468 2011 BF_{63}	16.1	X	30.93377	313.35490	119.87621	10.11216	0.1202140	0.18488029	3.0517033	21	—	—
458469 2011 BU_{66}	16.6	X	258.35272	301.07398	276.12837	3.85041	0.0733695	0.17904374	3.1176686	21	—	—
458470 2011 BV_{66}	16.3	X	257.31795	278.41082	310.84054	10.63833	0.1583407	0.17945113	3.1129484	21	—	—
458471 2011 BB_{68}	16.6	X	278.68719	266.54975	304.24298	11.62075	0.0403307	0.18481036	3.0524731	21	—	—
458472 2011 BV_{86}	17.0	X	5.34648	323.45317	133.80882	6.21815	0.1631313	0.18507955	3.0495125	21	—	—
458473 2011 BF_{87}	17.0	X	269.62444	186.75583	133.58448	7.08860	0.0109390	0.21539395	2.7562189	21	4 26.5	20.8
458474 2011 BW_{87}	16.5	X	313.46611	39.72177	117.62172	11.72969	0.0327891	0.18437739	3.0572499	21	—	—
458475 2011 BM_{89}	16.2	X	327.69552	201.95930	308.92060	9.60535	0.0319600	0.18360384	3.0658309	21	—	—
458476 2011 BS_{102}	16.3	X	124.99712	11.98944	325.06078	10.91523	0.1619789	0.18489687	3.0515208	21	—	—
458477 2011 BZ_{103}	17.0	X	22.65673	155.21940	278.79131	1.01527	0.0506887	0.17923934	3.1154001	21	—	—
458478 2011 BX_{104}	16.7	X	276.44380	66.87069	146.49235	11.63882	0.0130999	0.18799827	3.0178674	21	—	—
458479 2011 BF_{107}	16.2	X	42.06315	152.07398	284.30546	8.07327	0.1104892	0.18739166	3.0243766	21	—	—
458480 2011 BE_{108}	16.7	X	262.96517	80.10040	156.61128	9.97742	0.1527470	0.18294356	3.0732034	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458481 2011 BX_{109}	16.9	X	27.39353	255.14701	208.74089	8.03027	0.0988201	0.18718501	3.0266021	21	—	—
458482 2011 BH_{113}	16.7	X	127.09393	76.09177	319.08452	8.62911	0.0834822	0.19583401	2.9368198	21	2 12.0	20.9
458483 2011 BK_{114}	16.3	X	349.88996	145.27747	115.12129	14.81440	0.1627172	0.21919062	2.7242988	21	5 16.2	19.5
458484 2011 BG_{115}	17.3	X	53.48445	316.17485	132.37876	9.63214	0.1705346	0.19647721	2.9304069	21	1 17.2	20.4
458485 2011 BD_{119}	16.2	X	36.22131	132.22713	346.87299	10.73530	0.0519874	0.19438712	2.9513749	21	1 27.5	20.1
458486 2011 BQ_{121}	16.3	X	66.63022	103.10718	315.53933	14.94226	0.0999052	0.18781325	3.0198491	21	—	—
458487 2011 BX_{145}	17.0	X	271.69315	145.68380	43.00391	0.94304	0.0834005	0.17946079	3.1128367	21	—	—
458488 2011 BX_{153}	16.8	X	197.89755	12.12611	298.28197	11.08051	0.0413050	0.19761873	2.9191113	21	1 16.3	20.8
458489 2011 BR_{154}	17.2	X	37.07769	289.97689	141.33913	1.69915	0.1797847	0.18607097	3.0386707	21	—	—
458490 2011 BS_{161}	16.7	X	351.89098	81.03403	121.35994	15.88629	0.0939777	0.20448609	2.8533839	21	3 7.5	20.4
458491 2011 BA_{162}	15.9	X	41.51308	321.02316	130.70831	23.29666	0.1250108	0.19125242	2.9835369	21	1 1.4	19.7
458492 2011 CS	16.4	X	81.67112	322.50888	112.31942	10.39342	0.1254669	0.19553256	2.9398375	21	2 11.1	20.1
458493 2011 CE_{3}	17.9	X	328.01154	167.36984	316.96337	17.90678	0.0744944	0.36574849	1.9364860	21	—	—
458494 2011 CF_{4}	17.0	X	50.67000	357.65499	93.19354	4.63358	0.2500999	0.19492959	2.9458969	21	1 23.4	19.7
458495 2011 CL_{6}	16.4	X	78.90939	157.70313	3.22387	13.23414	0.1344879	0.21392080	2.7688581	21	5 24.4	20.3
458496 2011 CT_{8}	15.9	X	218.92522	266.86800	306.49095	9.72026	0.0868661	0.17056963	3.2200917	21	12 25.4	20.7
458497 2011 CR_{11}	17.2	X	135.64272	88.33492	287.06845	1.03557	0.1062766	0.19620312	2.9331354	21	1 31.9	21.5
458498 2011 CP_{23}	18.6	X	21.27081	235.81239	309.63740	19.77289	0.0479609	0.39481499	1.8402365	21	2 13.1	20.0
458499 2011 CG_{24}	16.2	X	320.69304	59.11282	101.76584	26.76699	0.3962594	0.17540701	3.1606137	21	—	—
458500 2011 CE_{25}	16.5	X	1.26657	12.04798	131.14865	11.72903	0.1837315	0.18986022	2.9981043	21	—	—
458501 2011 CL_{25}	16.4	X	312.71215	180.34053	342.02573	10.24897	0.0419274	0.18276997	3.0751490	21	—	—
458502 2011 CQ_{27}	16.2	X	106.63946	107.10214	334.01572	16.08581	0.0716098	0.20347059	2.8628699	21	3 10.0	20.2
458503 2011 CE_{30}	16.1	X	327.88947	344.92309	123.37967	24.65633	0.1902246	0.17881723	3.1203008	21	—	—
458504 2011 CC_{34}	16.4	X	92.62259	95.37962	313.95150	10.92754	0.0466486	0.19417876	2.9534859	21	1 14.7	20.5
458505 2011 CW_{36}	16.1	X	356.76997	134.86503	134.31185	15.47829	0.2001257	0.21849959	2.7300397	21	6 8.5	18.9
458506 2011 CM_{39}	16.9	X	343.25291	133.18174	33.92075	7.55553	0.2818224	0.18721461	3.0262832	21	—	—
458507 2011 CH_{40}	16.4	X	274.03946	141.47728	77.95308	4.84875	0.1230187	0.18402057	3.0612007	21	—	—
458508 2011 CM_{42}	15.4	X	271.53583	229.17496	314.19584	27.59841	0.1946004	0.17270065	3.1935476	21	—	—
458509 2011 CT_{44}	16.9	X	244.35372	357.07465	247.56193	5.79573	0.0723838	0.18435634	3.0574826	21	—	—
458510 2011 CC_{46}	16.6	X	259.35916	244.08695	109.60262	8.34155	0.0473905	0.21962185	2.7207315	21	5 21.0	20.4
458511 2011 CG_{46}	15.4	X	335.77434	24.79909	118.33034	28.82198	0.1446063	0.18027630	3.1034419	21	—	—
458512 2011 CQ_{47}	15.2	X	289.84621	77.81312	95.51796	26.34356	0.2345358	0.17290353	3.1910490	21	—	—
458513 2011 CF_{58}	16.7	X	331.29933	139.18589	146.67817	8.42232	0.1976332	0.21540704	2.7561073	21	5 10.3	19.8
458514 2011 CG_{59}	17.3	X	127.01633	135.66357	284.26716	0.96011	0.0597253	0.20272729	2.8698635	21	3 10.0	21.2
458515 2011 CA_{63}	16.5	X	6.91000	359.98997	107.51231	6.06222	0.1768455	0.18637579	3.0353566	21	—	—
458516 2011 CQ_{64}	16.1	X	335.79625	33.89793	107.45531	10.97877	0.0496134	0.18244921	3.0787521	21	—	—
458517 2011 CA_{68}	16.7	X	86.94344	41.75948	136.95555	13.35636	0.1070492	0.22215393	2.7000184	21	6 28.6	20.5
458518 2011 CO_{68}	16.7	X	293.87648	291.35092	275.35807	1.96343	0.1862249	0.18358989	3.0659863	21	—	—
458519 2011 CS_{71}	16.3	X	24.95804	107.21812	357.35438	11.28499	0.1114806	0.18798767	3.0179808	21	—	—
458520 2011 CT_{71}	16.2	X	226.40651	229.34717	10.62534	9.08864	0.1499776	0.17509304	3.1643909	21	—	—
458521 2011 CZ_{72}	16.0	X	343.55559	127.93723	353.15014	15.48831	0.1403610	0.18159992	3.0883437	21	—	—
458522 2011 CW_{76}	16.6	X	46.27308	21.33947	68.53321	4.91149	0.1172918	0.19023192	2.9941976	21	1 5.8	20.2
458523 2011 CV_{83}	16.0	X	278.23149	258.84050	312.92576	8.78699	0.0731556	0.18190050	3.0849404	21	—	—
458524 2011 CA_{99}	17.4	X	227.47700	148.56564	209.76034	6.04767	0.0340369	0.21036995	2.7999284	21	4 17.3	21.2
458525 2011 CE_{104}	17.0	X	290.06119	13.55019	224.65525	1.03648	0.0297504	0.19321325	2.9633170	21	2 4.4	21.3
458526 2011 CR_{106}	17.0	X	15.92345	115.38856	146.41791	5.61595	0.0655833	0.22089509	2.7102666	21	6 30.6	20.3
458527 2011 CM_{107}	16.2	X	312.88260	187.47356	329.96938	11.07180	0.0337120	0.17803640	3.1294176	21	—	—
458528 2011 CQ_{107}	16.4	X	248.00216	106.30604	159.61628	12.77433	0.2891515	0.18037399	3.1023213	21	1 6.7	22.0
458529 2011 DZ	16.0	X	300.12021	185.22616	2.70293	9.19111	0.1539169	0.18063354	3.0993487	21	—	—
458530 2011 DG_{1}	16.9	X	29.06419	227.93762	250.43331	2.13286	0.0760051	0.19174360	2.9784396	21	1 13.7	20.7
458531 2011 DQ_{5}	17.6	X	142.98514	29.27100	343.36657	20.52043	0.0951229	0.38092847	1.8846922	21	—	—
458532 2011 DS_{12}	16.2	X	220.37166	296.56841	359.64460	15.20631	0.0796443	0.18350082	3.0669783	21	1 30.8	21.1
458533 2011 DN_{18}	17.3	X	276.24229	195.13663	0.72808	1.03986	0.1479378	0.17225915	3.1990020	21	—	—
458534 2011 DP_{19}	16.6	X	351.55111	319.96993	339.82453	8.26539	0.1205744	0.22391121	2.6858731	21	7 16.1	19.5
458535 2011 DB_{20}	16.1	X	23.05337	245.65533	3.48520	11.58142	0.1715102	0.21598827	2.7511606	21	7 5.2	19.2
458536 2011 DB_{27}	16.8	X	327.05288	27.59466	146.98518	7.83554	0.1105775	0.18686851	3.0300186	21	—	—
458537 2011 DK_{40}	16.3	X	318.51202	39.73257	168.18869	10.25866	0.2033264	0.18602473	3.0391743	21	1 9.7	20.6
458538 2011 DQ_{49}	16.0	X	318.54402	327.65847	171.60745	28.79053	0.1309942	0.17553319	3.1590989	21	—	—
458539 2011 DH_{50}	16.4	X	111.82671	40.49257	91.97171	13.88031	0.1421283	0.21745597	2.7387674	21	6 4.2	20.5
458540 2011 DK_{50}	15.6	X	292.02601	237.03783	310.81561	11.29623	0.1075018	0.17788033	3.1312478	21	—	—
458541 2011 DV_{51}	16.2	X	25.31811	130.44527	307.75034	8.41867	0.0968033	0.17923299	3.1154737	21	—	—
458542 2011 DY_{51}	17.8	X	94.91398	72.14408	327.80986	19.38607	0.0804174	0.37813341	1.8939682	21	—	—
458543 2011 EA	18.1	X	149.85437	58.25965	327.36636	19.93178	0.0744468	0.38814770	1.8612500	21	1 25.1	19.9
458544 2011 EA_{7}	16.3	X	297.02805	27.17013	160.04038	12.07156	0.1315100	0.17625618	3.1504540	21	—	—
458545 2011 EU_{10}	16.8	X	337.87204	263.77417	345.72884	14.39508	0.1165463	0.20327996	2.8646595	21	4 4.8	20.6
458546 2011 EU_{13}	15.6	X	289.13962	197.07178	346.87170	20.90848	0.0827615	0.17311552	3.1884434	21	—	—
458547 2011 EP_{14}	16.5	X	275.05416	41.47770	152.75263	1.38414	0.1150315	0.17365863	3.1817921	21	—	—
458548 2011 ED_{17}	17.9	X	70.73681	1.22561	122.63645	24.25285	0.0490348	0.39098160	1.8522453	21	2 8.2	19.2
458549 2011 EV_{17}	15.9	X	330.07457	131.97736	31.76966	11.25739	0.1008527	0.18580468	3.0415732	21	—	—
458550 2011 EK_{19}	15.6	X	229.76713	122.45996	150.58598	14.73221	0.1773226	0.17094821	3.2153359	21	1 6.8	21.1
458551 2011 EE_{22}	16.2	X	313.40442	159.10374	51.55570	7.30250	0.0804815	0.18780439	3.0199440	21	1 26.7	20.4
458552 2011 EB_{27}	16.0	X	304.44695	212.97825	23.03164	10.40834	0.1562881	0.18588405	3.0407074	21	2 7.5	20.4
458553 2011 EA_{28}	17.3	X	10.33806	53.06581	77.87727	1.87271	0.2244650	0.18652229	3.0337670	21	—	—
458554 2011 EM_{33}	18.3	X	33.67310	306.11528	165.45950	24.33767	0.1185921	0.37921665	1.8903597	21	—	—
458555 2011 EC_{35}	16.5	X	341.57593	131.32175	44.31836	11.86653	0.0923929	0.18717139	3.0267490	21	1 19.7	20.7
458556 2011 EE_{39}	16.4	X	319.06638	88.17742	103.51634	2.64522	0.1244587	0.18057288	3.1000429	21	1 4.2	20.7
458557 2011 EC_{43}	16.1	X	2.40329	156.38114	340.88995	12.45878	0.1372758	0.18488437	3.0516584	21	—	—
458558 2011 EW_{45}	17.7	X	333.55913	138.63778	7.13502	22.45621	0.0103754	0.36694282	1.9322818	21	—	—
458559 2011 EH_{48}	15.9	X	296.17424	124.04377	125.78460	10.56688	0.0760657	0.19275056	2.9680574	21	2 21.7	20.1
458560 2011 ER_{51}	16.1	X	322.72895	141.11621	4.99645	14.42310	0.1463940	0.17637166	3.1490787	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458561 2011 ED_{54}	15.8	X	285.54497	134.62500	48.96263	11.36320	0.0422136	0.16842342	3.2473896	21	—	—
458562 2011 EK_{54}	16.5	X	300.64626	6.46215	175.00566	17.46145	0.1565919	0.17377631	3.1803555	21	—	—
458563 2011 EL_{54}	16.3	X	326.94490	192.42972	347.13050	11.74301	0.0710929	0.18442829	3.0566874	21	1 8.3	20.6
458564 2011 EN_{60}	16.5	X	87.12921	294.04859	98.26510	10.51860	0.0959482	0.17996823	3.1069826	21	—	—
458565 2011 ET_{60}	15.8	X	149.85753	273.33477	70.07652	10.24129	0.0845900	0.18122902	3.0925559	21	1 10.4	20.4
458566 2011 EY_{60}	16.0	X	217.68266	160.00516	107.04976	10.90939	0.0886314	0.17613859	3.1518560	21	—	—
458567 2011 ET_{61}	16.5	X	79.78377	5.79843	62.46673	11.04622	0.0829980	0.18780712	3.0199147	21	1 28.6	20.6
458568 2011 EJ_{69}	16.7	X	258.71927	97.07384	154.70046	10.21013	0.1167992	0.17880343	3.1204615	21	1 9.8	21.6
458569 2011 EZ_{70}	16.2	X	261.47294	52.48636	174.02255	11.04731	0.1041596	0.17619390	3.1511964	21	—	—
458570 2011 EY_{72}	16.6	X	320.94557	149.22007	37.28038	9.22079	0.1373230	0.17926088	3.1151505	21	—	—
458571 2011 EE_{77}	16.4	X	9.41674	86.30919	356.31474	25.00282	0.2538825	0.17775810	3.1326830	21	—	—
458572 2011 EM_{78}	16.5	X	331.33032	326.41282	165.28079	3.52631	0.1708618	0.17413579	3.1759771	21	—	—
458573 2011 EJ_{83}	17.3	X	326.28757	7.17721	158.93108	1.75484	0.1307021	0.18081602	3.0972632	21	—	—
458574 2011 EP_{85}	16.4	X	120.00882	41.94604	81.83291	11.65940	0.1160382	0.21215672	2.7841856	21	5 29.9	20.4
458575 2011 ES_{85}	16.1	X	335.13568	129.49029	106.67303	18.07799	0.1159483	0.19850951	2.9103720	21	3 29.4	20.2
458576 2011 EZ_{85}	16.5	X	332.87982	67.81968	108.59955	6.45123	0.0921872	0.18255885	3.0775193	21	1 7.4	20.4
458577 2011 FJ_{3}	16.7	X	332.94980	221.73981	342.20389	11.47314	0.1301946	0.19094005	2.9867901	21	2 6.0	20.5
458578 2011 FD_{4}	16.4	X	330.93622	61.48962	129.27264	7.40814	0.1267975	0.18530617	3.0470258	21	1 16.8	20.3
458579 2011 FS_{5}	17.2	X	18.94775	352.74706	131.47319	1.86277	0.1474857	0.18836158	3.0139855	21	1 3.8	20.7
458580 2011 FM_{7}	15.5	X	154.27847	262.57189	144.50246	13.63932	0.0834522	0.19747084	2.9205685	21	4 2.1	20.0
458581 2011 FH_{8}	16.3	X	338.35229	36.77593	119.48296	2.12079	0.1263790	0.17716265	3.1396984	21	—	—
458582 2011 FL_{8}	15.8	X	287.33023	194.00410	14.16462	17.04602	0.1220438	0.17496662	3.1659150	21	—	—
458583 2011 FX_{11}	16.3	X	326.68764	150.33307	28.70159	18.18295	0.1803659	0.17757178	3.1348739	21	—	—
458584 2011 FL_{13}	16.3	X	279.65973	51.97293	175.11933	7.33029	0.2051045	0.17595705	3.1540235	21	—	—
458585 2011 FD_{16}	16.6	X	357.18370	83.81233	94.19470	5.72563	0.0710714	0.18915873	3.0055119	21	2 14.5	20.6
458586 2011 FK_{21}	16.9	X	311.11576	62.73787	143.71857	3.17431	0.0497331	0.18269796	3.0759569	21	1 21.8	21.2
458587 2011 FA_{22}	15.8	X	119.47193	273.74599	72.96559	10.68260	0.0861397	0.17387026	3.1792097	21	—	—
458588 2011 FQ_{24}	18.0	X	262.63530	1.43240	177.84954	22.84815	0.0553208	0.35412164	1.9786443	21	—	—
458589 2011 FZ_{25}	16.0	X	255.24818	213.12552	76.89700	12.09696	0.0840364	0.18602840	3.0391342	21	2 27.8	20.7
458590 2011 FB_{27}	16.4	X	286.76381	176.41147	150.22151	14.17700	0.1858348	0.20224648	2.8744102	21	5 3.9	20.7
458591 2011 FB_{28}	16.8	X	355.96493	298.66653	226.98673	5.61055	0.2770850	0.18776992	3.0203136	21	—	—
458592 2011 FL_{28}	15.6	X	324.15105	220.30070	10.93734	22.93066	0.2110472	0.18854957	3.0119818	21	2 24.7	19.8
458593 2011 FG_{35}	16.4	X	331.61340	104.26250	59.49969	4.76335	0.0928806	0.17742258	3.1366312	21	—	—
458594 2011 FH_{35}	16.6	X	321.77007	147.43950	53.16536	1.85933	0.1777691	0.18485409	3.0519916	21	1 10.1	20.7
458595 2011 FC_{36}	16.2	X	47.18350	44.84979	102.99301	6.98407	0.1454953	0.19570768	2.9380835	21	3 28.7	19.7
458596 2011 FA_{41}	16.0	X	355.19064	183.51269	2.28694	19.51630	0.1987067	0.18808738	3.0169141	21	2 15.2	19.6
458597 2011 FU_{41}	16.2	X	265.81773	159.53722	72.76043	11.67157	0.1712855	0.17628126	3.1501553	21	—	—
458598 2011 FL_{42}	15.9	X	26.70566	43.03322	82.34655	10.66879	0.0392294	0.18454922	3.0553519	21	1 22.9	20.1
458599 2011 FU_{42}	15.8	X	357.53366	100.87933	20.29421	16.19538	0.1997206	0.17733665	3.1376443	21	—	—
458600 2011 FJ_{43}	16.7	X	37.43076	292.31765	167.41962	15.69229	0.2485989	0.18601295	3.0393025	21	1 6.3	19.8
458601 2011 FP_{43}	16.0	X	66.71125	20.78629	66.51843	10.94858	0.0090624	0.18358146	3.0660801	21	1 27.6	20.4
458602 2011 FR_{43}	16.2	X	343.81456	137.23637	30.12628	17.03293	0.1183589	0.18341202	3.0679682	21	1 9.9	20.5
458603 2011 FH_{44}	16.4	X	219.25234	161.94222	182.46462	11.84057	0.0505261	0.19549035	2.9402607	21	3 22.0	20.7
458604 2011 FD_{45}	16.1	X	187.01237	292.60959	10.58832	8.63625	0.0910991	0.17431388	3.1738135	21	1 3.7	21.1
458605 2011 FZ_{46}	16.7	X	278.52659	50.40865	188.75523	0.68992	0.1311242	0.17604605	3.1529605	21	1 14.6	21.5
458606 2011 FF_{50}	16.4	X	126.21469	349.80583	352.04553	10.75439	0.0511352	0.16861252	3.2449612	21	—	—
458607 2011 FF_{53}	17.3	X	15.89326	357.92141	155.17732	1.48652	0.2105840	0.19131112	2.9829267	21	1 31.7	20.2
458608 2011 FW_{53}	16.4	X	228.50908	108.36229	161.72363	4.75421	0.0914096	0.18002041	3.1063822	21	1 3.3	21.3
458609 2011 FC_{57}	16.8	X	350.12248	260.55607	7.12396	14.96291	0.1236497	0.20595920	2.8397618	21	5 20.3	20.4
458610 2011 FU_{57}	16.3	X	45.95807	70.53787	357.67308	11.69004	0.1407262	0.17491301	3.1665618	21	—	—
458611 2011 FZ_{58}	16.7	X	18.07485	240.09403	299.61113	1.09509	0.0386599	0.19334162	2.9620052	21	3 16.4	20.7
458612 2011 FX_{60}	16.7	X	27.45345	300.66024	180.36511	2.35385	0.1773677	0.18515416	3.0486933	21	1 14.7	20.0
458613 2011 FZ_{62}	16.1	X	318.23372	25.32263	142.92635	16.63863	0.0799160	0.18046552	3.1012722	21	—	—
458614 2011 FZ_{65}	16.7	X	38.40302	214.84075	269.02616	3.67424	0.1581523	0.19026464	2.9938543	21	2 5.7	19.9
458615 2011 FF_{67}	16.6	X	350.61448	62.31282	42.93455	10.27816	0.2033359	0.17537238	3.1610298	21	—	—
458616 2011 FH_{69}	16.4	X	18.90807	10.29605	105.32400	13.23559	0.1205637	0.18112959	3.0936875	21	—	—
458617 2011 FD_{74}	16.5	X	287.73789	195.00096	6.15528	2.84097	0.1254727	0.17835972	3.1256345	21	—	—
458618 2011 FR_{83}	17.1	X	0.04107	91.91152	26.87288	13.33049	0.2775612	0.18061873	3.0995182	21	—	—
458619 2011 FX_{83}	15.8	X	220.58438	201.53919	102.51451	9.90355	0.0752456	0.17733160	3.1377040	21	2 6.6	20.6
458620 2011 FP_{84}	15.9	X	24.77419	358.07975	113.84872	11.91676	0.0731402	0.18213746	3.0822642	21	1 2.4	19.9
458621 2011 FJ_{85}	16.2	X	104.88395	276.94511	81.19012	10.97444	0.0167318	0.17059929	3.2197185	21	—	—
458622 2011 FG_{88}	16.6	X	356.36698	121.82993	4.03679	16.09786	0.1755044	0.17898121	3.1183947	21	—	—
458623 2011 FP_{94}	17.0	X	6.40334	5.01195	190.02605	9.90638	0.0380158	0.19612421	2.9339221	21	3 19.2	20.8
458624 2011 FZ_{131}	16.2	X	333.55359	134.51305	359.47147	16.62165	0.2002023	0.17509505	3.1643667	21	—	—
458625 2011 FB_{132}	15.4	X	278.73575	304.53516	280.93843	9.31100	0.2000068	0.17683464	3.1435798	21	—	—
458626 2011 FH_{133}	16.8	X	320.29894	185.13408	351.00341	9.94569	0.0402049	0.18242514	3.0790230	21	—	—
458627 2011 FM_{133}	16.7	X	278.79397	268.86707	345.35001	9.63836	0.0749360	0.18975030	2.9992620	21	2 7.9	21.0
458628 2011 FP_{138}	16.9	X	52.54793	247.88510	202.29638	1.43533	0.0820468	0.18460700	3.0547144	21	1 14.8	20.9
458629 2011 FT_{141}	16.4	X	358.46302	163.54980	351.10457	17.40234	0.2285456	0.18440955	3.0568945	21	1 2.9	20.2
458630 2011 FO_{142}	16.3	X	32.10348	339.69827	221.16779	6.64789	0.1561696	0.20036075	2.8924173	21	5 10.6	19.4
458631 2011 FH_{143}	16.6	X	319.29182	349.67112	190.38613	10.69609	0.1672818	0.17886927	3.1196957	21	—	—
458632 2011 FR_{144}	16.2	X	354.72638	91.81925	79.64278	11.73090	0.1569055	0.18319923	3.0703434	21	1 26.5	20.0
458633 2011 FR_{145}	15.7	X	295.10524	243.69858	331.12178	15.46433	0.1860405	0.17711707	3.1402371	21	—	—
458634 2011 FX_{146}	15.6	X	272.56926	257.38122	309.24806	9.73804	0.1393625	0.17176757	3.2051026	21	—	—
458635 2011 FV_{152}	18.0	X	71.69171	229.65113	202.45486	20.49335	0.1074862	0.37038540	1.9202900	21	—	—
458636 2011 FY_{152}	17.9	X	3.19884	78.93251	105.54677	24.12198	0.0813391	0.38119160	1.8838248	21	1 13.4	19.3
458637 2011 FB_{156}	15.8	X	269.66783	235.04177	10.28861	17.42740	0.2500264	0.18055885	3.1002035	21	1 4.6	21.3
458638 2011 FR_{156}	16.0	X	285.70265	119.37355	131.85860	13.41930	0.2418098	0.18023322	3.1039365	21	1 23.0	20.9
458639 2011 GN_{9}	16.0	X	218.29316	134.79149	171.90489	11.99458	0.1221478	0.17341156	3.1848136	21	2 3.6	21.2
458640 2011 GV_{13}	16.4	X	333.63939	215.14604	344.17481	7.02612	0.1807748	0.18460109	3.0547796	21	1 25.5	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458641 2011 GQ_{23}	16.1	X	267.87765	342.74108	260.00073	6.22009	0.1198680	0.17685507	3.1433377	21	1 8.5	20.9
458642 2011 GH_{24}	16.5	X	309.36014	172.06742	357.87947	13.48717	0.1346989	0.17250515	3.1959601	21	—	—
458643 2011 GH_{35}	16.7	X	49.77667	264.88963	349.25617	12.98825	0.2102030	0.21874476	2.7279995	21	9 4.7	19.9
458644 2011 GN_{35}	16.1	X	305.73357	225.57833	302.50370	4.22513	0.1394463	0.17318275	3.1876182	21	—	—
458645 2011 GW_{36}	17.9	X	326.46469	207.40864	8.08448	19.26490	0.0560894	0.37908520	1.8907967	21	1 15.7	20.3
458646 2011 GM_{53}	15.9	X	48.58118	34.47336	88.67393	17.05245	0.0943924	0.18818050	3.0159188	21	2 26.5	20.0
458647 2011 GZ_{55}	15.7	X	32.16936	35.49128	111.11682	13.65506	0.0376473	0.18707261	3.0278144	21	2 27.3	19.9
458648 2011 GX_{56}	16.3	X	198.17083	157.14386	177.03058	11.39614	0.0485502	0.18315769	3.0708077	21	2 14.5	21.0
458649 2011 GP_{57}	16.5	X	326.31881	119.89121	46.40484	10.51020	0.1565450	0.17600572	3.1534421	21	—	—
458650 2011 GS_{57}	16.6	X	345.81673	0.22406	181.17064	11.34883	0.0876661	0.18317738	3.0705876	21	1 29.2	20.8
458651 2011 GC_{58}	16.0	X	3.79801	87.72213	44.78404	22.17832	0.2404476	0.17929540	3.1147506	21	—	—
458652 2011 GE_{58}	16.8	X	300.87268	94.20605	146.14173	4.25648	0.1771136	0.18246968	3.0785219	21	2 1.9	21.3
458653 2011 GZ_{59}	16.3	X	257.93131	129.79877	99.26313	9.37870	0.2132531	0.16854143	3.2458736	21	—	—
458654 2011 GF_{64}	16.5	X	353.08589	84.02567	110.91966	10.34159	0.1621047	0.19000107	2.9966224	21	2 21.7	20.0
458655 2011 GH_{67}	16.4	X	334.40482	105.38253	49.70370	26.24626	0.2999897	0.17939775	3.1135659	21	—	—
458656 2011 GB_{68}	16.3	X	310.97358	132.66003	93.04094	14.05617	0.2187125	0.18208949	3.0828055	21	1 22.8	20.8
458657 2011 GO_{68}	15.8	X	272.38158	137.72657	92.39016	29.70261	0.2076422	0.17355029	3.1831162	21	—	—
458658 2011 GF_{73}	15.5	X	22.89894	48.08814	31.01472	26.70040	0.3074496	0.17282009	3.1920761	21	—	—
458659 2011 GQ_{75}	17.0	X	353.10954	43.28902	168.10921	10.74702	0.1474189	0.19196010	2.9761997	21	3 14.3	20.5
458660 2011 GR_{76}	15.8	X	266.35547	211.22688	83.31687	10.58048	0.0333650	0.19067391	2.9895687	21	3 23.0	20.2
458661 2011 GS_{76}	16.1	X	47.67144	340.81265	116.12881	10.72051	0.0450296	0.17719955	3.1392626	21	1 16.4	20.1
458662 2011 GO_{78}	15.3	X	215.78082	190.53295	94.41434	30.70386	0.1782760	0.17297169	3.1902106	21	1 7.9	20.7
458663 2011 GH_{79}	16.4	X	345.28633	40.03032	103.67416	11.42906	0.0975356	0.17584285	3.1553890	21	—	—
458664 2011 GT_{81}	16.7	X	313.54441	104.11722	121.03415	2.61895	0.1335142	0.17979392	3.1089904	21	2 5.7	20.8
458665 2011 GV_{82}	16.5	X	311.39607	73.48950	162.13961	8.81851	0.0788213	0.18645145	3.0345354	21	2 21.6	20.7
458666 2011 GW_{83}	15.5	X	193.50473	185.30591	128.10166	10.21924	0.0580079	0.17492694	3.1663938	21	1 19.4	20.2
458667 2011 GV_{85}	16.6	X	1.98319	124.00323	8.52367	0.29185	0.1402572	0.17840434	3.1251133	21	—	—
458668 2011 GG_{86}	16.3	X	263.22795	74.03440	154.56645	5.84446	0.0718619	0.17910513	3.1169562	21	—	—
458669 2011 GJ_{86}	16.4	X	266.86675	219.98635	11.56671	9.47172	0.1939580	0.17707691	3.1407118	21	—	—
458670 2011 GY_{87}	16.2	X	279.88154	110.64050	118.07230	8.84680	0.1571853	0.17841436	3.1249963	21	—	—
458671 2011 HH_{3}	16.1	X	190.42884	229.73723	101.54963	10.20903	0.0499368	0.17839426	3.1252311	21	2 7.2	20.8
458672 2011 HK_{3}	16.2	X	36.82750	338.56008	142.73939	10.08541	0.0667474	0.18061072	3.0996099	21	1 30.9	20.2
458673 2011 HZ_{8}	15.8	X	340.94499	76.25581	56.70762	14.44695	0.1198879	0.17092252	3.2156580	21	—	—
458674 2011 HN_{11}	15.9	X	13.24826	80.30035	86.33365	14.25195	0.1183594	0.18417757	3.0594608	21	2 26.8	19.8
458675 2011 HJ_{17}	16.1	X	346.44574	60.13814	80.25064	16.97643	0.1894874	0.17799160	3.1299427	21	—	—
458676 2011 HL_{18}	16.5	X	18.99419	34.66380	78.35937	10.62549	0.1708071	0.17690727	3.1427193	21	—	—
458677 2011 HG_{29}	16.1	X	291.06974	185.55776	62.68334	10.03955	0.1744562	0.18041141	3.1018923	21	2 4.7	20.9
458678 2011 HC_{34}	16.3	X	255.25809	229.22731	12.23434	11.02940	0.0831461	0.17404688	3.1770586	21	—	—
458679 2011 HA_{36}	16.2	X	351.09181	320.02454	197.86592	7.73742	0.0226717	0.17166824	3.2063389	21	1 17.1	20.7
458680 2011 HD_{38}	15.9	X	9.21105	101.76457	87.65442	12.52024	0.0738458	0.18718377	3.0266155	21	3 23.9	20.0
458681 2011 HJ_{38}	16.2	X	314.20239	64.92309	155.73590	10.70111	0.1683054	0.17801363	3.1296844	21	1 26.3	20.5
458682 2011 HY_{38}	16.3	X	320.31250	78.44106	147.20329	8.83703	0.1842114	0.18339236	3.0681875	21	2 6.4	20.3
458683 2011 HD_{40}	16.2	X	359.83878	46.34168	71.73954	14.25044	0.1415020	0.17259932	3.1947975	21	—	—
458684 2011 HK_{40}	16.1	X	240.63550	133.44192	104.71700	8.88415	0.0258831	0.16786075	3.2546424	21	—	—
458685 2011 HX_{44}	15.9	X	19.95439	78.90547	76.87252	12.34723	0.0752440	0.18199431	3.0838803	21	2 24.5	20.1
458686 2011 HV_{48}	16.5	X	333.54292	40.37939	159.05222	10.99672	0.0411963	0.18105689	3.0945156	21	2 11.1	20.8
458687 2011 HE_{49}	16.3	X	23.30662	87.22458	60.76022	12.14323	0.0753818	0.18250314	3.0781456	21	2 19.6	20.4
458688 2011 HS_{50}	16.3	X	316.66052	88.18063	105.44813	11.41517	0.0576078	0.17424173	3.1746896	21	1 14.3	20.8
458689 2011 HL_{54}	16.4	X	283.99467	88.47617	165.10944	10.87183	0.0800682	0.17872784	3.1213412	21	2 10.8	21.0
458690 2011 HK_{56}	15.8	X	264.72158	198.98381	84.39094	13.87502	0.0669491	0.18177804	3.0863259	21	3 5.4	20.5
458691 2011 HV_{56}	15.7	X	229.63524	193.40512	106.88232	13.63515	0.1119762	0.17560441	3.1582447	21	2 10.5	20.7
458692 2011 HG_{57}	16.4	X	329.56790	61.71170	144.74427	11.89457	0.1435248	0.18090851	3.0962074	21	2 1.5	20.5
458693 2011 HU_{57}	16.6	X	349.62559	25.87503	154.63468	14.97165	0.1611300	0.18078138	3.0976588	21	1 26.7	20.4
458694 2011 HY_{58}	15.5	X	243.53123	159.10409	104.13174	11.79818	0.0241788	0.17250246	3.1959932	21	1 16.4	20.0
458695 2011 HD_{61}	16.3	X	151.65595	172.72686	159.65218	9.99399	0.0380588	0.16890770	3.2411795	21	—	—
458696 2011 HX_{63}	17.4	X	10.81968	311.95209	204.38147	5.16052	0.1951518	0.18768936	3.0211777	21	1 26.6	20.6
458697 2011 HT_{65}	16.5	X	319.32545	32.07544	155.55193	11.00811	0.1703565	0.17720776	3.1391656	21	—	—
458698 2011 HX_{65}	16.3	X	316.63747	347.95296	168.75561	4.64580	0.1103800	0.17204885	3.2016084	21	—	—
458699 2011 HA_{66}	16.7	X	322.03539	18.46780	164.65018	0.81656	0.0922103	0.17889129	3.1194396	21	1 2.4	21.0
458700 2011 HK_{67}	15.9	X	329.46246	12.22513	166.24832	15.40004	0.1209707	0.17313178	3.1882437	21	1 3.2	20.5
458701 2011 HZ_{71}	16.3	X	328.41277	161.06661	60.63760	11.95659	0.1469616	0.18348398	3.0671660	21	2 24.3	20.5
458702 2011 HT_{72}	16.4	X	304.74531	66.39351	193.76230	15.10913	0.2787226	0.18232975	3.0800968	21	2 13.3	21.2
458703 2011 HU_{73}	15.8	X	155.79329	146.76558	104.21019	8.52557	0.1345782	0.14286710	3.6239420	21	12 2.2	21.6
458704 2011 HA_{76}	16.4	X	344.31126	109.25044	66.99231	27.07702	0.2462482	0.18026221	3.1036036	21	—	—
458705 2011 HH_{83}	15.9	X	218.09713	332.17930	286.42066	6.15579	0.3856263	0.15850150	3.3815343	21	—	—
458706 2011 HH_{84}	15.3	X	333.55134	76.74302	110.26769	22.75731	0.0899627	0.17629413	3.1500019	21	1 23.1	19.6
458707 2011 HB_{85}	17.1	X	0.74403	308.57644	209.53501	10.83161	0.2197595	0.19066205	2.9896926	21	1 5.7	20.7
458708 2011 HK_{85}	15.8	X	187.93820	240.81194	108.37709	13.19954	0.0799148	0.17681441	3.1438196	21	2 28.9	20.7
458709 2011 HM_{86}	16.3	X	197.65748	270.41718	88.46032	10.89848	0.1248375	0.18752773	3.0229134	21	3 22.9	21.3
458710 2011 HZ_{95}	16.6	X	269.41970	18.50877	221.87982	0.38160	0.1182611	0.17680674	3.1439105	21	1 8.1	21.3
458711 2011 HW_{102}	15.9	X	21.23589	5.17698	134.51858	11.64419	0.1431912	0.18228227	3.0806316	21	1 29.8	19.4
458712 2011 JV	16.5	X	312.80354	90.33935	126.56163	18.37641	0.2758097	0.18086591	3.0966937	21	1 6.4	21.0
458713 2011 JB_{1}	15.3	X	310.63484	116.56599	104.69405	23.35745	0.0961010	0.18010509	3.1054084	21	2 4.1	19.8
458714 2011 JM_{2}	17.7	X	321.58950	47.33518	109.50859	25.35825	0.0902116	0.36198329	1.9498911	21	—	—
458715 2011 JG_{7}	15.9	X	301.75756	123.74114	120.39054	17.72721	0.1938920	0.17990405	3.1077215	21	2 6.9	20.4
458716 2011 JD_{9}	16.7	X	323.52601	91.69648	89.57096	14.25041	0.2514915	0.17548618	3.1596630	21	—	—
458717 2011 JP_{14}	16.1	X	8.18063	328.00247	170.17139	17.49913	0.1686995	0.17487985	3.1669621	21	1 4.9	20.2
458718 2011 JX_{14}	15.7	X	52.90969	335.45401	139.77713	17.94449	0.0886950	0.17724957	3.1386720	21	2 18.8	19.6
458719 2011 JL_{17}	16.1	X	298.29105	148.10880	98.18435	11.51208	0.0774568	0.18292136	3.0734520	21	2 23.4	20.6
458720 2011 JQ_{29}	18.2	X	275.71720	97.40616	151.01960	24.17111	0.1045526	0.36787572	1.9290136	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458721 2011 KV_1	15.9	X	342.30180	77.04378	139.64252	14.53308	0.1558199	0.18458308	3.0549783	21	3 5.6	19.7
458722 2011 KK_{12}	17.2	X	212.58851	225.82114	122.22112	27.36133	0.1039070	0.37586197	1.9015911	21	2 26.9	19.9
458723 2011 KQ_{12}	19.4	X	48.60504	142.88871	83.65719	19.28241	0.5029942	0.40461585	1.8103982	21	10 7.3	22.4
458724 2011 KB_{14}	16.0	X	106.88682	342.37707	74.78864	10.40841	0.0804678	0.17504192	3.1650070	21	2 22.5	20.6
458725 2011 KW_{18}	17.8	X	206.41610	149.52716	131.19427	24.43120	0.0526334	0.35637425	1.9702977	21	—	—
458726 2011 KM_{21}	15.5	X	337.51866	74.93516	113.84974	18.85731	0.0790448	0.17694247	3.1423025	21	2 1.5	19.7
458727 2011 KM_{23}	16.7	X	317.23266	65.95011	169.81330	6.75819	0.2472038	0.18188977	3.0850617	21	2 5.2	20.9
458728 2011 LH_4	15.8	X	138.32830	97.45798	222.81564	14.68937	0.1220756	0.15314469	3.4599361	21	—	—
458729 2011 LO_4	16.4	X	296.95413	73.83361	193.00095	13.27928	0.2408384	0.17157220	3.2075352	21	2 19.8	21.3
458730 2011 LA_{20}	13.7	X	274.56665	102.78976	257.17803	10.26311	0.0549945	0.08144153	5.2711507	21	6 18.0	20.6
458731 2011 LR_{23}	16.3	X	194.53007	298.64928	84.10774	11.20623	0.1164374	0.18757755	3.0223782	21	4 16.9	21.2
458732 2011 MD_5	17.9	X	149.66318	224.81139	170.34100	10.55651	0.6026099	0.25120729	2.4876039	21	4 9.9	23.2
458733 2011 NN_2	17.6	X	215.76950	350.31906	290.94591	13.50936	0.0727194	0.34935961	1.9965840	21	—	—
458734 2011 OC_3	17.7	X	77.53855	155.20782	132.61378	6.52693	0.2291252	0.31441109	2.1419244	21	12 4.5	20.9
458735 2011 OA_{39}	14.1	X	300.39463	68.06514	256.05311	9.50258	0.0607761	0.08400328	5.1634330	21	6 6.5	20.7
458736 2011 OL_{44}	17.9	X	237.53590	215.82027	118.06591	3.85924	0.2282794	0.26896141	2.3768917	21	3 13.4	21.9
458737 2011 OS_{56}	18.1	X	330.06232	223.62255	123.77070	7.20248	0.1788687	0.29514161	2.2341676	21	8 15.3	19.4
458738 2011 QB_{18}	18.3	X	309.69548	236.79220	117.36840	2.85406	0.2609692	0.28783309	2.2718286	21	6 23.6	20.4
458739 2011 QE_{27}	17.9	X	342.31929	37.71227	327.46447	5.53950	0.2086029	0.30111318	2.2045310	21	10 18.4	19.2
458740 2011 QF_{27}	17.6	X	288.75156	12.97303	357.47897	3.13565	0.2470306	0.28689713	2.2767670	21	6 16.6	20.2
458741 2011 QH_{27}	18.6	X	309.42054	264.04312	126.60626	3.13688	0.1572008	0.29492474	2.2352627	21	9 14.2	20.2
458742 2011 QZ_{32}	17.6	X	225.89013	282.43659	143.57216	6.67826	0.0894259	0.28104096	2.3082861	21	7 7.7	20.7
458743 2011 QM_{34}	17.9	X	254.95865	73.40049	330.37942	5.67610	0.1942118	0.28264910	2.2995224	21	6 30.0	21.1
458744 2011 QE_{35}	18.1	X	298.55699	135.88197	218.08603	6.09653	0.1279120	0.28704937	2.2759619	21	6 27.9	20.6
458745 2011 QY_{37}	18.4	X	151.19942	281.35053	135.80686	7.57106	0.5145226	0.25152096	2.4855353	21	5 2.8	23.6
458746 2011 QB_{42}	17.4	X	250.41312	312.46630	1.82300	4.91082	0.2016865	0.26640061	2.3920995	21	3 1.2	21.2
458747 2011 QP_{47}	13.6	X	307.28559	15.20717	304.65091	11.15277	0.0802770	0.08066056	5.3051200	21	6 7.5	20.4
458748 2011 QJ_{72}	17.8	X	284.85365	19.90879	351.24055	3.88573	0.2312919	0.28570807	2.2830795	21	6 14.7	20.8
458749 2011 QP_{74}	13.7	X	350.87758	324.18535	326.82878	18.28358	0.0692625	0.08437317	5.1483311	21	7 5.5	20.3
458750 2011 QK_{91}	18.4	X	227.24762	90.46761	286.73643	1.41592	0.2098209	0.26854810	2.3793299	21	4 26.3	22.1
458751 2011 QB_{92}	18.5	X	246.02104	122.54654	296.53268	4.68488	0.1650013	0.28439922	2.2900789	21	7 14.1	21.7
458752 2011 QS_{95}	15.8	X	280.68367	293.89420	6.78820	25.50512	0.3152666	0.17439248	3.1728598	21	3 15.3	21.0
458753 2011 QW_{96}	19.1	X	221.05581	165.13206	242.09141	1.73838	0.1700591	0.27459776	2.3442543	21	5 31.9	22.7
458754 2011 RF_4	18.0	X	321.57957	296.53510	14.39848	7.17213	0.1875513	0.28117502	2.3075524	21	5 20.0	20.3
458755 2011 RU_{10}	17.9	X	313.88203	243.98517	126.30941	3.56594	0.1981669	0.29033387	2.2587643	21	8 12.2	19.6
458756 2011 RQ_{11}	17.9	X	221.62387	56.39532	306.36857	1.22743	0.2401046	0.26369971	2.4084055	21	4 2.9	22.1
458757 2011 RX_{16}	18.2	X	339.43548	175.54320	161.84472	6.05119	0.2247567	0.29195807	2.2503793	21	8 16.7	19.1
458758 2011 SU	18.9	X	274.88822	152.12250	225.54659	1.51329	0.2087964	0.28246453	2.3005240	21	6 14.9	22.0
458759 2011 SP_6	18.5	X	260.31206	85.76684	339.95797	4.81088	0.0968926	0.29089319	2.2558680	21	8 22.6	21.2
458760 2011 SD_{10}	16.3	X	254.83956	187.78641	184.49895	22.74500	0.1641556	0.17543134	3.1603215	21	5 27.2	21.5
458761 2011 SV_{10}	18.9	X	271.20279	83.18292	328.20661	2.50228	0.2135252	0.28703702	2.2760272	21	7 28.3	21.5
458762 2011 SJ_{33}	17.7	X	300.39911	115.33596	242.98882	4.35302	0.1748087	0.28719612	2.2751865	21	6 29.5	20.0
458763 2011 SV_{33}	18.3	X	262.28865	89.40964	318.33509	1.49551	0.1653412	0.28540353	2.2847034	21	7 18.3	21.1
458764 2011 SY_{34}	17.7	X	190.89151	58.34391	20.29489	3.28477	0.1779002	0.26852055	2.3794926	21	6 13.0	21.6
458765 2011 SM_{49}	18.8	X	241.69285	142.36030	300.66956	1.18133	0.1710720	0.28707901	2.2758052	21	8 10.6	21.9
458766 2011 SR_{55}	18.4	X	199.40447	297.73351	140.14695	4.82578	0.1400889	0.27144189	2.3623893	21	6 21.4	22.0
458767 2011 SH_{57}	18.2	X	241.15933	333.47780	71.23199	2.61477	0.1817931	0.27092327	2.3654032	21	6 17.0	21.5
458768 2011 SK_{57}	18.3	X	299.39809	348.11194	24.64436	0.92876	0.2178411	0.28152276	2.3056518	21	7 12.9	20.7
458769 2011 SF_{64}	18.2	X	294.33612	190.54538	179.49881	2.26609	0.2239662	0.28559468	2.2836838	21	6 28.6	20.6
458770 2011 SH_{66}	17.7	X	42.50084	54.53075	221.14647	20.97343	0.0671785	0.29108012	2.2549021	21	8 28.7	20.8
458771 2011 SL_{67}	17.5	X	251.59750	7.63728	345.00430	6.56313	0.2278727	0.27186865	2.3599164	21	4 13.5	21.4
458772 2011 SP_{67}	18.1	X	10.98270	350.04278	9.26521	6.14651	0.2080208	0.30426695	2.1892710	21	12 14.5	20.2
458773 2011 ST_{84}	17.8	X	346.12470	219.38171	77.48289	3.17509	0.1866379	0.27991731	2.3144593	21	6 23.1	19.4
458774 2011 SJ_{87}	17.4	X	289.10430	326.55916	3.40206	7.43239	0.1396029	0.27351332	2.3504466	21	5 5.3	20.6
458775 2011 SK_{97}	17.7	X	322.36228	233.17196	113.36110	7.41229	0.2533489	0.29031248	2.2588752	21	7 10.5	19.1
458776 2011 SP_{99}	17.7	X	226.78421	228.51102	155.26268	2.00171	0.1851665	0.26808720	2.3820562	21	5 6.8	21.3
458777 2011 SR_{103}	18.0	X	314.72414	338.17121	26.54425	4.79075	0.1917373	0.28953989	2.2628918	21	8 7.6	19.7
458778 2011 SN_{105}	18.3	X	350.92304	50.71049	301.80539	4.04417	0.1841965	0.29474445	2.2361742	21	10 14.7	19.8
458779 2011 SS_{108}	18.1	X	350.18155	1.30203	355.87595	6.94840	0.1560158	0.29979653	2.2109808	21	10 19.2	19.8
458780 2011 SU_{114}	18.1	X	262.77445	22.66601	12.80883	6.89890	0.2372471	0.27977637	2.3152365	21	6 21.3	21.5
458781 2011 SY_{116}	17.8	X	276.96192	216.56057	168.60456	2.31974	0.2153228	0.27903505	2.3193353	21	6 27.2	20.6
458782 2011 SD_{119}	17.6	X	254.52113	209.02308	202.88186	4.25243	0.2378359	0.27966328	2.3158606	21	7 4.2	21.1
458783 2011 SE_{119}	17.8	X	324.64640	166.19275	190.91885	7.48369	0.1751710	0.28932329	2.2640210	21	8 14.9	19.5
458784 2011 SQ_{125}	18.2	X	273.65083	8.23366	40.88894	3.60756	0.1595519	0.28549748	2.2842021	21	8 7.8	20.8
458785 2011 SH_{128}	18.1	X	260.51780	215.18404	197.04058	7.46389	0.1171724	0.28077440	2.3097468	21	7 27.4	21.1
458786 2011 SB_{133}	17.6	X	199.04746	303.39239	121.36165	2.43719	0.1716498	0.26710823	2.3878729	21	6 3.3	21.4
458787 2011 SC_{133}	17.3	X	283.81999	276.85539	54.87985	4.87309	0.1040558	0.27063064	2.3671080	21	5 9.3	20.1
458788 2011 SE_{135}	17.8	X	268.63675	94.44138	232.90689	0.56411	0.1967183	0.26843998	2.3799688	21	4 2.7	21.4
458789 2011 SL_{135}	18.5	X	252.79895	227.74878	163.25297	3.10292	0.2331095	0.27713571	2.3299203	21	6 5.8	21.9
458790 2011 SM_{140}	18.0	X	228.42506	181.92528	192.56876	2.27851	0.1768688	0.26593228	2.3949071	21	4 26.6	21.6
458791 2011 SY_{160}	18.5	X	284.56517	114.92415	290.21272	3.02847	0.2203369	0.28758944	2.2731116	21	8 5.9	20.7
458792 2011 SV_{163}	18.1	X	285.99713	1.42711	45.12847	4.90763	0.1251399	0.28934874	2.2638882	21	8 31.5	20.5
458793 2011 SS_{167}	17.6	X	294.62275	227.98601	82.80882	2.42484	0.1985381	0.27056159	2.3675107	21	4 10.9	21.9
458794 2011 SW_{170}	18.5	X	222.07645	93.06485	343.00930	1.43394	0.1545415	0.27435312	2.3456477	21	7 11.9	22.0
458795 2011 SJ_{171}	18.1	X	187.74270	295.50101	230.38505	4.65657	0.0860329	0.29089893	2.2558383	21	10 8.5	21.2
458796 2011 SL_{171}	18.7	X	270.55482	113.54170	293.57971	1.94236	0.1503012	0.28196026	2.3032661	21	7 30.8	21.4
458797 2011 SH_{175}	17.9	X	268.00613	236.43773	162.59732	4.18618	0.1184802	0.28335598	2.2956965	21	7 20.1	20.7
458798 2011 SG_{184}	18.1	X	259.01858	254.22019	69.59380	3.32330	0.1808262	0.26174127	2.4204043	21	3 23.7	21.8
458799 2011 SU_{189}	18.4	X	279.71803	217.97344	185.89514	6.92075	0.1966988	0.28673564	2.2776217	21	7 30.0	21.1
458800 2011 SV_{189}	18.6	X	267.01849	202.16097	170.94237	0.83829	0.2301685	0.27762078	2.3272055	21	5 27.6	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458801 2011 SM_{201}	18.7	X	243.35665	47.87681	358.89000	2.39920	0.2228288	0.27858723	2.3218201	21	6 17.9	22.2
458802 2011 SW_{202}	18.2	X	271.41174	32.31862	356.95879	2.23071	0.2230646	0.28490013	2.2873939	21	6 24.9	21.3
458803 2011 SR_{205}	18.1	X	303.28354	220.28670	114.36591	1.73392	0.2062798	0.27922968	2.3182574	21	5 24.2	20.7
458804 2011 ST_{207}	18.1	X	248.62598	253.05091	94.38369	2.32857	0.2016628	0.26572653	2.3961432	21	4 10.2	21.8
458805 2011 SU_{219}	18.2	X	325.69697	170.12550	203.62830	5.39452	0.1331351	0.29184652	2.2509527	21	9 20.6	20.1
458806 2011 SN_{221}	18.0	X	316.40037	29.69525	14.03614	6.75143	0.1424700	0.29778437	2.2209296	21	10 21.2	19.7
458807 2011 SB_{225}	18.0	X	120.18927	11.91129	234.93803	6.10373	0.0738304	0.29766809	2.2215079	21	11 10.5	21.0
458808 2011 SD_{231}	17.9	X	9.77411	41.92834	319.59919	5.03074	0.1898733	0.30378485	2.1915866	21	12 12.8	19.9
458809 2011 SX_{232}	18.3	X	277.93274	158.09436	250.55975	2.99949	0.1430674	0.28570422	2.2831000	21	8 13.5	21.0
458810 2011 SA_{236}	17.4	X	197.37885	128.41302	259.65325	6.98478	0.1765668	0.25779881	2.4450183	21	4 13.2	21.5
458811 2011 SU_{245}	18.2	X	251.45486	1.30331	50.86575	3.90019	0.1781941	0.27938706	2.3173868	21	7 9.6	21.4
458812 2011 SE_{256}	17.7	X	337.60553	212.35714	95.77349	1.79015	0.1773620	0.28052541	2.3111134	21	6 22.9	19.5
458813 2011 SH_{256}	17.9	X	226.10882	297.88060	81.25199	2.28704	0.1875538	0.26519285	2.3993568	21	4 30.2	21.7
458814 2011 SY_{256}	17.5	X	241.83435	106.88811	293.74795	10.11524	0.2444109	0.27398403	2.3477538	21	6 6.3	21.3
458815 2011 SC_{260}	18.4	X	242.06393	33.04646	26.41642	2.52152	0.2015636	0.27660917	2.3328760	21	7 6.2	21.7
458816 2011 SF_{274}	17.8	X	350.64404	198.54060	122.17209	5.85583	0.2004973	0.29101510	2.2552380	21	8 21.5	19.0
458817 2011 TE_{6}	17.4	X	283.01881	288.98524	90.28180	7.56773	0.1863784	0.28447268	2.2896847	21	7 1.9	20.1
458818 2011 TG_{8}	17.6	X	348.24971	159.90930	170.18980	7.67749	0.1797869	0.29104445	2.2550863	21	8 29.2	19.0
458819 2011 TY_{12}	17.7	X	277.84479	177.07724	221.23259	5.03113	0.0873074	0.28643967	2.2791904	21	8 6.8	20.3
458820 2011 TT_{14}	17.4	X	221.87483	311.01094	64.93439	6.84969	0.2150082	0.26637325	2.3922633	21	4 22.6	21.4
458821 2011 UY	18.2	X	314.48727	154.67264	246.57669	4.70351	0.1217416	0.29398477	2.2400248	21	10 12.6	20.3
458822 2011 UB_{1}	18.3	X	299.66080	16.91993	6.89242	6.05189	0.1640236	0.28600738	2.2814864	21	8 12.9	20.6
458823 2011 UH_{2}	18.0	X	332.22465	103.45810	238.71052	5.50346	0.1375911	0.28552533	2.2840536	21	8 9.9	20.0
458824 2011 UF_{6}	18.7	X	213.68494	186.97629	221.17444	2.09455	0.1929101	0.26490256	2.4011094	21	5 25.5	22.7
458825 2011 UR_{8}	18.5	X	283.59582	348.78932	46.17734	6.31024	0.2229382	0.28190312	2.3035773	21	7 21.5	21.2
458826 2011 UD_{10}	18.0	X	275.84477	358.39764	353.55869	3.03735	0.1944124	0.27111353	2.3642964	21	5 12.6	21.3
458827 2011 UB_{14}	17.0	X	328.76729	75.81080	258.78833	6.53727	0.1045201	0.28243271	2.3006968	21	7 24.9	19.4
458828 2011 UV_{17}	17.4	X	284.14356	325.01701	58.02421	6.68899	0.1874569	0.28173693	2.3044831	21	7 9.7	20.1
458829 2011 UB_{22}	16.7	X	294.42649	27.38528	261.66962	6.04943	0.0844164	0.26110011	2.4243650	21	3 25.8	20.0
458830 2011 UQ_{22}	17.7	X	261.84903	23.63875	342.00504	5.23958	0.2035953	0.27315758	2.3524869	21	5 13.3	21.3
458831 2011 UE_{28}	18.1	X	307.62428	71.61695	292.67936	4.36585	0.1896589	0.28299092	2.2976703	21	7 20.0	20.1
458832 2011 UJ_{28}	17.7	X	301.22983	70.16424	285.10395	4.65443	0.1727542	0.27892089	2.3199681	21	6 27.1	19.9
458833 2011 UR_{28}	17.7	X	265.54687	131.94419	260.38921	6.06134	0.1394261	0.27587942	2.3369882	21	7 3.8	20.8
458834 2011 UU_{29}	18.3	X	216.85724	225.60940	200.19913	3.51769	0.2054069	0.26867821	2.3785617	21	6 19.5	22.1
458835 2011 UA_{30}	17.7	X	280.05451	280.92160	67.07671	2.92172	0.2248469	0.27182595	2.3601636	21	5 9.4	20.8
458836 2011 UK_{30}	17.7	X	254.41571	198.26312	212.76168	5.71639	0.1244032	0.27599533	2.3363338	21	7 16.9	20.8
458837 2011 UH_{40}	18.2	X	320.88610	350.86662	17.54987	6.98700	0.1167032	0.28974422	2.2618277	21	9 6.9	20.1
458838 2011 UP_{41}	18.4	X	14.69492	141.34740	208.62809	6.41881	0.1189216	0.30058225	2.2071262	21	11 22.0	20.5
458839 2011 UV_{42}	18.3	X	317.73869	161.44240	214.34148	3.38167	0.1531555	0.29000393	2.2604772	21	9 3.9	20.0
458840 2011 UW_{45}	17.7	X	220.80799	14.60701	37.89967	5.28436	0.1875010	0.27045341	2.3681420	21	6 6.1	21.4
458841 2011 UA_{53}	17.6	X	233.64883	263.28877	125.51257	3.09314	0.1903843	0.26680267	2.3896957	21	5 19.7	21.3
458842 2011 UT_{53}	17.0	X	36.60503	57.68643	235.09513	10.89561	0.1797646	0.28797470	2.2710838	21	10 7.8	19.6
458843 2011 UB_{55}	18.2	X	204.47577	29.27145	40.10645	3.41158	0.2116915	0.26520251	2.3992986	21	6 12.6	22.2
458844 2011 UZ_{56}	17.7	X	346.72673	134.03326	203.77716	9.78665	0.2479526	0.29170280	2.2516920	21	9 8.5	18.8
458845 2011 UV_{59}	17.9	X	310.57033	122.45673	223.96996	3.21488	0.2348041	0.28055344	2.3109594	21	6 18.2	20.0
458846 2011 UR_{65}	17.3	X	225.68347	281.43486	97.20883	4.25909	0.1385049	0.26482419	2.4015831	21	5 2.6	20.9
458847 2011 UC_{67}	17.7	X	246.24502	277.05981	99.17948	3.50356	0.2096775	0.27022938	2.3694507	21	5 13.8	21.4
458848 2011 UV_{70}	17.4	X	142.80579	56.50815	56.14633	6.94948	0.1409248	0.26224434	2.4173079	21	6 9.1	20.9
458849 2011 UX_{74}	18.0	X	275.90840	350.72712	56.13989	5.79773	0.1497339	0.28327948	2.2961097	21	8 10.5	20.7
458850 2011 UH_{75}	17.9	X	289.81262	242.98760	90.99369	2.78982	0.2329831	0.27409648	2.3471116	21	5 1.2	21.0
458851 2011 UC_{76}	16.3	X	15.71431	284.78852	13.95181	9.44802	0.0647898	0.18062704	3.0994232	21	8 22.8	20.4
458852 2011 UR_{80}	18.5	X	208.87834	49.89368	21.59696	1.49361	0.1631647	0.26841653	2.3801074	21	6 21.5	22.2
458853 2011 UW_{80}	18.4	X	259.93330	149.65837	248.18632	0.35050	0.1878128	0.27583121	2.3372604	21	6 27.9	21.5
458854 2011 UK_{83}	18.3	X	250.87898	180.30660	247.76673	5.14609	0.1134353	0.27900570	2.3194980	21	8 6.7	21.3
458855 2011 UK_{84}	17.9	X	255.40214	26.44240	25.10021	6.81128	0.1345930	0.27588447	2.3369596	21	7 21.0	21.1
458856 2011 UH_{85}	17.9	X	4.09755	352.67985	31.41364	7.41756	0.1516173	0.30139832	2.2031403	21	12 30.0	20.2
458857 2011 UT_{87}	17.4	X	207.13704	19.33242	59.73433	6.29261	0.1459907	0.26718694	2.3874039	21	6 30.8	21.0
458858 2011 UX_{94}	18.3	X	283.82499	86.36147	243.69781	0.25446	0.1991348	0.27188139	2.3598427	21	4 22.5	21.5
458859 2011 UY_{95}	18.1	X	254.38059	351.91859	42.58386	1.15085	0.1937751	0.27623866	2.3349616	21	6 16.1	21.2
458860 2011 UA_{100}	18.1	X	254.41081	213.01019	237.77123	3.69573	0.1771146	0.28460660	2.2889663	21	9 3.6	20.9
458861 2011 UF_{101}	18.6	X	318.95398	206.84642	183.86823	6.01769	0.1006426	0.29370162	2.2414643	21	10 8.6	20.5
458862 2011 UP_{101}	17.4	X	271.82289	192.56196	203.77680	7.56593	0.1205193	0.27790037	2.3256443	21	7 19.8	20.4
458863 2011 UX_{115}	18.2	X	287.87237	24.32929	1.34587	7.01927	0.1374890	0.28365443	2.2940859	21	7 30.6	20.8
458864 2011 UW_{116}	17.9	X	176.93911	168.50043	219.44099	11.93420	0.1635386	0.25217975	2.4812046	21	3 25.4	22.0
458865 2011 UG_{119}	18.5	X	231.00743	45.86212	20.09476	1.25885	0.1635269	0.27640393	2.3340308	21	7 6.9	21.8
458866 2011 UZ_{122}	18.6	X	301.42734	168.80848	157.45099	1.45957	0.2051905	0.27840613	2.3228269	21	5 9.4	21.2
458867 2011 UO_{127}	17.2	X	250.64431	283.03578	74.89756	5.69070	0.2630973	0.26623460	2.3930938	21	4 21.6	21.2
458868 2011 UT_{127}	17.4	X	224.90282	286.63013	75.12175	6.94042	0.1413065	0.25735976	2.4477982	21	4 12.0	21.2
458869 2011 UO_{129}	18.2	X	288.45236	122.28336	267.19386	4.16519	0.1426336	0.28460337	2.2889836	21	8 1.6	20.7
458870 2011 UZ_{129}	17.5	X	226.71945	113.15631	304.96453	5.49317	0.1769220	0.27147136	2.3622184	21	6 20.7	21.1
458871 2011 UM_{132}	18.4	X	273.18264	124.39217	279.98981	4.06496	0.1758465	0.28092103	2.3089430	21	7 25.9	21.0
458872 2011 UL_{135}	17.5	X	261.89140	61.58563	295.29135	5.21907	0.1271096	0.27271073	2.3550560	21	5 10.7	20.8
458873 2011 UO_{137}	18.1	X	290.72611	145.93551	214.75612	2.20659	0.1861138	0.27851812	2.3222043	21	6 15.9	20.6
458874 2011 UJ_{138}	17.3	X	226.73291	51.69246	37.95640	7.36933	0.0828232	0.27608131	2.3358487	21	8 15.8	20.5
458875 2011 UG_{139}	18.5	X	332.39837	131.75923	236.92853	4.48436	0.1796241	0.29004121	2.2602835	21	9 24.6	19.9
458876 2011 UC_{146}	18.2	X	204.69631	195.98997	248.19611	4.83960	0.1913761	0.26727008	2.3869088	21	7 2.6	22.1
458877 2011 UB_{151}	17.7	X	224.87673	11.15440	39.20764	3.25810	0.2159200	0.26887773	2.3773849	21	6 5.7	21.4
458878 2011 UG_{152}	17.9	X	311.22113	210.90170	138.52041	1.56126	0.1855318	0.27923209	2.3182441	21	7 3.6	20.2
458879 2011 UM_{153}	18.1	X	335.95997	289.19586	77.19674	6.49000	0.1914245	0.28876053	2.2669616	21	10 7.1	19.6
458880 2011 UG_{161}	17.7	X	208.22676	201.57501	185.74868	0.94574	0.1957990	0.25970780	2.4330221	21	4 24.3	21.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458881 2011 UL_{163}	17.9	X	9.33768	100.13744	249.57666	6.45491	0.1887203	0.29547105	2.2325066	21	11 21.9	20.0
458882 2011 UV_{163}	17.8	X	190.33772	206.65274	238.45745	4.59732	0.1825391	0.26323315	2.4112505	21	6 21.2	21.7
458883 2011 UE_{164}	16.8	X	265.66011	297.26693	90.30439	7.58261	0.1167975	0.27598003	2.3364201	21	6 30.9	19.7
458884 2011 UZ_{164}	17.6	X	296.49481	183.65433	170.66699	5.48626	0.2509758	0.27860792	2.3217052	21	6 4.7	20.5
458885 2011 UU_{166}	17.5	X	241.83627	279.53923	127.81599	8.77565	0.1869926	0.27456173	2.3444594	21	6 21.2	21.1
458886 2011 UU_{173}	17.3	X	229.52539	16.10312	31.16578	8.08474	0.1111657	0.26725732	2.3869848	21	6 13.5	20.9
458887 2011 US_{174}	17.9	X	211.84086	274.52296	140.62510	6.22030	0.1123055	0.26393997	2.4069438	21	6 6.2	21.4
458888 2011 UQ_{175}	17.2	X	265.89933	85.29825	263.40037	5.91017	0.1356606	0.26737213	2.3863014	21	5 3.9	20.6
458889 2011 UH_{177}	18.1	X	331.14438	116.53183	234.97556	6.22175	0.1289127	0.28536786	2.2848937	21	8 23.1	20.3
458890 2011 UM_{178}	17.9	X	345.90729	210.29681	110.38833	3.56686	0.1812337	0.28191021	2.3035387	21	8 6.3	19.2
458891 2011 UG_{179}	17.4	X	192.45818	358.49146	69.20922	8.34897	0.1799700	0.26207750	2.4183337	21	5 31.7	21.3
458892 2011 UQ_{182}	17.0	X	174.26609	99.73002	250.07643	12.88209	0.1320092	0.23859415	2.5745195	21	2 1.4	21.2
458893 2011 UG_{185}	17.5	X	213.67819	295.50194	137.21312	5.99534	0.1375313	0.27102683	2.3648006	21	6 29.3	21.0
458894 2011 UU_{187}	17.4	X	288.06483	268.70279	83.41347	8.30696	0.1571373	0.27611445	2.3356618	21	6 4.8	20.3
458895 2011 UQ_{195}	18.3	X	207.79983	141.95234	320.75213	3.93064	0.1131203	0.27577932	2.3375537	21	8 4.8	21.4
458896 2011 UZ_{198}	17.9	X	256.14009	294.03937	92.90542	2.62670	0.1981458	0.27189904	2.3597406	21	6 7.5	21.2
458897 2011 UV_{201}	18.2	X	148.56826	70.49446	72.59636	3.30027	0.1610459	0.26593882	2.3948678	21	7 28.2	21.8
458898 2011 UT_{202}	18.1	X	286.06158	216.01703	143.60157	1.52241	0.2065589	0.27483771	2.3428896	21	6 4.6	21.1
458899 2011 UW_{202}	18.1	X	212.15931	251.49737	174.31621	1.93359	0.1079287	0.26671506	2.3902190	21	6 20.2	21.5
458900 2011 UT_{203}	18.1	X	232.11575	261.99904	181.41175	1.84353	0.1732972	0.27516140	2.3410519	21	7 30.2	21.5
458901 2011 UZ_{203}	18.4	X	203.31410	26.60104	89.35150	2.14236	0.1344172	0.27497892	2.3420875	21	8 16.8	21.7
458902 2011 UA_{204}	18.3	X	244.85516	217.53744	191.61062	1.91583	0.1838504	0.27253300	2.3560798	21	6 26.7	21.6
458903 2011 US_{204}	18.3	X	179.23159	285.34303	199.42148	2.02556	0.1584579	0.26959868	2.3731446	21	8 1.5	22.1
458904 2011 UP_{205}	17.8	X	232.98931	354.66883	58.37406	6.89453	0.1121112	0.27288842	2.3540335	21	6 26.2	21.0
458905 2011 UE_{230}	18.0	X	228.03970	252.62293	113.71273	2.20526	0.1977863	0.26383651	2.4075730	21	4 15.8	22.0
458906 2011 UW_{234}	17.5	X	134.28087	318.87960	230.85690	22.53219	0.1997046	0.27884343	2.3203978	21	9 6.8	21.8
458907 2011 UL_{236}	18.2	X	241.85098	212.01795	240.63764	3.95972	0.1953210	0.28162392	2.3050996	21	8 18.9	21.5
458908 2011 UF_{239}	18.5	X	306.30080	356.58791	29.39361	3.41608	0.1671152	0.28575195	2.2828458	21	8 28.4	20.4
458909 2011 UY_{239}	18.6	X	211.86829	209.83393	225.79365	4.08511	0.2024781	0.26852386	2.3794731	21	6 27.6	22.4
458910 2011 UJ_{240}	17.6	X	12.82303	278.91052	33.06740	8.57847	0.1698827	0.28882900	2.2666033	21	9 29.1	19.5
458911 2011 UK_{240}	18.1	X	68.47460	268.18075	31.52051	4.66486	0.1763320	0.30150735	2.2026092	21	12 1.9	21.2
458912 2011 UQ_{240}	18.3	X	177.74185	57.23389	41.31578	2.47777	0.1036953	0.26591664	2.3950011	21	6 26.6	21.7
458913 2011 UO_{249}	18.3	X	205.97590	223.83935	222.32965	3.73720	0.1108479	0.26931452	2.3748137	21	7 10.2	21.8
458914 2011 UY_{251}	18.6	X	191.00988	256.30436	124.92875	2.84303	0.2478846	0.25223151	2.4808652	21	4 4.7	23.0
458915 2011 UH_{252}	17.7	X	246.13482	299.41994	86.38651	4.52095	0.2076162	0.26807844	2.3821081	21	5 26.1	21.2
458916 2011 UO_{267}	17.9	X	272.30773	34.48486	337.17926	3.37262	0.1802713	0.27375765	2.3490479	21	6 7.1	21.0
458917 2011 UV_{274}	18.4	X	21.92522	71.59566	257.80221	3.44518	0.0874764	0.29367932	2.2415777	21	10 25.9	20.7
458918 2011 UP_{277}	18.1	X	284.06352	122.06755	270.05342	4.56572	0.1722181	0.28004621	2.3137490	21	7 24.3	20.8
458919 2011 UO_{278}	18.7	X	217.94595	64.25751	355.06750	1.78104	0.1823138	0.26630471	2.3926738	21	6 13.2	22.5
458920 2011 UH_{279}	17.5	X	300.09863	322.11674	46.33468	5.74589	0.2634928	0.28105755	2.3081953	21	6 28.6	19.9
458921 2011 UL_{279}	17.6	X	320.76434	292.66924	48.78711	7.74090	0.1471251	0.27723099	2.3293864	21	7 18.3	19.8
458922 2011 UQ_{280}	18.1	X	228.13588	169.93757	265.16547	4.48194	0.1846991	0.27516751	2.3410172	21	7 13.6	21.7
458923 2011 UD_{281}	18.0	X	268.45824	236.99167	129.49372	6.60835	0.2495713	0.27410034	2.3470896	21	5 19.9	21.5
458924 2011 UD_{282}	18.1	X	166.56783	83.44261	350.74992	2.77298	0.1774491	0.25677053	2.4515416	21	5 15.6	22.1
458925 2011 UC_{283}	17.6	X	263.40053	296.60479	81.22420	5.46767	0.1441574	0.27169665	2.3609123	21	6 10.2	20.7
458926 2011 UE_{283}	17.5	X	236.92792	273.96827	111.76529	3.77648	0.1012690	0.26591055	2.3950376	21	5 26.3	20.7
458927 2011 UO_{283}	17.3	X	111.00072	298.44313	142.33898	4.15072	0.1243815	0.24239051	2.5475672	21	3 22.4	20.6
458928 2011 UF_{284}	18.5	X	263.25747	114.03895	293.02392	1.83672	0.2266941	0.27691794	2.3311416	21	7 9.5	21.6
458929 2011 UM_{295}	17.9	X	312.85742	132.82576	238.90556	6.08988	0.1223382	0.28625579	2.2801663	21	8 19.5	20.2
458930 2011 UW_{296}	18.1	X	279.33653	175.94520	203.70791	3.62235	0.2601697	0.27929833	2.3178775	21	6 15.8	21.0
458931 2011 UE_{299}	18.0	X	283.24731	311.31010	59.97624	6.35452	0.1475152	0.27575442	2.3376944	21	6 27.1	20.7
458932 2011 UV_{301}	18.0	X	214.35438	259.42153	96.82546	2.98577	0.1932049	0.25503328	2.4626620	21	3 23.8	22.1
458933 2011 US_{313}	18.1	X	245.94992	25.40647	62.31733	5.66258	0.1025223	0.28297774	2.2977417	21	9 4.7	21.0
458934 2011 UJ_{316}	18.2	X	206.47492	67.16561	31.69869	1.74600	0.1418949	0.27252118	2.3561479	21	7 27.4	21.6
458935 2011 UX_{318}	18.1	X	179.65107	293.09323	215.12062	5.08446	0.0966350	0.27706163	2.3303355	21	9 2.6	21.6
458936 2011 UW_{321}	18.2	X	255.68294	282.96746	126.37095	7.22886	0.2648786	0.27761961	2.3272121	21	6 29.4	21.7
458937 2011 UK_{323}	18.2	X	297.94936	78.06475	275.39944	1.02887	0.2273334	0.27965483	2.3159072	21	6 8.8	20.7
458938 2011 UG_{324}	18.5	X	238.02387	309.26123	109.43428	2.12278	0.1731264	0.27524501	2.3405778	21	7 3.4	22.0
458939 2011 UO_{333}	17.3	X	265.16878	299.10466	93.46292	7.85541	0.1659219	0.27867178	2.3213505	21	6 30.0	20.3
458940 2011 UZ_{334}	17.7	X	287.05292	336.10159	23.98672	5.67955	0.1255634	0.27636137	2.3342704	21	6 19.7	20.5
458941 2011 UX_{336}	18.0	X	323.24172	299.02943	69.79595	5.71283	0.2167155	0.29154746	2.2524917	21	9 4.1	19.4
458942 2011 UC_{337}	17.3	X	293.67096	229.94564	116.86383	5.65358	0.1508443	0.27758615	2.3273991	21	6 6.7	19.9
458943 2011 UR_{337}	18.4	X	257.87352	324.47276	72.99136	3.98451	0.2039201	0.27934995	2.3175920	21	6 22.8	21.7
458944 2011 UW_{337}	17.8	X	89.05556	23.90428	33.85515	5.33043	0.2167239	0.23446199	2.6046802	21	2 5.6	20.7
458945 2011 UR_{340}	18.0	X	243.74367	334.84984	30.89563	5.45278	0.1354726	0.26797876	2.3826987	21	5 2.5	21.5
458946 2011 UC_{341}	18.4	X	245.41662	175.75194	217.85704	4.33651	0.1838212	0.27205486	2.3588395	21	6 6.6	21.8
458947 2011 UG_{344}	17.8	X	274.93447	336.20911	26.26534	3.51508	0.1455341	0.27485164	2.3428105	21	6 2.5	20.9
458948 2011 UJ_{352}	17.5	X	78.72070	81.06606	12.41616	7.70760	0.1094207	0.23756914	2.5819195	21	2 21.5	20.5
458949 2011 UB_{369}	18.1	X	210.50850	171.00737	238.80574	4.51288	0.2180468	0.26325575	2.4111125	21	5 23.9	22.2
458950 2011 UH_{377}	18.3	X	285.85799	81.58199	318.08107	1.72196	0.2098058	0.28289939	2.2981659	21	8 2.0	20.8
458951 2011 UH_{379}	18.3	X	214.20295	40.11409	15.25381	2.61249	0.1627741	0.26515423	2.3995898	21	6 5.1	21.9
458952 2011 US_{379}	17.1	X	81.20081	16.63912	76.68871	14.03500	0.1504395	0.23507327	2.6001629	21	3 8.7	20.5
458953 2011 UH_{381}	17.8	X	325.22890	109.38441	192.39945	3.46050	0.1066318	0.27450405	2.3447878	21	5 29.3	20.1
458954 2011 UW_{391}	18.4	X	306.53640	302.86250	89.72435	5.62681	0.2304039	0.29007532	2.2601063	21	8 30.9	20.1
458955 2011 UU_{396}	17.8	X	282.78300	114.57906	221.79005	1.53129	0.2358104	0.27256694	2.3558841	21	4 24.8	21.2
458956 2011 UX_{398}	17.2	X	310.96632	302.06784	2.55983	14.86363	0.0232167	0.26483791	2.4015001	21	5 17.4	20.4
458957 2011 UC_{404}	17.6	X	123.22670	209.62691	59.05780	7.61030	0.1470299	0.30015759	2.2092074	21	12 14.4	20.8
458958 2011 UY_{404}	17.4	X	341.15487	165.47257	148.77026	4.23070	0.1446824	0.28302302	2.2974966	21	7 14.9	19.4
458959 2011 UE_{407}	18.1	X	206.09409	56.76429	359.19366	1.39464	0.1716825	0.26920608	2.3754513	21	5 28.7	21.7
458960 2011 VY	17.1	X	237.04577	104.51399	308.31834	6.16015	0.1004661	0.27352804	2.3503623	21	7 2.7	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
458961 2011 VT_{12}	17.9	X	263.98400	283.69419	128.26432	3.21253	0.1959203	0.27938957	2.3173729	21	7 21.5	20.9
458962 2011 VE_{21}	17.9	X	104.49984	195.29711	73.92673	7.24712	0.0611308	0.29714190	2.2241298	21	11 21.9	20.8
458963 2011 VN_{22}	18.0	X	92.46477	28.33909	96.72073	4.61477	0.1779371	0.24426205	2.5345375	21	5 4.9	21.3
458964 2011 WM_{2}	20.3	X	358.58946	315.26542	57.50008	15.87175	0.2876935	0.50612483	1.5594243	21	—	—
458965 2011 WS_{8}	17.8	X	173.00145	160.99851	42.08914	3.60199	0.1150006	0.29378784	2.2410257	21	11 10.1	21.0
458966 2011 WA_{14}	18.1	X	225.89481	158.64614	261.71969	0.50993	0.1681617	0.26893121	2.3770697	21	6 23.4	21.8
458967 2011 WB_{17}	18.3	X	301.49338	289.13639	69.00321	3.25346	0.2050703	0.27745235	2.3281473	21	6 25.9	20.5
458968 2011 WK_{17}	17.4	X	290.59680	289.71899	70.64158	7.44844	0.1660312	0.27368793	2.3494468	21	6 18.6	20.1
458969 2011 WR_{18}	18.2	X	223.66541	39.56261	48.63894	5.64614	0.1527836	0.27895893	2.3197572	21	8 1.1	21.6
458970 2011 WW_{23}	17.7	X	37.11416	255.09501	63.51925	7.59163	0.1776903	0.29385176	2.2407007	21	11 19.2	20.2
458971 2011 WK_{24}	18.1	X	240.76610	339.18925	70.55731	4.13530	0.1861869	0.26957745	2.3732692	21	6 22.9	21.7
458972 2011 WZ_{24}	16.8	X	176.06109	331.78253	91.57435	6.80287	0.0732406	0.25782374	2.4448607	21	5 9.6	20.2
458973 2011 WT_{36}	18.0	X	245.49596	323.60829	61.29488	1.60443	0.2061688	0.26982564	2.3718137	21	5 23.8	21.7
458974 2011 WG_{56}	18.2	X	187.51622	48.68676	61.69979	4.13639	0.2142574	0.26734783	2.3864460	21	7 21.9	22.2
458975 2011 WO_{57}	18.7	X	211.54717	347.81995	102.96022	2.21890	0.1507111	0.27067676	2.3668391	21	7 20.8	22.2
458976 2011 WV_{60}	18.5	X	273.51507	241.21161	207.20337	2.33680	0.1456859	0.28751327	2.2735131	21	10 6.2	20.7
458977 2011 WE_{62}	18.6	X	202.15328	310.84957	147.77298	2.68886	0.1615543	0.26938640	2.3743912	21	7 20.6	22.3
458978 2011 WV_{63}	17.3	X	321.94316	270.01575	61.69177	11.66234	0.2816908	0.27812615	2.3243856	21	6 6.8	19.1
458979 2011 WG_{68}	16.8	X	143.70400	323.49812	112.19269	10.81493	0.0772264	0.23703582	2.5857909	21	4 23.1	20.6
458980 2011 WT_{69}	18.0	X	318.22855	11.31565	351.34258	2.51843	0.1987080	0.28370997	2.2937864	21	8 8.9	19.6
458981 2011 WJ_{70}	18.0	X	264.06122	356.81416	32.35182	3.07244	0.2332134	0.27498976	2.3420260	21	6 14.6	21.5
458982 2011 WU_{70}	18.0	X	245.77500	10.62217	20.79600	2.84513	0.1963478	0.26905832	2.3763210	21	6 2.2	21.6
458983 2011 WF_{71}	17.8	X	324.91677	126.46477	257.94158	5.83668	0.1214058	0.28780828	2.2719592	21	10 4.2	19.8
458984 2011 WP_{71}	17.3	X	201.58819	59.95516	64.25060	21.68529	0.1212283	0.27649432	2.3335220	21	9 8.5	21.2
458985 2011 WC_{72}	16.9	X	20.57961	230.71627	59.26799	10.86418	0.1754852	0.27661612	2.3328370	21	9 12.8	19.2
458986 2011 WT_{72}	17.9	X	287.54276	11.28713	16.47858	4.32680	0.1897587	0.27920712	2.3183823	21	7 22.4	20.5
458987 2011 WZ_{82}	18.3	X	205.39530	202.70610	231.70519	6.39519	0.0838537	0.26616782	2.3934940	21	6 25.1	21.6
458988 2011 WP_{93}	18.2	X	212.15533	352.39675	101.38881	2.51827	0.1378792	0.27137750	2.3627630	21	7 26.5	21.5
458989 2011 WP_{105}	17.2	X	61.23274	178.68502	270.08506	2.89735	0.0587817	0.22785247	2.6548107	21	1 13.4	20.5
458990 2011 WR_{112}	17.6	X	228.67429	141.87274	266.27922	10.22730	0.1790127	0.26670851	2.3902581	21	6 9.2	21.2
458991 2011 WZ_{112}	17.1	X	241.79598	305.03393	105.92193	9.23040	0.2614720	0.27197085	2.3593252	21	6 19.0	20.8
458992 2011 WJ_{115}	17.5	X	236.93323	304.35467	121.34601	5.48512	0.2490681	0.27232883	2.3572572	21	7 4.5	21.4
458993 2011 WY_{115}	18.1	X	159.59399	340.05667	70.66881	4.16912	0.1503424	0.24721583	2.5143083	21	4 10.5	21.9
458994 2011 WV_{126}	18.7	X	278.73323	148.04713	256.55678	4.56574	0.2167368	0.28147576	2.3059084	21	7 26.6	21.3
458995 2011 WG_{132}	18.6	X	238.79977	237.98700	183.12051	1.87234	0.1941615	0.27225959	2.3576568	21	7 5.2	22.0
458996 2011 WB_{134}	18.4	X	216.54310	91.17913	338.87655	0.75191	0.1635362	0.26812893	2.3818090	21	6 27.2	21.9
458997 2011 WC_{134}	17.7	X	4.69780	268.81119	70.38941	7.13495	0.1710005	0.28809116	2.2704717	21	10 25.9	19.6
458998 2011 WO_{137}	18.8	X	244.09899	58.23974	341.26787	0.92366	0.1896290	0.26886721	2.3774469	21	6 12.3	22.4
458999 2011 WA_{141}	18.0	X	189.08767	71.65937	34.04346	5.30770	0.1083408	0.26689497	2.3891447	21	7 20.1	21.5
459000 2011 WY_{143}	15.7	X	313.35546	129.40813	229.68348	11.02199	0.0718989	0.17830780	3.1262413	21	7 31.5	20.1
459001 2011 WW_{144}	18.4	X	224.83183	72.67978	0.58710	1.13967	0.1612435	0.26953384	2.3735252	21	7 10.4	21.9
459002 2011 WY_{144}	17.2	X	204.64836	233.70726	282.20045	5.11619	0.0637110	0.28524590	2.2855450	21	10 15.7	20.2
459003 2011 WH_{146}	17.8	X	233.06324	12.68486	79.01313	7.33017	0.0626073	0.27683718	2.3315949	21	8 29.9	20.9
459004 2011 WL_{151}	17.3	X	232.53369	114.31591	303.00598	12.89422	0.1777115	0.27283580	2.3543362	21	6 26.5	20.9
459005 2011 WO_{152}	17.6	X	253.68721	126.69480	284.74519	6.89354	0.1906312	0.27654510	2.3332364	21	7 8.9	20.8
459006 2011 WG_{153}	18.4	X	256.69529	319.75027	141.05576	10.00054	0.1284488	0.28610402	2.2809726	21	10 5.2	21.2
459007 2011 XB_{2}	18.1	X	238.89472	145.09671	279.23005	5.04378	0.2175683	0.27147237	2.3622125	21	7 7.4	21.6
459008 2011 YQ_{3}	16.5	X	122.57904	33.26790	58.46955	12.34373	0.1200294	0.24147220	2.5540219	21	4 22.2	20.1
459009 2011 YY_{3}	16.7	X	62.07607	205.21868	240.15728	12.08548	0.1280918	0.21933864	2.7230730	21	1 14.8	20.0
459010 2011 YB_{8}	17.6	X	201.99785	313.03225	120.67527	7.73241	0.0831638	0.25796762	2.4439515	21	6 21.0	21.1
459011 2011 YJ_{8}	18.0	X	195.93304	304.00893	144.87200	1.66991	0.1611395	0.26054451	2.4278104	21	7 1.8	21.8
459012 2011 YJ_{9}	17.5	X	152.93881	258.20915	254.18286	6.26373	0.0608387	0.26949213	2.3737701	21	8 6.9	20.8
459013 2011 YM_{18}	17.2	X	78.53205	39.16945	224.64783	6.05149	0.1044129	0.28398350	2.2923133	21	10 14.8	20.1
459014 2011 YY_{22}	18.3	X	186.69015	42.90203	35.26453	2.91975	0.1788577	0.25533764	2.4607046	21	6 8.8	22.2
459015 2011 YS_{23}	17.5	X	172.80668	212.92191	307.94902	4.46937	0.1601734	0.26838294	2.3803059	21	9 10.3	21.3
459016 2011 YX_{24}	18.3	X	209.77701	319.90889	100.92597	4.12129	0.1707275	0.25769761	2.4456583	21	6 8.5	22.1
459017 2011 YY_{24}	16.0	X	196.20178	232.64180	108.56993	18.55747	0.2367512	0.23267085	2.6180307	21	2 24.5	20.8
459018 2011 YR_{25}	17.0	X	41.92070	259.46231	296.60039	10.02346	0.1169614	0.23882658	2.5728488	21	5 10.7	20.0
459019 2011 YU_{25}	17.0	X	94.90858	207.46516	293.52100	13.00290	0.1062163	0.24060304	2.5601691	21	5 14.3	20.6
459020 2011 YX_{25}	16.7	X	133.20158	321.85628	113.61996	13.93300	0.1247496	0.23655418	2.5892995	21	4 17.8	20.7
459021 2011 YS_{32}	17.1	X	162.72827	199.86286	210.99811	2.96870	0.1895688	0.24325792	2.5415075	21	4 14.6	21.2
459022 2011 YJ_{33}	17.5	X	158.48263	41.37693	159.83298	4.58815	0.1385801	0.27475211	2.3433763	21	10 22.4	21.1
459023 2011 YO_{34}	18.2	X	235.23917	326.68898	78.95656	3.84586	0.1701430	0.26154957	2.4215868	21	6 13.4	21.9
459024 2011 YC_{35}	17.6	X	207.04422	105.84497	320.62350	5.09606	0.1961726	0.25831439	2.4417638	21	6 11.8	21.7
459025 2011 YT_{35}	17.3	X	147.60113	308.75430	93.56084	3.99934	0.2011358	0.23496304	2.6009760	21	3 25.0	21.4
459026 2011 YA_{41}	17.8	X	310.85582	96.72961	295.72488	5.41966	0.0935302	0.28497408	2.2869981	21	9 20.9	20.2
459027 2011 YK_{43}	17.5	X	160.59298	326.73959	97.40104	1.51516	0.0826851	0.24357329	2.5393132	21	4 22.9	21.1
459028 2011 YM_{43}	17.4	X	174.08322	205.98986	289.09007	6.20188	0.0699459	0.26474010	2.4020916	21	8 9.8	20.8
459029 2011 YU_{44}	17.9	X	177.83889	317.15729	147.13998	2.89005	0.1575519	0.25685916	2.4509776	21	7 4.5	21.9
459030 2011 YH_{46}	17.4	X	172.75026	4.46447	41.79479	5.03654	0.2163196	0.24382452	2.5375687	21	4 19.7	21.6
459031 2011 YS_{46}	17.4	X	178.47454	3.67812	83.12815	6.11546	0.1522686	0.25335470	2.4735274	21	6 12.5	21.3
459032 2011 YS_{48}	17.3	X	286.56471	324.56569	84.77890	10.67854	0.0873094	0.28315244	2.2967965	21	9 15.3	20.0
459033 2011 YS_{53}	17.7	X	35.64323	92.38970	122.93001	11.01096	0.0737334	0.24414054	2.5353784	21	5 29.7	20.8
459034 2011 YV_{59}	17.9	X	142.74381	316.95333	259.12480	1.57554	0.1510289	0.27263982	2.3554643	21	10 23.9	21.4
459035 2011 YD_{61}	16.7	X	193.71716	85.88557	294.37359	27.01414	0.2337553	0.24127923	2.5553836	21	3 19.2	21.8
459036 2011 YS_{64}	17.3	X	44.32235	89.90687	61.66082	6.06367	0.0563484	0.23345367	2.6121749	21	3 15.2	20.5
459037 2011 YY_{64}	17.6	X	264.23662	297.43435	106.06916	4.55721	0.1365968	0.26941268	2.3742368	21	7 18.9	20.5
459038 2011 YF_{66}	17.7	X	262.13742	28.57931	349.57533	4.60918	0.1459776	0.26034154	2.4290721	21	6 8.6	21.1
459039 2011 YD_{77}	16.3	X	220.02256	246.76035	109.45088	13.56394	0.3293714	0.24506200	2.5290189	21	3 31.2	21.3
459040 2011 YX_{77}	16.9	X	65.31520	181.48241	282.67487	7.68140	0.1609790	0.22411664	2.6842316	21	2 17.4	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459041 2011 YV_{78}	17.3	X	169.51309	175.31160	359.18833	5.80914	0.0570469	0.27086225	2.3657584	21	9 28.8	20.5
459042 2011 YY_{78}	16.8	X	18.28790	0.43286	291.23410	13.65258	0.1102982	0.26316512	2.4116660	21	8 17.9	19.5
459043 2012 AU_{1}	17.7	X	145.97119	263.27222	292.55986	4.61175	0.1662337	0.26834872	2.3805083	21	9 29.2	21.6
459044 2012 AB_{9}	17.2	X	175.23184	268.28435	132.70918	15.47674	0.1389594	0.24002882	2.5642505	21	4 18.1	21.5
459045 2012 AY_{9}	17.0	X	144.92966	209.73424	304.55800	6.28760	0.0745550	0.26297004	2.4128586	21	8 2.5	20.4
459046 2012 AS_{10}	17.2	X	121.25084	194.89122	50.94354	12.50048	0.4868145	0.48838168	1.5969690	21	12 2.9	20.1
459047 2012 AL_{13}	17.6	X	126.12500	43.77167	125.62384	2.18420	0.1227819	0.25617289	2.4553530	21	8 5.2	21.0
459048 2012 AJ_{14}	16.6	X	358.80259	264.97257	311.96204	10.29414	0.1134574	0.22743039	2.6580943	21	3 22.3	19.8
459049 2012 AW_{17}	17.5	X	152.51724	25.17843	136.31244	3.09096	0.1472685	0.25895816	2.4377153	21	8 24.1	21.1
459050 2012 AF_{22}	17.1	X	120.30529	51.57820	55.68645	12.76031	0.1402223	0.24105423	2.5569734	21	5 9.9	20.6
459051 2012 BF_{4}	17.4	X	145.08696	221.60262	282.15392	4.28835	0.0715794	0.25744872	2.4472343	21	7 18.9	20.7
459052 2012 BE_{7}	17.9	X	123.64539	90.06190	106.54422	2.54807	0.1426090	0.26183868	2.4198040	21	9 10.6	21.5
459053 2012 BR_{8}	16.9	X	136.59415	133.89604	118.91231	24.46404	0.1362191	0.27782940	2.3260404	21	12 9.7	20.9
459054 2012 BS_{8}	17.2	X	182.28937	42.27244	82.72987	8.72934	0.1999829	0.25945461	2.4346047	21	8 6.5	21.3
459055 2012 BB_{12}	17.4	X	95.30101	93.80916	62.76008	3.48901	0.1277994	0.24340147	2.5405081	21	6 11.6	20.7
459056 2012 BD_{16}	17.2	X	155.80559	208.89787	308.27032	9.57740	0.0905782	0.26095735	2.4252492	21	8 18.3	20.7
459057 2012 BL_{17}	17.2	X	186.32176	221.38212	150.72678	9.19358	0.0947576	0.22746447	2.6578288	21	3 19.1	21.2
459058 2012 BW_{17}	16.6	X	201.69733	79.28776	10.74544	9.07177	0.0915696	0.25729382	2.4482164	21	7 14.3	20.3
459059 2012 BL_{18}	17.1	X	162.60059	133.32716	308.60846	11.97644	0.1283270	0.24236817	2.5477237	21	5 17.8	21.2
459060 2012 BO_{18}	17.7	X	133.07603	30.36163	151.24033	6.71867	0.1462431	0.25624207	2.4549110	21	8 30.6	21.4
459061 2012 BP_{20}	17.9	X	150.39914	325.45429	160.89453	1.58253	0.1424926	0.25210896	2.4816690	21	7 5.9	21.5
459062 2012 BU_{21}	17.3	X	113.27951	182.23149	278.65865	11.81697	0.1191046	0.23733639	2.5836072	21	4 14.0	21.1
459063 2012 BB_{22}	17.5	X	141.72263	232.89560	277.82978	6.01238	0.0695734	0.25676820	2.4515564	21	7 23.6	21.0
459064 2012 BA_{24}	17.4	X	138.55423	160.42885	48.03148	5.78656	0.2023501	0.26323427	2.4112436	21	10 12.9	21.4
459065 2012 BS_{24}	17.2	X	224.57584	263.96479	141.25536	6.53574	0.1209680	0.25524293	2.4613133	21	6 6.6	20.9
459066 2012 BG_{27}	17.3	X	152.01638	241.64109	255.19627	7.37109	0.1719960	0.25589237	2.4571471	21	7 21.2	21.3
459067 2012 BT_{27}	17.2	X	140.52137	228.49052	298.75904	3.93343	0.0679493	0.25939073	2.4350044	21	8 13.9	20.7
459068 2012 BM_{29}	17.4	X	147.00971	180.33974	309.23738	3.06402	0.1598819	0.25345739	2.4728593	21	7 8.1	21.1
459069 2012 BB_{30}	17.1	X	80.64273	126.20186	276.13729	7.74457	0.1792547	0.21576480	2.7530598	21	—	—
459070 2012 BO_{32}	17.0	X	174.37331	133.21134	317.39864	9.09640	0.1104868	0.25271528	2.4776980	21	6 12.3	20.9
459071 2012 BZ_{35}	17.7	X	207.11709	286.44946	138.13125	4.68009	0.1331341	0.25668370	2.4520944	21	6 12.5	21.5
459072 2012 BQ_{36}	17.0	X	32.36212	284.80788	285.29249	10.90998	0.1364562	0.24098603	2.5574558	21	5 16.4	19.7
459073 2012 BH_{41}	17.8	X	118.80638	343.54998	104.46589	4.22346	0.1442534	0.23559663	2.5963107	21	4 15.1	21.5
459074 2012 BN_{47}	17.0	X	331.55756	97.70639	85.87713	5.99192	0.0901200	0.21373462	2.7704659	21	1 7.7	20.5
459075 2012 BJ_{50}	17.8	X	73.39306	226.15659	269.86152	1.38302	0.0491719	0.23435601	2.6054654	21	3 31.9	21.0
459076 2012 BS_{51}	17.5	X	172.64383	271.14128	137.63778	9.16763	0.1617009	0.23924572	2.5698430	21	4 23.9	21.7
459077 2012 BB_{52}	17.0	X	43.03461	244.70997	306.97898	10.71279	0.1422783	0.23320861	2.6140045	21	5 8.7	20.0
459078 2012 BW_{52}	16.6	X	122.15375	114.27118	332.00056	21.54922	0.0351195	0.22819845	2.6521266	21	3 21.5	20.5
459079 2012 BQ_{53}	17.3	X	67.71447	31.46888	137.48249	12.70152	0.2353147	0.23334817	2.6129621	21	6 9.8	20.6
459080 2012 BH_{54}	16.4	X	325.51488	284.66436	332.18034	11.13561	0.0388502	0.22984893	2.6394153	21	4 3.2	20.0
459081 2012 BO_{55}	16.3	X	340.56476	256.26057	350.21258	13.17634	0.1238251	0.22729839	2.6591233	21	4 2.2	19.5
459082 2012 BQ_{57}	17.9	X	168.14495	207.28637	286.80187	5.16716	0.0907209	0.26143266	2.4223087	21	8 1.9	21.5
459083 2012 BZ_{57}	17.2	X	339.29136	66.57489	125.34717	8.73551	0.1507170	0.21968296	2.7202269	21	1 18.5	20.4
459084 2012 BY_{62}	17.1	X	117.99555	234.00327	151.91936	5.12492	0.1197596	0.21919070	2.7242981	21	1 21.2	20.8
459085 2012 BU_{63}	18.0	X	166.70320	39.18367	153.51228	3.15022	0.1525212	0.27324304	2.3519963	21	10 18.7	21.6
459086 2012 BJ_{69}	17.5	X	196.07079	75.95149	316.40551	14.24901	0.1353003	0.24213853	2.5493343	21	4 13.3	21.9
459087 2012 BB_{71}	18.2	X	207.08001	94.28298	327.81170	1.85335	0.1900479	0.25492510	2.4633587	21	6 6.5	22.1
459088 2012 BK_{74}	17.3	X	242.61177	122.70911	282.70353	12.72040	0.1603545	0.26095520	2.4252624	21	6 22.3	20.9
459089 2012 BL_{81}	17.2	X	99.89389	109.27645	123.15361	14.90261	0.1494747	0.26324549	2.4111752	21	10 8.5	21.0
459090 2012 BP_{82}	17.8	X	183.46618	170.80273	317.19974	4.15533	0.1255807	0.26174496	2.4203815	21	8 11.0	21.5
459091 2012 BX_{83}	17.8	X	83.26558	121.97703	109.55941	8.08095	0.0341374	0.26160956	2.4212166	21	8 28.1	20.9
459092 2012 BC_{85}	18.0	X	151.27816	61.61484	348.84399	2.77151	0.1661671	0.23504564	2.6003666	21	4 1.9	22.0
459093 2012 BM_{88}	17.7	X	87.01711	224.49312	2.11499	4.93466	0.1346451	0.25794962	2.4440652	21	9 8.1	20.9
459094 2012 BO_{88}	17.7	X	214.67199	79.13009	343.70899	5.99015	0.1500285	0.25645592	2.4535462	21	6 16.5	21.5
459095 2012 BR_{88}	17.5	X	228.54568	358.51522	34.13981	3.60839	0.2127247	0.25427017	2.4675868	21	5 17.8	21.4
459096 2012 BA_{89}	17.7	X	147.68052	91.33057	343.37476	4.51154	0.1994221	0.24097341	2.5575451	21	4 29.9	21.8
459097 2012 BJ_{89}	16.9	X	85.77569	336.51800	123.73841	22.76090	0.0451225	0.22519478	2.6756574	21	3 8.6	20.7
459098 2012 BE_{93}	17.6	X	82.74412	89.05169	355.80209	4.42346	0.0777764	0.22159838	2.7045291	21	2 13.3	21.0
459099 2012 BR_{98}	17.8	X	144.66505	276.01430	126.73639	6.01733	0.1247019	0.22973838	2.6402619	21	3 15.8	21.7
459100 2012 BP_{100}	17.5	X	42.10618	241.63987	316.03411	8.54771	0.0827870	0.23787860	2.5796798	21	5 9.7	20.7
459101 2012 BU_{100}	17.4	X	113.90608	173.56337	121.53159	5.76711	0.1167516	0.28779763	2.2720152	21	—	—
459102 2012 BS_{104}	17.7	X	162.70651	31.60640	144.25649	3.05143	0.1044741	0.26786174	2.3833927	21	9 23.1	21.0
459103 2012 BX_{104}	16.8	X	38.50048	225.51320	322.73629	9.79158	0.0885505	0.23233970	2.6205177	21	4 19.2	20.0
459104 2012 BO_{105}	17.6	X	119.24634	67.81348	100.74570	14.47438	0.1710517	0.25023847	2.4940204	21	8 2.2	21.5
459105 2012 BM_{107}	17.4	X	171.85926	262.72625	102.28804	9.02459	0.1067621	0.22558083	2.6726038	21	2 25.5	21.5
459106 2012 BF_{108}	17.4	X	208.28506	33.18330	314.73820	8.36775	0.1074638	0.23024167	2.6364129	21	3 6.8	21.6
459107 2012 BW_{108}	17.6	X	193.73813	318.08924	115.87184	9.25492	0.1759138	0.25259816	2.4784639	21	6 11.2	21.7
459108 2012 BB_{112}	17.7	X	143.52699	296.66617	148.90011	9.97811	0.1752070	0.23893886	2.5720428	21	5 12.9	21.9
459109 2012 BS_{116}	18.0	X	183.80788	236.88199	157.00498	1.95718	0.2122871	0.24169785	2.5524321	21	4 13.7	22.3
459110 2012 BY_{116}	17.6	X	157.78336	132.58848	298.92842	4.05310	0.1704344	0.24242767	2.5473068	21	5 3.5	21.7
459111 2012 BS_{117}	17.5	X	118.63250	236.55341	306.27094	3.53011	0.0811195	0.25661236	2.4525488	21	8 10.0	20.8
459112 2012 BW_{117}	17.5	X	345.21051	98.23031	134.89544	2.25935	0.0922024	0.23168866	2.6254245	21	3 30.5	20.5
459113 2012 BU_{121}	17.7	X	46.95223	249.51632	319.27574	12.32876	0.2475686	0.23688003	2.5869245	21	7 4.3	20.5
459114 2012 BG_{125}	16.7	X	89.55287	186.21550	305.19966	13.71133	0.0561189	0.23302645	2.6153666	21	4 11.6	20.5
459115 2012 BX_{125}	17.0	X	92.69456	306.40919	301.26091	8.88500	0.2246239	0.25935060	2.4352555	21	10 16.3	21.0
459116 2012 BJ_{127}	18.0	X	46.70973	100.40694	42.46808	0.74437	0.2353358	0.22624208	2.6673937	21	3 20.4	20.1
459117 2012 BK_{127}	17.7	X	313.40082	241.14412	118.06465	23.75068	0.1184342	0.37327367	1.9103714	21	8 12.8	18.9
459118 2012 BE_{129}	16.7	X	164.70349	186.59158	155.43515	10.36754	0.0906990	0.21171596	2.7880485	21	1 18.0	20.9
459119 2012 BJ_{134}	18.2	X	252.93484	138.27010	144.53605	21.26000	0.8328271	0.29066803	2.2570328	21	1 6.9	24.1
459120 2012 BV_{134}	16.9	X	117.31773	226.44409	267.97603	5.72853	0.0866576	0.24242607	2.5473180	21	6 3.7	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459121 2012 BW_{138}	17.4	X	79.60518	238.62466	306.38958	4.61155	0.0643271	0.24390764	2.5369921	21	6 19.5	20.6
459122 2012 BV_{141}	17.5	X	136.23633	354.79025	81.24784	5.82336	0.1850785	0.23774661	2.5806344	21	4 23.5	21.5
459123 2012 BF_{142}	17.3	X	134.08161	85.77348	142.41582	22.25714	0.2961950	0.26867531	2.3785788	21	11 10.0	22.1
459124 2012 BQ_{147}	17.9	X	180.21248	346.27247	115.18698	7.56211	0.1021877	0.25692718	2.4505450	21	7 3.2	21.6
459125 2012 BR_{150}	17.0	X	107.39557	30.50984	94.49049	9.40241	0.0878209	0.23718747	2.5846886	21	5 12.6	20.5
459126 2012 BL_{152}	17.8	X	142.35705	97.90512	106.15465	3.38230	0.1363910	0.26533988	2.3984704	21	10 9.6	21.5
459127 2012 CP	16.6	X	112.91338	28.70843	112.92693	10.51469	0.0543526	0.23529276	2.5985456	21	6 5.4	20.2
459128 2012 CR_{1}	17.2	X	332.46222	319.42419	315.65539	3.31253	0.1321852	0.23676331	2.5877746	21	4 29.3	20.1
459129 2012 CE_{2}	16.5	X	17.81720	202.40882	313.00981	10.13578	0.1289016	0.21762106	2.7373822	21	2 4.7	19.6
459130 2012 CY_{2}	16.2	X	301.32921	332.47599	146.72154	11.25875	0.0877510	0.18629131	3.0362742	21	12 19.2	20.3
459131 2012 CC_{10}	16.6	X	143.48020	110.50504	315.23871	13.98910	0.1023244	0.23226686	2.6210656	21	3 31.1	20.7
459132 2012 CV_{10}	17.3	X	335.63729	120.94051	124.71771	3.70521	0.0335927	0.23165489	2.6256796	21	4 9.9	20.6
459133 2012 CH_{11}	17.1	X	144.70385	277.70797	131.67975	12.69906	0.1808228	0.23074439	2.6325823	21	4 1.2	21.3
459134 2012 CV_{12}	18.3	X	78.94529	162.34437	4.90850	3.76040	0.1769348	0.23708342	2.5854447	21	6 11.7	21.6
459135 2012 CX_{12}	17.7	X	91.27904	3.84793	120.45932	4.48315	0.1319203	0.23138937	2.6276879	21	4 26.5	21.1
459136 2012 CO_{13}	17.1	X	109.95805	152.10376	334.42141	17.31459	0.1008164	0.23684372	2.5871889	21	5 9.6	21.1
459137 2012 CW_{16}	18.1	X	116.89440	143.20347	326.11679	3.55250	0.1458691	0.23576102	2.5951037	21	5 7.4	21.7
459138 2012 CP_{17}	17.5	X	40.08339	22.41106	143.27482	5.43974	0.2154008	0.22657457	2.6647836	21	4 9.0	19.8
459139 2012 CK_{18}	17.3	X	53.06505	81.49567	92.77658	13.58836	0.2117866	0.22888642	2.6468096	21	5 20.5	20.2
459140 2012 CH_{23}	17.0	X	148.44541	155.51945	304.73618	14.42397	0.0656855	0.24199476	2.5503439	21	5 22.0	20.9
459141 2012 CU_{25}	16.7	X	109.91594	183.67627	313.07066	21.28037	0.0253022	0.23831458	2.5765326	21	5 12.9	20.7
459142 2012 CY_{26}	17.4	X	66.75110	343.90795	276.29892	1.60439	0.1919160	0.25707580	2.4496004	21	10 4.6	20.6
459143 2012 CF_{33}	17.1	X	197.72140	213.12161	176.63085	6.84819	0.2750801	0.24404819	2.5360180	21	4 20.7	21.6
459144 2012 CU_{36}	17.2	X	226.04318	326.67754	148.41240	7.93045	0.0447084	0.26846218	2.3798375	21	9 22.4	20.3
459145 2012 CO_{37}	17.9	X	87.43063	164.51051	339.53210	3.99298	0.1522777	0.23373575	2.6100728	21	5 17.7	21.2
459146 2012 CH_{38}	17.0	X	65.80040	225.45204	234.31953	4.16313	0.0863381	0.21776797	2.7361509	21	2 6.8	20.3
459147 2012 CA_{47}	18.0	X	190.84324	306.02571	158.00654	2.86743	0.2210694	0.25712605	2.4492813	21	7 15.1	22.0
459148 2012 CE_{47}	17.2	X	109.32333	70.01921	15.60551	5.63731	0.0368326	0.22248884	2.6973082	21	3 16.1	20.9
459149 2012 CV_{47}	16.7	X	18.63330	72.60188	146.48146	14.99647	0.1218786	0.22979223	2.6398494	21	5 11.6	19.9
459150 2012 CN_{49}	18.0	X	202.70576	11.62784	64.62601	5.69664	0.1639235	0.25534946	2.4606287	21	6 21.7	21.9
459151 2012 CT_{50}	17.1	X	184.64764	265.28838	156.49239	14.44354	0.0878360	0.24109209	2.5567057	21	5 20.4	21.2
459152 2012 CZ_{50}	17.8	X	64.23644	282.78794	236.38988	1.09526	0.1398436	0.23075513	2.6325005	21	5 2.9	20.8
459153 2012 CW_{51}	17.2	X	30.88327	76.88626	153.18657	12.44403	0.1635759	0.23627833	2.5913145	21	6 19.8	20.1
459154 2012 CT_{52}	17.7	X	102.16758	102.01243	123.73795	3.34457	0.1595690	0.25748344	2.4470143	21	9 27.6	21.3
459155 2012 CF_{54}	17.6	X	89.82502	39.68379	122.74336	5.10872	0.1809965	0.23878581	2.5731417	21	6 20.9	21.0
459156 2012 CY_{54}	17.7	X	110.06013	58.97382	166.20676	5.16399	0.3856042	0.25619699	2.4551990	21	10 18.6	22.3
459157 2012 DX_{5}	17.6	X	254.01888	71.97506	336.78011	6.09856	0.1126820	0.25816893	2.4426809	21	7 17.4	20.8
459158 2012 DL_{6}	17.8	X	120.66477	325.33410	152.37215	10.14816	0.1509885	0.23867787	2.5739175	21	5 27.2	21.7
459159 2012 DT_{7}	18.1	X	107.24433	46.27105	122.88613	5.99310	0.1869214	0.24433452	2.5340363	21	7 21.2	21.8
459160 2012 DN_{9}	17.6	X	40.71053	111.61341	124.57237	3.21837	0.0831991	0.24386205	2.5373083	21	7 5.9	20.3
459161 2012 DS_{10}	17.5	X	128.08002	78.78821	22.83702	3.50619	0.1768815	0.23601769	2.5932219	21	5 14.2	21.5
459162 2012 DY_{11}	17.5	X	144.88610	123.80761	346.14761	30.51556	0.2023024	0.24333734	2.5409544	21	6 10.9	22.3
459163 2012 DA_{12}	17.1	X	68.95977	0.34224	133.76638	11.19979	0.0917004	0.22410155	2.6843521	21	4 4.3	20.5
459164 2012 DB_{15}	17.4	X	119.61800	69.76844	133.80981	7.17208	0.1198352	0.25804212	2.4434811	21	9 14.3	20.9
459165 2012 DN_{16}	16.9	X	276.49457	126.87155	154.73426	12.35561	0.1375671	0.21014611	2.8019162	21	2 26.1	20.9
459166 2012 DQ_{17}	17.4	X	55.63567	108.93522	67.64763	2.79042	0.1197274	0.22804941	2.6532820	21	5 11.2	20.4
459167 2012 DA_{22}	17.1	X	48.42477	104.38048	98.44637	9.43388	0.1606420	0.23336776	2.6128159	21	6 11.8	19.9
459168 2012 DU_{22}	17.4	X	5.96226	333.04398	195.59091	3.80626	0.1382691	0.21395661	2.7685492	21	2 1.3	20.6
459169 2012 DA_{23}	17.3	X	253.01412	23.68237	300.84069	4.24630	0.1641203	0.22473947	2.6792700	21	3 20.1	21.5
459170 2012 DF_{23}	17.4	X	178.51924	104.27559	326.52397	12.73531	0.0280863	0.23709184	2.5853835	21	5 15.9	21.3
459171 2012 DH_{23}	18.1	X	53.97491	18.38795	155.87926	4.78694	0.1764758	0.22782212	2.6550464	21	5 14.6	21.0
459172 2012 DV_{24}	17.3	X	51.42028	47.93768	93.56012	4.90825	0.0563717	0.21593750	2.7515918	21	3 14.4	20.8
459173 2012 DB_{25}	16.2	X	82.21032	229.03382	150.21069	10.82122	0.0227052	0.18732677	3.0250750	21	—	—
459174 2012 DJ_{25}	17.3	X	161.19160	307.14090	128.34253	4.34574	0.0588182	0.22991149	2.6389365	21	5 8.8	21.0
459175 2012 DQ_{26}	16.9	X	49.91528	14.13143	168.40648	14.09275	0.1772637	0.22795674	2.6540011	21	5 21.1	20.0
459176 2012 DS_{27}	17.4	X	32.81002	16.22742	171.14871	14.43029	0.1250391	0.22302857	2.6929547	21	4 20.5	20.5
459177 2012 DX_{28}	16.3	X	225.57737	106.47186	158.54832	10.85534	0.0684462	0.19483805	2.9468195	21	—	—
459178 2012 DV_{33}	17.7	X	128.74560	354.99747	138.84096	2.32090	0.0123009	0.24343358	2.5402847	21	6 8.4	20.9
459179 2012 DY_{34}	17.5	X	80.61266	54.60932	100.51161	3.67415	0.0519737	0.23208698	2.6224197	21	5 9.9	20.8
459180 2012 DP_{35}	17.7	X	90.12292	13.91989	141.88141	5.25441	0.0725106	0.23487756	2.6016070	21	5 27.5	21.1
459181 2012 DK_{36}	17.7	X	92.54213	313.26960	195.25365	3.72471	0.2055398	0.23409748	2.6073834	21	6 9.5	21.2
459182 2012 DM_{39}	17.8	X	102.09586	214.39197	298.80180	2.58513	0.1668360	0.23691247	2.5866883	21	6 21.6	21.4
459183 2012 DS_{39}	16.0	X	282.41560	22.63433	340.55209	12.64627	0.2989515	0.24402323	2.5361909	21	5 19.6	20.0
459184 2012 DC_{40}	17.7	X	170.70428	146.24420	307.27837	4.77724	0.2480562	0.24455886	2.5324864	21	6 16.0	22.0
459185 2012 DG_{44}	17.2	X	94.05293	103.81933	17.20276	11.53516	0.1524548	0.22681481	2.6629016	21	4 25.1	20.8
459186 2012 DC_{45}	17.1	X	79.41964	32.81364	99.36489	5.77328	0.0609480	0.22153723	2.7050268	21	4 11.5	20.6
459187 2012 DD_{46}	17.1	X	348.34160	83.61336	168.08281	12.92556	0.1264001	0.22498588	2.6773134	21	4 30.9	20.2
459188 2012 DM_{46}	17.5	X	39.27114	48.66875	169.34964	13.14023	0.1960819	0.23035901	2.6355175	21	6 22.4	20.5
459189 2012 DU_{46}	16.5	X	90.07438	31.26396	109.10744	31.92398	0.2099421	0.23447651	2.6045727	21	6 5.2	20.5
459190 2012 DJ_{47}	17.1	X	147.06233	66.04522	329.50960	27.68280	0.4364234	0.23604765	2.5930024	21	3 18.3	22.3
459191 2012 DQ_{47}	17.7	X	51.14280	222.85281	349.10006	8.36249	0.2245930	0.23559998	2.5962861	21	7 12.6	20.6
459192 2012 DG_{48}	17.6	X	139.08495	198.05400	39.91013	1.84992	0.1796587	0.26738022	2.3862533	21	11 16.9	21.4
459193 2012 DL_{48}	17.4	X	74.83445	127.97190	345.12301	5.68744	0.0676259	0.21937591	2.7227646	21	3 8.6	20.7
459194 2012 DY_{48}	17.5	X	109.91429	137.96828	331.68589	12.99483	0.1993846	0.23324826	2.6137083	21	5 2.5	21.5
459195 2012 DT_{53}	17.0	X	30.36462	28.90119	166.47904	11.90655	0.1178919	0.22297277	2.6934040	21	4 27.3	20.1
459196 2012 DX_{54}	16.1	X	42.82938	23.18764	146.85634	15.35493	0.0348230	0.22578899	2.6709610	21	4 8.3	19.7
459197 2012 DZ_{56}	17.7	X	144.53720	267.32369	174.38357	10.88408	0.1635154	0.23545785	2.5973308	21	5 7.5	21.8
459198 2012 DD_{58}	17.4	X	28.69351	131.42178	17.09928	4.49344	0.0625037	0.21224436	2.7834191	21	2 18.2	20.8
459199 2012 DH_{60}	16.9	X	308.98273	233.93436	9.49802	6.17286	0.0248012	0.21434043	2.7652431	21	3 5.5	20.7
459200 2012 DK_{61}	21.0	X	171.32933	301.42072	336.11355	6.26725	0.1653798	0.71134346	1.2428436	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459201 2012 DX_{62}	16.2	X	256.94233	303.66697	323.62273	11.82028	0.0559552	0.21479646	2.7613278	21	1 27.3	20.1
459202 2012 DL_{67}	16.1	X	132.92669	208.94210	150.86752	12.45848	0.0636171	0.19481272	2.9470749	21	1 4.7	20.5
459203 2012 DB_{72}	16.8	X	316.75003	335.02385	264.43098	5.97796	0.0082355	0.22238953	2.6981111	21	3 6.7	20.6
459204 2012 DV_{72}	17.9	X	128.09918	110.45802	352.97694	4.85319	0.2350799	0.23724400	2.5842779	21	5 21.7	22.0
459205 2012 DZ_{73}	17.9	X	147.32002	314.75385	204.69144	1.87786	0.1392633	0.25514825	2.4619222	21	8 14.7	21.5
459206 2012 DH_{74}	16.6	X	122.51736	172.23852	0.01822	15.00992	0.0583673	0.24376449	2.5379852	21	8 3.8	20.4
459207 2012 DP_{77}	17.2	X	140.27466	85.41642	122.52387	12.47224	0.2152947	0.26254378	2.4154695	21	10 17.9	21.5
459208 2012 DT_{78}	17.3	X	98.02831	168.05750	341.41817	2.44537	0.2398199	0.23684075	2.5872105	21	6 21.6	21.0
459209 2012 DP_{80}	17.7	X	25.34196	97.65202	135.53788	6.14549	0.1569537	0.23387786	2.6090154	21	6 12.2	20.3
459210 2012 DU_{80}	17.5	X	14.76488	112.72120	131.74280	6.28464	0.1381045	0.23415248	2.6069750	21	6 6.9	20.1
459211 2012 DD_{81}	17.6	X	178.31546	355.73673	122.06393	5.77203	0.0692286	0.25078011	2.4904280	21	7 23.2	21.2
459212 2012 DN_{81}	16.7	X	267.70895	208.56728	154.54201	12.36279	0.0620538	0.24277679	2.5448641	21	6 10.1	20.3
459213 2012 DQ_{82}	16.9	X	358.68653	216.30335	9.93175	15.42522	0.0365720	0.22369426	2.6876095	21	4 12.7	20.4
459214 2012 DS_{82}	16.6	X	122.95748	248.00988	166.27524	14.33703	0.0772042	0.21187413	2.7866607	21	2 26.9	20.4
459215 2012 DE_{83}	17.9	X	169.21202	287.11508	154.53154	7.25514	0.2443930	0.24425364	2.5345957	21	6 1.3	22.4
459216 2012 DH_{87}	16.2	X	99.00821	64.79248	12.00225	15.13891	0.0336840	0.21232447	2.7827190	21	2 25.6	20.1
459217 2012 DN_{87}	17.3	X	85.60302	326.30705	195.48628	14.24399	0.1218824	0.23606670	2.5928629	21	6 5.8	20.9
459218 2012 DZ_{87}	17.2	X	59.36789	127.65071	4.99479	3.43788	0.1303897	0.22030789	2.7150803	21	3 19.1	20.1
459219 2012 DJ_{88}	17.5	X	12.95755	11.98554	165.76595	1.62133	0.1586277	0.21452245	2.7636787	21	2 25.9	20.1
459220 2012 DC_{90}	16.7	X	85.64664	61.61142	99.29526	15.72788	0.0732143	0.23929924	2.5694598	21	5 30.1	20.1
459221 2012 DW_{90}	17.7	X	171.50869	24.89233	137.50676	2.89899	0.1429271	0.26198137	2.4189252	21	9 13.5	21.3
459222 2012 DF_{92}	17.1	X	45.06975	201.63623	350.03949	8.67290	0.1067825	0.23188014	2.6239789	21	5 9.0	20.2
459223 2012 DA_{96}	16.7	X	254.02753	15.22933	343.07058	8.25557	0.1619048	0.23821495	2.5772509	21	4 30.3	20.7
459224 2012 DS_{96}	17.3	X	277.30861	346.48431	332.22176	2.16951	0.0965325	0.23480571	2.6021377	21	4 16.1	20.7
459225 2012 DO_{97}	16.9	X	83.67508	47.94942	122.23804	15.23840	0.1213735	0.23666874	2.5884639	21	6 15.8	20.4
459226 2012 EB_{1}	17.3	X	356.91461	18.94712	180.70261	4.92740	0.0591084	0.21767473	2.7369322	21	3 7.2	20.5
459227 2012 EH_{4}	16.8	X	106.34779	96.86785	9.56058	13.66810	0.0139726	0.22002860	2.7173774	21	4 3.2	20.5
459228 2012 EP_{4}	17.4	X	92.55753	340.59127	168.99642	13.39184	0.1247400	0.23255542	2.6188969	21	5 31.7	21.1
459229 2012 EA_{5}	16.8	X	93.53305	239.57654	11.89434	10.25454	0.2333602	0.25799018	2.4438090	21	10 24.9	20.6
459230 2012 ER_{6}	17.3	X	95.97073	128.49997	354.60721	16.56061	0.2207565	0.23067689	2.6330958	21	5 5.5	21.3
459231 2012 EN_{8}	16.9	X	155.31088	273.10164	160.96562	26.97219	0.1099677	0.23597251	2.5935529	21	5 7.9	21.3
459232 2012 EH_{12}	17.9	X	75.75945	204.34527	258.14597	1.25765	0.2280509	0.21897309	2.7261027	21	3 18.9	20.9
459233 2012 EB_{13}	17.1	X	117.00164	109.24475	335.07304	11.04442	0.1697638	0.22527571	2.6750165	21	4 5.6	21.2
459234 2012 EV_{15}	17.7	X	123.63863	307.56666	174.36522	11.69836	0.1319282	0.23590917	2.5940171	21	6 2.3	21.7
459235 2012 ER_{16}	17.2	X	78.75148	117.55094	19.96795	12.09530	0.1508889	0.22570333	2.6716367	21	4 25.7	20.6
459236 2012 FH_{1}	16.7	X	35.19050	132.64368	106.36505	14.01958	0.2145402	0.23082723	2.6319524	21	7 19.4	19.2
459237 2012 FC_{7}	18.1	X	100.22800	341.62559	173.41860	3.22446	0.1523594	0.23923296	2.5699344	21	6 19.8	21.6
459238 2012 FH_{11}	16.0	X	206.45881	153.06275	97.86421	10.26374	0.0941718	0.18563760	3.0433980	21	—	—
459239 2012 FD_{15}	16.8	X	25.41644	226.23120	355.97082	13.09392	0.1283026	0.23002962	2.6380329	21	5 18.8	19.9
459240 2012 FL_{15}	16.5	X	313.86704	270.17470	344.27296	11.83267	0.1128746	0.22110444	2.7085555	21	3 9.7	19.9
459241 2012 FN_{15}	16.2	X	138.44989	106.25732	1.60843	22.19331	0.0647615	0.23484204	2.6018694	21	5 13.4	20.3
459242 2012 FZ_{19}	16.6	X	126.07047	18.33184	16.54971	9.04639	0.0858450	0.20893270	2.8127541	21	2 12.6	20.6
459243 2012 FZ_{20}	17.7	X	116.54339	102.15363	24.60827	5.38172	0.1764873	0.23558318	2.5964095	21	6 3.4	21.6
459244 2012 FB_{21}	17.3	X	176.30341	238.42978	103.36327	3.07320	0.0356603	0.20563124	2.8427805	21	1 28.3	21.2
459245 2012 FL_{22}	17.3	X	155.23854	266.48112	171.46903	14.90234	0.0974524	0.23082814	2.6319454	21	5 9.7	21.4
459246 2012 FJ_{25}	16.4	X	345.66218	213.40240	13.82134	7.75989	0.0470521	0.21989983	2.7184382	21	3 29.2	19.7
459247 2012 FV_{25}	17.9	X	94.85144	101.55545	22.25387	3.53043	0.1915928	0.22815096	2.6524946	21	5 7.4	21.3
459248 2012 FD_{28}	17.2	X	16.17308	80.19564	117.73542	6.40693	0.0257222	0.21941601	2.7224328	21	4 6.7	20.8
459249 2012 FY_{31}	16.9	X	317.51319	133.28038	168.32206	13.17688	0.1781375	0.22667250	2.6640160	21	5 11.2	20.3
459250 2012 FL_{34}	16.0	X	162.37213	162.21408	169.55110	14.67073	0.1523232	0.19248815	2.9707542	21	1 11.9	20.9
459251 2012 FA_{35}	17.5	X	333.85987	70.34715	160.94618	8.13705	0.1703334	0.21394752	2.7686276	21	3 1.3	20.8
459252 2012 FP_{36}	17.4	X	59.58934	59.39200	112.76027	6.85900	0.0468723	0.22645108	2.6657522	21	5 4.5	20.9
459253 2012 FG_{39}	17.5	X	255.50351	113.84441	347.65010	9.85900	0.0878725	0.27018807	2.3696922	21	10 2.4	20.6
459254 2012 FV_{43}	16.3	X	232.94302	109.58350	108.15252	13.22522	0.2440819	0.17969090	3.1101786	21	12 28.2	21.1
459255 2012 FL_{44}	16.8	X	47.97617	189.04959	53.94338	12.98061	0.2286649	0.23298931	2.6156445	21	8 27.8	20.2
459256 2012 FZ_{46}	17.7	X	165.51519	284.98716	179.73170	21.86544	0.1338510	0.24302704	2.5431168	21	6 22.6	22.2
459257 2012 FJ_{48}	17.1	X	23.55693	0.14575	125.60383	2.88125	0.0458296	0.20524601	2.8463365	21	1 12.8	20.8
459258 2012 FV_{48}	17.4	X	1.14409	41.46680	154.29442	5.20785	0.0799388	0.21573524	2.7533113	21	3 8.2	20.5
459259 2012 FJ_{49}	17.4	X	299.46528	70.17353	98.96196	2.87994	0.1821787	0.19178978	2.9779614	21	—	—
459260 2012 FW_{52}	16.5	X	94.50345	193.00783	169.66585	11.28004	0.0690681	0.18751581	3.0230415	21	—	—
459261 2012 FF_{54}	16.4	X	307.79958	310.94517	217.28126	7.91653	0.0792953	0.19234512	2.9722267	21	—	—
459262 2012 FZ_{54}	17.4	X	222.56785	197.48113	148.77462	6.62296	0.0323793	0.21776061	2.7362126	21	3 28.4	21.2
459263 2012 FB_{55}	17.1	X	145.29633	246.32050	169.35977	12.94184	0.0452765	0.21685886	2.7437925	21	3 24.7	21.0
459264 2012 FM_{56}	17.5	X	32.83263	65.21903	151.58988	7.56003	0.2125841	0.22840278	2.6505447	21	6 9.9	20.0
459265 2012 FX_{56}	17.0	X	126.65484	262.28211	171.71957	14.28869	0.1092826	0.22279063	2.6948717	21	4 2.7	20.8
459266 2012 FT_{60}	16.2	X	39.60891	96.15848	83.31043	8.74342	0.0711555	0.21886264	2.7270198	21	4 18.9	19.6
459267 2012 FM_{61}	16.9	X	24.76636	194.39236	53.13972	6.03665	0.2070629	0.23095275	2.6309987	21	7 9.3	19.3
459268 2012 FU_{61}	16.2	X	282.25188	84.43777	84.09043	14.36326	0.0215898	0.18209505	3.0827428	21	—	—
459269 2012 FR_{64}	17.7	X	169.60424	296.17868	170.23641	9.69040	0.0755083	0.24236012	2.5477801	21	6 27.4	21.5
459270 2012 FB_{67}	17.2	X	298.99335	275.80958	62.83532	2.45294	0.1372998	0.23813754	2.5778094	21	6 6.0	20.1
459271 2012 FL_{67}	18.0	X	67.04791	133.18083	38.56896	2.73280	0.1882663	0.22529332	2.6748771	21	6 2.5	21.2
459272 2012 FF_{69}	17.0	X	36.03755	336.06001	196.10215	11.24602	0.1657751	0.21504945	2.7591618	21	4 5.2	19.9
459273 2012 FU_{72}	16.6	X	9.12421	212.71129	354.04601	9.63051	0.2100141	0.21725330	2.7404705	21	3 26.7	19.2
459274 2012 FG_{73}	16.9	X	69.08627	189.59861	17.30822	13.72864	0.1686708	0.23480301	2.6021577	21	7 27.4	20.5
459275 2012 FV_{74}	16.7	X	42.22492	230.73891	343.81226	12.73919	0.1223908	0.23026071	2.6362676	21	6 10.9	20.0
459276 2012 FM_{75}	16.9	X	16.78268	176.07266	67.91405	10.48500	0.0855418	0.23287320	2.6165139	21	6 6.6	19.7
459277 2012 FE_{77}	17.4	X	75.87905	355.56155	165.23321	2.26989	0.1367623	0.22975576	2.6401288	21	5 23.9	20.7
459278 2012 FG_{78}	17.6	X	72.32568	246.19559	260.99454	4.17546	0.2254271	0.22649513	2.6654066	21	5 13.1	20.8
459279 2012 FH_{78}	17.1	X	109.19374	133.80560	14.37168	12.00980	0.1271412	0.23306297	2.6150933	21	6 17.1	21.0
459280 2012 FM_{82}	17.1	X	13.01306	108.39623	82.77059	5.73248	0.1270046	0.21733659	2.7397703	21	3 21.5	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459281 2012 GB	15.6	X	222.09224	260.31333	7.71136	10.16096	0.1073386	0.18975485	2.9992141	21	—	—
459282 2012 GU_2	17.1	X	34.81115	136.06911	28.30008	5.00860	0.0144359	0.21373204	2.7704881	21	3 18.2	20.7
459283 2012 GB_3	17.9	X	49.97313	69.47794	81.32384	1.67437	0.2092415	0.21835778	2.7312216	21	4 7.5	20.4
459284 2012 GR_3	16.7	X	91.88767	256.36428	197.48665	12.06639	0.1024921	0.21214609	2.7842786	21	3 11.5	20.4
459285 2012 GX_4	17.2	X	71.48110	330.31371	222.16072	4.47994	0.1797365	0.23305816	2.6151293	21	7 6.6	20.5
459286 2012 GY_4	16.4	X	34.56862	244.76482	7.15283	10.32548	0.2933783	0.23188120	2.6239709	21	8 25.5	19.1
459287 2012 GX_6	16.4	X	333.74225	314.50849	184.40230	8.75807	0.0365928	0.18941309	3.0028206	21	—	—
459288 2012 GK_7	16.7	X	32.68911	193.96624	24.35480	13.57139	0.1644273	0.22464853	2.6799930	21	6 1.6	19.7
459289 2012 GC_8	16.0	X	121.07090	62.98746	7.11197	13.44035	0.0242793	0.21301258	2.7767229	21	3 12.3	19.8
459290 2012 GQ_{12}	17.0	X	79.15872	103.31604	84.51309	12.52724	0.1224148	0.23128312	2.6284926	21	7 2.2	20.4
459291 2012 GT_{12}	16.7	X	302.71378	196.26517	101.62791	11.07083	0.1251753	0.21634278	2.7481543	21	4 25.5	20.5
459292 2012 GA_{13}	15.8	X	252.14962	274.27080	19.09400	14.71304	0.1443002	0.20403036	2.8576312	21	2 22.2	20.5
459293 2012 GQ_{13}	16.8	X	52.12283	105.25035	62.68619	25.49712	0.2486521	0.22019679	2.7159935	21	5 15.5	19.6
459294 2012 GL_{14}	16.8	X	107.39311	128.58692	12.88849	12.68130	0.0877448	0.23048593	2.6345500	21	5 29.1	20.6
459295 2012 GP_{16}	17.2	X	68.96107	225.42192	5.02179	7.36972	0.1421903	0.23915424	2.5704983	21	8 22.4	20.6
459296 2012 GA_{17}	16.9	X	78.67030	88.62126	109.33381	7.90933	0.2280375	0.23472526	2.6027323	21	8 1.8	20.5
459297 2012 GE_{17}	17.1	X	31.93519	105.35326	76.34482	13.95133	0.1534202	0.21661829	2.7458236	21	4 17.5	20.2
459298 2012 GZ_{19}	17.0	X	358.63010	227.53511	40.00325	13.13679	0.1259780	0.22805386	2.6532475	21	6 6.6	19.9
459299 2012 GE_{21}	17.4	X	81.37419	35.32179	112.89737	7.62857	0.2063026	0.22464522	2.6800193	21	5 27.2	20.9
459300 2012 GS_{22}	16.8	X	305.11303	167.94951	102.25704	11.08189	0.1292994	0.21053200	2.7984914	21	3 24.0	20.8
459301 2012 GN_{24}	16.5	X	33.46206	150.95381	23.28306	12.71550	0.1477821	0.21491994	2.7602701	21	4 3.8	19.4
459302 2012 GP_{25}	17.1	X	27.37434	160.43511	35.71520	12.83504	0.1225470	0.21975686	2.7196170	21	4 20.9	20.0
459303 2012 GS_{25}	17.2	X	122.58478	291.75525	187.96424	12.46395	0.2107656	0.23266768	2.6180544	21	6 6.3	21.5
459304 2012 GC_{26}	17.0	X	60.92273	204.34376	16.32277	12.49288	0.1456785	0.23637886	2.5905797	21	7 30.9	20.4
459305 2012 GT_{27}	16.9	X	329.53390	169.01933	75.63838	10.76760	0.1569331	0.21268791	2.7795480	21	3 21.1	20.5
459306 2012 GY_{27}	17.2	X	51.95438	55.12038	179.50930	12.00448	0.1207231	0.23465217	2.6032727	21	7 25.1	20.5
459307 2012 GZ_{27}	16.7	X	85.16879	168.47520	57.79761	15.88165	0.0565184	0.24330929	2.5411497	21	9 1.1	20.4
459308 2012 GN_{29}	17.0	X	173.05077	44.27342	20.26312	6.51107	0.1394615	0.22862135	2.6488551	21	5 8.8	21.1
459309 2012 GS_{29}	16.1	X	229.41663	183.32927	21.85458	10.85017	0.0389789	0.17646814	3.1479308	21	—	—
459310 2012 GZ_{32}	16.9	X	264.26740	292.99987	275.34198	0.57684	0.1979638	0.18598738	3.0395810	21	—	—
459311 2012 GF_{33}	15.8	X	185.97743	56.70657	206.05877	25.30265	0.1335267	0.17468731	3.1692888	21	—	—
459312 2012 GY_{33}	16.5	X	110.24571	179.31390	355.56694	14.15650	0.0956490	0.23873206	2.5735280	21	7 26.3	20.3
459313 2012 GM_{37}	17.1	X	6.01723	234.73860	350.15422	4.06356	0.0659840	0.21951583	2.7216074	21	4 22.4	20.5
459314 2012 GC_{39}	16.9	X	303.84569	109.29634	149.31621	14.57817	0.1423353	0.20407234	2.8572394	21	3 2.1	20.8
459315 2012 GA_{40}	16.6	X	318.85492	163.36567	105.20715	9.28059	0.1814150	0.21377814	2.7700898	21	3 31.6	20.2
459316 2012 HS_1	16.8	X	8.14960	102.51134	90.33062	6.64283	0.0753484	0.21209747	2.7847041	21	3 19.3	20.3
459317 2012 HT_1	16.4	X	45.47340	110.04910	112.98923	18.58623	0.2354722	0.22987619	2.6392066	21	7 18.7	19.0
459318 2012 HU_3	16.7	X	31.74632	169.93049	100.41342	6.66638	0.2082094	0.23296731	2.6158092	21	8 31.1	19.4
459319 2012 HV_5	16.3	X	298.48181	94.15513	71.98866	18.71242	0.1770047	0.18572259	3.0424694	21	—	—
459320 2012 HL_6	15.8	X	187.47182	161.77897	107.38706	15.16539	0.0459107	0.17474145	3.1686341	21	—	—
459321 2012 HX_8	15.6	X	56.59071	273.23038	103.88982	13.00510	0.0786025	0.17244161	3.1967450	21	—	—
459322 2012 HB_9	15.9	X	167.57123	224.76685	78.43767	12.18796	0.1213285	0.18060782	3.0996430	21	—	—
459323 2012 HF_{10}	16.6	X	350.29879	142.57773	140.03948	13.84751	0.1629385	0.22385044	2.6863592	21	6 15.3	19.5
459324 2012 HY_{11}	17.1	X	70.30699	39.67015	174.39224	8.08584	0.1885027	0.23294608	2.6159681	21	8 4.3	20.5
459325 2012 HM_{17}	16.1	X	195.76095	172.89009	93.37032	10.46623	0.0451954	0.17638238	3.1489511	21	—	—
459326 2012 HX_{18}	15.9	X	287.93055	21.94186	118.60456	14.96300	0.2381769	0.17532928	3.1615478	21	12 6.4	19.9
459327 2012 HK_{19}	15.9	X	233.31845	188.04950	70.27756	16.03467	0.0667635	0.18561679	3.0436254	21	—	—
459328 2012 HX_{19}	16.2	X	159.42641	302.73442	28.38184	5.03669	0.0508894	0.18497423	3.0506700	21	1 1.9	20.7
459329 2012 HE_{20}	16.8	X	88.65497	87.93330	145.74897	12.72043	0.2754379	0.24196874	2.5505267	21	10 6.7	21.0
459330 2012 HY_{22}	16.1	X	63.94309	68.45719	108.98930	14.48359	0.1452663	0.22287484	2.6941929	21	6 2.1	19.5
459331 2012 HR_{23}	16.9	X	80.78550	159.76505	53.98302	8.52481	0.1330732	0.23768433	2.5810852	21	8 15.1	20.5
459332 2012 HT_{23}	16.5	X	209.06848	290.77142	147.50014	15.12228	0.0272907	0.22982646	2.6395873	21	7 8.7	20.3
459333 2012 HZ_{27}	15.9	X	89.89396	304.80291	67.20826	11.41830	0.0800775	0.17747052	3.1360663	21	—	—
459334 2012 HO_{38}	16.8	X	117.27932	309.58272	206.98294	25.77534	0.2791625	0.23788923	2.5796030	21	7 17.6	21.7
459335 2012 HC_{39}	16.5	X	107.74934	156.99908	355.37274	13.54255	0.2482828	0.23622655	2.5916931	21	7 9.4	20.8
459336 2012 HF_{39}	16.2	X	357.52788	339.42970	262.98968	8.93840	0.1390210	0.22140495	2.7061041	21	4 27.6	19.2
459337 2012 HO_{39}	17.0	X	348.69575	298.53105	318.50107	9.06969	0.3200217	0.21653092	2.7465622	21	4 4.9	19.7
459338 2012 HZ_{40}	16.1	X	281.07371	220.97309	351.03852	8.33823	0.1231833	0.19151437	2.9808158	21	—	—
459339 2012 HA_{41}	16.7	X	63.68451	229.35400	5.29287	12.02142	0.2289623	0.23770480	2.5809371	21	9 4.6	20.1
459340 2012 HP_{41}	16.9	X	329.71823	177.65475	54.96405	10.05519	0.1169216	0.21063187	2.7976067	21	3 11.1	20.6
459341 2012 HX_{42}	16.8	X	33.95596	91.87756	103.35388	13.53242	0.1893811	0.21752323	2.7382028	21	5 12.6	19.7
459342 2012 HC_{47}	16.7	X	248.30332	184.73870	83.03540	12.02287	0.1383608	0.19068615	2.9894408	21	1 16.5	21.5
459343 2012 HM_{51}	15.6	X	180.95762	242.98358	66.50717	17.13899	0.2152592	0.18123365	3.0925031	21	1 9.4	21.0
459344 2012 HV_{51}	16.4	X	300.24031	164.30969	46.29909	11.13657	0.0530013	0.19225327	2.9731734	21	1 13.2	20.8
459345 2012 HY_{52}	17.0	X	280.12887	215.69823	79.01883	9.23526	0.1127246	0.21194767	2.7860160	21	3 26.0	21.1
459346 2012 HR_{53}	17.2	X	18.40856	143.73007	92.16606	5.10525	0.0337051	0.22706392	2.6609535	21	5 28.3	20.4
459347 2012 HM_{54}	17.0	X	96.81952	284.15419	225.15005	9.09517	0.1174456	0.22745280	2.6579197	21	6 3.1	20.6
459348 2012 HF_{55}	17.2	X	104.78130	95.62212	54.15117	11.50869	0.2571237	0.23232080	2.6206598	21	7 1.3	21.3
459349 2012 HE_{56}	15.9	X	229.91592	15.72794	208.28032	11.50793	0.0827642	0.17920282	3.1158233	21	—	—
459350 2012 HG_{59}	17.3	X	93.02919	113.06088	58.15826	13.75791	0.2075669	0.23578212	2.5949489	21	7 11.5	21.2
459351 2012 HL_{60}	17.3	X	32.93327	149.23814	71.78679	3.24094	0.1395551	0.22512405	2.6762178	21	6 6.8	19.9
459352 2012 HJ_{61}	15.6	X	211.22102	135.53409	86.60212	23.64278	0.0540945	0.17064352	3.2191622	21	12 29.5	20.4
459353 2012 HH_{62}	17.0	X	1.18050	88.50631	186.53918	12.39936	0.2498009	0.22753808	2.6572556	21	6 24.0	19.3
459354 2012 HO_{69}	16.0	X	141.62684	264.85108	69.71219	20.10640	0.0733227	0.18156615	3.0887265	21	—	—
459355 2012 HQ_{75}	17.3	X	35.96248	12.31115	153.56394	8.68155	0.1554503	0.21307285	2.7761993	21	3 29.2	20.2
459356 2012 HT_{78}	16.3	X	242.55052	33.54506	235.39327	13.81109	0.1290979	0.18937040	3.0032719	21	1 9.7	21.3
459357 2012 HN_{79}	16.4	X	271.19525	356.65344	219.58002	4.79975	0.2065821	0.18458722	3.0549326	21	—	—
459358 2012 HN_{81}	15.8	X	185.28582	241.46706	61.88796	13.23320	0.0475054	0.18186512	3.0853405	21	—	—
459359 2012 HN_{83}	17.5	X	75.90245	67.47237	109.63108	14.03378	0.1214704	0.22625895	2.6672612	21	6 14.2	21.0
459360 2012 HO_{83}	17.1	X	65.20851	94.93648	103.59475	14.94829	0.1635335	0.22875839	2.6477970	21	7 3.8	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459361 2012 JE_{2}	16.0	X	356.09830	70.66335	72.13642	10.90925	0.0666343	0.19016045	2.9949478	21	—	—
459362 2012 JD_{12}	16.7	X	50.60141	176.50421	67.62957	11.23026	0.1359056	0.23601930	2.5932101	21	8 15.4	20.0
459363 2012 JR_{13}	16.6	X	338.53991	21.06193	226.39217	8.99020	0.2444274	0.21132531	2.7914834	21	3 16.4	19.9
459364 2012 JA_{14}	16.9	X	333.24640	160.67624	129.82617	5.40484	0.0521669	0.22327805	2.6909484	21	6 4.9	20.4
459365 2012 JF_{15}	16.0	X	142.02021	271.84685	46.42646	11.47025	0.0863038	0.17363220	3.1821150	21	—	—
459366 2012 JN_{18}	16.2	X	9.51952	131.91888	95.06324	31.61361	0.0889828	0.22061961	2.7125222	21	5 17.0	20.0
459367 2012 JH_{23}	16.8	X	30.63048	81.34447	117.87593	13.30533	0.1911755	0.21810830	2.7333039	21	5 11.9	19.7
459368 2012 JK_{24}	16.6	X	7.09964	152.42708	121.86628	16.37445	0.1855173	0.22561236	2.6723549	21	7 8.2	19.0
459369 2012 JR_{24}	17.2	X	61.31271	69.63236	161.86830	4.00162	0.2413142	0.23428624	2.6059827	21	8 25.9	20.4
459370 2012 JV_{27}	17.4	X	23.62203	133.82861	126.18517	14.13906	0.2240001	0.22761213	2.6566792	21	7 28.2	19.6
459371 2012 JF_{29}	16.2	X	187.63134	261.68558	44.04197	8.58637	0.0601771	0.18347400	3.0672772	21	1 3.6	20.9
459372 2012 JA_{32}	17.5	X	39.13002	1.39856	198.76004	9.60794	0.0773455	0.22001516	2.7174880	21	5 14.3	20.8
459373 2012 JE_{35}	16.0	X	180.97371	254.00047	45.81788	11.37790	0.0747172	0.18120787	3.0927965	21	—	—
459374 2012 JF_{38}	17.2	X	26.12819	26.01022	217.89181	10.92999	0.1903484	0.22618103	2.6678737	21	7 1.9	20.0
459375 2012 JR_{41}	15.4	X	13.01241	296.59455	133.90313	22.90415	0.0406041	0.16863832	3.2446302	21	—	—
459376 2012 JM_{42}	16.6	X	166.26508	179.19925	131.06577	5.90117	0.0849772	0.17576651	3.1563026	21	—	—
459377 2012 JN_{45}	16.4	X	271.89840	23.51474	225.51570	8.88721	0.0656276	0.19043183	2.9921018	21	1 21.3	20.9
459378 2012 JY_{49}	16.4	X	254.57146	313.90823	236.08348	8.41530	0.0705185	0.17277169	3.1926722	21	—	—
459379 2012 JK_{57}	16.3	X	280.63179	102.66943	102.73879	13.57369	0.0404044	0.18318973	3.0704496	21	—	—
459380 2012 JR_{60}	16.4	X	80.09222	5.02450	68.11090	12.18211	0.0780044	0.19806518	2.9147231	21	2 1.7	20.4
459381 2012 JX_{61}	16.7	X	301.79771	259.73494	98.01422	12.79177	0.0938843	0.23058763	2.6337753	21	7 15.1	19.8
459382 2012 JY_{61}	16.4	X	192.14255	263.98191	32.80388	9.56404	0.0705332	0.18285711	3.0741719	21	—	—
459383 2012 JV_{62}	17.4	X	329.35253	58.12332	188.50504	8.37378	0.1530312	0.21170543	2.7881409	21	3 16.9	21.0
459384 2012 KM_{8}	16.8	X	76.15968	194.21927	233.35986	11.02813	0.0881202	0.19006728	2.9959264	21	1 17.0	20.8
459385 2012 KA_{11}	16.4	X	278.84569	90.92342	79.61590	8.52792	0.1461679	0.17875226	3.1210570	21	—	—
459386 2012 KJ_{11}	16.9	X	151.26485	305.32336	339.62666	35.83820	0.5716291	0.50182913	1.5683108	21	—	—
459387 2012 KD_{12}	15.6	X	151.24943	202.65765	144.43265	20.37130	0.2351932	0.17598571	3.1536812	21	1 29.2	20.8
459388 2012 KC_{16}	16.0	X	209.22909	192.68069	92.07076	11.29035	0.0622893	0.18123396	3.0924997	21	1 1.5	20.6
459389 2012 KQ_{19}	16.0	X	224.29125	321.64631	54.93679	12.60900	0.0572762	0.21966699	2.7203588	21	5 6.0	19.8
459390 2012 KQ_{20}	16.4	X	29.26793	72.60792	67.18176	9.63421	0.0416273	0.19991221	2.8967421	21	2 12.5	20.3
459391 2012 KF_{23}	16.8	X	354.07976	90.63023	72.08504	9.40037	0.1132795	0.19958801	2.8998782	21	1 14.1	20.5
459392 2012 KK_{25}	16.2	X	72.48873	219.33719	134.50598	7.16010	0.1776971	0.16532225	3.2878740	21	—	—
459393 2012 KE_{26}	17.4	X	91.78795	39.17060	88.96286	5.36524	0.1648357	0.21900257	2.7258581	21	5 8.0	21.0
459394 2012 KJ_{26}	17.1	X	156.27519	356.35216	71.78597	7.15515	0.0391268	0.21506706	2.7590111	21	4 23.7	21.0
459395 2012 KE_{29}	17.2	X	25.70066	84.85793	207.70217	14.03936	0.0757731	0.24057321	2.5603806	21	8 26.7	20.5
459396 2012 KJ_{30}	16.2	X	137.71961	239.50220	91.93716	17.51603	0.0245283	0.17466519	3.1695563	21	—	—
459397 2012 KK_{31}	16.2	X	157.96601	254.28419	56.29061	11.34287	0.0705719	0.17823142	3.1271343	21	—	—
459398 2012 KO_{31}	16.1	X	130.77048	159.18173	204.70855	10.21976	0.1014629	0.18631352	3.0360329	21	1 12.1	20.7
459399 2012 KB_{40}	16.7	X	69.76584	271.36612	224.41118	12.08709	0.1674021	0.21063212	2.7976045	21	4 14.4	20.2
459400 2012 KX_{47}	17.6	X	75.55891	89.90840	102.74729	11.46358	0.2395581	0.22928441	2.6437458	21	7 23.1	21.2
459401 2012 KE_{48}	16.2	X	343.11411	42.56756	105.85354	11.82505	0.0581496	0.18263414	3.0766734	21	—	—
459402 2012 KT_{49}	16.9	X	343.23102	159.93708	108.23472	7.68730	0.0197977	0.21748254	2.7385444	21	5 23.8	20.6
459403 2012 KK_{50}	16.4	X	274.95165	44.90808	205.88610	9.84806	0.0530804	0.19114570	2.9846473	21	1 27.8	20.9
459404 2012 LR	16.2	X	64.57641	310.14791	106.09346	11.14788	0.0467829	0.17732115	3.1378272	21	—	—
459405 2012 LZ_{5}	16.4	X	38.03629	289.49572	211.38320	12.52649	0.0166753	0.19639279	2.9312466	21	2 17.6	20.6
459406 2012 LD_{9}	16.5	X	17.43095	16.81834	168.84989	15.61600	0.0762079	0.20588006	2.8404895	21	3 22.6	19.9
459407 2012 LU_{14}	16.1	X	229.39344	126.58048	144.58464	16.06427	0.1990476	0.18132225	3.0914957	21	1 2.8	21.5
459408 2012 LP_{17}	17.4	X	73.46134	74.17845	136.75500	6.04522	0.2199569	0.23185873	2.6241405	21	8 10.8	20.9
459409 2012 LY_{17}	16.0	X	325.31285	77.55594	95.16735	16.77015	0.0607221	0.18507127	3.0496035	21	—	—
459410 2012 LL_{20}	16.4	X	205.14888	132.40443	140.54096	11.05841	0.1223720	0.17475583	3.1684603	21	—	—
459411 2012 LO_{22}	16.7	X	19.70020	109.08812	71.15470	10.29751	0.1321037	0.20967164	2.8061416	21	3 22.7	20.0
459412 2012 MR_{5}	16.4	X	6.72047	128.44919	133.78180	15.67417	0.2074266	0.22051775	2.7133574	21	6 20.2	19.1
459413 2012 MO_{15}	16.5	X	249.83441	131.32499	135.18280	11.19177	0.1151882	0.17832408	3.1260509	21	1 18.7	21.3
459414 2012 NG	18.3	X	154.67391	113.69400	273.76041	19.52840	0.0816694	0.39895157	1.8274939	21	1 22.3	20.1
459415 2012 PQ	15.3	X	285.55899	295.23668	304.15860	14.77497	0.1478921	0.17763556	3.1341236	21	1 20.5	19.9
459416 2012 PO_{14}	18.1	X	162.61699	49.28689	315.18860	18.56825	0.1247257	0.38925200	1.8577281	21	1 17.8	19.9
459417 2012 PY_{27}	15.7	X	268.92282	259.98670	330.86600	24.53745	0.2199519	0.17202322	3.2019263	21	—	—
459418 2012 QL_{44}	17.7	X	155.31732	193.46264	135.16696	22.81458	0.0906917	0.37987535	1.8881738	21	—	—
459419 2012 QM_{48}	16.3	X	289.00702	88.16237	201.52220	9.15636	0.0339522	0.18944702	3.0024620	21	4 7.8	20.3
459420 2012 QA_{50}	18.0	X	7.58224	110.19695	312.66546	17.10983	0.0987493	0.35977600	1.9578583	21	—	—
459421 2012 RK	18.6	X	178.31967	81.09014	299.64427	18.61588	0.1149300	0.39976322	1.8250194	21	2 17.7	20.8
459422 2012 RA_{9}	13.4	X	352.59002	353.77761	272.89173	29.21291	0.0522003	0.08501756	5.1222836	21	6 7.9	20.0
459423 2012 RG_{9}	16.2	X	324.68590	48.09409	165.09359	16.90262	0.1527202	0.18012992	3.1051230	21	1 31.8	20.5
459424 2012 RH_{39}	16.1	X	343.36237	214.45438	16.15184	10.84975	0.0776463	0.18862719	3.0111555	21	3 31.9	19.9
459425 2012 SE	18.8	X	184.54570	51.29488	341.08552	21.05633	0.1767312	0.40032680	1.8233062	21	3 20.5	21.3
459426 2012 SF_{4}	17.9	X	303.57976	158.90865	13.18901	20.23862	0.0565840	0.36948614	1.9234044	21	—	—
459427 2012 SG_{25}	13.8	X	276.83119	343.81219	13.67870	13.01641	0.1066851	0.08320757	5.1962992	21	6 9.2	20.8
459428 2012 SC_{50}	13.6	X	296.48723	29.33327	301.73307	7.72876	0.1085090	0.08216674	5.2400892	21	6 3.1	20.4
459429 2012 SS_{51}	18.1	X	340.06770	357.62088	186.44021	22.27700	0.0460621	0.38870231	1.8594791	21	—	—
459430 2012 SW_{63}	15.9	X	281.80443	75.66018	204.29785	11.23027	0.0728642	0.17834474	3.1258096	21	3 11.7	20.5
459431 2012 TG_{5}	18.0	X	65.45189	191.96434	271.28630	19.78114	0.0778128	0.38331745	1.8768533	21	—	—
459432 2012 TL_{14}	14.2	X	268.98510	110.32301	248.98854	8.60453	0.0904542	0.08291987	5.2083118	21	6 6.5	21.0
459433 2012 TG_{37}	16.2	X	287.72740	62.48386	188.88268	13.56565	0.0903554	0.17238672	3.1974236	21	2 10.5	21.0
459434 2012 TA_{65}	16.3	X	292.57507	277.19994	329.47580	9.87233	0.2584136	0.17260001	3.1947889	21	1 25.4	21.3
459435 2012 TE_{77}	15.6	X	152.47929	348.64321	255.16888	2.12598	0.0125172	0.12608433	3.9387823	21	11 15.7	21.2
459436 2012 TV_{81}	14.2	X	289.35071	104.93684	230.24896	2.08545	0.1095420	0.08384305	5.1700095	21	5 30.7	20.9
459437 2012 TH_{89}	16.2	X	234.93962	95.11738	225.75919	8.71504	0.2092510	0.17390121	3.1788326	21	3 1.0	21.7
459438 2012 TZ_{103}	14.2	X	300.39135	106.02832	224.53116	9.20160	0.0763835	0.08032060	5.3200789	21	6 12.1	21.1
459439 2012 TB_{146}	13.7	X	344.77614	289.26583	359.26549	13.45412	0.1093407	0.08381750	5.1710601	21	6 18.9	20.2
459440 2012 TU_{297}	18.4	X	93.53448	126.61926	215.09245	20.77065	0.0737055	0.35418276	1.9784167	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459441 2012 TN_{308}	17.9	X	33.90596	265.17375	237.43982	20.58295	0.0745622	0.38086479	1.8849022	21	—	—
459442 2012 UC_{18}	18.4	X	230.41676	24.09975	227.36714	20.14765	0.0452495	0.36974606	1.9225029	21	—	—
459443 2012 UR_{85}	16.4	X	256.04471	86.46831	231.89880	13.80094	0.3087777	0.17776059	3.1326537	21	3 6.2	22.1
459444 2012 UF_{158}	17.6	X	337.10766	177.12510	335.26508	17.95948	0.1018753	0.36911558	1.9246915	21	—	—
459445 2012 UC_{170}	15.6	X	210.45309	283.37058	65.61615	26.87361	0.2277735	0.17295635	3.1903993	21	4 1.6	21.5
459446 2012 VR_{1}	18.0	X	35.12535	99.61107	66.22932	20.42402	0.0895620	0.39214227	1.8485886	21	2 20.9	19.9
459447 2012 VL_{38}	17.9	X	25.12194	78.86195	83.93082	22.61175	0.0806339	0.38216147	1.8806362	21	1 18.1	19.6
459448 2012 VM_{38}	18.0	X	126.99336	266.93893	110.18459	24.61544	0.1156660	0.37425140	1.9070427	21	—	—
459449 2012 WO	17.8	X	53.90869	51.57574	350.25499	18.24847	0.1088775	0.35704026	1.9678467	21	—	—
459450 2012 WX_{4}	18.8	X	275.59029	171.39598	249.50217	3.11981	0.1497614	0.31660784	2.1320053	21	8 29.4	20.9
459451 2012 WG_{32}	17.5	X	239.79213	300.48598	26.55296	17.61567	0.4963328	0.39665459	1.8345423	21	2 26.4	21.6
459452 2012 XB_{6}	16.2	X	266.99613	150.73055	165.06758	6.99398	0.3137928	0.17587821	3.1549661	21	3 16.7	21.6
459453 2012 XH_{21}	17.7	X	88.16237	92.95974	245.54998	19.50738	0.0297099	0.34547897	2.0115074	21	—	—
459454 2012 XY_{55}	17.9	X	179.23928	188.80585	97.95136	24.35197	0.0708632	0.35538208	1.9739631	21	—	—
459455 2012 XB_{56}	17.9	X	11.22208	193.00479	301.27791	18.93694	0.0577231	0.36455812	1.9406991	21	—	—
459456 2012 XD_{111}	17.8	X	118.16827	276.20518	102.63646	25.01015	0.0663660	0.36978342	1.9223735	21	—	—
459457 2012 XG_{134}	17.4	X	297.75766	148.37223	109.28257	24.28410	0.0494720	0.37991585	1.8880396	21	2 2.7	19.4
459458 2012 XR_{134}	18.5	X	300.37067	355.13046	218.04567	11.86514	0.7711585	0.34433060	2.0159773	21	—	—
459459 2012 YZ_{2}	17.7	X	300.20113	297.73418	293.32039	19.10788	0.0469947	0.36960509	1.9229917	21	—	—
459460 2012 YT_{3}	18.3	X	122.78862	88.89511	312.12574	18.86792	0.1292686	0.36983987	1.9221778	21	1 17.4	19.7
459461 2013 AD	17.6	X	84.47726	30.68120	333.01708	18.02423	0.0278976	0.34593557	2.0097371	21	—	—
459462 2013 AY_{52}	19.9	X	283.01021	251.79165	116.35513	18.34988	0.4745969	0.65403263	1.3144269	21	5 1.2	22.0
459463 2013 AO_{55}	17.8	X	169.69183	11.48717	312.58778	18.35330	0.0704267	0.35592300	1.9719626	21	—	—
459464 2013 AZ_{72}	17.9	X	347.35338	221.64349	329.21873	18.05679	0.0718415	0.36664950	1.9333122	21	1 8.5	20.0
459465 2013 AK_{112}	18.4	X	317.15004	340.51107	66.86248	2.02900	0.0814846	0.31183104	2.1537229	21	11 4.8	20.1
459466 2013 BR	14.0	X	335.49521	308.63698	93.26645	8.81844	0.0419988	0.08455908	5.1407823	21	10 22.2	20.7
459467 2013 BZ_{16}	17.7	X	176.44784	11.04595	291.11573	16.45416	0.1113721	0.34967236	1.9953933	21	—	—
459468 2013 BC_{22}	17.4	X	71.41629	84.94494	37.34091	2.52373	0.1693868	0.25647000	2.4534563	21	3 24.8	19.9
459469 2013 BO_{43}	17.9	X	146.06764	97.96838	96.57073	4.49364	0.0786827	0.30042871	2.2078781	21	10 4.2	20.8
459470 2013 BU_{45}	17.9	X	16.29199	1.99355	161.76315	22.62951	0.0652771	0.36954839	1.9231884	21	1 8.6	20.1
459471 2013 BT_{54}	18.8	X	263.74133	16.38646	91.51907	2.99622	0.0581358	0.31320947	2.1473992	21	11 8.7	21.0
459472 2013 CA_{7}	18.2	X	279.72078	125.56882	260.87594	3.20978	0.0767268	0.29354933	2.2422394	21	7 26.3	20.6
459473 2013 CF_{16}	17.7	X	184.25373	303.03822	125.66306	6.73357	0.1092702	0.27316686	2.3524336	21	5 25.9	21.3
459474 2013 CJ_{18}	17.2	X	229.73565	294.78422	130.68622	6.93823	0.0774826	0.28280776	2.2986623	21	7 13.2	20.3
459475 2013 CX_{21}	17.4	X	187.24807	334.75908	87.57436	7.45157	0.0967316	0.27065233	2.3669815	21	5 20.2	20.8
459476 2013 CL_{36}	17.7	X	176.10498	9.23641	24.78705	12.00067	0.1768163	0.38202772	1.8810751	21	3 26.4	20.1
459477 2013 CE_{41}	18.6	X	231.46150	272.40697	147.31476	4.67089	0.1051019	0.28829095	2.2694226	21	7 4.1	21.8
459478 2013 CT_{45}	18.0	X	70.59524	95.96914	331.17728	18.31013	0.0711865	0.35195296	1.9867641	21	—	—
459479 2013 CP_{47}	17.8	X	114.26696	309.75472	300.70348	5.22167	0.1244538	0.30027502	2.2086314	21	11 9.9	21.1
459480 2013 CR_{47}	18.5	X	167.83378	34.34337	182.06955	5.37623	0.1153236	0.30786528	2.1721788	21	11 25.3	21.5
459481 2013 CR_{60}	16.8	X	253.48088	148.58929	124.02560	9.09602	0.1501098	0.23661707	2.5888407	21	1 18.2	20.7
459482 2013 CO_{68}	18.8	X	193.56024	230.99682	230.13360	4.58005	0.1686720	0.28740639	2.2740767	21	7 14.8	22.5
459483 2013 CZ_{73}	18.5	X	300.20494	340.46187	76.15323	2.72537	0.1082076	0.30816591	2.1707659	21	10 16.5	20.2
459484 2013 CS_{75}	16.6	X	235.81963	93.93846	140.62627	10.46123	0.1411462	0.21362900	2.7713790	21	—	—
459485 2013 CS_{79}	18.3	X	238.18782	323.22386	135.76529	4.82692	0.1013325	0.30373353	2.1918335	21	9 10.3	20.9
459486 2013 CX_{103}	17.2	X	287.90835	194.17049	99.91639	6.33352	0.1528585	0.25682420	2.4512000	21	3 21.7	20.6
459487 2013 CW_{110}	18.3	X	179.17763	77.96778	104.89127	6.69155	0.0669175	0.30388825	2.1910894	21	10 29.2	21.2
459488 2013 CJ_{111}	18.1	X	279.66563	301.25218	105.53659	5.16280	0.1598117	0.29998983	2.2100310	21	8 14.2	20.3
459489 2013 CH_{119}	18.2	X	153.76141	243.70637	10.35415	6.29147	0.2161939	0.30783670	2.1723133	21	12 23.8	21.7
459490 2013 CY_{123}	18.2	X	92.53385	88.92938	98.29499	2.22898	0.1255375	0.27378420	2.3488960	21	7 20.9	21.1
459491 2013 CC_{128}	18.6	X	212.16414	154.68473	81.25293	2.99465	0.2317227	0.32933377	2.0767228	21	—	—
459492 2013 CO_{139}	17.8	X	99.72524	6.73959	133.96484	7.37407	0.1592115	0.26349457	2.4096554	21	6 1.1	21.0
459493 2013 CH_{143}	18.3	X	117.91290	340.96594	184.93503	2.95128	0.0954522	0.27739152	2.3284876	21	7 18.5	21.3
459494 2013 CM_{161}	18.0	X	311.01440	353.38317	16.05293	1.55276	0.1112193	0.28944026	2.2634110	21	8 18.3	20.0
459495 2013 CJ_{168}	18.0	X	279.24055	131.77048	275.48317	6.82019	0.1416402	0.29792409	2.2202351	21	8 13.1	20.6
459496 2013 CH_{172}	17.7	X	88.91596	303.50916	310.88068	2.46451	0.2108952	0.28859626	2.2678218	21	10 26.4	21.0
459497 2013 CL_{174}	18.5	X	154.38662	280.04948	288.72389	1.94946	0.1297601	0.29887095	2.2155433	21	10 28.6	21.7
459498 2013 CH_{175}	17.9	X	243.70884	261.21409	157.60334	6.20770	0.0997087	0.28531280	2.2851877	21	7 18.4	20.9
459499 2013 CS_{191}	18.4	X	190.00182	139.88974	34.14747	4.34380	0.0913956	0.30295508	2.1955865	21	10 24.8	21.1
459500 2013 CR_{195}	18.5	X	297.41739	269.07721	145.17754	5.56333	0.1259382	0.30597938	2.1810952	21	10 5.6	20.3
459501 2013 CD_{207}	18.2	X	326.34363	91.83882	304.47493	3.58962	0.0848609	0.30825610	2.1703424	21	11 1.4	20.3
459502 2013 CB_{208}	18.4	X	303.17779	128.92619	292.70880	4.26137	0.0854251	0.30759408	2.1734554	21	10 28.5	20.4
459503 2013 CC_{218}	17.8	X	318.51875	50.66669	303.43650	5.27325	0.1104311	0.29009220	2.2600186	21	8 6.8	19.7
459504 2013 DC_{13}	17.9	X	81.48027	240.50783	6.21826	6.83675	0.0771293	0.29113725	2.2546071	21	9 23.4	20.4
459505 2013 EC_{6}	17.5	X	331.16456	162.99646	173.64341	5.48967	0.1868567	0.28233873	2.3012073	21	7 24.9	19.4
459506 2013 EU_{10}	17.5	X	138.30327	322.47707	222.17629	2.91183	0.1077359	0.28514326	2.2860934	21	9 7.4	20.7
459507 2013 EA_{13}	17.2	X	298.46548	211.97757	147.86844	7.32485	0.1366990	0.28066406	2.3103521	21	7 5.5	19.7
459508 2013 EQ_{15}	17.3	X	239.59480	306.13070	110.44527	5.26051	0.0839505	0.28174757	2.3044251	21	7 12.7	20.3
459509 2013 EQ_{17}	18.0	X	133.05081	146.57588	67.42946	5.49678	0.1848187	0.28833030	2.2692161	21	10 17.3	21.5
459510 2013 ER_{18}	18.2	X	167.46168	295.44523	284.77005	3.37642	0.0843790	0.30716910	2.1754597	21	11 30.5	21.1
459511 2013 ER_{25}	18.6	X	133.08090	52.98625	106.10778	2.19518	0.1237050	0.27665705	2.3326069	21	7 30.9	21.9
459512 2013 EA_{26}	18.7	X	158.98682	36.71751	159.02754	1.54492	0.0871237	0.29525567	2.2335922	21	10 18.1	21.7
459513 2013 EB_{29}	17.9	X	121.59412	293.08610	327.63867	6.51134	0.2066981	0.29941079	2.2128794	21	12 3.4	21.5
459514 2013 EZ_{30}	17.8	X	112.65827	170.51443	108.42569	4.91111	0.1758999	0.29973098	2.2113032	21	12 18.7	21.2
459515 2013 EW_{52}	18.3	X	152.72775	210.27577	351.78816	8.65849	0.0338484	0.29702989	2.2246888	21	10 16.6	21.1
459516 2013 ER_{62}	18.0	X	43.94814	329.57037	355.14020	6.31590	0.1207714	0.29884101	2.2156913	21	11 26.9	20.7
459517 2013 EN_{67}	17.8	X	57.58795	120.24496	133.43643	5.11663	0.1594269	0.27333219	2.3514849	21	9 12.6	20.6
459518 2013 EB_{82}	18.1	X	286.69895	274.88925	159.33981	5.01286	0.1179230	0.30279945	2.1963388	21	10 17.1	20.0
459519 2013 EP_{85}	17.3	X	49.70671	145.59181	80.82833	5.97031	0.1035322	0.26769826	2.3843629	21	7 9.9	19.8
459520 2013 EY_{101}	17.2	X	265.00139	105.63306	151.00642	9.70659	0.0469862	0.22845638	2.6501301	21	1 19.2	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459521 2013 EY_{107}	17.3	X	137.11813	63.57655	136.49814	23.41203	0.1875684	0.28215614	2.3022000	21	10 7.7	21.4
459522 2013 EV_{109}	17.4	X	16.78515	206.38465	70.64975	4.73167	0.1630466	0.26657317	2.3910670	21	8 5.6	19.4
459523 2013 EM_{116}	17.4	X	160.46269	197.53627	124.62286	5.25533	0.0716907	0.21754266	2.7380398	21	—	—
459524 2013 ES_{116}	18.3	X	110.12892	102.10440	65.25962	3.43438	0.1076216	0.27101334	2.3648791	21	7 13.3	21.5
459525 2013 EL_{125}	18.0	X	113.05809	109.40859	94.76401	4.36856	0.0979372	0.28029909	2.3123572	21	9 7.4	21.1
459526 2013 EM_{125}	18.2	X	116.44072	76.38638	79.74351	5.54111	0.1298323	0.26856229	2.3792461	21	7 7.9	21.4
459527 2013 EW_{127}	14.9	X	153.11513	302.51019	279.80151	25.01430	0.2674048	0.17601557	3.1533244	21	10 25.5	20.9
459528 2013 EG_{141}	18.1	X	339.10836	173.58276	148.70403	1.30183	0.1138081	0.28979851	2.2615453	21	7 26.9	19.8
459529 2013 EY_{152}	18.1	X	154.35051	88.20828	20.31966	5.37923	0.1916037	0.26370839	2.4083527	21	6 18.8	22.0
459530 2013 FG_{1}	18.3	X	166.03724	80.06723	142.26882	3.73736	0.0617124	0.30623421	2.1798850	21	12 4.2	21.0
459531 2013 FB_{2}	17.4	X	333.86380	184.58477	120.66525	8.01656	0.1120250	0.26714008	2.3876831	21	6 19.2	19.8
459532 2013 FL_{6}	18.0	X	177.38413	191.15071	29.05685	6.48890	0.1385257	0.30537981	2.1839491	21	12 6.4	21.1
459533 2013 FW_{19}	18.0	X	106.20354	76.37624	169.15689	6.75855	0.2148556	0.28584884	2.2823299	21	11 3.1	21.6
459534 2013 FC_{26}	17.5	X	61.14552	142.52351	52.87085	5.65294	0.1164155	0.26414642	2.4056895	21	6 13.6	20.2
459535 2013 GE_{2}	18.4	X	129.38577	186.13233	20.35073	3.92284	0.1708294	0.28359917	2.2943839	21	10 1.7	22.0
459536 2013 GN_{2}	18.8	X	193.33115	25.77231	126.21427	0.61544	0.1479124	0.29385960	2.2406609	21	9 23.4	21.8
459537 2013 GF_{3}	17.7	X	85.57742	347.49745	199.04581	11.74604	0.1145423	0.26908363	2.3761719	21	7 6.4	20.9
459538 2013 GL_{6}	18.3	X	163.28991	41.62422	141.72953	4.00358	0.0225223	0.29148894	2.2527932	21	10 8.7	21.0
459539 2013 GG_{17}	17.7	X	24.74515	183.22420	94.59487	5.52004	0.1078135	0.27256594	2.3558899	21	8 16.6	20.0
459540 2013 GY_{19}	18.2	X	124.76261	27.24769	149.49324	2.45477	0.1749742	0.27613252	2.3355599	21	8 18.4	21.7
459541 2013 GC_{22}	18.1	X	191.09117	150.86238	17.58224	5.92333	0.0983809	0.29507419	2.2345079	21	10 16.4	21.0
459542 2013 GP_{22}	18.0	X	40.03697	269.26484	25.30537	5.45911	0.1668665	0.27797632	2.3252207	21	10 15.6	20.4
459543 2013 GX_{23}	17.5	X	315.06607	6.70896	264.55261	2.35004	0.0949925	0.24708593	2.5151895	21	4 1.3	20.6
459544 2013 GJ_{25}	18.0	X	197.19982	313.28681	221.89260	5.04917	0.1634028	0.29972120	2.2113513	21	10 26.9	21.1
459545 2013 GR_{25}	17.8	X	104.08116	239.25172	345.59166	7.10212	0.1668296	0.28077367	2.3097508	21	9 28.0	21.2
459546 2013 GH_{26}	18.2	X	93.73967	53.46463	195.09375	6.18744	0.2017840	0.28319898	2.2965448	21	10 24.0	21.5
459547 2013 GR_{28}	17.4	X	69.85033	306.57040	198.75730	14.12040	0.0314602	0.24643512	2.5196158	21	4 5.1	20.6
459548 2013 GD_{31}	17.9	X	58.67684	333.80549	270.40898	0.72319	0.1328715	0.27141013	2.3625736	21	8 24.8	20.4
459549 2013 GO_{32}	17.5	X	67.26731	178.04759	57.32744	2.78765	0.1801558	0.27011964	2.3700924	21	9 3.2	20.4
459550 2013 GT_{43}	18.1	X	83.30164	111.50877	150.94639	2.58183	0.1930469	0.28084194	2.3093765	21	10 30.7	21.5
459551 2013 GH_{46}	18.2	X	88.72213	272.00770	5.22627	7.71717	0.1435885	0.29488523	2.2354624	21	11 18.3	21.5
459552 2013 GN_{46}	18.3	X	131.70959	244.96387	27.95559	3.48814	0.1574192	0.30623667	2.1798733	21	12 29.3	21.6
459553 2013 GA_{51}	18.4	X	181.39153	247.40057	311.13929	3.96510	0.1092405	0.29826841	2.2185261	21	11 13.1	21.4
459554 2013 GZ_{69}	17.9	X	104.31764	93.66744	138.33961	4.59599	0.1732910	0.27909065	2.3190273	21	10 11.6	21.4
459555 2013 GT_{74}	17.8	X	11.33229	280.08241	356.12186	1.47352	0.1737165	0.26190063	2.4194223	21	7 21.9	19.7
459556 2013 GU_{78}	18.3	X	70.12957	341.65461	217.45387	2.46212	0.1255678	0.25930778	2.4355237	21	7 5.3	21.0
459557 2013 GF_{81}	18.4	X	184.36377	102.28567	38.80068	3.31047	0.1371000	0.28333933	2.2957864	21	8 31.7	21.8
459558 2013 GV_{82}	15.9	X	102.86580	265.49841	81.94963	10.85487	0.1002648	0.18866109	3.0107948	21	—	—
459559 2013 GL_{85}	17.1	X	342.29168	108.55420	92.97101	13.03196	0.2200815	0.23285986	2.6166138	21	1 22.9	20.2
459560 2013 GV_{89}	18.4	X	186.83813	283.94771	333.73225	2.25074	0.1047074	0.31858579	2.1231717	21	—	—
459561 2013 GM_{92}	18.0	X	129.42291	32.26209	235.72757	2.74157	0.3047349	0.29341650	2.2429161	21	12 19.1	22.1
459562 2013 GQ_{96}	17.4	X	353.09040	164.31758	126.40085	3.66077	0.1674741	0.26019497	2.4299842	21	7 1.4	19.4
459563 2013 GW_{97}	17.6	X	166.55677	329.49808	235.41083	9.43980	0.1066994	0.29464408	2.2366820	21	11 5.7	20.7
459564 2013 GF_{98}	18.2	X	76.94424	156.76168	28.21614	2.75074	0.1449416	0.26083369	2.4260156	21	6 28.8	21.0
459565 2013 GH_{99}	15.4	X	222.44306	277.31664	209.90732	24.86833	0.1678631	0.17193232	3.2030548	21	9 5.1	20.8
459566 2013 GO_{99}	15.8	X	126.13547	219.90059	86.26489	14.01900	0.1533413	0.18533033	3.0467609	21	—	—
459567 2013 GU_{101}	18.1	X	106.01327	166.84341	65.55070	4.75605	0.1879918	0.27759062	2.3273741	21	10 14.7	21.6
459568 2013 GY_{103}	18.5	X	194.16607	139.82336	22.98031	1.83553	0.1496002	0.29425934	2.2386312	21	10 8.5	21.7
459569 2013 GW_{104}	18.1	X	149.10489	164.81075	6.45251	4.32481	0.0772732	0.28175320	2.3043944	21	9 2.6	21.3
459570 2013 GF_{105}	18.0	X	120.77337	66.25043	143.96977	5.00709	0.1669997	0.28101959	2.3084031	21	9 29.0	21.5
459571 2013 GB_{107}	18.1	X	214.34084	340.03370	177.67176	5.19314	0.0801572	0.29867727	2.2165010	21	11 3.5	20.7
459572 2013 GC_{107}	18.0	X	115.45197	194.03068	89.16184	2.09002	0.2182337	0.29751146	2.2222875	21	12 26.8	21.6
459573 2013 GE_{107}	16.2	X	149.71927	197.84937	107.81438	10.89240	0.2784456	0.18642588	3.0348129	21	—	—
459574 2013 GD_{109}	17.6	X	179.51240	299.14117	268.00902	4.71557	0.1079860	0.29916721	2.2140804	21	11 23.6	20.5
459575 2013 GF_{109}	17.7	X	87.64344	347.88899	249.08946	4.78997	0.1501681	0.27563277	2.3383821	21	9 22.9	21.1
459576 2013 GB_{110}	18.2	X	133.22939	102.52386	121.38089	4.17315	0.1886267	0.28827933	2.2694836	21	10 29.8	21.8
459577 2013 GF_{110}	17.8	X	66.84601	203.96434	55.68473	4.43214	0.2188433	0.27333552	2.3514658	21	10 12.0	21.0
459578 2013 GZ_{110}	18.0	X	86.16637	205.57173	61.67477	4.34529	0.2042932	0.28064108	2.3104782	21	11 9.3	21.5
459579 2013 GG_{112}	17.6	X	55.43777	236.28350	355.31221	4.31888	0.1564292	0.26256289	2.4153523	21	8 6.4	20.2
459580 2013 GR_{112}	17.1	X	29.83284	319.97868	210.79529	14.74830	0.0637895	0.23875852	2.5733378	21	3 10.9	20.4
459581 2013 GL_{115}	18.2	X	71.39141	14.04016	262.67460	2.64094	0.1386741	0.28424348	2.2909153	21	10 28.4	21.2
459582 2013 GV_{117}	18.3	X	138.20402	156.21342	20.88394	7.64621	0.0430352	0.27910521	2.3189466	21	8 28.5	21.3
459583 2013 GU_{118}	16.0	X	117.62929	213.67218	82.73296	16.61411	0.2570785	0.17527345	3.1622191	21	12 28.4	21.5
459584 2013 GE_{123}	18.0	X	69.04752	91.85029	164.95519	1.18836	0.1596168	0.27283194	2.3543584	21	10 1.1	21.1
459585 2013 GH_{124}	18.6	X	129.54296	188.97517	14.43863	2.07303	0.1222266	0.28275312	2.2989584	21	9 25.2	21.7
459586 2013 GV_{126}	16.7	X	77.03500	295.65473	190.49900	21.87195	0.0282160	0.23334629	2.6129762	21	3 20.9	20.1
459587 2013 GW_{126}	17.6	X	111.72697	87.64298	107.97941	4.99456	0.0535442	0.26723687	2.3871065	21	8 17.9	20.6
459588 2013 GE_{127}	18.0	X	125.70715	93.03986	161.02488	2.97665	0.1342110	0.29184699	2.2509503	21	11 27.9	21.3
459589 2013 GD_{130}	17.3	X	285.41771	24.90734	257.35674	5.05865	0.1135481	0.23596940	2.5935757	21	3 5.3	21.1
459590 2013 GQ_{130}	17.6	X	104.37667	207.60883	13.21811	5.75450	0.1648172	0.27642224	2.3339277	21	9 24.8	20.8
459591 2013 GS_{134}	18.4	X	181.01189	8.02212	193.66623	6.56826	0.1009353	0.29818698	2.2189300	21	11 20.1	21.5
459592 2013 HV_{2}	16.7	X	355.70721	54.38960	148.00345	14.95249	0.1066443	0.23686394	2.5870416	21	3 2.7	19.6
459593 2013 HX_{8}	17.6	X	164.39356	129.74180	77.07667	7.51846	0.0817484	0.29770705	2.2213141	21	11 9.9	20.6
459594 2013 HZ_{9}	17.4	X	354.21174	118.47438	86.54149	9.73779	0.1100331	0.23814396	2.5777631	21	3 7.2	20.5
459595 2013 HF_{12}	16.9	X	300.32639	130.58970	104.90314	12.59586	0.1502037	0.22401718	2.6850260	21	1 23.5	20.8
459596 2013 HK_{13}	17.8	X	87.39398	147.76833	109.35315	5.25728	0.2041665	0.27956334	2.3164125	21	10 30.3	21.3
459597 2013 HP_{20}	16.8	X	70.35712	30.83455	94.22468	14.29796	0.1721818	0.24424734	2.5346393	21	4 6.7	20.0
459598 2013 HY_{20}	17.8	X	48.16279	103.76726	132.01990	3.35260	0.1511502	0.26089908	2.4256102	21	7 28.9	20.3
459599 2013 HG_{22}	17.7	X	76.99381	41.46686	233.72526	5.80280	0.2386288	0.27966814	2.3158338	21	11 13.1	21.0
459600 2013 HO_{23}	17.9	X	101.37461	134.74808	122.27048	4.97365	0.2194333	0.28365842	2.2940644	21	11 13.1	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459601 2013 HQ_{24}	18.0	X	169.22784	275.13668	227.60491	2.65115	0.0808661	0.27526677	2.3404544	21	8 15.2	21.2
459602 2013 HD_{25}	17.6	X	99.34647	331.11739	231.44697	5.81599	0.0627343	0.26964449	2.3728759	21	8 8.7	20.7
459603 2013 HB_{26}	18.2	X	153.60859	269.40115	316.56074	1.59040	0.1779556	0.29438372	2.2380005	21	11 17.6	21.7
459604 2013 HB_{28}	17.4	X	73.80708	132.37631	136.92742	7.50242	0.1185152	0.27968804	2.3157240	21	10 22.3	20.5
459605 2013 HH_{30}	17.2	X	139.91625	120.03279	265.26077	5.16313	0.1145069	0.22718989	2.6599698	21	2 11.8	21.1
459606 2013 HM_{31}	17.9	X	206.47124	151.21631	282.34621	5.97906	0.0998154	0.26796826	2.3827610	21	6 24.9	21.4
459607 2013 HZ_{42}	17.7	X	341.34240	19.55712	356.19600	6.89521	0.1403099	0.28795180	2.2712042	21	10 26.0	19.6
459608 2013 HP_{43}	18.7	X	273.02940	105.47999	344.91963	5.20228	0.1050409	0.29554070	2.2321559	21	10 14.7	20.9
459609 2013 HM_{51}	18.1	X	252.17275	55.35988	357.02606	7.99620	0.0978663	0.27307940	2.3529359	21	7 23.8	21.3
459610 2013 HU_{59}	18.2	X	359.62954	314.64592	1.29772	7.38150	0.1266820	0.27187953	2.3598535	21	8 30.2	20.3
459611 2013 HV_{62}	18.2	X	283.71974	24.79704	10.87004	6.50649	0.1185556	0.27872636	2.3210475	21	8 11.4	20.9
459612 2013 HS_{67}	17.8	X	29.68196	34.77989	225.24070	6.60493	0.0838577	0.26511258	2.3998411	21	7 21.3	20.5
459613 2013 HM_{73}	18.4	X	87.58583	332.60265	269.16265	1.86934	0.1540680	0.27747269	2.3280335	21	10 1.4	21.7
459614 2013 HN_{79}	18.0	X	53.21978	40.18078	218.44382	3.33688	0.1472229	0.27024329	2.3693693	21	9 7.7	20.7
459615 2013 HM_{107}	18.4	X	243.35643	225.57402	177.61761	2.38209	0.1951694	0.26939158	2.3743608	21	6 16.1	21.8
459616 2013 HS_{113}	17.2	X	116.52108	11.63281	17.12727	3.01461	0.0572365	0.21902256	2.7256922	21	1 15.2	20.9
459617 2013 HN_{115}	17.4	X	170.14052	124.48159	205.17606	3.33760	0.1010123	0.21344324	2.7729867	21	1 9.9	21.5
459618 2013 HJ_{116}	18.6	X	118.85124	295.69112	191.87377	3.17246	0.1129144	0.25723998	2.4485580	21	5 30.8	21.9
459619 2013 HU_{126}	17.8	X	89.34335	234.69004	1.54310	9.69617	0.0508917	0.27801497	2.3250052	21	9 14.7	20.5
459620 2013 HH_{130}	17.7	X	185.66590	258.04994	292.74146	3.27792	0.0895356	0.29810841	2.2193199	21	11 9.6	20.7
459621 2013 HK_{138}	18.2	X	307.83672	90.63880	289.62691	1.70426	0.1665792	0.28057036	2.3108665	21	8 19.2	20.2
459622 2013 HR_{139}	17.9	X	235.93343	124.53656	278.23319	1.42228	0.2194240	0.26791860	2.3830554	21	6 6.0	21.5
459623 2013 JB_{2}	15.1	X	3.92297	256.68083	143.87759	26.09725	0.2632590	0.17489231	3.1668117	21	—	—
459624 2013 JF_{2}	17.9	X	171.27510	131.03983	73.93345	4.09772	0.1063336	0.29439678	2.2379344	21	11 12.2	20.8
459625 2013 JG_{2}	18.1	X	150.81472	265.65323	299.80128	2.24346	0.1948997	0.28801833	2.2708545	21	10 18.9	21.8
459626 2013 JP_{2}	17.9	X	64.75357	143.49134	93.23927	3.54283	0.1293237	0.26334224	2.4105845	21	8 23.7	20.9
459627 2013 JC_{3}	17.8	X	159.33713	146.27142	18.67680	6.57224	0.1200962	0.28220807	2.3019175	21	9 7.5	21.1
459628 2013 JZ_{3}	17.6	X	78.01066	157.20193	86.00240	8.33358	0.1843382	0.27141580	2.3625407	21	10 1.5	21.0
459629 2013 JQ_{4}	17.1	X	269.03556	121.44745	136.07412	25.48375	0.1196293	0.22441426	2.6818578	21	1 19.6	21.2
459630 2013 JB_{5}	17.7	X	102.83524	209.94521	39.26365	3.38516	0.1984221	0.28106805	2.3081378	21	11 1.3	21.3
459631 2013 JF_{5}	16.5	X	263.39510	13.69748	259.74627	9.26513	0.1670799	0.22017296	2.7161894	21	1 27.2	20.9
459632 2013 JD_{11}	17.4	X	101.08489	158.60796	72.40274	6.01066	0.1062674	0.27743051	2.3282694	21	10 1.6	20.6
459633 2013 JS_{11}	17.3	X	6.29288	336.17656	222.10398	11.15164	0.0207441	0.23568934	2.5956298	21	3 15.2	20.9
459634 2013 JX_{21}	18.7	X	129.47173	4.76725	194.11334	1.21004	0.1272586	0.27761323	2.3272477	21	9 18.4	22.1
459635 2013 JJ_{25}	18.0	X	46.72224	136.03799	126.94520	2.88315	0.1497119	0.26974611	2.3722799	21	9 6.8	20.5
459636 2013 JB_{28}	15.6	X	138.29252	189.31758	84.23457	17.96904	0.2349156	0.17513583	3.1638755	21	12 17.4	21.1
459637 2013 JJ_{28}	18.2	X	103.74527	277.47811	312.25611	4.29394	0.1892622	0.27605139	2.3360175	21	10 5.0	21.7
459638 2013 JA_{31}	17.0	X	9.33043	354.97521	205.72416	14.29054	0.0504639	0.23266613	2.6180661	21	3 23.4	20.4
459639 2013 JR_{31}	18.0	X	176.09454	150.11968	113.17121	7.54921	0.2286227	0.30576640	2.1821079	21	—	—
459640 2013 JE_{32}	17.9	X	162.75155	155.55332	127.80030	6.93266	0.1343938	0.30761342	2.1733643	21	—	—
459641 2013 JT_{33}	16.7	X	107.22990	134.52061	118.03644	24.59919	0.1724118	0.27943349	2.3171301	21	11 17.5	20.8
459642 2013 JY_{33}	17.3	X	308.55499	175.15269	112.79773	13.25061	0.1647938	0.23707896	2.5854771	21	4 13.4	20.9
459643 2013 JK_{36}	16.9	X	301.85750	46.18679	249.53144	13.62988	0.1044035	0.23808199	2.5782104	21	4 12.9	20.5
459644 2013 JC_{37}	17.5	X	22.63324	335.55429	292.51815	1.62487	0.1886483	0.25893082	2.4378869	21	8 4.5	19.3
459645 2013 JG_{37}	17.6	X	86.02560	50.76259	228.21053	3.67288	0.2105618	0.28268116	2.2993485	21	11 24.4	21.0
459646 2013 JM_{39}	18.2	X	127.09498	167.72053	62.24432	0.93525	0.1718167	0.28417812	2.2912666	21	10 29.3	21.7
459647 2013 JZ_{41}	16.8	X	11.07757	321.83664	252.43768	4.81880	0.1693209	0.24189306	2.5510586	21	4 8.3	19.1
459648 2013 JL_{42}	17.9	X	124.30918	43.53091	166.06474	8.67730	0.1612785	0.27770618	2.3267284	21	9 30.8	21.4
459649 2013 JU_{46}	16.4	X	341.77902	99.73424	97.19606	15.41273	0.1410610	0.22360719	2.6883071	21	1 31.2	19.8
459650 2013 JE_{48}	17.0	X	311.87767	224.10018	92.88710	15.40137	0.2743134	0.24343081	2.5403040	21	5 8.7	20.2
459651 2013 JG_{49}	16.8	X	216.94608	239.92751	45.91540	10.72145	0.1457414	0.21354110	2.7721394	21	1 5.7	21.5
459652 2013 JG_{53}	17.2	X	12.55389	233.77259	334.76909	3.96633	0.1091748	0.24158475	2.5532286	21	4 5.6	20.0
459653 2013 JB_{61}	17.9	X	43.63932	145.62785	70.23068	2.49915	0.0935889	0.25128553	2.4870875	21	6 11.9	20.6
459654 2013 KY_{3}	15.9	X	102.68663	272.39212	84.76205	10.51253	0.0879159	0.19160022	2.9799253	21	—	—
459655 2013 KM_{4}	17.7	X	116.39528	327.82626	219.64890	4.94309	0.1421001	0.26866976	2.3786115	21	8 18.7	21.2
459656 2013 KO_{4}	18.0	X	146.27311	143.62248	103.87207	3.27956	0.1241769	0.29372961	2.2413219	21	12 9.8	21.3
459657 2013 KP_{5}	17.4	X	79.91051	185.73332	88.64041	6.36212	0.1546096	0.27791744	2.3255491	21	11 8.0	20.7
459658 2013 KL_{7}	17.8	X	68.77805	62.10142	180.17970	2.22075	0.1642669	0.26499077	2.4005765	21	9 10.1	20.9
459659 2013 KN_{7}	15.9	X	131.73605	245.32342	60.50461	17.61715	0.1936675	0.18463062	3.0544538	21	—	—
459660 2013 KJ_{8}	16.6	X	104.14094	136.12094	102.29026	25.17315	0.2002982	0.27617121	2.3353418	21	11 1.4	20.8
459661 2013 KS_{10}	16.7	X	307.26710	131.64288	72.79219	10.40258	0.0656038	0.21411786	2.7671591	21	1 6.4	20.5
459662 2013 KM_{13}	17.8	X	142.68141	295.68422	234.92605	3.94130	0.1624645	0.27122826	2.3636296	21	8 25.2	21.4
459663 2013 KB_{15}	16.8	X	307.18034	236.57462	84.35803	16.42394	0.2762295	0.24218928	2.5489781	21	5 7.1	20.2
459664 2013 KU_{15}	18.0	X	64.60512	117.84617	120.50024	2.24309	0.1457943	0.26248831	2.4158098	21	8 27.6	20.8
459665 2013 KV_{15}	17.5	X	75.62911	167.69998	104.69893	12.99693	0.2033769	0.27374587	2.3491153	21	11 9.1	21.1
459666 2013 LQ	18.1	X	163.26463	345.12489	240.28771	2.60450	0.1745682	0.29485433	2.2356186	21	11 26.4	21.5
459667 2013 LC_{9}	17.5	X	112.76981	199.62221	86.48798	6.61357	0.1715490	0.29197408	2.2502970	21	12 26.2	20.9
459668 2013 LD_{14}	17.1	X	19.63402	107.31992	108.24162	9.34952	0.1108676	0.24043315	2.5613749	21	5 5.4	20.0
459669 2013 LT_{14}	17.8	X	66.15755	189.72056	71.95684	5.87347	0.2027483	0.27011997	2.3700905	21	10 12.6	21.0
459670 2013 LM_{16}	18.1	X	72.58651	101.20470	161.36045	1.77115	0.1614274	0.27186295	2.3599494	21	10 13.7	21.1
459671 2013 LS_{21}	17.4	X	53.34806	198.60589	78.24955	6.13164	0.1325127	0.26802289	2.3824372	21	10 6.3	20.3
459672 2013 LM_{22}	16.7	X	352.27914	145.51434	113.66317	19.46993	0.1660901	0.24464428	2.5318968	21	5 18.6	19.6
459673 2013 LQ_{22}	17.7	X	60.57903	5.28788	235.44487	5.05800	0.0695504	0.26145765	2.4221543	21	8 9.3	20.7
459674 2013 LS_{22}	16.6	X	165.90478	237.72354	94.04911	2.48999	0.1466787	0.20046426	2.8914216	21	1 14.9	21.2
459675 2013 LO_{24}	16.9	X	75.23871	38.60294	93.04491	14.85652	0.1015144	0.23278348	2.6171862	21	4 14.6	20.4
459676 2013 LO_{28}	18.3	X	95.39310	20.11434	184.24671	1.08263	0.1269658	0.26556560	2.3971112	21	8 17.1	21.4
459677 2013 LR_{32}	17.4	X	338.85621	128.67823	175.19287	13.46486	0.1807216	0.23582248	2.5946528	21	6 20.0	20.3
459678 2013 LJ_{33}	15.5	X	152.49154	34.62883	248.16606	16.09517	0.1724100	0.18145466	3.0899916	21	—	—
459679 2013 LS_{33}	17.7	X	136.37782	172.12430	78.20506	6.87357	0.2222714	0.28974035	2.2618479	21	12 2.8	21.3
459680 2013 LV_{33}	17.5	X	30.76656	173.00112	79.94765	2.25502	0.1616770	0.25528792	2.4610242	21	7 24.9	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459681 2013 LL_{34}	17.7	X	68.88794	211.27900	46.74810	2.99827	0.1873885	0.26955399	2.3734069	21	10 6.9	20.7
459682 2013 ML_{2}	16.2	X	138.79964	176.79768	147.40624	11.07168	0.1069714	0.19139765	2.9820275	21	—	—
459683 2013 MY_{5}	19.7	X	229.86025	279.00054	102.89179	2.99640	0.4530931	0.46011019	1.6617339	21	4 19.3	22.6
459684 2013 MH_{6}	16.6	X	321.76483	71.75236	223.95920	14.31357	0.1816407	0.23997238	2.5646526	21	5 4.3	19.5
459685 2013 MO_{6}	16.6	X	296.71882	12.75440	216.45771	12.78426	0.1446705	0.21487059	2.7606927	21	1 10.8	20.9
459686 2013 MW_{8}	16.7	X	61.70523	270.10627	288.83048	13.57695	0.0844228	0.22909104	2.6452333	21	6 16.7	20.0
459687 2013 MX_{10}	15.9	X	156.79150	337.95031	292.96612	14.10259	0.0520920	0.17198522	3.2023979	21	12 30.1	20.8
459688 2013 NT_{8}	16.7	X	332.02482	71.87301	130.79754	8.45577	0.1643808	0.21274799	2.7790247	21	1 21.4	20.2
459689 2013 NG_{9}	16.5	X	293.22460	32.08323	268.96236	8.02382	0.1644508	0.22627314	2.6671496	21	3 31.7	20.4
459690 2013 NT_{12}	16.3	X	83.36012	129.31703	286.73247	14.31589	0.0698557	0.18131233	3.0916085	21	1 14.6	20.5
459691 2013 NY_{12}	17.0	X	296.16173	26.82693	288.05081	11.99990	0.1703500	0.23255350	2.6189113	21	4 19.9	20.8
459692 2013 NK_{13}	16.9	X	321.50477	339.44426	290.45349	16.23820	0.1691310	0.22940281	2.6428361	21	3 21.7	20.6
459693 2013 NR_{15}	16.9	X	253.89373	48.13729	300.20700	8.69168	0.1068774	0.22341903	2.6898162	21	4 23.6	21.1
459694 2013 NR_{16}	15.9	X	36.16454	273.53032	159.83354	11.85264	0.1254793	0.17407014	3.1767756	21	—	—
459695 2013 NY_{16}	17.0	X	283.41714	127.23628	268.87802	6.30595	0.0929712	0.24740895	2.5129997	21	8 8.9	20.2
459696 2013 NW_{20}	16.1	X	136.20897	187.12010	301.60186	21.42101	0.0773194	0.23655483	2.5892948	21	6 20.9	20.0
459697 2013 NV_{23}	15.8	X	37.83838	159.09613	302.80534	27.57451	0.1549451	0.18148978	3.0895929	21	1 13.4	19.4
459698 2013 OV_{8}	16.3	X	346.01019	155.26563	275.50131	8.70884	0.0085464	0.15472596	3.4363225	21	12 14.2	21.1
459699 2013 OZ_{9}	16.8	X	296.36644	349.11370	323.32621	11.34922	0.2414176	0.22600065	2.6692931	21	4 6.6	20.7
459700 2013 PG_{11}	15.7	X	144.08640	352.35261	334.09596	16.81814	0.2032064	0.17279516	3.1923830	21	—	—
459701 2013 PC_{13}	16.0	X	136.31461	230.86126	90.90190	10.96971	0.0165997	0.17260853	3.1946838	21	—	—
459702 2013 PZ_{13}	16.5	X	9.53846	296.09448	323.38231	11.69519	0.1471184	0.23111783	2.6297457	21	6 19.2	19.3
459703 2013 PR_{16}	16.2	X	216.37852	305.60160	336.32398	18.12242	0.1911784	0.18539171	3.0460885	21	1 7.9	21.6
459704 2013 PC_{22}	16.7	X	234.03652	311.15374	324.83235	7.95485	0.0229825	0.18370006	3.0647604	21	1 19.5	21.1
459705 2013 PE_{23}	17.1	X	306.34174	112.52087	170.78299	11.55398	0.1602199	0.21668828	2.7452323	21	4 2.1	20.7
459706 2013 PR_{25}	16.4	X	308.57185	28.07480	273.31075	11.75984	0.1600342	0.22310593	2.6923322	21	4 22.6	20.1
459707 2013 PQ_{30}	16.8	X	98.54713	270.85150	171.27180	11.10135	0.0577027	0.19166749	2.9792281	21	3 3.7	20.9
459708 2013 PM_{32}	16.6	X	200.97270	169.33284	193.18620	8.61798	0.0825954	0.20071234	2.8890385	21	3 22.7	21.0
459709 2013 PQ_{34}	16.6	X	97.43483	112.74312	296.64853	9.20147	0.1300379	0.18272634	3.0756384	21	2 1.3	20.8
459710 2013 PZ_{35}	16.7	X	237.87820	335.90123	348.60758	5.46227	0.0561499	0.20590255	2.8402827	21	3 16.5	20.9
459711 2013 PY_{36}	16.2	X	320.08736	177.35237	88.34745	14.57609	0.0589589	0.21787512	2.7352537	21	4 19.1	20.0
459712 2013 PD_{37}	17.3	X	339.04268	7.77463	278.15064	3.86444	0.2399514	0.23389717	2.6088718	21	5 13.1	19.7
459713 2013 PM_{39}	16.2	X	272.10675	236.53452	344.33473	16.31524	0.1172931	0.18192588	3.0846535	21	—	—
459714 2013 PY_{40}	16.9	X	61.35618	194.24505	231.40969	6.96006	0.0731699	0.17633513	3.1495136	21	—	—
459715 2013 PU_{41}	15.8	X	346.67099	165.02039	338.29100	18.81381	0.1308645	0.17298635	3.1900304	21	—	—
459716 2013 PB_{45}	15.9	X	326.39214	209.71658	299.22491	15.69194	0.1668510	0.18010262	3.1054368	21	—	—
459717 2013 PE_{46}	17.0	X	102.92392	261.95672	162.10054	13.24770	0.0758218	0.19333017	2.9621221	21	2 16.9	21.0
459718 2013 PJ_{46}	16.8	X	358.86096	236.12199	295.82896	8.56654	0.0085813	0.19769162	2.9183937	21	2 8.8	20.8
459719 2013 PQ_{46}	17.1	X	174.22263	88.53340	268.19497	4.25810	0.0386820	0.19707636	2.9244646	21	2 12.8	21.4
459720 2013 PC_{48}	16.9	X	125.18254	225.97732	344.22876	2.47869	0.0710577	0.25100654	2.4889301	21	9 22.5	20.5
459721 2013 PF_{49}	16.8	X	284.08879	81.74117	190.54218	7.22523	0.1835341	0.21009752	2.8023482	21	2 15.5	21.0
459722 2013 PL_{49}	16.4	X	326.44079	298.77239	317.76626	12.40575	0.1257747	0.21751305	2.7382883	21	3 23.4	20.1
459723 2013 PA_{50}	16.1	X	330.34764	236.87242	299.88497	11.14589	0.1034554	0.18539466	3.0460561	21	1 3.1	20.2
459724 2013 PM_{50}	16.5	X	87.01412	120.05243	302.36387	11.48648	0.1383628	0.18025503	3.1036861	21	2 4.9	20.7
459725 2013 PA_{57}	16.6	X	311.12680	54.29330	172.62884	13.38821	0.1966340	0.21067713	2.7972060	21	1 19.2	20.7
459726 2013 PC_{59}	16.7	X	345.90465	290.76799	248.44023	7.60516	0.1071365	0.20002989	2.8956059	21	1 20.7	20.5
459727 2013 PN_{59}	17.1	X	161.46420	142.65767	229.90705	5.57186	0.0744722	0.19781883	2.9171424	21	2 19.7	21.5
459728 2013 PH_{65}	16.5	X	88.05034	323.60409	147.01630	36.16830	0.1504418	0.20515011	2.8472235	21	4 15.1	20.9
459729 2013 PQ_{71}	17.0	X	278.01826	180.66250	145.99800	5.78818	0.1627320	0.22068880	2.7119553	21	4 22.9	20.9
459730 2013 PJ_{73}	15.9	X	156.87629	51.99304	285.34825	9.76905	0.0882112	0.17660533	3.1463004	21	1 11.1	20.6
459731 2013 PS_{73}	16.3	X	301.00195	30.73382	279.98486	12.57396	0.1488486	0.22099697	2.7094336	21	4 26.3	20.1
459732 2013 QK	16.3	X	218.41974	8.95313	294.97650	7.45867	0.1629377	0.19582038	2.9369561	21	1 28.9	21.1
459733 2013 QM	15.9	X	90.14228	81.10187	308.22656	16.08464	0.1624221	0.17346139	3.1842036	21	1 8.1	20.1
459734 2013 QO_{2}	16.7	X	20.64159	303.76314	310.27717	12.52987	0.1439167	0.23768779	2.5810602	21	7 4.8	19.4
459735 2013 QV_{2}	17.6	X	118.91604	81.26607	201.31962	5.04615	0.1633959	0.28070191	2.3101445	21	12 25.2	21.2
459736 2013 QA_{6}	14.8	X	74.76478	29.58936	292.98018	16.74048	0.0284893	0.14680895	3.5587791	21	11 21.8	20.2
459737 2013 QT_{7}	16.4	X	118.75623	82.22149	282.74052	7.49547	0.0601708	0.17612614	3.1520045	21	—	—
459738 2013 QT_{9}	17.4	X	29.33344	97.93124	170.05008	13.11880	0.1413185	0.23961151	2.5672270	21	8 7.9	20.3
459739 2013 QE_{10}	16.6	X	182.98373	111.37713	174.47290	13.28262	0.1219091	0.17197581	3.2025148	21	—	—
459740 2013 QG_{10}	16.7	X	181.61582	326.87196	341.01694	8.87963	0.0629786	0.17685345	3.1433569	21	1 1.9	21.5
459741 2013 QA_{12}	17.0	X	82.39182	151.72895	236.03328	7.28939	0.0596907	0.17102360	3.2143908	21	—	—
459742 2013 QS_{16}	16.4	X	250.41067	338.85677	340.07499	8.03970	0.1959602	0.21036771	2.7999482	21	3 11.2	20.9
459743 2013 QD_{18}	16.2	X	179.28831	280.56972	350.28336	7.69494	0.0424926	0.16837888	3.2479623	21	—	—
459744 2013 QL_{18}	17.0	X	241.42685	172.24979	141.02654	2.68406	0.0530250	0.20376948	2.8600697	21	3 8.1	21.0
459745 2013 QS_{19}	16.5	X	34.30357	351.31489	134.43055	12.15498	0.0825020	0.18940358	3.0029212	21	1 31.6	20.2
459746 2013 QX_{24}	16.3	X	95.05817	25.75439	3.50635	10.56874	0.0459075	0.17413410	3.1759975	21	—	—
459747 2013 QW_{28}	16.6	X	168.31996	167.48422	156.72602	4.59686	0.0561383	0.17949926	3.1123919	21	1 4.3	21.3
459748 2013 QQ_{33}	16.3	X	348.26057	192.31304	307.47670	14.35459	0.0494860	0.17730098	3.1380651	21	—	—
459749 2013 QF_{35}	16.1	X	254.26399	297.28408	342.76390	14.78478	0.1769937	0.20059812	2.8901351	21	2 4.0	20.9
459750 2013 QP_{36}	15.5	X	205.47690	283.68308	338.38634	20.74613	0.1191896	0.17671191	3.1450351	21	—	—
459751 2013 QO_{37}	17.1	X	275.55233	198.62576	151.82914	6.68724	0.0897055	0.22712838	2.6604501	21	5 30.3	20.8
459752 2013 QL_{42}	16.5	X	165.20409	152.59713	157.77040	9.86907	0.0651122	0.17493590	3.1662856	21	—	—
459753 2013 QX_{44}	16.9	X	262.21851	75.93211	191.85036	5.65945	0.0272452	0.19703350	2.9248886	21	2 5.7	21.0
459754 2013 QD_{45}	17.3	X	346.62918	84.18250	182.73403	4.54191	0.1144463	0.22314838	2.6919907	21	5 18.7	20.3
459755 2013 QJ_{46}	16.8	X	304.92801	51.84180	238.91714	13.26972	0.2001543	0.22023600	2.7156711	21	3 28.1	20.6
459756 2013 QD_{48}	16.3	X	353.70774	278.32021	355.62220	13.26292	0.1160838	0.22426696	2.6830320	21	6 7.4	19.6
459757 2013 QJ_{51}	16.8	X	164.25617	244.33214	186.27886	4.28032	0.0500193	0.21262611	2.7800866	21	5 6.0	20.7
459758 2013 QC_{53}	16.8	X	261.90717	333.66358	347.32990	5.06334	0.0628023	0.21387878	2.7692208	21	4 6.3	20.6
459759 2013 QA_{54}	17.0	X	301.92773	302.92518	344.66490	10.01090	0.1584606	0.21925539	2.7237622	21	3 28.3	20.7
459760 2013 QK_{55}	15.8	X	194.28607	189.59632	133.00483	10.40042	0.0378910	0.18937234	3.0032514	21	1 27.9	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459761 2013 QV_{56}	16.3	X	148.05843	220.59280	137.99923	10.95715	0.0611511	0.18225723	3.0809137	21	1 22.5	20.8
459762 2013 QJ_{57}	16.6	X	238.24498	246.43401	98.01204	4.79117	0.1037171	0.20938113	2.8087367	21	4 9.5	20.8
459763 2013 QE_{58}	17.8	X	2.59613	253.71120	18.17061	3.73095	0.2324930	0.23653429	2.5894447	21	6 23.0	19.7
459764 2013 QH_{58}	16.2	X	70.61889	273.02805	144.15584	10.04995	0.0797590	0.17401839	3.1774054	21	1 2.3	20.5
459765 2013 QF_{59}	16.8	X	186.48651	346.31385	346.42378	9.07098	0.1194080	0.18970914	2.9996958	21	2 6.1	21.5
459766 2013 QD_{64}	17.2	X	299.47336	15.46579	292.55250	2.61070	0.2239901	0.22661938	2.6644322	21	4 11.6	20.9
459767 2013 QC_{70}	16.7	X	305.41926	146.35756	171.24393	14.78665	0.1168403	0.22656095	2.6648903	21	5 24.2	20.4
459768 2013 QD_{70}	16.6	X	322.78426	318.32123	332.85941	12.61549	0.2454650	0.22947217	2.6423035	21	4 13.0	20.0
459769 2013 QQ_{70}	15.5	X	161.74050	13.33110	310.88354	26.45793	0.1330062	0.17332646	3.1858560	21	1 10.0	20.6
459770 2013 QC_{76}	16.0	X	18.51131	146.05145	309.31602	8.05453	0.0235851	0.17355472	3.1830620	21	—	—
459771 2013 QG_{76}	16.6	X	174.39177	355.54088	318.55228	8.67518	0.0713838	0.18040795	3.1019320	21	1 1.2	21.3
459772 2013 QT_{83}	16.5	X	296.87491	306.52225	355.58936	12.84309	0.2591223	0.22305395	2.6927504	21	3 26.9	20.5
459773 2013 QY_{91}	17.7	X	99.72178	318.10423	273.84723	3.32583	0.1167902	0.25726706	2.4483862	21	9 25.1	21.1
459774 2013 RD_{1}	15.8	X	74.63050	261.43380	175.25565	9.65019	0.1202057	0.17632552	3.1496280	21	2 3.3	20.0
459775 2013 RB_{5}	16.8	X	35.75810	263.73789	345.67292	5.85011	0.1410450	0.23359977	2.6110856	21	7 26.4	19.6
459776 2013 RU_{7}	17.2	X	65.48018	70.84886	168.35325	16.82425	0.1021115	0.24284227	2.5444067	21	8 18.9	20.5
459777 2013 RZ_{11}	16.3	X	167.33610	354.36677	317.81163	9.18152	0.0730545	0.17632585	3.1496241	21	—	—
459778 2013 RQ_{12}	16.8	X	240.72901	339.95235	316.16422	10.51190	0.0833418	0.19641180	2.9310575	21	2 12.2	21.3
459779 2013 RX_{12}	16.2	X	226.37087	113.30174	164.84974	10.37335	0.0851131	0.17923190	3.1154863	21	1 10.3	21.1
459780 2013 RO_{13}	16.6	X	356.56379	341.44733	180.72935	12.43102	0.0413895	0.18772561	3.0207888	21	1 23.8	20.9
459781 2013 RG_{17}	15.9	X	220.99474	273.35263	350.42478	15.56524	0.0519855	0.17543058	3.1603306	21	—	—
459782 2013 RB_{25}	17.3	X	332.87599	148.21482	132.69655	3.05405	0.1770832	0.22526071	2.6751353	21	5 6.2	20.1
459783 2013 RN_{26}	16.8	X	300.16867	171.53365	159.29348	9.66430	0.1410038	0.22427082	2.6830012	21	5 30.1	20.4
459784 2013 RN_{27}	16.3	X	208.11008	253.56126	42.92211	3.70710	0.1802301	0.17898270	3.1183774	21	1 15.6	21.6
459785 2013 RU_{30}	16.1	X	4.88054	310.82197	336.78433	7.32333	0.1140432	0.23504905	2.6003415	21	7 23.4	18.9
459786 2013 RK_{34}	16.5	X	185.97000	146.66630	182.30000	9.28697	0.0196171	0.18398959	3.0615444	21	1 24.6	21.1
459787 2013 RZ_{38}	16.0	X	144.79522	359.82513	336.99355	10.90016	0.0788623	0.17255573	3.1953355	21	—	—
459788 2013 RA_{44}	15.7	X	187.59836	354.64446	320.37238	10.64205	0.0539086	0.17896821	3.1185458	21	1 15.9	20.4
459789 2013 RR_{51}	16.4	X	319.95036	5.86683	270.36885	13.15323	0.2273156	0.22206215	2.7007623	21	3 22.3	20.2
459790 2013 RE_{52}	15.4	X	88.81000	230.03231	176.76424	27.18457	0.1996860	0.17084067	3.2166850	21	1 28.9	20.1
459791 2013 RB_{57}	15.8	X	110.10810	117.11851	334.15882	5.84900	0.0079660	0.19605075	2.9346550	21	3 20.9	19.9
459792 2013 RP_{57}	16.3	X	235.50520	315.67078	335.28892	7.55426	0.1014322	0.18978722	2.9988730	21	2 2.9	21.0
459793 2013 RY_{57}	16.6	X	194.38043	359.59833	324.75052	9.09130	0.0076517	0.18394391	3.0620511	21	1 31.2	20.9
459794 2013 RG_{60}	16.3	X	146.72010	44.49146	335.72908	10.77503	0.0423031	0.18593451	3.0401573	21	2 14.6	20.7
459795 2013 RP_{64}	16.8	X	232.02727	338.66300	356.34746	1.65616	0.0694555	0.20308635	2.8664799	21	3 22.7	21.0
459796 2013 RQ_{64}	16.2	X	130.31375	180.09903	171.05053	1.64431	0.0797894	0.17230323	3.1984564	21	—	—
459797 2013 RM_{67}	16.3	X	100.55639	70.21710	341.82918	9.34257	0.0246873	0.18158075	3.0885610	21	1 28.5	20.6
459798 2013 RO_{68}	16.1	X	144.37473	198.31913	174.41743	9.17107	0.0630206	0.18007872	3.1057116	21	2 3.6	20.8
459799 2013 RK_{69}	15.6	X	195.94118	64.58009	246.35705	15.62548	0.2119436	0.17723221	3.1388768	21	1 18.2	21.2
459800 2013 RN_{77}	16.2	X	71.77069	267.72852	172.36611	11.75794	0.0611629	0.18004606	3.1060871	21	1 26.8	20.5
459801 2013 RO_{77}	16.1	X	27.73431	296.11376	183.10608	11.01972	0.0664618	0.17518674	3.1632625	21	1 15.5	20.5
459802 2013 RE_{81}	16.2	X	173.33535	150.95490	181.46806	10.29100	0.0986166	0.17935233	3.1140915	21	1 20.8	21.1
459803 2013 RT_{81}	16.9	X	276.64296	130.27461	182.74633	5.77037	0.0342517	0.20941981	2.8083908	21	4 21.2	20.7
459804 2013 RA_{82}	16.2	X	164.43881	347.74611	354.50056	9.74064	0.0574290	0.17338951	3.1850835	21	1 25.5	21.0
459805 2013 RS_{85}	16.3	X	148.41437	26.88498	345.32830	8.42658	0.0595368	0.17846509	3.1244041	21	2 10.6	20.9
459806 2013 RS_{92}	15.4	X	298.26551	211.69251	9.58677	24.44835	0.0827226	0.17856866	3.1231959	21	1 31.2	20.3
459807 2013 RR_{94}	16.7	X	254.73187	71.42084	259.46591	2.82021	0.1994501	0.21136333	2.7911485	21	3 28.6	21.1
459808 2013 RT_{95}	15.5	X	204.93239	165.96314	123.61996	6.92292	0.0988534	0.17284470	3.1917730	21	1 4.6	20.6
459809 2013 RO_{96}	16.1	X	191.06455	207.31078	156.59166	11.78568	0.0851429	0.19152580	2.9806972	21	3 17.5	20.6
459810 2013 SN_{8}	16.0	X	94.13449	107.35099	280.20897	7.70930	0.0832606	0.17312787	3.1882917	21	—	—
459811 2013 SU_{17}	16.2	X	155.86306	168.36881	167.84161	12.47383	0.0836842	0.17384495	3.1795183	21	1 8.1	21.1
459812 2013 SP_{23}	16.9	X	275.13785	311.30072	8.90849	6.12675	0.0577074	0.20886287	2.8133810	21	4 22.8	20.9
459813 2013 SP_{30}	16.9	X	86.56518	307.18960	9.57277	23.83203	0.2265823	0.27368404	2.3494691	21	—	—
459814 2013 SM_{33}	17.0	X	265.38180	84.68563	213.01550	1.22787	0.0184347	0.19972068	2.8985938	21	3 20.3	21.0
459815 2013 SO_{33}	16.7	X	223.37174	110.79938	182.11609	9.60281	0.0811061	0.18537989	3.0462179	21	1 22.6	21.5
459816 2013 SB_{34}	16.5	X	265.73747	156.12283	168.07542	5.04838	0.0553248	0.20937996	2.8087471	21	4 19.3	20.4
459817 2013 SZ_{35}	16.5	X	287.87917	63.29688	174.13659	2.55330	0.0488472	0.18697087	3.0289126	21	1 30.3	20.8
459818 2013 SP_{36}	16.1	X	74.18380	45.79157	356.67330	9.24158	0.0189012	0.16786435	3.2545959	21	—	—
459819 2013 SW_{39}	16.9	X	356.44779	330.16311	308.24581	8.66121	0.0743864	0.23079066	2.6322304	21	6 22.9	20.1
459820 2013 SA_{40}	15.8	X	178.26926	17.79248	303.47090	17.56353	0.2239245	0.17814533	3.1281417	21	1 21.2	21.1
459821 2013 SH_{47}	16.7	X	261.25651	323.47710	357.57733	1.57199	0.0332438	0.20614948	2.8380141	21	4 11.2	20.6
459822 2013 SQ_{52}	16.0	X	266.66348	10.87711	289.89103	12.88273	0.1302879	0.20065865	2.8895538	21	3 6.2	20.7
459823 2013 SU_{52}	15.3	X	287.77782	324.00881	264.09396	14.55669	0.0301197	0.17808667	3.1288286	21	1 20.2	19.9
459824 2013 SP_{54}	16.3	X	256.58768	265.70619	5.34465	16.41263	0.1055429	0.18627726	3.0364269	21	2 5.8	21.2
459825 2013 SO_{62}	16.8	X	313.04805	143.59564	163.26854	5.20620	0.0979986	0.22072346	2.7116714	21	5 22.5	20.2
459826 2013 SW_{63}	16.0	X	206.28804	187.71891	106.49029	6.32573	0.0815301	0.17412547	3.1761026	21	1 11.0	20.8
459827 2013 SS_{64}	15.9	X	125.62268	198.60151	178.53628	13.00170	0.1327579	0.17631340	3.1497724	21	1 27.6	20.7
459828 2013 SW_{65}	16.5	X	297.13842	123.50251	184.94326	13.33107	0.0574346	0.21272049	2.7792642	21	5 9.6	20.3
459829 2013 SO_{67}	15.3	X	10.65625	133.91749	1.39934	26.05574	0.0873495	0.17440804	3.1726711	21	1 22.2	19.9
459830 2013 SH_{72}	17.1	X	298.48735	280.83177	9.05559	4.32440	0.0845646	0.21089536	2.7952760	21	4 10.2	20.8
459831 2013 SV_{72}	15.9	X	210.93002	227.01976	131.33886	10.26747	0.0766064	0.19710501	2.9241811	21	4 2.2	20.4
459832 2013 SW_{73}	16.4	X	262.35356	245.76365	3.22143	11.02668	0.0642262	0.18260603	3.0769892	21	1 17.8	21.1
459833 2013 ST_{75}	16.2	X	201.81943	103.39181	176.16607	10.98294	0.0797325	0.17241820	3.1970345	21	—	—
459834 2013 SO_{77}	16.6	X	150.26442	219.54363	174.22435	9.74880	0.0522177	0.19033436	2.9931232	21	3 5.7	21.0
459835 2013 SP_{83}	16.5	X	141.70006	146.84252	191.30298	8.99448	0.1852448	0.17085716	3.2164781	21	1 6.6	21.6
459836 2013 SW_{83}	16.3	X	346.39310	359.68595	274.00947	12.03993	0.1417726	0.22488608	2.6781054	21	5 23.4	19.3
459837 2013 SK_{85}	15.7	X	79.25662	105.42979	341.77468	24.92868	0.1453286	0.18101573	3.0949847	21	2 28.2	19.6
459838 2013 TP	16.7	X	308.79682	43.68088	263.33969	12.44917	0.2356836	0.22392660	2.6857500	21	4 18.3	20.4
459839 2013 TN_{2}	15.5	X	37.11824	278.14419	122.86723	10.44497	0.0801628	0.15297360	3.4625155	21	—	—
459840 2013 TP_{8}	16.4	X	305.49538	255.70729	35.18439	8.49945	0.1853371	0.21397418	2.7683977	21	4 7.4	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459841 2013 TF_{13}	17.0	X	295.46686	126.66859	170.39482	5.09477	0.1485544	0.20919548	2.8103981	21	4 7.8	20.7
459842 2013 TG_{15}	15.7	X	81.20236	260.57463	150.63023	6.08470	0.0568771	0.16905494	3.2392973	21	1 7.5	20.1
459843 2013 TJ_{21}	17.0	X	23.38429	71.82863	158.87551	4.48746	0.0387752	0.21333093	2.7739598	21	5 29.8	20.5
459844 2013 TS_{28}	17.5	X	228.12104	89.42174	29.11859	23.25843	0.0853706	0.36332542	1.9450862	21	10 9.7	19.5
459845 2013 TT_{28}	17.6	X	356.36617	209.21227	198.09461	4.99898	0.1367211	0.25772152	2.4455071	21	—	—
459846 2013 TK_{33}	16.4	X	19.40861	273.77152	347.72885	10.75909	0.1472495	0.23244620	2.6197173	21	7 15.4	19.2
459847 2013 TP_{38}	16.0	X	84.48767	7.21654	47.16931	9.28499	0.0294087	0.16851293	3.2462395	21	1 14.2	20.6
459848 2013 TA_{46}	16.8	X	26.94425	307.29450	219.32229	2.60779	0.0590196	0.18637495	3.0353657	21	3 12.9	20.8
459849 2013 TN_{47}	14.2	X	256.56003	348.46397	13.98482	5.84185	0.1258866	0.08431903	5.1505349	21	5 22.4	21.3
459850 2013 TX_{47}	16.1	X	79.74913	74.58618	20.79879	10.36086	0.1008196	0.17708918	3.1405668	21	3 8.3	20.3
459851 2013 TS_{52}	15.9	X	196.01841	87.08466	242.41046	9.74504	0.1834051	0.18184034	3.0856208	21	2 7.5	21.2
459852 2013 TE_{67}	16.3	X	134.37898	131.00342	220.26026	9.22223	0.0700236	0.17634949	3.1493426	21	—	—
459853 2013 TD_{70}	16.4	X	324.77874	28.21257	188.16830	7.23810	0.0601112	0.18795258	3.0183564	21	2 16.1	20.5
459854 2013 TB_{79}	16.5	X	290.51336	263.22694	350.47079	7.03928	0.1336328	0.19610071	2.9341565	21	2 11.6	20.8
459855 2013 TJ_{79}	16.2	X	182.60685	16.61653	344.26068	9.24913	0.1060097	0.19114108	2.9846954	21	3 4.6	20.9
459856 2013 TU_{83}	16.2	X	24.42617	138.48686	357.22245	8.34841	0.0295680	0.17353711	3.1832774	21	2 4.9	20.7
459857 2013 TE_{104}	15.8	X	275.81227	26.28285	219.37904	9.44328	0.0358869	0.17552265	3.1592253	21	1 27.4	20.5
459858 2013 TO_{121}	17.1	X	264.84146	136.25547	195.23948	4.84294	0.1665806	0.21368602	2.7708859	21	4 12.7	21.3
459859 2013 TO_{124}	16.0	X	245.91585	56.83286	212.20611	10.56155	0.1663505	0.17870581	3.1215977	21	1 13.1	21.3
459860 2013 TY_{124}	15.7	X	232.51061	257.68544	24.33522	14.64929	0.2756617	0.18257132	3.0773792	21	1 18.3	21.4
459861 2013 TL_{126}	16.5	X	342.06579	278.61108	260.69068	2.44941	0.0081267	0.17839714	3.1251975	21	2 1.7	20.9
459862 2013 TW_{126}	16.3	X	285.80537	0.10003	309.18091	12.64175	0.1674482	0.21058891	2.7979872	21	3 31.8	20.6
459863 2013 TR_{129}	15.8	X	89.73778	304.35774	163.17783	13.12127	0.1117609	0.19009010	2.9956866	21	4 4.4	19.9
459864 2013 TG_{142}	16.5	X	195.69441	118.11007	188.18014	10.17047	0.0948771	0.17482742	3.1675953	21	1 13.1	21.6
459865 2013 XZ_{8}	9.5	X	1.20810	288.46028	266.67293	22.53561	0.3708662	0.02012613	13.3853319	21	3 25.3	18.9
459866 2013 YE_{54}	17.2	X	253.88073	171.39205	280.56070	4.36030	0.0902006	0.22508896	2.6764959	21	9 12.2	21.0
459867 2013 YE_{62}	16.3	X	212.03102	247.70681	289.44698	12.45719	0.1054181	0.22857315	2.6492274	21	11 7.8	20.4
459868 2013 YP_{96}	15.7	X	178.97800	272.35630	108.74056	26.19903	0.2624351	0.17491478	3.1665405	21	4 12.0	21.7
459869 2014 AQ_{4}	17.2	X	288.71026	90.40037	310.07697	7.31488	0.1613437	0.21644400	2.7472975	21	8 11.8	20.7
459870 2014 AT_{28}	12.0	X	39.14269	279.88264	262.59226	165.53250	0.4010547	0.02739155	10.8991254	21	6 13.2	21.2
459871 2014 ET_{6}	16.7	X	115.23975	355.68670	351.28825	15.24936	0.1435838	0.24242777	2.5473061	21	—	—
459872 2014 EK_{24}	23.3	X	210.39098	63.85339	340.56003	4.80449	0.0700847	0.97296958	1.0086408	21	—	—
459873 2014 FJ	17.5	X	283.91843	79.78022	84.65733	24.32722	0.0646718	0.36975269	1.9224799	21	—	—
459874 2014 GS_{32}	17.5	X	268.03801	223.59151	82.31803	3.57067	0.1989117	0.26628822	2.3927725	21	3 7.9	21.1
459875 2014 GR_{49}	17.9	X	134.67898	288.79305	123.66718	25.47866	0.0280278	0.39759921	1.8316354	21	1 27.1	19.0
459876 2014 HW_{37}	17.8	X	60.91161	136.60755	103.32690	4.82861	0.1382847	0.30388343	2.1911126	21	8 27.7	20.1
459877 2014 HL_{66}	17.9	X	292.09785	253.40735	68.86560	6.95912	0.2482980	0.28000006	2.3140033	21	4 17.1	21.0
459878 2014 HX_{123}	18.2	X	231.65490	188.67612	102.54672	24.55499	0.0664468	0.38882112	1.8591003	21	—	—
459879 2014 JH_{22}	17.6	X	332.01117	200.62968	83.72752	5.99340	0.2188679	0.27734405	2.3287533	21	4 27.5	19.7
459880 2014 JQ_{25}	18.6	X	328.63394	331.94226	185.23477	22.43075	0.1276979	0.37426375	1.9070008	21	—	—
459881 2014 JT_{30}	17.6	X	191.56539	208.62906	91.30134	25.33237	0.0519157	0.37297087	1.9114053	21	—	—
459882 2014 JQ_{37}	17.1	X	187.09772	250.78664	81.74714	12.09411	0.3066627	0.23485688	2.6017597	21	2 8.7	22.0
459883 2014 JX_{55}	15.9	X	236.87058	32.65710	271.85534	32.06474	0.1698191	0.23144534	2.6272643	21	1 27.9	20.7
459884 2014 KM_{34}	16.9	X	128.30364	169.59848	155.14996	22.93744	0.2300037	0.21087416	2.7954634	21	—	—
459885 2014 KN_{39}	18.1	X	176.73540	136.75418	259.90066	21.09672	0.0895132	0.40398850	1.8122720	21	3 2.3	20.8
459886 2014 KS_{45}	17.9	X	91.06919	268.79729	123.14458	26.85140	0.1480205	0.36698847	1.9321215	21	—	—
459887 2014 KG_{51}	18.0	X	344.57226	47.26076	249.81480	11.81220	0.1375927	0.28595353	2.2817729	21	6 23.3	20.0
459888 2014 KP_{78}	18.1	X	303.24618	59.11779	243.13688	4.04859	0.2128833	0.27235749	2.3570918	21	4 5.1	21.3
459889 2014 KC_{87}	18.1	X	157.40672	134.61213	256.94124	17.95389	0.1018177	0.39347237	1.8444203	21	2 3.3	20.4
459890 2014 KG_{92}	17.6	X	325.85722	230.30002	125.80346	7.80843	0.2077226	0.28273394	2.2990624	21	8 15.3	18.9
459891 2014 KM_{101}	17.8	X	2.66411	214.88591	87.75126	7.10820	0.1882355	0.29358700	2.2420476	21	8 23.2	19.3
459892 2014 LW	18.4	X	288.34352	175.52168	138.20946	3.19865	0.2036525	0.26927206	2.3750633	21	4 6.9	21.5
459893 2014 LE_{11}	16.5	X	192.02024	177.21684	109.78014	17.81929	0.2399789	0.21311575	2.7758267	21	—	—
459894 2014 LM_{11}	17.8	X	47.66321	6.74347	254.92614	6.18930	0.0780839	0.28749340	2.2736178	21	8 22.3	20.5
459895 2014 LS_{12}	16.6	X	190.86143	133.70838	220.13309	3.97543	0.2482742	0.24125681	2.5555418	21	2 28.9	21.1
459896 2014 LJ_{16}	17.5	X	304.77720	200.11708	147.88187	6.58080	0.1321762	0.27206139	2.3588017	21	6 29.1	20.1
459897 2014 LF_{21}	15.8	X	242.86544	65.12499	257.41978	24.39493	0.1327675	0.23968504	2.5667019	21	2 25.6	20.4
459898 2014 MQ	17.9	X	120.98111	290.42363	115.24931	25.52421	0.1432534	0.38108315	1.8841822	21	1 17.7	18.8
459899 2014 MP_{2}	16.0	X	189.85067	301.33135	58.32122	7.67089	0.3511812	0.24052290	2.5607377	21	3 14.7	20.9
459900 2014 MA_{4}	17.9	X	320.20655	216.40644	113.06397	6.26383	0.1878699	0.28477157	2.2880823	21	6 18.8	19.8
459901 2014 MZ_{8}	17.9	X	9.17326	244.49666	121.03213	3.77470	0.2014915	0.30601479	2.1809269	21	12 20.8	20.0
459902 2014 ME_{11}	17.7	X	29.69440	26.50576	238.86226	6.27978	0.0926684	0.28474758	2.2882107	21	7 31.1	20.1
459903 2014 MN_{11}	16.8	X	196.50970	213.22225	129.60369	13.98789	0.2825018	0.22909585	2.6451962	21	2 25.6	21.6
459904 2014 MD_{12}	18.0	X	24.26367	17.79559	289.37158	3.36319	0.2163546	0.29416241	2.2391229	21	10 17.7	20.1
459905 2014 MH_{12}	17.3	X	256.04508	248.74438	113.40512	7.16767	0.1119497	0.26100271	2.4249681	21	5 17.4	20.7
459906 2014 MB_{13}	16.9	X	284.52717	44.89854	295.64904	5.78774	0.2135070	0.25922641	2.4360333	21	5 4.4	20.4
459907 2014 MP_{13}	17.8	X	28.73580	150.27747	125.65929	8.64034	0.1334304	0.28631191	2.2798684	21	8 25.9	19.9
459908 2014 MU_{17}	16.6	X	169.22830	252.36432	92.93717	29.88605	0.3628954	0.23293357	2.6160618	21	2 16.5	21.9
459909 2014 MK_{20}	17.7	X	299.85290	224.39857	121.57583	7.21667	0.1658027	0.27451431	2.3447293	21	6 12.6	20.4
459910 2014 MU_{20}	17.1	X	15.37509	29.75255	256.27280	9.17483	0.2136634	0.28502195	2.2867420	21	8 18.6	19.0
459911 2014 MO_{21}	17.5	X	280.04492	230.34146	82.48522	10.61775	0.2310525	0.26210142	2.4181866	21	3 29.8	21.3
459912 2014 MS_{22}	16.4	X	245.80402	10.05659	265.97556	13.38479	0.2032857	0.22885694	2.6470368	21	1 12.4	21.0
459913 2014 MH_{24}	17.6	X	257.82975	217.93396	125.43289	3.17878	0.1922407	0.25523635	2.4613556	21	4 15.8	21.5
459914 2014 MN_{24}	17.1	X	189.56687	236.07377	112.79427	14.14993	0.1857045	0.22991900	2.6388790	21	2 26.5	21.6
459915 2014 MC_{27}	17.4	X	265.77190	263.90918	127.96036	22.07000	0.2995674	0.28362725	2.2942324	21	6 15.9	21.2
459916 2014 MP_{30}	18.5	X	307.87612	146.17983	207.19141	3.55054	0.1991922	0.28781173	2.2719410	21	6 30.6	20.7
459917 2014 ML_{38}	17.1	X	87.83239	236.62826	131.39089	5.87923	0.2614897	0.18759510	3.0221897	21	—	—
459918 2014 MT_{38}	17.1	X	323.71452	250.40087	87.24684	9.64832	0.2307864	0.27599062	2.3363604	21	7 2.4	18.9
459919 2014 MV_{38}	16.4	X	65.09362	266.82536	114.07399	22.31438	0.3710534	0.17991861	3.1075539	21	—	—
459920 2014 ME_{40}	16.6	X	179.28001	243.03451	91.68827	12.07351	0.0662172	0.21948400	2.7218706	21	1 23.6	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
459921 2014 MB_{42}	18.6	X	8.46738	9.94615	120.46506	25.09718	0.0751008	0.37044848	1.9200720	21	—	—
459922 2014 MV_{42}	16.5	X	182.49661	132.71310	196.03677	9.25837	0.1285665	0.21746716	2.7386735	21	1 20.8	20.9
459923 2014 MU_{46}	17.0	X	149.71508	139.45507	219.91955	11.16104	0.0694276	0.21833992	2.7313706	21	1 17.1	21.1
459924 2014 MF_{50}	17.0	X	302.89265	227.70218	122.76954	23.68867	0.2599399	0.27329382	2.3517050	21	6 12.1	20.1
459925 2014 ME_{51}	17.8	X	150.65019	115.56233	306.27701	18.43301	0.0325802	0.39018812	1.8547556	21	3 1.3	19.8
459926 2014 MJ_{51}	17.2	X	236.98462	189.64066	232.15084	11.54969	0.2218214	0.26928085	2.3750116	21	6 30.4	21.1
459927 2014 MF_{54}	17.4	X	166.23424	40.01782	326.95368	11.44181	0.2041192	0.22742314	2.6581508	21	2 24.7	21.9
459928 2014 ML_{56}	17.2	X	218.27096	218.99658	99.20701	4.91879	0.2093537	0.23050957	2.6343698	21	2 11.5	21.7
459929 2014 MV_{56}	17.0	X	165.78199	277.22604	103.53225	13.53468	0.2861492	0.22467958	2.6797461	21	3 24.9	21.9
459930 2014 MK_{59}	15.9	X	123.91994	18.51703	273.66983	13.24180	0.1751239	0.18326447	3.0696147	21	12 26.8	20.9
459931 2014 MZ_{60}	17.0	X	117.54153	59.28814	300.27832	14.94591	0.3456897	0.19681655	2.9270376	21	1 22.8	21.5
459932 2014 MA_{62}	16.6	X	106.09791	289.60529	116.13952	10.18637	0.1196961	0.21424988	2.7660222	21	2 2.3	20.3
459933 2014 MP_{63}	18.0	X	270.51350	193.63910	190.57540	4.83866	0.1721230	0.27179004	2.3603715	21	6 24.0	21.2
459934 2014 MN_{65}	16.3	X	107.81123	104.60687	232.16033	8.55274	0.0927177	0.18846577	3.0128747	21	—	—
459935 2014 NB_{1}	18.3	X	33.19334	139.73868	156.72380	4.30200	0.2214141	0.30121284	2.2040447	21	10 22.6	20.5
459936 2014 NY_{2}	16.0	X	190.96143	105.53884	250.81791	10.31291	0.2988970	0.24125480	2.5555560	21	3 1.9	20.9
459937 2014 NH_{12}	17.1	X	192.87691	317.00665	97.24368	7.25959	0.1364221	0.25899264	2.4374989	21	5 16.7	20.8
459938 2014 NH_{19}	16.2	X	358.54407	161.67644	261.37010	13.85311	0.1368689	0.17666167	3.1456313	21	—	—
459939 2014 NC_{21}	16.5	X	6.30341	156.04065	250.71908	13.80041	0.2482923	0.17131222	3.2107795	21	—	—
459940 2014 NR_{24}	16.9	X	209.77673	62.34995	274.74145	13.53829	0.1083097	0.23599882	2.5933601	21	2 18.7	21.1
459941 2014 NK_{27}	16.7	X	47.23952	233.69247	154.65495	7.48462	0.2369343	0.18399437	3.0614913	21	—	—
459942 2014 NY_{27}	15.9	X	16.73403	99.94273	285.04771	24.10819	0.1731586	0.17247960	3.1962756	21	12 20.7	20.0
459943 2014 NN_{29}	17.8	X	241.91699	238.39163	148.92169	6.66923	0.1140769	0.26536299	2.3983311	21	6 2.6	21.3
459944 2014 NE_{31}	17.8	X	7.12563	231.81231	130.25411	7.89370	0.1647918	0.30364031	2.1922821	21	12 6.5	19.9
459945 2014 NA_{34}	17.5	X	161.63278	137.89734	226.80292	3.23132	0.0968279	0.22698993	2.6615318	21	2 9.0	21.4
459946 2014 NM_{37}	17.9	X	343.71225	82.17395	272.77600	5.88946	0.1289017	0.28798961	2.2710054	21	9 25.2	19.9
459947 2014 NQ_{37}	17.3	X	321.83979	97.70923	273.01430	5.59090	0.1439715	0.28395183	2.2924837	21	9 2.7	19.5
459948 2014 NO_{41}	16.1	X	142.65176	92.17004	162.18603	26.26762	0.1859816	0.18192038	3.0847157	21	12 3.2	21.8
459949 2014 NR_{42}	15.5	X	33.20629	104.57851	274.91619	24.28275	0.1298677	0.17384950	3.1794629	21	12 29.3	19.8
459950 2014 ND_{46}	17.7	X	171.73470	188.11040	215.82411	7.05238	0.1852071	0.23558349	2.5964073	21	4 14.0	22.0
459951 2014 NQ_{49}	16.3	X	27.62058	132.16764	271.22985	15.56731	0.2229816	0.17590239	3.1546769	21	—	—
459952 2014 ND_{51}	18.0	X	189.19774	247.32325	133.27845	4.29657	0.1984371	0.23766169	2.5812491	21	4 3.1	22.3
459953 2014 NC_{54}	17.7	X	294.86951	246.22595	109.66280	7.19572	0.1483254	0.27068880	2.3667689	21	6 22.2	20.4
459954 2014 NH_{54}	16.7	X	246.87574	169.77797	115.21570	15.59332	0.1251573	0.22954382	2.6417537	21	1 30.1	20.7
459955 2014 NB_{55}	16.9	X	212.87831	254.19667	103.67634	13.11500	0.0275229	0.24080750	2.5587197	21	4 3.1	20.7
459956 2014 NK_{55}	17.1	X	197.74432	301.14197	91.46272	6.49874	0.1701152	0.24234097	2.5479143	21	4 25.5	21.3
459957 2014 NV_{55}	18.1	X	344.24947	300.37386	39.73188	4.83681	0.1676074	0.28392050	2.2926524	21	9 8.8	19.7
459958 2014 NS_{57}	17.2	X	263.74246	298.79013	41.73124	8.56509	0.2188727	0.25148974	2.4857410	21	4 15.7	21.1
459959 2014 NC_{59}	17.8	X	325.24539	56.91148	284.59808	4.67339	0.1961436	0.27662162	2.3328061	21	7 18.5	19.5
459960 2014 NW_{59}	17.8	X	5.53210	31.67667	321.62195	6.26140	0.1470273	0.29610495	2.2293193	21	11 10.9	20.0
459961 2014 NY_{59}	17.3	X	187.82989	252.71908	122.48186	10.06549	0.3316886	0.22748681	2.6576548	21	4 1.3	22.4
459962 2014 NN_{63}	16.3	X	200.64457	161.90381	241.04834	16.44849	0.2516071	0.23185653	2.6241571	21	5 7.3	20.9
459963 2014 NQ_{65}	17.9	X	36.10874	213.53897	94.70180	3.58480	0.1888262	0.30062633	2.2069104	21	11 7.1	20.2
459964 2014 OJ	17.7	X	249.42476	245.49273	125.65195	2.04452	0.1938959	0.25822100	2.4423525	21	5 12.1	21.4
459965 2014 OA_{1}	17.5	X	315.29050	199.66701	141.29453	9.22031	0.2203799	0.26984073	2.3717253	21	6 22.2	19.9
459966 2014 ON_{1}	17.5	X	19.38702	15.00164	316.28205	9.59369	0.1293615	0.29850255	2.2173658	21	10 28.1	20.0
459967 2014 OC_{3}	16.8	X	75.09613	43.97376	318.03650	14.84981	0.2623280	0.18234910	3.0798789	21	—	—
459968 2014 OU_{3}	16.5	X	100.24348	245.41223	102.18019	10.50610	0.0647309	0.19296601	2.9658477	21	—	—
459969 2014 OK_{5}	17.0	X	235.61901	271.45382	125.07168	8.15815	0.0876768	0.26169849	2.4206680	21	6 10.3	20.4
459970 2014 OX_{5}	18.0	X	310.65019	226.22599	128.94195	6.00917	0.2534303	0.27756675	2.3275075	21	6 28.8	20.1
459971 2014 ON_{6}	11.6	X	57.60264	195.59956	94.29093	3.94184	0.5652878	0.02021415	13.3464510	21	11 19.6	22.9
459972 2014 OB_{12}	17.7	X	310.59283	84.51983	309.26733	6.92050	0.0604998	0.29821921	2.2187701	21	9 26.7	20.1
459973 2014 ON_{12}	17.0	X	63.28124	279.37552	106.48160	7.11651	0.2241081	0.19046227	2.9917830	21	—	—
459974 2014 OB_{13}	17.3	X	218.64031	59.08917	304.28597	7.59032	0.1606655	0.24660795	2.5184384	21	4 1.2	21.5
459975 2014 OL_{19}	18.1	X	254.63140	284.47208	137.92342	5.60089	0.1238566	0.28403971	2.2920109	21	8 4.2	20.7
459976 2014 OV_{20}	17.8	X	302.46389	231.67449	127.34027	11.70906	0.1419282	0.27808406	2.3246201	21	7 10.4	20.3
459977 2014 OE_{23}	17.8	X	296.09225	219.05632	140.58282	4.46453	0.0797092	0.27760440	2.3272971	21	7 11.1	20.4
459978 2014 OE_{24}	18.3	X	245.30309	213.16622	163.92891	1.41266	0.1866087	0.25973962	2.4328234	21	5 16.0	21.8
459979 2014 OR_{27}	17.8	X	214.99013	82.94944	312.71131	5.45425	0.1327448	0.25690313	2.4506979	21	5 11.2	21.6
459980 2014 OB_{30}	17.2	X	88.23272	309.01543	107.56715	6.03752	0.0286837	0.22027491	2.7153513	21	1 8.7	20.6
459981 2014 OF_{33}	18.2	X	243.48256	349.65910	25.64278	3.17683	0.2110906	0.25780555	2.4449757	21	5 9.1	22.0
459982 2014 OM_{34}	18.4	X	278.41424	15.44707	6.02025	3.66290	0.1784655	0.27440206	2.3453687	21	6 30.2	21.3
459983 2014 OP_{35}	17.5	X	262.45325	250.68245	110.43897	6.51762	0.0955157	0.26404106	2.4063294	21	5 25.2	20.8
459984 2014 OB_{36}	18.4	X	265.25219	35.57189	333.32019	1.86784	0.2080595	0.26386183	2.4074189	21	5 22.6	21.9
459985 2014 OJ_{37}	18.0	X	276.03476	62.79098	309.43236	6.10440	0.1579096	0.27072543	2.3665554	21	6 16.7	21.0
459986 2014 OU_{37}	18.2	X	315.52355	269.70473	117.85007	6.01590	0.1367465	0.29212423	2.2495259	21	9 26.4	20.1
459987 2014 OD_{38}	17.8	X	286.12233	164.57392	113.03464	2.94891	0.1240721	0.24569575	2.5246680	21	3 1.2	21.2
459988 2014 OE_{38}	17.6	X	279.88771	73.77000	314.45129	6.62422	0.1241847	0.27886191	2.3202952	21	7 22.0	20.3
459989 2014 OX_{38}	18.0	X	312.62411	13.61479	337.08241	3.98364	0.1205192	0.27904667	2.3192709	21	7 20.5	20.3
459990 2014 OZ_{38}	16.7	X	184.02636	229.20673	108.45047	6.19820	0.1980798	0.22248494	2.6973397	21	2 7.5	21.1
459991 2014 OE_{39}	16.0	X	256.61468	335.05806	89.69173	3.74047	0.0160835	0.14488649	3.5901902	21	8 20.5	21.1
459992 2014 ON_{41}	17.7	X	224.29707	330.20535	89.65878	6.00008	0.2213975	0.26529520	2.3987397	21	6 17.6	21.5
459993 2014 OD_{48}	16.8	X	138.50917	236.20448	121.07466	10.22559	0.1271530	0.21191257	2.7863237	21	1 12.9	20.8
459994 2014 OU_{53}	18.5	X	356.30119	30.19512	313.83673	4.15098	0.1646643	0.29244591	2.2478760	21	10 10.2	20.3
459995 2014 OY_{67}	16.8	X	202.46669	189.59932	112.05136	7.31337	0.0089400	0.21709509	2.7418017	21	1 5.6	20.7
459996 2014 OD_{71}	17.4	X	121.05553	43.08186	63.21286	1.05588	0.1144449	0.24486021	2.5304081	21	5 5.2	20.9
459997 2014 OK_{71}	17.2	X	155.94640	76.92879	333.69217	10.84804	0.1971830	0.23109605	2.6299109	21	4 5.2	21.7
459998 2014 OD_{73}	17.0	X	329.72109	32.92457	335.94462	6.54101	0.2731939	0.27530950	2.3402123	21	9 9.4	17.9
459999 2014 OJ_{79}	16.5	X	67.56902	11.45132	338.25047	9.41857	0.1088160	0.18529232	3.0471776	21	—	—
460000 2014 OT_{79}	17.1	X	186.36560	67.60606	325.29361	11.66716	0.1575379	0.24585268	2.5235936	21	4 6.6	21.3