Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500001 2011 PX_{10}	16.1	X	278.02674	298.60841	49.67110	9.92020	0.1002429	0.18306764	3.0718146	21	5 28.7	20.4
500002 2011 PQ_{14}	16.7	X	227.53494	240.20738	172.22715	12.95875	0.1231610	0.17867572	3.1219482	21	6 20.0	21.8
500003 2011 QW_{2}	16.9	X	260.88829	79.73054	231.78852	8.95509	0.2048783	0.17091951	3.2156958	21	3 12.5	22.2
500004 2011 QE_{4}	16.0	X	152.07343	200.96252	247.86541	8.10975	0.0493251	0.17528318	3.1621021	21	5 15.9	20.7
500005 2011 QC_{5}	16.0	X	233.16402	61.93502	284.09948	17.31827	0.1313918	0.17005748	3.2265537	21	3 27.5	21.4
500006 2011 QR_{8}	16.9	X	305.12541	126.13339	182.76365	14.26655	0.0547214	0.17880391	3.1204558	21	5 23.6	21.4
500007 2011 QT_{8}	17.0	X	294.10854	99.18352	179.83502	15.75053	0.1824078	0.17139277	3.2097734	21	3 12.9	21.7
500008 2011 QB_{13}	16.1	X	277.48739	65.01975	271.12847	8.20369	0.2223134	0.17747363	3.1360297	21	4 25.2	21.0
500009 2011 QQ_{17}	16.4	X	280.91698	350.25233	324.13477	14.67880	0.2736722	0.17445368	3.1721177	21	3 23.9	21.6
500010 2011 QY_{19}	16.7	X	240.24088	178.68369	191.14937	2.20203	0.1087904	0.17232629	3.1981710	21	5 13.3	21.6
500011 2011 QB_{20}	16.1	X	198.65714	114.82725	342.20460	26.21509	0.2296138	0.17801522	3.1296657	21	7 21.2	21.8
500012 2011 QD_{34}	16.3	X	256.40500	33.75355	339.11225	12.20472	0.2127174	0.17764028	3.1340680	21	5 18.7	21.5
500013 2011 QN_{35}	15.8	X	251.07611	355.60998	12.22157	28.21008	0.1716278	0.17280376	3.1922771	21	5 4.1	21.2
500014 2011 QL_{47}	16.6	X	272.32836	311.87259	327.59300	23.88443	0.3214935	0.16918406	3.2376489	21	2 9.6	22.1
500015 2011 QZ_{48}	16.0	X	289.32441	329.94899	8.55852	11.62713	0.1758881	0.17797401	3.1301489	21	5 17.1	20.5
500016 2011 QH_{58}	16.3	X	161.67151	198.65619	287.29591	9.16068	0.0695208	0.18502979	3.0500593	21	7 13.7	20.9
500017 2011 QL_{60}	16.2	X	270.97778	162.78582	189.80780	14.51449	0.1873795	0.17663230	3.1459801	21	5 17.3	21.0
500018 2011 QW_{63}	16.7	X	201.21301	284.12656	198.84855	10.80637	0.0466041	0.19552274	2.9399360	21	8 21.6	21.2
500019 2011 QW_{78}	16.1	X	244.42115	17.99396	343.84312	14.66621	0.1057274	0.17242691	3.1969268	21	5 1.5	21.2
500020 2011 QY_{84}	16.7	X	245.81341	35.64718	338.10768	8.60950	0.0934294	0.17492500	3.1664172	21	5 22.8	21.6
500021 2011 QZ_{86}	16.0	X	260.08937	160.07652	184.55739	8.89919	0.0785453	0.17453008	3.1711919	21	5 8.6	20.6
500022 2011 QU_{94}	15.6	X	81.21866	221.46031	330.62672	15.40994	0.0271386	0.17924914	3.1152865	21	6 28.7	20.2
500023 2011 RA_{3}	16.5	X	82.56837	270.13391	285.14268	8.84348	0.0624493	0.18476245	3.0530007	21	7 7.7	20.6
500024 2011 SW	16.8	X	299.34080	130.70933	181.13482	11.87306	0.2040457	0.17687887	3.1430557	21	4 27.7	21.2
500025 2011 SS_{6}	16.4	X	212.39856	92.93826	337.71489	8.84928	0.0814652	0.17869992	3.1216663	21	6 30.4	21.2
500026 2011 SS_{21}	19.0	X	108.95946	279.58567	4.72352	3.25192	0.3164222	0.31870839	2.1226272	21	12 28.1	22.8
500027 2011 SD_{29}	16.3	X	205.68387	142.62140	193.60181	7.00229	0.1307780	0.15145744	3.4855848	21	2 28.6	21.9
500028 2011 SC_{34}	16.1	X	229.85221	271.81534	187.15709	23.66187	0.3764589	0.17700424	3.1415714	21	7 26.5	22.1
500029 2011 SW_{39}	16.1	X	196.54400	76.48399	351.42699	14.92517	0.0863217	0.17366330	3.1817351	21	6 6.8	21.2
500030 2011 SY_{42}	18.9	X	80.44137	353.30672	336.89929	1.21874	0.0736116	0.31782646	2.1265521	21	—	—
500031 2011 SS_{47}	16.5	X	305.36867	131.25015	183.41488	9.34552	0.0677716	0.17520033	3.1630989	21	5 28.9	20.9
500032 2011 SF_{63}	16.0	X	262.49107	141.60680	213.74854	13.85298	0.2237279	0.17412040	3.1761642	21	5 6.7	20.9
500033 2011 SS_{75}	16.3	X	262.50974	47.71329	303.61601	6.52607	0.1455893	0.17467865	3.1693936	21	5 7.6	21.1
500034 2011 SS_{82}	18.1	X	326.00174	189.93644	185.00632	7.22442	0.1530692	0.29119515	2.2543082	21	9 23.2	19.5
500035 2011 SM_{108}	16.2	X	260.46137	30.06114	323.17028	7.23291	0.2805071	0.17471463	3.1689584	21	4 23.1	21.6
500036 2011 SZ_{110}	16.0	X	301.48795	73.07329	253.50730	9.55054	0.1622093	0.17989022	3.1078807	21	5 23.1	20.2
500037 2011 SG_{114}	16.4	X	288.28232	271.86981	30.11621	24.19981	0.3297158	0.17404264	3.1771102	21	3 25.9	21.6
500038 2011 SG_{136}	16.4	X	235.69470	209.86380	194.93583	11.28924	0.1136802	0.17545516	3.1600354	21	6 19.4	21.4
500039 2011 SM_{156}	15.9	X	356.10515	100.05747	178.35059	9.36095	0.0397178	0.17737583	3.1371823	21	6 23.4	20.3
500040 2011 SJ_{177}	16.2	X	334.03854	117.73298	183.48615	9.39834	0.0897837	0.17751427	3.1355510	21	6 18.2	20.3
500041 2011 SV_{191}	16.7	X	213.61671	226.67466	184.95845	11.86638	0.1401423	0.17259656	3.1948315	21	6 5.1	21.9
500042 2011 SK_{192}	16.2	X	235.19341	202.79869	193.68833	8.51060	0.0860111	0.17489934	3.1667269	21	6 11.8	21.1
500043 2011 SJ_{201}	16.6	X	291.06531	120.14730	175.49076	25.94601	0.2644587	0.17216200	3.2002054	21	3 19.8	21.3
500044 2011 SB_{216}	16.1	X	12.93711	267.37419	342.39247	8.31209	0.1645122	0.18271157	3.0758042	21	6 13.0	19.7
500045 2011 SQ_{248}	15.7	X	221.60151	332.03000	26.68326	17.45118	0.1393516	0.15894976	3.3751737	21	4 11.4	21.0
500046 2011 SN_{260}	18.9	X	99.18993	92.36617	221.16501	5.46569	0.1608016	0.31642823	2.1328120	21	—	—
500047 2011 SQ_{262}	16.4	X	329.50653	98.02200	177.58088	21.71093	0.0754987	0.17271533	3.1933667	21	5 13.5	20.9
500048 2011 TC_{6}	15.6	X	270.27095	325.68081	18.89008	27.80212	0.1759398	0.17424553	3.1746435	21	4 28.1	20.6
500049 2011 UY_{5}	18.7	X	56.86996	145.70924	208.87003	2.90259	0.1929498	0.31191492	2.1533367	21	—	—
500050 2011 US_{40}	19.6	X	40.51295	133.48714	239.80020	1.44358	0.1464478	0.31369493	2.1451832	21	—	—
500051 2011 UB_{74}	18.4	X	24.32242	115.35233	268.36179	2.85395	0.1068855	0.30717302	2.1754411	21	—	—
500052 2011 UK_{103}	17.8	X	164.98999	128.35416	245.78295	13.23337	0.1677918	0.24251558	2.5466912	21	2 22.8	22.1
500053 2011 UU_{123}	16.4	X	268.20236	103.37697	205.38848	7.13887	0.2995727	0.16413271	3.3037408	21	3 9.6	21.9
500054 2011 UE_{135}	18.1	X	93.04159	352.17722	346.44431	2.55669	0.1619085	0.31605928	2.1344715	21	—	—
500055 2011 UG_{147}	15.9	X	166.31873	348.84627	59.23396	6.46128	0.0943444	0.14764887	3.5452698	21	4 18.7	21.3
500056 2011 UZ_{154}	16.0	X	320.34608	161.59541	168.44232	10.86957	0.1237217	0.18200321	3.0837798	21	6 30.8	20.1
500057 2011 UB_{163}	18.1	X	63.94786	65.27359	284.44625	1.89410	0.2066957	0.31267197	2.1498595	21	—	—
500058 2011 UA_{167}	16.1	X	187.15817	156.79006	276.93035	6.61294	0.0233385	0.17071904	3.2182127	21	6 6.6	20.7
500059 2011 UQ_{185}	15.6	X	194.76526	49.83411	66.47605	22.18687	0.1124980	0.17181066	3.2045667	21	8 11.4	21.0
500060 2011 UQ_{246}	17.9	X	110.73389	20.73981	228.44800	4.80857	0.0754440	0.29143683	2.2530618	21	11 1.6	21.0
500061 2011 UV_{257}	18.3	X	15.97699	342.66606	44.35122	2.75367	0.0407926	0.30569340	2.1824552	21	—	—
500062 2011 UF_{271}	15.6	X	211.21461	100.92661	246.62998	15.11271	0.1410498	0.15836639	3.3834574	21	3 12.7	21.3
500063 2011 UA_{286}	15.7	X	256.32851	44.41625	304.26603	15.58124	0.1271969	0.17111129	3.2132926	21	4 25.7	21.0
500064 2011 UY_{291}	18.7	X	24.42662	226.26223	95.76259	4.65288	0.1719303	0.29657671	2.2269545	21	11 5.9	20.9
500065 2011 UO_{303}	18.4	X	28.45968	326.09077	60.43462	3.58445	0.1027912	0.30956824	2.1642053	21	—	—
500066 2011 UO_{314}	18.6	X	359.83679	276.92321	138.74432	2.57404	0.0919291	0.30842044	2.1695714	21	—	—
500067 2011 UK_{316}	18.3	X	208.24761	325.96010	246.70134	4.55516	0.0487689	0.30800150	2.1715383	21	—	—
500068 2011 UY_{381}	15.8	X	269.76332	285.77832	86.61937	11.52877	0.1543768	0.17498954	3.1656386	21	6 12.3	20.5
500069 2011 UC_{406}	16.7	X	254.79080	279.92293	103.24957	6.48576	0.2006669	0.17334949	3.1855738	21	6 4.5	21.8
500070 2011 VW_{15}	18.9	X	18.60410	194.15655	210.58675	0.87651	0.1018952	0.31189113	2.1534462	21	—	—
500071 2011 VE_{19}	16.0	X	330.45490	306.24941	47.39681	10.08857	0.0840186	0.18190571	3.0848816	21	8 27.7	20.1
500072 2011 WN_{25}	17.9	X	154.62275	163.05200	61.46232	7.81636	0.1255816	0.29720308	2.2238245	21	11 19.2	21.1
500073 2011 WD_{27}	15.7	X	258.03205	2.83267	64.60249	18.73560	0.1076646	0.17713547	3.1400196	21	8 21.1	20.6
500074 2011 WB_{35}	17.5	X	130.03070	171.50529	64.38006	4.44657	0.1250758	0.29175940	2.2514008	21	11 8.6	20.8
500075 2011 WU_{67}	18.5	X	303.82420	219.33417	220.60140	3.67006	0.1019432	0.29370049	2.2414700	21	11 25.2	20.4
500076 2011 WO_{70}	17.5	X	216.41991	124.67678	61.62863	6.41500	0.0725351	0.29847659	2.2174944	21	12 15.0	20.0
500077 2011 WJ_{76}	18.2	X	52.11574	66.35031	268.99187	4.60744	0.1429736	0.30258398	2.1973813	21	12 27.2	20.9
500078 2011 WZ_{88}	18.2	X	243.78894	220.72128	266.88087	5.58487	0.1145404	0.28680993	2.2772284	21	10 21.1	21.1
500079 2011 WY_{92}	17.9	X	2.90115	261.67355	95.84965	4.76352	0.2216466	0.29474731	2.2361597	21	11 28.5	19.7
500080 2011 WV_{134}	17.1	X	356.93955	25.68995	157.71139	6.04058	0.6783106	0.21194664	2.7860251	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500081 2011 WJ_{148}	18.1	X	347.85071	146.84702	262.24648	5.35979	0.1081989	0.29841434	2.2178028	21	12 31.0	20.3
500082 2011 YF_1	17.2	X	223.94318	10.59019	92.78068	10.74466	0.0635719	0.27175278	2.3605872	21	9 4.1	20.5
500083 2011 YO_{11}	17.5	X	202.40836	78.17376	102.78308	6.64498	0.1039052	0.28532844	2.2851042	21	11 15.8	20.6
500084 2011 YF_{26}	18.8	X	354.68640	164.65914	245.37381	0.30124	0.1986648	0.29647212	2.2274783	21	—	—
500085 2011 YK_{37}	18.5	X	7.90905	271.85656	127.45283	3.22938	0.2148512	0.29778873	2.2209079	21	—	—
500086 2011 YO_{43}	17.7	X	338.44588	125.55187	288.66806	6.52829	0.0885720	0.29241016	2.2480592	21	12 18.6	19.9
500087 2011 YL_{57}	17.8	X	190.47569	82.75385	91.03460	6.13960	0.0291804	0.27920581	2.3183896	21	10 30.2	20.8
500088 2011 YK_{65}	17.7	X	178.11059	44.89068	129.82214	7.44265	0.0448246	0.27596407	2.3365102	21	10 14.9	20.8
500089 2011 YE_{73}	18.1	X	253.80072	131.13763	330.68774	5.26931	0.1040382	0.27824586	2.3237188	21	9 29.5	21.0
500090 2011 YQ_{74}	15.1	X	180.91254	304.16103	313.41498	15.60211	0.1989275	0.17956652	3.1116146	21	—	—
500091 2012 AD_{15}	16.9	X	217.18208	219.63531	306.84685	24.16322	0.1447840	0.28305041	2.2973484	21	10 25.6	20.8
500092 2012 BA_{10}	16.8	X	37.31378	75.15955	147.40944	29.33094	0.3188118	0.23310030	2.6148142	21	7 18.1	19.6
500093 2012 BB_{17}	18.0	X	103.46841	86.73443	105.16650	3.39545	0.1418569	0.25210613	2.4816876	21	8 12.2	21.5
500094 2012 BC_{20}	18.7	X	234.93383	103.91549	151.65102	23.83797	0.2788315	0.61209004	1.3738074	21	—	—
500095 2012 BT_{20}	17.7	X	274.88814	212.39618	280.66744	5.55709	0.1536112	0.28945179	2.2633509	21	12 14.3	19.6
500096 2012 BY_{20}	18.2	X	204.09905	24.64190	118.49132	5.40177	0.1147628	0.26862750	2.3788610	21	9 26.0	21.6
500097 2012 BX_{21}	18.1	X	312.28257	317.69108	140.40516	7.31692	0.1259412	0.29394424	2.2402307	21	—	—
500098 2012 BY_{28}	17.9	X	355.05837	80.82935	285.90178	5.49637	0.1168114	0.28443329	2.2898960	21	11 5.8	20.1
500099 2012 BK_{38}	18.2	X	295.37151	152.54405	315.36172	4.90605	0.1617257	0.29106597	2.2549751	21	12 16.6	19.9
500100 2012 BP_{51}	18.3	X	228.82597	199.33756	288.55536	4.09752	0.0909792	0.27560276	2.3385519	21	10 3.6	21.3
500101 2012 BZ_{59}	17.9	X	314.51248	82.24194	316.70369	6.39262	0.1286987	0.27995552	2.3142487	21	10 3.8	20.0
500102 2012 BX_{70}	18.3	X	178.35501	186.43880	313.13530	0.53504	0.1241125	0.26252397	2.4155910	21	8 21.1	21.9
500103 2012 BA_{73}	17.0	X	190.88015	18.56439	142.32217	13.58650	0.0950802	0.26893559	2.3770438	21	10 8.4	20.5
500104 2012 BW_{82}	17.7	X	81.33116	121.78319	119.47845	4.84807	0.1727024	0.25943837	2.4347063	21	9 27.6	21.1
500105 2012 BQ_{84}	18.3	X	225.35758	184.30717	329.72780	4.44192	0.0946882	0.28046710	2.3114337	21	11 4.4	21.2
500106 2012 BH_{85}	17.9	X	136.14993	182.96019	341.93203	1.79973	0.1147014	0.25671873	2.4518713	21	8 9.9	21.4
500107 2012 BA_{91}	17.5	X	277.40714	304.94705	130.11120	7.13131	0.0769321	0.27408256	2.3471911	21	10 5.9	20.2
500108 2012 BQ_{91}	18.1	X	165.30651	124.49776	109.06220	2.64502	0.1718927	0.27907296	2.3191253	21	12 6.6	21.7
500109 2012 BS_{94}	18.3	X	160.34987	65.30444	134.76920	5.01110	0.1741476	0.27069264	2.3667465	21	10 22.5	22.2
500110 2012 BJ_{100}	18.1	X	352.62739	324.37378	101.64427	5.09434	0.1331940	0.29586288	2.2305351	21	—	—
500111 2012 BV_{100}	18.5	X	331.15867	82.04941	340.71776	2.18966	0.1195673	0.28854512	2.2680897	21	12 19.6	20.5
500112 2012 BL_{105}	17.4	X	174.28454	55.26478	109.70815	8.97485	0.0697297	0.26678542	2.3897987	21	9 25.9	20.9
500113 2012 BA_{111}	18.4	X	198.49198	350.30790	156.38139	3.46753	0.0885017	0.26886803	2.3774421	21	9 24.9	21.5
500114 2012 BW_{114}	18.2	X	256.52456	136.10769	304.18839	7.42695	0.0482946	0.26979786	2.3719765	21	9 9.5	21.3
500115 2012 BE_{118}	18.1	X	138.35856	50.80403	143.94134	1.82328	0.1207727	0.26440504	2.4041205	21	9 21.7	21.7
500116 2012 BO_{118}	18.7	X	156.93012	42.10093	144.26307	1.85869	0.1229450	0.26763745	2.3847240	21	9 30.4	22.3
500117 2012 BO_{125}	18.1	X	295.82819	124.61079	302.03496	6.04304	0.0929416	0.27665459	2.3326207	21	10 14.7	20.6
500118 2012 BM_{137}	18.5	X	338.59204	326.53083	106.06686	2.87495	0.1583027	0.29332340	2.2433907	21	—	—
500119 2012 BV_{137}	18.9	X	347.09884	176.52051	229.74467	1.89244	0.1921564	0.29291703	2.2454651	21	—	—
500120 2012 BP_{148}	18.1	X	212.47608	330.08052	156.67587	6.95144	0.0773940	0.26815486	2.3816554	21	9 15.8	21.2
500121 2012 BW_{149}	18.1	X	243.07612	346.93625	189.24888	4.01518	0.1214224	0.28785678	2.2717040	21	12 28.2	20.7
500122 2012 CX_6	18.5	X	39.58832	254.47366	151.72506	4.61186	0.1307976	0.30364499	2.1922596	21	—	—
500123 2012 CK_{11}	18.3	X	206.43375	162.64394	336.87480	4.91096	0.0556917	0.26890008	2.3772531	21	9 25.7	21.4
500124 2012 CW_{12}	17.2	X	351.10969	224.24572	123.00144	7.57891	0.1364584	0.26717145	2.3874962	21	10 3.5	19.5
500125 2012 CB_{14}	18.5	X	230.41362	179.06467	345.34003	1.19478	0.1151983	0.28143405	2.3061362	21	11 23.8	21.2
500126 2012 CB_{16}	18.0	X	149.87885	267.37732	299.23441	1.62315	0.1362761	0.26821873	2.3812774	21	10 17.9	21.6
500127 2012 CP_{19}	18.4	X	257.25511	142.33588	336.30872	2.92773	0.1618154	0.28109431	2.3079940	21	10 20.0	21.1
500128 2012 CD_{25}	17.6	X	330.58866	183.78326	290.64715	6.64231	0.0298880	0.29711313	2.2242733	21	—	—
500129 2012 CV_{27}	17.9	X	350.05398	63.58401	336.90008	6.01298	0.0913524	0.28768199	2.2726240	21	12 16.9	20.3
500130 2012 CW_{27}	18.2	X	273.98483	137.48304	313.99838	5.03499	0.1691590	0.27891945	2.3199762	21	10 3.6	20.6
500131 2012 CW_{32}	17.3	X	15.77679	355.29361	199.70002	3.50190	0.1602543	0.22531459	2.6747088	21	3 25.4	20.0
500132 2012 CT_{33}	18.3	X	296.88789	121.80148	311.67514	4.67110	0.1331508	0.27923349	2.3182364	21	10 23.5	20.5
500133 2012 CC_{35}	18.2	X	51.70960	241.78185	138.64302	6.90692	0.2309058	0.30179375	2.2012155	21	—	—
500134 2012 CX_{36}	18.4	X	300.66476	144.12797	308.60520	1.56520	0.1891876	0.28737972	2.2742174	21	11 29.9	20.0
500135 2012 CT_{42}	17.9	X	179.68069	107.91637	111.05606	6.29040	0.1461388	0.27867792	2.3213164	21	12 4.2	21.3
500136 2012 CO_{46}	22.7	X	137.57324	64.38687	349.62263	3.63064	0.1969657	0.64936772	1.3207144	21	—	—
500137 2012 CD_{52}	17.9	X	277.62628	265.39994	167.84147	5.86439	0.0906811	0.27096261	2.3651742	21	9 28.4	20.5
500138 2012 CC_{55}	17.2	X	92.65681	113.08068	117.12590	24.48623	0.0704007	0.36102429	1.9533427	21	10 2.5	20.0
500139 2012 DY_4	18.3	X	240.84051	141.83220	355.30863	1.10226	0.1233422	0.27759707	2.3273380	21	10 29.5	21.2
500140 2012 DG_8	17.4	X	15.48501	121.84448	101.81455	6.65659	0.3349870	0.22411533	2.6842421	21	5 14.4	18.7
500141 2012 DP_{12}	17.3	X	26.95678	67.38676	106.50028	14.01941	0.2236999	0.22326954	2.6910168	21	3 27.9	20.0
500142 2012 DO_{15}	16.7	X	2.99805	207.22199	21.29486	13.71914	0.2320590	0.22036988	2.7145712	21	4 13.5	19.0
500143 2012 DT_{16}	16.0	X	322.30339	309.23436	9.49091	11.16489	0.2019425	0.24493254	2.5299099	21	6 2.0	18.9
500144 2012 DW_{16}	18.1	X	263.30184	110.18274	19.14471	7.45517	0.0589145	0.28080165	2.3095974	21	11 29.3	20.9
500145 2012 DC_{30}	16.9	X	39.07084	67.83542	167.52140	13.22740	0.1593626	0.23538955	2.5978332	21	7 11.2	20.0
500146 2012 DH_{32}	18.0	X	232.44657	155.26151	348.63785	6.27862	0.1422887	0.27442117	2.3452599	21	10 22.5	21.3
500147 2012 DU_{34}	17.4	X	63.16287	265.16796	357.66687	10.12875	0.1481452	0.25335457	2.4735283	21	9 26.8	20.5
500148 2012 DS_{45}	18.2	X	166.35475	128.83155	71.33399	3.02236	0.1592486	0.26528822	2.3987818	21	10 26.5	21.9
500149 2012 DH_{49}	18.0	X	204.53962	81.02643	131.96255	3.76726	0.0895918	0.27980293	2.3150900	21	12 29.4	21.0
500150 2012 DA_{55}	17.7	X	234.69913	129.28596	317.76830	4.07967	0.0630533	0.26712309	2.3877843	21	8 20.6	20.8
500151 2012 DA_{64}	17.4	X	51.24619	308.45422	317.56801	13.96858	0.1198300	0.25757618	2.4464270	21	9 5.9	20.4
500152 2012 DR_{66}	16.9	X	267.29684	16.82788	152.32260	5.65985	0.0880790	0.18531003	3.0469835	21	—	—
500153 2012 DW_{66}	17.8	X	39.37159	199.21627	14.24194	1.55779	0.1543230	0.23374763	2.6099844	21	6 8.9	20.4
500154 2012 DE_{80}	18.0	X	172.80763	125.71255	58.88559	2.04722	0.1265216	0.26646719	2.3917010	21	10 14.0	21.4
500155 2012 DF_{81}	17.8	X	125.08974	146.62165	73.16549	3.64276	0.1585579	0.25966122	2.4333131	21	10 12.9	21.7
500156 2012 DG_{89}	16.9	X	48.34701	308.27444	274.89696	3.86632	0.2429110	0.23351765	2.6116977	21	7 24.9	19.8
500157 2012 EU	18.0	X	112.34959	261.77486	318.48973	3.81999	0.0909232	0.25848031	2.4407188	21	9 22.0	21.5
500158 2012 ED_5	17.4	X	14.78191	264.44212	338.76442	6.75541	0.3665159	0.22645002	2.6657606	21	6 21.4	18.5
500159 2012 EY_{13}	18.4	X	281.30954	90.37674	30.73624	7.81930	0.1944044	0.28277050	2.2988642	21	11 28.8	20.4
500160 2012 EQ_{16}	17.6	X	285.14182	33.96113	61.82586	6.99160	0.0513298	0.27214896	2.3582957	21	11 16.4	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500161 2012 EW_{16}	16.6	X	3.50950	254.75217	85.84129	8.57950	0.2643076	0.25502323	2.4627267	21	11 2.5	18.6
500162 2012 EH_{17}	17.2	X	190.26498	131.03070	53.10428	7.29950	0.1106757	0.26878681	2.3779210	21	11 2.2	20.4
500163 2012 FS	18.2	X	257.72597	52.70707	91.24908	4.85811	0.1591855	0.28132356	2.3067400	21	11 28.2	20.7
500164 2012 FH_{6}	17.6	X	10.07919	180.54954	208.15326	3.32762	0.1928195	0.28446509	2.2897254	21	—	—
500165 2012 FO_{12}	17.6	X	249.41561	305.16287	165.28872	6.20128	0.1596546	0.27005928	2.3704455	21	9 28.9	20.6
500166 2012 FS_{12}	17.8	X	301.33540	29.91225	42.84115	2.98233	0.1897056	0.27597244	2.3364630	21	10 26.7	19.5
500167 2012 FP_{19}	18.1	X	96.62109	184.38777	81.90676	2.46080	0.1601518	0.26137016	2.4226948	21	11 12.0	21.6
500168 2012 FY_{19}	18.3	X	282.44943	314.20798	144.34285	4.71786	0.1514761	0.27685378	2.3315017	21	11 5.4	20.5
500169 2012 FC_{21}	17.5	X	188.04638	175.58987	18.52184	7.22713	0.0881258	0.27153668	2.3618395	21	11 12.3	20.7
500170 2012 FF_{25}	17.4	X	3.57649	282.94175	356.74821	30.05585	0.2513146	0.23511295	2.5998703	21	7 30.1	20.3
500171 2012 FW_{25}	18.1	X	130.39225	15.25138	177.71828	6.71219	0.0988956	0.25311323	2.4751004	21	9 7.5	21.6
500172 2012 FP_{34}	17.7	X	218.11955	127.52858	38.52510	6.48398	0.0238564	0.27093016	2.3653631	21	11 20.9	20.8
500173 2012 FX_{40}	18.2	X	143.81782	220.53141	339.52430	0.93607	0.1306395	0.25939880	2.4349539	21	10 3.2	21.7
500174 2012 FH_{42}	18.3	X	209.87598	63.39002	96.57490	2.29933	0.1176077	0.26817112	2.3815592	21	10 22.9	21.7
500175 2012 FM_{44}	17.3	X	151.89128	77.50539	153.98410	7.63828	0.1571885	0.26237330	2.4165157	21	11 21.9	21.3
500176 2012 FN_{45}	18.3	X	214.22806	123.63387	33.17391	1.81069	0.1218050	0.27025052	2.3693271	21	10 22.5	21.7
500177 2012 FW_{45}	18.0	X	103.31058	129.66595	138.91430	3.06969	0.1439024	0.26366918	2.4085914	21	11 20.9	21.7
500178 2012 FN_{46}	17.7	X	317.81449	120.51449	149.46069	2.35865	0.1846016	0.21956809	2.7211756	21	3 26.3	21.2
500179 2012 FL_{47}	17.9	X	291.30789	279.75756	153.28438	5.83973	0.2116108	0.27413003	2.3469201	21	10 3.5	19.9
500180 2012 FC_{49}	18.0	X	232.30146	101.66369	20.48898	7.09948	0.1149698	0.26615165	2.3935910	21	9 29.4	21.2
500181 2012 FG_{50}	17.3	X	16.16595	147.17433	135.13939	5.75530	0.1608593	0.24109817	2.5566627	21	8 8.9	19.6
500182 2012 FK_{51}	18.0	X	102.85239	129.94221	133.50284	4.75030	0.0722616	0.26452961	2.4033657	21	11 9.2	21.3
500183 2012 FH_{53}	17.7	X	3.82831	284.24865	342.05205	7.13376	0.1576115	0.23203044	2.6228457	21	6 16.9	20.3
500184 2012 FM_{59}	17.7	X	281.59234	293.16600	152.51828	7.09088	0.0660146	0.27074380	2.3664484	21	10 28.1	20.4
500185 2012 FU_{75}	17.5	X	58.58416	255.90693	327.30058	3.44604	0.1337345	0.23862041	2.5743307	21	7 24.4	20.6
500186 2012 GH_{3}	18.1	X	272.48737	339.38427	153.88703	2.13193	0.1318249	0.27795934	2.3253154	21	12 10.4	20.5
500187 2012 GV_{8}	17.6	X	19.13267	294.14138	329.19278	3.47825	0.1713911	0.23390002	2.6088506	21	7 17.7	19.9
500188 2012 GZ_{16}	16.8	X	340.10332	226.88778	71.90300	13.55665	0.3005727	0.22431017	2.6826874	21	5 28.9	18.7
500189 2012 GB_{19}	18.2	X	241.76228	31.87072	99.46184	2.31130	0.1350913	0.26842450	2.3800602	21	10 21.1	21.3
500190 2012 GZ_{20}	18.2	X	103.18320	205.71713	53.87790	2.08582	0.1523954	0.25997135	2.4313775	21	11 8.9	21.9
500191 2012 GC_{22}	17.1	X	23.76507	198.58971	23.71660	8.06839	0.1759426	0.22354180	2.6888313	21	5 22.3	19.8
500192 2012 GO_{22}	16.9	X	351.02487	159.93925	78.67491	9.32344	0.1986338	0.21587752	2.7521014	21	4 11.9	19.8
500193 2012 GP_{34}	18.0	X	43.68565	246.86588	343.95330	4.79435	0.2355430	0.23077682	2.6323356	21	7 28.3	20.7
500194 2012 GS_{35}	17.7	X	52.09605	347.13318	243.36594	3.54724	0.1055451	0.23371015	2.6102634	21	7 18.6	20.8
500195 2012 GJ_{36}	16.9	X	347.89143	56.01602	231.03271	12.27924	0.1364872	0.22788920	2.6545254	21	6 16.3	19.7
500196 2012 HG_{1}	17.1	X	20.15314	135.70451	129.01623	10.22489	0.0321781	0.22955581	2.6416616	21	7 9.4	20.4
500197 2012 HB_{3}	17.2	X	349.74115	130.40378	138.59100	13.00944	0.1429427	0.22254714	2.6968370	21	5 27.9	20.3
500198 2012 HV_{4}	17.4	X	330.04145	135.66711	136.76084	8.08722	0.2539321	0.21766755	2.7369924	21	4 9.7	20.5
500199 2012 HQ_{6}	17.4	X	70.83412	38.29189	180.90377	17.06061	0.2248093	0.23636675	2.5906682	21	8 16.5	21.1
500200 2012 HQ_{8}	17.0	X	24.54676	92.49763	160.95709	13.22927	0.1327844	0.22918816	2.6444860	21	7 7.9	20.1
500201 2012 HO_{9}	17.2	X	33.55899	112.71008	98.35154	12.26006	0.1177597	0.22243673	2.6977294	21	5 25.3	20.4
500202 2012 HX_{12}	17.8	X	107.14871	101.82220	109.20273	8.15915	0.1566837	0.24274247	2.5451040	21	9 14.4	21.7
500203 2012 HO_{17}	17.4	X	8.35625	107.90740	177.06505	10.43501	0.2976837	0.22625567	2.6672869	21	8 5.0	19.2
500204 2012 HQ_{19}	17.2	X	353.95834	93.45299	155.83529	12.27468	0.1589974	0.21657715	2.7461713	21	5 6.8	20.3
500205 2012 HZ_{26}	17.1	X	14.90223	78.56996	172.71579	12.38832	0.2338903	0.22738015	2.6584858	21	6 22.8	19.6
500206 2012 HF_{27}	17.1	X	82.30556	47.65137	138.58851	9.87786	0.1430125	0.23211157	2.6222344	21	7 7.5	20.6
500207 2012 HQ_{27}	17.8	X	80.75377	171.95290	53.27145	5.68541	0.2141784	0.23992097	2.5650189	21	9 10.2	21.5
500208 2012 HB_{28}	17.5	X	110.76235	350.57963	195.68412	8.76248	0.1000482	0.23863165	2.5742498	21	8 4.3	21.2
500209 2012 HK_{28}	17.9	X	239.99010	43.65694	121.06641	6.67311	0.2013998	0.27488554	2.3426179	21	11 24.5	20.9
500210 2012 HN_{30}	16.4	X	55.31187	141.50367	59.35671	14.10719	0.1068773	0.22605664	2.6688523	21	6 10.9	19.7
500211 2012 HM_{32}	17.4	X	111.84261	355.71948	190.49301	0.82986	0.0788057	0.24209606	2.5496324	21	8 5.4	20.7
500212 2012 HD_{34}	17.6	X	355.43546	153.03705	147.44836	8.49765	0.2193561	0.22972149	2.6403914	21	7 21.5	19.8
500213 2012 HL_{36}	17.2	X	6.82800	90.68105	133.37085	9.34276	0.1947471	0.21849981	2.7300379	21	4 24.0	19.9
500214 2012 HC_{42}	17.9	X	220.59104	164.73243	20.29719	2.31081	0.1466453	0.27588684	2.3369463	21	12 3.3	20.8
500215 2012 HV_{43}	17.8	X	28.00618	78.47052	194.55583	3.34044	0.1810503	0.23456139	2.6039444	21	8 19.4	20.5
500216 2012 HP_{47}	17.0	X	130.86793	107.19825	121.28905	7.64645	0.1276795	0.25317352	2.4747074	21	10 29.3	20.9
500217 2012 HB_{48}	17.2	X	338.26868	151.01048	142.63063	5.57794	0.1489178	0.22409780	2.6843820	21	6 7.8	20.1
500218 2012 HQ_{48}	17.5	X	252.73206	50.98547	99.91859	9.87751	0.1013122	0.27151721	2.3619524	21	12 7.9	20.3
500219 2012 HZ_{48}	16.9	X	341.84189	164.50715	155.74762	13.56233	0.2803613	0.22695505	2.6618044	21	7 11.9	19.1
500220 2012 HV_{57}	16.8	X	26.19898	328.99074	263.65363	8.31026	0.1881185	0.22590279	2.6700639	21	6 15.9	19.0
500221 2012 HS_{64}	17.3	X	26.78463	184.00314	51.46185	13.38546	0.1042401	0.22652265	2.6651908	21	6 11.9	20.4
500222 2012 HD_{69}	16.4	X	334.34849	247.07003	107.14175	12.97870	0.2009960	0.23803542	2.5785466	21	9 2.6	18.8
500223 2012 HM_{69}	17.1	X	310.87175	147.41963	160.94007	12.86415	0.1662133	0.22058546	2.7128022	21	5 12.9	20.7
500224 2012 HM_{74}	17.9	X	42.56507	128.38908	172.57875	3.70920	0.1935396	0.24555295	2.5256468	21	10 28.4	20.9
500225 2012 HU_{77}	17.6	X	80.18965	353.45262	223.83379	9.10506	0.1448920	0.23565551	2.5958783	21	8 12.9	21.4
500226 2012 HC_{79}	17.3	X	9.14718	102.95788	172.95578	11.80458	0.2583920	0.22509552	2.6764439	21	7 18.6	19.5
500227 2012 JM	17.6	X	53.73638	70.42687	190.73195	28.99323	0.3274310	0.23514670	2.5996215	21	10 8.5	21.1
500228 2012 JV_{1}	17.5	X	72.14338	65.47838	166.20118	7.56717	0.1660693	0.23692798	2.5865755	21	8 28.7	20.9
500229 2012 JA_{2}	17.3	X	88.63603	10.95727	206.79730	8.60264	0.1048257	0.23848273	2.5753213	21	8 19.5	21.0
500230 2012 JR_{2}	17.7	X	128.31617	81.80129	110.05134	4.60429	0.0478913	0.24354900	2.5394820	21	9 1.4	21.2
500231 2012 JW_{2}	17.0	X	38.10105	221.61008	54.85437	13.24943	0.0623647	0.23946716	2.5682585	21	9 3.2	20.5
500232 2012 JE_{7}	17.8	X	81.94884	138.99664	66.82526	3.30218	0.1360658	0.23444301	2.6048208	21	8 3.3	21.3
500233 2012 JL_{7}	17.5	X	7.30618	41.71908	250.60299	3.54748	0.2733931	0.22876641	2.6477352	21	8 13.0	19.4
500234 2012 JK_{13}	16.9	X	332.52264	148.52024	199.27841	8.59078	0.1380945	0.23586790	2.5943197	21	8 14.9	19.7
500235 2012 JH_{16}	17.0	X	319.05950	139.90591	148.40474	21.63793	0.2564774	0.21317961	2.7752723	21	4 16.7	20.8
500236 2012 JC_{17}	17.5	X	15.36733	244.51926	61.56181	15.81302	0.1483018	0.24073198	2.5592548	21	9 22.2	20.6
500237 2012 JS_{23}	16.9	X	53.48092	126.36207	144.72202	13.61813	0.2016954	0.23807012	2.5782961	21	10 6.7	20.4
500238 2012 JG_{24}	16.9	X	74.30856	300.53751	255.47896	10.24690	0.1835328	0.22978655	2.6398929	21	7 14.7	20.5
500239 2012 JL_{25}	17.4	X	165.89983	30.39206	235.33213	2.73207	0.1454748	0.27268466	2.3552061	21	—	—
500240 2012 JE_{27}	17.5	X	18.81040	44.73627	198.69342	8.87788	0.2297030	0.22259967	2.6964128	21	6 19.6	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500241 2012 JT_{28}	16.2	X	326.22025	116.87605	236.10301	29.18034	0.3054049	0.23329907	2.6133287	21	7 8.8	19.2
500242 2012 JF_{33}	17.5	X	26.80553	63.58082	171.22737	6.62567	0.1275937	0.22693999	2.6619222	21	6 15.1	20.4
500243 2012 JG_{38}	17.5	X	64.24777	80.04850	154.78968	11.92391	0.1462672	0.23484599	2.6018402	21	8 19.0	20.8
500244 2012 JW_{38}	17.8	X	358.36474	128.71657	170.82450	4.28076	0.1612751	0.23123202	2.6288798	21	7 26.7	20.2
500245 2012 JL_{43}	17.4	X	321.94658	121.60655	186.52680	1.94922	0.2776464	0.21968047	2.7202475	21	5 8.5	20.2
500246 2012 JO_{52}	17.3	X	10.16000	189.10914	77.10248	12.59103	0.0782414	0.23069599	2.6329505	21	6 27.6	20.3
500247 2012 JB_{56}	17.8	X	78.78202	175.39264	44.22554	4.41482	0.1304935	0.23659394	2.5890095	21	8 18.3	21.2
500248 2012 JV_{63}	17.6	X	320.99153	96.99922	202.32603	3.03769	0.2248134	0.21841216	2.7307682	21	5 3.6	20.8
500249 2012 JY_{65}	17.1	X	23.90282	224.42030	71.59795	5.29801	0.2393388	0.23316995	2.6142934	21	9 28.9	19.7
500250 2012 KE_{5}	17.3	X	345.67810	187.79472	90.88605	6.37328	0.0779316	0.22132985	2.7067162	21	6 5.3	20.4
500251 2012 KA_{10}	17.8	X	185.79424	67.91763	110.03244	2.98531	0.0811641	0.25526417	2.4611768	21	10 21.3	21.3
500252 2012 KU_{10}	17.4	X	116.80513	357.92570	201.67010	7.02973	0.1081573	0.24075679	2.5590789	21	8 30.4	21.2
500253 2012 KA_{15}	17.6	X	55.26746	55.25365	150.35058	9.78581	0.2012850	0.22702638	2.6612469	21	7 3.9	20.8
500254 2012 KW_{15}	17.4	X	29.01695	122.84054	98.64037	12.10127	0.1055182	0.21965781	2.7204346	21	5 30.8	20.6
500255 2012 KM_{27}	17.4	X	95.06568	165.30484	73.16986	11.22760	0.1659788	0.24414794	2.5353271	21	10 10.2	21.3
500256 2012 KP_{34}	16.9	X	290.11481	225.73486	100.88459	6.10351	0.1438758	0.21578287	2.7529062	21	5 10.5	20.6
500257 2012 KQ_{46}	16.8	X	339.36215	189.33358	89.15997	9.37367	0.1737788	0.21696520	2.7428959	21	5 17.4	19.7
500258 2012 KP_{48}	16.6	X	140.85121	275.31207	225.85955	11.91328	0.1263245	0.23156577	2.6263533	21	7 11.8	20.8
500259 2012 KE_{49}	16.5	X	53.82086	192.27592	73.50704	17.66637	0.1310157	0.23711249	2.5852334	21	9 25.5	20.2
500260 2012 KF_{49}	16.7	X	94.26690	314.75212	235.12993	10.73739	0.1371065	0.23131298	2.6282664	21	7 23.8	20.6
500261 2012 KN_{49}	16.8	X	26.83758	227.67063	113.81192	8.08767	0.2573140	0.24359641	2.5391526	21	12 9.0	19.9
500262 2012 KV_{49}	17.2	X	126.86756	318.07577	228.24011	14.83048	0.1130494	0.23897329	2.5717957	21	8 20.3	21.4
500263 2012 KJ_{51}	17.0	X	339.60619	191.22185	122.65458	17.97878	0.2613037	0.22610985	2.6684336	21	6 29.0	19.3
500264 2012 LC_{9}	17.0	X	312.77828	167.41157	155.01659	14.66480	0.1353878	0.22129352	2.7070125	21	6 8.2	20.6
500265 2012 LN_{10}	16.9	X	153.26330	328.76302	202.72696	12.34675	0.1847705	0.24203278	2.5500768	21	9 2.9	21.4
500266 2012 LK_{12}	17.3	X	8.94082	38.88903	226.83923	10.47652	0.1666482	0.22360382	2.6883340	21	6 26.7	20.0
500267 2012 LL_{13}	17.5	X	358.35788	142.37237	159.05816	13.73750	0.1739793	0.22871371	2.6481419	21	7 29.1	20.1
500268 2012 LH_{14}	17.2	X	342.41692	153.13236	126.03852	15.55905	0.2073037	0.21769011	2.7368033	21	5 23.5	20.3
500269 2012 LN_{15}	16.6	X	80.69869	347.31143	214.50025	12.66635	0.2323691	0.23160832	2.6260316	21	8 4.7	20.6
500270 2012 LW_{17}	17.1	X	50.58076	55.31189	228.13742	12.63567	0.1769329	0.23899703	2.5716255	21	10 8.4	20.5
500271 2012 LN_{19}	16.8	X	340.99957	65.54965	238.11168	12.67375	0.1952201	0.22265714	2.6959488	21	6 21.8	19.5
500272 2012 MC_{3}	17.1	X	104.14280	8.31167	197.07126	21.63042	0.0044908	0.23522275	2.5990612	21	8 6.2	21.0
500273 2012 MT_{3}	16.8	X	292.58951	208.47471	128.29571	13.00960	0.1123828	0.20896160	2.8124947	21	6 2.6	20.8
500274 2012 MV_{7}	17.0	X	353.88270	162.77318	96.23261	5.53902	0.1165671	0.21709739	2.7417824	21	5 20.8	20.0
500275 2012 MS_{8}	16.6	X	102.08584	13.98654	175.86866	13.09941	0.1013923	0.23335892	2.6128819	21	7 29.8	20.5
500276 2012 PK_{2}	16.8	X	196.97782	61.28077	323.32511	8.36335	0.0724361	0.18328134	3.0694264	21	4 12.9	21.6
500277 2012 PQ_{2}	16.8	X	202.02819	232.54485	171.64025	10.56691	0.1328383	0.18871632	3.0102074	21	5 16.9	21.7
500278 2012 PM_{3}	16.4	X	98.81182	155.42938	332.59899	8.57485	0.0942618	0.18388907	3.0626599	21	5 3.9	20.9
500279 2012 PL_{9}	16.5	X	300.18635	58.06768	211.58234	7.15022	0.0918882	0.18768054	3.0212724	21	3 18.1	20.7
500280 2012 PU_{10}	16.5	X	173.47197	231.82802	172.56364	10.61007	0.0474361	0.18217104	3.0818854	21	4 17.2	21.1
500281 2012 PD_{13}	16.5	X	298.55349	22.49277	321.56530	10.59123	0.1295696	0.20344844	2.8630777	21	6 15.6	20.3
500282 2012 PP_{13}	16.1	X	153.49691	123.73700	317.88609	8.81080	0.0717901	0.18541427	3.0458414	21	5 6.8	20.8
500283 2012 PF_{14}	16.0	X	44.82108	74.39911	176.38882	17.24600	0.0941001	0.20965043	2.8063309	21	7 31.3	19.9
500284 2012 PB_{16}	18.8	X	203.23285	344.26243	322.63855	18.28961	0.0381190	0.38638605	1.8669030	21	—	—
500285 2012 PG_{18}	17.9	X	184.77741	160.20024	145.05323	22.87196	0.0753428	0.38174417	1.8820065	21	—	—
500286 2012 PU_{18}	17.5	X	287.47703	275.42168	276.92511	21.85561	0.1178600	0.38297646	1.8779672	21	—	—
500287 2012 PQ_{23}	16.5	X	343.60925	167.21637	141.94416	22.28076	0.1708632	0.21383738	2.7695782	21	7 10.1	19.7
500288 2012 PG_{24}	17.0	X	93.15116	32.22987	208.93151	14.01311	0.2185355	0.23341116	2.6124920	21	10 9.0	21.1
500289 2012 PY_{34}	16.1	X	214.11924	28.01372	335.08781	8.56687	0.1487794	0.18422288	3.0589592	21	4 3.0	21.2
500290 2012 PA_{37}	16.8	X	342.36203	164.84675	142.87436	14.02898	0.1761064	0.21134870	2.7912774	21	7 4.2	19.9
500291 2012 PB_{38}	17.2	X	35.40624	52.25490	225.75391	4.56277	0.1016212	0.22223299	2.6993780	21	8 25.9	20.5
500292 2012 PK_{43}	17.0	X	261.52615	295.13972	40.93356	3.25683	0.1788510	0.19289558	2.9665695	21	4 15.6	21.7
500293 2012 PW_{43}	16.2	X	198.79083	191.03353	152.81914	13.12415	0.1486326	0.17397365	3.1779500	21	3 3.0	21.4
500294 2012 QF_{2}	18.0	X	73.41415	55.50429	32.63922	21.52574	0.0335407	0.38179370	1.8818437	21	—	—
500295 2012 QW_{7}	16.9	X	341.51905	44.99155	275.98321	6.47439	0.2137675	0.21727381	2.7402980	21	7 18.9	19.3
500296 2012 QU_{13}	16.4	X	259.59033	325.54831	336.21788	17.33522	0.1388853	0.18150578	3.0894114	21	3 5.9	21.3
500297 2012 QT_{17}	18.7	X	103.39804	283.73991	163.56355	22.94518	0.0855989	0.39725802	1.8326841	21	2 6.9	20.1
500298 2012 QR_{21}	16.4	X	245.43442	10.09575	321.55264	10.15958	0.0612918	0.18311795	3.0712519	21	3 31.5	21.1
500299 2012 QC_{22}	16.9	X	303.43662	171.57510	172.84860	17.16277	0.1921106	0.20557726	2.8432780	21	6 14.4	20.9
500300 2012 QY_{27}	16.8	X	231.46273	161.98652	182.93750	4.68863	0.1466055	0.18185792	3.0854220	21	3 31.9	21.7
500301 2012 QW_{28}	16.3	X	193.46347	80.37594	314.24205	11.79922	0.0727152	0.18340864	3.0680059	21	4 19.6	21.2
500302 2012 QQ_{31}	15.8	X	250.39591	1.53802	309.24952	9.47810	0.1019684	0.17969871	3.1100884	21	3 9.4	20.6
500303 2012 QR_{34}	16.9	X	192.20932	78.27223	314.65121	9.11414	0.0996772	0.18224033	3.0811042	21	4 17.7	21.8
500304 2012 QQ_{39}	16.4	X	196.87520	74.36414	341.35241	9.98412	0.1357552	0.18955300	3.0013429	21	5 20.9	21.4
500305 2012 QK_{42}	18.3	X	98.75095	117.42011	305.17073	19.07499	0.1044556	0.38777508	1.8624421	21	—	—
500306 2012 QY_{46}	16.2	X	163.65189	62.43169	343.34308	9.20517	0.1089575	0.18201434	3.0836540	21	4 6.4	21.0
500307 2012 QB_{49}	16.9	X	318.16089	67.10328	276.42775	3.70391	0.1731487	0.20978517	2.8051292	21	7 9.5	20.0
500308 2012 QA_{52}	16.9	X	316.02060	2.39051	341.82104	8.38621	0.1587691	0.20952488	2.8074518	21	7 10.7	20.3
500309 2012 RY	16.1	X	356.25120	122.91911	153.40739	12.94741	0.0825772	0.20645351	2.8352272	21	6 20.4	19.8
500310 2012 RD_{3}	16.3	X	206.14136	80.20799	322.41614	11.30131	0.3518656	0.18264683	3.0765310	21	5 7.8	22.2
500311 2012 RL_{3}	16.2	X	223.97598	77.12059	308.49031	12.74482	0.2348155	0.18661214	3.0327931	21	5 3.0	21.7
500312 2012 RN_{4}	16.3	X	207.78503	351.02159	6.45967	13.40155	0.1001716	0.17711593	3.1402505	21	3 26.5	21.3
500313 2012 RE_{14}	16.5	X	335.22211	123.90984	205.52036	19.75507	0.2274453	0.21020119	2.8014268	21	7 11.5	19.8
500314 2012 RX_{21}	16.8	X	215.68146	153.93136	227.01962	5.54932	0.2142441	0.18344245	3.0676289	21	4 26.2	21.9
500315 2012 RB_{22}	15.7	X	152.52106	81.97354	339.36173	11.55707	0.0633012	0.17901873	3.1179591	21	4 9.0	20.4
500316 2012 RS_{23}	16.9	X	187.89545	240.39831	150.08904	5.60066	0.1448134	0.17299461	3.1899289	21	4 18.0	22.0
500317 2012 RE_{24}	16.0	X	221.99736	343.38412	21.91730	16.74928	0.2521712	0.18046187	3.1013140	21	4 11.9	21.4
500318 2012 RS_{28}	16.8	X	258.23149	355.51278	351.67583	9.82820	0.1968800	0.19159501	2.9799793	21	4 20.3	21.6
500319 2012 RV_{31}	16.0	X	262.24495	150.66511	162.80289	19.67262	0.1358537	0.18383695	3.0632387	21	3 27.1	20.7
500320 2012 RQ_{34}	16.3	X	186.58360	178.37465	206.49411	8.62335	0.0865539	0.17326225	3.1866430	21	4 6.8	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500321 2012 RD_{35}	16.3	X	236.19201	179.53801	196.82409	15.73919	0.1232717	0.18734425	3.0248869	21	5 16.2	21.1
500322 2012 RM_{40}	16.6	X	308.56281	184.66518	171.51876	4.56209	0.1204499	0.20860171	2.8157287	21	7 18.1	20.0
500323 2012 RE_{43}	16.6	X	137.93422	118.11116	321.89775	9.75698	0.0869795	0.18451611	3.0557174	21	4 17.6	21.3
500324 2012 SF	16.8	X	316.88877	98.82982	175.63597	15.35651	0.1807344	0.19044783	2.9919341	21	4 5.6	20.7
500325 2012 SQ	18.6	X	258.94637	99.81996	191.32142	29.32251	0.2094420	0.40027680	1.8234580	21	1 15.2	22.1
500326 2012 SW_{7}	16.7	X	264.24384	348.07402	350.26713	10.71636	0.1301937	0.18980246	2.9987124	21	4 22.3	21.3
500327 2012 SY_{8}	16.6	X	259.31965	29.57035	14.06156	9.68840	0.1272943	0.20208865	2.8759065	21	7 15.4	20.9
500328 2012 SY_{14}	18.3	X	343.25201	357.80137	202.30312	22.40555	0.0464641	0.38992725	1.8555828	21	1 4.9	20.8
500329 2012 SN_{16}	17.3	X	227.01521	56.01732	322.60160	5.85699	0.1888159	0.18354159	3.0665242	21	5 2.0	22.5
500330 2012 SZ_{20}	16.8	X	239.13844	213.39254	190.96538	10.69246	0.0743456	0.20032060	2.8928038	21	6 26.1	21.2
500331 2012 SU_{23}	16.6	X	202.56215	40.49731	3.57263	8.94263	0.0850797	0.18522401	3.0479268	21	5 13.6	21.4
500332 2012 SE_{24}	16.7	X	206.19136	40.09126	4.43945	11.63713	0.1470749	0.18543242	3.0456426	21	5 15.1	21.8
500333 2012 SF_{27}	16.6	X	237.21018	12.73270	355.57206	11.11916	0.1299357	0.18740891	3.0241911	21	5 1.1	21.5
500334 2012 SD_{39}	16.6	X	223.15694	351.55144	350.81045	10.78113	0.0770938	0.17684641	3.1434403	21	3 23.2	21.4
500335 2012 SS_{40}	16.4	X	213.16630	45.36798	350.68072	9.65057	0.0461983	0.18850297	3.0124783	21	5 16.2	20.9
500336 2012 SD_{41}	16.5	X	264.86963	203.75149	207.62448	4.96172	0.1636979	0.20586120	2.8406630	21	7 23.6	20.7
500337 2012 SY_{45}	17.0	X	293.22357	335.09584	355.95621	10.92755	0.0971980	0.19520957	2.9430794	21	5 23.8	21.2
500338 2012 SU_{49}	16.7	X	258.29098	350.69152	15.04976	10.18324	0.1130737	0.19288457	2.9666825	21	5 23.5	21.2
500339 2012 SH_{52}	16.3	X	181.24612	187.62237	199.64157	11.90977	0.0640645	0.17702343	3.1413444	21	4 3.3	21.1
500340 2012 SH_{54}	16.1	X	262.59801	339.24822	337.22872	11.98298	0.1076333	0.18379663	3.0636867	21	3 27.7	20.7
500341 2012 SW_{55}	16.6	X	234.82539	216.86448	145.55157	10.87554	0.3149889	0.18645384	3.0345094	21	4 18.3	22.1
500342 2012 SM_{56}	18.3	X	158.82780	187.57990	195.11494	20.54845	0.0449448	0.38788792	1.8620809	21	1 18.7	20.7
500343 2012 SZ_{58}	17.9	X	144.41219	76.41796	330.20201	15.57923	0.1510891	0.38859380	1.8598252	21	2 24.9	19.7
500344 2012 SZ_{62}	16.5	X	207.79449	112.81766	266.61175	4.15400	0.1784018	0.17956407	3.1116429	21	4 18.1	21.7
500345 2012 SJ_{65}	17.3	X	305.79926	207.86046	129.31977	2.96325	0.0777940	0.20200954	2.8766573	21	6 24.7	21.1
500346 2012 TW_{1}	16.3	X	246.83098	342.89077	9.32263	13.17955	0.0660236	0.18615401	3.0377669	21	4 27.8	20.8
500347 2012 TY_{1}	17.5	X	236.12582	199.24503	158.29359	1.35548	0.1479984	0.18489350	3.0515579	21	4 20.3	22.3
500348 2012 TH_{4}	15.4	X	210.94222	88.05894	296.08081	24.50924	0.2521068	0.18005711	3.1059601	21	4 14.9	21.4
500349 2012 TX_{6}	16.8	X	229.85277	197.59261	184.09623	8.69164	0.1221998	0.18628572	3.0363349	21	5 16.4	21.6
500350 2012 TG_{10}	17.0	X	215.55779	44.28505	327.45362	4.22153	0.3047599	0.17936408	3.1139555	21	4 11.7	22.7
500351 2012 TQ_{10}	16.5	X	223.31657	176.33519	213.79953	11.09343	0.0905350	0.18212164	3.0824427	21	5 21.7	21.2
500352 2012 TH_{11}	16.5	X	197.98363	29.46097	29.01770	17.06164	0.1053920	0.18167917	3.0874454	21	5 25.1	21.6
500353 2012 TL_{11}	16.1	X	272.04670	266.87975	30.99040	26.11022	0.2324861	0.17705169	3.1410101	21	3 19.6	21.4
500354 2012 TE_{13}	16.4	X	238.54882	338.86401	54.67550	11.71885	0.0823541	0.19203395	2.9754366	21	6 10.3	20.8
500355 2012 TR_{14}	17.7	X	298.81149	236.38629	310.43526	17.63532	0.0576446	0.37103334	1.9180537	21	—	—
500356 2012 TG_{18}	17.2	X	244.82362	324.76301	19.38065	1.20828	0.1756601	0.18170868	3.0871112	21	4 10.1	22.1
500357 2012 TT_{18}	17.3	X	221.92355	235.49748	147.15648	0.83148	0.1904891	0.18262100	3.0768211	21	5 5.0	22.5
500358 2012 TA_{25}	16.4	X	216.42501	124.11527	213.91932	8.48024	0.0404049	0.17023688	3.2242864	21	3 12.3	21.2
500359 2012 TC_{28}	16.3	X	181.35032	248.28921	185.11572	14.09436	0.1144986	0.18649113	3.0341050	21	6 1.2	21.3
500360 2012 TF_{33}	16.7	X	247.33692	340.22685	8.21426	2.96886	0.3123759	0.18535542	3.0464860	21	4 7.3	21.9
500361 2012 TG_{33}	16.3	X	183.13826	200.55873	207.06905	9.24468	0.1100506	0.17639902	3.1487531	21	5 2.1	21.2
500362 2012 TP_{33}	17.1	X	218.48551	218.80405	175.31402	3.05985	0.2169928	0.18356762	3.0662343	21	5 15.0	22.4
500363 2012 TG_{34}	16.1	X	358.54393	208.74363	116.99951	10.55645	0.1657813	0.21316213	2.7754240	21	9 9.1	19.0
500364 2012 TQ_{34}	16.3	X	185.83836	104.68699	297.80314	8.78175	0.2181566	0.17971931	3.1098508	21	4 25.3	21.9
500365 2012 TT_{36}	17.3	X	237.10578	188.25693	197.08910	4.41645	0.1643718	0.19269300	2.9686483	21	5 23.6	22.0
500366 2012 TM_{37}	16.2	X	222.83074	185.14479	181.13165	28.90753	0.1484171	0.17972646	3.1097684	21	4 20.5	21.4
500367 2012 TR_{37}	16.0	X	187.01744	338.69759	70.40768	14.79474	0.1508323	0.17707701	3.1407107	21	5 10.0	21.1
500368 2012 TS_{39}	16.0	X	205.66200	24.94024	354.66886	10.79702	0.1286368	0.17766741	3.1337490	21	4 15.7	21.2
500369 2012 TV_{40}	16.1	X	223.35674	47.95449	353.29377	12.99978	0.0931006	0.18947760	3.0021391	21	5 31.6	20.9
500370 2012 TD_{42}	16.1	X	122.12652	123.90573	341.23125	10.39000	0.0391655	0.17736611	3.1372969	21	4 25.7	20.8
500371 2012 TC_{46}	16.4	X	239.84549	357.79059	330.37471	8.39436	0.0597222	0.17550025	3.1594942	21	3 23.9	21.2
500372 2012 TE_{49}	17.0	X	159.58470	92.57902	4.39378	3.84884	0.1115224	0.18395072	3.0619756	21	6 6.6	21.7
500373 2012 TM_{54}	16.1	X	243.60225	106.99107	250.68924	10.15933	0.1225684	0.17916355	3.1162785	21	4 28.1	20.9
500374 2012 TB_{55}	15.7	X	185.41335	204.48851	238.53520	12.91834	0.1742330	0.18107763	3.0942793	21	6 15.2	20.8
500375 2012 TX_{55}	16.0	X	195.15357	193.55479	212.95207	16.30858	0.1064384	0.18116486	3.0932860	21	5 12.4	20.9
500376 2012 TT_{57}	16.8	X	245.72593	165.94159	218.76475	5.90072	0.2933422	0.18915516	3.0055497	21	5 20.3	21.9
500377 2012 TB_{59}	16.6	X	178.31186	174.79157	223.15546	9.25302	0.0910802	0.17408938	3.1765414	21	4 13.6	21.6
500378 2012 TC_{59}	16.1	X	259.29703	355.51724	356.38393	10.79523	0.1010887	0.18747551	3.0234748	21	5 7.6	20.7
500379 2012 TX_{59}	16.8	X	193.10190	193.29852	193.43939	9.65870	0.1469069	0.17487030	3.1670774	21	4 16.9	21.8
500380 2012 TK_{65}	16.5	X	214.55688	25.54883	326.63588	8.49877	0.0807715	0.17434460	3.1734407	21	3 24.5	21.5
500381 2012 TM_{65}	16.3	X	236.00679	45.62577	340.86200	10.67726	0.0486028	0.19018414	2.9946991	21	5 31.9	20.8
500382 2012 TN_{68}	17.2	X	219.44279	165.75720	199.56578	0.42960	0.1808661	0.17556450	3.1587233	21	4 12.9	22.4
500383 2012 TR_{69}	16.4	X	232.59812	317.53586	32.45873	10.92695	0.2260559	0.17728512	3.1382524	21	4 5.7	21.8
500384 2012 TE_{70}	16.4	X	208.15640	317.56610	68.03837	2.28549	0.1815544	0.17823253	3.1271213	21	4 27.7	21.5
500385 2012 TG_{80}	16.9	X	230.56701	150.48157	204.82074	4.12555	0.2653940	0.17988040	3.1079939	21	4 5.9	22.4
500386 2012 TP_{81}	16.7	X	256.52513	290.24357	25.38327	10.63443	0.2397214	0.18259312	3.0771342	21	3 16.3	21.9
500387 2012 TX_{83}	17.0	X	213.96734	192.78727	205.96643	20.56903	0.0611886	0.18466792	3.0540425	21	5 23.9	21.7
500388 2012 TP_{84}	16.5	X	285.11910	279.39045	16.02481	10.00332	0.0401259	0.17653991	3.1470776	21	4 10.4	20.9
500389 2012 TF_{85}	16.8	X	243.10424	23.68181	320.72536	0.10823	0.1095478	0.17969034	3.1101851	21	4 14.2	21.6
500390 2012 TX_{86}	16.6	X	237.12037	158.42414	209.61592	11.27619	0.1115632	0.18349722	3.0670185	21	5 7.2	21.2
500391 2012 TA_{87}	16.5	X	218.38597	176.60818	211.22689	4.85517	0.1380737	0.18248279	3.0783744	21	5 10.8	21.4
500392 2012 TK_{88}	16.9	X	228.84952	340.74606	9.60785	1.53423	0.1907826	0.17786714	3.1314025	21	4 2.7	22.1
500393 2012 TC_{89}	16.1	X	325.51668	122.58229	161.45689	12.15483	0.0552883	0.18945734	3.0023530	21	5 19.6	20.3
500394 2012 TT_{90}	16.8	X	163.01491	328.13849	89.46001	2.71830	0.1623190	0.17398046	3.1778671	21	4 27.4	21.9
500395 2012 TT_{91}	17.0	X	216.74910	19.72490	78.10989	3.56528	0.0640743	0.20393470	2.8585248	21	8 10.9	21.2
500396 2012 TY_{91}	16.1	X	144.72644	78.19146	38.89873	11.12901	0.0783759	0.18795186	3.0183641	21	6 13.0	20.8
500397 2012 TF_{92}	17.2	X	345.68091	201.58829	142.65466	5.19890	0.0770969	0.21265950	2.7797956	21	9 6.7	20.4
500398 2012 TO_{93}	16.3	X	102.32305	76.88619	40.08661	9.57456	0.0556141	0.17483267	3.1675319	21	4 23.8	20.8
500399 2012 TY_{94}	16.8	X	260.49351	84.71824	277.36944	2.65855	0.1726436	0.18957850	3.0010737	21	5 16.5	21.2
500400 2012 TN_{97}	16.5	X	356.47834	237.33927	22.11360	16.71214	0.0246968	0.18537220	3.0463022	21	5 25.7	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500401 2012 TU_{97}	16.5	X	210.43465	31.82218	21.29865	8.93185	0.0871053	0.18575446	3.0421215	21	6 3.3	21.3
500402 2012 TV_{97}	16.8	X	305.28523	289.90063	6.23239	2.90385	0.0800667	0.18303554	3.0721736	21	4 30.5	20.9
500403 2012 TX_{97}	17.0	X	221.35993	53.40459	353.58677	1.30246	0.0997953	0.18739863	3.0243017	21	6 7.8	21.5
500404 2012 TE_{100}	16.0	X	224.83585	147.27387	236.96498	17.06804	0.1816736	0.18300295	3.0725384	21	5 9.2	21.0
500405 2012 TW_{108}	16.1	X	345.67204	273.17824	344.72268	9.95842	0.1249802	0.18727032	3.0256829	21	5 1.3	19.9
500406 2012 TB_{109}	16.6	X	219.51377	35.66519	342.75299	8.58654	0.0950857	0.18150595	3.0894095	21	4 28.8	21.4
500407 2012 TC_{110}	16.2	X	262.26767	17.87277	350.95945	11.19107	0.1030989	0.19193465	2.9764628	21	6 2.9	20.8
500408 2012 TF_{110}	16.8	X	208.35022	39.89131	337.62953	8.90048	0.0852860	0.17720241	3.1392288	21	4 16.6	21.7
500409 2012 TT_{111}	16.8	X	206.60575	19.58071	348.79299	9.04729	0.0969234	0.17448016	3.1717967	21	4 5.0	21.9
500410 2012 TD_{112}	17.1	X	226.25527	154.33521	229.65538	8.84360	0.1053656	0.18490769	3.0514018	21	5 15.4	21.9
500411 2012 TN_{114}	16.7	X	198.88548	33.62028	345.15824	8.43208	0.0896955	0.17500497	3.1654525	21	4 9.5	21.6
500412 2012 TY_{114}	17.1	X	255.83052	130.21542	228.55498	8.09452	0.0888468	0.18776798	3.0203344	21	5 17.8	21.4
500413 2012 TA_{115}	16.5	X	5.43242	1.13264	234.67755	7.43601	0.0154880	0.18272386	3.0756662	21	5 11.9	20.7
500414 2012 TB_{115}	15.9	X	35.88765	184.17860	4.04470	17.06602	0.1718147	0.17486301	3.1671655	21	4 27.4	19.7
500415 2012 TA_{116}	16.7	X	214.02868	140.72488	252.28503	6.78536	0.0859991	0.18275871	3.0752752	21	5 14.3	21.5
500416 2012 TM_{116}	16.7	X	231.06381	137.06799	287.24052	4.68203	0.0818447	0.19629457	2.9322244	21	7 12.2	21.0
500417 2012 TV_{121}	16.6	X	278.01164	124.55445	231.43550	10.90480	0.0710529	0.19307947	2.9646856	21	6 12.5	20.8
500418 2012 TZ_{128}	16.9	X	254.43415	126.58267	219.98517	9.26400	0.1080105	0.18517366	3.0484792	21	4 28.6	21.3
500419 2012 TF_{131}	16.6	X	244.72730	313.41031	38.56718	6.00425	0.1972101	0.18393804	3.0621163	21	4 18.1	21.4
500420 2012 TJ_{131}	17.3	X	207.78160	265.07413	140.34952	2.46288	0.1803396	0.18316198	3.0707597	21	5 20.9	22.4
500421 2012 TM_{134}	16.8	X	227.91915	200.51371	179.29552	11.97158	0.0696608	0.18654253	3.0335475	21	5 16.6	21.4
500422 2012 TO_{136}	18.4	X	233.84364	79.40302	207.69485	20.69479	0.0735925	0.38411434	1.8742565	21	—	—
500423 2012 TX_{136}	16.5	X	194.35513	246.64219	228.19479	10.81601	0.0881614	0.20072920	2.8888768	21	7 31.7	21.1
500424 2012 TH_{141}	17.2	X	217.81460	289.83770	96.18675	4.27688	0.1541535	0.18462853	3.0544769	21	5 7.9	22.1
500425 2012 TO_{141}	16.1	X	310.11605	271.95825	356.86239	18.60387	0.0769173	0.18291165	3.0735607	21	3 30.7	20.3
500426 2012 TP_{142}	16.6	X	182.61166	261.71878	153.89184	12.41006	0.2158823	0.17588806	3.1548483	21	5 15.2	22.2
500427 2012 TD_{144}	17.2	X	302.85206	236.03713	100.73295	2.90061	0.0702286	0.19683909	2.9268142	21	6 21.1	21.1
500428 2012 TY_{144}	16.9	X	211.11367	266.30465	129.37105	5.40365	0.1728264	0.18393934	3.0621018	21	5 13.4	22.0
500429 2012 TK_{145}	17.8	X	305.37435	327.97632	227.09858	20.38963	0.0482915	0.37144515	1.9166358	21	—	—
500430 2012 TS_{148}	18.3	X	149.32821	344.45958	32.46302	20.37987	0.0949302	0.38241448	1.8798066	21	1 15.2	20.6
500431 2012 TF_{149}	16.6	X	148.14030	79.33029	38.47148	13.50873	0.2708292	0.17416025	3.1756797	21	6 29.8	22.3
500432 2012 TG_{151}	16.9	X	237.33947	134.31502	229.97415	2.35975	0.2205788	0.18126332	3.0921657	21	4 24.0	22.1
500433 2012 TO_{152}	17.4	X	237.36119	332.14018	10.19153	4.98857	0.1568506	0.17994648	3.1072329	21	4 2.5	22.4
500434 2012 TX_{154}	17.0	X	193.12943	26.63794	28.07262	4.73664	0.1459415	0.18259196	3.0771472	21	5 18.4	21.9
500435 2012 TY_{154}	16.7	X	267.15405	313.34539	20.20421	11.52975	0.1127587	0.18615616	3.0377436	21	4 24.4	21.3
500436 2012 TK_{155}	16.6	X	270.14091	131.09093	176.90252	5.26006	0.0722126	0.17873408	3.1212686	21	4 4.5	21.2
500437 2012 TU_{160}	16.9	X	202.52214	225.82909	164.57818	6.19398	0.1297300	0.17908139	3.1172317	21	4 30.8	21.9
500438 2012 TO_{164}	16.8	X	125.66953	304.08168	186.61680	9.59015	0.0746696	0.18655960	3.0333625	21	6 10.2	21.4
500439 2012 TC_{166}	16.8	X	252.80832	150.33802	185.10658	11.69878	0.0792365	0.17877015	3.1208487	21	4 18.3	21.4
500440 2012 TA_{168}	16.3	X	289.68600	179.74201	165.05627	8.45469	0.0590380	0.19051519	2.9912289	21	6 15.8	20.5
500441 2012 TM_{170}	16.7	X	253.22713	100.73388	214.36242	0.43693	0.1565381	0.17673948	3.1447080	21	3 16.5	21.7
500442 2012 TP_{171}	16.6	X	216.20978	33.77588	339.95840	4.44428	0.1436458	0.17950218	3.1123582	21	4 19.6	21.6
500443 2012 TJ_{172}	16.7	X	182.61396	260.85253	213.44266	11.06339	0.0054425	0.19957940	2.8999615	21	7 20.4	21.0
500444 2012 TQ_{173}	16.7	X	281.95923	69.25624	238.48555	4.65013	0.1284900	0.18382427	3.0633795	21	4 7.9	21.1
500445 2012 TE_{183}	16.7	X	239.03712	354.31068	10.34089	9.49555	0.1000786	0.18454234	3.0554279	21	5 2.7	21.4
500446 2012 TV_{184}	16.6	X	143.65364	124.06063	338.31660	9.28004	0.0383224	0.18328745	3.0693581	21	5 19.3	21.2
500447 2012 TB_{186}	15.9	X	96.65738	107.57909	55.72062	16.70521	0.0290653	0.17611418	3.1521473	21	6 7.8	20.4
500448 2012 TX_{192}	16.4	X	298.38688	77.65028	231.20126	9.11798	0.0459897	0.18602787	3.0391400	21	5 13.2	20.6
500449 2012 TJ_{198}	17.5	X	235.40114	137.69094	236.12225	6.65933	0.2522380	0.18525324	3.0476061	21	5 1.3	22.7
500450 2012 TT_{198}	16.6	X	157.93306	81.05987	0.48828	6.85699	0.1675760	0.17540919	3.1605875	21	5 18.9	21.8
500451 2012 TG_{199}	17.2	X	222.59778	141.44552	249.07611	3.77818	0.1515269	0.18455010	3.0553422	21	5 16.5	21.9
500452 2012 TT_{200}	17.4	X	298.89460	165.11305	155.25210	3.38222	0.1539780	0.19431020	2.9521538	21	5 13.1	21.4
500453 2012 TD_{202}	16.6	X	181.77112	14.03848	35.20195	9.30618	0.0563462	0.18035040	3.1025918	21	4 30.3	21.2
500454 2012 TS_{203}	16.8	X	247.00047	217.18992	102.79605	2.41885	0.1638852	0.17816126	3.1279553	21	3 16.9	21.9
500455 2012 TC_{205}	18.1	X	122.47781	120.75204	245.11319	8.61383	0.1538968	0.25914548	2.4365404	21	—	—
500456 2012 TO_{206}	16.5	X	248.65289	35.75491	351.24225	9.19822	0.0805321	0.18960328	3.0008122	21	6 14.5	21.1
500457 2012 TZ_{206}	16.8	X	176.51256	20.22449	56.30135	6.12554	0.1129238	0.18388029	3.0627574	21	5 29.5	21.5
500458 2012 TD_{209}	16.8	X	240.33607	188.49117	145.09607	9.28739	0.0622485	0.17780019	3.1321885	21	4 5.5	21.5
500459 2012 TP_{210}	16.6	X	73.65343	127.71047	90.38171	6.67702	0.0451709	0.20148110	2.8816850	21	7 24.3	20.6
500460 2012 TV_{210}	16.3	X	108.48843	124.31537	5.09811	12.63189	0.1256669	0.17671827	3.1449597	21	5 21.9	21.1
500461 2012 TL_{213}	16.9	X	236.85418	294.47964	38.59479	1.49529	0.1705278	0.17602407	3.1532229	21	3 22.3	22.0
500462 2012 TB_{218}	16.8	X	242.84076	255.77108	88.32109	2.56318	0.1865308	0.18286510	3.0740824	21	4 8.5	21.7
500463 2012 TZ_{218}	16.2	X	230.49240	185.78545	222.02055	19.34713	0.1244941	0.18710839	3.0274284	21	6 15.4	21.1
500464 2012 TW_{219}	16.7	X	218.40611	294.48179	58.23211	1.24449	0.2210269	0.17722289	3.1389869	21	3 27.6	21.9
500465 2012 TB_{221}	17.1	X	159.80628	102.67198	24.46588	8.51910	0.1711651	0.19212009	2.9745472	21	7 18.9	22.1
500466 2012 TO_{221}	16.3	X	94.75809	320.89160	190.71935	11.43419	0.1987701	0.18070753	3.0985027	21	6 16.4	21.0
500467 2012 TR_{222}	16.3	X	237.87459	314.42629	46.66178	8.72609	0.1971239	0.17827744	3.1265962	21	4 23.8	21.5
500468 2012 TD_{226}	17.0	X	246.66498	318.12581	38.66004	9.45597	0.1004426	0.18469900	3.0536998	21	5 3.3	21.6
500469 2012 TS_{226}	17.1	X	223.02168	263.88325	149.83190	5.28687	0.1371225	0.19085778	2.9876483	21	6 15.8	21.8
500470 2012 TX_{227}	17.0	X	215.31103	243.29885	150.44397	5.09875	0.0742057	0.18425277	3.0586282	21	5 19.1	21.6
500471 2012 TB_{228}	16.9	X	253.28771	257.56149	70.49289	0.08712	0.1302663	0.17946932	3.1127380	21	4 3.2	21.7
500472 2012 TC_{234}	18.4	X	239.38706	135.75828	184.24020	22.19567	0.0319622	0.39380123	1.8433933	21	2 7.2	20.7
500473 2012 TQ_{234}	16.7	X	221.25184	296.72274	72.91394	6.44087	0.1538338	0.18142151	3.0903680	21	4 22.5	21.7
500474 2012 TE_{236}	16.7	X	319.25816	211.08791	121.20053	6.76906	0.0746920	0.20001690	2.8957312	21	7 8.4	20.3
500475 2012 TF_{236}	16.3	X	152.18527	335.63495	112.80018	6.22381	0.1120142	0.17848509	3.1241707	21	5 21.8	21.2
500476 2012 TU_{237}	16.7	X	172.96002	271.75730	146.51654	5.80267	0.1992763	0.17507338	3.1646278	21	5 8.9	22.0
500477 2012 TY_{239}	16.7	X	220.41098	24.84116	29.75494	12.95277	0.1583872	0.18902073	3.0069746	21	6 10.8	21.7
500478 2012 TT_{241}	16.6	X	257.24229	193.21250	181.64451	10.65660	0.1127204	0.19224606	2.9732477	21	6 6.6	21.1
500479 2012 TX_{241}	17.1	X	284.78801	136.16560	185.88142	6.35417	0.2409220	0.19082086	2.9880336	21	4 15.7	21.6
500480 2012 TL_{244}	16.2	X	187.96780	264.25586	181.94476	10.10622	0.2346096	0.18228240	3.0806301	21	6 21.1	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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500481 2012 TP_{244}	18.3	X	151.00585	163.43917	199.45818	24.73480	0.0606359	0.37809064	1.8941110	21	—	—
500482 2012 TV_{248}	16.6	X	190.72759	44.43308	352.81783	8.95762	0.0952938	0.17548522	3.1596745	21	4 23.2	21.6
500483 2012 TZ_{251}	16.1	X	337.82200	242.57480	11.34228	16.53693	0.1680071	0.18124139	3.0924151	21	4 10.6	19.8
500484 2012 TC_{254}	16.0	X	286.72341	282.62060	350.65559	14.67889	0.1914242	0.17285190	3.1916844	21	2 27.6	20.7
500485 2012 TK_{254}	15.8	X	13.38942	272.65697	308.41368	9.56806	0.0883488	0.17763168	3.1341691	21	4 30.5	19.9
500486 2012 TZ_{255}	17.2	X	227.95225	263.69238	145.49957	5.21675	0.2446340	0.19238001	2.9718674	21	6 8.0	22.3
500487 2012 TL_{256}	16.5	X	236.66764	42.47681	29.68330	12.18004	0.0367503	0.20056022	2.8904992	21	8 8.8	20.8
500488 2012 TM_{257}	16.6	X	230.85391	192.99111	156.77265	3.94202	0.1950325	0.17766274	3.1338039	21	4 4.7	21.8
500489 2012 TO_{261}	16.7	X	157.64819	84.12607	348.37301	9.52729	0.0934242	0.17691395	3.1426402	21	5 1.7	21.7
500490 2012 TS_{261}	16.6	X	94.19816	131.70830	27.95430	9.99046	0.0883776	0.18449189	3.0559849	21	6 8.9	21.0
500491 2012 TK_{264}	16.9	X	218.80081	21.70881	35.81353	8.70175	0.1066392	0.19015063	2.9950509	21	6 17.3	21.6
500492 2012 TP_{264}	16.9	X	206.16085	213.21754	199.59573	10.62747	0.0736632	0.18528770	3.0472283	21	6 1.4	21.6
500493 2012 TW_{264}	17.1	X	240.88117	252.69784	182.53547	5.83211	0.0669602	0.20176577	2.8789739	21	8 7.4	21.2
500494 2012 TK_{265}	16.5	X	201.47040	291.71193	80.16368	6.18218	0.1468552	0.17286704	3.1914981	21	4 9.0	21.7
500495 2012 TH_{267}	16.4	X	139.53245	49.69686	56.52991	8.16972	0.1062966	0.17740516	3.1368365	21	5 28.3	21.1
500496 2012 TP_{267}	16.5	X	141.03887	69.43125	55.42786	11.81345	0.0783938	0.18388123	3.0627470	21	6 19.3	21.1
500497 2012 TB_{269}	17.7	X	276.98410	234.50058	156.54758	4.54592	0.1530543	0.20355455	2.8620827	21	7 14.5	21.8
500498 2012 TV_{270}	16.9	X	94.94470	0.42693	207.83498	9.08053	0.0302893	0.19884056	2.9071408	21	8 2.3	21.2
500499 2012 TP_{273}	17.3	X	182.21790	32.08506	50.04997	2.38511	0.2275779	0.18133243	3.0913801	21	6 11.8	22.7
500500 2012 TJ_{276}	16.4	X	272.98324	39.18691	302.34649	4.63440	0.1489030	0.18890073	3.0082479	21	5 6.3	20.8
500501 2012 TW_{282}	16.0	X	206.66128	186.32965	211.64743	17.38202	0.2186190	0.17777031	3.1325395	21	5 10.5	21.4
500502 2012 TC_{285}	16.4	X	273.44846	131.69930	200.91507	16.80309	0.1511898	0.18501290	3.0502449	21	4 28.5	20.9
500503 2012 TG_{285}	16.7	X	221.26607	161.53335	200.41559	5.12933	0.1490669	0.17515689	3.1636219	21	4 12.0	21.8
500504 2012 TX_{285}	16.4	X	327.92525	231.62205	18.89934	9.87352	0.0974119	0.17743915	3.1364359	21	4 3.3	20.5
500505 2012 TU_{286}	16.4	X	204.98177	340.51166	64.21008	6.27955	0.1415547	0.18040729	3.1019396	21	5 18.5	21.3
500506 2012 TF_{287}	16.5	X	212.45140	325.59543	68.79426	3.72277	0.0952804	0.18021680	3.1041250	21	5 14.9	21.3
500507 2012 TP_{287}	16.6	X	183.22507	204.45142	248.38193	12.75287	0.1428681	0.18767095	3.0213753	21	6 24.7	21.6
500508 2012 TH_{288}	16.2	X	246.78999	64.79898	256.97005	9.59870	0.0781621	0.17369179	3.1813871	21	3 20.7	21.1
500509 2012 TJ_{288}	16.5	X	187.50183	98.43349	285.03005	7.63833	0.1157111	0.17182404	3.2044004	21	4 3.4	21.7
500510 2012 TL_{288}	16.2	X	266.84828	53.28359	265.45151	10.01028	0.0905365	0.17958537	3.1113969	21	4 6.5	20.9
500511 2012 TQ_{288}	16.6	X	175.55203	118.79279	296.10470	9.28350	0.0919071	0.17599116	3.1536161	21	4 28.8	21.6
500512 2012 TV_{288}	16.6	X	263.15004	83.35890	260.32623	10.14747	0.0798734	0.18440573	3.0569367	21	5 6.9	21.0
500513 2012 TE_{289}	16.5	X	165.99908	129.07459	320.77658	9.09717	0.0350150	0.18428878	3.0582298	21	5 31.3	21.1
500514 2012 TF_{291}	16.7	X	222.68780	217.93853	177.46205	10.15454	0.1776434	0.18363779	3.0654531	21	5 23.1	21.8
500515 2012 TV_{291}	16.0	X	171.99260	237.88566	238.00528	15.45031	0.2401065	0.18309432	3.0715161	21	7 11.1	21.6
500516 2012 TO_{295}	16.3	X	172.76620	60.38516	11.89123	13.60584	0.1270666	0.17710619	3.1403657	21	5 17.7	21.4
500517 2012 TR_{298}	16.4	X	236.71223	131.42905	196.77208	8.56339	0.1126612	0.17216040	3.2002252	21	3 18.9	21.3
500518 2012 TL_{300}	16.9	X	21.58459	145.71284	125.38957	8.86105	0.1891781	0.21357983	2.7718042	21	8 4.7	19.5
500519 2012 TQ_{302}	15.8	X	221.63519	332.30657	23.80220	9.60786	0.1027714	0.17363400	3.1820931	21	4 8.2	20.6
500520 2012 TA_{304}	16.7	X	251.61304	236.94364	119.00105	3.30184	0.2322163	0.18695460	3.0290884	21	4 26.7	21.6
500521 2012 TB_{306}	17.1	X	230.23855	164.14460	235.06906	4.09251	0.1527002	0.19048783	2.9915152	21	6 3.6	21.9
500522 2012 TZ_{306}	16.3	X	272.90533	30.78318	349.50377	16.99329	0.1578607	0.19777976	2.9175266	21	6 26.6	20.8
500523 2012 TB_{308}	16.0	X	236.58688	88.48247	264.29136	13.82957	0.1459951	0.17711143	3.1403037	21	4 10.3	21.2
500524 2012 TO_{308}	16.2	X	210.27783	43.78435	350.77856	15.93697	0.2132527	0.17818332	3.1276971	21	5 2.3	21.8
500525 2012 TU_{308}	18.8	X	116.37026	226.13629	185.98353	22.34422	0.1102793	0.38564149	1.8693052	21	1 8.8	20.9
500526 2012 TW_{308}	16.4	X	213.12782	45.70617	356.11038	5.61457	0.1677440	0.18281044	3.0746950	21	5 19.5	21.5
500527 2012 TR_{313}	17.4	X	112.92072	312.17894	55.84609	10.22136	0.2422296	0.26010457	2.4305472	21	1 1.2	20.3
500528 2012 TC_{314}	16.8	X	213.97276	243.88690	126.26063	5.72635	0.2369533	0.18005838	3.1059454	21	4 14.6	22.3
500529 2012 TA_{317}	16.3	X	191.50602	287.88800	123.75613	10.73434	0.1891211	0.18049882	3.1008907	21	5 17.3	21.6
500530 2012 TG_{320}	17.7	X	327.76540	175.38554	359.85690	21.48550	0.1176197	0.36996205	1.9217546	21	—	—
500531 2012 TH_{321}	16.2	X	187.89065	294.48745	142.59357	13.82296	0.2396023	0.18016555	3.1047136	21	6 12.0	21.8
500532 2012 UT	15.8	X	223.17478	94.37014	269.95111	7.89909	0.1380455	0.17771548	3.1331838	21	4 13.7	21.0
500533 2012 UJ_{2}	16.9	X	228.27764	272.98221	100.55686	2.77521	0.1174900	0.18247234	3.0784919	21	5 4.7	21.7
500534 2012 UK_{2}	16.8	X	226.14794	230.85208	169.68946	5.73787	0.1153824	0.18835754	3.0140286	21	6 4.6	21.6
500535 2012 UM_{14}	17.0	X	249.20214	316.78260	36.38361	6.43647	0.0401165	0.18246942	3.0785248	21	5 8.2	21.3
500536 2012 UY_{14}	16.4	X	276.80659	285.94804	38.41491	10.04082	0.0793503	0.18362876	3.0655536	21	4 30.5	20.7
500537 2012 UH_{18}	18.8	X	168.32058	17.75672	7.03073	20.66661	0.0684770	0.39132812	1.8511517	21	2 24.3	20.9
500538 2012 UN_{21}	17.2	X	262.72392	340.28862	45.76391	9.84668	0.1019571	0.19600600	2.9351016	21	6 27.8	21.5
500539 2012 UX_{22}	16.4	X	182.13916	116.49387	301.95091	10.20815	0.0188479	0.17935352	3.1140777	21	5 8.7	21.0
500540 2012 UR_{24}	17.2	X	206.19142	94.83474	326.77444	8.39616	0.3492090	0.18256276	3.0774754	21	6 1.6	23.1
500541 2012 UE_{25}	16.0	X	108.03461	248.14879	320.66258	9.75833	0.0728766	0.20304250	2.8668926	21	8 26.8	20.1
500542 2012 US_{25}	16.3	X	303.88189	311.91614	338.73954	9.86915	0.1982601	0.18470268	3.0536593	21	4 1.2	20.6
500543 2012 UX_{25}	16.6	X	273.15632	40.78656	313.21459	7.43329	0.1203686	0.19019756	2.9945582	21	5 26.4	20.9
500544 2012 UE_{27}	16.8	X	220.50708	253.28862	172.59285	17.20942	0.0913903	0.19161310	2.9797918	21	6 30.9	21.6
500545 2012 UR_{31}	16.2	X	211.28826	128.53856	273.98208	8.39033	0.0986846	0.17727792	3.1383373	21	5 22.6	21.1
500546 2012 US_{32}	16.5	X	206.54790	218.25101	192.36124	29.27272	0.3352707	0.18092602	3.0960077	21	5 22.5	22.6
500547 2012 UT_{32}	16.5	X	190.55539	199.90258	263.86101	7.67530	0.2526203	0.18562880	3.0434942	21	7 12.9	21.9
500548 2012 UB_{36}	16.2	X	215.71300	309.63038	48.51028	5.80796	0.1846919	0.17189726	3.2034903	21	4 3.5	21.6
500549 2012 UC_{36}	16.8	X	215.42137	173.49313	201.21836	0.53659	0.1814851	0.17542170	3.1604373	21	4 20.6	22.0
500550 2012 UF_{38}	16.3	X	165.56656	203.82932	240.79800	9.73257	0.0732993	0.17853563	3.1235811	21	5 27.6	20.9
500551 2012 UR_{40}	16.6	X	217.54524	300.62614	87.28740	3.06898	0.1801730	0.18105913	3.0944901	21	5 8.5	21.6
500552 2012 UA_{41}	16.4	X	279.73537	277.93687	39.32730	11.20214	0.0791804	0.18138241	3.0908121	21	4 25.9	20.9
500553 2012 UG_{42}	16.5	X	222.70636	155.01167	213.60802	9.92538	0.0894148	0.17724673	3.1387054	21	4 24.2	21.3
500554 2012 UE_{43}	16.0	X	272.23880	117.84989	202.14118	17.20506	0.1473016	0.18199091	3.0839186	21	4 11.1	20.6
500555 2012 UG_{46}	16.8	X	238.23086	203.64055	169.43070	5.51130	0.2454932	0.18414949	3.0597718	21	5 5.1	22.0
500556 2012 UY_{49}	16.7	X	217.56364	187.08248	170.10034	5.31691	0.1639656	0.17264102	3.1942829	21	4 3.6	22.0
500557 2012 UZ_{50}	16.7	X	248.56901	258.70510	61.86461	2.18655	0.1538590	0.17166763	3.2063464	21	3 20.4	21.7
500558 2012 UE_{51}	16.0	X	285.80390	94.82270	219.51278	10.37237	0.0885805	0.17877133	3.1208349	21	4 28.1	20.3
500559 2012 UT_{52}	17.4	X	249.73306	206.75449	162.54450	0.75147	0.2043332	0.18498844	3.0505137	21	5 12.5	22.3
500560 2012 US_{55}	16.7	X	140.28012	131.73887	355.10987	5.00940	0.1312332	0.17978837	3.1090544	21	6 26.2	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500561 2012 US_{56}	16.1	X	328.71518	240.33066	32.48064	11.96388	0.0907062	0.17895783	3.1186663	21	5 1.9	20.2
500562 2012 UD_{58}	16.8	X	271.63454	145.68828	222.49259	15.69931	0.2192733	0.19220583	2.9736625	21	5 31.1	21.3
500563 2012 UN_{58}	18.2	X	287.45824	91.87215	245.39223	3.31015	0.1511015	0.30187193	2.2008354	21	5 11.8	20.8
500564 2012 UU_{58}	16.2	X	146.86230	79.06494	40.45923	19.85200	0.1505228	0.17795520	3.1303694	21	6 22.8	21.5
500565 2012 UP_{61}	18.3	X	321.20865	20.91362	190.52814	21.90816	0.0449785	0.38294813	1.8780598	21	—	—
500566 2012 UT_{61}	19.0	X	186.62880	151.05285	188.80477	22.04473	0.0620780	0.38316736	1.8773434	21	—	—
500567 2012 UM_{64}	16.6	X	151.27570	273.53601	187.97254	10.47607	0.0996336	0.17472891	3.1687857	21	6 4.8	21.6
500568 2012 UM_{65}	16.5	X	211.74684	331.80768	53.26794	6.30212	0.1361664	0.17412133	3.1761529	21	5 1.9	21.6
500569 2012 UB_{66}	17.0	X	190.05287	337.86728	80.08845	2.22183	0.1641962	0.17582269	3.1556302	21	5 20.8	22.2
500570 2012 UB_{68}	17.9	X	55.93295	278.82878	186.69521	21.78295	0.1110065	0.37863793	1.8922854	21	—	—
500571 2012 UX_{70}	17.0	X	289.61186	134.26738	195.85431	7.22963	0.1874002	0.19177646	2.9780994	21	5 8.9	21.1
500572 2012 UX_{77}	16.4	X	222.68879	103.62358	246.55664	3.30407	0.1961696	0.17386151	3.1793164	21	3 27.2	21.7
500573 2012 UA_{79}	16.2	X	246.26071	33.01049	314.50601	4.22878	0.1531729	0.17857262	3.1231497	21	4 15.6	21.3
500574 2012 UD_{79}	16.8	X	253.06955	357.38411	351.90531	4.36370	0.1595511	0.18074876	3.0980315	21	4 24.2	21.7
500575 2012 UK_{79}	16.1	X	180.17092	188.58397	244.88616	9.89721	0.0681496	0.17821027	3.1273817	21	5 29.4	20.7
500576 2012 UP_{81}	16.9	X	286.38237	280.81541	65.95026	14.53647	0.2942837	0.19310078	2.9644675	21	5 12.2	21.3
500577 2012 UR_{82}	15.8	X	220.78049	118.31910	280.09217	7.92776	0.0816723	0.17907845	3.1172658	21	5 28.6	20.5
500578 2012 UV_{82}	16.4	X	256.87144	108.02563	275.43523	8.45248	0.1107577	0.18679571	3.0308058	21	6 16.5	20.7
500579 2012 UZ_{83}	16.0	X	260.76354	69.90500	260.40618	8.92056	0.2151216	0.17726902	3.1384423	21	4 1.5	21.2
500580 2012 UG_{87}	16.5	X	230.36584	306.54320	84.54668	6.37129	0.1436663	0.18223628	3.0811499	21	5 26.1	21.2
500581 2012 UW_{87}	16.9	X	219.62331	175.64967	223.63488	3.77877	0.1255416	0.18005402	3.1059956	21	5 26.5	21.6
500582 2012 UO_{88}	17.1	X	217.49901	357.39884	54.83332	1.56752	0.1771278	0.18240090	3.0792957	21	6 6.1	22.0
500583 2012 UB_{89}	17.0	X	218.43314	355.25790	53.26036	2.76035	0.1832138	0.18165535	3.0877153	21	6 2.0	22.1
500584 2012 UX_{89}	17.7	X	162.13578	342.35957	56.74442	4.02216	0.1799106	0.27599317	2.3363460	21	3 28.7	21.2
500585 2012 UE_{93}	16.3	X	233.27625	77.56842	267.87013	9.51051	0.0757154	0.17931970	3.1144693	21	4 3.6	21.2
500586 2012 UL_{95}	16.4	X	234.68771	319.65808	25.95058	5.09265	0.2214706	0.17805465	3.1292037	21	4 1.2	21.6
500587 2012 UX_{95}	16.8	X	179.23244	198.64568	215.28653	9.15422	0.0718989	0.17566612	3.1575050	21	5 4.8	21.6
500588 2012 UU_{97}	16.7	X	193.74761	161.11745	234.43774	3.93698	0.0475506	0.17754011	3.1352467	21	4 26.8	21.2
500589 2012 UX_{99}	16.7	X	192.69602	282.12749	203.45346	10.97789	0.1067325	0.19586008	2.9365592	21	8 12.0	21.5
500590 2012 UK_{100}	16.5	X	293.61450	171.79947	133.61746	2.99516	0.0481157	0.17689857	3.1428224	21	5 4.1	20.9
500591 2012 UY_{101}	16.6	X	277.47451	135.04638	211.66092	8.71157	0.1517329	0.18800943	3.0177479	21	5 20.2	20.9
500592 2012 UJ_{104}	16.1	X	196.08933	109.79488	302.43596	9.08623	0.0909057	0.17975690	3.1094173	21	5 17.8	21.0
500593 2012 UN_{106}	16.3	X	205.90634	187.90137	223.36806	9.96878	0.0820155	0.18184043	3.0856198	21	5 29.5	21.0
500594 2012 UP_{106}	16.4	X	211.24409	44.39659	32.53927	20.46002	0.1133335	0.18933762	3.0036185	21	7 4.9	21.5
500595 2012 UN_{110}	15.5	X	152.88593	39.87367	55.11918	25.18317	0.0939941	0.17316309	3.1878595	21	5 25.8	20.5
500596 2012 UH_{111}	16.6	X	230.28967	255.63088	118.72915	3.14720	0.1231043	0.17882135	3.1202529	21	5 7.7	21.4
500597 2012 UQ_{111}	18.5	X	84.63944	211.85083	213.75391	20.08313	0.0926458	0.37341828	1.9098782	21	—	—
500598 2012 UF_{114}	16.9	X	242.26369	336.66530	16.70822	4.97914	0.1370177	0.18194328	3.0844569	21	4 21.1	21.7
500599 2012 UX_{118}	16.8	X	241.36252	317.89159	59.58866	2.67992	0.1190298	0.18096574	3.0955547	21	5 22.0	21.5
500600 2012 UW_{119}	16.0	X	182.13711	184.56828	235.79878	28.66065	0.1754495	0.17431447	3.1738063	21	5 16.7	21.1
500601 2012 UD_{120}	16.3	X	210.70640	134.68188	266.31756	9.31968	0.1066687	0.17849406	3.1240660	21	5 19.7	21.2
500602 2012 UP_{120}	16.5	X	278.86596	91.74260	264.40786	9.05886	0.0578800	0.18668235	3.0320327	21	6 16.0	20.5
500603 2012 UH_{121}	16.1	X	311.20376	306.00003	18.24363	11.62306	0.1651210	0.19062670	2.9900623	21	5 30.9	20.1
500604 2012 UG_{123}	16.3	X	192.86242	181.76538	245.98287	8.08089	0.0751098	0.17894174	3.1188533	21	6 4.9	21.1
500605 2012 UP_{123}	16.2	X	190.39661	186.92141	247.70215	8.15043	0.0850509	0.17965103	3.1106387	21	6 10.7	20.9
500606 2012 UQ_{128}	16.2	X	206.84177	39.67860	9.13904	16.41299	0.1211994	0.17960582	3.1111607	21	5 20.6	21.4
500607 2012 UF_{130}	16.7	X	222.95093	115.54491	300.37584	7.28975	0.0769880	0.18789797	3.0189412	21	6 23.0	21.3
500608 2012 UK_{132}	16.3	X	233.93678	102.70421	302.52446	7.45605	0.1101918	0.18965643	3.0002515	21	6 18.5	20.8
500609 2012 UG_{135}	16.8	X	228.17898	251.46490	180.80759	15.35770	0.3574339	0.19056966	2.9906589	21	6 28.0	22.5
500610 2012 UK_{138}	18.6	X	65.80921	88.70707	28.60935	20.67060	0.0998652	0.38166181	1.8822772	21	2 2.5	20.5
500611 2012 UU_{138}	16.4	X	215.98456	65.05117	349.62174	18.30091	0.1022402	0.18810245	3.0167530	21	6 9.9	21.4
500612 2012 UX_{138}	16.5	X	206.77026	104.02556	292.86796	11.43226	0.1092878	0.18119274	3.0929686	21	5 8.2	21.5
500613 2012 UO_{139}	16.2	X	202.69062	27.53044	334.77702	11.79065	0.1272562	0.17108612	3.2136078	21	3 23.7	21.5
500614 2012 UK_{145}	16.8	X	242.68839	199.52403	157.28770	5.42213	0.1365355	0.18062407	3.0994571	21	4 28.3	21.6
500615 2012 UZ_{145}	15.9	X	141.72167	189.73703	277.36467	10.65171	0.0962975	0.17783321	3.1318009	21	5 30.8	20.7
500616 2012 UB_{146}	16.0	X	89.98295	182.47028	328.92839	11.27689	0.0680450	0.17640477	3.1486846	21	5 19.5	20.6
500617 2012 UU_{147}	16.9	X	196.06393	97.10212	357.24920	3.33085	0.1936347	0.18661170	3.0327979	21	7 8.6	22.0
500618 2012 UZ_{147}	17.9	X	281.57463	357.80204	206.25113	23.54551	0.0765042	0.36751810	1.9302648	21	—	—
500619 2012 UH_{149}	16.5	X	136.11592	106.52887	19.54403	10.07780	0.1936522	0.17697937	3.1418657	21	6 25.7	21.7
500620 2012 US_{149}	16.4	X	203.74554	33.67209	28.35914	15.44723	0.0631296	0.18332514	3.0689374	21	6 7.0	21.2
500621 2012 UM_{152}	17.4	X	211.34047	335.30457	90.96365	3.60363	0.3014642	0.18247298	3.0784847	21	6 12.9	23.0
500622 2012 UM_{153}	16.8	X	226.28892	203.69144	202.13142	5.07304	0.1408028	0.18355042	3.0664258	21	6 9.1	21.6
500623 2012 UE_{154}	16.9	X	140.53870	71.49069	26.97194	1.43408	0.1771549	0.17399125	3.1777357	21	5 25.8	22.1
500624 2012 UK_{154}	16.2	X	285.68669	300.89307	323.49189	4.03703	0.1221417	0.16876404	3.2430186	21	2 22.6	21.0
500625 2012 UL_{154}	16.4	X	245.93781	342.06691	6.34487	9.02976	0.0340050	0.17938951	3.1136612	21	4 27.3	20.9
500626 2012 UE_{157}	16.3	X	96.64276	188.13698	320.57298	9.45156	0.0205900	0.17900641	3.1181021	21	5 18.0	20.8
500627 2012 UO_{157}	16.1	X	174.89764	105.96652	329.26041	9.92044	0.1049197	0.17895638	3.1186832	21	5 24.4	21.2
500628 2012 UW_{160}	17.6	X	226.53206	55.09779	5.51201	1.75197	0.2371376	0.18932028	3.0038019	21	6 20.5	22.7
500629 2012 UP_{163}	16.1	X	234.94365	42.54865	24.20457	9.66319	0.0510959	0.19258483	2.9697598	21	7 26.4	20.5
500630 2012 UU_{163}	16.5	X	240.32569	118.10399	259.54865	8.56134	0.0719583	0.18081399	3.0972863	21	5 25.4	21.2
500631 2012 UT_{164}	15.7	X	311.53424	29.00211	242.82194	29.94970	0.0383769	0.17342270	3.1846773	21	4 10.9	20.6
500632 2012 UZ_{166}	15.8	X	205.21453	99.73943	354.54574	12.65048	0.1203151	0.19030948	2.9933841	21	7 22.9	20.7
500633 2012 UK_{169}	18.2	X	9.72929	253.10297	227.60727	19.02766	0.1130294	0.36144690	1.9518198	21	—	—
500634 2012 UU_{171}	18.0	X	138.32246	118.73661	237.99045	20.72988	0.0980441	0.37010045	1.9212755	21	—	—
500635 2012 UG_{173}	16.2	X	220.51542	36.81485	11.26253	8.66053	0.1085883	0.18362093	3.0656408	21	6 6.6	21.0
500636 2012 VH	16.6	X	245.56835	211.01638	148.43673	12.72422	0.1281250	0.18243243	3.0789410	21	5 7.4	21.5
500637 2012 VJ_{1}	16.9	X	185.60439	343.07893	108.25940	11.62975	0.0795354	0.18769347	3.0211336	21	6 26.6	21.4
500638 2012 VS_{1}	17.7	X	170.52259	10.78405	8.17897	14.75542	0.2697270	0.39956567	1.8256209	21	3 7.1	20.2
500639 2012 VW_{1}	18.5	X	224.79901	78.51546	193.16623	21.98491	0.0192956	0.37230836	1.9136721	21	—	—
500640 2012 VD_{2}	17.9	X	232.32218	275.18466	35.45986	22.01718	0.0773106	0.38514907	1.8708982	21	1 30.6	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500641 2012 VK_{3}	16.5	X	153.48283	37.08045	60.46410	7.10056	0.0850140	0.17812231	3.1284113	21	5 30.9	21.2
500642 2012 VD_{4}	16.4	X	196.57250	306.19949	92.21849	13.19275	0.1463552	0.17655380	3.1469125	21	5 7.5	21.6
500643 2012 VO_{5}	16.0	X	283.03295	283.96859	11.10454	9.83893	0.0672070	0.17717771	3.1395205	21	4 3.7	20.5
500644 2012 VR_{7}	16.6	X	181.32256	227.39709	184.65088	1.70802	0.1017692	0.17593296	3.1543115	21	5 5.3	21.6
500645 2012 VY_{7}	16.8	X	169.03045	32.46012	43.55553	5.71976	0.1230273	0.17735130	3.1374716	21	5 21.9	21.8
500646 2012 VW_{8}	16.7	X	112.35127	92.57187	43.96033	0.33345	0.1252737	0.17615986	3.1516023	21	6 7.9	21.3
500647 2012 VD_{9}	15.8	X	125.80287	81.28788	39.01281	17.33805	0.1377519	0.17502968	3.1651545	21	5 31.5	20.8
500648 2012 VW_{10}	17.3	X	234.23147	128.04143	209.88417	0.60583	0.1656333	0.17835260	3.1257177	21	3 25.1	22.4
500649 2012 VT_{12}	17.4	X	170.28588	34.88020	70.48836	1.94064	0.1651493	0.18346717	3.0673533	21	6 29.4	22.4
500650 2012 VL_{13}	16.7	X	239.62307	315.79925	48.28269	3.29491	0.0907781	0.18102308	3.0949009	21	5 6.3	21.1
500651 2012 VU_{14}	16.5	X	177.04604	307.67907	113.29376	12.38297	0.1550823	0.17552307	3.1592203	21	5 16.5	21.8
500652 2012 VO_{15}	16.8	X	236.65629	123.02838	234.55073	8.60932	0.1424892	0.18104055	3.0947018	21	4 19.7	21.7
500653 2012 VU_{16}	15.8	X	200.75999	29.60801	36.17103	9.55628	0.0877938	0.18045451	3.1013984	21	6 9.3	20.6
500654 2012 VB_{18}	16.7	X	243.00410	268.32945	116.82458	3.10618	0.0934513	0.18304715	3.0720437	21	6 5.3	21.1
500655 2012 VL_{18}	16.6	X	210.02116	238.17242	184.59591	4.95431	0.1462216	0.18213741	3.0822648	21	6 13.9	21.6
500656 2012 VG_{19}	16.9	X	243.75527	203.39833	206.18659	8.37002	0.1154316	0.18968619	2.9999377	21	7 3.1	21.5
500657 2012 VK_{19}	16.4	X	260.09505	257.31476	67.91372	14.70850	0.3693488	0.18169142	3.0873066	21	3 25.0	22.1
500658 2012 VX_{19}	16.8	X	232.15060	285.44424	114.09667	2.32198	0.2019851	0.18163710	3.0879221	21	6 2.6	21.9
500659 2012 VU_{20}	16.7	X	196.31581	15.43694	28.08500	9.88667	0.0968491	0.17863800	3.1223876	21	5 7.8	21.5
500660 2012 VS_{21}	16.7	X	215.91928	328.31621	46.92289	1.25717	0.1905679	0.17617925	3.1513711	21	4 21.4	21.9
500661 2012 VN_{23}	17.2	X	165.39289	76.27808	15.10315	0.79098	0.1598880	0.17734530	3.1375424	21	6 7.8	22.2
500662 2012 VJ_{27}	16.6	X	192.08871	32.58544	351.68111	5.89535	0.1226988	0.17182581	3.2043783	21	4 10.9	21.7
500663 2012 VS_{27}	16.4	X	133.65942	161.50445	311.41299	3.76475	0.1183525	0.17679149	3.1440913	21	5 31.4	21.2
500664 2012 VO_{28}	17.2	X	233.98991	108.07202	300.30135	0.83046	0.1638028	0.19040214	2.9924128	21	6 17.6	21.8
500665 2012 VB_{29}	18.4	X	271.72017	2.81946	219.91326	19.76212	0.0479197	0.37303978	1.9111699	21	—	—
500666 2012 VO_{29}	17.1	X	260.78222	110.73450	284.74259	4.48198	0.0893534	0.19577453	2.9374146	21	7 9.5	21.2
500667 2012 VS_{31}	16.0	X	212.73352	10.15500	13.35407	10.61008	0.0068905	0.17947182	3.1127091	21	5 2.9	20.5
500668 2012 VL_{39}	17.2	X	177.61166	46.28961	8.56120	1.66207	0.1770047	0.17584525	3.1553602	21	5 5.9	22.5
500669 2012 VU_{39}	16.2	X	221.79706	146.89558	250.18602	8.18569	0.0942453	0.17943798	3.1131004	21	5 27.7	20.8
500670 2012 VV_{39}	16.1	X	175.68809	188.62371	251.05261	9.77142	0.0579803	0.17591628	3.1545109	21	6 1.1	20.8
500671 2012 VJ_{42}	16.2	X	246.35578	318.61354	64.48180	12.21766	0.2168173	0.18309663	3.0714903	21	5 24.9	21.2
500672 2012 VM_{43}	15.8	X	215.60294	302.64451	71.82100	12.18528	0.0788534	0.17260945	3.1946724	21	4 28.5	20.7
500673 2012 VF_{45}	16.4	X	247.14348	259.20153	131.64751	9.59666	0.2132777	0.18907714	3.0063765	21	6 5.8	21.3
500674 2012 VY_{47}	16.9	X	248.54834	279.02319	68.37889	2.61124	0.1921144	0.18229857	3.0804480	21	4 16.9	21.7
500675 2012 VK_{59}	16.8	X	285.09853	105.70436	199.36304	4.37091	0.1387438	0.17561774	3.1580849	21	4 9.1	21.2
500676 2012 VX_{60}	17.1	X	222.46152	17.06516	60.09860	10.84311	0.1814527	0.18949995	3.0019030	21	7 11.7	22.1
500677 2012 VA_{62}	16.3	X	209.48779	340.93960	55.19075	11.50876	0.1347608	0.17739631	3.1369409	21	5 12.7	21.3
500678 2012 VD_{63}	16.5	X	47.51898	126.26138	78.96862	6.18814	0.0661376	0.17880136	3.1204855	21	6 3.2	20.7
500679 2012 VE_{63}	16.7	X	297.94106	245.20198	77.73599	6.13821	0.2293218	0.19043273	2.9920923	21	5 4.5	20.9
500680 2012 VD_{73}	16.4	X	151.28465	250.68795	208.42999	9.69186	0.0930902	0.17478564	3.1681001	21	6 1.1	21.3
500681 2012 VS_{73}	16.2	X	202.29557	345.74990	74.59237	13.79704	0.1542708	0.17809893	3.1286850	21	6 3.5	21.3
500682 2012 VC_{74}	16.4	X	283.40540	267.03714	55.77846	12.93895	0.0585301	0.17895105	3.1187451	21	5 10.9	20.7
500683 2012 VZ_{78}	16.2	X	231.53403	313.05381	60.29439	12.33850	0.0923946	0.17584361	3.1553799	21	5 10.3	20.9
500684 2012 VH_{81}	16.3	X	251.92026	198.61607	171.36542	10.30435	0.0696296	0.17812026	3.1284352	21	5 31.6	21.0
500685 2012 VA_{83}	16.5	X	232.21941	312.71863	58.42992	10.15156	0.2170964	0.17736098	3.1373574	21	4 30.3	21.7
500686 2012 VO_{85}	16.6	X	221.53432	301.38952	96.57830	3.29041	0.1489386	0.18031193	3.1030331	21	5 25.6	21.6
500687 2012 VO_{88}	16.5	X	234.79342	172.33758	222.08813	8.61472	0.0688196	0.18018161	3.1045291	21	6 10.0	21.1
500688 2012 VF_{91}	16.5	X	252.47770	118.26162	221.34559	8.53858	0.1037419	0.17251125	3.1958847	21	4 18.8	21.2
500689 2012 VB_{92}	16.2	X	256.40779	138.79842	226.00286	9.05345	0.0816894	0.17978921	3.1090446	21	5 27.5	20.6
500690 2012 VS_{92}	16.4	X	163.67754	70.16533	74.85027	10.15158	0.1986069	0.18394311	3.0620600	21	8 14.6	21.7
500691 2012 VP_{94}	16.4	X	241.74216	329.18478	47.91659	10.22744	0.1243362	0.18167662	3.0874743	21	5 20.6	21.1
500692 2012 VF_{95}	16.7	X	249.74577	282.64942	83.25602	2.99951	0.1888942	0.18308573	3.0716122	21	5 10.3	21.5
500693 2012 VG_{95}	15.6	X	42.36296	359.55047	226.85314	18.14421	0.1255206	0.18208183	3.0828920	21	6 27.7	19.7
500694 2012 VP_{97}	18.0	X	162.33567	303.45602	47.10883	22.72741	0.1176125	0.37493516	1.9047235	21	—	—
500695 2012 VD_{107}	17.5	X	205.16504	127.91848	278.63965	0.53989	0.2458693	0.17790654	3.1309402	21	5 17.9	22.8
500696 2012 VF_{109}	16.9	X	184.45561	39.52532	58.11196	5.28754	0.2089077	0.18191369	3.0847913	21	7 2.4	22.2
500697 2012 VH_{109}	16.8	X	253.59514	272.52189	75.61582	1.79001	0.2228099	0.18103723	3.0947397	21	4 19.5	21.7
500698 2012 VQ_{109}	16.1	X	217.32750	318.17699	96.20967	27.99337	0.1736000	0.17324009	3.1869148	21	6 12.1	21.4
500699 2012 VN_{110}	16.9	X	280.40479	59.64932	249.46567	7.56477	0.1028958	0.17170250	3.2059124	21	4 11.4	21.6
500700 2012 VP_{111}	17.0	X	201.33449	355.20343	52.54642	1.29991	0.1916041	0.17659657	3.1464044	21	5 17.6	22.1
500701 2012 WO_{1}	16.8	X	190.65666	206.85228	240.79186	8.71432	0.0719594	0.18345412	3.0674988	21	6 26.8	21.4
500702 2012 WK_{3}	16.8	X	260.86657	193.81316	163.11971	3.65162	0.2579492	0.18373434	3.0643791	21	5 3.7	21.8
500703 2012 WL_{3}	17.8	X	228.93298	219.89455	54.30108	22.50644	0.0956850	0.37104852	1.9180014	21	—	—
500704 2012 WC_{10}	15.8	X	193.43492	25.20177	49.33601	28.63289	0.1308467	0.17956650	3.1116149	21	6 7.1	21.0
500705 2012 WA_{12}	16.8	X	243.82508	319.01454	83.34450	3.64775	0.0874519	0.18649709	3.0340403	21	6 28.3	21.2
500706 2012 WE_{14}	17.0	X	241.01040	328.13395	95.75180	5.77469	0.1152104	0.19087900	2.9874268	21	7 19.7	21.4
500707 2012 WF_{18}	16.2	X	216.77110	1.76211	50.22532	15.61166	0.0312500	0.18051702	3.1006823	21	6 12.3	20.8
500708 2012 WB_{19}	16.3	X	262.63773	339.88055	48.89465	10.20404	0.0885833	0.18888462	3.0084190	21	7 3.6	20.7
500709 2012 WS_{28}	16.6	X	208.17910	198.45349	214.28395	4.95174	0.1471798	0.18004905	3.1060527	21	5 31.1	21.6
500710 2012 WX_{33}	17.0	X	178.80759	259.63989	186.45721	1.48346	0.1644947	0.17379234	3.1801599	21	6 13.7	22.3
500711 2012 XJ	18.0	X	314.66218	294.03866	258.26153	18.01306	0.0949168	0.36563268	1.9368948	21	—	—
500712 2012 XM_{1}	16.6	X	289.34894	114.64122	232.93301	7.43862	0.1286369	0.18915770	3.0055228	21	6 8.1	20.6
500713 2012 XZ_{7}	16.0	X	255.15992	312.87779	75.21928	11.80276	0.1427186	0.18689157	3.0297694	21	6 16.1	20.4
500714 2012 XL_{10}	16.2	X	238.49091	290.40471	67.38747	27.10032	0.2356968	0.17575313	3.1564627	21	4 27.7	21.8
500715 2012 XU_{16}	18.4	X	106.01491	348.69613	92.82758	25.03286	0.0804601	0.38061841	1.8857156	21	2 14.9	20.4
500716 2012 XG_{18}	17.2	X	192.33247	11.97008	51.28694	2.20253	0.1883376	0.17645378	3.1481016	21	5 28.5	22.4
500717 2012 XJ_{20}	16.1	X	284.96697	251.13307	71.73018	10.40544	0.0696483	0.17506420	3.1647384	21	5 12.6	20.6
500718 2012 XY_{22}	15.8	X	230.62507	135.11900	255.02833	8.04742	0.0949424	0.17868150	3.1218809	21	5 28.4	20.4
500719 2012 XX_{24}	16.4	X	283.95040	84.97051	237.84660	8.85324	0.0848154	0.17685765	3.1433071	21	5 6.8	20.7
500720 2012 XL_{30}	17.2	X	200.92476	132.32364	274.22328	4.42248	0.1819368	0.17324347	3.1868733	21	5 15.4	22.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500721 2012 XA_{34}	16.6	X	222.04343	306.61492	98.78395	2.66239	0.1726138	0.17902476	3.1178890	21	6 2.5	21.7
500722 2012 XO_{34}	16.9	X	232.95204	340.02298	79.80114	8.46891	0.2029734	0.18607742	3.0386005	21	6 27.5	21.8
500723 2012 XS_{34}	17.4	X	207.94053	255.01557	169.33945	0.81653	0.1839136	0.17901832	3.1179638	21	6 12.3	22.6
500724 2012 XS_{40}	16.2	X	274.13810	83.87225	259.71854	8.27512	0.1200491	0.17647495	3.1478499	21	5 15.7	20.9
500725 2012 XP_{43}	16.1	X	228.24855	316.90449	73.72131	10.56401	0.0976243	0.17515208	3.1636797	21	5 27.1	20.8
500726 2012 XW_{47}	17.6	X	262.09269	126.91646	99.19353	24.53438	0.0479104	0.35422552	1.9782575	21	—	—
500727 2012 XY_{50}	16.9	X	255.11719	306.52291	59.40491	2.62149	0.1135204	0.18566989	3.0430451	21	5 22.9	21.4
500728 2012 XZ_{57}	16.6	X	229.13938	267.55577	109.67058	4.14196	0.0473910	0.17297105	3.1902186	21	5 16.2	21.2
500729 2012 XZ_{69}	16.9	X	210.53260	274.69951	146.53663	8.10938	0.1871479	0.17953915	3.1119309	21	6 11.5	22.2
500730 2012 XG_{72}	16.3	X	224.55052	327.36731	92.68236	11.24155	0.0757922	0.18544513	3.0455035	21	6 29.9	20.8
500731 2012 XM_{85}	16.7	X	226.62706	280.61968	171.33980	12.11343	0.1708858	0.18966547	3.0001562	21	8 1.1	21.6
500732 2012 XT_{85}	16.2	X	255.08722	177.14447	211.25232	11.37110	0.1168989	0.18323653	3.0699267	21	6 19.5	20.9
500733 2012 XQ_{110}	15.4	X	231.71534	92.67095	297.14381	24.54819	0.2674470	0.17495492	3.1660561	21	5 13.1	21.3
500734 2012 XB_{116}	17.8	X	38.05397	187.30669	272.31283	19.15658	0.0412285	0.35621617	1.9708805	21	—	—
500735 2012 XA_{123}	16.8	X	277.55069	178.11628	181.21078	8.87977	0.0945397	0.18261671	3.0768693	21	6 13.6	21.3
500736 2012 XS_{127}	17.0	X	229.93142	141.70669	257.22935	3.92642	0.2475319	0.18306896	3.0717998	21	5 27.6	22.1
500737 2012 XY_{128}	17.1	X	224.02925	200.52953	211.41937	3.15930	0.1924010	0.18531332	3.0469474	21	6 10.9	22.1
500738 2012 XK_{129}	16.1	X	226.24330	96.12456	285.53355	14.50209	0.2541440	0.17533913	3.1614294	21	4 30.2	21.8
500739 2012 XM_{133}	15.4	X	214.33950	137.21581	264.40134	20.71159	0.1486070	0.17509783	3.1643332	21	5 22.7	20.6
500740 2012 XJ_{140}	16.5	X	229.50118	310.78092	83.88549	6.39394	0.1432882	0.18022345	3.1040486	21	5 29.6	21.3
500741 2012 XF_{142}	16.8	X	153.20744	12.18984	124.05700	7.02133	0.0915325	0.18219873	3.0815731	21	7 18.4	21.4
500742 2012 XE_{144}	15.7	X	225.35174	313.04692	136.73190	10.90652	0.0694569	0.19011713	2.9954027	21	8 8.3	20.0
500743 2012 YE_{7}	18.5	X	61.57289	163.11496	292.07863	16.37600	0.1583816	0.37140695	1.9167672	21	—	—
500744 2013 AK_{17}	17.5	X	228.85051	207.47589	298.46237	25.46804	0.2090373	0.31095577	2.1577625	21	10 1.8	21.3
500745 2013 AO_{19}	16.2	X	217.06530	277.45604	113.87871	10.63446	0.2517626	0.16614742	3.2769789	21	5 12.7	22.0
500746 2013 AC_{21}	18.2	X	116.36883	292.59262	106.55084	24.07922	0.1023557	0.36471901	1.9401283	21	—	—
500747 2013 AU_{47}	16.3	X	213.41828	356.62117	60.96289	11.82936	0.1099521	0.17253024	3.1956502	21	6 11.8	21.3
500748 2013 AJ_{50}	18.6	X	52.84751	143.17200	295.31150	17.18260	0.1051436	0.35521114	1.9745964	21	—	—
500749 2013 AP_{60}	16.9	X	285.39495	49.20758	251.06467	21.89021	0.7502417	0.20269356	2.8701819	21	1 30.1	23.4
500750 2013 AA_{65}	18.3	X	103.04059	320.44012	126.33121	23.33223	0.0890255	0.37520139	1.9038224	21	2 16.4	19.8
500751 2013 AU_{68}	16.3	X	174.86782	332.91827	115.19911	11.78936	0.2457043	0.16849310	3.2464942	21	6 14.8	22.1
500752 2013 AO_{71}	18.2	X	71.56332	103.36608	346.74939	18.15769	0.1268133	0.36740565	1.9306586	21	—	—
500753 2013 AM_{74}	16.2	X	238.43955	67.03011	340.70871	15.11340	0.2380659	0.17955204	3.1117819	21	6 14.7	21.7
500754 2013 AN_{75}	16.1	X	243.12018	24.83055	14.35669	17.46320	0.2169517	0.17708502	3.1406160	21	6 7.4	21.5
500755 2013 AM_{92}	15.8	X	226.63945	302.34426	127.01222	11.04030	0.0901520	0.17483059	3.1675570	21	7 12.4	20.6
500756 2013 AD_{100}	17.8	X	287.54910	259.54996	305.02550	17.43501	0.0443140	0.35275727	1.9837430	21	—	—
500757 2013 AF_{100}	16.5	X	269.16241	296.45294	101.36285	11.00154	0.1507466	0.18305729	3.0719303	21	7 14.2	21.0
500758 2013 AF_{119}	17.6	X	216.90296	6.19446	272.67822	18.01132	0.0347662	0.36330758	1.9451499	21	—	—
500759 2013 AN_{141}	17.9	X	275.40927	338.28775	260.44268	17.89142	0.0407297	0.35952331	1.9587756	21	—	—
500760 2013 BX_{20}	16.6	X	215.15988	319.84365	112.59875	12.14329	0.2629832	0.17738508	3.1370733	21	6 24.8	22.2
500761 2013 BU_{27}	17.9	X	134.69555	84.06857	270.93412	16.10966	0.1134791	0.35591050	1.9720088	21	—	—
500762 2013 BK_{70}	17.6	X	12.69508	194.49944	299.59046	17.52652	0.1014897	0.35414476	1.9785582	21	—	—
500763 2013 CF_{1}	17.8	X	75.80429	256.73306	154.00910	24.27722	0.1154217	0.35286973	1.9833215	21	—	—
500764 2013 CJ_{1}	18.3	X	159.37344	35.90306	302.94840	16.54406	0.0754619	0.35282160	1.9835018	21	—	—
500765 2013 CO_{1}	17.8	X	134.54001	101.25635	297.70388	17.41882	0.1061793	0.36740711	1.9306535	21	1 25.6	19.5
500766 2013 CL_{13}	18.6	X	212.40451	181.32295	352.75804	3.02384	0.0857984	0.31343396	2.1463738	21	11 23.2	21.0
500767 2013 CO_{15}	18.0	X	81.76984	238.73866	352.26211	2.35775	0.1026665	0.28570631	2.2830889	21	9 4.4	20.6
500768 2013 CP_{42}	18.7	X	115.63728	316.62936	299.32189	0.63558	0.1702866	0.30315164	2.1946373	21	11 22.5	21.8
500769 2013 CX_{45}	17.7	X	116.72799	284.39740	298.62594	7.31628	0.3134421	0.28778075	2.2721041	21	10 14.4	21.8
500770 2013 CT_{64}	16.6	X	211.96185	286.16669	156.50760	13.81657	0.2837765	0.17475691	3.1684472	21	7 3.2	22.4
500771 2013 CT_{115}	18.1	X	123.44098	340.05048	263.06867	6.24657	0.1154267	0.30185583	2.2009137	21	11 10.5	21.3
500772 2013 CQ_{145}	17.9	X	48.06948	177.20463	84.81717	3.53764	0.1874876	0.27940455	2.3172901	21	9 16.4	20.4
500773 2013 CM_{155}	15.7	X	326.88811	99.99042	127.84440	3.88986	0.1267531	0.12540521	3.9529894	21	3 9.7	20.8
500774 2013 CK_{186}	17.5	X	170.75577	260.95071	255.00256	3.92270	0.0596745	0.29260522	2.2470600	21	9 4.8	20.4
500775 2013 CP_{191}	16.3	X	219.28254	35.50197	60.45531	17.69190	0.2602934	0.17770995	3.1332489	21	7 29.3	21.9
500776 2013 CV_{192}	18.3	X	119.34079	105.98757	111.27670	2.70654	0.1608722	0.28891144	2.2661721	21	10 6.9	21.6
500777 2013 DM_{12}	17.5	X	95.22878	357.05753	212.08648	6.98369	0.1418487	0.28015868	2.3131298	21	8 23.8	20.8
500778 2013 DR_{15}	17.5	X	34.18776	341.88872	290.38872	7.21823	0.2282763	0.27739551	2.3284652	21	9 9.0	19.9
500779 2013 EP_{10}	16.3	X	192.38914	304.70881	175.20535	26.91131	0.3628889	0.17344588	3.1843934	21	7 29.6	22.6
500780 2013 EN_{16}	18.2	X	47.17171	126.41822	136.56904	5.76924	0.1454958	0.27772164	2.3266420	21	9 8.2	20.7
500781 2013 EA_{18}	18.3	X	113.40837	314.92957	244.59242	4.55232	0.2720644	0.27788291	2.3257417	21	9 11.3	22.3
500782 2013 EN_{18}	18.5	X	38.63576	310.89119	297.95786	0.64970	0.1546882	0.27166002	2.3611246	21	8 2.0	20.8
500783 2013 EA_{30}	15.0	X	340.55455	143.44976	71.52462	9.36786	0.1102794	0.12582054	3.9442855	21	3 19.0	20.2
500784 2013 EG_{42}	14.6	X	269.97046	303.60559	210.50266	3.52472	0.0250343	0.08333353	5.1910616	21	12 6.6	21.4
500785 2013 EU_{78}	18.8	X	162.59571	95.63616	144.61586	3.72612	0.1537232	0.30824301	2.1704039	21	12 17.7	22.0
500786 2013 ET_{87}	15.8	X	182.72222	16.00636	95.01626	9.39118	0.0832028	0.16041814	3.3545458	21	7 18.2	20.9
500787 2013 EJ_{107}	17.2	X	112.21850	233.02408	38.32073	22.87770	0.3568503	0.29098767	2.2553796	21	12 8.2	21.7
500788 2013 EP_{109}	17.4	X	118.50437	148.38650	72.56805	10.99693	0.2891717	0.28584645	2.2823427	21	10 20.2	21.5
500789 2013 EC_{120}	17.5	X	98.39372	286.13652	350.74810	7.15750	0.1193358	0.29784062	2.2206499	21	11 26.9	20.7
500790 2013 EG_{123}	18.1	X	187.37489	83.73214	74.78545	5.49057	0.2138975	0.29452912	2.2372639	21	9 25.2	21.7
500791 2013 EQ_{123}	18.2	X	104.28378	242.29187	34.68547	6.59490	0.2632329	0.29186137	2.2508763	21	12 10.5	22.1
500792 2013 ER_{126}	17.0	X	31.78316	148.57687	153.91002	23.42351	0.1725890	0.27892505	2.3199450	21	10 21.7	20.0
500793 2013 FC	17.6	X	333.24115	136.46370	22.81994	19.65800	0.0493997	0.34502611	2.0132672	21	—	—
500794 2013 FC_{5}	18.0	X	77.96577	233.96527	36.05181	6.46102	0.1206100	0.28620688	2.2804261	21	10 26.3	20.9
500795 2013 FN_{11}	18.5	X	114.83430	273.44266	1.95053	3.75735	0.1387535	0.30037410	2.2081457	21	12 14.8	21.7
500796 2013 FR_{13}	17.5	X	77.95939	214.59839	63.80278	7.75212	0.1702131	0.28804320	2.2707237	21	11 13.1	20.5
500797 2013 FO_{22}	18.5	X	132.13363	58.48800	187.14254	5.56497	0.1848426	0.29943427	2.2127637	21	11 25.3	22.0
500798 2013 GM_{1}	17.9	X	84.40199	26.09683	223.30024	3.82500	0.1915502	0.28040374	2.3117818	21	10 12.9	21.3
500799 2013 GQ_{3}	18.5	X	95.86560	192.65587	64.35344	1.44698	0.2027723	0.28674483	2.2775731	21	11 5.8	21.9
500800 2013 GJ_{5}	18.6	X	171.06886	20.47948	157.65923	5.49032	0.2565740	0.29282401	2.2459406	21	10 3.3	22.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500801 2013 GU_{7}	18.0	X	165.84534	348.36911	30.14792	20.38575	0.0763555	0.35428470	1.9780372	21	2 22.2	20.8
500802 2013 GA_{18}	18.3	X	131.60462	225.96295	52.69846	6.13495	0.1715016	0.30359422	2.1925039	21	—	—
500803 2013 GB_{18}	17.2	X	100.24940	249.07278	16.88853	23.56664	0.1349369	0.29037508	2.2585506	21	11 8.3	20.8
500804 2013 GH_{21}	18.5	X	180.93069	233.72875	307.07277	3.02255	0.1131293	0.29345118	2.2427394	21	10 19.0	21.7
500805 2013 GR_{24}	16.1	X	194.68675	286.98786	205.62166	19.01924	0.2907622	0.17290337	3.1910510	21	8 13.6	22.2
500806 2013 GC_{27}	17.5	X	92.34671	178.21807	115.00393	8.73980	0.1786612	0.29402857	2.2398023	21	12 17.6	20.9
500807 2013 GY_{34}	18.1	X	92.10001	41.02072	230.57408	3.53215	0.0780235	0.29076523	2.2565298	21	11 9.8	21.1
500808 2013 GP_{37}	18.2	X	190.79515	127.33978	84.67592	4.93786	0.0952788	0.30624686	2.1798250	21	12 16.2	20.9
500809 2013 GT_{39}	17.5	X	84.51663	135.03243	126.26603	5.93245	0.2027556	0.28359287	2.2944178	21	11 2.3	20.9
500810 2013 GA_{43}	18.3	X	95.32098	195.86856	30.32809	6.23246	0.1188177	0.27722432	2.3294237	21	9 18.6	21.4
500811 2013 GM_{63}	18.3	X	209.23519	232.80549	339.42690	4.31019	0.1439711	0.31132199	2.1560700	21	—	—
500812 2013 GD_{71}	18.4	X	155.08009	180.40964	28.30226	4.81639	0.0768166	0.29269027	2.2466247	21	10 29.9	21.4
500813 2013 GR_{71}	18.5	X	57.00225	175.04220	134.92919	2.13578	0.2171253	0.28408544	2.2917649	21	12 5.8	21.6
500814 2013 GL_{82}	18.0	X	73.40296	328.53974	272.92807	2.40861	0.1447256	0.27248940	2.3563311	21	9 11.6	21.1
500815 2013 GU_{87}	18.0	X	117.84675	159.85672	154.08679	6.81383	0.2574043	0.30259925	2.1973074	21	—	—
500816 2013 GF_{88}	18.7	X	126.26061	76.96240	162.17009	8.77861	0.1679249	0.29006569	2.2601563	21	11 11.9	22.3
500817 2013 GX_{93}	18.2	X	150.26662	31.32491	187.65729	5.03533	0.0995923	0.29430344	2.2384075	21	11 8.5	21.3
500818 2013 GZ_{97}	17.9	X	84.30164	358.55897	233.16814	1.72192	0.1820167	0.27329307	2.3517093	21	9 17.5	21.1
500819 2013 GF_{99}	18.3	X	161.24114	203.44089	18.56926	5.52867	0.1209892	0.29665303	2.2265726	21	11 21.4	21.6
500820 2013 GX_{101}	17.7	X	92.20184	184.80135	68.37411	6.22922	0.1796705	0.27760249	2.3273077	21	10 27.1	21.1
500821 2013 GG_{110}	17.4	X	106.04223	316.12112	27.24044	3.01741	0.1766182	0.31505553	2.1390026	21	—	—
500822 2013 GX_{113}	18.0	X	73.99217	295.95303	340.90068	2.59998	0.2018463	0.28347793	2.2950380	21	11 7.9	21.3
500823 2013 GY_{115}	18.7	X	150.31050	148.92360	62.62118	3.44039	0.1489769	0.29249996	2.2475991	21	10 28.8	22.1
500824 2013 GU_{126}	17.3	X	68.10526	277.20160	58.02688	10.20958	0.0864626	0.29843682	2.2176914	21	—	—
500825 2013 GM_{127}	18.0	X	123.95153	163.94481	135.91546	4.94895	0.1959209	0.30130682	2.2035863	21	—	—
500826 2013 GP_{130}	17.3	X	149.59998	12.49173	257.67537	6.07630	0.1208675	0.30512844	2.1851484	21	—	—
500827 2013 GQ_{133}	18.1	X	99.23885	268.05767	16.57931	5.53343	0.2259478	0.29146514	2.2529159	21	12 14.4	21.8
500828 2013 GR_{136}	7.8	X	332.77548	57.53831	198.74280	1.64412	0.0782848	0.00341558	43.6676106	21	5 5.1	23.9
500829 2013 GT_{136}	7.4	X	185.90896	355.03973	40.86481	12.12790	0.1546496	0.00357583	42.3530898	21	4 30.6	24.3
500830 2013 GU_{136}	7.9	X	36.90768	126.67071	49.17843	8.32447	0.1654499	0.00336490	44.1050544	21	5 6.8	23.7
500831 2013 GV_{136}	8.2	X	78.15481	290.43375	216.06545	7.45421	0.0320205	0.00373883	41.1129592	21	5 9.1	24.3
500832 2013 GZ_{136}	8.2	X	355.92113	36.81171	213.94979	18.37251	0.6121921	0.00120803	87.3141169	21	5 10.7	23.6
500833 2013 GD_{137}	8.3	X	23.48259	353.79127	204.47062	6.94786	0.1028023	0.00398753	39.3852544	21	5 8.1	23.8
500834 2013 GK_{137}	7.2	X	166.85259	11.21550	45.00199	9.88862	0.1777320	0.00402012	39.1721080	21	5 7.2	23.8
500835 2013 GN_{137}	7.0	X	40.43768	104.96988	72.39966	2.76176	0.0627710	0.00336798	44.0781388	21	5 3.5	23.2
500836 2013 GQ_{137}	7.4	X	51.93865	70.36676	90.48995	2.84682	0.1286881	0.00319398	45.6647476	21	5 6.6	23.7
500837 2013 GT_{137}	7.4	X	81.11152	108.64847	25.34589	2.30144	0.1027463	0.00331144	44.5784237	21	5 7.1	23.8
500838 2013 GV_{137}	6.8	X	233.73479	288.78704	69.79506	3.19711	0.0852330	0.00339827	43.8157827	21	5 5.8	23.5
500839 2013 GW_{137}	7.7	X	348.33956	192.26086	46.31374	5.02314	0.0632947	0.00351039	42.8777835	21	5 5.7	23.8
500840 2013 GA_{138}	7.8	X	337.56003	189.32736	63.41456	3.90172	0.0472139	0.00339634	43.8324091	21	5 8.9	24.0
500841 2013 HE_{30}	17.8	X	6.86720	26.35152	256.75326	5.26930	0.1312317	0.26373509	2.4081901	21	7 18.8	20.0
500842 2013 HE_{49}	18.7	X	196.94409	287.95067	239.75477	3.28313	0.1226811	0.29465352	2.2366342	21	10 19.3	21.8
500843 2013 HQ_{52}	18.4	X	54.14586	42.78345	288.86102	4.28653	0.1740785	0.29505314	2.2346142	21	12 27.3	21.3
500844 2013 HE_{53}	18.4	X	44.61128	17.53406	302.78033	4.30012	0.1681937	0.28754839	2.2733280	21	11 27.7	21.2
500845 2013 HK_{61}	18.4	X	178.38290	300.57709	247.21731	3.80301	0.0058104	0.29370977	2.2414228	21	11 3.5	20.9
500846 2013 HN_{61}	18.5	X	119.03165	271.22430	349.15591	3.45534	0.1476279	0.29369070	2.2415198	21	11 28.6	21.9
500847 2013 HC_{62}	17.8	X	159.26898	23.27081	214.93379	7.24997	0.1750273	0.30080631	2.2060300	21	12 9.8	21.3
500848 2013 HC_{64}	19.1	X	247.09762	185.40476	350.01881	4.26781	0.0177571	0.31264252	2.1499945	21	—	—
500849 2013 HA_{73}	18.1	X	107.82845	92.07985	230.25266	5.51361	0.1219736	0.30983457	2.1629649	21	—	—
500850 2013 HB_{81}	18.6	X	40.67154	92.16620	209.39219	8.22021	0.2408189	0.27517181	2.3409929	21	11 7.5	21.3
500851 2013 HQ_{84}	18.1	X	75.74856	84.02384	229.98942	2.63407	0.1938336	0.29308255	2.2446195	21	12 28.4	21.4
500852 2013 HJ_{89}	18.3	X	53.16253	303.77505	2.05969	3.51511	0.1962274	0.28428774	2.2906776	21	11 22.2	21.2
500853 2013 HT_{120}	18.0	X	24.96033	143.84205	205.95278	6.55881	0.1387759	0.29181611	2.2511091	21	12 8.7	20.5
500854 2013 HP_{128}	17.7	X	191.20551	183.73846	2.96734	8.26361	0.0414466	0.29664438	2.2266159	21	11 13.9	20.5
500855 2013 HS_{140}	18.6	X	279.78837	275.01757	190.81945	5.19737	0.1068997	0.30363337	2.1923155	21	11 23.4	20.5
500856 2013 HT_{156}	7.6	X	232.11074	302.16042	54.49449	3.68203	0.0186650	0.00337175	44.0452932	21	5 7.7	24.1
500857 2013 JO_{2}	18.2	X	82.02968	139.08300	124.65244	2.20700	0.1709725	0.27583409	2.3372442	21	10 28.1	21.4
500858 2013 JJ_{3}	18.3	X	209.01845	197.16974	347.28627	5.99897	0.0579214	0.30232460	2.1986380	21	12 4.8	21.0
500859 2013 JG_{6}	18.2	X	59.39496	147.90390	128.61251	1.80461	0.1821410	0.27408642	2.3471691	21	10 19.9	21.2
500860 2013 JZ_{10}	18.3	X	66.92057	98.35787	191.00232	5.16770	0.1701112	0.28029666	2.3123706	21	11 14.3	21.4
500861 2013 JE_{11}	17.7	X	122.22997	188.37086	61.44414	6.96590	0.1561780	0.28903288	2.2655373	21	11 18.9	21.2
500862 2013 JY_{21}	18.1	X	101.08324	272.81942	59.85150	3.51866	0.0892810	0.30767587	2.1730702	21	—	—
500863 2013 JZ_{23}	17.8	X	188.09223	54.06254	95.75866	6.94002	0.0677604	0.27907069	2.3191379	21	9 22.5	21.0
500864 2013 JC_{25}	16.9	X	340.25899	58.57183	185.76660	11.57515	0.2184347	0.23703689	2.5857831	21	3 17.0	19.4
500865 2013 JT_{26}	17.1	X	132.46992	192.47019	72.36697	7.02095	0.1187969	0.29382564	2.2408335	21	12 17.6	20.3
500866 2013 JJ_{29}	18.6	X	52.89191	75.21440	210.63993	6.11651	0.2181622	0.27211065	2.3585171	21	10 28.6	21.6
500867 2013 JO_{29}	18.1	X	101.79468	24.55244	209.38763	5.94264	0.0750676	0.27651554	2.3334027	21	9 28.2	21.2
500868 2013 JN_{39}	18.5	X	131.14544	185.10000	55.08226	3.69325	0.1648904	0.28781631	2.2719169	21	11 14.9	21.9
500869 2013 JW_{46}	17.9	X	68.04442	149.88269	147.41751	6.44199	0.1776134	0.27788149	2.3257497	21	11 26.9	21.2
500870 2013 JQ_{48}	18.4	X	140.21378	212.75614	66.94975	6.32852	0.1857725	0.30029867	2.2085155	21	—	—
500871 2013 JL_{52}	16.2	X	245.12976	113.11281	41.26810	9.17067	0.1667009	0.18810155	3.0167625	21	11 6.6	20.5
500872 2013 JJ_{53}	18.0	X	22.07950	312.11153	358.42791	1.46332	0.1876482	0.27113993	2.3641429	21	10 11.2	20.3
500873 2013 JO_{58}	18.3	X	247.29276	271.19511	212.93746	4.81331	0.0780736	0.29529167	2.2334107	21	10 31.0	20.9
500874 2013 JT_{58}	18.2	X	93.00465	239.38958	60.07420	7.18158	0.1743190	0.29214463	2.2494211	21	12 24.8	21.6
500875 2013 JZ_{62}	18.2	X	109.95135	77.94584	133.65274	2.00380	0.1529380	0.27341392	2.3510163	21	9 17.2	21.5
500876 2013 JD_{64}	8.0	X	1.15948	178.61658	67.54342	50.29049	0.4139712	0.00159005	72.6990685	21	5 29.8	24.3
500877 2013 JE_{64}	8.2	X	30.78887	89.94294	107.16663	8.32267	0.2852116	0.00296957	47.9373632	21	6 2.6	24.0
500878 2013 JG_{64}	7.7	X	224.78014	182.14275	208.00780	18.22559	0.1081370	0.00364005	41.8534478	21	5 28.8	24.3
500879 2013 JH_{64}	5.8	X	54.32213	60.37287	86.05297	13.70971	0.3809957	0.00216409	59.1950479	21	5 27.4	23.1
500880 2013 JJ_{64}	7.4	X	303.95985	183.61048	128.26427	7.64038	0.0869733	0.00296836	47.9503779	21	5 29.7	24.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500881 2013 JM_{64}	8.2	X	32.88095	52.31572	165.51131	7.28675	0.0491247	0.00355493	42.5189006	21	6 5.4	24.3
500882 2013 JN_{64}	8.3	X	15.88161	79.75958	146.55909	7.73387	0.2901431	0.00253100	53.3262273	21	6 7.5	24.2
500883 2013 JJ_{65}	7.4	X	96.63066	274.16822	214.93897	19.82857	0.2518081	0.00397920	39.4401804	21	6 2.9	23.7
500884 2013 JK_{65}	9.6	X	354.61714	186.86642	83.12027	20.02463	0.2615992	0.00394398	39.6746108	21	6 11.6	24.3
500885 2013 JL_{65}	9.0	X	59.50967	26.30975	145.85492	7.24352	0.2291024	0.00398384	39.4095507	21	6 8.8	24.6
500886 2013 JN_{65}	7.4	X	208.03366	318.43712	79.94825	19.61662	0.0105429	0.00378468	40.7802472	21	5 28.7	23.5
500887 2013 JO_{65}	8.2	X	323.10551	116.31657	175.25153	9.96306	0.0846939	0.00354831	42.5717920	21	5 30.9	24.2
500888 2013 JP_{65}	8.0	X	71.71698	337.78234	192.16870	12.47917	0.0614992	0.00370074	41.3946177	21	5 30.8	24.1
500889 2013 KC_{9}	17.4	X	15.61694	255.54876	79.17197	6.64319	0.1408898	0.27233896	2.3571988	21	10 31.2	19.8
500890 2013 LS_{4}	18.1	X	86.95844	170.51770	72.25458	4.60161	0.1932972	0.27374315	2.3491309	21	10 9.5	21.5
500891 2013 LH_{5}	18.0	X	26.07516	163.94314	138.65167	2.33890	0.1833226	0.26657045	2.3910833	21	10 6.4	20.3
500892 2013 LO_{6}	18.3	X	31.50124	171.49300	166.88535	6.14009	0.2632025	0.27440650	2.3453435	21	12 17.9	21.3
500893 2013 LJ_{9}	18.1	X	66.14976	236.74014	73.41343	7.16770	0.1291335	0.28227380	2.3015602	21	12 4.9	21.0
500894 2013 LM_{9}	18.1	X	52.49168	235.79050	77.16020	3.13713	0.2541167	0.27468113	2.3437799	21	12 7.5	21.3
500895 2013 LJ_{13}	18.5	X	191.68703	114.60397	123.48799	4.47945	0.1537468	0.30532774	2.1841974	21	—	—
500896 2013 LG_{21}	17.8	X	27.85767	245.32819	69.15653	7.11042	0.1623497	0.27175818	2.3605559	21	10 25.8	20.3
500897 2013 LV_{27}	18.5	X	62.36013	112.07609	170.63845	0.96048	0.1645287	0.27441334	2.3453045	21	10 28.8	21.5
500898 2013 LD_{28}	16.2	X	310.42428	245.30039	91.94910	8.07686	0.2704311	0.24534852	2.5270495	21	5 30.8	19.0
500899 2013 LS_{28}	17.6	X	81.89809	89.37968	188.90205	7.17121	0.0997439	0.28275899	2.2989266	21	11 9.2	20.7
500900 2013 LX_{31}	17.8	X	27.04998	121.00405	183.95870	7.32555	0.2429901	0.26534272	2.3984533	21	10 22.2	20.2
500901 2013 MX_{3}	17.8	X	41.32515	156.34176	156.02884	6.08408	0.1921034	0.26279670	2.4139194	21	11 14.6	20.8
500902 2013 MA_{5}	17.9	X	47.84519	108.84442	206.31819	4.32359	0.1892856	0.26481300	2.4016507	21	11 25.2	20.9
500903 2013 MW_{9}	18.1	X	101.29162	196.87017	79.37958	3.24812	0.2060222	0.27841897	2.3227555	21	12 3.6	21.6
500904 2013 ND	16.3	X	331.51564	13.59031	256.49009	14.11554	0.0974744	0.23854143	2.5748988	21	4 23.2	19.6
500905 2013 NA_{1}	17.7	X	66.25648	57.27221	199.72068	6.27737	0.1407899	0.26778985	2.3838191	21	9 23.0	20.6
500906 2013 NS_{5}	18.2	X	61.53989	203.92973	84.20410	2.37120	0.1792131	0.26677565	2.3898571	21	11 5.3	21.3
500907 2013 NC_{6}	18.4	X	61.45716	27.62949	289.66609	0.96774	0.1770777	0.27508239	2.3415002	21	12 13.3	21.5
500908 2013 NR_{18}	17.7	X	94.54527	288.16365	347.20274	6.46673	0.1037009	0.27087335	2.3656938	21	11 14.9	21.1
500909 2013 NZ_{20}	18.0	X	153.14899	134.92850	105.10859	5.20284	0.1046069	0.28332035	2.2958889	21	12 6.5	21.2
500910 2013 NJ_{22}	16.8	X	185.30194	171.78364	276.57292	7.25437	0.2822363	0.20135075	2.8829286	21	6 21.3	22.0
500911 2013 OD_{5}	17.1	X	348.53538	299.25717	5.78243	5.77598	0.1895467	0.24393704	2.5367882	21	7 15.2	19.2
500912 2013 OL_{5}	18.2	X	340.36817	91.07522	280.48092	13.76395	0.4183338	0.24884602	2.5033155	21	10 16.4	19.0
500913 2013 OD_{10}	17.8	X	54.93159	208.65935	126.94394	7.77749	0.1463455	0.27539144	2.3397480	21	12 25.9	20.9
500914 2013 PM_{3}	16.9	X	0.49215	138.89348	240.49871	7.07517	0.2547459	0.25813709	2.4428818	21	12 20.6	19.2
500915 2013 PU_{9}	17.8	X	192.68367	218.74362	310.31666	5.41321	0.0597922	0.25760137	2.4462674	21	10 15.3	21.2
500916 2013 PB_{10}	17.7	X	335.36550	331.84376	350.38706	5.61718	0.2293909	0.24348931	2.5398971	21	7 6.3	19.8
500917 2013 PM_{11}	17.0	X	292.75507	129.73366	269.99025	5.18118	0.3486084	0.23341962	2.6124289	21	7 16.9	20.1
500918 2013 PH_{13}	18.3	X	337.46161	162.83630	172.06398	12.68317	0.2026352	0.24374801	2.5380996	21	8 1.5	20.7
500919 2013 PJ_{25}	17.6	X	18.72139	98.62369	217.62232	2.78241	0.2167222	0.25461635	2.4653497	21	10 15.3	19.8
500920 2013 PW_{25}	16.8	X	301.20209	209.57281	182.40877	33.91361	0.2831606	0.23600476	2.5933166	21	7 28.4	20.5
500921 2013 PY_{25}	16.6	X	259.29414	122.04961	300.18410	10.81635	0.2830299	0.22907694	2.6453418	21	7 18.1	20.5
500922 2013 PE_{26}	17.8	X	146.66114	204.50538	316.00551	45.58294	0.6117884	0.50924015	1.5530578	21	8 18.8	21.4
500923 2013 PP_{30}	17.9	X	250.78679	202.02109	196.07805	2.95093	0.1280510	0.22804905	2.6532848	21	6 25.4	21.6
500924 2013 PG_{34}	17.3	X	55.07449	348.64211	304.71819	5.63763	0.1148915	0.25612881	2.4556347	21	10 20.4	20.6
500925 2013 PW_{36}	17.4	X	258.24985	86.68998	316.66624	8.28584	0.1276557	0.23468631	2.6030202	21	7 12.8	21.1
500926 2013 PR_{38}	17.1	X	96.05421	58.34880	165.18128	9.44699	0.2029787	0.25571403	2.4582894	21	9 22.1	20.8
500927 2013 PG_{39}	18.2	X	11.98346	168.42327	164.22477	7.08502	0.2084363	0.25312277	2.4750382	21	10 28.1	20.6
500928 2013 PO_{39}	18.0	X	119.51648	129.93272	129.26040	3.31304	0.1924378	0.27240941	2.3567923	21	11 27.7	21.8
500929 2013 PM_{45}	17.9	X	321.39587	114.76411	279.89320	7.17267	0.1821114	0.25561857	2.4589014	21	10 1.6	20.3
500930 2013 PR_{47}	18.1	X	319.57218	30.12807	311.04918	2.39232	0.2015141	0.23823563	2.5771018	21	7 4.7	20.8
500931 2013 PS_{50}	18.0	X	285.48002	207.34600	213.01827	2.71599	0.1135366	0.24715267	2.5147366	21	9 13.7	20.8
500932 2013 PZ_{50}	17.2	X	314.44637	185.65881	120.31264	13.97397	0.1805888	0.21849221	2.7301012	21	5 14.7	20.8
500933 2013 PA_{54}	17.5	X	339.63876	10.44200	344.27468	3.44072	0.1536091	0.24712974	2.5148922	21	9 13.3	19.5
500934 2013 PF_{55}	17.7	X	85.39488	22.36046	175.82009	6.48310	0.1228093	0.23267422	2.6180054	21	7 23.9	21.4
500935 2013 PX_{55}	17.9	X	262.89690	84.01506	335.36618	12.39406	0.1766297	0.23641191	2.5903383	21	8 4.1	21.5
500936 2013 PU_{60}	18.0	X	130.77211	43.92280	184.68349	7.31095	0.1267144	0.26878140	2.3779529	21	10 29.1	21.6
500937 2013 PX_{63}	17.7	X	260.18014	229.71786	196.97336	5.02294	0.1340772	0.24668586	2.5179081	21	8 12.8	21.2
500938 2013 PE_{66}	17.7	X	349.84040	159.97902	207.01338	2.74839	0.2029347	0.25302397	2.4756825	21	10 30.3	19.6
500939 2013 PR_{69}	17.3	X	28.65351	23.45480	292.42620	7.02344	0.1941213	0.25908679	2.4369084	21	10 26.0	20.1
500940 2013 PW_{72}	18.1	X	3.46708	298.98920	337.61598	10.51993	0.3133998	0.24133043	2.5550221	21	7 9.7	19.5
500941 2013 PB_{74}	16.9	X	305.63979	31.77377	339.74759	13.06952	0.2830231	0.23403977	2.6078120	21	7 12.6	20.0
500942 2013 QK_{2}	18.3	X	338.62646	143.64234	191.17317	5.94019	0.2780440	0.24476714	2.5310495	21	7 28.4	19.9
500943 2013 QZ_{4}	17.2	X	254.15658	62.41973	328.07147	12.02850	0.1706706	0.22842240	2.6503929	21	6 14.1	21.4
500944 2013 QS_{5}	17.7	X	28.10335	61.95211	236.44115	1.77646	0.1817223	0.25276285	2.4773872	21	9 29.3	20.3
500945 2013 QC_{6}	17.3	X	310.90284	128.32023	230.29253	4.31631	0.3585423	0.23339655	2.6126010	21	6 15.1	20.0
500946 2013 QU_{6}	18.1	X	33.53693	132.49552	209.07431	5.11327	0.2217896	0.26434044	2.4045122	21	12 16.2	21.1
500947 2013 QP_{9}	18.0	X	289.41636	52.05077	320.90570	2.41228	0.1355150	0.23392954	2.6086311	21	7 11.1	21.2
500948 2013 QN_{12}	17.4	X	259.46505	61.85671	320.75518	9.57223	0.0958524	0.22874768	2.6478797	21	6 20.1	21.2
500949 2013 QU_{13}	16.9	X	201.20607	143.16383	324.40422	32.82087	0.2035302	0.23367412	2.6105317	21	8 4.8	21.4
500950 2013 QT_{15}	17.2	X	268.68253	281.91787	127.23873	14.01639	0.1164921	0.22930389	2.6435961	21	8 3.9	20.8
500951 2013 QS_{27}	17.5	X	84.69168	83.54007	167.06991	2.68843	0.1694404	0.25700795	2.4500315	21	10 11.3	21.0
500952 2013 QU_{28}	17.1	X	325.14649	183.11389	156.84370	7.06760	0.1814816	0.23897387	2.5717916	21	7 16.2	19.6
500953 2013 QX_{28}	17.8	X	290.31773	193.40739	163.84521	0.13772	0.0472483	0.23249279	2.6193672	21	7 4.3	21.2
500954 2013 QZ_{31}	17.9	X	358.93303	217.41311	177.61027	7.16787	0.1852543	0.26296699	2.4128772	21	12 30.0	20.5
500955 2013 QQ_{32}	16.9	X	14.24752	359.21402	343.21462	14.82742	0.1613742	0.25825807	2.4421187	21	10 30.0	19.8
500956 2013 QR_{33}	17.6	X	40.48905	331.41671	264.36838	6.78186	0.1782546	0.23708538	2.5854305	21	7 17.6	20.3
500957 2013 QX_{35}	18.1	X	344.29607	113.70508	308.71038	1.54114	0.2106985	0.26447534	2.4036945	21	—	—
500958 2013 QG_{37}	18.1	X	295.22857	228.57772	143.90745	6.33038	0.1335247	0.23870956	2.5736897	21	7 18.9	21.2
500959 2013 QD_{42}	17.6	X	248.55448	38.89039	340.85561	5.24327	0.0767655	0.22533179	2.6745727	21	6 3.9	21.5
500960 2013 QY_{42}	16.4	X	298.91040	359.40295	21.77137	14.11916	0.2559204	0.23292403	2.6161332	21	7 21.3	19.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
500961 2013 QP_{44}	17.9	X	117.71582	51.88586	178.17176	8.50548	0.1859626	0.25880084	2.4387031	21	10 20.4	21.8
500962 2013 QT_{50}	18.1	X	71.12385	60.38316	207.07077	0.94800	0.1568823	0.25632710	2.4543681	21	10 15.4	21.3
500963 2013 QF_{51}	18.5	X	297.90640	222.00798	179.32487	4.54026	0.2030976	0.24413598	2.5354099	21	8 22.7	21.3
500964 2013 QX_{56}	17.0	X	255.69098	275.41439	119.52860	6.18731	0.1779201	0.22816670	2.6523727	21	6 21.1	21.0
500965 2013 QE_{57}	18.0	X	310.55951	290.44440	38.04576	4.64373	0.1894715	0.23112110	2.6297208	21	5 31.7	21.1
500966 2013 QD_{61}	17.5	X	66.53109	100.25010	158.18158	9.27233	0.2407315	0.25943999	2.4346962	21	10 12.5	20.9
500967 2013 QS_{64}	17.6	X	9.33171	211.13528	162.02057	7.61206	0.1901184	0.26526661	2.3989120	21	12 19.1	20.2
500968 2013 QF_{67}	18.1	X	338.22181	29.83710	281.90599	2.17506	0.2257347	0.23807452	2.5782643	21	6 25.3	19.9
500969 2013 QK_{68}	17.9	X	20.66048	23.56120	295.43384	0.68851	0.1824177	0.25377888	2.4707704	21	10 17.0	20.3
500970 2013 QH_{69}	17.6	X	39.11849	234.72628	87.88829	4.08230	0.1984669	0.26439253	2.4041963	21	11 25.2	20.4
500971 2013 QO_{70}	17.4	X	281.57232	42.16295	5.54536	12.37074	0.1610628	0.23681173	2.5874218	21	8 18.4	20.7
500972 2013 QO_{72}	17.5	X	304.18475	50.03856	21.81506	5.01545	0.1731329	0.25646669	2.4534774	21	10 27.7	19.6
500973 2013 QE_{74}	17.6	X	51.55833	153.47706	159.79341	5.10732	0.2332745	0.26261625	2.4150251	21	12 3.2	20.9
500974 2013 QH_{76}	17.4	X	305.79130	32.72040	330.15809	5.87568	0.2590477	0.23575794	2.5951263	21	7 1.8	20.4
500975 2013 QJ_{77}	17.4	X	357.66785	359.76120	271.83333	2.12012	0.1239650	0.23155631	2.6264248	21	6 13.1	20.2
500976 2013 QD_{80}	18.1	X	310.69167	75.00892	316.98820	3.96774	0.1844220	0.24651685	2.5190588	21	9 5.6	20.4
500977 2013 QH_{82}	17.2	X	39.32277	250.30471	335.71361	10.73333	0.1363770	0.23132759	2.6281557	21	6 26.9	20.3
500978 2013 QC_{83}	16.9	X	302.25632	359.60707	357.60198	14.45988	0.2680919	0.23473576	2.6026546	21	6 14.1	20.5
500979 2013 QM_{83}	17.9	X	320.11154	238.33582	108.24073	4.86180	0.3035950	0.23835601	2.5762340	21	6 25.3	20.0
500980 2013 QC_{84}	17.2	X	22.54316	69.56736	251.83989	5.71311	0.1423613	0.25433317	2.4671793	21	10 15.7	19.9
500981 2013 QN_{90}	17.6	X	310.21753	196.76864	157.43316	6.52725	0.0386647	0.23956844	2.5675347	21	7 29.7	20.8
500982 2013 QL_{91}	17.2	X	229.44340	295.91149	144.89594	10.86760	0.1221589	0.24124352	2.5556357	21	7 27.8	20.9
500983 2013 QB_{95}	17.9	X	346.55111	317.48717	20.57191	1.39477	0.2011321	0.24780507	2.5103210	21	9 3.3	19.6
500984 2013 RX_{1}	16.8	X	265.47169	151.77964	234.42633	4.95098	0.1678631	0.22135687	2.7064960	21	6 21.9	20.7
500985 2013 RB_{3}	17.8	X	295.78001	135.67166	196.37857	1.78819	0.0924289	0.22350697	2.6891107	21	5 31.5	21.2
500986 2013 RK_{5}	18.2	X	5.26953	331.43554	339.35925	3.17358	0.1100220	0.24183003	2.5515019	21	8 26.8	20.7
500987 2013 RH_{8}	18.0	X	249.39968	157.00933	238.74153	2.00752	0.1065306	0.22682155	2.6628488	21	6 23.4	21.9
500988 2013 RR_{10}	17.5	X	290.53030	26.57268	348.17997	8.15840	0.1913737	0.23471327	2.6028209	21	7 7.2	20.8
500989 2013 RM_{11}	18.7	X	332.16825	340.62857	349.19884	4.74502	0.2829536	0.23887363	2.5725110	21	7 1.8	20.7
500990 2013 RC_{12}	17.7	X	347.72598	24.25811	259.70793	2.73236	0.1599277	0.23326591	2.6135764	21	6 9.7	20.1
500991 2013 RP_{12}	17.7	X	273.09088	226.06899	189.82814	9.13664	0.0918314	0.24368370	2.5385461	21	8 21.5	21.1
500992 2013 RB_{16}	17.9	X	338.72971	335.32532	323.02192	4.46090	0.1373650	0.23076369	2.6324355	21	6 15.7	20.6
500993 2013 RA_{18}	17.6	X	358.39347	335.62108	333.48681	9.43433	0.2318989	0.24202758	2.5501133	21	8 17.4	19.2
500994 2013 RA_{20}	17.5	X	44.07745	319.87407	352.97764	2.53741	0.2257286	0.26031912	2.4292115	21	11 20.8	20.7
500995 2013 RE_{20}	17.1	X	262.85223	6.02225	353.05362	5.99306	0.0339935	0.22003611	2.7173156	21	5 31.1	20.9
500996 2013 RC_{22}	16.4	X	278.97895	39.98214	357.09332	11.92932	0.1604576	0.23080456	2.6321247	21	7 29.6	20.0
500997 2013 RO_{22}	17.2	X	307.03270	168.04982	177.70657	10.07546	0.1641794	0.23123882	2.6288283	21	6 24.6	20.6
500998 2013 RP_{23}	17.6	X	344.74412	185.64889	191.65177	7.21049	0.1419116	0.25419209	2.4680921	21	10 31.6	19.9
500999 2013 RD_{25}	17.0	X	201.72153	101.43334	356.68205	11.80374	0.1309926	0.22285059	2.6943883	21	7 24.2	21.4
501000 2013 RS_{25}	16.9	X	300.43369	14.87246	349.59454	14.31974	0.1677318	0.23181225	2.6244912	21	7 14.5	20.3
501001 2013 RD_{26}	17.6	X	316.79863	87.10062	284.62098	5.24606	0.1914119	0.24175657	2.5520187	21	8 15.4	20.0
501002 2013 RG_{28}	17.0	X	212.52088	32.46864	23.03394	6.69981	0.0080601	0.21556105	2.7547944	21	6 13.6	20.9
501003 2013 RL_{28}	17.3	X	170.50828	12.08645	61.90234	2.91635	0.0522625	0.20594983	2.8398480	21	5 17.4	21.2
501004 2013 RE_{29}	17.4	X	9.13366	196.61841	68.25408	2.36631	0.1105825	0.22264581	2.6960402	21	6 25.3	20.1
501005 2013 RR_{31}	17.0	X	333.78131	357.59990	331.87550	13.41797	0.1769059	0.23594201	2.5937764	21	7 23.5	19.6
501006 2013 RT_{31}	17.8	X	326.46914	28.76821	306.52526	6.56533	0.2075191	0.23794196	2.5792218	21	7 9.4	20.1
501007 2013 RD_{33}	17.5	X	327.15069	204.43052	128.23954	6.55309	0.2863934	0.23694715	2.5864359	21	6 22.6	19.8
501008 2013 RV_{33}	17.3	X	340.13061	359.20513	329.53281	8.91456	0.1705571	0.23865053	2.5741140	21	8 4.2	19.5
501009 2013 RN_{36}	17.1	X	286.28169	350.89334	1.60202	6.08796	0.0379088	0.22414699	2.6839893	21	6 23.6	20.8
501010 2013 RW_{36}	17.9	X	332.82183	158.90013	165.50939	2.45712	0.2241301	0.23530435	2.5984603	21	7 3.0	20.2
501011 2013 RL_{38}	17.1	X	339.98913	312.86974	2.45154	10.79565	0.1435033	0.23363932	2.6107909	21	7 17.1	20.0
501012 2013 RB_{39}	17.9	X	347.35685	138.27886	179.98035	4.13451	0.1309993	0.23687920	2.5869305	21	8 1.9	20.6
501013 2013 RO_{39}	16.8	X	72.50880	204.22560	1.74940	16.82229	0.1168596	0.22618855	2.6678146	21	7 23.3	20.6
501014 2013 RS_{42}	17.9	X	44.47312	212.85081	82.62519	2.68902	0.1848700	0.25521974	2.4614624	21	10 23.8	20.8
501015 2013 RR_{45}	17.4	X	344.48832	30.28205	282.05664	3.50251	0.1048816	0.23411102	2.6072828	21	7 20.1	20.2
501016 2013 RO_{46}	18.4	X	334.05932	41.05437	310.54302	2.46055	0.1744274	0.24195111	2.5506506	21	8 24.9	20.4
501017 2013 RB_{47}	17.7	X	282.58072	184.72273	190.75229	7.59436	0.1897313	0.22945488	2.6424363	21	6 25.4	21.3
501018 2013 RE_{47}	17.2	X	349.68248	1.93536	335.41473	11.71460	0.1335505	0.24236291	2.5477606	21	9 5.5	19.6
501019 2013 RK_{53}	17.0	X	191.76053	149.99035	286.20309	4.04723	0.1006427	0.21356080	2.7719689	21	6 13.0	21.3
501020 2013 RG_{54}	17.8	X	348.38078	47.67846	338.23857	0.77871	0.1871187	0.25721606	2.4487098	21	11 24.6	19.7
501021 2013 RW_{55}	17.3	X	274.69635	88.89695	301.92564	10.19848	0.1584594	0.23247098	2.6195310	21	7 11.9	20.8
501022 2013 RY_{56}	17.6	X	296.77075	60.07960	301.40477	3.59441	0.2046046	0.23114244	2.6295590	21	6 24.2	20.9
501023 2013 RE_{57}	17.7	X	338.29958	354.53917	314.79959	3.61835	0.1901629	0.23418674	2.6067208	21	6 26.3	20.0
501024 2013 RJ_{60}	16.5	X	40.52567	168.53576	100.80249	11.41039	0.0835257	0.23203399	2.6228189	21	8 26.2	19.8
501025 2013 RP_{60}	16.4	X	335.22070	31.33914	316.79467	12.99392	0.1883992	0.23625315	2.5914986	21	8 19.2	18.7
501026 2013 RA_{63}	17.7	X	259.50864	206.44448	170.38059	6.17230	0.0554182	0.22521417	2.6755038	21	6 17.9	21.4
501027 2013 RT_{63}	17.6	X	327.16487	44.05466	359.63441	6.69967	0.1210674	0.25544508	2.4600146	21	11 1.6	20.2
501028 2013 RX_{64}	16.9	X	275.24006	168.69298	235.28017	2.85841	0.1944498	0.22982072	2.6396313	21	7 23.5	20.5
501029 2013 RL_{67}	17.8	X	294.00036	180.27443	185.97421	7.70353	0.2091741	0.23269338	2.6178617	21	6 25.5	21.2
501030 2013 RF_{68}	17.3	X	326.90908	36.46021	314.97735	8.29408	0.2093898	0.23746021	2.5827091	21	8 4.8	19.3
501031 2013 RP_{70}	17.4	X	4.64707	335.20254	351.30821	7.68239	0.1410164	0.24282892	2.5444999	21	9 20.1	19.9
501032 2013 RQ_{70}	17.6	X	252.33567	59.78707	319.34198	3.04433	0.1143764	0.21757158	2.7377972	21	6 3.9	21.7
501033 2013 RS_{70}	17.9	X	12.12212	306.90269	59.35496	3.34815	0.2081720	0.25780034	2.4450086	21	12 14.4	20.3
501034 2013 RV_{70}	17.6	X	52.17671	175.50446	169.77719	13.80683	0.2043507	0.26645805	2.3917557	21	—	—
501035 2013 RY_{70}	16.8	X	277.66380	176.43313	223.85771	12.78952	0.2487502	0.23104949	2.6302642	21	7 11.2	20.7
501036 2013 RA_{71}	17.2	X	239.96556	242.50971	154.14480	2.59961	0.1846142	0.21933437	2.7231083	21	6 6.6	21.4
501037 2013 RT_{71}	17.3	X	317.85602	188.42186	135.14704	3.26349	0.1870311	0.22848180	2.6499335	21	6 7.8	20.1
501038 2013 RX_{72}	17.4	X	258.20721	16.41572	357.90581	5.83956	0.0532061	0.21883241	2.7272710	21	6 12.5	21.3
501039 2013 RL_{74}	18.2	X	325.68718	37.99266	309.69141	19.01128	0.2412165	0.24079244	2.5588264	21	7 23.9	20.5
501040 2013 RF_{78}	18.1	X	306.97776	211.47641	167.22318	6.14139	0.2329068	0.23964039	2.5670207	21	7 30.7	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501041 2013 RK_{79}	18.3	X	239.41684	215.41083	199.27749	3.01627	0.1344501	0.22784852	2.6548414	21	7 3.4	22.3
501042 2013 RD_{82}	17.4	X	297.22604	70.68884	266.83683	1.06772	0.0872527	0.22474368	2.6792365	21	6 10.6	20.8
501043 2013 RM_{82}	18.8	X	351.46082	131.28285	202.41431	13.82472	0.2852196	0.24436217	2.5338452	21	9 7.2	20.5
501044 2013 RG_{83}	16.8	X	282.66299	53.54624	340.37854	12.22131	0.1859424	0.23244178	2.6197505	21	7 25.6	20.2
501045 2013 RK_{86}	16.7	X	20.59480	288.25933	358.24114	14.59562	0.1379047	0.23581949	2.5946747	21	8 26.2	19.6
501046 2013 RJ_{87}	16.7	X	289.74248	25.74308	18.29429	14.13290	0.2509046	0.23211318	2.6222223	21	8 11.8	20.2
501047 2013 RN_{94}	18.0	X	328.98765	271.33360	67.84401	3.45453	0.2746497	0.23749011	2.5824923	21	7 10.5	20.0
501048 2013 RQ_{94}	16.7	X	358.10852	189.94583	158.75569	16.56668	0.1896610	0.24577049	2.5241562	21	10 22.0	19.2
501049 2013 RT_{94}	16.9	X	333.03447	349.28519	345.19065	5.42903	0.2117948	0.23467655	2.6030924	21	7 23.6	19.2
501050 2013 RD_{95}	18.2	X	324.20205	304.59112	55.83159	6.15742	0.2561564	0.23908968	2.5709611	21	8 9.1	20.3
501051 2013 RU_{96}	17.8	X	350.82260	139.15105	207.06622	10.21935	0.2066457	0.24656190	2.5187520	21	9 24.9	19.8
501052 2013 RM_{97}	16.8	X	254.55161	215.66097	290.44560	11.18435	0.0943353	0.26737315	2.3862953	21	12 2.3	19.7
501053 2013 RQ_{97}	17.0	X	37.44293	33.09566	254.69669	9.87311	0.1454602	0.24561851	2.5251974	21	9 17.8	20.2
501054 2013 SA	17.2	X	325.49364	352.84774	5.36897	5.10446	0.3030133	0.23717387	2.5847874	21	7 30.4	19.1
501055 2013 SP_{8}	17.5	X	322.79356	13.95021	316.38686	2.50271	0.1367393	0.23363138	2.6108501	21	7 4.2	20.4
501056 2013 SO_{14}	17.4	X	317.06088	145.26687	180.68706	6.86168	0.0553391	0.22826715	2.6515944	21	6 28.3	20.8
501057 2013 SQ_{15}	17.7	X	269.95371	19.28675	15.10927	2.38582	0.1300140	0.22967651	2.6407360	21	7 14.7	21.4
501058 2013 SH_{20}	17.1	X	303.15768	49.85706	348.27688	17.81579	0.2689793	0.23834694	2.5762994	21	8 21.9	19.8
501059 2013 SU_{25}	17.7	X	27.43884	43.07155	287.68757	9.16315	0.2011153	0.25706333	2.4496796	21	11 16.0	20.6
501060 2013 SO_{27}	17.8	X	292.30992	76.49322	330.14232	10.55492	0.1888097	0.23849674	2.5752205	21	8 23.8	20.8
501061 2013 SX_{27}	16.8	X	326.02802	2.64492	13.62714	29.86016	0.1735233	0.23875823	2.5733399	21	9 24.9	19.4
501062 2013 SJ_{28}	17.1	X	296.67431	33.29990	3.51503	4.23083	0.3071145	0.23461625	2.6035384	21	7 28.0	20.0
501063 2013 SG_{29}	15.9	X	107.73328	312.24845	246.58365	9.62261	0.2123826	0.23781179	2.5801629	21	8 26.9	20.1
501064 2013 SH_{30}	17.3	X	290.02996	2.17323	39.04601	4.21856	0.2219416	0.23351778	2.6116968	21	8 8.2	20.4
501065 2013 SC_{32}	17.8	X	234.96336	271.79075	155.07306	2.63644	0.0906800	0.22979934	2.6397950	21	7 19.2	21.5
501066 2013 SZ_{32}	17.7	X	272.67735	37.70878	1.04100	14.77939	0.0874761	0.23473320	2.6026736	21	8 5.9	21.3
501067 2013 SY_{37}	17.4	X	235.31452	310.50843	116.85974	3.88314	0.0383920	0.23102519	2.6304486	21	7 27.3	20.8
501068 2013 SD_{39}	17.7	X	289.71922	21.47819	14.93726	4.47270	0.1433065	0.23383031	2.6093691	21	8 14.2	20.8
501069 2013 SC_{41}	17.6	X	305.24543	247.73189	174.07621	10.23914	0.2202861	0.25351896	2.4724589	21	10 9.8	19.7
501070 2013 SL_{42}	18.1	X	336.45142	262.87759	64.09765	3.98728	0.2529133	0.23748745	2.5825116	21	7 13.5	20.1
501071 2013 SW_{45}	17.2	X	302.08455	158.75904	241.40343	5.94731	0.2154813	0.24485672	2.5304322	21	8 24.4	19.8
501072 2013 SX_{45}	17.3	X	265.80717	116.66375	222.39011	7.92875	0.2024951	0.21865886	2.7287138	21	4 17.8	21.4
501073 2013 SA_{46}	17.4	X	259.44827	110.47207	303.00023	8.64570	0.1835015	0.23460289	2.6036372	21	7 19.4	21.0
501074 2013 ST_{47}	17.3	X	296.08491	204.42108	165.36275	6.38373	0.3309928	0.22955235	2.6416882	21	6 14.2	20.9
501075 2013 SU_{49}	17.7	X	270.69820	313.52415	122.11671	3.33126	0.1477132	0.23552904	2.5968074	21	9 8.5	21.0
501076 2013 SM_{50}	16.6	X	4.00346	292.42923	37.60988	14.98038	0.1508184	0.23588450	2.5941980	21	10 1.4	19.4
501077 2013 SY_{50}	16.9	X	252.23275	320.12928	86.36330	3.29901	0.1767658	0.22308275	2.6925187	21	7 2.5	20.9
501078 2013 SQ_{53}	17.3	X	50.44484	261.00831	2.74909	4.59957	0.1920601	0.24185853	2.5513015	21	9 17.4	20.3
501079 2013 SE_{54}	16.1	X	298.63162	299.39501	7.50145	8.18967	0.0362136	0.21095142	2.7947807	21	5 8.0	19.9
501080 2013 SK_{55}	18.0	X	334.72686	168.01756	201.22029	14.98593	0.2841366	0.24348107	2.5399543	21	9 16.3	19.6
501081 2013 SN_{55}	17.3	X	285.05945	181.27005	204.45372	11.75692	0.1950536	0.22484647	2.6784199	21	7 10.1	21.1
501082 2013 SM_{56}	16.5	X	18.93531	331.19745	333.04316	14.22033	0.1055373	0.24091401	2.5579654	21	9 7.3	19.3
501083 2013 SJ_{57}	17.5	X	217.82986	314.70398	89.07622	3.73313	0.0258757	0.21566828	2.7538812	21	6 4.4	21.4
501084 2013 SG_{58}	15.8	X	80.83739	159.80367	308.76507	16.32256	0.1685531	0.17859068	3.1229391	21	3 22.8	20.3
501085 2013 SS_{62}	17.3	X	302.13248	201.57176	169.21945	9.50276	0.1557360	0.23552240	2.5968562	21	7 22.9	20.5
501086 2013 SN_{64}	16.3	X	266.14008	127.21102	292.02773	21.14414	0.0382335	0.23999458	2.5644944	21	8 17.8	20.0
501087 2013 SN_{66}	17.4	X	289.34379	81.85234	351.01084	14.54042	0.0879454	0.25203079	2.4821822	21	10 8.1	20.4
501088 2013 SR_{68}	17.3	X	335.10689	152.90941	157.65485	2.79299	0.1932466	0.23250763	2.6192558	21	6 20.6	19.8
501089 2013 SK_{71}	17.0	X	301.28946	331.07885	25.58371	8.87139	0.2330302	0.23156818	2.6263351	21	6 18.7	20.3
501090 2013 SY_{71}	17.5	X	341.68823	182.08419	171.07963	14.65091	0.1956768	0.24421589	2.5348568	21	9 15.1	19.3
501091 2013 SL_{72}	17.3	X	241.77403	31.50722	8.41374	6.39224	0.0644046	0.22492036	2.6778333	21	6 25.1	21.1
501092 2013 SM_{72}	17.8	X	11.24301	183.28329	171.32473	6.81756	0.1258335	0.25633049	2.4543465	21	11 15.3	20.5
501093 2013 SP_{72}	17.9	X	2.10423	313.68712	0.06866	3.93918	0.1309116	0.24214294	2.5493033	21	8 27.5	20.3
501094 2013 SW_{76}	17.4	X	310.83697	87.59582	256.43689	10.23107	0.1860954	0.23277843	2.6172240	21	6 24.6	20.5
501095 2013 SH_{78}	17.3	X	282.37241	282.65398	80.52065	4.12920	0.2250317	0.22307124	2.6926113	21	6 3.9	21.1
501096 2013 SN_{81}	17.5	X	309.94894	152.55121	196.00159	6.03494	0.3152529	0.22817124	2.6523375	21	6 7.7	20.5
501097 2013 SO_{81}	16.4	X	153.66477	206.27036	234.14241	9.62502	0.1028709	0.19011511	2.9954240	21	5 10.5	20.9
501098 2013 SP_{81}	17.4	X	288.21074	192.73740	222.19770	4.59467	0.2431848	0.23075432	2.6325068	21	8 16.9	20.6
501099 2013 ST_{81}	16.9	X	261.78231	344.23029	50.16362	9.68802	0.2091039	0.21718689	2.7410291	21	6 22.8	21.1
501100 2013 SV_{81}	16.8	X	323.32067	336.88069	45.49599	8.30896	0.1962292	0.23585688	2.5944004	21	9 21.2	19.2
501101 2013 SZ_{82}	17.3	X	280.99423	104.02794	305.82007	11.88191	0.2573732	0.23182367	2.6244050	21	7 30.1	20.7
501102 2013 SB_{83}	17.7	X	331.45754	237.47315	105.75103	5.78905	0.3005021	0.23758021	2.5818393	21	7 19.8	19.3
501103 2013 SF_{83}	16.1	X	181.78354	183.89766	260.32579	14.22482	0.1057905	0.20642597	2.8354794	21	6 13.0	20.5
501104 2013 SG_{85}	16.9	X	20.69974	182.47565	123.70581	7.54367	0.2187526	0.24342703	2.5403303	21	10 6.8	19.5
501105 2013 SA_{87}	7.1	X	22.16333	141.61321	207.58566	40.74362	0.0768958	0.00362887	41.9393566	21	10 8.3	23.0
501106 2013 TN_{1}	17.7	X	287.04178	200.44676	172.81741	4.34097	0.1470321	0.22944066	2.6425454	21	7 5.4	21.0
501107 2013 TF_{2}	16.8	X	334.52583	330.05125	331.07406	15.02149	0.1904946	0.22739240	2.6583903	21	6 2.8	20.0
501108 2013 TF_{3}	17.0	X	290.05724	82.05509	305.87106	13.50518	0.1401702	0.23099274	2.6306950	21	7 31.8	20.2
501109 2013 TE_{7}	17.2	X	264.73238	357.83146	62.90724	7.24860	0.1988333	0.22852233	2.6496202	21	8 4.3	21.0
501110 2013 TJ_{7}	17.0	X	315.54320	59.90007	270.65170	10.87675	0.1959169	0.23154317	2.6265242	21	6 11.9	19.9
501111 2013 TE_{8}	16.9	X	270.00330	348.63762	36.02617	14.39758	0.2449569	0.22340705	2.6899124	21	6 12.9	21.1
501112 2013 TN_{8}	16.5	X	109.92860	200.02075	19.15063	5.27067	0.1012541	0.24291857	2.5438739	21	9 20.2	20.1
501113 2013 TL_{10}	17.0	X	29.16146	142.14107	166.32142	9.59912	0.0528847	0.24060555	2.5601512	21	9 26.7	20.0
501114 2013 TG_{12}	17.3	X	29.64742	340.11476	8.57423	5.20221	0.1413059	0.25765830	2.4459071	21	12 5.3	20.2
501115 2013 TU_{12}	17.0	X	349.08627	111.99082	222.12560	24.85035	0.4022493	0.24109610	2.5566774	21	8 22.5	18.8
501116 2013 TP_{13}	18.0	X	319.01733	299.42982	50.52450	3.73561	0.2037093	0.23415501	2.6069563	21	7 17.4	20.5
501117 2013 TA_{15}	17.9	X	334.93698	172.13491	151.40419	5.53011	0.2001944	0.23454528	2.6040636	21	7 9.5	20.3
501118 2013 TM_{18}	18.0	X	342.28885	46.94063	294.09159	1.96642	0.1819442	0.23731844	2.5837375	21	8 25.9	20.1
501119 2013 TK_{19}	17.1	X	215.07645	82.77134	312.40128	5.62926	0.0774866	0.21080423	2.7960815	21	5 15.9	21.4
501120 2013 TR_{20}	17.8	X	251.46903	27.60921	26.35505	2.83429	0.2021641	0.22586052	2.6703971	21	7 8.8	21.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501121 2013 TN_{22}	18.1	X	9.88173	262.48523	60.15920	2.22093	0.1459403	0.24455448	2.5325166	21	9 27.1	20.5
501122 2013 TV_{23}	16.5	X	284.66669	101.69245	246.68074	5.57886	0.0190967	0.21391421	2.7689150	21	6 18.7	20.1
501123 2013 TX_{23}	17.9	X	330.44793	10.86775	338.59227	2.99858	0.1720569	0.23434056	2.6055799	21	8 13.9	20.4
501124 2013 TH_{24}	16.9	X	350.71738	67.64697	219.65267	12.09910	0.1019168	0.21992666	2.7182170	21	6 23.6	20.2
501125 2013 TU_{25}	17.7	X	305.51602	19.47385	7.85806	5.05533	0.2212542	0.23763727	2.5814260	21	8 15.4	20.3
501126 2013 TO_{26}	17.9	X	350.72841	336.68613	18.35871	7.15366	0.0808818	0.24462638	2.5320203	21	10 4.2	20.5
501127 2013 TO_{31}	17.0	X	274.22511	41.25482	323.32345	4.72043	0.1014826	0.21979014	2.7193425	21	6 13.5	20.8
501128 2013 TX_{31}	17.5	X	312.11907	158.74849	195.55260	5.08616	0.2858588	0.23341315	2.6124771	21	6 24.5	20.4
501129 2013 TL_{32}	17.6	X	302.58508	127.25702	262.36703	0.70038	0.1675440	0.23496556	2.6009574	21	8 19.7	20.4
501130 2013 TW_{32}	17.7	X	294.61486	202.24342	203.50558	3.56204	0.2946264	0.23508366	2.6000863	21	8 6.0	20.6
501131 2013 TE_{33}	17.2	X	332.20136	130.70345	201.79414	13.08100	0.1986358	0.23132505	2.6281750	21	7 14.9	20.1
501132 2013 TJ_{35}	16.9	X	289.27813	36.08556	324.36053	5.95253	0.0741050	0.21831456	2.7315820	21	7 3.7	20.6
501133 2013 TN_{35}	17.9	X	309.16329	87.99443	294.40155	3.45873	0.2842197	0.23489229	2.6014982	21	7 31.8	20.4
501134 2013 TO_{35}	17.8	X	299.99545	50.79419	15.29733	14.51501	0.2495823	0.24017025	2.5632438	21	9 28.2	20.2
501135 2013 TE_{39}	17.1	X	265.08088	185.12490	204.06477	5.63361	0.0545538	0.22181323	2.7027824	21	7 10.9	20.8
501136 2013 TO_{40}	17.2	X	172.15942	35.04127	39.83366	2.37481	0.0461533	0.20443286	2.8538792	21	5 20.0	21.3
501137 2013 TJ_{43}	16.9	X	266.26785	348.75676	14.36437	10.97695	0.1654640	0.21693215	2.7431745	21	5 21.2	21.1
501138 2013 TM_{43}	17.4	X	278.21942	55.56572	14.84039	13.13841	0.1715419	0.23732843	2.5836651	21	9 11.9	20.7
501139 2013 TX_{44}	17.3	X	241.58735	200.89919	219.43139	4.67175	0.0690885	0.22462371	2.6801904	21	7 20.3	21.1
501140 2013 TT_{52}	17.1	X	335.33118	97.88312	226.21829	11.81973	0.3018803	0.23381418	2.6094891	21	6 25.1	19.2
501141 2013 TS_{53}	18.0	X	356.11513	12.27775	305.07680	3.83490	0.3153325	0.23991568	2.5650566	21	8 28.2	19.1
501142 2013 TV_{53}	17.2	X	279.83300	131.20121	237.00432	7.14431	0.2415378	0.22259437	2.6964555	21	6 5.2	20.9
501143 2013 TB_{54}	17.6	X	328.84737	71.05899	265.39849	3.79905	0.2754075	0.23456428	2.6039230	21	7 4.8	19.8
501144 2013 TT_{55}	17.2	X	354.19778	12.45520	294.58801	4.01644	0.2347798	0.23493571	2.6011777	21	7 30.2	19.0
501145 2013 TL_{61}	17.0	X	338.61171	114.25554	216.19106	15.27401	0.2446844	0.23630303	2.5911339	21	7 20.2	19.5
501146 2013 TT_{61}	16.4	X	34.51860	273.65060	248.95428	9.52073	0.1636232	0.18434620	3.0575947	21	3 20.7	20.0
501147 2013 TM_{62}	18.0	X	293.79157	238.69305	127.82269	6.30224	0.3134772	0.23022602	2.6365324	21	6 9.8	21.5
501148 2013 TO_{64}	17.4	X	282.59228	334.00674	6.55382	4.15612	0.0825544	0.21553593	2.7550084	21	5 25.5	21.3
501149 2013 TR_{65}	17.0	X	266.39802	221.24794	208.47823	12.88902	0.2288909	0.22781781	2.6550799	21	8 7.2	21.0
501150 2013 TV_{65}	17.2	X	251.21665	114.76392	316.66189	7.86066	0.1395829	0.23035547	2.6355445	21	8 8.2	20.8
501151 2013 TK_{70}	17.8	X	342.10867	251.18393	51.42748	2.40189	0.2282207	0.23161164	2.6260065	21	6 19.7	19.9
501152 2013 TX_{71}	17.9	X	318.81797	145.85476	183.87831	1.83883	0.1189445	0.23101994	2.6304885	21	6 28.4	20.8
501153 2013 TG_{72}	18.0	X	293.07371	17.06662	10.88858	1.81047	0.1411231	0.23163196	2.6258529	21	8 6.5	21.0
501154 2013 TM_{72}	17.5	X	329.15109	341.25409	8.38403	7.98081	0.2057856	0.24028615	2.5624195	21	8 11.5	19.8
501155 2013 TP_{72}	17.8	X	290.66252	161.34099	196.18548	3.67871	0.2263272	0.22419929	2.6835719	21	6 6.9	21.3
501156 2013 TU_{73}	17.4	X	327.32136	79.01944	259.66921	3.16354	0.2933639	0.23320714	2.6140155	21	7 1.3	19.5
501157 2013 TZ_{73}	17.0	X	291.91106	198.42877	223.09374	11.66345	0.2374899	0.23641446	2.5903197	21	8 30.8	20.3
501158 2013 TM_{77}	17.5	X	317.51283	86.55092	299.72668	10.31646	0.2006020	0.24183786	2.5514468	21	9 4.1	20.0
501159 2013 TQ_{77}	17.3	X	175.94156	97.40093	342.84847	2.90615	0.1647215	0.20472846	2.8511314	21	6 2.7	22.0
501160 2013 TD_{79}	16.5	X	229.37574	57.67971	2.21075	22.18047	0.0428547	0.22633852	2.6666360	21	7 15.4	20.7
501161 2013 TH_{79}	18.2	X	304.44046	26.53141	346.75340	3.79420	0.2497958	0.23638836	2.5905103	21	7 16.7	20.9
501162 2013 TW_{79}	18.2	X	349.21418	303.03277	41.44214	22.46419	0.1033565	0.37009948	1.9212789	21	10 16.8	19.6
501163 2013 TF_{80}	17.6	X	335.86403	173.18887	184.36661	11.84771	0.0705088	0.23963251	2.5670769	21	9 9.9	20.6
501164 2013 TU_{82}	17.5	X	344.82218	189.45692	203.99400	10.14509	0.2545036	0.25507912	2.4623669	21	12 7.1	19.4
501165 2013 TR_{83}	17.9	X	306.90309	145.52736	216.71174	11.09479	0.1870112	0.23096307	2.6309203	21	7 12.1	21.2
501166 2013 TB_{84}	17.1	X	271.09727	23.43824	343.83044	4.76750	0.1412213	0.21865492	2.7287466	21	6 6.8	20.9
501167 2013 TK_{84}	17.1	X	247.69647	150.75059	250.21005	3.42461	0.1201940	0.21916512	2.7245101	21	6 26.7	20.9
501168 2013 TL_{84}	18.2	X	310.84978	145.85613	250.52651	2.87188	0.2657284	0.23941733	2.5686149	21	8 29.1	20.5
501169 2013 TJ_{89}	17.8	X	356.51107	119.90872	230.51996	4.70575	0.1446367	0.24377676	2.5379000	21	10 9.8	20.3
501170 2013 TO_{89}	17.6	X	314.49084	358.19048	357.67051	4.29221	0.2265670	0.23192142	2.6236676	21	7 13.6	20.4
501171 2013 TX_{89}	17.1	X	209.67092	227.65774	212.68589	10.90611	0.2273364	0.21323099	2.7748265	21	6 29.9	22.0
501172 2013 TC_{93}	17.3	X	310.62077	160.26484	201.76327	7.05768	0.1868701	0.23085018	2.6317779	21	7 19.3	20.3
501173 2013 TM_{93}	17.1	X	318.45889	145.16222	205.31030	10.72372	0.1212449	0.22878883	2.6475622	21	7 24.7	20.5
501174 2013 TN_{94}	17.4	X	318.33879	160.27389	201.47874	13.98950	0.2642279	0.23661805	2.5888336	21	7 19.3	20.2
501175 2013 TV_{94}	17.1	X	233.71694	196.89381	196.56989	5.06754	0.1381879	0.20946667	2.8079720	21	5 31.8	21.5
501176 2013 TS_{95}	18.0	X	322.72737	209.06405	153.58278	2.46181	0.1733509	0.23359593	2.6111142	21	8 17.2	20.4
501177 2013 TK_{96}	17.5	X	59.81679	91.27029	217.26272	10.19249	0.1074789	0.25484404	2.4638810	21	11 18.0	20.7
501178 2013 TC_{99}	16.4	X	267.66121	204.78303	182.33269	8.78180	0.1250470	0.22073037	2.7116148	21	7 1.3	20.3
501179 2013 TM_{99}	17.8	X	321.95771	48.49496	3.98187	9.43783	0.2855467	0.24464069	2.5319216	21	10 23.5	19.2
501180 2013 TU_{99}	16.5	X	243.84801	26.47221	15.33683	15.05319	0.1928373	0.21524165	2.7575190	21	6 14.2	21.2
501181 2013 TQ_{102}	17.4	X	224.86765	44.84200	11.72405	3.46425	0.0915176	0.21619100	2.7494404	21	6 24.2	21.6
501182 2013 TO_{106}	17.4	X	4.14282	268.08018	17.30283	7.01566	0.2216411	0.23141739	2.6274758	21	7 23.4	19.6
501183 2013 TP_{106}	17.1	X	256.04603	206.83241	196.91743	5.03155	0.0913922	0.22286184	2.6942977	21	7 13.4	21.0
501184 2013 TT_{108}	18.1	X	297.07251	147.11606	229.95167	1.30534	0.2316881	0.23106102	2.6301767	21	7 11.9	21.2
501185 2013 TW_{108}	17.5	X	283.34785	203.54959	198.37965	4.98062	0.2519714	0.23141129	2.6275220	21	7 22.0	21.0
501186 2013 TH_{109}	16.7	X	309.56121	329.16919	354.67826	13.50884	0.1944264	0.21991460	2.7183164	21	5 19.2	20.3
501187 2013 TM_{109}	16.9	X	269.89879	49.43923	6.67954	9.73718	0.1581316	0.22853267	2.6495403	21	8 12.3	20.6
501188 2013 TG_{110}	16.9	X	225.44339	130.03023	286.11291	3.33698	0.0808551	0.21404840	2.7677577	21	6 25.3	20.7
501189 2013 TT_{110}	17.4	X	253.35500	171.34842	245.27572	5.31590	0.1850348	0.22226666	2.6991054	21	7 14.9	21.6
501190 2013 TX_{112}	16.9	X	261.86700	342.44714	39.65525	6.50258	0.0524466	0.21814371	2.7330081	21	6 28.6	20.7
501191 2013 TP_{113}	16.9	X	295.13430	190.42652	202.57275	12.10298	0.0721268	0.23269644	2.6178387	21	8 22.8	20.5
501192 2013 TS_{114}	16.8	X	292.92104	209.26413	204.17128	21.94841	0.0434739	0.23899990	2.5716049	21	9 22.5	20.3
501193 2013 TJ_{115}	17.0	X	3.07682	271.71517	28.90781	4.39499	0.2342508	0.22939641	2.6428853	21	8 15.9	19.0
501194 2013 TM_{116}	16.8	X	254.60228	126.66286	261.78360	5.56621	0.0642545	0.21741061	2.7391484	21	6 25.8	20.4
501195 2013 TX_{123}	18.7	X	295.24725	91.33615	310.01558	1.47966	0.2250382	0.23577520	2.5949996	21	8 14.5	21.3
501196 2013 TH_{124}	17.2	X	249.39214	83.53480	3.89039	12.28365	0.1223398	0.23228697	2.6209143	21	9 2.4	20.9
501197 2013 TL_{124}	18.8	X	322.20872	138.15275	251.77824	1.66963	0.3245529	0.24244349	2.5471960	21	9 8.8	20.2
501198 2013 TO_{126}	17.4	X	310.63132	59.88760	312.14272	2.67352	0.2097454	0.23627817	2.5913156	21	8 1.9	20.1
501199 2013 TK_{127}	17.2	X	270.24688	107.50742	268.76507	4.16316	0.0732737	0.21881660	2.7274023	21	6 28.5	20.8
501200 2013 TK_{128}	17.7	X	51.61243	102.55985	203.07244	10.04410	0.1933727	0.25779492	2.4450428	21	11 17.4	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501201 2013 TH_{130}	17.0	X	330.04327	355.91447	327.89725	9.15082	0.1249676	0.23082364	2.6319796	21	7 10.8	20.0
501202 2013 TU_{134}	18.3	X	288.25506	294.69610	119.81678	5.97597	0.2976291	0.23230341	2.6207906	21	8 9.9	21.5
501203 2013 TB_{136}	16.4	X	293.46130	241.43893	192.95042	30.28624	0.2662184	0.23470457	2.6028852	21	9 19.5	19.4
501204 2013 TE_{136}	17.1	X	237.59742	104.78223	340.70942	9.79137	0.2054226	0.22355340	2.6887383	21	8 5.6	21.3
501205 2013 TT_{136}	18.0	X	355.64888	308.05853	29.36359	16.78862	0.2231058	0.24437029	2.5337890	21	10 2.4	20.1
501206 2013 TZ_{136}	16.7	X	248.72458	220.36142	208.48472	13.86186	0.1025482	0.22805073	2.6532718	21	8 2.0	20.8
501207 2013 TO_{141}	17.3	X	233.08271	331.72921	43.73280	4.98508	0.0816501	0.20925216	2.8098906	21	5 12.1	21.4
501208 2013 TS_{141}	17.5	X	252.86039	2.21658	17.63921	12.93949	0.1593346	0.21738151	2.7393929	21	5 28.5	21.8
501209 2013 TV_{141}	17.1	X	163.18994	64.24527	35.51449	4.72306	0.0273983	0.21295411	2.7772312	21	6 9.1	21.0
501210 2013 TF_{142}	17.8	X	335.06173	282.54540	46.00101	3.94547	0.1127328	0.23179552	2.6246175	21	7 28.0	20.6
501211 2013 TQ_{143}	17.5	X	307.87968	264.32984	94.79434	3.27820	0.2696887	0.23233655	2.6205414	21	6 27.3	20.2
501212 2013 TB_{145}	17.2	X	275.00180	328.76431	51.30264	8.79083	0.2632810	0.22526561	2.6750965	21	6 11.3	21.2
501213 2013 TS_{145}	17.0	X	261.13186	133.25439	253.26690	4.69083	0.2449026	0.21992843	2.7182024	21	6 8.2	21.1
501214 2013 TC_{146}	6.5	X	108.41860	56.28398	147.51002	14.16477	0.1612256	0.00770163	25.3949559	21	8 22.0	20.8
501215 2013 TZ_{153}	17.2	X	27.56361	294.22355	27.77958	4.14211	0.1238173	0.24107434	2.5568312	21	10 21.7	20.2
501216 2013 UW	17.3	X	279.03781	80.54383	19.89708	28.01506	0.3661043	0.23294986	2.6159398	21	9 26.8	20.8
501217 2013 UY_{1}	18.2	X	81.40258	219.15729	88.10868	23.76622	0.0559327	0.38569486	1.8691328	21	—	—
501218 2013 UZ_{2}	16.2	X	242.48919	141.06903	261.09201	16.23109	0.2554966	0.21493736	2.7601209	21	6 9.7	20.7
501219 2013 UP_{3}	17.3	X	337.85967	233.59403	123.63968	18.06488	0.2728928	0.24292125	2.5438552	21	9 16.7	19.2
501220 2013 UB_{6}	16.8	X	263.14952	34.26656	27.50497	7.93660	0.1878953	0.22901820	2.6457942	21	8 6.2	20.6
501221 2013 UX_{7}	16.1	X	185.74028	222.67923	238.99133	14.10502	0.0532484	0.21639088	2.7477470	21	7 7.4	20.3
501222 2013 US_{9}	17.4	X	329.17108	223.68734	130.35966	8.62393	0.1078470	0.23555767	2.5965970	21	8 24.8	20.1
501223 2013 UU_{12}	17.3	X	220.92100	326.29582	79.20759	5.35659	0.0734121	0.21281305	2.7784583	21	6 6.8	21.2
501224 2013 UU_{13}	17.6	X	302.08938	65.03270	293.12124	11.74284	0.2854417	0.23009469	2.6375355	21	6 13.9	21.0
501225 2013 UY_{13}	17.1	X	260.79430	112.81225	310.42997	12.79065	0.2317823	0.22747649	2.6577352	21	7 27.7	20.9
501226 2013 UH_{14}	17.4	X	324.21034	353.59922	28.08178	14.78648	0.1690510	0.24022119	2.5628814	21	9 26.4	19.9
501227 2013 UO_{14}	17.1	X	294.94580	47.10425	3.71942	5.22877	0.2084677	0.23550125	2.5970117	21	9 1.3	20.0
501228 2013 VL_{1}	16.8	X	286.37330	297.35357	79.60535	6.24808	0.2110649	0.22595746	2.6696332	21	6 29.7	20.2
501229 2013 VO_{1}	16.9	X	338.97821	242.84733	125.64913	5.99902	0.2772813	0.24106317	2.5569102	21	10 7.1	18.4
501230 2013 VB_{3}	16.9	X	312.44810	71.53039	310.53106	12.93388	0.1211764	0.23584279	2.5945038	21	8 28.9	19.9
501231 2013 VS_{3}	17.5	X	278.43241	237.96058	169.56786	11.81629	0.1815349	0.22903332	2.6456777	21	8 2.6	21.2
501232 2013 VT_{3}	16.5	X	304.01054	269.78451	148.32716	10.43141	0.0569295	0.24165753	2.5527159	21	10 21.2	19.7
501233 2013 VS_{4}	17.1	X	332.56634	54.68436	299.88333	11.83399	0.2988838	0.23588363	2.5942043	21	8 9.9	18.8
501234 2013 VK_{6}	17.2	X	256.39551	169.08935	252.31717	8.45446	0.1901941	0.22275087	2.6951924	21	7 22.7	21.3
501235 2013 VM_{6}	17.6	X	246.23979	183.20501	249.01438	7.24036	0.2525678	0.22002290	2.7174243	21	7 19.4	22.0
501236 2013 VY_{6}	16.3	X	202.38651	106.87844	328.79735	8.56410	0.0985181	0.21078517	2.7962501	21	6 24.4	20.7
501237 2013 VR_{7}	17.3	X	263.63683	151.97706	237.82675	2.61803	0.1194319	0.21940059	2.7225603	21	7 1.1	21.1
501238 2013 VG_{8}	17.5	X	286.31827	210.20058	197.65991	3.70931	0.2176791	0.22968025	2.6407074	21	8 9.2	20.8
501239 2013 VK_{10}	16.8	X	278.64179	357.68616	51.16394	15.03033	0.2361993	0.23039893	2.6352131	21	8 3.1	20.6
501240 2013 VN_{10}	17.3	X	304.19553	205.43447	189.89012	6.61966	0.1080761	0.23591608	2.5939665	21	9 7.5	20.3
501241 2013 VA_{11}	17.1	X	273.27336	347.06407	73.54249	14.57556	0.2323263	0.23024771	2.6363668	21	8 12.3	20.9
501242 2013 VO_{12}	17.0	X	321.87722	220.59172	146.14682	19.34125	0.2991913	0.23670747	2.5881815	21	8 1.7	19.2
501243 2013 VG_{13}	21.8	X	326.65740	24.71880	156.57530	7.80277	0.3546529	0.92301910	1.0447096	21	—	—
501244 2013 VA_{15}	17.0	X	317.78586	142.76872	213.76908	12.07646	0.1465168	0.22956750	2.6415720	21	7 28.1	20.2
501245 2013 VW_{15}	16.9	X	239.79195	269.54685	112.25363	5.25604	0.1184479	0.20978230	2.8051548	21	5 25.6	21.2
501246 2013 VC_{16}	17.2	X	334.93704	164.22600	197.78932	8.59164	0.1753187	0.23902761	2.5714061	21	9 10.4	19.6
501247 2013 VK_{16}	17.4	X	292.08069	327.80503	79.54165	6.11080	0.2398899	0.23425839	2.6061892	21	8 17.9	20.4
501248 2013 VR_{18}	16.9	X	328.27825	327.05009	36.66896	31.24749	0.2307348	0.23920774	2.5701150	21	9 21.7	19.9
501249 2013 VR_{19}	17.5	X	337.09867	128.67229	220.75363	8.69534	0.2251748	0.23616055	2.5921760	21	8 20.5	19.8
501250 2013 VT_{20}	17.3	X	314.66660	182.10334	187.80136	6.99281	0.2973279	0.23303004	2.6153397	21	7 19.8	19.9
501251 2013 VX_{20}	17.3	X	285.81571	36.96358	30.14113	7.12134	0.3362674	0.23149683	2.6268747	21	8 20.2	20.6
501252 2013 VX_{21}	17.3	X	320.93851	239.81744	128.42902	5.10761	0.2676025	0.23612004	2.5924725	21	8 8.9	19.3
501253 2013 VF_{22}	17.0	X	243.11867	132.84593	312.13671	12.60351	0.2257751	0.22276054	2.6951144	21	8 5.9	21.0
501254 2013 VG_{22}	17.1	X	322.20443	7.65595	17.47585	14.38951	0.0689703	0.23959833	2.5673211	21	9 30.7	20.1
501255 2013 VH_{22}	17.3	X	312.58352	324.71641	17.78928	12.95330	0.3066162	0.22966242	2.6408441	21	6 1.1	20.6
501256 2013 WA	16.5	X	299.62137	66.60577	350.21428	27.80197	0.3159996	0.23444435	2.6048109	21	9 3.6	19.1
501257 2013 WN_{1}	17.6	X	335.41895	217.82610	128.88527	4.67259	0.2905102	0.23614420	2.5922956	21	8 9.3	19.1
501258 2013 WA_{2}	16.9	X	328.20675	262.47457	83.31306	13.74716	0.2814593	0.23198679	2.6231747	21	7 19.1	19.1
501259 2013 WY_{2}	17.0	X	260.53547	192.30144	231.15739	13.22194	0.1928409	0.22107890	2.7087641	21	7 27.4	21.2
501260 2013 WY_{3}	16.1	X	229.48483	252.09342	245.62418	21.13626	0.0579472	0.23504082	2.6004021	21	10 14.7	20.0
501261 2013 WB_{6}	17.2	X	333.27078	217.12071	161.25023	7.14315	0.1942925	0.23871712	2.5736353	21	10 6.3	19.3
501262 2013 WU_{6}	17.1	X	271.52115	18.37817	51.56321	14.63095	0.2258310	0.22909464	2.6452056	21	8 26.9	21.0
501263 2013 WT_{9}	17.3	X	277.49985	219.40941	205.81658	11.39386	0.1598088	0.23011935	2.6373471	21	8 27.4	20.8
501264 2013 WF_{11}	16.7	X	229.43809	242.62060	221.70814	21.15933	0.0498256	0.22388794	2.6860592	21	8 28.8	20.9
501265 2013 WE_{12}	16.7	X	324.29090	248.64731	115.92120	13.73740	0.2181792	0.23197891	2.6232341	21	8 20.9	19.1
501266 2013 WJ_{13}	17.2	X	257.41598	322.09285	82.44376	9.10564	0.1299166	0.21562726	2.7542304	21	7 12.2	21.2
501267 2013 WV_{13}	16.9	X	324.32470	198.74749	127.00390	6.70918	0.0391910	0.20988250	2.8042619	21	7 10.8	20.5
501268 2013 WG_{14}	17.4	X	227.39397	284.02742	156.91286	5.58636	0.0542581	0.21410568	2.7672640	21	8 1.1	21.4
501269 2013 WE_{15}	16.3	X	247.60128	255.81371	85.66754	10.95057	0.0901686	0.19089375	2.9872730	21	4 21.2	20.9
501270 2013 WE_{19}	15.7	X	106.12283	34.52673	111.55927	11.17243	0.0709427	0.19063601	2.9899649	21	6 6.7	20.0
501271 2013 WE_{26}	16.9	X	263.12611	41.73613	12.98896	9.57584	0.2604756	0.22570280	2.6716409	21	7 17.1	21.0
501272 2013 WC_{29}	17.2	X	295.39806	164.02847	246.92465	3.07909	0.2018150	0.23286468	2.6165777	21	8 30.9	20.2
501273 2013 WZ_{33}	17.2	X	256.50792	332.97182	64.59248	5.52688	0.0751177	0.21310919	2.7758837	21	7 9.4	21.1
501274 2013 WT_{34}	17.3	X	222.85689	203.96336	234.80550	3.25796	0.0799527	0.21385255	2.7694472	21	7 21.1	21.4
501275 2013 WN_{37}	16.8	X	265.92825	116.94053	271.64761	12.02273	0.2098536	0.21491262	2.7603327	21	6 20.3	20.8
501276 2013 WH_{41}	17.4	X	212.77568	53.37078	58.54126	4.42746	0.1862156	0.21586779	2.7521841	21	8 16.2	21.8
501277 2013 WJ_{41}	15.8	X	343.02605	358.44555	258.26780	11.25932	0.0337882	0.19045990	2.9918078	21	5 5.6	20.0
501278 2013 WZ_{41}	16.9	X	253.76187	267.93498	133.01586	10.05061	0.2075584	0.21550179	2.7552994	21	6 23.8	21.3
501279 2013 WA_{43}	16.0	X	183.12632	341.04330	64.43290	11.54083	0.0484552	0.18600993	3.0393354	21	4 29.8	20.5
501280 2013 WO_{43}	17.5	X	314.72681	328.88043	53.87027	5.25157	0.1776363	0.22912493	2.6449725	21	9 2.9	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501281 2013 WJ_{46}	16.5	X	335.15977	294.32793	59.35736	11.83542	0.1294068	0.23260558	2.6185204	21	9 9.4	19.5
501282 2013 WM_{46}	16.9	X	304.78613	289.88727	76.95669	7.40274	0.2283689	0.22816495	2.6523862	21	7 11.2	19.9
501283 2013 WS_{46}	16.7	X	238.74110	2.50059	80.48520	11.57486	0.1503908	0.22210063	2.7004503	21	8 10.4	20.9
501284 2013 WV_{46}	17.0	X	293.81252	187.69676	220.21505	13.60272	0.2233580	0.23256143	2.6188518	21	8 15.8	20.4
501285 2013 WY_{46}	17.1	X	232.23842	349.38910	91.11647	6.36786	0.1409579	0.21907075	2.7252925	21	7 29.8	21.2
501286 2013 WK_{53}	16.3	X	8.07846	22.56057	317.57784	6.22725	0.2515866	0.24212221	2.5494488	21	10 30.1	18.7
501287 2013 WR_{54}	16.6	X	152.18229	128.13004	314.51933	8.09819	0.0977671	0.19156948	2.9802441	21	5 8.6	21.2
501288 2013 WW_{54}	16.5	X	226.32659	291.00506	115.82837	10.14232	0.1368702	0.20488762	2.8496547	21	6 10.9	21.0
501289 2013 WY_{54}	17.2	X	311.80367	86.98981	292.14901	11.37783	0.2887809	0.23262463	2.6183775	21	7 29.9	19.7
501290 2013 WB_{56}	16.6	X	281.89286	147.45787	256.95658	8.77584	0.1404780	0.22532799	2.6746027	21	8 8.0	20.2
501291 2013 WH_{57}	17.0	X	324.78615	257.37456	137.25611	4.76761	0.1601395	0.23982557	2.5656991	21	10 14.5	19.4
501292 2013 WY_{57}	16.7	X	302.19078	319.35068	62.12139	14.48670	0.2714955	0.23005680	2.6378251	21	7 22.4	19.9
501293 2013 WA_{59}	17.4	X	259.79705	5.91727	90.08265	5.75908	0.2319106	0.23000879	2.6381921	21	9 10.1	21.1
501294 2013 WZ_{59}	17.6	X	261.92821	255.34664	139.96833	4.11222	0.2024120	0.21741854	2.7390817	21	6 25.4	21.6
501295 2013 WL_{62}	17.1	X	187.15607	305.38543	124.75243	9.11431	0.1907973	0.19612097	2.9339544	21	6 2.7	22.2
501296 2013 WB_{63}	16.8	X	284.99650	219.72908	210.56577	11.13606	0.2226849	0.23340692	2.6125236	21	9 4.6	20.0
501297 2013 WF_{63}	17.3	X	308.37523	196.96295	193.66114	9.33034	0.2790726	0.23221923	2.6214240	21	8 9.9	20.1
501298 2013 WV_{63}	17.2	X	326.08185	220.46942	118.02865	11.35667	0.1012890	0.22697684	2.6616341	21	7 26.3	20.0
501299 2013 WB_{68}	16.3	X	3.47205	328.69631	19.69569	7.87367	0.2187471	0.24180234	2.5516967	21	10 29.4	18.6
501300 2013 WW_{68}	17.8	X	276.93110	136.66483	297.71284	1.22076	0.1863741	0.23416998	2.6068452	21	9 7.6	21.0
501301 2013 WZ_{68}	16.8	X	196.05871	243.15600	235.51186	11.71056	0.0947537	0.22042342	2.7141315	21	8 6.9	21.1
501302 2013 WD_{69}	17.0	X	268.30968	170.91363	196.77926	3.84410	0.1807293	0.21550749	2.7552508	21	5 31.0	21.0
501303 2013 WA_{70}	17.3	X	271.32624	9.14419	42.22693	5.63392	0.0659451	0.22369374	2.6876136	21	8 20.9	20.9
501304 2013 WM_{70}	17.3	X	309.41357	332.46856	12.26915	0.35060	0.0824595	0.21544393	2.7557926	21	7 9.9	20.7
501305 2013 WS_{71}	17.6	X	254.54301	98.79565	297.75781	1.52347	0.2068823	0.21421739	2.7663018	21	6 18.7	21.8
501306 2013 WF_{72}	16.5	X	40.39944	207.10147	63.52832	10.91445	0.1619561	0.22103873	2.7090923	21	9 10.5	19.9
501307 2013 WD_{74}	17.6	X	254.16183	353.03615	112.35882	5.69963	0.1860717	0.23085016	2.6317781	21	9 21.9	21.3
501308 2013 WW_{78}	17.4	X	305.48859	330.12407	78.98492	5.74190	0.2954764	0.23655160	2.5893184	21	9 5.7	19.8
501309 2013 WF_{83}	17.2	X	321.61053	270.11532	80.00375	6.88947	0.0371554	0.21885702	2.7270665	21	8 12.5	20.8
501310 2013 WS_{85}	18.0	X	287.82670	281.74697	154.89386	4.91255	0.2850061	0.23361409	2.6109789	21	9 11.9	21.0
501311 2013 WW_{85}	17.2	X	293.19183	343.38631	76.13322	5.81486	0.2696433	0.23296213	2.6158480	21	9 1.7	20.2
501312 2013 WJ_{86}	16.8	X	250.90243	182.26114	211.44610	17.86893	0.1915727	0.21519128	2.7579492	21	6 12.3	21.3
501313 2013 WJ_{91}	16.4	X	188.11859	148.36042	259.87775	10.21098	0.1290565	0.19187780	2.9770507	21	5 4.6	21.3
501314 2013 WV_{98}	16.6	X	336.82120	303.57631	66.99321	9.62693	0.0419794	0.23265233	2.6181696	21	10 6.1	20.0
501315 2013 WD_{103}	17.6	X	302.50699	336.22195	67.09557	5.42100	0.2401756	0.23597249	2.5935530	21	8 31.5	20.3
501316 2013 WT_{103}	16.2	X	199.50479	91.36306	61.35162	22.58373	0.1078829	0.22915110	2.6447711	21	10 10.5	20.6
501317 2013 WU_{103}	16.8	X	261.23633	174.49994	256.85562	10.87419	0.1542417	0.22479801	2.6788048	21	8 13.0	20.8
501318 2013 WB_{104}	16.7	X	119.21785	198.06002	266.53770	4.45863	0.2013406	0.17924773	3.1153029	21	5 14.5	21.6
501319 2013 WF_{104}	16.7	X	265.43732	138.93353	256.59195	12.89275	0.2061570	0.22063728	2.7123774	21	6 28.2	20.7
501320 2013 WA_{106}	16.2	X	224.59600	337.27623	98.84834	10.50567	0.1366168	0.21566244	2.7539309	21	7 15.6	20.3
501321 2013 WP_{106}	17.7	X	275.63978	147.76121	258.00397	6.39341	0.3093516	0.22534101	2.6744997	21	7 9.5	21.6
501322 2013 WD_{108}	17.6	X	325.27299	251.38439	141.07217	4.61014	0.2184034	0.23819488	2.5773957	21	10 8.1	19.6
501323 2013 WV_{108}	17.3	X	274.25096	167.86654	281.01786	5.14285	0.2254113	0.23208822	2.6224104	21	9 14.6	20.6
501324 2013 XK_{2}	17.5	X	267.99891	266.90416	123.94495	5.73726	0.1720472	0.21697329	2.7428277	21	6 30.6	21.4
501325 2013 XD_{3}	16.6	X	303.52607	139.22938	251.01361	13.45937	0.1116590	0.22929392	2.6436727	21	8 22.9	20.2
501326 2013 XG_{5}	17.3	X	311.03490	257.65328	127.39294	3.42978	0.1256887	0.22958446	2.6414419	21	9 3.9	20.1
501327 2013 XN_{5}	16.4	X	234.33417	70.63111	288.47992	8.58782	0.0030370	0.19278256	2.9677289	21	4 27.9	20.7
501328 2013 XL_{6}	16.3	X	190.94321	102.22743	300.32782	7.76426	0.1088822	0.19304959	2.9649916	21	4 28.8	21.1
501329 2013 XR_{8}	16.7	X	217.31173	65.19582	80.45055	13.88819	0.2056805	0.22816923	2.6523530	21	10 6.3	21.2
501330 2013 XP_{10}	17.2	X	287.72304	140.82313	249.85329	6.95620	0.1282036	0.22468420	2.6797094	21	7 31.6	20.7
501331 2013 XW_{10}	17.3	X	309.46621	310.75293	42.71071	7.23435	0.0394104	0.21740718	2.7391772	21	7 30.1	20.9
501332 2013 XK_{12}	17.0	X	306.95591	314.91674	59.62031	6.98654	0.0851957	0.22164128	2.7041801	21	8 20.1	20.4
501333 2013 XJ_{14}	17.7	X	277.53575	152.54743	261.39056	3.68920	0.2308902	0.22484165	2.6784582	21	8 2.9	21.4
501334 2013 XS_{16}	17.6	X	253.43688	34.63302	27.06851	6.08203	0.0615494	0.21690700	2.7433865	21	8 10.9	21.4
501335 2013 XQ_{18}	16.8	X	222.92397	41.90893	66.92367	10.10927	0.1195833	0.21885081	2.7271181	21	8 31.5	21.0
501336 2013 XT_{20}	16.4	X	293.57228	39.89980	40.01807	29.30744	0.2133973	0.23713675	2.5850571	21	10 18.9	19.3
501337 2013 XM_{23}	16.4	X	206.63248	299.96271	105.91859	22.71930	0.2218135	0.19007564	2.9958386	21	5 25.1	21.8
501338 2013 YK	16.9	X	253.92672	266.22108	132.18606	13.08052	0.1567110	0.21932458	2.7231894	21	6 26.7	21.0
501339 2013 YV_{1}	16.3	X	168.99336	166.38431	280.37226	9.63068	0.0787672	0.18673276	3.0314870	21	6 2.4	21.0
501340 2013 YS_{4}	15.7	X	258.73071	38.84183	286.78180	15.87879	0.2000460	0.17933398	3.1143040	21	3 21.5	21.0
501341 2013 YG_{7}	16.6	X	264.62552	134.17548	260.78004	13.01791	0.0994679	0.21326887	2.7744979	21	7 10.4	20.5
501342 2013 YC_{10}	16.1	X	167.09124	127.36458	275.68411	11.14993	0.1187229	0.17212336	3.2006843	21	4 5.9	21.4
501343 2013 YD_{10}	16.8	X	280.87474	346.24773	107.32653	15.12819	0.2221307	0.22840837	2.6505014	21	10 12.5	20.3
501344 2013 YH_{10}	15.8	X	297.71692	175.30367	123.53011	14.29817	0.0310401	0.17435270	3.1733424	21	5 8.2	20.5
501345 2013 YC_{11}	17.0	X	282.89655	264.77670	143.57066	8.40106	0.2103654	0.21509347	2.7587853	21	8 6.3	20.5
501346 2013 YQ_{11}	17.5	X	267.67920	343.54950	103.00528	5.49745	0.3190675	0.22187483	2.7022822	21	8 23.9	21.5
501347 2013 YN_{12}	15.8	X	254.17978	43.66942	272.19715	12.99314	0.0378323	0.18019435	3.1043828	21	3 22.9	20.6
501348 2013 YS_{13}	16.2	X	108.57038	189.10859	301.26163	12.22263	0.0571323	0.17113066	3.2130502	21	5 15.2	21.1
501349 2013 YE_{15}	17.3	X	328.38961	278.25130	89.20360	4.68975	0.2616838	0.23397061	2.6083258	21	8 30.8	19.2
501350 2013 YO_{15}	16.9	X	350.49774	277.65299	88.18050	12.50107	0.2190764	0.23912517	2.5707066	21	11 2.8	19.3
501351 2013 YV_{19}	15.0	X	32.57723	290.34111	259.98220	21.57608	0.2180556	0.17376863	3.1804492	21	5 2.3	18.7
501352 2013 YM_{20}	16.8	X	353.28220	209.12178	152.12113	3.23374	0.2407303	0.23965669	2.5669043	21	10 31.2	18.8
501353 2013 YC_{25}	17.7	X	312.42234	308.31291	78.95353	3.71480	0.2059291	0.23202553	2.6228827	21	8 31.3	20.3
501354 2013 YQ_{26}	16.9	X	187.28693	10.37388	89.40176	7.20846	0.0591563	0.19725048	2.9227433	21	7 9.5	21.2
501355 2013 YJ_{30}	16.7	X	257.50510	270.94969	135.61601	10.63427	0.2531994	0.20596675	2.8396925	21	6 29.5	21.2
501356 2013 YU_{30}	16.3	X	200.85043	102.37726	280.52175	4.05011	0.1597367	0.17924034	3.1153885	21	4 16.3	21.4
501357 2013 YC_{31}	17.3	X	312.66469	313.69810	76.02216	6.98439	0.1000350	0.22896521	2.6462023	21	9 19.7	20.4
501358 2013 YV_{32}	16.9	X	145.15363	26.07665	72.77826	13.17150	0.0844530	0.19016296	2.9949214	21	5 24.1	21.4
501359 2013 YZ_{32}	16.8	X	81.66485	275.67813	264.17609	7.53682	0.0298396	0.19652788	2.9299032	21	6 11.2	20.8
501360 2013 YD_{33}	17.7	X	271.93313	350.20443	69.64106	6.52763	0.0751008	0.22313895	2.6920666	21	9 1.5	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501361 2013 YN_{33}	16.6	X	204.64786	341.99952	131.30622	10.20966	0.0846680	0.20420243	2.8560257	21	8 14.8	20.7
501362 2013 YY_{33}	16.3	X	115.26087	5.28626	125.37284	18.54505	0.1622767	0.17688036	3.1430380	21	6 11.2	21.3
501363 2013 YE_{36}	16.9	X	246.36486	329.04764	147.80180	13.99217	0.0891358	0.24032396	2.5621507	21	10 14.3	20.5
501364 2013 YO_{40}	16.5	X	342.98785	118.76176	305.90930	16.79672	0.1513208	0.23990978	2.5650987	21	—	—
501365 2013 YA_{42}	17.4	X	301.57589	114.29603	277.99657	4.82330	0.0576370	0.22416611	2.6838367	21	9 3.2	20.8
501366 2013 YS_{42}	16.1	X	172.88524	87.28645	318.64325	11.70390	0.1410891	0.17628648	3.1500931	21	4 14.8	21.4
501367 2013 YQ_{43}	17.1	X	256.48841	118.99278	306.72109	7.78060	0.2116924	0.21246344	2.7815054	21	7 27.8	21.1
501368 2013 YU_{44}	16.2	X	196.21659	291.82176	113.10308	11.62101	0.1424143	0.18093900	3.0958596	21	5 14.2	21.4
501369 2013 YD_{45}	16.2	X	133.41822	167.06103	305.11138	11.84046	0.1186170	0.17766152	3.1338182	21	5 29.4	21.1
501370 2013 YN_{45}	16.2	X	107.93491	82.50882	134.08218	13.41014	0.0373386	0.20305474	2.8667773	21	9 5.3	20.3
501371 2013 YJ_{47}	15.9	X	68.39564	95.68012	91.71364	12.61923	0.0456044	0.18819430	3.0157713	21	6 6.8	19.9
501372 2013 YS_{47}	16.7	X	122.90331	35.45127	96.25195	7.00611	0.1329887	0.18146649	3.0898573	21	6 14.4	21.5
501373 2013 YX_{47}	16.2	X	95.57393	203.85201	300.84849	3.86227	0.1320567	0.17287124	3.1914464	21	5 30.1	20.7
501374 2013 YW_{48}	16.9	X	263.18650	138.33412	257.03188	9.12934	0.3108794	0.21637831	2.7478534	21	6 14.3	21.4
501375 2013 YT_{50}	17.2	X	286.25793	3.95137	91.67342	13.35945	0.1515462	0.23340466	2.6125405	21	11 2.9	20.4
501376 2013 YS_{51}	16.3	X	175.44717	326.97006	109.49924	13.00661	0.0242568	0.18454317	3.0554187	21	5 29.3	20.8
501377 2013 YX_{53}	16.7	X	294.19807	295.83556	78.54052	7.29348	0.0762758	0.21528167	2.7571772	21	7 30.6	20.3
501378 2013 YE_{56}	16.2	X	73.09634	90.46572	73.74302	11.51342	0.0170578	0.18075686	3.0979390	21	5 11.8	20.5
501379 2013 YH_{59}	15.9	X	127.99756	140.15810	316.27806	9.66430	0.0521148	0.17515744	3.1636152	21	4 23.6	20.7
501380 2013 YS_{59}	17.2	X	200.36894	78.72787	37.21463	3.81895	0.0464207	0.20763915	2.8244240	21	8 17.1	21.2
501381 2013 YG_{64}	15.6	X	177.44316	321.77615	100.73900	10.63519	0.0841524	0.17549596	3.1595457	21	5 16.3	20.5
501382 2013 YH_{65}	16.0	X	175.68500	120.80149	289.30603	9.34864	0.0951383	0.17682769	3.1436622	21	4 22.9	21.1
501383 2013 YM_{65}	16.2	X	64.35617	186.82774	354.01560	10.14184	0.1557270	0.17567528	3.1573952	21	6 6.6	20.5
501384 2013 YC_{66}	17.1	X	328.84509	22.04284	18.27374	6.04070	0.3228209	0.23801631	2.5786847	21	10 23.1	17.9
501385 2013 YT_{68}	16.3	X	200.53170	320.55132	122.37170	4.97582	0.0957849	0.18956138	3.0012543	21	7 1.3	20.9
501386 2013 YU_{68}	16.0	X	176.55798	316.37585	127.64983	13.78433	0.0889265	0.18090605	3.0962355	21	6 9.9	20.9
501387 2013 YA_{69}	16.5	X	249.06019	249.31290	132.24372	11.11126	0.1325787	0.18805683	3.0172408	21	6 4.7	21.3
501388 2013 YS_{74}	16.4	X	242.54582	306.95317	76.75239	8.29415	0.1316808	0.19350037	2.9603849	21	5 29.7	20.8
501389 2013 YD_{75}	16.0	X	122.15192	159.06197	302.84436	8.67619	0.1896845	0.17251626	3.1958228	21	5 11.4	21.1
501390 2013 YM_{75}	16.3	X	192.94891	278.79088	132.20690	11.78049	0.0800858	0.18028910	3.1032950	21	5 18.8	21.2
501391 2013 YR_{75}	16.4	X	158.73036	314.94803	133.02922	9.92905	0.0729791	0.18044157	3.1015467	21	5 26.6	21.2
501392 2013 YW_{75}	16.9	X	269.41696	254.68378	133.61924	12.74127	0.0694123	0.19944370	2.9012768	21	7 13.8	21.0
501393 2013 YF_{76}	16.9	X	224.83449	337.31846	142.74538	8.29125	0.1133652	0.21118394	2.7927289	21	9 13.6	21.0
501394 2013 YQ_{78}	16.0	X	131.29427	166.18803	298.56143	8.58143	0.0390332	0.17926764	3.1150722	21	5 7.8	20.6
501395 2013 YE_{83}	15.5	X	287.06579	29.08148	281.32740	9.32962	0.1055953	0.17630171	3.1499116	21	4 18.8	20.1
501396 2013 YH_{83}	16.9	X	346.74416	306.97418	89.57122	4.35076	0.1127577	0.23699996	2.5860517	21	11 25.3	19.6
501397 2013 YR_{83}	16.4	X	301.01806	275.69041	124.83597	13.40949	0.2694051	0.22428104	2.6829197	21	8 16.2	19.2
501398 2013 YF_{90}	16.3	X	153.10453	311.47312	136.38817	10.65712	0.0948186	0.17473748	3.1686821	21	5 22.5	21.3
501399 2013 YH_{92}	16.8	X	142.03101	339.74213	126.19765	10.18721	0.1336279	0.19007095	2.9958878	21	6 3.6	21.6
501400 2013 YQ_{92}	16.7	X	264.53920	304.47748	88.93742	7.78242	0.0525068	0.21229132	2.7830086	21	7 17.8	20.4
501401 2013 YO_{93}	16.6	X	95.50265	29.09948	104.81852	10.19478	0.0278282	0.17298623	3.1900319	21	5 5.9	21.2
501402 2013 YU_{93}	15.6	X	22.53461	121.07436	101.69639	10.88645	0.0246439	0.17758835	3.1346789	21	5 21.4	20.0
501403 2013 YG_{94}	17.2	X	186.81870	303.09219	110.12377	5.72310	0.1844039	0.18382996	3.0633163	21	5 13.5	22.4
501404 2013 YE_{95}	16.4	X	18.49541	125.40402	111.76836	12.21458	0.0234979	0.18062086	3.0994938	21	6 2.8	20.8
501405 2013 YU_{96}	15.6	X	167.13230	344.66880	112.22736	12.35924	0.0719688	0.18216741	3.0819264	21	6 14.5	20.4
501406 2013 YD_{107}	16.9	X	198.11563	268.59625	129.80334	5.93292	0.1716474	0.18439492	3.0570562	21	5 5.9	22.1
501407 2013 YY_{108}	16.6	X	199.80142	75.53726	348.52007	9.22262	0.0742253	0.19128019	2.9832482	21	6 6.1	21.2
501408 2013 YL_{109}	15.8	X	289.49568	252.66963	115.46188	13.87931	0.1395092	0.20485451	2.8499617	21	7 3.7	19.7
501409 2013 YJ_{111}	16.8	X	269.24874	100.35055	340.64478	10.68998	0.2229125	0.22234928	2.6984367	21	8 31.1	20.5
501410 2013 YQ_{113}	16.6	X	307.54561	195.92168	111.23709	6.87650	0.0621500	0.18266087	3.0763733	21	5 22.9	20.8
501411 2013 YT_{116}	16.5	X	222.38181	314.45434	117.16464	12.74626	0.0962600	0.19480699	2.9471327	21	7 10.4	20.9
501412 2013 YV_{120}	15.9	X	167.05897	315.14326	112.06380	28.45154	0.1271799	0.18083553	3.0970404	21	5 20.7	21.3
501413 2013 YN_{124}	16.6	X	166.95550	346.98447	99.53857	6.94948	0.1375628	0.18050225	3.1008515	21	6 3.4	21.6
501414 2013 YA_{125}	16.5	X	281.96291	295.47830	115.14581	7.28910	0.0754343	0.20942897	2.8083089	21	8 31.7	20.2
501415 2013 YS_{128}	16.3	X	161.86540	296.03458	145.58777	12.12672	0.0752961	0.18801653	3.0176720	21	5 22.7	21.0
501416 2013 YP_{130}	17.2	X	221.26709	33.99253	49.18736	7.26125	0.0754112	0.20408303	2.8571396	21	7 28.1	21.5
501417 2013 YQ_{130}	17.0	X	316.40343	323.88689	77.75339	12.54427	0.0406921	0.22442718	2.6817549	21	10 18.3	20.6
501418 2013 YD_{131}	16.1	X	200.58263	29.16388	346.00291	8.32750	0.0538573	0.17305457	3.1891920	21	4 7.6	20.9
501419 2013 YJ_{131}	16.2	X	121.06803	114.67379	320.79094	15.41190	0.0769513	0.16507450	3.2911630	21	3 22.3	21.2
501420 2013 YD_{132}	16.2	X	113.22609	155.56636	339.92685	9.07066	0.0968886	0.18114941	3.0934619	21	6 2.4	20.9
501421 2013 YK_{132}	15.5	X	304.47070	209.43298	81.65140	19.47874	0.1977832	0.17848018	3.1242280	21	4 17.2	20.1
501422 2013 YG_{133}	17.2	X	226.68236	60.78425	335.87380	10.66466	0.1320134	0.19363761	2.9589860	21	5 26.7	22.0
501423 2013 YS_{138}	16.1	X	187.74337	94.46712	310.03671	16.96372	0.0977204	0.18230012	3.0804305	21	4 23.9	21.3
501424 2013 YU_{139}	17.7	X	281.98321	109.01890	327.83426	2.92760	0.2654889	0.22289358	2.6940419	21	9 4.3	20.9
501425 2013 YW_{139}	16.1	X	181.22015	289.33740	116.87843	9.06526	0.1326105	0.17569451	3.1571648	21	5 1.9	21.3
501426 2013 YQ_{141}	16.9	X	299.40902	97.56421	270.28221	5.60606	0.1421996	0.21718873	2.7410136	21	7 16.9	20.2
501427 2013 YP_{146}	16.5	X	143.69652	111.69174	324.49708	11.57640	0.1486891	0.17575518	3.1564383	21	4 24.6	21.7
501428 2013 YF_{149}	16.0	X	140.56568	134.08686	312.93709	22.50308	0.3212027	0.17498330	3.1657137	21	5 16.9	22.0
501429 2013 YH_{149}	16.2	X	109.59414	345.87487	125.65045	18.62308	0.1640249	0.17835673	3.1256695	21	5 16.0	21.2
501430 2013 YD_{150}	17.1	X	321.92878	32.67974	357.47460	4.68438	0.2352020	0.23543120	2.5975268	21	9 21.1	19.2
501431 2013 YL_{150}	16.6	X	265.47886	356.17203	81.05050	10.19496	0.2328008	0.22506878	2.6766559	21	8 23.9	20.5
501432 2013 YP_{150}	15.7	X	185.82614	306.19043	80.35875	10.55497	0.1240059	0.18057910	3.0999717	21	4 13.5	20.8
501433 2014 AV	16.4	X	31.24097	117.77023	91.75307	10.88766	0.0506410	0.17549626	3.1595420	21	5 17.7	20.6
501434 2014 AA_{1}	17.2	X	294.86350	317.31224	76.57348	6.94635	0.2030832	0.21773234	2.7364494	21	8 8.3	20.5
501435 2014 AO_{4}	16.3	X	185.21042	303.17348	95.41325	10.32390	0.0922000	0.17480474	3.1678692	21	4 26.8	21.3
501436 2014 AG_{10}	15.7	X	146.01510	156.13172	311.68157	22.07822	0.1510316	0.18313122	3.0711035	21	6 10.3	20.9
501437 2014 AA_{19}	17.1	X	134.50536	38.27534	89.05406	1.93366	0.1335625	0.18361527	3.0657037	21	6 20.9	21.8
501438 2014 AO_{19}	16.4	X	102.78162	202.45166	300.21400	10.15357	0.0866658	0.17333530	3.1857477	21	5 29.4	21.1
501439 2014 AC_{20}	16.5	X	218.96416	295.29359	71.27587	12.94607	0.0941496	0.18895158	3.0077081	21	4 21.6	21.2
501440 2014 AW_{22}	16.1	X	192.10044	118.63962	284.74703	19.80263	0.0364968	0.17924464	3.1153387	21	4 29.4	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501441 2014 AQ_{23}	15.8	X	258.96297	219.58070	124.77073	10.75805	0.0766693	0.17933812	3.1142560	21	5 9.2	20.5
501442 2014 AW_{23}	16.8	X	201.98445	45.62667	355.32259	5.64712	0.2108844	0.18899222	3.0072770	21	5 7.4	21.9
501443 2014 AB_{27}	15.9	X	175.54549	294.63481	134.43536	27.46635	0.1908688	0.18134045	3.0912889	21	5 29.4	21.6
501444 2014 AG_{27}	15.3	X	113.91784	205.79922	282.70032	14.18326	0.1182617	0.17398441	3.1778190	21	5 29.3	20.1
501445 2014 AH_{27}	15.9	X	152.25049	322.95201	142.80606	18.32930	0.0800309	0.18150059	3.0894703	21	6 11.6	20.9
501446 2014 AJ_{28}	17.4	X	271.35162	275.29153	224.51564	3.82084	0.2161346	0.23604949	2.5929890	21	11 23.9	20.2
501447 2014 AW_{29}	16.6	X	102.11528	221.16367	253.82261	8.40616	0.0930036	0.18026285	3.1035964	21	4 23.2	21.1
501448 2014 AX_{33}	16.8	X	183.54462	325.06594	113.47508	11.05892	0.0840351	0.18852639	3.0122288	21	6 9.4	21.5
501449 2014 AA_{35}	16.4	X	176.80777	161.93513	261.49223	9.81109	0.0989054	0.18890531	3.0081993	21	5 12.3	21.1
501450 2014 AM_{36}	17.0	X	321.48549	98.69977	255.03912	11.87671	0.2480940	0.22470881	2.6795137	21	7 16.9	19.7
501451 2014 AP_{38}	16.8	X	124.44364	328.36552	122.77223	3.50364	0.0800118	0.17158939	3.2073211	21	4 22.7	21.5
501452 2014 AM_{40}	16.2	X	145.44006	13.77703	106.58715	14.98435	0.2001951	0.18373666	3.0643533	21	6 27.5	21.2
501453 2014 AZ_{40}	15.9	X	100.53356	333.65769	126.63425	13.36096	0.0205478	0.15954200	3.3668159	21	4 2.5	20.8
501454 2014 AL_{41}	16.8	X	191.58486	122.13498	299.19319	7.99542	0.1973194	0.18442936	3.0566755	21	5 24.2	22.1
501455 2014 AW_{42}	16.1	X	196.70598	289.98316	81.73836	10.79814	0.1219417	0.18249046	3.0782882	21	4 6.5	21.1
501456 2014 AK_{43}	15.7	X	127.87800	325.70108	124.74316	25.00507	0.1941996	0.17270814	3.1934553	21	5 15.4	21.2
501457 2014 AY_{45}	17.0	X	260.77117	30.15899	59.83513	9.98856	0.3202214	0.21900062	2.7258742	21	8 23.8	21.3
501458 2014 AU_{46}	16.5	X	160.46346	321.45668	124.12467	11.63786	0.0953807	0.17922018	3.1156221	21	5 27.2	21.4
501459 2014 AL_{47}	16.9	X	105.37169	116.35609	29.80307	1.62268	0.1075022	0.17889904	3.1193495	21	6 9.5	21.4
501460 2014 AS_{47}	16.3	X	48.69471	91.96337	115.54413	10.50002	0.0292284	0.17965779	3.1105607	21	6 5.3	20.6
501461 2014 AS_{49}	16.6	X	115.34009	42.62508	114.60745	10.54122	0.0917577	0.18633828	3.0357639	21	7 3.3	21.1
501462 2014 BD_{7}	16.8	X	242.82344	258.36739	131.36466	3.65854	0.1108994	0.18814365	3.0163125	21	6 8.9	21.3
501463 2014 BE_{10}	16.0	X	173.35467	11.69069	23.08193	16.57127	0.2268670	0.17384455	3.1795232	21	4 11.2	21.4
501464 2014 BC_{11}	16.3	X	79.75656	240.71846	313.07315	8.48334	0.0238460	0.18444023	3.0565555	21	6 26.9	20.5
501465 2014 BY_{14}	16.4	X	45.08840	184.64549	67.40780	8.68933	0.0178113	0.19991463	2.8967188	21	7 27.9	20.4
501466 2014 BR_{16}	17.1	X	271.53542	334.04320	77.30787	6.09797	0.1588684	0.21326316	2.7745475	21	8 5.1	20.9
501467 2014 BZ_{17}	15.7	X	261.24593	31.44042	307.06419	26.17279	0.1677709	0.17327179	3.1865261	21	4 5.3	21.3
501468 2014 BU_{18}	16.1	X	132.74822	179.17552	298.02799	7.94813	0.0568390	0.17714505	3.1399064	21	5 29.2	20.7
501469 2014 BV_{19}	16.1	X	193.79314	112.15857	310.64675	7.86435	0.1003572	0.18130172	3.0917291	21	5 29.2	21.0
501470 2014 BM_{20}	16.1	X	158.57174	323.17245	109.34639	12.40438	0.1746209	0.17675343	3.1445425	21	5 14.8	21.4
501471 2014 BR_{30}	16.5	X	189.20072	257.29339	162.67013	11.02638	0.0963865	0.17655705	3.1468740	21	5 24.7	21.6
501472 2014 BE_{36}	15.7	X	196.25038	287.65401	127.19669	10.62116	0.0764663	0.17735426	3.1374367	21	5 26.3	20.6
501473 2014 BJ_{39}	16.2	X	189.84260	133.60945	328.48552	7.91927	0.1099309	0.18609575	3.0384009	21	7 15.2	20.9
501474 2014 BQ_{44}	16.1	X	194.55002	109.01763	311.98300	6.17786	0.1093666	0.18029541	3.1032226	21	5 27.7	21.0
501475 2014 BQ_{48}	16.2	X	135.64658	339.79673	159.86690	19.28921	0.1344083	0.17784999	3.1316039	21	7 7.1	21.4
501476 2014 BV_{52}	15.7	X	110.60061	158.88155	320.25597	15.18203	0.0472499	0.17380683	3.1799832	21	4 28.0	20.5
501477 2014 BW_{54}	16.5	X	210.23182	84.02235	320.06373	8.38981	0.0922146	0.17844383	3.1246522	21	5 22.5	21.5
501478 2014 BT_{58}	16.0	X	224.70418	114.94019	311.29290	10.55276	0.0984555	0.19137951	2.9822159	21	7 7.1	20.5
501479 2014 BD_{60}	17.7	X	72.90922	240.76658	111.34238	23.70435	0.0978315	0.37204563	1.9145729	21	—	—
501480 2014 BD_{62}	15.6	X	172.79174	241.76505	194.80504	13.42237	0.0517007	0.17707609	3.1407216	21	5 26.1	20.4
501481 2014 BW_{62}	16.7	X	215.93518	259.11464	161.09789	11.47360	0.0729257	0.19230164	2.9726747	21	6 21.0	21.3
501482 2014 CO_{2}	16.1	X	201.64349	334.04413	118.87085	11.01962	0.0602005	0.18764453	3.0216589	21	7 16.7	20.4
501483 2014 CU_{2}	15.5	X	122.84917	162.31076	334.30589	27.96081	0.1350414	0.17501410	3.1653423	21	6 24.9	20.8
501484 2014 CR_{4}	17.0	X	178.63452	272.45676	157.59653	3.45047	0.1975482	0.18081049	3.0973264	21	5 26.1	22.2
501485 2014 CW_{4}	16.1	X	232.10929	78.70029	320.69213	8.71749	0.0884340	0.18437007	3.0573308	21	6 10.7	20.8
501486 2014 CK_{5}	16.7	X	181.75389	68.14356	5.49653	4.68950	0.1537768	0.18309996	3.0714531	21	5 30.9	21.7
501487 2014 CL_{6}	16.1	X	53.51445	95.54596	114.33758	12.94636	0.0316111	0.17815898	3.1279819	21	6 14.8	20.5
501488 2014 CN_{12}	16.4	X	193.04526	65.17015	358.46681	7.78764	0.0718216	0.18023105	3.1039614	21	5 29.3	21.2
501489 2014 CW_{12}	16.4	X	105.57487	66.53956	86.93785	6.60449	0.0289418	0.17778697	3.1323438	21	6 8.6	20.7
501490 2014 CJ_{16}	16.5	X	148.55793	142.34843	314.30197	12.84264	0.1790555	0.17499901	3.1655244	21	5 29.6	21.8
501491 2014 CM_{17}	16.3	X	168.87604	316.04631	140.95800	6.28096	0.1195201	0.17966822	3.1104403	21	6 17.2	21.2
501492 2014 DW	16.3	X	195.59652	286.69722	151.62283	7.91885	0.1621068	0.18665054	3.0323771	21	6 19.3	21.3
501493 2014 DP_{1}	17.5	X	265.18922	305.02308	155.58501	4.06939	0.2679267	0.22212438	2.7002578	21	9 14.3	21.0
501494 2014 DV_{1}	16.4	X	144.29246	325.27951	149.64731	11.22888	0.1973512	0.17791367	3.1308565	21	6 20.2	21.7
501495 2014 DO_{8}	16.2	X	139.65111	175.47340	302.74017	10.29538	0.0784609	0.18101072	3.0950418	21	6 10.1	20.9
501496 2014 DF_{9}	16.1	X	175.11127	302.88334	155.71457	17.49629	0.0883249	0.18189147	3.0850425	21	6 25.3	21.1
501497 2014 DW_{23}	16.3	X	183.76687	93.15820	338.97505	15.52815	0.2628476	0.17944069	3.1130691	21	5 29.3	22.1
501498 2014 DP_{28}	15.9	X	250.15439	54.08259	319.77846	13.64593	0.1164178	0.18309800	3.0714749	21	5 24.4	20.8
501499 2014 DB_{29}	16.6	X	131.33507	334.19515	155.59816	6.10696	0.0945491	0.17803966	3.1293793	21	6 17.5	21.3
501500 2014 DZ_{30}	16.9	X	199.11814	289.40119	173.74717	10.07667	0.0874363	0.19173400	2.9785390	21	7 24.0	21.6
501501 2014 DG_{35}	15.5	X	70.30637	206.66971	330.79162	27.10027	0.1503436	0.17222984	3.1993649	21	6 12.0	20.4
501502 2014 DE_{36}	16.9	X	114.29133	144.83402	350.59657	0.53778	0.1115008	0.17375333	3.1806360	21	6 7.1	21.5
501503 2014 DS_{39}	16.4	X	163.50638	119.41092	324.36960	15.72201	0.2404970	0.18219913	3.0815687	21	5 28.2	22.0
501504 2014 DA_{40}	16.5	X	154.96846	324.75996	130.29273	10.45744	0.0934362	0.17796848	3.1302137	21	6 1.3	21.4
501505 2014 DP_{49}	16.5	X	174.69415	319.77284	149.94363	9.86912	0.0646416	0.17856046	3.1232915	21	7 7.2	21.3
501506 2014 DV_{68}	16.3	X	227.13315	276.86428	159.64295	16.02168	0.0744624	0.18311659	3.0712671	21	7 22.5	21.1
501507 2014 DC_{74}	16.1	X	247.67859	304.99066	129.59297	10.05039	0.1251733	0.19166323	2.9792722	21	8 8.6	20.4
501508 2014 DU_{109}	16.5	X	225.39967	272.75298	155.59501	11.64334	0.1554795	0.18595516	3.0399322	21	7 4.3	21.5
501509 2014 DZ_{109}	16.4	X	255.71399	255.92848	142.81403	9.29622	0.0786140	0.18216579	3.0819446	21	7 8.5	20.9
501510 2014 DH_{115}	15.8	X	186.31773	85.08703	344.32258	18.42720	0.1617013	0.17588967	3.1548290	21	5 26.5	21.3
501511 2014 DC_{116}	16.3	X	222.97251	75.75337	351.63610	9.58840	0.0570826	0.17970498	3.1100162	21	7 11.0	21.0
501512 2014 DE_{116}	16.3	X	192.33798	85.21807	1.55309	8.39812	0.0683332	0.17628859	3.1500679	21	6 28.9	21.2
501513 2014 DQ_{119}	16.8	X	290.38642	283.91520	158.86279	9.65083	0.2405708	0.21963906	2.7205894	21	10 2.5	19.9
501514 2014 DT_{121}	16.1	X	221.10700	91.99912	324.74616	8.01062	0.0982516	0.18010464	3.1054135	21	6 20.5	20.9
501515 2014 DB_{127}	16.3	X	197.87333	112.03654	335.26924	9.89240	0.0851376	0.18214944	3.0821290	21	7 5.9	21.1
501516 2014 DG_{127}	16.9	X	183.10515	305.14276	178.49610	8.88893	0.1272269	0.18988854	2.9978061	21	7 31.9	21.8
501517 2014 DQ_{127}	17.0	X	241.59162	271.31606	170.47631	8.36274	0.2046782	0.20079825	2.8882144	21	7 31.6	21.6
501518 2014 DB_{128}	16.7	X	275.12232	234.98288	159.61747	10.77712	0.0665675	0.18942936	3.0026487	21	7 28.8	20.9
501519 2014 DR_{134}	16.1	X	311.11349	184.46488	147.86802	10.07192	0.0818209	0.17547173	3.1598365	21	6 25.9	20.4
501520 2014 EE_{19}	17.0	X	173.09466	104.17099	35.33679	3.41687	0.2106483	0.19135743	2.9824453	21	8 14.0	22.0

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501521 2014 EW_{27}	16.3	X	114.40045	338.15564	160.77891	13.74873	0.1254887	0.17255122	3.1953911	21	6 14.6	21.3
501522 2014 EG_{29}	16.7	X	182.82612	342.50460	106.64183	4.21216	0.1776617	0.18174200	3.0867339	21	6 20.8	21.8
501523 2014 EX_{29}	16.2	X	154.81604	341.85955	163.91775	10.80375	0.0275804	0.18277418	3.0751017	21	7 27.8	20.7
501524 2014 EA_{31}	16.2	X	262.67171	273.83148	152.18822	11.48813	0.1193439	0.19536065	2.9415618	21	8 15.8	20.2
501525 2014 EF_{50}	15.6	X	74.71210	200.98955	352.75298	10.77904	0.0261845	0.17378480	3.1802519	21	6 20.2	20.2
501526 2014 EF_{51}	15.7	X	113.84998	326.63075	175.58397	24.13740	0.0849074	0.16992614	3.2282161	21	6 13.3	20.9
501527 2014 FR_{3}	16.5	X	206.66926	291.90908	126.22864	12.24255	0.1245595	0.17344226	3.1844378	21	6 7.9	21.7
501528 2014 FV_{5}	16.2	X	263.53746	257.17837	147.48249	10.36799	0.1389438	0.18969700	2.9998238	21	7 17.1	20.5
501529 2014 FA_{8}	16.3	X	174.53012	275.53220	171.35769	13.80338	0.2217048	0.17533937	3.1614265	21	6 12.7	22.0
501530 2014 FH_{8}	16.4	X	175.20945	87.39079	5.15495	15.43835	0.2318079	0.17820465	3.1274474	21	6 18.2	22.1
501531 2014 FP_{19}	15.7	X	159.96893	262.99651	172.94977	18.22604	0.1451758	0.17249552	3.1960790	21	5 18.0	21.1
501532 2014 FR_{21}	16.4	X	184.88306	268.42186	206.69387	9.43746	0.1422534	0.18681999	3.0305433	21	7 22.2	21.5
501533 2014 FV_{39}	16.6	X	165.50476	337.29982	172.04806	5.22478	0.1405596	0.18176848	3.0864340	21	8 16.4	21.5
501534 2014 FQ_{55}	15.6	X	107.99035	115.10172	54.59306	18.12075	0.1549120	0.16814434	3.2509818	21	7 20.5	20.8
501535 2014 HY_{35}	16.2	X	128.80050	113.14631	58.90809	16.96355	0.1475617	0.17334690	3.1856055	21	8 17.2	21.5
501536 2014 HQ_{122}	16.7	X	204.65949	283.39814	169.68487	10.41374	0.2356650	0.17839187	3.1252590	21	7 11.1	22.2
501537 2014 HH_{161}	15.9	X	199.78048	25.68299	83.61308	11.79881	0.0507534	0.17304525	3.1893066	21	8 7.1	20.7
501538 2014 HM_{168}	15.8	X	30.23295	275.32880	56.88126	23.09948	0.0892841	0.18370332	3.0647240	21	10 31.2	20.0
501539 2014 JZ_{2}	16.1	X	177.46377	172.56795	71.37490	15.45089	0.0593756	0.21123266	2.7922995	21	12 25.8	20.2
501540 2014 JF_{25}	17.3	X	75.26245	255.46086	116.23495	24.36035	0.1256131	0.36029454	1.9559793	21	—	—
501541 2014 JJ_{40}	17.4	X	198.98685	118.57762	110.53473	5.22370	0.0423767	0.21492864	2.7601956	21	—	—
501542 2014 JE_{56}	18.1	X	115.17854	302.33997	103.56164	23.01515	0.0917363	0.38324592	1.8770868	21	—	—
501543 2014 JG_{56}	18.2	X	266.85870	90.56139	132.98214	23.88545	0.0471775	0.37813723	1.8939554	21	—	—
501544 2014 JH_{56}	18.2	X	55.09344	271.65049	191.33054	22.09614	0.0335271	0.38350279	1.8762485	21	—	—
501545 2014 JC_{66}	16.0	X	48.95931	237.65175	79.23637	11.16869	0.0957415	0.18537453	3.0462766	21	11 4.7	20.2
501546 2014 JJ_{80}	5.5	X	345.23277	97.71504	261.49857	18.68167	0.2801530	0.00344070	43.4548698	21	8 18.1	20.6
501547 2014 KN_{21}	18.8	X	249.76591	136.61136	180.57130	22.07306	0.0063753	0.40335382	1.8141726	21	2 18.1	20.6
501548 2014 KX_{81}	17.2	X	292.57766	293.13734	248.51908	3.37164	0.1338731	0.23239864	2.6200746	21	—	—
501549 2014 KC_{85}	17.9	X	120.67327	94.37754	271.58723	18.11679	0.0964591	0.36821345	1.9278339	21	—	—
501550 2014 KJ_{85}	18.2	X	161.87983	244.51468	93.99789	24.06009	0.0422585	0.37525916	1.9036270	21	—	—
501551 2014 KS_{86}	18.5	X	94.47134	266.30841	176.45033	20.04609	0.1059369	0.38940549	1.8572399	21	1 16.0	20.2
501552 2014 LQ_{9}	18.3	X	188.20435	181.12184	137.78502	24.86610	0.0948352	0.37849154	1.8927733	21	—	—
501553 2014 LB_{16}	18.0	X	14.05720	234.72888	110.26260	7.83632	0.2246101	0.29894186	2.2151930	21	12 2.2	20.1
501554 2014 LN_{24}	18.3	X	2.15322	225.30928	309.87924	18.59850	0.0861606	0.38303857	1.8777642	21	—	—
501555 2014 LX_{25}	18.3	X	206.09593	173.05795	170.05638	22.56167	0.0619242	0.39087549	1.8525805	21	1 30.5	20.6
501556 2014 LF_{26}	18.3	X	171.09572	198.34528	152.31050	23.84212	0.1019110	0.37875985	1.8918793	21	1 5.3	20.8
501557 2014 LX_{26}	17.9	X	55.53613	294.75422	138.76265	24.63760	0.0459787	0.37139299	1.9168152	21	—	—
501558 2014 LD_{27}	18.6	X	64.39150	281.97905	169.47135	23.13734	0.0696527	0.37985943	1.8882266	21	—	—
501559 2014 MO_{18}	17.8	X	25.50338	332.79222	123.26497	24.82482	0.0574303	0.36112058	1.9529954	21	—	—
501560 2014 MD_{37}	17.8	X	325.78352	239.83449	145.01320	4.35670	0.2188929	0.28890269	2.2662179	21	10 9.3	18.9
501561 2014 MG_{37}	18.1	X	45.55809	157.28351	136.87285	7.76786	0.1090615	0.29460792	2.2368650	21	10 19.7	20.7
501562 2014 MA_{55}	18.3	X	38.18207	166.45962	316.60982	17.96037	0.1001387	0.37303016	1.9112027	21	—	—
501563 2014 NA_{19}	18.1	X	69.56315	312.36833	144.85639	22.80130	0.0616527	0.36963971	1.9228717	21	—	—
501564 2014 NT_{28}	18.2	X	107.83375	97.66082	133.40805	6.70470	0.1215813	0.30336189	2.1936232	21	10 13.4	21.3
501565 2014 NQ_{59}	17.8	X	258.08794	153.15147	120.41015	23.72221	0.0576796	0.37045693	1.9200428	21	1 4.3	20.1
501566 2014 NV_{62}	18.1	X	207.79687	356.57854	301.13042	17.27060	0.0614615	0.36610677	1.9352224	21	—	—
501567 2014 NF_{63}	21.0	X	145.61165	325.64200	297.63111	2.16864	0.4199104	0.33580940	2.0499384	21	12 26.1	24.9
501568 2014 OC	17.7	X	303.96401	257.68581	299.13478	17.46123	0.0787070	0.36590237	1.9359430	21	—	—
501569 2014 OE_{5}	18.6	X	146.91985	0.50007	309.08459	14.72660	0.0581780	0.34295879	2.0213496	21	—	—
501570 2014 OQ_{43}	17.4	X	314.83223	253.07705	112.42206	6.47788	0.2614908	0.26868877	2.3784993	21	7 23.6	19.4
501571 2014 OQ_{97}	17.4	X	210.41684	128.87721	151.57711	23.69259	0.0555067	0.35074221	1.9913336	21	—	—
501572 2014 OP_{127}	18.0	X	100.76455	116.97395	90.06758	7.26873	0.0454933	0.28493187	2.2872240	21	8 20.9	20.9
501573 2014 OV_{143}	18.1	X	59.59910	110.53989	88.09443	3.14136	0.1438931	0.27020255	2.3696075	21	6 20.8	20.5
501574 2014 OO_{195}	18.2	X	65.43200	187.15536	147.76303	6.66371	0.1906489	0.31016172	2.1614437	21	—	—
501575 2014 OB_{232}	19.7	X	106.16144	78.19628	287.68680	1.44101	0.2176735	0.33524420	2.0522418	21	—	—
501576 2014 OA_{296}	18.3	X	65.08965	113.45676	199.04221	0.79950	0.1627234	0.30194083	2.2005006	21	12 14.2	21.1
501577 2014 OG_{296}	18.0	X	32.14962	149.04254	135.60872	3.96679	0.1902166	0.28024919	2.3126317	21	9 23.9	20.2
501578 2014 OX_{296}	18.1	X	35.71384	251.90873	98.19427	4.18909	0.1649890	0.30106760	2.2047535	21	12 29.8	20.8
501579 2014 OE_{366}	18.4	X	132.62709	280.57333	128.35833	22.35570	0.0833178	0.37439063	1.9065699	21	2 3.4	20.0
501580 2014 OZ_{390}	18.6	X	330.01871	184.47528	330.76378	17.21793	0.0661667	0.35571884	1.9727171	21	—	—
501581 2014 OB_{394}	6.1	X	355.77492	9.71244	8.08485	20.68752	0.2547074	0.00305802	47.0084367	21	10 3.6	21.5
501582 2014 PN_{21}	18.5	X	64.58181	160.63684	138.21255	5.87987	0.2142451	0.30515238	2.1850341	21	12 3.3	21.6
501583 2014 QS_{2}	18.3	X	35.72539	308.86944	164.71949	23.06102	0.0879178	0.36047945	1.9553104	21	—	—
501584 2014 QZ_{21}	17.9	X	63.46911	12.97488	270.14331	5.05804	0.1866455	0.29678891	2.2258929	21	11 4.1	20.8
501585 2014 QA_{43}	11.4	X	28.27615	247.95190	118.39006	37.21295	0.5072939	0.03276851	9.6715978	21	12 30.9	19.9
501586 2014 QG_{119}	19.2	X	113.53730	330.85369	313.23805	1.05537	0.1516846	0.31659074	2.1320820	21	12 27.9	22.3
501587 2014 QE_{124}	17.9	X	50.15854	294.62651	333.83075	2.34731	0.1392128	0.28430855	2.2905658	21	9 18.5	20.4
501588 2014 QX_{136}	17.3	X	134.63259	281.04644	161.19034	5.92695	0.1848695	0.22750373	2.6575231	21	4 30.1	21.4
501589 2014 QY_{140}	19.3	X	75.66683	223.09748	112.31194	2.18118	0.1294516	0.31526210	2.1380682	21	—	—
501590 2014 QN_{141}	17.0	X	148.72263	253.07685	161.00803	22.25100	0.0633974	0.22705330	2.6610366	21	3 29.3	20.9
501591 2014 QF_{166}	18.1	X	91.01995	93.43635	328.07415	18.22731	0.1378465	0.35217876	1.9859148	21	—	—
501592 2014 QK_{166}	17.4	X	323.77822	227.71124	156.85622	23.34620	0.1798373	0.28795784	2.2711724	21	10 8.6	19.4
501593 2014 QY_{198}	17.2	X	171.24809	273.73956	187.78061	6.65397	0.1688965	0.25559124	2.4590767	21	6 24.7	21.3
501594 2014 QA_{224}	18.4	X	241.06064	200.92624	312.57812	4.77363	0.0305013	0.30988676	2.1627220	21	12 13.2	20.7
501595 2014 QO_{226}	19.5	X	96.60327	26.13661	289.15116	0.55144	0.1789267	0.31983251	2.1176506	21	—	—
501596 2014 QX_{237}	19.0	X	349.20201	292.89476	124.47459	2.59188	0.2059136	0.30381387	2.1914470	21	—	—
501597 2014 QH_{240}	18.7	X	20.99910	208.36234	152.26596	5.57279	0.0973087	0.30226127	2.1989451	21	12 13.9	21.1
501598 2014 QD_{241}	18.6	X	97.17338	176.34049	105.61340	2.41977	0.1441999	0.30727092	2.1749790	21	12 7.5	21.7
501599 2014 QA_{300}	18.0	X	32.60023	145.79302	127.27555	4.95781	0.1716617	0.27799121	2.3251377	21	9 2.9	20.2
501600 2014 QT_{300}	18.1	X	83.78357	179.37437	112.50310	4.27914	0.1650695	0.30534866	2.1840976	21	12 8.3	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501601 2014 QV_{306}	18.5	X	98.98638	287.87802	356.30006	4.65994	0.1837921	0.30856890	2.1688755	21	12 13.9	21.8
501602 2014 QS_{322}	18.0	X	3.31595	187.04214	121.07397	2.14628	0.1955556	0.27594750	2.3366038	21	8 30.2	19.5
501603 2014 QT_{328}	18.3	X	57.74144	326.35003	31.95035	5.21374	0.1480266	0.30974987	2.1633592	21	—	—
501604 2014 QQ_{336}	17.9	X	344.91195	233.01875	133.85979	4.49906	0.2430970	0.28621757	2.2803693	21	11 3.5	19.1
501605 2014 QU_{357}	17.5	X	196.02689	102.82007	18.55401	5.81161	0.0977835	0.26659670	2.3909264	21	8 19.7	20.9
501606 2014 QC_{369}	18.6	X	50.16587	215.99800	139.23035	5.78816	0.2345562	0.30977910	2.1632231	21	—	—
501607 2014 QL_{382}	18.3	X	9.10325	145.77160	182.06383	4.59357	0.1923725	0.28631698	2.2798415	21	10 17.8	20.0
501608 2014 QU_{390}	18.1	X	38.26593	130.42739	358.70344	20.18135	0.0620441	0.36694695	1.9322673	21	—	—
501609 2014 QU_{403}	17.9	X	45.29220	39.99647	251.65230	5.47662	0.2336943	0.29135080	2.2535053	21	10 30.6	20.7
501610 2014 QG_{417}	17.1	X	299.71805	78.25325	196.03228	14.28927	0.0634709	0.23344290	2.6122552	21	3 21.8	20.6
501611 2014 QW_{438}	17.5	X	199.63910	16.22857	110.42457	6.03936	0.0618304	0.25754596	2.4466183	21	9 1.8	20.9
501612 2014 RE	17.8	X	351.62250	186.72560	226.72501	6.03518	0.3440147	0.29252964	2.2474470	21	—	—
501613 2014 RV_{30}	18.1	X	131.92107	219.65648	204.57975	19.57819	0.0827092	0.37086104	1.9186477	21	2 20.4	20.4
501614 2014 RP_{41}	17.9	X	345.20527	197.62939	152.92384	7.74594	0.1368091	0.28223862	2.3017514	21	9 26.9	19.7
501615 2014 SQ_{36}	18.7	X	355.60391	272.82944	142.18270	3.79639	0.1301652	0.30712822	2.1756527	21	—	—
501616 2014 SN_{48}	18.1	X	12.67497	244.13014	40.19855	6.07035	0.0946965	0.27362391	2.3498133	21	8 3.6	20.5
501617 2014 SL_{58}	18.5	X	143.44416	112.37582	114.70114	6.07103	0.0735601	0.29951404	2.2123708	21	11 13.7	21.5
501618 2014 SL_{93}	18.4	X	93.67536	321.67419	330.87259	4.75168	0.1744135	0.30733940	2.1746560	21	12 19.3	21.7
501619 2014 SQ_{96}	19.3	X	117.75394	332.52800	340.92736	2.49073	0.0552595	0.31986616	2.1175021	21	—	—
501620 2014 SF_{143}	17.7	X	353.21156	235.98201	284.09566	17.06559	0.0583913	0.35295458	1.9830036	21	—	—
501621 2014 SG_{144}	18.5	X	112.94116	139.55053	133.43976	3.78270	0.2441077	0.30924312	2.1657219	21	12 14.8	22.0
501622 2014 SU_{147}	18.1	X	15.11501	104.85569	217.53026	4.34163	0.1925028	0.28631129	2.2798717	21	10 19.9	20.1
501623 2014 SD_{156}	17.8	X	90.46264	247.33401	2.89593	5.95207	0.1114425	0.28156847	2.3054022	21	10 11.6	21.0
501624 2014 SG_{157}	18.7	X	341.52091	192.86765	217.50013	4.18543	0.1326706	0.29460041	2.2369030	21	12 23.6	20.6
501625 2014 SZ_{164}	18.1	X	65.82439	151.53063	156.42556	5.05887	0.1841590	0.29791356	2.2202875	21	12 11.3	21.3
501626 2014 SZ_{171}	18.7	X	260.79458	21.06849	134.62307	1.92577	0.0625090	0.31255240	2.1504078	21	—	—
501627 2014 SD_{206}	18.0	X	65.04052	319.01239	355.33450	6.08964	0.1813905	0.30173095	2.2015209	21	12 18.3	21.2
501628 2014 SU_{206}	18.4	X	65.98337	158.36973	171.78033	4.59777	0.1516698	0.29710737	2.2243021	21	—	—
501629 2014 SA_{208}	17.1	X	196.92913	331.10498	130.47894	6.27514	0.1602336	0.24327618	2.5413803	21	7 19.1	21.1
501630 2014 SD_{208}	18.1	X	48.18020	195.94939	150.07809	5.10248	0.1661205	0.29530494	2.2333438	21	—	—
501631 2014 SS_{208}	17.4	X	12.97344	226.71773	129.82365	6.39473	0.1377713	0.28371648	2.2937514	21	11 28.8	19.8
501632 2014 SZ_{208}	17.9	X	20.14003	243.63288	114.15685	7.14823	0.1535460	0.28837930	2.2689591	21	12 14.6	20.3
501633 2014 SZ_{209}	16.8	X	216.18537	244.94264	130.06329	7.25381	0.0395972	0.22224025	2.6993192	21	4 27.1	20.7
501634 2014 SH_{213}	17.8	X	309.47626	284.67792	69.58509	16.32875	0.2510463	0.25941077	2.4348790	21	6 24.8	20.5
501635 2014 SC_{214}	17.1	X	200.56212	264.66719	125.86579	7.90025	0.1085973	0.22116256	2.7080810	21	4 28.1	21.4
501636 2014 SM_{214}	18.0	X	48.68550	191.85081	143.36232	5.42978	0.1735786	0.29104653	2.2550756	21	12 24.8	20.9
501637 2014 SZ_{215}	17.6	X	209.71932	352.12018	121.04556	8.64506	0.1398718	0.25062526	2.4914537	21	8 18.9	21.3
501638 2014 SD_{216}	17.8	X	48.35036	193.39959	164.10029	7.31530	0.2316517	0.29937508	2.2130554	21	—	—
501639 2014 SE_{216}	17.2	X	350.83984	268.72284	121.45703	7.29955	0.1211455	0.28264093	2.2995667	21	12 6.8	19.4
501640 2014 SK_{216}	17.4	X	103.84127	220.85144	107.57101	9.04078	0.0735852	0.30446518	2.1883207	21	—	—
501641 2014 SR_{216}	16.5	X	200.07962	246.06060	143.74339	7.23382	0.0766009	0.21874639	2.7279859	21	4 26.6	20.6
501642 2014 SD_{217}	17.6	X	76.24141	198.67654	124.19206	7.17990	0.1973796	0.29595270	2.2300838	21	—	—
501643 2014 SZ_{217}	17.9	X	13.29133	217.91527	188.31940	5.93791	0.0301852	0.29996644	2.2101458	21	—	—
501644 2014 SB_{219}	17.7	X	289.24146	304.72535	123.80934	7.33133	0.0860008	0.26977937	2.3720849	21	10 13.8	20.4
501645 2014 SJ_{221}	17.8	X	22.99630	234.63401	116.32698	7.91560	0.1554731	0.29178564	2.2512658	21	12 10.7	20.3
501646 2014 SC_{223}	18.3	X	70.81790	290.98866	40.24689	8.55827	0.2666663	0.30771064	2.1729065	21	—	—
501647 2014 SD_{224}	22.3	X	123.10997	277.11028	286.29597	4.59107	0.3308882	1.01843467	0.9783943	21	—	—
501648 2014 SB_{227}	17.5	X	28.49453	173.04523	101.46991	3.35898	0.1885805	0.26904463	2.3764015	21	8 30.3	19.6
501649 2014 SS_{233}	17.5	X	256.27954	348.35746	129.81736	4.27139	0.0924728	0.28565049	2.2833863	21	11 2.5	20.0
501650 2014 SA_{271}	18.9	X	111.69541	101.71151	182.81742	0.57657	0.1550335	0.31134958	2.1559426	21	12 25.9	22.0
501651 2014 SZ_{281}	17.4	X	210.76051	340.89527	171.84402	6.12147	0.0323338	0.28061504	2.3106212	21	10 27.1	20.2
501652 2014 SA_{293}	17.6	X	72.51305	339.63317	33.88793	3.92986	0.1871274	0.31521409	2.1382852	21	—	—
501653 2014 SO_{297}	18.5	X	293.49985	254.34839	192.81878	3.52553	0.1829341	0.29004690	2.2602539	21	11 6.9	20.1
501654 2014 SD_{299}	17.4	X	285.65688	236.57594	241.49296	5.55056	0.0982007	0.29410013	2.2394390	21	12 19.6	19.5
501655 2014 SS_{300}	17.9	X	240.80570	75.08474	3.60641	6.07153	0.1042819	0.26015435	2.4302371	21	8 13.4	21.3
501656 2014 SG_{305}	18.5	X	36.73256	177.30216	204.64262	6.96163	0.1858625	0.30867253	2.1683900	21	—	—
501657 2014 SU_{319}	18.8	X	73.01515	312.15075	10.54426	4.57263	0.1986422	0.30543827	2.1836704	21	—	—
501658 2014 SA_{333}	18.3	X	7.90291	74.96451	234.69577	1.54578	0.1881869	0.27573285	2.3378163	21	9 10.4	20.1
501659 2014 SC_{335}	17.5	X	103.76073	103.57349	125.42147	7.06846	0.0921803	0.27464924	2.3439614	21	9 30.1	20.7
501660 2014 SJ_{336}	18.4	X	80.50518	123.62929	180.84739	7.79993	0.2022955	0.30265238	2.1970502	21	12 23.1	21.8
501661 2014 ST_{336}	18.3	X	265.76343	300.84192	145.06268	3.30390	0.1364256	0.27370966	2.3493225	21	9 21.4	21.1
501662 2014 SZ_{337}	18.5	X	92.43213	170.50110	169.26069	5.42924	0.1594892	0.31565370	2.1362994	21	—	—
501663 2014 SF_{338}	18.5	X	100.74783	187.22826	124.12574	3.38047	0.1929964	0.31194019	2.1532204	21	—	—
501664 2014 SK_{339}	18.1	X	56.16475	210.50288	110.20442	3.89443	0.2336330	0.29736402	2.2230221	21	12 22.6	21.1
501665 2014 SD_{343}	19.0	X	72.68482	66.62869	281.20145	0.57111	0.2467989	0.31462772	2.1409411	21	—	—
501666 2014 SJ_{348}	18.6	X	332.19462	274.18769	130.84752	4.29264	0.1150063	0.28656861	2.2785067	21	11 24.9	20.6
501667 2014 TG_{4}	18.1	X	334.03340	11.52200	46.17790	5.07178	0.1544976	0.29328820	2.2435702	21	12 22.2	19.8
501668 2014 TB_{6}	17.7	X	278.46678	89.90489	37.65880	7.64997	0.0897816	0.29490432	2.2353659	21	12 21.9	20.1
501669 2014 TB_{14}	17.8	X	253.08162	229.46232	226.17442	6.29325	0.1432948	0.27183833	2.3600920	21	9 11.9	21.0
501670 2014 TE_{16}	18.4	X	339.37609	214.09423	227.77323	4.29164	0.1990122	0.30095984	2.2052797	21	—	—
501671 2014 TT_{19}	17.8	X	268.62043	40.19180	33.47367	3.56932	0.1560963	0.27041503	2.3683661	21	9 5.0	20.5
501672 2014 TT_{22}	17.5	X	260.32265	264.32358	180.53519	6.06523	0.0862604	0.27140557	2.3626001	21	9 18.7	20.3
501673 2014 TD_{28}	17.8	X	190.10482	158.17860	51.03035	7.26343	0.0379840	0.29733971	2.2231432	21	12 16.2	20.5
501674 2014 TU_{28}	18.6	X	61.46234	296.09980	72.27546	4.43738	0.1772212	0.31210823	2.1524475	21	—	—
501675 2014 TS_{29}	17.6	X	255.20748	28.25455	53.32966	2.26934	0.1475692	0.26569302	2.3963447	21	8 29.1	20.6
501676 2014 TA_{35}	18.3	X	160.67975	142.48829	204.63228	20.94400	0.0927120	0.35133528	1.9890920	21	—	—
501677 2014 TG_{42}	18.3	X	5.81885	337.46110	55.55772	2.90179	0.1123586	0.29605665	2.2295617	21	—	—
501678 2014 TB_{45}	18.8	X	1.82331	3.39718	28.11623	0.66986	0.2318027	0.29463576	2.2367241	21	—	—
501679 2014 TX_{45}	18.0	X	303.27742	324.67769	91.67108	1.68399	0.1995640	0.27493629	2.3423296	21	10 3.4	19.7
501680 2014 TE_{47}	17.4	X	209.21988	310.87901	219.06060	6.03638	0.0651327	0.28552356	2.2840630	21	11 12.6	20.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501681 2014 TF_{48}	18.7	X	355.34905	86.06616	309.89236	1.29114	0.2288968	0.29288743	2.2456163	21	—	—
501682 2014 TG_{48}	17.6	X	224.02462	86.43496	18.62976	6.21650	0.0659357	0.26407262	2.4061376	21	9 3.1	20.7
501683 2014 TY_{53}	17.8	X	341.41437	199.98420	188.79634	6.19101	0.1153820	0.28069338	2.3101912	21	11 16.3	19.9
501684 2014 TO_{54}	18.5	X	328.36081	206.39111	188.41324	6.42891	0.1412170	0.27755926	2.3275494	21	10 30.5	20.4
501685 2014 TV_{54}	18.0	X	0.55733	226.27933	155.39366	4.76847	0.1334857	0.28627163	2.2800822	21	12 13.4	20.2
501686 2014 TQ_{58}	16.7	X	204.94571	163.58602	229.31791	15.49942	0.0429523	0.22958055	2.6414718	21	5 2.6	20.5
501687 2014 TM_{60}	18.7	X	336.47234	188.01035	221.51336	3.60266	0.1090830	0.29102232	2.2552006	21	12 9.6	20.8
501688 2014 TB_{65}	17.8	X	61.78436	298.49314	43.96307	5.37580	0.1788122	0.30854516	2.1689867	21	—	—
501689 2014 TL_{69}	18.1	X	46.01662	325.70051	68.81971	4.19808	0.0770887	0.31040926	2.1602944	21	—	—
501690 2014 TD_{74}	18.0	X	296.67884	280.52442	166.62625	5.25014	0.1139507	0.28297363	2.2977639	21	11 20.3	20.2
501691 2014 TJ_{74}	17.8	X	73.58884	233.31823	79.19774	7.74293	0.2522936	0.29889526	2.2154232	21	12 30.3	21.3
501692 2014 UW	17.8	X	326.31987	282.81913	129.90522	3.27031	0.2513578	0.27967991	2.3157688	21	11 27.9	18.8
501693 2014 UW_{1}	18.3	X	332.28265	229.85010	175.45012	5.45865	0.0891047	0.28186434	2.3037886	21	11 23.1	20.6
501694 2014 UB_{4}	18.0	X	29.45276	213.49417	169.16066	4.45746	0.1610450	0.29967793	2.2115641	21	—	—
501695 2014 UC_{4}	17.1	X	69.45263	166.45326	96.53321	6.81024	0.2151014	0.26858397	2.3791181	21	10 20.2	20.5
501696 2014 UA_{5}	18.3	X	27.84090	239.59733	102.20047	3.54026	0.2167320	0.28611400	2.2809196	21	12 12.9	20.7
501697 2014 UQ_{6}	18.4	X	19.38069	299.49832	91.44765	5.21646	0.1613939	0.29743518	2.2226675	21	—	—
501698 2014 UE_{7}	18.2	X	354.08529	252.95649	139.87886	2.48399	0.1240544	0.28641072	2.2793440	21	12 16.8	20.3
501699 2014 UN_{9}	16.7	X	115.40016	215.33245	230.70515	18.01021	0.1316912	0.20642394	2.8354980	21	4 3.9	21.0
501700 2014 UL_{10}	18.5	X	30.36561	264.23892	109.65946	4.54129	0.1961862	0.29771621	2.2212685	21	—	—
501701 2014 UC_{11}	18.3	X	300.67856	172.07992	259.71074	6.26528	0.0859591	0.28312186	2.2969618	21	11 3.8	20.6
501702 2014 UD_{12}	17.9	X	273.29483	218.15377	273.15297	4.02927	0.1174619	0.29334823	2.2432641	21	12 14.9	19.9
501703 2014 UA_{13}	17.8	X	58.97189	301.31725	353.81305	4.75427	0.1708396	0.28417276	2.2912954	21	11 10.7	20.9
501704 2014 UK_{13}	18.0	X	269.17435	88.14697	16.16441	7.47830	0.0552417	0.28144363	2.3060839	21	11 3.4	20.6
501705 2014 UG_{18}	17.6	X	276.64154	120.06963	234.90037	1.38898	0.1098911	0.24552576	2.5258333	21	6 1.6	20.9
501706 2014 UV_{21}	17.9	X	217.37849	55.27157	89.64708	7.06889	0.0417727	0.27176289	2.3605287	21	10 24.2	21.0
501707 2014 UL_{22}	16.6	X	238.57138	212.81672	121.99561	6.78551	0.0504085	0.21378503	2.7700303	21	4 2.3	20.6
501708 2014 UW_{22}	17.8	X	50.75334	256.57319	70.45448	7.76426	0.1367093	0.28577018	2.2827488	21	12 10.1	20.7
501709 2014 UF_{23}	17.1	X	247.88175	187.22122	184.84917	6.60546	0.0816487	0.23818797	2.5774455	21	5 24.8	20.8
501710 2014 UY_{23}	18.3	X	60.70466	234.75301	113.24382	4.59299	0.2143937	0.30498920	2.1858133	21	—	—
501711 2014 UB_{25}	17.9	X	39.99777	307.30612	67.47057	7.07209	0.1211095	0.29853626	2.2171989	21	—	—
501712 2014 UP_{27}	18.0	X	316.44208	289.63904	128.29610	4.21785	0.0949352	0.27947758	2.3168864	21	11 13.2	20.2
501713 2014 UH_{28}	17.7	X	27.13563	283.48217	44.56247	12.41713	0.2150745	0.28103842	2.3083000	21	11 19.8	20.3
501714 2014 UT_{37}	17.6	X	164.48491	78.31794	88.44829	3.52754	0.1370164	0.26563744	2.3966789	21	9 13.6	21.2
501715 2014 UG_{39}	18.4	X	333.15382	242.70510	178.28571	3.91687	0.1292985	0.29347274	2.2426296	21	12 23.2	20.3
501716 2014 UN_{40}	17.3	X	31.77865	125.37939	242.09868	9.28857	0.1362641	0.29449415	2.2374411	21	—	—
501717 2014 US_{41}	17.6	X	245.66705	240.39119	232.56220	4.11371	0.2224280	0.26418229	2.4054717	21	9 15.1	20.9
501718 2014 UL_{42}	18.6	X	18.91945	159.02588	219.40370	3.92891	0.1772337	0.29304712	2.2448005	21	—	—
501719 2014 UX_{42}	17.6	X	232.25405	180.08264	301.75245	4.58748	0.1768299	0.26952253	2.3735916	21	9 17.7	21.0
501720 2014 UT_{43}	16.3	X	85.19403	230.15830	235.15637	14.15952	0.1140698	0.20411611	2.8568309	21	3 16.8	20.4
501721 2014 UC_{48}	18.1	X	48.34071	199.80951	109.12619	5.42474	0.1076487	0.27799137	2.3251368	21	11 8.9	20.9
501722 2014 UW_{48}	18.5	X	55.91590	352.50683	30.58463	3.88066	0.0951453	0.31348399	2.1461454	21	—	—
501723 2014 UJ_{50}	17.8	X	4.18423	125.53479	239.04888	5.87024	0.1410718	0.28129182	2.3069135	21	11 23.8	19.8
501724 2014 UG_{51}	18.6	X	73.91940	130.81677	220.08995	4.93186	0.1964986	0.30830127	2.1701304	21	—	—
501725 2014 UC_{54}	16.3	X	19.20410	210.39991	44.91706	16.60751	0.1344909	0.24251160	2.5467191	21	6 30.9	19.2
501726 2014 UH_{54}	18.6	X	303.44181	52.84851	34.53541	1.97464	0.1808017	0.28371242	2.2937733	21	11 27.2	20.2
501727 2014 UF_{55}	18.3	X	273.33284	336.67222	127.01439	4.75978	0.1063080	0.28038123	2.3119056	21	11 5.2	20.7
501728 2014 UB_{68}	18.1	X	337.11310	252.50847	173.12081	4.36070	0.1232262	0.29562503	2.2317314	21	—	—
501729 2014 UD_{78}	17.7	X	235.62492	253.65154	228.07584	2.35699	0.1797105	0.27171323	2.3608163	21	9 22.5	21.1
501730 2014 UG_{82}	17.8	X	233.13008	234.59983	230.86545	3.34520	0.1295840	0.26614573	2.3936265	21	9 2.8	21.3
501731 2014 UG_{84}	18.3	X	50.10810	276.08417	56.95316	2.13545	0.2664677	0.29571891	2.2312590	21	—	—
501732 2014 UZ_{84}	17.4	X	135.16975	341.02260	230.31274	6.52521	0.0600050	0.26656550	2.3911129	21	10 5.1	20.7
501733 2014 UC_{87}	16.8	X	317.81671	236.24313	35.71039	9.94759	0.1806333	0.23706756	2.5855601	21	3 29.6	19.9
501734 2014 UO_{90}	17.4	X	123.17124	133.11348	75.14576	7.13217	0.0698549	0.26335038	2.4105349	21	9 23.1	20.8
501735 2014 UX_{91}	17.6	X	258.50796	251.75851	223.35951	6.54804	0.0319945	0.28671704	2.2777202	21	11 9.3	20.2
501736 2014 UU_{93}	18.5	X	298.29617	231.17289	214.30798	4.92744	0.1904041	0.28027303	2.3125005	21	11 10.7	20.3
501737 2014 UN_{95}	17.7	X	298.13832	267.12178	142.13315	1.41548	0.1820539	0.27180776	2.3602689	21	9 12.7	20.0
501738 2014 UF_{96}	18.4	X	135.97629	226.09718	65.17018	4.31678	0.1583763	0.31321141	2.1473903	21	—	—
501739 2014 UM_{96}	18.3	X	75.62503	282.29959	60.13533	4.02251	0.1535457	0.30798790	2.1716022	21	—	—
501740 2014 UV_{98}	17.0	X	164.27451	276.93107	145.13822	5.62476	0.0526673	0.22049872	2.7135136	21	4 25.9	21.0
501741 2014 UF_{106}	18.2	X	288.91660	179.19749	249.77495	3.34572	0.0660850	0.27475437	2.3433634	21	10 11.9	20.9
501742 2014 UN_{112}	18.1	X	41.67213	249.05624	118.96514	4.99309	0.1674863	0.30568990	2.1824719	21	—	—
501743 2014 UM_{116}	18.2	X	71.61569	23.24374	285.53786	5.57719	0.2580139	0.29648644	2.2274066	21	12 24.2	21.5
501744 2014 UZ_{118}	18.0	X	253.08348	137.94560	306.60517	1.07963	0.1089966	0.26563563	2.3966898	21	9 3.7	20.8
501745 2014 UB_{124}	17.7	X	217.50024	235.05533	304.47868	6.77702	0.0616700	0.29388843	2.2405143	21	12 7.7	20.5
501746 2014 UL_{129}	17.5	X	178.64084	312.86938	232.52871	8.47105	0.0893664	0.27919508	2.3184490	21	10 22.6	20.9
501747 2014 UM_{134}	18.5	X	25.98741	345.28805	336.61235	2.42224	0.1834288	0.28019620	2.3129232	21	11 3.9	20.8
501748 2014 UT_{134}	17.9	X	101.59379	346.70377	342.75603	1.61523	0.1895274	0.31414754	2.1431222	21	—	—
501749 2014 UD_{135}	18.1	X	26.55499	53.04766	349.99238	1.63323	0.0919006	0.30494759	2.1860122	21	—	—
501750 2014 UU_{135}	17.8	X	198.98066	127.21194	37.72279	5.46768	0.0975407	0.27387321	2.3483871	21	10 19.4	21.0
501751 2014 UJ_{136}	18.3	X	314.46104	5.68847	38.00585	6.20631	0.1339083	0.27569828	2.3380117	21	10 15.1	20.2
501752 2014 UT_{138}	17.8	X	199.77276	163.23906	305.82781	3.86223	0.0533412	0.25597683	2.4566066	21	8 6.9	21.0
501753 2014 UJ_{140}	17.6	X	234.00877	240.81070	248.23189	6.31095	0.0543577	0.27817020	2.3241402	21	10 18.1	20.5
501754 2014 UE_{148}	17.4	X	197.37347	263.95325	219.67774	5.58457	0.1002433	0.25588819	2.4571738	21	8 18.7	21.1
501755 2014 UB_{154}	18.0	X	23.33213	236.41579	134.06263	4.69631	0.1695243	0.29858057	2.2169795	21	—	—
501756 2014 UU_{154}	18.3	X	72.61952	231.64292	73.56470	6.42987	0.1404634	0.29604654	2.2296125	21	12 9.4	21.3
501757 2014 UB_{157}	18.2	X	83.25761	14.38462	343.25351	1.60554	0.1267646	0.31082797	2.1583539	21	—	—
501758 2014 UL_{159}	17.7	X	266.05883	353.76553	99.66982	6.92653	0.0802468	0.27438082	2.3454898	21	10 15.0	20.5
501759 2014 UW_{161}	17.6	X	217.12010	258.66514	215.05318	3.97869	0.1442548	0.25915314	2.4364924	21	8 24.6	21.1
501760 2014 UE_{171}	17.7	X	50.88730	223.86130	139.87217	3.19672	0.0181826	0.29678503	2.2259123	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501761 2014 UN_{171}	18.0	X	57.05717	194.56079	159.27837	4.63064	0.1485540	0.30031538	2.2084335	21	—	—
501762 2014 UC_{172}	18.2	X	16.02656	218.99904	159.79236	7.39244	0.1531706	0.29414657	2.2392033	21	—	—
501763 2014 UP_{172}	18.2	X	39.76731	218.19385	157.99054	6.48309	0.1764357	0.30364916	2.1922395	21	—	—
501764 2014 UX_{173}	17.6	X	346.68215	234.97350	112.88590	6.26779	0.2711625	0.27624200	2.3349428	21	10 5.8	18.7
501765 2014 UY_{179}	18.0	X	86.15520	245.17294	63.75126	6.43271	0.1585797	0.30156862	2.2023108	21	12 30.9	21.3
501766 2014 UT_{181}	17.6	X	43.57014	305.95006	59.08462	6.34852	0.0660928	0.29942752	2.2127970	21	—	—
501767 2014 UA_{184}	18.4	X	75.88749	242.15744	62.69395	3.07897	0.2643230	0.29875132	2.2161347	21	12 23.7	21.8
501768 2014 UQ_{190}	18.7	X	327.49711	129.02447	286.77152	4.92710	0.1252757	0.28865741	2.2675015	21	12 1.5	20.7
501769 2014 UP_{200}	18.3	X	308.97873	172.13492	254.72097	2.54279	0.1972558	0.28044138	2.3115750	21	11 3.4	19.7
501770 2014 UO_{201}	17.8	X	98.37080	220.42403	87.18442	4.46827	0.1368221	0.30697203	2.1763906	21	—	—
501771 2014 UQ_{204}	17.9	X	63.36856	157.78313	172.93093	5.24729	0.2511338	0.29893768	2.2152136	21	—	—
501772 2014 UT_{206}	17.9	X	340.77960	57.40134	339.77935	6.66013	0.1431100	0.28429020	2.2906644	21	11 28.0	20.0
501773 2014 UY_{206}	17.1	X	267.56560	23.77083	125.46793	5.88681	0.0542444	0.29757538	2.2219693	21	—	—
501774 2014 UG_{207}	17.9	X	36.44943	258.75042	73.65362	8.10453	0.1109808	0.28915372	2.2649061	21	11 25.9	20.4
501775 2014 UG_{210}	18.2	X	71.49546	215.89417	74.61179	6.32528	0.1605571	0.28612661	2.2808526	21	11 20.3	21.4
501776 2014 VH_{4}	18.6	X	4.13254	17.61966	16.66579	7.13568	0.1768430	0.29657189	2.2269787	21	—	—
501777 2014 VF_{5}	17.7	X	51.20692	231.39810	106.65955	6.43408	0.1274828	0.30312447	2.1947685	21	12 27.9	20.4
501778 2014 VA_{6}	18.1	X	32.49741	334.64637	68.12237	6.72286	0.1763371	0.31038717	2.1603969	21	—	—
501779 2014 VB_{10}	17.3	X	313.45921	121.03410	323.12270	22.51431	0.2550084	0.28079741	2.3096207	21	12 17.3	19.3
501780 2014 VY_{10}	17.6	X	49.54553	61.65101	278.47749	5.71524	0.1324698	0.29102914	2.2551654	21	12 26.8	20.4
501781 2014 VB_{11}	18.3	X	339.92600	35.65233	344.84428	3.28075	0.1824223	0.27751891	2.3277750	21	11 1.0	20.1
501782 2014 VV_{14}	18.3	X	276.74783	358.13285	74.62586	2.19195	0.1472112	0.26723855	2.3870965	21	9 16.9	20.9
501783 2014 VL_{16}	19.0	X	347.02948	60.76583	3.42677	2.90015	0.1922666	0.29158376	2.2523048	21	—	—
501784 2014 VO_{17}	17.9	X	250.92314	267.87955	199.44510	5.22202	0.1987081	0.26914078	2.3758356	21	9 18.4	21.0
501785 2014 VR_{18}	17.9	X	297.13741	237.12434	213.78576	5.40923	0.0563211	0.29387663	2.2405743	21	12 2.8	20.1
501786 2014 VQ_{21}	18.4	X	305.41487	225.12423	215.10699	6.36932	0.0816613	0.28224032	2.3017422	21	11 26.8	20.6
501787 2014 VV_{21}	18.2	X	326.17447	218.73074	176.91009	2.65981	0.1829200	0.27660678	2.3328895	21	10 25.8	19.6
501788 2014 VK_{22}	18.7	X	269.66295	234.36578	201.46527	1.08452	0.1598730	0.26428537	2.4048462	21	9 6.3	21.5
501789 2014 VZ_{23}	17.9	X	117.94732	163.45747	166.36214	3.04295	0.1741286	0.31636058	2.1331160	21	—	—
501790 2014 VB_{25}	18.7	X	15.35774	334.12229	73.86040	3.62666	0.1260562	0.29853828	2.2171889	21	—	—
501791 2014 VV_{28}	17.4	X	58.42711	250.97313	42.16970	3.55234	0.1730805	0.27630576	2.3345836	21	11 8.0	20.4
501792 2014 VO_{30}	17.4	X	304.59209	232.43745	68.28100	4.03171	0.1703660	0.23225351	2.6211660	21	4 19.1	20.7
501793 2014 VV_{30}	18.5	X	355.94691	217.74343	187.08019	1.87349	0.1890185	0.29121174	2.2542226	21	—	—
501794 2014 VZ_{30}	16.6	X	59.20332	343.65668	233.33302	12.74198	0.1789847	0.23139379	2.6276544	21	7 19.3	20.0
501795 2014 VG_{31}	18.8	X	46.74756	301.66975	86.72318	4.52156	0.1650913	0.30664350	2.1779448	21	—	—
501796 2014 VH_{35}	17.3	X	269.13343	95.30931	64.90824	6.67031	0.0780711	0.30070093	2.2065454	21	—	—
501797 2014 VJ_{36}	17.6	X	192.94883	312.92254	216.40424	6.34893	0.0424773	0.27457468	2.3443857	21	10 22.3	20.7
501798 2014 VN_{36}	18.3	X	247.40613	71.11842	68.07654	5.94801	0.0847794	0.28254219	2.3001024	21	11 18.4	21.0
501799 2014 WV_{11}	17.8	X	302.26437	169.52507	257.85311	2.05119	0.1481451	0.27872510	2.3210545	21	10 24.7	19.7
501800 2014 WE_{24}	17.8	X	317.51058	126.78006	277.05627	6.57942	0.1727334	0.27387669	2.3483672	21	10 13.3	19.7
501801 2014 WU_{24}	18.7	X	322.23357	160.04521	245.17331	0.93633	0.1420290	0.27849087	2.3223557	21	11 1.6	20.7
501802 2014 WB_{25}	18.1	X	52.88580	301.27820	52.08743	5.84017	0.1753454	0.30027433	2.2086348	21	—	—
501803 2014 WA_{34}	17.7	X	233.94680	157.99754	310.00433	1.64863	0.1715993	0.26396893	2.4067677	21	9 3.1	20.9
501804 2014 WL_{37}	17.4	X	174.67568	346.38127	257.86689	4.87472	0.0460128	0.30181022	2.2011354	21	—	—
501805 2014 WM_{46}	17.5	X	208.11187	246.90323	240.17725	6.88209	0.1018282	0.25760477	2.4462459	21	9 3.3	21.1
501806 2014 WV_{49}	17.5	X	92.82204	191.00286	85.63567	8.70168	0.1297425	0.27959115	2.3162589	21	11 22.1	20.8
501807 2014 WV_{50}	17.9	X	331.24235	340.68748	48.14295	2.96244	0.2122766	0.27657513	2.3330675	21	10 26.9	19.1
501808 2014 WS_{51}	18.0	X	310.65672	186.19002	257.20478	4.29477	0.1547027	0.28370865	2.2937936	21	12 8.9	19.7
501809 2014 WD_{52}	17.3	X	231.23134	87.35024	44.02832	6.01494	0.0264769	0.27110011	2.3643744	21	10 23.8	20.0
501810 2014 WR_{53}	18.1	X	72.62840	243.70268	74.56535	5.39912	0.1697970	0.29178209	2.2512840	21	12 28.5	21.3
501811 2014 WU_{54}	17.4	X	198.63181	264.63235	206.69252	4.01726	0.2179160	0.24244039	2.5472177	21	7 29.9	21.7
501812 2014 WC_{56}	18.0	X	44.11407	284.53579	77.73073	2.99052	0.1799142	0.29703241	2.2246763	21	—	—
501813 2014 WH_{56}	17.1	X	159.41393	209.05169	290.10099	2.60700	0.1438648	0.23977366	2.5660694	21	7 31.4	21.1
501814 2014 WB_{59}	18.5	X	108.60744	132.55033	175.84223	3.33840	0.2113726	0.30754291	2.1736965	21	—	—
501815 2014 WL_{60}	18.1	X	318.29944	287.49698	117.34212	4.73892	0.1964503	0.27755235	2.3275880	21	10 23.4	19.7
501816 2014 WE_{61}	18.1	X	56.17570	206.48970	108.66338	4.87622	0.1674061	0.28827098	2.2695274	21	12 6.3	21.0
501817 2014 WV_{61}	18.0	X	50.07128	222.47467	121.86309	5.80129	0.1379247	0.29452048	2.2373077	21	—	—
501818 2014 WE_{66}	18.2	X	323.12222	208.06406	249.68791	2.66832	0.1257285	0.30000995	2.2099321	21	—	—
501819 2014 WA_{67}	18.0	X	4.05918	115.80810	280.09327	7.42025	0.1131861	0.29708671	2.2244052	21	—	—
501820 2014 WA_{71}	18.2	X	169.46792	157.89643	90.89168	4.85923	0.1420975	0.30083897	2.2058704	21	—	—
501821 2014 WB_{78}	18.5	X	305.47282	249.83747	202.20652	2.94434	0.1331846	0.28672969	2.2776532	21	12 13.4	20.3
501822 2014 WF_{78}	18.5	X	308.63651	23.47866	94.79836	2.97906	0.0771571	0.29925312	2.2136566	21	—	—
501823 2014 WY_{84}	17.9	X	50.62322	97.21530	198.81218	6.13430	0.1412232	0.27635813	2.3342886	21	10 28.9	20.7
501824 2014 WT_{91}	17.3	X	295.26997	180.17076	97.01808	5.52286	0.0729241	0.21577726	2.7529539	21	3 25.2	21.1
501825 2014 WJ_{94}	17.6	X	165.56297	160.91252	83.90198	5.00239	0.1000217	0.29540400	2.2328444	21	12 27.8	20.6
501826 2014 WX_{101}	18.2	X	23.17835	249.70834	107.37949	4.68878	0.2157490	0.29105669	2.2550231	21	12 28.3	20.7
501827 2014 WY_{104}	18.5	X	79.55487	293.84194	43.68640	5.03650	0.2320017	0.31475535	2.1403623	21	—	—
501828 2014 WJ_{106}	18.0	X	302.87099	20.67892	75.67187	6.96652	0.1599012	0.29071992	2.2567642	21	12 14.6	19.5
501829 2014 WV_{107}	18.3	X	41.74021	343.72303	354.92310	3.51423	0.2166006	0.29663048	2.2266854	21	12 28.3	21.2
501830 2014 WG_{109}	17.5	X	338.48682	239.07963	101.99398	6.54652	0.2049701	0.26765055	2.3846462	21	8 22.8	19.2
501831 2014 WT_{122}	18.2	X	55.96360	6.92276	356.55220	4.99865	0.1012930	0.30045745	2.2077373	21	—	—
501832 2014 WN_{125}	18.4	X	266.72769	152.33610	309.32713	2.33210	0.1414469	0.27039937	2.3684575	21	10 11.8	21.2
501833 2014 WP_{127}	18.0	X	46.35324	93.02295	267.89721	3.24645	0.0690555	0.29253478	2.2474207	21	—	—
501834 2014 WQ_{128}	18.5	X	334.64035	97.19085	335.49702	3.50661	0.1202592	0.28991838	2.2609219	21	—	—
501835 2014 WM_{134}	18.5	X	334.29020	209.72712	214.70016	1.56169	0.1681315	0.28804797	2.2706987	21	—	—
501836 2014 WJ_{135}	17.0	X	17.92611	123.50906	105.36019	5.66730	0.1178178	0.22329073	2.6908465	21	5 21.1	19.9
501837 2014 WL_{135}	17.9	X	144.19563	103.82250	153.99792	3.52701	0.0565322	0.29001123	2.2604393	21	12 21.9	21.0
501838 2014 WZ_{135}	18.3	X	274.02660	278.81547	182.33015	0.84225	0.1365969	0.27446281	2.3450227	21	10 25.7	20.6
501839 2014 WP_{137}	18.2	X	226.46195	316.79466	196.65006	0.67844	0.1158088	0.27440855	2.3453318	21	11 3.1	21.0
501840 2014 WT_{138}	16.1	X	276.03864	168.61358	66.60901	17.97041	0.1756089	0.18217847	3.0818016	21	1 1.7	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501841 2014 WT_{139}	17.6	X	288.33272	355.38558	71.39815	2.46406	0.1682584	0.26860241	2.3790092	21	9 24.3	19.9
501842 2014 WK_{141}	17.8	X	201.33425	265.00601	231.29216	5.71279	0.0710597	0.25837444	2.4413855	21	9 11.3	21.4
501843 2014 WF_{145}	18.6	X	8.69570	45.07951	339.43036	4.03352	0.2173696	0.29232472	2.2484972	21	—	—
501844 2014 WQ_{160}	17.7	X	4.95018	175.54009	105.46336	9.29273	0.0397173	0.24511086	2.5286827	21	7 10.0	20.7
501845 2014 WF_{161}	18.0	X	38.82769	201.35252	134.93609	4.51627	0.1703002	0.28384018	2.2930849	21	12 12.6	20.7
501846 2014 WH_{165}	17.1	X	150.23069	47.94306	62.74202	6.47637	0.1304873	0.22571026	2.6715820	21	6 14.6	21.3
501847 2014 WB_{184}	17.1	X	189.45360	186.56180	305.35175	14.25540	0.0858492	0.24410941	2.5355939	21	8 19.7	20.9
501848 2014 WR_{187}	18.2	X	286.50896	324.61394	107.31759	5.89337	0.0812032	0.27430886	2.3459000	21	10 15.2	20.8
501849 2014 WA_{190}	17.9	X	123.49424	42.59049	192.68888	8.09977	0.0352653	0.27261114	2.3556295	21	10 25.4	20.8
501850 2014 WG_{190}	17.8	X	358.71441	284.05023	137.01011	5.42534	0.0912960	0.29800211	2.2198476	21	—	—
501851 2014 WJ_{194}	17.2	X	90.90032	241.69536	306.00450	8.42870	0.0643619	0.23693686	2.5865108	21	7 9.9	20.6
501852 2014 WL_{212}	17.6	X	12.07808	28.84707	323.15738	6.32780	0.1321410	0.28122624	2.3072721	21	11 15.1	20.0
501853 2014 WS_{212}	17.1	X	34.59764	324.09201	21.54085	7.79063	0.1346476	0.28429015	2.2906646	21	12 12.8	19.9
501854 2014 WH_{214}	17.7	X	16.69035	241.48378	94.77094	3.12512	0.1224204	0.27343360	2.3509035	21	10 31.5	20.2
501855 2014 WA_{223}	18.4	X	33.91051	152.18557	237.39997	1.94953	0.1481146	0.30295657	2.1955793	21	—	—
501856 2014 WY_{223}	17.8	X	237.10892	241.47315	233.28873	4.08415	0.1845031	0.26308311	2.4121672	21	9 12.6	21.4
501857 2014 WU_{230}	16.2	X	119.99880	337.93497	184.23003	12.81291	0.1118638	0.21518095	2.7580375	21	7 15.4	20.5
501858 2014 WN_{234}	16.9	X	199.45609	35.61398	61.99431	13.02360	0.1407041	0.23993019	2.5649533	21	7 19.1	21.1
501859 2014 WO_{240}	18.4	X	4.79766	174.94472	178.84385	6.20760	0.1344375	0.27997490	2.3141419	21	11 9.3	20.6
501860 2014 WB_{260}	18.0	X	251.85311	343.05607	173.27901	4.06495	0.0900615	0.28791824	2.2713807	21	12 18.9	20.6
501861 2014 WD_{263}	18.5	X	324.99988	334.37738	114.01306	7.08198	0.0904338	0.29269950	2.2465775	21	—	—
501862 2014 WW_{269}	18.4	X	265.77746	311.08005	119.04667	5.80558	0.1287492	0.26055421	2.4277501	21	8 30.6	21.4
501863 2014 WV_{272}	18.1	X	315.08621	319.26894	105.28952	5.86416	0.2144298	0.27932309	2.3177406	21	11 16.9	19.5
501864 2014 WX_{274}	17.8	X	231.04155	319.57556	132.51389	7.28577	0.0945275	0.25329565	2.4739119	21	8 18.9	21.1
501865 2014 WT_{279}	17.9	X	307.08959	275.06209	129.54621	4.16008	0.1855338	0.26998126	2.3709022	21	9 24.8	19.8
501866 2014 WH_{283}	18.8	X	67.48641	281.86644	93.44800	5.40616	0.1620101	0.31171177	2.1542722	21	—	—
501867 2014 WX_{285}	16.6	X	220.90794	316.67988	112.05640	10.18895	0.0587939	0.24053572	2.5606467	21	7 8.4	20.1
501868 2014 WC_{286}	17.2	X	273.58758	333.95872	93.49280	10.71199	0.0766754	0.26241082	2.4162854	21	9 20.6	20.3
501869 2014 WV_{286}	18.1	X	301.93561	277.14866	174.36765	4.56932	0.0946609	0.28198505	2.3031311	21	12 6.7	20.3
501870 2014 WP_{296}	17.7	X	302.71056	236.09946	166.66075	7.51008	0.1494423	0.26767707	2.3844887	21	9 16.1	19.8
501871 2014 WS_{322}	17.5	X	41.02424	191.40447	96.02018	8.39456	0.1042498	0.26800094	2.3825673	21	9 29.9	20.4
501872 2014 WM_{339}	16.9	X	188.84965	324.06523	103.34504	13.43719	0.0568216	0.23244600	2.6197188	21	5 31.6	20.8
501873 2014 WA_{349}	17.8	X	332.04968	57.87661	324.84494	5.89035	0.1199480	0.27380204	2.3487940	21	10 13.4	20.0
501874 2014 WO_{349}	18.1	X	25.65411	109.00731	270.15506	6.53531	0.1318220	0.29545404	2.2325923	21	—	—
501875 2014 WM_{350}	17.9	X	54.64485	254.66063	88.82984	10.37396	0.2285566	0.30033531	2.2083359	21	—	—
501876 2014 WO_{355}	16.6	X	210.55184	230.33768	174.52606	9.38335	0.0824574	0.21186044	2.7867807	21	5 26.5	20.9
501877 2014 WH_{357}	18.1	X	291.42146	120.09085	347.87821	6.22134	0.0329112	0.29120090	2.2542785	21	12 18.4	20.7
501878 2014 WF_{365}	17.2	X	300.77821	15.13221	165.75788	17.88804	0.7633071	0.29017017	2.2596137	21	—	—
501879 2014 WV_{378}	17.9	X	328.11663	109.18381	283.60995	5.79855	0.1318731	0.27630075	2.3346118	21	10 21.9	20.2
501880 2014 WK_{382}	16.4	X	31.55725	221.11173	31.94298	14.88132	0.0108974	0.22762336	2.6565918	21	7 10.3	20.2
501881 2014 WG_{388}	18.4	X	330.63926	242.46738	190.18540	5.15958	0.1477304	0.28735402	2.2743530	21	—	—
501882 2014 WL_{397}	18.1	X	9.32215	223.65810	151.88021	8.01097	0.1928858	0.29323596	2.2438366	21	12 30.2	20.5
501883 2014 WQ_{399}	15.8	X	63.54315	249.20995	270.76008	10.13122	0.0441811	0.18621452	3.0371089	21	4 20.9	20.1
501884 2014 WY_{399}	16.2	X	247.34068	249.39491	143.67748	25.05393	0.1614986	0.21752564	2.7381826	21	6 15.8	20.8
501885 2014 WN_{407}	19.0	X	349.77562	236.37094	165.54193	2.33169	0.2202907	0.28634329	2.2797018	21	—	—
501886 2014 WG_{408}	18.3	X	306.67245	355.52973	60.51152	3.08208	0.1641527	0.27137872	2.3627559	21	10 14.6	20.1
501887 2014 WG_{419}	18.3	X	26.36406	261.76716	151.80230	5.03987	0.1676724	0.30334152	2.1937214	21	—	—
501888 2014 WB_{420}	16.6	X	199.67450	346.81277	115.42289	15.76668	0.2175213	0.23105705	2.6302068	21	7 20.5	21.0
501889 2014 WF_{421}	17.2	X	219.20529	304.26960	126.80880	13.54545	0.1531758	0.22996329	2.6385401	21	7 2.3	21.5
501890 2014 WR_{422}	16.7	X	99.85582	297.35195	214.46022	6.50982	0.2502419	0.20246540	2.8723378	21	6 27.7	21.1
501891 2014 WX_{425}	16.7	X	95.35898	193.57838	336.53467	14.07890	0.0486454	0.21782394	2.7356822	21	6 19.4	20.7
501892 2014 WZ_{427}	15.9	X	49.50350	326.46266	308.65291	12.44782	0.1151292	0.22792359	2.6542584	21	9 11.2	19.5
501893 2014 WE_{428}	16.5	X	309.57362	196.97746	155.01560	9.63647	0.1145073	0.22561666	2.6723209	21	7 14.9	19.9
501894 2014 WS_{428}	17.7	X	266.28708	94.95026	15.97782	7.85884	0.2206121	0.25409696	2.4687081	21	10 9.9	20.7
501895 2014 WX_{428}	15.9	X	16.46851	180.28086	51.80811	10.93831	0.0621343	0.18762176	3.0219034	21	5 22.0	19.8
501896 2014 WE_{429}	16.1	X	129.31715	111.66518	80.50978	10.27584	0.0414556	0.21854522	2.7296597	21	9 4.2	20.1
501897 2014 WL_{429}	16.5	X	191.21442	64.92497	43.91997	5.41261	0.1001401	0.21605375	2.7506047	21	7 26.1	20.7
501898 2014 WR_{429}	16.6	X	159.53809	133.94411	5.30262	13.69865	0.2496857	0.21337502	2.7735777	21	8 7.9	21.6
501899 2014 WM_{435}	18.8	X	7.87920	87.22450	334.51691	3.18389	0.1440366	0.30132147	2.2035149	21	—	—
501900 2014 WJ_{437}	17.6	X	253.57097	219.99673	284.79161	6.41755	0.0434220	0.28532123	2.2851427	21	12 11.5	20.3
501901 2014 WE_{443}	16.6	X	199.28099	170.92712	295.98245	4.84126	0.0854142	0.24484752	2.5304955	21	7 31.8	20.3
501902 2014 WG_{454}	18.2	X	348.80987	232.39615	164.39914	10.41375	0.2262067	0.28739481	2.2741378	21	12 28.6	20.3
501903 2014 WE_{463}	16.6	X	346.84939	122.49976	73.26505	11.39335	0.0388570	0.19644978	2.9306797	21	2 27.9	20.7
501904 2014 WV_{464}	18.3	X	350.26347	173.94230	244.06747	4.01058	0.1450991	0.29076606	2.2565255	21	—	—
501905 2014 WH_{467}	16.1	X	127.91274	138.61330	311.14135	9.04280	0.0780677	0.18794834	3.0184018	21	4 17.3	20.6
501906 2014 WO_{467}	16.3	X	221.41166	282.82436	133.83939	9.56951	0.1767626	0.21780942	2.7358038	21	6 15.4	20.8
501907 2014 WY_{467}	16.3	X	40.54344	200.32248	326.20860	14.44067	0.1504301	0.17685258	3.1433672	21	4 3.1	20.3
501908 2014 WF_{468}	16.4	X	239.17778	149.73138	318.13872	13.11161	0.1355942	0.23940874	2.5686763	21	9 7.6	20.2
501909 2014 WP_{468}	16.0	X	61.98680	45.12297	82.24301	8.30315	0.1534807	0.17237242	3.1976004	21	3 31.6	20.1
501910 2014 WY_{468}	16.2	X	204.31069	325.41305	124.99341	14.11961	0.0762776	0.21858860	2.7292985	21	7 15.9	20.1
501911 2014 WD_{476}	18.4	X	12.12715	199.86587	145.31911	1.80824	0.2028144	0.28065591	2.3103969	21	11 19.7	20.5
501912 2014 WU_{477}	17.6	X	216.86941	297.16726	154.59322	13.16011	0.1742409	0.23369857	2.6103496	21	7 23.9	21.9
501913 2014 WP_{478}	16.9	X	226.42338	293.22359	135.59385	22.57878	0.0549413	0.22512068	2.6762445	21	7 15.8	20.8
501914 2014 WY_{478}	15.9	X	321.25128	342.83586	277.62299	14.64537	0.1754047	0.18260717	3.0769764	21	3 16.5	20.3
501915 2014 WJ_{479}	16.4	X	290.52363	198.32829	156.62317	10.59580	0.0763878	0.21965911	2.7204238	21	6 26.9	20.1
501916 2014 WN_{479}	15.6	X	358.46372	318.45405	259.76444	9.82874	0.0919548	0.18242868	3.0789832	21	4 2.2	19.7
501917 2014 WX_{479}	15.7	X	21.52017	41.05969	143.46916	18.00996	0.1702733	0.17627981	3.1501725	21	4 7.1	19.5
501918 2014 WY_{479}	16.8	X	328.62780	112.10019	227.48636	5.41187	0.0641716	0.22640222	2.6661358	21	8 2.1	20.2
501919 2014 WL_{480}	15.6	X	77.51927	262.24847	237.93556	10.12961	0.0859366	0.18579353	3.0416949	21	4 22.2	19.8
501920 2014 WJ_{481}	16.9	X	193.33138	342.80872	164.94862	14.96826	0.0279925	0.24203137	2.5500867	21	9 22.9	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
501921 2014 WU_{481}	17.1	X	161.87840	299.83003	208.21817	11.03089	0.1327342	0.22560805	2.6723889	21	8 10.1	21.5
501922 2014 WA_{482}	16.9	X	211.81596	307.17996	252.18187	23.35786	0.1695108	0.28660132	2.2783333	21	12 10.7	20.1
501923 2014 WG_{485}	17.8	X	316.66777	229.38514	184.86423	4.94122	0.1483462	0.27760883	2.3272723	21	11 5.2	19.6
501924 2014 WK_{487}	16.8	X	109.81449	297.52514	255.90755	16.75739	0.1202380	0.24023611	2.5627752	21	8 9.9	20.9
501925 2014 WP_{487}	16.7	X	290.75194	295.49871	129.02849	15.10632	0.0987579	0.24404678	2.5360277	21	10 7.6	20.0
501926 2014 WH_{490}	17.0	X	173.62793	9.58642	119.17584	14.68050	0.0874336	0.24070822	2.5594232	21	8 1.7	20.8
501927 2014 WE_{494}	16.8	X	242.48013	199.15158	254.27201	8.29426	0.1281718	0.24280700	2.5446531	21	8 24.8	20.5
501928 2014 WL_{494}	17.1	X	214.09065	295.31562	152.62213	13.16552	0.1537135	0.22952711	2.6418819	21	7 17.8	21.4
501929 2014 WS_{494}	16.6	X	298.79099	115.19397	271.12741	13.35476	0.0957890	0.23837424	2.5761027	21	8 13.7	20.1
501930 2014 WT_{494}	16.7	X	209.14010	288.19961	150.70794	13.06805	0.1681321	0.22466571	2.6798564	21	7 1.5	21.2
501931 2014 WJ_{496}	16.7	X	15.11390	328.47087	218.88356	9.82322	0.1480393	0.17718134	3.1394777	21	3 20.9	20.4
501932 2014 WX_{504}	17.1	X	202.40906	326.42013	153.76631	13.65098	0.2137134	0.24653654	2.5189247	21	8 14.1	21.2
501933 2014 WC_{506}	18.1	X	350.05562	345.98155	68.31850	4.40909	0.1293473	0.29294353	2.2453297	21	—	—
501934 2014 XT_3	17.8	X	32.82154	14.74039	321.62944	11.03451	0.4668899	0.29054832	2.2576527	21	—	—
501935 2014 XO_6	18.6	X	77.96324	231.69762	103.63460	7.87986	0.3284139	0.30676874	2.1773520	21	—	—
501936 2014 XE_{13}	18.1	X	294.99574	151.18461	269.93217	0.33582	0.1695648	0.26895574	2.3769251	21	9 26.1	20.2
501937 2014 XZ_{14}	16.0	X	139.03727	267.57203	254.09909	12.68725	0.1324767	0.23746629	2.5826650	21	8 3.8	20.3
501938 2014 XB_{17}	17.6	X	34.95168	239.11843	123.12197	4.85417	0.1836478	0.29248403	2.2476807	21	—	—
501939 2014 XB_{29}	17.8	X	304.33968	347.53205	112.17718	10.32130	0.0420565	0.28573008	2.2829623	21	12 25.1	20.2
501940 2014 XE_{37}	17.6	X	13.85220	291.67070	91.14288	8.22433	0.1234449	0.27627022	2.3347838	21	12 31.5	20.3
501941 2014 XA_{38}	17.0	X	181.39177	183.82836	298.40104	13.95953	0.1264878	0.22928893	2.6437111	21	7 30.2	21.1
501942 2014 XL_{38}	16.4	X	111.49394	0.92563	111.71176	4.16361	0.1187215	0.19881740	2.9073665	21	5 7.2	20.5
501943 2014 XU_{38}	18.2	X	318.52608	49.28594	12.96733	1.23657	0.1662278	0.27094215	2.3652933	21	11 17.9	20.0
501944 2014 XF_{39}	17.6	X	7.53633	336.08811	86.44152	8.40613	0.1305026	0.29835184	2.2181125	21	—	—
501945 2014 YR_2	17.9	X	342.66607	293.59016	144.21076	5.93915	0.1915781	0.28697045	2.2763791	21	—	—
501946 2014 YH_3	16.0	X	71.14807	7.05749	128.23973	13.66299	0.0231502	0.18680963	3.0306553	21	4 6.3	20.4
501947 2014 YO_3	17.0	X	205.36834	180.78645	289.20314	12.92069	0.2003122	0.23490751	2.6013859	21	8 2.5	21.4
501948 2014 YU_3	16.2	X	304.18357	22.20256	299.48332	10.96756	0.0667076	0.21257805	2.7805056	21	6 1.7	20.0
501949 2014 YV_3	17.0	X	254.37081	314.86931	115.99064	6.74954	0.0613568	0.23924773	2.5698287	21	8 25.0	20.3
501950 2014 YN_4	16.5	X	244.40484	302.24135	120.41185	27.33642	0.1623097	0.23551184	2.5969338	21	7 16.9	20.3
501951 2014 YA_5	16.7	X	145.20690	340.87972	125.01735	9.75205	0.1733162	0.21092295	2.7950323	21	6 8.4	21.3
501952 2014 YP_5	16.0	X	17.17275	63.27671	106.66388	26.30973	0.1581349	0.17557640	3.1585805	21	3 14.5	20.1
501953 2014 YA_7	17.2	X	236.07704	312.15842	111.87762	14.75726	0.1665872	0.23539232	2.5978129	21	7 9.1	21.1
501954 2014 YB_7	16.6	X	196.65361	351.86786	109.91648	6.27739	0.0905878	0.22967312	2.6407620	21	7 22.1	20.5
501955 2014 YF_8	17.3	X	97.49930	108.14936	71.51531	7.16084	0.0063579	0.21797018	2.7344584	21	6 28.1	20.9
501956 2014 YC_{10}	17.2	X	31.57152	117.87115	284.31217	22.59776	0.2801192	0.29690350	2.2253202	21	—	—
501957 2014 YK_{10}	16.3	X	49.38378	312.51359	287.48162	12.14858	0.1702015	0.21212220	2.7844877	21	8 4.2	19.7
501958 2014 YY_{10}	16.7	X	183.80542	176.88783	289.77573	12.58609	0.1401827	0.23028008	2.6361197	21	7 13.4	20.9
501959 2014 YB_{11}	18.0	X	260.43186	139.72801	310.14950	1.67168	0.1698037	0.26145931	2.4221441	21	9 10.9	21.1
501960 2014 YW_{11}	18.2	X	5.45599	106.50104	328.85550	4.96797	0.1486896	0.30312928	2.1947453	21	—	—
501961 2014 YD_{13}	17.3	X	208.19899	312.91700	211.42927	0.72538	0.1255988	0.25632539	2.4543790	21	10 23.3	20.6
501962 2014 YZ_{15}	18.7	X	291.52297	203.19728	252.39611	1.43715	0.1811482	0.26964532	2.3728710	21	11 9.8	20.8
501963 2014 YJ_{16}	16.4	X	239.91319	133.34483	297.77802	20.65528	0.1163114	0.23627340	2.5913505	21	7 26.9	20.0
501964 2014 YE_{20}	18.1	X	17.39656	328.69839	69.50027	4.09882	0.1737579	0.28542175	2.2846061	21	—	—
501965 2014 YQ_{20}	16.5	X	136.40276	235.68720	294.91435	10.97234	0.1173990	0.24588800	2.5233519	21	8 14.2	20.3
501966 2014 YJ_{21}	16.6	X	46.61119	320.97465	279.87197	15.75209	0.1865901	0.24369735	2.5384513	21	8 2.9	19.6
501967 2014 YP_{21}	17.6	X	323.81859	339.55890	97.93291	6.78290	0.1923159	0.27595921	2.3365377	21	12 27.8	19.2
501968 2014 YD_{22}	16.5	X	35.17526	219.71637	305.82770	5.11629	0.1045043	0.18092566	3.0960117	21	3 24.9	20.4
501969 2014 YG_{22}	16.7	X	195.40317	311.62232	122.17143	6.43715	0.0241336	0.21429747	2.7656126	21	6 16.2	20.5
501970 2014 YY_{22}	16.4	X	19.39270	66.17169	94.51677	13.37261	0.1144040	0.17646282	3.1479941	21	3 2.4	20.4
501971 2014 YY_{23}	17.6	X	317.37724	72.42243	21.77319	2.91189	0.1581266	0.28293234	2.2979874	21	—	—
501972 2014 YE_{24}	17.8	X	259.62807	161.89089	321.61241	5.77753	0.1398535	0.27298057	2.3535038	21	10 31.2	20.7
501973 2014 YG_{24}	17.6	X	351.35271	301.61940	165.38493	4.43761	0.0950976	0.29909350	2.2144442	21	—	—
501974 2014 YX_{24}	17.7	X	24.40675	93.53902	317.24901	7.24023	0.2034750	0.29706436	2.2245168	21	—	—
501975 2014 YT_{28}	16.7	X	242.26788	6.46285	7.28382	6.00593	0.0559547	0.21826659	2.7319823	21	5 21.3	20.6
501976 2014 YV_{28}	17.4	X	217.10670	134.51706	36.01241	5.39533	0.0507151	0.26883148	2.3776576	21	11 21.5	20.6
501977 2014 YE_{31}	16.8	X	189.17980	64.71017	69.01592	14.19342	0.0154871	0.23792976	2.5793099	21	9 5.7	20.6
501978 2014 YL_{31}	16.2	X	142.57932	75.87835	16.08833	14.84241	0.1237796	0.20393549	2.8585174	21	5 10.1	20.7
501979 2014 YN_{38}	16.2	X	359.83364	122.08693	69.34252	6.61070	0.1046313	0.17991801	3.1075607	21	3 8.4	20.1
501980 2014 YR_{38}	17.1	X	291.91696	282.81568	65.84645	6.53746	0.0663095	0.22577817	2.6710463	21	6 21.5	20.6
501981 2014 YT_{38}	17.7	X	248.39410	38.65567	59.89735	4.74534	0.1490354	0.25243084	2.4795590	21	9 12.8	21.1
501982 2014 YN_{40}	17.6	X	284.20024	146.81671	284.75938	8.33615	0.1846551	0.26677032	2.3898889	21	9 14.3	20.3
501983 2014 YJ_{41}	16.9	X	175.11068	108.90818	51.97912	6.91445	0.0889913	0.24160513	2.5530850	21	9 17.7	20.7
501984 2014 YN_{41}	18.4	X	346.03214	219.60435	204.94972	1.84937	0.2301682	0.28634410	2.2796975	21	—	—
501985 2014 YV_{42}	17.7	X	255.74246	105.65964	21.31537	6.03327	0.2201681	0.26204573	2.4185291	21	10 18.2	20.7
501986 2014 YM_{43}	16.6	X	139.69892	176.03614	298.45465	14.08471	0.1128137	0.22002601	2.7173988	21	6 7.3	20.8
501987 2014 YU_{45}	16.6	X	226.33021	296.79192	146.06666	8.20898	0.1486541	0.24278921	2.5447774	21	7 24.6	20.6
501988 2014 YE_{48}	16.7	X	197.53306	22.25699	107.68537	10.35146	0.1635171	0.24515043	2.5284107	21	8 28.5	20.8
501989 2015 AS_2	16.7	X	118.52131	193.01584	27.50550	15.35886	0.1257990	0.23581195	2.5947300	21	10 4.9	20.6
501990 2015 AP_3	17.9	X	19.73307	286.88218	121.10547	5.74278	0.0712773	0.28933940	2.2639370	21	—	—
501991 2015 AW_9	18.2	X	332.64969	61.30274	20.91784	6.21667	0.1621974	0.28329591	2.2960210	21	—	—
501992 2015 AJ_{10}	16.1	X	10.58813	181.44489	16.04910	11.26741	0.0486765	0.18907322	3.0064181	21	3 30.6	19.9
501993 2015 AF_{18}	17.5	X	202.35960	2.76076	115.21519	13.74901	0.1141155	0.23864978	2.5741194	21	8 19.7	21.4
501994 2015 AW_{21}	16.4	X	271.17855	21.46068	233.71430	8.97592	0.0605819	0.18609453	3.0384142	21	1 28.6	21.0
501995 2015 AP_{28}	17.9	X	327.16242	109.20852	316.45552	2.72779	0.1259084	0.27506126	2.3416201	21	12 12.2	19.9
501996 2015 AY_{28}	17.1	X	179.62507	261.87353	302.65710	4.48178	0.0540982	0.26462395	2.4027944	21	11 18.3	20.4
501997 2015 AZ_{28}	16.6	X	321.73927	123.59940	106.11418	10.69658	0.1628620	0.17795013	3.1304289	21	2 20.7	20.8
501998 2015 AV_{29}	17.5	X	125.54101	165.86120	318.19595	2.68919	0.0441501	0.20955102	2.8072184	21	5 26.6	21.3
501999 2015 AN_{30}	17.2	X	174.29527	153.93446	280.73868	3.20029	0.0242745	0.21038824	2.7997660	21	5 20.9	21.1
502000 2015 AA_{33}	18.2	X	121.00561	219.13482	138.40083	1.74789	0.1122283	0.31126471	2.1563345	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502001 2015 AR_{35}	16.1	X	217.44987	208.25442	101.59992	8.93265	0.1002367	0.17582941	3.1555498	21	2 10.0	21.0
502002 2015 AA_{36}	17.5	X	255.64878	158.97718	310.10937	5.78273	0.0741719	0.25858835	2.4400388	21	10 13.3	20.6
502003 2015 AB_{37}	16.9	X	352.96525	263.75451	314.59885	5.23196	0.1445287	0.18591852	3.0403315	21	3 21.9	20.5
502004 2015 AB_{38}	17.8	X	299.56974	113.36745	316.54077	4.31808	0.0815632	0.26264030	2.4148777	21	10 25.8	20.5
502005 2015 AW_{39}	17.7	X	146.37298	197.11028	28.24925	2.69299	0.1300413	0.25429371	2.4674345	21	11 5.9	21.4
502006 2015 AK_{41}	18.2	X	301.11841	324.63811	107.37572	2.12593	0.1544321	0.26611686	2.3937996	21	10 27.9	20.3
502007 2015 AL_{43}	16.6	X	53.66392	310.63871	328.05544	6.41377	0.1325404	0.24113157	2.5564266	21	9 29.7	19.9
502008 2015 AH_{53}	17.5	X	224.99848	189.48150	276.84468	4.52078	0.0541575	0.24611669	2.5217886	21	9 1.3	21.1
502009 2015 AO_{55}	17.4	X	207.21528	315.97129	103.85700	7.56217	0.0544198	0.22121021	2.7076920	21	6 10.9	21.3
502010 2015 AK_{56}	17.0	X	205.33361	97.96317	305.49360	5.03738	0.0122698	0.21202514	2.7853374	21	5 18.3	20.9
502011 2015 AF_{57}	18.1	X	210.08094	167.43558	292.00811	2.91965	0.1122967	0.23725308	2.5842120	21	8 1.2	22.0
502012 2015 AE_{62}	17.4	X	344.56959	40.93208	245.15418	3.98413	0.0824989	0.22038555	2.7144424	21	6 13.4	20.6
502013 2015 AS_{67}	16.2	X	11.23314	271.58559	281.96498	9.83835	0.0777578	0.18711961	3.0273073	21	3 19.4	20.2
502014 2015 AV_{68}	16.5	X	38.56898	131.87613	114.15737	10.50186	0.0706032	0.22272938	2.6953658	21	7 15.0	19.5
502015 2015 AL_{70}	17.0	X	138.80432	9.61433	107.34992	13.58282	0.0546514	0.21327147	2.7744754	21	6 6.4	21.0
502016 2015 AN_{73}	16.5	X	230.79090	142.14596	289.01605	13.78843	0.0511145	0.23313450	2.6145584	21	7 23.6	20.2
502017 2015 AR_{74}	17.4	X	172.02872	198.10856	262.09028	3.46788	0.0720120	0.22003909	2.7172910	21	6 22.3	21.4
502018 2015 AZ_{75}	17.9	X	357.00025	184.46977	167.72727	2.64613	0.1069290	0.25605433	2.4561108	21	10 14.7	20.2
502019 2015 AY_{77}	17.4	X	178.43345	293.55913	276.01707	5.42417	0.0617356	0.26451532	2.4034522	21	11 23.4	20.6
502020 2015 AZ_{80}	17.4	X	196.33876	330.38630	134.42594	3.57028	0.1682589	0.23185342	2.6241805	21	7 22.3	21.7
502021 2015 AW_{81}	17.6	X	223.25779	225.60371	203.37601	1.20374	0.0016598	0.22668368	2.6639284	21	7 17.3	21.0
502022 2015 AW_{83}	17.7	X	117.14566	176.03159	342.56491	0.28358	0.0150275	0.21963058	2.7206594	21	6 27.3	21.2
502023 2015 AP_{84}	18.3	X	270.50475	57.69783	78.15902	2.67752	0.1377443	0.27370308	2.3493601	21	12 8.5	20.7
502024 2015 AR_{87}	17.1	X	296.23130	238.64271	103.10886	5.45118	0.1087809	0.22806367	2.6531714	21	6 11.8	20.5
502025 2015 AC_{96}	16.0	X	349.99833	3.16771	166.54548	20.30324	0.0469819	0.17849155	3.1240953	21	1 26.2	20.4
502026 2015 AW_{96}	16.8	X	165.60627	326.00012	140.63289	22.48241	0.0178276	0.22652297	2.6651882	21	6 23.8	20.9
502027 2015 AK_{99}	17.1	X	230.60156	304.78381	106.61619	7.39724	0.0618729	0.22511213	2.6763123	21	6 26.8	20.7
502028 2015 AK_{100}	16.3	X	297.36846	282.80766	316.54140	3.90824	0.0996493	0.17342730	3.1846209	21	2 8.7	20.8
502029 2015 AO_{102}	16.8	X	232.98832	234.71532	113.40508	19.37182	0.1712833	0.20331337	2.8643457	21	4 11.7	21.8
502030 2015 AD_{105}	16.5	X	25.69155	307.16894	304.98546	3.46625	0.0785326	0.21740760	2.7391737	21	7 4.1	19.8
502031 2015 AM_{112}	16.6	X	205.74275	231.58078	149.61490	2.42987	0.0106119	0.19870188	2.9084933	21	4 23.2	20.7
502032 2015 AA_{118}	16.9	X	102.28796	242.57866	292.05815	3.84507	0.0672733	0.21607066	2.7504612	21	7 6.9	20.5
502033 2015 AR_{125}	17.5	X	131.14275	212.37302	304.32861	0.84186	0.1129281	0.21982102	2.7190878	21	7 23.0	21.6
502034 2015 AP_{126}	18.2	X	359.87688	168.85660	260.87538	1.35124	0.1572574	0.28882776	2.2666098	21	—	—
502035 2015 AM_{128}	17.0	X	5.89161	11.21597	299.24718	6.79039	0.1623520	0.23543634	2.5974890	21	8 27.9	19.5
502036 2015 AR_{128}	17.0	X	72.54429	34.12764	144.08310	2.60052	0.0230489	0.20570744	2.8420784	21	5 26.9	20.7
502037 2015 AH_{129}	17.7	X	293.24525	236.03802	114.20548	3.89856	0.1414730	0.22700405	2.6614214	21	6 13.9	21.2
502038 2015 AO_{130}	16.9	X	323.47568	34.42609	301.27799	6.73885	0.1962720	0.23396203	2.6083896	21	7 5.3	19.3
502039 2015 AN_{132}	16.1	X	307.53488	306.18999	310.65361	9.83447	0.1203292	0.18313991	3.0710064	21	3 6.3	20.5
502040 2015 AS_{133}	17.2	X	246.02170	272.08904	113.63515	7.07483	0.0811931	0.21988489	2.7185613	21	6 10.0	21.1
502041 2015 AF_{142}	17.0	X	350.81364	191.84256	93.12127	4.17158	0.0400314	0.21868372	2.7285071	21	6 23.9	20.5
502042 2015 AM_{142}	17.1	X	272.87450	31.21996	316.63947	5.67881	0.0965100	0.21656839	2.7462454	21	5 19.9	21.0
502043 2015 AD_{146}	17.4	X	135.04334	177.21484	35.48845	2.19436	0.0925478	0.24449321	2.5329397	21	10 8.3	21.1
502044 2015 AX_{146}	18.0	X	22.71104	75.62468	313.45412	6.79062	0.1375228	0.28277542	2.2988375	21	—	—
502045 2015 AY_{149}	16.9	X	357.32597	256.89797	37.83283	2.70661	0.1247324	0.22322734	2.6913559	21	7 18.3	19.7
502046 2015 AX_{150}	16.8	X	28.55782	194.48019	74.43700	4.02810	0.0602497	0.22458903	2.6804663	21	7 31.8	20.1
502047 2015 AH_{152}	17.2	X	334.91744	251.17908	116.77486	12.48874	0.0410084	0.24766391	2.5112747	21	10 2.7	20.5
502048 2015 AR_{154}	15.9	X	318.62426	131.93706	111.96374	12.07863	0.1096420	0.18097738	3.0954219	21	3 15.1	20.2
502049 2015 AT_{154}	17.7	X	50.69069	317.12264	319.85800	4.32256	0.0944740	0.23679827	2.5875199	21	9 17.6	20.9
502050 2015 AH_{158}	17.4	X	282.93576	80.39483	304.74435	13.95918	0.0907701	0.23508765	2.6000569	21	7 26.0	20.5
502051 2015 AK_{158}	18.0	X	338.04234	268.76278	123.96435	6.94618	0.1755892	0.26597156	2.3946713	21	11 17.1	20.0
502052 2015 AZ_{158}	17.5	X	196.21189	48.45002	129.23398	3.21992	0.1341459	0.25407468	2.4688524	21	10 28.0	21.1
502053 2015 AP_{164}	17.0	X	43.82261	66.51147	120.46040	3.19727	0.0154316	0.19633560	2.9318158	21	4 30.3	20.9
502054 2015 AX_{164}	16.9	X	223.13041	288.68214	113.47419	2.72409	0.0645465	0.21481350	2.7611818	21	6 5.8	20.8
502055 2015 AC_{166}	16.6	X	58.01644	134.29248	124.50934	8.17239	0.1248666	0.22839116	2.6506346	21	9 11.6	20.0
502056 2015 AW_{166}	17.7	X	278.34425	54.24966	17.72122	1.47890	0.1638246	0.25434306	2.4671153	21	9 13.1	20.3
502057 2015 AK_{168}	17.2	X	171.65087	37.77679	113.49635	6.17366	0.1142602	0.23418245	2.6067527	21	8 29.9	21.2
502058 2015 AU_{168}	17.1	X	108.92761	191.70645	116.12679	7.75462	0.1411329	0.27679475	2.3318332	21	—	—
502059 2015 AZ_{170}	17.3	X	247.78091	52.75668	321.71084	6.01436	0.0690748	0.21372076	2.7705856	21	5 28.1	21.3
502060 2015 AB_{172}	17.4	X	229.76735	354.29746	99.07712	4.87360	0.1782664	0.24077642	2.5589398	21	8 9.9	21.3
502061 2015 AC_{176}	17.4	X	229.42174	21.96190	56.95420	4.11198	0.0451630	0.23168258	2.6254704	21	8 4.9	21.0
502062 2015 AD_{179}	17.6	X	231.94271	36.81579	19.99356	3.02270	0.0372016	0.22321225	2.6914771	21	7 8.9	21.3
502063 2015 AG_{179}	16.1	X	299.24905	294.20068	312.90704	24.76173	0.1733324	0.17018178	3.2249824	21	2 8.5	20.8
502064 2015 AH_{180}	17.1	X	212.39415	313.21302	95.74839	6.82896	0.0363582	0.21152416	2.7897336	21	6 4.3	21.1
502065 2015 AO_{180}	17.9	X	210.13673	17.39425	90.49714	4.28905	0.0644037	0.23458029	2.6038045	21	8 17.9	21.5
502066 2015 AM_{181}	18.6	X	353.46895	329.03909	94.06465	3.73934	0.1937915	0.28395664	2.2924579	21	—	—
502067 2015 AE_{182}	17.4	X	161.56904	77.10594	96.75209	4.55618	0.1793082	0.23544922	2.5973943	21	9 18.2	21.7
502068 2015 AL_{183}	16.8	X	286.79144	158.17781	105.43953	5.80748	0.0883677	0.18071156	3.0984567	21	2 27.9	21.2
502069 2015 AZ_{188}	17.2	X	30.33061	124.22165	117.75373	12.60149	0.0821340	0.21247507	2.7814039	21	6 27.7	20.6
502070 2015 AB_{189}	17.2	X	323.28083	241.98815	108.47403	5.99645	0.0961771	0.23904602	2.5712741	21	8 10.0	20.0
502071 2015 AK_{191}	17.7	X	257.09708	141.61276	327.24354	5.17944	0.0729848	0.25720237	2.4487967	21	10 15.7	20.8
502072 2015 AM_{193}	17.8	X	197.44969	336.22157	137.02644	2.60873	0.0211107	0.23137047	2.6278310	21	8 10.9	21.4
502073 2015 AL_{196}	18.3	X	340.46478	18.48217	23.28045	1.63893	0.1842045	0.27025205	2.3693182	21	12 5.9	20.1
502074 2015 AN_{196}	16.4	X	314.35898	345.36628	320.18062	14.63599	0.1615151	0.20928851	2.8095653	21	5 6.1	20.2
502075 2015 AA_{206}	15.7	X	341.12405	278.55322	295.45450	15.28131	0.1941409	0.17808019	3.1289046	21	2 16.7	19.6
502076 2015 AF_{206}	17.9	X	296.81434	341.14690	100.97033	2.91929	0.1357573	0.26807075	2.3821536	21	11 6.6	20.1
502077 2015 AD_{225}	17.3	X	226.45712	260.12303	172.64708	9.17210	0.1081685	0.22871439	2.6481367	21	7 14.4	21.4
502078 2015 AS_{228}	16.3	X	73.15655	83.30328	170.18677	13.59750	0.0841625	0.23107586	2.6300641	21	9 16.4	19.7
502079 2015 AR_{229}	17.5	X	318.73118	184.83562	248.89323	6.46506	0.0873166	0.26608634	2.3939826	21	12 5.5	19.8
502080 2015 AT_{232}	16.2	X	250.86885	65.22452	307.76621	24.14282	0.1633923	0.21189359	2.7864901	21	5 15.2	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502081 2015 AB_{233}	16.7	X	313.70250	98.00567	250.44618	5.28958	0.0625089	0.22295785	2.6935241	21	7 22.9	20.2
502082 2015 AX_{233}	16.7	X	356.11950	23.98026	168.41782	12.84569	0.0710794	0.17050219	3.2209408	21	3 4.2	21.0
502083 2015 AQ_{234}	16.9	X	299.80793	104.94649	290.28428	13.79936	0.1272384	0.24264863	2.5457602	21	8 23.8	20.2
502084 2015 AO_{238}	17.0	X	152.11453	224.85979	220.99866	7.47149	0.0425983	0.19754533	2.9198343	21	5 11.1	21.1
502085 2015 AW_{238}	15.9	X	101.02453	120.19185	340.68941	8.56698	0.0983368	0.18141571	3.0904338	21	4 3.9	20.4
502086 2015 AT_{239}	17.5	X	265.66918	87.93064	28.87489	3.41929	0.1303521	0.25855643	2.4402397	21	11 1.4	20.5
502087 2015 AB_{240}	17.2	X	232.39486	130.50048	331.68018	11.08848	0.1653012	0.24030882	2.5622583	21	8 24.5	20.7
502088 2015 AD_{240}	17.6	X	202.83154	321.31666	176.90786	8.77241	0.1093856	0.23954430	2.5677071	21	9 13.2	21.2
502089 2015 AJ_{241}	15.9	X	121.93619	324.18770	127.57868	11.92497	0.0988377	0.18631176	3.0360520	21	4 25.2	20.5
502090 2015 AM_{241}	16.4	X	162.07217	323.77517	108.26772	4.68449	0.0823749	0.19591216	2.9360388	21	5 9.1	20.8
502091 2015 AT_{246}	17.1	X	136.95928	345.93028	151.05689	14.64728	0.1968387	0.22579889	2.6708829	21	7 9.6	21.6
502092 2015 AH_{248}	17.3	X	291.41094	25.12706	309.18489	5.28268	0.0461157	0.21969605	2.7201189	21	6 3.9	21.0
502093 2015 AC_{250}	16.9	X	77.86705	215.30855	3.27429	12.86543	0.1056980	0.22475181	2.6791719	21	8 14.3	20.7
502094 2015 AB_{252}	16.9	X	331.14053	143.54007	101.20415	11.67624	0.0637425	0.19117540	2.9843382	21	4 8.5	21.1
502095 2015 AL_{252}	18.1	X	323.23655	51.84510	30.71130	2.26884	0.1425722	0.27789622	2.3256675	21	—	—
502096 2015 AQ_{253}	17.4	X	125.54008	152.57201	341.07733	3.77663	0.0521696	0.20889071	2.8131311	21	6 9.5	21.4
502097 2015 AT_{258}	16.3	X	154.84508	169.35387	321.56788	11.97732	0.1534164	0.21469543	2.7621941	21	7 18.6	20.8
502098 2015 AV_{261}	17.8	X	306.36422	249.85805	175.33336	6.13485	0.1143503	0.25752245	2.4467672	21	10 30.6	20.3
502099 2015 AB_{262}	17.4	X	322.72006	212.48172	198.63027	6.25494	0.1166590	0.25791664	2.4442735	21	11 8.3	19.8
502100 2015 AE_{263}	17.2	X	204.94498	303.40969	134.84963	8.80791	0.1802667	0.21964786	2.7205167	21	6 26.5	21.7
502101 2015 AE_{264}	16.1	X	221.18104	293.18188	71.49388	13.00698	0.0569343	0.18378744	3.0637888	21	4 23.8	20.8
502102 2015 AF_{264}	18.1	X	122.74590	155.82734	353.27164	18.96998	0.0648631	0.35891439	1.9609904	21	6 29.8	20.8
502103 2015 AN_{264}	16.7	X	187.67984	44.53572	55.26327	10.29258	0.0803119	0.21626793	2.7487883	21	7 10.3	20.9
502104 2015 AA_{265}	17.0	X	306.24948	317.65632	136.44889	14.55014	0.1238294	0.26587335	2.3952610	21	12 14.1	19.6
502105 2015 AQ_{272}	15.0	X	245.21856	33.93141	132.54461	2.41475	0.0848887	0.12534436	3.9542688	21	11 22.8	20.6
502106 2015 AX_{273}	17.0	X	332.75430	256.10685	45.43821	4.58942	0.0877850	0.21501899	2.7594223	21	6 15.2	20.2
502107 2015 AU_{278}	16.0	X	263.72767	357.93762	308.55044	18.01901	0.1989769	0.17976419	3.1093331	21	3 4.7	21.2
502108 2015 AZ_{279}	17.3	X	215.93505	111.39547	334.22203	21.66851	0.0476400	0.22573007	2.6714258	21	8 1.2	21.3
502109 2015 AP_{280}	16.5	X	212.05991	45.59272	331.61748	8.96698	0.0053820	0.19017692	2.9947749	21	4 21.9	20.9
502110 2015 BR	16.8	X	267.73304	58.38016	344.90867	9.01440	0.1878760	0.24326253	2.5414754	21	7 17.1	20.3
502111 2015 BS_{2}	16.6	X	161.70318	321.68152	122.32543	3.05529	0.0340703	0.20374685	2.8602815	21	5 19.8	20.6
502112 2015 BT_{3}	16.9	X	344.17567	279.09124	117.35319	24.00179	0.2933712	0.27047404	2.3680216	21	12 25.4	18.7
502113 2015 BB_{5}	16.4	X	58.43885	294.84315	278.29683	13.82285	0.0534409	0.21411771	2.7671603	21	6 27.0	19.8
502114 2015 BG_{5}	17.1	X	255.43662	125.84425	291.79742	10.28587	0.1547883	0.23638848	2.5905094	21	7 23.2	20.8
502115 2015 BZ_{5}	17.7	X	0.89567	299.96541	101.28094	7.24251	0.1259293	0.27475926	2.3433356	21	—	—
502116 2015 BC_{6}	16.8	X	194.48229	166.26937	327.48175	10.43041	0.1217510	0.23643238	2.5901887	21	8 28.1	20.7
502117 2015 BS_{6}	17.6	X	178.39671	226.52931	282.62335	3.37738	0.1263009	0.23317746	2.6142373	21	8 30.5	21.7
502118 2015 BR_{7}	16.2	X	34.66580	237.99494	308.29761	9.28144	0.1492620	0.19148663	2.9811037	21	4 20.1	19.8
502119 2015 BS_{7}	17.4	X	151.28148	93.19840	73.78615	3.21413	0.0841987	0.23572209	2.5953894	21	8 28.0	21.2
502120 2015 BT_{7}	17.3	X	254.65983	354.48807	150.92687	5.18455	0.0498499	0.26512508	2.3997657	21	12 9.2	20.3
502121 2015 BK_{8}	17.9	X	348.45263	94.98485	335.95569	4.01460	0.1303693	0.28572706	2.2829784	21	—	—
502122 2015 BT_{8}	16.7	X	74.75898	11.71527	145.53957	3.66868	0.1459866	0.19065930	2.9897214	21	5 21.8	20.6
502123 2015 BC_{13}	16.7	X	286.01640	216.66500	105.41174	3.27906	0.0600815	0.20300470	2.8672484	21	5 11.8	20.6
502124 2015 BG_{13}	16.4	X	2.72101	79.44910	121.44413	11.71190	0.0137242	0.18309465	3.0715125	21	3 30.4	20.8
502125 2015 BN_{15}	16.3	X	273.32757	339.32224	340.12640	1.20897	0.0728276	0.19661100	2.9290774	21	4 19.5	20.4
502126 2015 BA_{16}	16.1	X	19.41463	230.29084	314.60840	1.91211	0.0288977	0.18354126	3.0665279	21	3 25.9	20.3
502127 2015 BO_{16}	16.7	X	180.02978	308.29236	127.89903	3.75899	0.1636197	0.21240931	2.7819779	21	6 2.2	21.3
502128 2015 BR_{16}	16.2	X	352.93219	96.96995	130.47746	17.58644	0.1193817	0.18576038	3.0420568	21	4 15.1	20.2
502129 2015 BC_{18}	17.6	X	196.47803	311.79087	166.02665	1.89284	0.1514148	0.22958802	2.6414146	21	8 8.5	21.7
502130 2015 BA_{19}	17.4	X	166.75136	132.13790	352.49722	3.99531	0.0972875	0.22849427	2.6498371	21	7 20.0	21.4
502131 2015 BB_{20}	16.4	X	8.29681	142.00783	102.97685	5.90118	0.0927121	0.19237398	2.9719295	21	5 28.4	19.9
502132 2015 BP_{21}	17.2	X	270.88425	196.85054	193.06954	5.61879	0.1450520	0.22711496	2.6605549	21	7 6.2	20.9
502133 2015 BU_{22}	17.7	X	276.24180	1.74647	149.74632	7.28243	0.0540586	0.27489102	2.3425867	21	—	—
502134 2015 BZ_{22}	16.8	X	312.14664	206.45213	153.66805	14.09334	0.1206966	0.22832321	2.6511604	21	7 29.9	20.0
502135 2015 BX_{23}	16.3	X	343.50479	177.12382	156.59931	11.44499	0.1018800	0.22667715	2.6639796	21	8 18.2	19.2
502136 2015 BT_{24}	16.4	X	45.49209	10.54300	155.72797	12.16018	0.0298690	0.17952593	3.1120837	21	4 10.9	20.7
502137 2015 BA_{25}	17.1	X	232.42703	138.71071	294.02771	3.45912	0.0798183	0.22344357	2.6896193	21	7 25.3	20.7
502138 2015 BL_{25}	17.3	X	236.22147	227.68151	228.38678	2.36100	0.0839830	0.23538175	2.5978906	21	8 29.2	20.9
502139 2015 BC_{26}	16.4	X	327.60241	282.74538	321.34851	8.41882	0.0503512	0.17744125	3.1364112	21	3 27.1	20.7
502140 2015 BG_{26}	17.0	X	277.29970	263.34532	148.95787	9.10536	0.1099468	0.23603583	2.5930890	21	8 21.6	20.3
502141 2015 BN_{26}	16.6	X	82.53676	219.31946	292.40800	2.76640	0.0605253	0.18958924	3.0009604	21	5 10.6	20.7
502142 2015 BU_{26}	17.4	X	119.74638	46.73370	162.16727	1.04922	0.0880444	0.22674375	2.6634579	21	9 14.3	21.1
502143 2015 BQ_{27}	16.9	X	182.69846	301.78958	147.16473	5.71034	0.1379281	0.21103835	2.7940133	21	6 20.2	21.4
502144 2015 BC_{28}	17.1	X	1.57117	72.52883	309.23759	5.48843	0.1591636	0.25855677	2.4402375	21	12 10.5	19.7
502145 2015 BH_{28}	16.2	X	270.07481	0.32659	297.36863	7.86184	0.0127916	0.17671653	3.1449803	21	3 25.8	20.9
502146 2015 BJ_{30}	16.8	X	100.92588	359.91373	147.62525	17.57828	0.1628606	0.19730626	2.9221924	21	6 15.3	21.4
502147 2015 BY_{31}	15.5	X	281.61930	328.13799	296.01356	18.06704	0.0794768	0.17623710	3.1506815	21	2 16.1	20.2
502148 2015 BK_{34}	16.8	X	339.25750	7.45082	312.41919	6.88067	0.0729832	0.22659377	2.6646330	21	7 24.3	20.0
502149 2015 BL_{34}	17.6	X	353.82871	279.15492	108.56874	5.80780	0.1757408	0.26982855	2.3717966	21	12 11.6	19.8
502150 2015 BO_{34}	16.1	X	356.20167	77.46791	122.06470	13.48983	0.1551077	0.17456428	3.1707777	21	3 10.5	20.0
502151 2015 BQ_{34}	17.2	X	170.35999	142.08131	317.01028	13.56493	0.1401108	0.21655293	2.7463761	21	6 21.9	21.8
502152 2015 BS_{34}	18.6	X	307.55542	52.38518	25.65526	1.68618	0.1579237	0.26829324	2.3808365	21	11 18.3	20.6
502153 2015 BJ_{36}	15.5	X	58.73115	224.54431	283.23414	12.11305	0.0414708	0.16985947	3.2290606	21	3 28.6	20.2
502154 2015 BW_{36}	16.6	X	121.67562	178.32181	293.96451	15.14458	0.1194023	0.18639523	3.0351455	21	5 14.8	21.4
502155 2015 BH_{38}	17.3	X	351.59597	327.78472	19.79510	6.58803	0.1471616	0.25323205	2.4743261	21	9 30.0	19.5
502156 2015 BO_{41}	16.8	X	318.74103	272.90157	45.69855	5.85183	0.0759555	0.22275664	2.6951459	21	6 18.0	20.1
502157 2015 BQ_{41}	17.4	X	354.61982	246.67625	80.65191	9.43430	0.0987773	0.24243020	2.5472891	21	9 5.7	20.3
502158 2015 BH_{42}	17.2	X	241.42589	23.27759	12.91113	4.98364	0.0515464	0.22437549	2.6821668	21	6 20.9	21.0
502159 2015 BP_{45}	18.0	X	312.84326	297.96629	145.91365	6.94798	0.1938218	0.28085744	2.3092915	21	12 14.0	19.6
502160 2015 BW_{48}	17.4	X	282.59527	284.23383	146.81306	9.75566	0.2040060	0.26413893	2.4057349	21	9 14.3	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502161 2015 BV_{53}	18.0	X	286.59553	330.21716	136.51962	5.90697	0.1943825	0.26971624	2.3724550	21	11 17.5	20.2
502162 2015 BQ_{57}	17.3	X	217.63641	23.03455	46.86048	3.53039	0.1166854	0.22517336	2.6758271	21	7 1.7	21.4
502163 2015 BK_{58}	17.2	X	48.10063	183.47761	94.09992	5.73997	0.0949877	0.23391388	2.6087475	21	9 19.3	20.5
502164 2015 BQ_{58}	17.3	X	150.46670	147.18321	349.69366	4.31780	0.0626610	0.21976702	2.7195332	21	7 16.1	21.2
502165 2015 BY_{58}	18.6	X	291.29275	6.21268	98.87132	3.27818	0.1622870	0.26970750	2.3725062	21	11 27.2	20.7
502166 2015 BZ_{58}	17.7	X	324.58093	338.00768	103.12288	4.02053	0.1502918	0.27569133	2.3380510	21	—	—
502167 2015 BA_{59}	18.3	X	329.98085	3.45081	48.62830	2.31185	0.1685975	0.26814210	2.3817310	21	11 26.8	20.1
502168 2015 BE_{59}	16.1	X	344.55587	88.26756	121.87869	16.86963	0.0748482	0.17599226	3.1536028	21	3 14.4	20.4
502169 2015 BN_{59}	17.5	X	261.29447	294.10664	122.25425	9.21098	0.2106044	0.24179959	2.5517160	21	7 21.5	21.1
502170 2015 BP_{59}	16.6	X	246.56464	266.03738	120.22010	6.69342	0.0478228	0.21526370	2.7573307	21	6 15.4	20.4
502171 2015 BR_{59}	16.1	X	342.40795	96.51371	125.78376	15.13527	0.1537397	0.17621936	3.1508929	21	3 17.6	20.1
502172 2015 BZ_{59}	17.7	X	298.30030	333.37404	97.86216	2.55707	0.1627010	0.26083539	2.4260051	21	10 19.3	20.0
502173 2015 BB_{60}	16.5	X	37.49876	107.79091	46.87266	1.25674	0.1225986	0.17624393	3.1506000	21	3 19.5	20.2
502174 2015 BH_{60}	17.5	X	330.64520	317.24616	120.98217	6.63309	0.1464030	0.27646937	2.3336624	21	—	—
502175 2015 BE_{61}	17.1	X	139.43458	263.62092	347.05157	6.00605	0.0280581	0.26193691	2.4191989	21	11 30.4	20.5
502176 2015 BG_{61}	16.3	X	223.61697	3.26019	344.06403	8.07534	0.0520969	0.18783503	3.0196156	21	3 29.2	20.7
502177 2015 BK_{61}	17.3	X	327.77680	230.73711	116.53013	12.30991	0.2519894	0.23821101	2.5772794	21	7 24.8	19.5
502178 2015 BS_{61}	17.6	X	354.59651	280.96302	91.85466	6.12413	0.1592019	0.25990291	2.4318043	21	11 16.9	19.8
502179 2015 BU_{63}	16.2	X	109.94349	355.59824	95.39776	9.52693	0.0386521	0.18256905	3.0774046	21	4 2.1	20.7
502180 2015 BV_{63}	16.4	X	28.15009	215.88639	342.76955	9.32814	0.0463515	0.19054123	2.9909563	21	4 20.9	20.5
502181 2015 BG_{64}	16.9	X	209.32974	30.12998	22.58287	6.34855	0.0530124	0.21010434	2.8022876	21	6 2.9	21.1
502182 2015 BA_{65}	16.0	X	51.31678	123.62346	18.49613	5.29903	0.0752625	0.17717523	3.1395498	21	3 21.2	20.0
502183 2015 BG_{65}	16.8	X	201.16460	358.55743	79.13687	5.43235	0.0442276	0.21572970	2.7533584	21	6 27.3	20.6
502184 2015 BH_{65}	17.3	X	260.58987	113.15524	358.46215	6.63113	0.1358864	0.25699983	2.4500832	21	10 15.2	20.2
502185 2015 BK_{66}	17.0	X	256.08796	36.04340	337.47543	5.75503	0.0524384	0.21231112	2.7828357	21	6 8.9	20.9
502186 2015 BO_{66}	17.2	X	111.14149	68.60852	74.89405	3.17977	0.0077144	0.20363914	2.8612901	21	5 29.6	21.0
502187 2015 BS_{66}	16.1	X	253.11503	182.62416	116.69892	10.01859	0.0470181	0.17571028	3.1569759	21	3 11.6	20.8
502188 2015 BT_{66}	16.2	X	43.57241	28.39069	113.02005	9.17894	0.0961897	0.17295557	3.1904089	21	3 14.2	20.3
502189 2015 BB_{67}	16.2	X	285.12198	293.67263	327.99599	8.05264	0.0524471	0.17416776	3.1755884	21	2 26.5	20.6
502190 2015 BY_{67}	17.9	X	302.05050	349.18761	94.18775	4.23189	0.1805601	0.26627697	2.3928399	21	11 13.8	19.8
502191 2015 BA_{68}	16.6	X	32.49272	67.86838	89.89284	2.72531	0.1526729	0.17378128	3.1802949	21	3 18.2	20.1
502192 2015 BG_{69}	16.1	X	325.19876	2.59512	251.68807	8.38410	0.0672603	0.18767142	3.0213703	21	4 2.7	20.3
502193 2015 BQ_{69}	17.2	X	188.38808	298.39134	160.01491	10.00783	0.1282974	0.22250584	2.6971707	21	7 6.9	21.5
502194 2015 BV_{69}	17.1	X	154.42597	279.57556	222.57702	5.38418	0.0067220	0.22312037	2.6922160	21	7 22.5	20.8
502195 2015 BY_{69}	17.0	X	22.12186	13.85456	244.36409	6.44101	0.0511043	0.21410091	2.7673051	21	7 3.9	20.6
502196 2015 BZ_{69}	16.7	X	50.25580	15.02126	271.77462	9.20560	0.1413511	0.23700681	2.5860019	21	10 4.4	20.2
502197 2015 BG_{70}	17.2	X	311.96075	80.92192	268.12556	7.63819	0.2311671	0.23266203	2.6180969	21	6 26.5	19.8
502198 2015 BV_{71}	16.5	X	39.93750	241.20287	271.83543	3.98858	0.1191420	0.17449009	3.1716764	21	3 18.7	20.4
502199 2015 BW_{71}	17.0	X	126.01477	18.30236	143.72659	15.84628	0.0749144	0.21517324	2.7581034	21	7 19.7	21.1
502200 2015 BY_{71}	16.7	X	278.19915	81.35502	273.14806	3.47180	0.0898117	0.21210425	2.7846448	21	6 7.3	20.4
502201 2015 BQ_{72}	16.9	X	301.91827	195.03116	159.46781	9.72699	0.1347943	0.22781120	2.6551313	21	7 3.5	20.4
502202 2015 BE_{73}	16.8	X	164.71409	6.75504	102.49655	9.90221	0.0882344	0.21596573	2.7513520	21	6 26.6	20.8
502203 2015 BB_{74}	17.0	X	5.97273	192.51620	93.78978	4.40666	0.0733772	0.21986609	2.7187162	21	7 20.2	20.2
502204 2015 BK_{74}	16.3	X	22.97476	80.89163	107.04197	9.62877	0.0691613	0.18352663	3.0666908	21	4 10.1	20.4
502205 2015 BW_{74}	17.2	X	125.76099	197.81276	334.06228	8.71626	0.0301465	0.22332862	2.6905421	21	7 30.4	20.9
502206 2015 BY_{74}	17.5	X	173.31926	86.25644	6.93187	3.82949	0.0709665	0.21294387	2.7773202	21	6 14.5	21.7
502207 2015 BZ_{75}	16.9	X	237.58813	282.17099	106.78512	12.54615	0.1714260	0.21792779	2.7348130	21	5 28.9	21.3
502208 2015 BA_{76}	16.6	X	328.80208	183.89911	64.97446	6.15770	0.2351680	0.17747324	3.1360343	21	3 16.6	20.6
502209 2015 BN_{77}	17.2	X	241.79558	333.95569	34.60344	4.01285	0.1084267	0.20998490	2.8033501	21	5 10.3	21.4
502210 2015 BO_{77}	16.5	X	321.37756	194.85603	52.17916	4.19911	0.1429822	0.18018780	3.1044581	21	3 15.3	20.6
502211 2015 BG_{78}	15.3	X	85.27936	301.08929	139.14852	15.78219	0.0971229	0.17191782	3.2032349	21	2 22.9	19.6
502212 2015 BY_{78}	18.7	X	337.02564	291.26206	161.01288	4.49761	0.2478750	0.28975765	2.2617579	21	—	—
502213 2015 BP_{80}	17.5	X	48.55399	243.83970	91.99567	7.32365	0.1317919	0.27116118	2.3640194	21	12 15.8	20.4
502214 2015 BF_{81}	17.2	X	357.79588	267.58958	93.75725	10.33156	0.1341220	0.26145199	2.4221893	21	11 6.2	19.7
502215 2015 BW_{82}	15.9	X	100.32659	290.56924	277.60721	17.04118	0.1244121	0.22566397	2.6719473	21	8 17.8	20.1
502216 2015 BX_{85}	17.8	X	331.55653	239.00925	149.25166	3.90194	0.2137652	0.26188880	2.4194952	21	10 23.9	19.3
502217 2015 BF_{86}	17.1	X	228.92622	289.82558	145.45895	2.29743	0.0661958	0.22843857	2.6502678	21	7 26.1	20.6
502218 2015 BZ_{86}	17.3	X	186.89984	7.22433	122.83481	3.03728	0.0243035	0.22955591	2.6416609	21	8 20.3	20.9
502219 2015 BA_{87}	15.6	X	31.06590	28.03718	133.04869	16.38652	0.0213268	0.17555832	3.1587974	21	3 17.6	20.1
502220 2015 BW_{87}	18.0	X	206.31410	315.05657	145.27651	4.76129	0.1837314	0.22963214	2.6410762	21	7 24.9	22.4
502221 2015 BB_{88}	16.5	X	37.18433	13.88341	173.52419	1.00778	0.1411014	0.18452332	3.0556378	21	5 1.6	20.0
502222 2015 BD_{88}	16.3	X	299.00450	301.07199	298.82307	4.44577	0.0236220	0.16797077	3.2532211	21	2 21.4	20.9
502223 2015 BH_{88}	17.2	X	173.06445	284.24348	165.90083	4.41732	0.0787025	0.20932666	2.8092239	21	6 11.3	21.4
502224 2015 BK_{88}	16.9	X	279.64655	263.97185	148.24395	9.02784	0.0393628	0.23733306	2.5836314	21	9 6.1	20.1
502225 2015 BN_{88}	18.4	X	358.20913	276.93699	146.52250	4.71918	0.2329682	0.28544611	2.2844762	21	—	—
502226 2015 BQ_{88}	17.1	X	334.86107	76.42883	222.96800	5.53730	0.0282052	0.21332069	2.7740486	21	6 21.0	20.8
502227 2015 BU_{88}	17.5	X	296.03750	117.55989	306.31905	8.08442	0.1682256	0.25704967	2.4497665	21	9 25.8	20.1
502228 2015 BA_{89}	18.1	X	345.96685	312.91345	108.53814	3.09801	0.1671820	0.27615778	2.3354175	21	—	—
502229 2015 BE_{89}	16.9	X	64.35707	238.65293	356.38251	1.80071	0.0216554	0.21985931	2.7187721	21	7 31.1	20.5
502230 2015 BO_{89}	16.9	X	142.05283	158.40918	50.55530	8.01578	0.1373853	0.23805526	2.5784033	21	10 13.7	20.9
502231 2015 BV_{89}	17.8	X	284.94270	16.54560	68.32407	2.23252	0.1505445	0.25742925	2.4473577	21	10 15.8	20.2
502232 2015 BX_{89}	17.3	X	221.55656	325.34662	115.50854	6.64345	0.1868672	0.22986887	2.6392626	21	7 14.5	21.6
502233 2015 BQ_{90}	17.7	X	305.71961	149.06369	269.62793	1.67529	0.1884419	0.25617219	2.4553574	21	10 8.1	19.9
502234 2015 BS_{90}	16.8	X	278.44629	269.30393	149.83880	14.82481	0.1578349	0.23956954	2.5675268	21	8 25.5	19.7
502235 2015 BZ_{90}	17.1	X	135.23101	54.67113	144.11536	10.09546	0.0459008	0.22994315	2.6386942	21	9 18.4	20.8
502236 2015 BA_{91}	17.0	X	209.65630	327.71930	145.78573	12.10740	0.1521815	0.23106054	2.6301803	21	8 16.1	21.0
502237 2015 BO_{91}	16.5	X	179.15685	291.31859	141.51722	17.35242	0.1482993	0.20522794	2.8465035	21	5 31.7	21.4
502238 2015 BN_{93}	17.0	X	211.82804	13.75873	45.40011	4.51495	0.0956166	0.21614106	2.7498639	21	6 12.4	21.2
502239 2015 BJ_{94}	17.6	X	232.32341	66.52465	39.21789	2.50202	0.0357073	0.24692496	2.5162825	21	9 16.1	20.8
502240 2015 BQ_{96}	17.8	X	233.76550	59.37215	93.66675	8.62942	0.0585677	0.26628006	2.3928214	21	11 21.0	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502241 2015 BL_{98}	18.3	X	314.32815	298.08309	116.03589	5.39072	0.1377746	0.26039817	2.4287199	21	10 29.1	20.6
502242 2015 BS_{98}	16.8	X	283.82324	39.57696	311.75292	13.43773	0.2104179	0.22302801	2.6929592	21	5 19.7	20.9
502243 2015 BC_{99}	16.7	X	2.72222	112.80536	111.52153	1.87181	0.0845086	0.18974065	2.9993636	21	4 21.7	20.4
502244 2015 BA_{100}	17.2	X	47.75920	330.88224	229.07935	1.14837	0.0303387	0.20211266	2.8756788	21	5 22.4	21.0
502245 2015 BC_{100}	17.3	X	215.10531	126.54187	292.48098	3.75221	0.0580663	0.21728391	2.7402131	21	6 18.6	21.2
502246 2015 BH_{100}	18.0	X	290.78431	297.99682	127.85194	3.22571	0.1751901	0.25358684	2.4720177	21	9 24.0	20.5
502247 2015 BV_{100}	17.0	X	77.98161	133.36155	144.54730	4.69584	0.0485618	0.24416665	2.5351976	21	10 23.1	20.3
502248 2015 BS_{101}	16.0	X	238.95070	228.81115	127.76602	12.67271	0.0373693	0.19012650	2.9953042	21	5 5.6	20.5
502249 2015 BE_{102}	17.4	X	270.83850	256.27154	156.11255	6.43538	0.0757468	0.23349174	2.6118909	21	8 17.3	20.7
502250 2015 BV_{102}	17.1	X	312.34798	42.80298	311.12239	3.25715	0.1452044	0.22383391	2.6864915	21	7 19.1	20.1
502251 2015 BJ_{103}	16.5	X	288.40248	162.70773	145.74239	10.40303	0.0869323	0.18910931	3.0060355	21	4 27.3	20.8
502252 2015 BM_{103}	16.8	X	326.71783	141.96824	146.78056	12.52979	0.0171784	0.19830306	2.9123917	21	5 30.9	21.0
502253 2015 BP_{107}	16.7	X	197.24873	281.55794	161.67967	4.79440	0.1350031	0.22125301	2.7073428	21	6 26.7	21.0
502254 2015 BB_{113}	16.4	X	301.68606	150.69769	90.97930	16.02283	0.1015187	0.17810455	3.1286191	21	2 20.7	21.0
502255 2015 BS_{117}	16.2	X	125.43779	255.83893	157.96330	7.51866	0.2010223	0.18672693	3.0315501	21	3 21.6	20.8
502256 2015 BS_{118}	16.7	X	64.67330	254.95599	353.00693	6.72135	0.0309054	0.22370057	2.6875589	21	8 20.9	20.2
502257 2015 BT_{118}	17.2	X	355.24254	227.45665	93.18865	4.75789	0.0280062	0.22631252	2.6668402	21	8 21.4	20.6
502258 2015 BK_{119}	17.7	X	275.29398	25.08959	66.31485	2.70583	0.1525892	0.25398690	2.4694212	21	10 8.8	20.5
502259 2015 BN_{119}	16.9	X	191.17723	349.37744	113.37602	6.19935	0.1230538	0.22045483	2.7138738	21	7 16.1	20.9
502260 2015 BT_{119}	17.1	X	252.25209	275.60015	124.04772	11.01266	0.1111028	0.22053542	2.7132125	21	7 1.7	21.1
502261 2015 BM_{120}	17.5	X	150.79779	58.68334	77.39904	5.81200	0.0705303	0.21984385	2.7188995	21	7 15.6	21.4
502262 2015 BE_{121}	16.3	X	301.74583	221.64117	112.68951	14.25110	0.1575902	0.21872547	2.7281599	21	6 4.6	20.0
502263 2015 BW_{121}	17.1	X	33.56443	279.60346	22.50645	1.87695	0.0499024	0.24063773	2.5599230	21	9 23.1	20.0
502264 2015 BD_{122}	16.9	X	342.23519	214.48058	99.00820	3.79617	0.0694238	0.22403527	2.6848815	21	7 19.8	20.0
502265 2015 BM_{122}	16.5	X	310.46613	169.91578	93.72274	5.53482	0.0474551	0.18737592	3.0245460	21	4 3.9	20.7
502266 2015 BN_{122}	16.8	X	274.94137	245.66930	109.99699	7.40741	0.0624118	0.21536634	2.7564545	21	6 9.4	20.5
502267 2015 BF_{124}	17.2	X	337.70339	324.18610	322.88341	2.85310	0.0657918	0.20938343	2.8087161	21	6 5.1	20.6
502268 2015 BH_{124}	17.5	X	124.42565	18.75811	123.97820	9.72231	0.1052480	0.21053793	2.7984389	21	6 26.7	21.6
502269 2015 BO_{125}	16.3	X	356.90494	250.48817	309.49132	9.91255	0.0696456	0.17803825	3.1293958	21	3 9.8	20.5
502270 2015 BR_{125}	17.1	X	291.32777	241.22278	120.43903	6.14612	0.0868614	0.22564309	2.6721122	21	7 5.5	20.4
502271 2015 BQ_{126}	18.2	X	284.14145	311.68460	94.48973	2.55707	0.0874154	0.24206434	2.5498551	21	8 28.4	21.2
502272 2015 BM_{128}	17.2	X	337.88473	304.64918	358.50939	3.86818	0.0662439	0.21595112	2.7514761	21	6 28.3	20.5
502273 2015 BP_{129}	16.7	X	293.23733	212.71266	125.03477	4.52058	0.2015007	0.21728287	2.7402218	21	5 19.8	20.4
502274 2015 BC_{130}	18.0	X	348.73964	257.40529	128.33840	3.28020	0.2028491	0.26637870	2.3922307	21	12 1.0	20.0
502275 2015 BQ_{130}	16.8	X	133.05621	157.94846	326.34896	4.01475	0.0750514	0.20695646	2.8306319	21	6 9.0	20.9
502276 2015 BY_{132}	16.7	X	349.29383	123.64835	116.93155	10.83011	0.0394564	0.19205601	2.9752088	21	4 29.4	20.8
502277 2015 BS_{133}	17.3	X	272.47921	349.12046	79.53952	3.45520	0.0816527	0.24531820	2.5272577	21	9 13.8	20.4
502278 2015 BT_{133}	16.9	X	290.83152	272.77705	73.87075	5.43247	0.1364180	0.21890137	2.7266982	21	6 6.4	20.3
502279 2015 BP_{134}	16.8	X	300.66468	259.88244	105.07222	8.61843	0.1405045	0.23193105	2.6235950	21	7 16.2	19.7
502280 2015 BW_{135}	18.2	X	0.59652	41.89735	342.69945	5.28505	0.2506588	0.27399530	2.3476894	21	—	—
502281 2015 BR_{136}	16.3	X	264.94806	42.94232	319.67875	24.02532	0.0488596	0.21362175	2.7714416	21	6 6.6	20.6
502282 2015 BD_{138}	15.4	X	297.53767	300.16538	323.47109	25.54772	0.2276695	0.17395023	3.1782353	21	2 18.4	20.1
502283 2015 BB_{139}	17.5	X	284.43818	358.07800	8.33401	6.25806	0.0331139	0.22179029	2.7029688	21	7 12.0	21.2
502284 2015 BE_{140}	17.1	X	332.36604	278.01761	17.58750	6.43511	0.0670401	0.20904551	2.8117421	21	6 7.9	20.7
502285 2015 BP_{140}	16.4	X	222.14058	19.53374	336.58325	14.45164	0.0292919	0.18986645	2.9980387	21	4 4.3	21.0
502286 2015 BT_{140}	17.0	X	268.55702	283.68105	71.43174	6.28237	0.1441759	0.21271962	2.7792718	21	5 19.9	20.9
502287 2015 BZ_{140}	17.9	X	5.56414	19.87554	17.03929	6.26805	0.1616926	0.27555365	2.3388297	21	—	—
502288 2015 BD_{141}	17.0	X	266.99760	340.02492	45.20894	6.90079	0.0359951	0.22171250	2.7036010	21	7 13.2	20.7
502289 2015 BL_{141}	17.2	X	281.79791	359.25203	58.18988	6.60972	0.1440140	0.24660393	2.5184658	21	9 3.7	20.3
502290 2015 BO_{141}	16.3	X	11.84026	197.22302	3.38321	9.77800	0.1560439	0.17943250	3.1131638	21	4 2.8	19.8
502291 2015 BS_{141}	17.4	X	259.56358	37.41581	86.02712	8.12630	0.0153649	0.25885039	2.4383919	21	11 20.9	20.5
502292 2015 BY_{141}	17.1	X	173.27690	92.40911	36.62449	6.36266	0.1454345	0.22469793	2.6796002	21	8 3.1	21.5
502293 2015 BK_{142}	17.0	X	318.73349	219.94813	90.20367	7.42482	0.0233393	0.20984589	2.8045880	21	6 13.7	20.8
502294 2015 BT_{143}	16.1	X	224.81628	227.17750	112.87098	13.74515	0.0572329	0.18256481	3.0774523	21	3 30.4	20.9
502295 2015 BB_{144}	17.1	X	140.40440	111.11975	87.94650	4.59632	0.0855311	0.23717168	2.5848033	21	9 27.7	20.9
502296 2015 BB_{146}	18.4	X	318.14718	87.98878	332.24866	3.93504	0.1362039	0.26360977	2.4089533	21	11 11.3	20.8
502297 2015 BC_{146}	16.2	X	295.00708	145.91513	125.29178	14.46431	0.1693594	0.17680845	3.1438902	21	3 10.0	20.8
502298 2015 BQ_{146}	17.4	X	300.83632	310.95183	116.35815	8.02993	0.1709821	0.26009187	2.4306263	21	10 20.3	19.8
502299 2015 BJ_{147}	16.5	X	326.16051	110.02641	122.36760	10.59387	0.0616202	0.17668678	3.1453333	21	3 16.9	20.9
502300 2015 BK_{147}	17.2	X	131.80538	180.27933	345.04313	3.59549	0.0221226	0.22140148	2.7061323	21	7 27.6	20.8
502301 2015 BP_{148}	17.6	X	299.37428	40.97088	20.94355	3.08411	0.1673903	0.25677672	2.4515022	21	10 4.6	19.7
502302 2015 BQ_{148}	17.1	X	209.64777	1.04467	36.09933	2.48427	0.0757390	0.20360485	2.8616112	21	5 14.3	21.4
502303 2015 BT_{148}	17.3	X	336.13865	303.05371	110.33872	6.85340	0.0954003	0.26584857	2.3954099	21	12 7.4	19.8
502304 2015 BL_{149}	16.4	X	98.82306	125.58734	337.27533	10.37974	0.1170767	0.18375968	3.0640973	21	4 4.9	20.9
502305 2015 BQ_{149}	16.6	X	312.87747	292.23088	347.65984	5.55700	0.1627452	0.18796202	3.0182554	21	4 6.5	20.5
502306 2015 BF_{150}	16.8	X	18.42050	169.02838	109.88400	6.56942	0.0959864	0.21763316	2.7372807	21	8 1.1	20.0
502307 2015 BU_{150}	17.1	X	12.19235	245.59359	25.63382	4.60928	0.0300325	0.21438728	2.7648402	21	7 7.4	20.7
502308 2015 BA_{151}	17.3	X	358.54759	267.11947	24.23029	4.55699	0.0537409	0.21663552	2.7456780	21	7 15.6	20.7
502309 2015 BC_{151}	16.9	X	227.11363	286.01298	98.97132	6.84405	0.0809333	0.20539306	2.8449777	21	5 19.6	21.1
502310 2015 BG_{151}	17.4	X	224.84827	31.30296	47.46123	3.92040	0.1334826	0.22907357	2.6453678	21	7 20.4	21.4
502311 2015 BQ_{151}	17.9	X	356.78790	301.14544	92.69778	7.76736	0.0805925	0.26851930	2.3795000	21	12 12.5	20.3
502312 2015 BA_{153}	16.6	X	270.78046	170.13842	128.12359	9.68836	0.0442236	0.18550916	3.0448026	21	3 30.3	21.0
502313 2015 BV_{153}	18.0	X	297.88036	54.32974	358.75050	5.02752	0.1352655	0.25252329	2.4789538	21	9 22.3	20.7
502314 2015 BZ_{154}	16.9	X	307.83410	310.61208	329.39582	10.56330	0.0781658	0.19072737	2.9890100	21	4 8.5	21.1
502315 2015 BB_{155}	16.5	X	80.85593	202.34782	340.65799	8.68513	0.1524375	0.20305889	2.8667383	21	7 4.2	20.6
502316 2015 BX_{156}	16.6	X	168.61326	344.59974	123.33320	11.33997	0.0800471	0.21007908	2.8025122	21	6 29.1	20.8
502317 2015 BF_{157}	16.5	X	194.90674	292.62294	156.38284	12.79255	0.1343393	0.21046292	2.7991037	21	7 1.8	21.2
502318 2015 BU_{159}	16.9	X	348.60632	90.80379	153.63655	9.20699	0.0308783	0.19133117	2.9827182	21	5 2.3	21.0
502319 2015 BW_{159}	17.2	X	197.54703	230.48822	196.27223	3.64670	0.0873981	0.21013653	2.8020014	21	6 7.9	21.4
502320 2015 BJ_{160}	17.0	X	226.21755	175.29066	229.00470	2.95904	0.0978553	0.21311436	2.7758388	21	6 9.4	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
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502321 2015 BL_{160}	17.0	X	227.43522	151.77066	250.54191	2.58528	0.1002323	0.21291361	2.7775834	21	6 7.9	21.0
502322 2015 BD_{161}	16.9	X	312.68452	153.06538	183.60342	5.71618	0.0538627	0.21987151	2.7186716	21	7 6.6	20.4
502323 2015 BX_{163}	17.4	X	328.63272	34.85765	314.80474	14.02703	0.1223250	0.23754563	2.5820899	21	8 13.7	20.2
502324 2015 BM_{164}	17.1	X	267.17294	273.77298	88.29665	5.17185	0.0899514	0.21614936	2.7497935	21	6 3.4	21.0
502325 2015 BO_{165}	16.9	X	334.67993	309.58450	318.49102	4.11836	0.0755876	0.19865742	2.9089273	21	5 3.9	20.7
502326 2015 BW_{166}	17.3	X	287.60127	243.54308	118.26024	7.23529	0.0604257	0.22291365	2.6938802	21	7 4.6	20.9
502327 2015 BL_{167}	17.1	X	55.24938	7.17199	323.74967	5.35312	0.1464259	0.26459650	2.4029606	21	12 17.9	20.4
502328 2015 BM_{168}	16.4	X	327.96379	187.33916	67.05086	2.82346	0.1385186	0.18566139	3.0431380	21	4 2.4	20.2
502329 2015 BD_{169}	17.4	X	356.48419	196.23997	111.69726	7.33920	0.0484781	0.22614341	2.6681696	21	8 4.8	20.6
502330 2015 BE_{169}	16.6	X	68.95194	8.66973	116.68833	11.73722	0.0162225	0.17951015	3.1122661	21	3 21.4	21.1
502331 2015 BW_{171}	17.9	X	297.82049	304.74704	121.64172	2.11925	0.1690877	0.25897560	2.4376059	21	10 9.5	20.2
502332 2015 BO_{173}	17.7	X	290.49212	53.21154	317.44051	15.18740	0.1392294	0.23076343	2.6324375	21	7 11.3	21.1
502333 2015 BM_{176}	16.0	X	193.39023	55.12683	322.39898	15.58999	0.0086386	0.18677018	3.0310820	21	3 26.8	20.6
502334 2015 BT_{179}	17.7	X	222.57768	125.70485	330.48159	11.14942	0.1368168	0.23665328	2.5885766	21	8 10.2	21.6
502335 2015 BR_{184}	17.2	X	40.05519	287.43003	7.11011	9.40907	0.1102442	0.23591894	2.5939455	21	9 30.1	20.3
502336 2015 BA_{185}	16.9	X	31.85451	166.66476	103.52817	13.40859	0.1038706	0.21931545	2.7232650	21	8 14.2	20.3
502337 2015 BB_{186}	17.5	X	340.33105	320.34139	85.94556	6.92817	0.1096356	0.26563233	2.3967097	21	12 4.9	19.8
502338 2015 BF_{187}	16.9	X	322.05496	241.14183	81.41578	3.74537	0.0644936	0.21756683	2.7378370	21	6 30.6	20.3
502339 2015 BZ_{187}	16.4	X	313.43412	120.22699	119.18454	10.88185	0.0448597	0.17523949	3.1626276	21	3 11.4	20.9
502340 2015 BJ_{189}	17.1	X	350.56588	242.19684	113.51772	3.95731	0.0635464	0.24540298	2.5266756	21	10 5.8	20.0
502341 2015 BB_{191}	16.7	X	162.95610	183.60289	319.85284	11.65666	0.1326711	0.22510599	2.6763609	21	8 9.4	20.9
502342 2015 BJ_{193}	17.0	X	13.29937	190.61023	99.69569	6.30505	0.0133798	0.22381313	2.6866578	21	8 4.1	20.4
502343 2015 BK_{193}	17.2	X	264.43191	278.30367	92.14991	5.26678	0.0833525	0.21534828	2.7566086	21	6 11.9	21.0
502344 2015 BH_{195}	18.3	X	326.07376	30.87608	358.73228	4.91284	0.1179270	0.25162154	2.4848728	21	10 10.2	20.8
502345 2015 BV_{195}	17.0	X	344.17013	214.46106	97.21941	6.55407	0.0589464	0.22003090	2.7173584	21	7 20.9	20.3
502346 2015 BJ_{197}	17.9	X	331.33503	22.18762	342.76985	2.09465	0.1124697	0.24567974	2.5247777	21	9 13.4	20.2
502347 2015 BP_{198}	16.9	X	98.53525	77.93668	95.41970	4.27825	0.0372426	0.21116828	2.7928670	21	6 25.8	20.5
502348 2015 BR_{200}	16.1	X	241.69093	314.65460	346.73681	15.44297	0.1513543	0.17053721	3.2204998	21	2 21.8	21.3
502349 2015 BN_{203}	15.7	X	313.42245	302.37733	296.45166	16.67635	0.1490945	0.17247410	3.1963435	21	2 15.4	20.2
502350 2015 BS_{203}	18.4	X	357.63523	235.50633	161.21210	4.13304	0.2234426	0.27674450	2.3321155	21	—	—
502351 2015 BH_{204}	17.6	X	218.26883	286.54300	197.77788	4.52581	0.0857722	0.24468885	2.5315893	21	9 14.6	21.0
502352 2015 BT_{205}	17.2	X	236.03553	133.47891	316.20430	11.91126	0.1501991	0.23615704	2.5922016	21	8 13.0	21.1
502353 2015 BU_{205}	17.3	X	201.16863	314.21889	135.56459	5.91227	0.1339535	0.22116741	2.7080414	21	7 8.9	21.5
502354 2015 BY_{207}	15.9	X	189.00834	290.40722	110.62510	14.63518	0.1572299	0.21602158	2.7508777	21	5 3.3	20.6
502355 2015 BM_{213}	15.9	X	24.41867	255.49909	275.16235	17.47648	0.1052090	0.18274031	3.0754817	21	3 6.3	20.2
502356 2015 BV_{213}	16.8	X	204.12122	301.78106	109.43766	4.63550	0.0939258	0.20874776	2.8144152	21	5 26.5	21.0
502357 2015 BT_{215}	17.1	X	227.02991	310.34601	81.88596	6.78077	0.0598936	0.21828182	2.7318552	21	5 28.9	20.9
502358 2015 BT_{222}	15.8	X	303.01423	2.21146	251.03934	8.50649	0.1908279	0.17787972	3.1312549	21	2 15.1	20.4
502359 2015 BW_{222}	16.5	X	24.30411	307.93799	321.64038	4.50659	0.0926278	0.22839500	2.6506049	21	7 28.7	19.4
502360 2015 BJ_{223}	17.2	X	2.69086	172.86116	76.38123	5.50842	0.0145672	0.21179622	2.7873441	21	5 24.5	20.9
502361 2015 BS_{224}	17.1	X	124.76654	38.17773	89.80545	6.02371	0.1109056	0.21057331	2.7981253	21	6 8.6	21.1
502362 2015 BL_{225}	19.0	X	313.03421	33.13110	8.57267	2.26915	0.2375553	0.26479992	2.4017298	21	9 23.5	20.3
502363 2015 BO_{231}	16.7	X	76.25059	174.72987	70.42150	7.35610	0.0571881	0.23717332	2.5847913	21	9 9.6	20.2
502364 2015 BK_{233}	16.4	X	18.29688	170.57555	19.39229	6.60138	0.1792820	0.18525852	3.0475482	21	4 1.3	19.5
502365 2015 BR_{233}	16.5	X	13.43005	306.52487	327.55833	12.36607	0.1525604	0.22479150	2.6788566	21	7 22.6	19.3
502366 2015 BQ_{238}	17.0	X	159.18321	90.89207	29.37067	4.44262	0.0681839	0.22251979	2.6970580	21	7 4.3	21.0
502367 2015 BR_{238}	16.0	X	178.33651	87.86776	259.80140	10.94645	0.1185986	0.17675998	3.1444649	21	2 10.9	21.2
502368 2015 BZ_{238}	18.0	X	41.61241	263.20439	62.26218	4.77188	0.0800367	0.26112136	2.4242335	21	11 13.2	20.8
502369 2015 BG_{240}	16.8	X	237.81712	261.97481	132.55307	12.72829	0.1156495	0.21998701	2.7177199	21	6 9.7	21.0
502370 2015 BT_{240}	18.0	X	305.74532	314.57714	138.40928	6.58694	0.1018295	0.27081197	2.3660512	21	12 12.4	20.4
502371 2015 BU_{240}	16.7	X	27.15190	147.64426	132.79937	15.16645	0.2214062	0.22267679	2.6957902	21	9 7.7	19.6
502372 2015 BH_{241}	17.4	X	91.36440	3.12445	197.30963	0.78759	0.0458826	0.21983371	2.7189832	21	7 23.9	21.1
502373 2015 BL_{241}	17.7	X	303.51837	234.33373	139.40287	3.69880	0.1629985	0.24023028	2.5628167	21	7 29.9	20.5
502374 2015 BE_{242}	17.2	X	31.43699	142.21546	158.29716	6.44128	0.1204462	0.23782217	2.5800878	21	9 28.4	20.1
502375 2015 BO_{242}	16.9	X	15.74923	26.19292	237.16843	2.52242	0.0191804	0.21548390	2.7554519	21	6 30.4	20.5
502376 2015 BS_{242}	17.7	X	327.87981	139.43666	282.14226	9.30132	0.2044020	0.27225296	2.3576951	21	12 10.8	19.4
502377 2015 BV_{242}	16.9	X	325.25786	172.06169	160.99843	9.66159	0.0657352	0.22566683	2.6719248	21	7 19.1	20.3
502378 2015 BW_{242}	16.9	X	248.71381	277.93413	136.86069	27.26822	0.0932897	0.23127839	2.6285284	21	7 20.3	20.8
502379 2015 BC_{243}	16.8	X	8.59736	2.83456	286.69813	11.32552	0.0629963	0.22268889	2.6956925	21	7 26.7	20.0
502380 2015 BN_{243}	16.6	X	300.68104	123.04472	146.25761	10.50941	0.1112469	0.18292913	3.0733650	21	3 20.4	20.9
502381 2015 BS_{243}	16.9	X	339.83406	36.42638	258.35802	3.49789	0.0340979	0.21371552	2.7706309	21	6 21.6	20.5
502382 2015 BT_{243}	17.8	X	324.21430	116.63404	277.03397	5.45876	0.1992530	0.25936209	2.4351837	21	10 7.8	19.8
502383 2015 BA_{244}	17.0	X	303.96356	200.36707	147.54790	11.53225	0.0909323	0.22416633	2.6838349	21	7 4.4	20.6
502384 2015 BU_{244}	18.1	X	350.00194	144.64703	247.74472	1.84857	0.1998884	0.27029519	2.3690661	21	12 14.2	19.9
502385 2015 BW_{244}	17.2	X	70.10026	281.99887	276.42211	3.17071	0.0402948	0.20992851	2.8038521	21	6 21.5	20.9
502386 2015 BN_{245}	18.0	X	337.26825	283.54815	137.20689	5.36834	0.1328658	0.27291850	2.3538606	21	12 24.4	20.1
502387 2015 BW_{245}	16.3	X	55.43852	199.37785	305.44490	8.93615	0.0363765	0.18176107	3.0865179	21	3 20.5	20.6
502388 2015 BC_{246}	17.9	X	314.29151	244.45782	153.66800	2.93218	0.1353366	0.25356687	2.4721475	21	10 1.6	20.3
502389 2015 BD_{246}	17.6	X	190.44221	277.46684	177.25276	1.78019	0.0314227	0.21911114	2.7249576	21	7 6.9	21.3
502390 2015 BP_{246}	16.6	X	46.43725	358.58998	278.38579	3.35289	0.1789740	0.22845145	2.6501682	21	9 23.6	19.8
502391 2015 BY_{247}	15.9	X	188.06379	195.29040	142.41981	9.30434	0.1366601	0.16922781	3.2370908	21	2 14.6	21.2
502392 2015 BG_{248}	16.3	X	88.50166	163.79301	313.19646	9.24938	0.0727702	0.18470447	3.0536396	21	4 2.3	20.7
502393 2015 BK_{248}	17.4	X	244.92840	263.75071	139.77281	3.90777	0.1669489	0.22716297	2.6601800	21	6 21.8	21.5
502394 2015 BP_{248}	17.1	X	190.87682	307.24975	132.79037	0.51807	0.0512086	0.21348106	2.7726592	21	6 17.9	21.0
502395 2015 BC_{249}	17.6	X	249.52480	291.70925	130.49409	1.66650	0.1071734	0.23277185	2.6172733	21	7 29.1	21.2
502396 2015 BV_{249}	17.7	X	212.54094	21.17611	114.91708	5.99036	0.0341822	0.24372197	2.5382804	21	10 3.1	21.1
502397 2015 BV_{250}	17.1	X	217.42003	305.68209	124.03000	3.19185	0.0439002	0.21788990	2.7351300	21	7 6.6	20.8
502398 2015 BJ_{251}	18.0	X	298.81044	273.21004	173.59245	1.48836	0.1520102	0.26418712	2.4054423	21	11 14.0	20.0
502399 2015 BO_{251}	17.1	X	335.74394	190.27271	153.49951	2.40541	0.0944089	0.23136250	2.6278913	21	8 20.4	20.0
502400 2015 BP_{251}	18.7	X	348.15592	118.49427	308.51189	2.37826	0.2340459	0.28164357	2.3049924	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502401 2015 BR_{251}	16.4	X	317.72579	285.87788	326.56577	2.44493	0.1406124	0.17609122	3.1524213	21	3 15.3	20.7
502402 2015 BF_{252}	17.8	X	297.54251	188.16833	232.13693	2.52040	0.1309806	0.25308944	2.4752555	21	10 2.0	20.5
502403 2015 BG_{252}	17.0	X	148.79459	354.89500	160.76417	5.79996	0.0407737	0.22322420	2.6913811	21	8 5.0	20.7
502404 2015 BW_{252}	16.7	X	172.75218	185.42184	265.11306	5.19951	0.0513912	0.20859456	2.8157930	21	6 10.2	20.7
502405 2015 BD_{253}	16.1	X	99.40160	186.00155	295.23733	8.51707	0.0419666	0.18883299	3.0089673	21	4 17.5	20.4
502406 2015 BO_{253}	17.0	X	60.48437	39.35254	179.82255	4.08655	0.0783913	0.21101741	2.7941981	21	7 11.1	20.7
502407 2015 BR_{253}	17.3	X	102.47202	12.31260	155.97661	8.01938	0.0785057	0.20899808	2.8121675	21	6 30.0	21.3
502408 2015 BS_{253}	16.8	X	26.85019	77.30407	168.21675	4.71814	0.0553341	0.20906291	2.8115861	21	6 24.6	20.5
502409 2015 BA_{254}	16.9	X	305.22456	120.87301	221.19192	3.83735	0.1230029	0.22025559	2.7155101	21	6 23.3	20.3
502410 2015 BC_{254}	17.0	X	335.07887	41.70487	278.87903	5.21977	0.0716062	0.22127768	2.7071416	21	7 17.3	20.1
502411 2015 BQ_{254}	16.7	X	126.68169	227.07903	286.42067	3.73974	0.0764518	0.21345782	2.7728604	21	7 10.1	20.7
502412 2015 BS_{254}	16.0	X	270.98982	148.43846	149.23847	11.68808	0.1624356	0.18053002	3.1005336	21	3 14.3	20.8
502413 2015 BT_{254}	16.6	X	19.59846	43.90342	141.42932	18.77959	0.1388851	0.17760257	3.1345116	21	4 3.9	20.5
502414 2015 BJ_{255}	17.3	X	235.18503	293.68439	141.39585	11.77141	0.0893469	0.23135771	2.6279276	21	7 30.5	21.0
502415 2015 BL_{255}	16.7	X	251.16523	286.98884	138.74168	11.92993	0.1715581	0.23805972	2.5783712	21	7 26.9	20.4
502416 2015 BN_{255}	15.9	X	150.08101	249.20754	140.86120	11.73787	0.1883513	0.18120034	3.0928822	21	3 17.4	20.9
502417 2015 BO_{255}	16.1	X	53.68411	213.22219	306.14499	7.04926	0.0339266	0.18552890	3.0445867	21	4 5.6	20.4
502418 2015 BB_{256}	16.4	X	261.49328	24.35331	285.55951	7.83486	0.0472382	0.18605658	3.0388274	21	3 25.0	21.0
502419 2015 BD_{256}	16.1	X	278.14288	30.84037	258.12886	4.45901	0.1323987	0.18129791	3.0917724	21	3 10.7	20.7
502420 2015 BF_{256}	16.4	X	347.39699	46.85831	149.88828	9.98190	0.0591592	0.17214824	3.2003759	21	2 27.2	20.5
502421 2015 BS_{256}	16.8	X	188.54056	156.55900	286.61928	6.96677	0.1933837	0.21870351	2.7283424	21	6 17.8	21.3
502422 2015 BW_{256}	16.7	X	235.16256	124.33335	285.60861	5.57532	0.0643644	0.22071490	2.7117414	21	6 30.3	20.5
502423 2015 BC_{257}	16.1	X	59.02607	211.74738	283.17019	5.24722	0.1403668	0.17856598	3.1232271	21	3 26.5	20.1
502424 2015 BJ_{257}	18.0	X	337.30659	275.27369	152.44995	7.44622	0.1491608	0.27539173	2.3397464	21	—	—
502425 2015 BN_{257}	16.7	X	68.54811	291.92249	254.43660	5.60803	0.0434741	0.20392521	2.8586135	21	6 3.7	20.6
502426 2015 BA_{258}	18.4	X	339.30403	275.21549	163.81064	5.27802	0.1898595	0.28212652	2.3023611	21	—	—
502427 2015 BC_{258}	17.0	X	344.18997	31.45193	266.90260	6.03509	0.0610890	0.21577434	2.7529787	21	7 1.4	20.4
502428 2015 BH_{259}	17.5	X	164.01423	339.83579	134.68523	5.77289	0.1002364	0.21503211	2.7593101	21	7 2.8	21.8
502429 2015 BG_{260}	15.6	X	289.65533	151.05334	144.56975	10.77221	0.0733237	0.18899897	3.0072053	21	4 14.6	19.9
502430 2015 BD_{264}	16.7	X	1.27548	74.98383	275.52194	13.70975	0.1272439	0.23903771	2.5713336	21	10 10.4	19.9
502431 2015 BX_{268}	17.4	X	352.53867	110.44642	249.50111	3.16102	0.1468908	0.25434200	2.4671222	21	10 18.8	19.7
502432 2015 BB_{269}	17.5	X	306.95917	144.81138	284.51450	4.49868	0.1920492	0.26645568	2.3917699	21	10 28.5	19.5
502433 2015 BO_{270}	17.0	X	206.85449	318.32814	99.66800	4.83040	0.0892945	0.21026567	2.8008540	21	6 6.7	21.1
502434 2015 BG_{274}	16.4	X	60.59157	328.68577	326.94148	14.04844	0.1222264	0.24249228	2.5468543	21	10 25.4	20.1
502435 2015 BH_{274}	18.0	X	302.31818	348.77594	104.79306	2.75560	0.1434956	0.26750418	2.3855160	21	12 2.9	19.9
502436 2015 BY_{275}	17.5	X	212.27129	285.06839	136.75322	8.38054	0.2196803	0.21470733	2.7620920	21	6 11.7	22.3
502437 2015 BD_{276}	16.0	X	101.08750	315.64077	153.48424	11.26540	0.0609950	0.17806759	3.1290521	21	4 15.8	20.5
502438 2015 BH_{276}	17.1	X	149.78137	26.10502	119.30519	4.65872	0.0349036	0.21326028	2.7745724	21	7 23.9	21.1
502439 2015 BQ_{276}	16.2	X	72.30401	189.43282	342.75705	9.38039	0.0446299	0.19066892	2.9896209	21	5 18.9	20.4
502440 2015 BF_{277}	16.9	X	8.20772	16.74997	339.38378	12.94085	0.1238273	0.24544134	2.5264124	21	11 1.4	20.0
502441 2015 BK_{277}	16.9	X	51.53044	82.39581	131.85374	7.04507	0.1641006	0.19488078	2.9463887	21	7 4.1	20.6
502442 2015 BL_{277}	17.7	X	295.09328	292.98425	131.55287	5.99696	0.1979768	0.25148596	2.4857658	21	9 27.1	20.2
502443 2015 BT_{277}	16.7	X	325.72529	115.46122	147.18274	16.39886	0.0790995	0.18100528	3.0951038	21	4 22.4	21.1
502444 2015 BZ_{277}	17.2	X	189.26122	296.63829	159.77609	4.44101	0.0421886	0.21585560	2.7522878	21	7 7.2	21.1
502445 2015 BK_{278}	16.0	X	111.35069	122.91568	319.84134	9.59070	0.0596273	0.17667585	3.1454630	21	3 19.4	20.5
502446 2015 BT_{278}	16.6	X	1.63819	283.19817	318.62516	0.28467	0.1237841	0.18882047	3.0091003	21	5 11.3	20.1
502447 2015 BB_{281}	17.0	X	357.02746	62.74719	223.50055	8.36482	0.1656441	0.21839554	2.7309067	21	7 2.3	19.8
502448 2015 BO_{291}	15.9	X	325.95103	110.65680	143.82542	12.06079	0.0915573	0.17930278	3.1146652	21	4 9.6	20.1
502449 2015 BR_{291}	16.8	X	141.55004	7.90338	127.61039	4.60310	0.0365178	0.20853331	2.8163444	21	6 30.5	20.8
502450 2015 BU_{291}	16.4	X	87.84354	327.52201	139.71908	11.36542	0.0699506	0.17486503	3.1671411	21	3 29.5	20.9
502451 2015 BW_{291}	16.1	X	73.03686	23.97163	142.29999	12.45293	0.0631437	0.19088863	2.9873264	21	5 21.5	20.4
502452 2015 BF_{292}	15.7	X	198.23967	228.20937	140.88794	10.65827	0.1121708	0.18039865	3.1020385	21	4 3.0	20.7
502453 2015 BZ_{292}	16.0	X	125.03711	110.95079	351.76244	12.54303	0.1223693	0.18304571	3.0720598	21	5 5.3	20.9
502454 2015 BD_{293}	16.8	X	334.46942	183.67832	201.78726	13.88399	0.1455267	0.25665715	2.4522635	21	10 23.1	18.8
502455 2015 BX_{294}	15.4	X	356.10685	298.93629	268.24956	14.42524	0.0682687	0.17733858	3.1376215	21	3 14.2	19.9
502456 2015 BB_{304}	16.0	X	155.65503	307.70014	141.09258	9.78199	0.1078922	0.18793051	3.0185927	21	5 26.0	20.8
502457 2015 BE_{304}	16.6	X	145.58177	152.41700	32.83286	7.28029	0.0611266	0.22117839	2.7079518	21	9 13.9	20.5
502458 2015 BH_{305}	16.1	X	280.78413	201.52619	144.47067	12.89677	0.0660987	0.19146726	2.9813047	21	6 6.3	20.4
502459 2015 BJ_{305}	16.9	X	104.17967	83.61165	133.82160	10.49873	0.1098330	0.21249538	2.7812266	21	9 11.2	21.0
502460 2015 BB_{307}	16.2	X	318.29234	242.92223	20.61786	9.65647	0.0993626	0.18665199	3.0323615	21	4 4.9	20.3
502461 2015 BD_{307}	15.7	X	138.67355	314.09997	102.73542	15.95269	0.0237176	0.17974522	3.1095520	21	3 26.9	20.4
502462 2015 BE_{307}	16.3	X	124.12973	95.71225	2.99570	10.78314	0.0380724	0.19211205	2.9746302	21	4 20.0	20.6
502463 2015 BK_{310}	17.2	X	44.72327	300.59099	31.24678	6.59179	0.1554161	0.25970539	2.4330372	21	12 5.7	20.3
502464 2015 BQ_{310}	18.0	X	313.45326	263.44680	183.15948	1.75556	0.1722801	0.27424941	2.3462390	21	12 16.8	19.7
502465 2015 BM_{313}	16.7	X	29.83029	113.92984	131.46298	4.72084	0.0500789	0.21161259	2.7889563	21	6 28.5	20.2
502466 2015 BW_{314}	16.4	X	317.82357	190.88375	147.67806	18.61388	0.1560010	0.21708240	2.7419086	21	7 4.8	19.9
502467 2015 BK_{316}	17.1	X	226.13283	28.64593	2.31579	4.16522	0.0779075	0.21136174	2.7911625	21	5 23.5	21.3
502468 2015 BX_{318}	16.8	X	18.31429	93.90191	85.55612	2.27065	0.0297327	0.18010790	3.1053761	21	3 20.1	20.9
502469 2015 BD_{320}	17.6	X	325.60055	10.32741	326.52777	1.84239	0.0906825	0.22716968	2.6601276	21	7 24.2	20.8
502470 2015 BU_{321}	18.3	X	302.40716	12.81549	46.20370	3.01675	0.1809982	0.25935751	2.4352123	21	10 5.6	20.3
502471 2015 BD_{324}	17.7	X	281.57194	17.12130	68.26475	6.25525	0.1102159	0.25580817	2.4576863	21	10 18.6	20.5
502472 2015 BW_{329}	18.0	X	247.40373	31.10834	91.19811	5.27127	0.1861703	0.25228834	2.4804926	21	10 8.4	21.4
502473 2015 BS_{334}	16.0	X	44.21335	185.81928	315.14137	14.96817	0.0400997	0.17501116	3.1653778	21	3 1.9	20.4
502474 2015 BY_{338}	16.1	X	56.70885	30.28640	101.55543	10.52719	0.0527544	0.17514711	3.1637396	21	3 18.1	20.5
502475 2015 BP_{339}	17.2	X	272.51643	338.38529	92.31103	5.63228	0.0963139	0.24591472	2.5231691	21	9 15.6	20.3
502476 2015 BY_{339}	16.6	X	94.57852	21.80837	103.05867	4.41150	0.0719654	0.18970364	2.9997537	21	4 26.3	20.7
502477 2015 BN_{341}	15.5	X	305.06055	282.52041	322.94730	27.50905	0.0844110	0.17181028	3.2045714	21	2 22.5	20.2
502478 2015 BO_{341}	17.1	X	49.66469	77.28420	104.85799	6.06473	0.0447488	0.19182468	2.9776003	21	5 5.9	21.1
502479 2015 BB_{346}	16.8	X	263.71291	86.46934	302.73131	11.43844	0.0722086	0.23234294	2.6204934	21	7 8.6	20.3
502480 2015 BC_{353}	18.3	X	260.38389	305.16056	135.36678	12.78505	0.1880382	0.24657615	2.5186549	21	8 27.1	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502481 2015 BU_{353}	16.3	X	318.86863	90.79189	137.76084	8.77690	0.0444025	0.17436320	3.1732150	21	3 3.0	20.7
502482 2015 BS_{354}	16.9	X	338.56538	229.97636	82.14168	1.67040	0.0576876	0.21152380	2.7897368	21	7 12.4	20.4
502483 2015 BT_{354}	17.1	X	172.74942	320.06570	130.15158	3.03058	0.0545463	0.20437968	2.8543742	21	6 10.4	21.3
502484 2015 BX_{354}	15.6	X	43.85206	279.44169	253.05303	11.03732	0.1590600	0.17885030	3.1199162	21	4 22.5	19.4
502485 2015 BY_{355}	17.7	X	334.59183	261.22062	142.19439	6.18502	0.2451776	0.26579557	2.3957283	21	11 30.4	19.3
502486 2015 BD_{356}	16.3	X	98.50455	138.92846	327.08964	9.11044	0.0260792	0.17866184	3.1221098	21	3 27.4	20.7
502487 2015 BJ_{356}	16.0	X	355.66921	76.94407	148.38032	12.86607	0.0753841	0.18126689	3.0921251	21	4 17.2	20.1
502488 2015 BM_{356}	17.1	X	285.49067	230.50800	142.81239	4.91640	0.1231716	0.22213497	2.7001720	21	7 7.2	20.5
502489 2015 BR_{356}	16.8	X	353.54446	88.16630	143.56114	13.58994	0.0872041	0.18094816	3.0957552	21	4 22.3	20.9
502490 2015 BC_{357}	16.6	X	56.85440	193.10537	22.87176	4.22462	0.0376855	0.21264861	2.7798905	21	6 26.4	20.2
502491 2015 BF_{357}	16.0	X	307.73868	268.06482	334.47750	10.13268	0.0339468	0.17710061	3.1404317	21	3 4.6	20.4
502492 2015 BO_{357}	16.7	X	294.80267	261.21790	89.00692	7.13278	0.0636248	0.21961726	2.7207694	21	6 28.5	20.1
502493 2015 BZ_{381}	17.0	X	238.77709	266.87295	104.38913	4.91770	0.1114041	0.20931652	2.8093146	21	5 12.2	21.3
502494 2015 BP_{389}	17.2	X	183.79069	15.22768	75.59247	5.82061	0.0311344	0.21379389	2.7699538	21	6 23.6	21.2
502495 2015 BM_{395}	16.1	X	52.58785	76.33889	103.07025	11.53522	0.0203956	0.19342796	2.9611237	21	5 6.2	20.3
502496 2015 BY_{395}	18.0	X	339.75540	10.69019	73.13462	6.74224	0.1263150	0.28066666	2.3103379	21	—	—
502497 2015 BC_{398}	16.7	X	110.31827	279.49677	179.45514	2.23588	0.0563120	0.18429961	3.0581100	21	4 10.1	20.9
502498 2015 BD_{398}	16.9	X	242.23860	88.49506	303.18045	3.85135	0.1185210	0.21573147	2.7533434	21	6 8.5	21.0
502499 2015 BD_{401}	17.6	X	250.35917	140.45728	277.09540	1.61974	0.0739751	0.22853633	2.6495119	21	7 28.1	21.1
502500 2015 BD_{405}	18.1	X	342.39482	235.20004	177.81428	1.38090	0.1782483	0.27071678	2.3666059	21	12 27.1	20.0
502501 2015 BW_{406}	17.0	X	276.40684	64.87812	317.99685	8.07972	0.1556969	0.22689666	2.6622611	21	7 3.9	20.7
502502 2015 BN_{411}	16.5	X	337.58960	113.84186	128.20172	10.17459	0.0793749	0.18297010	3.0729062	21	4 11.7	20.6
502503 2015 BS_{413}	17.5	X	13.62336	8.16715	348.64416	6.04169	0.1389534	0.25569887	2.4583866	21	11 20.2	20.3
502504 2015 BY_{418}	17.4	X	232.36733	75.69365	340.18961	2.06721	0.0711524	0.21884382	2.7271762	21	7 4.2	21.4
502505 2015 BE_{420}	16.3	X	265.81144	331.52870	332.19776	9.90369	0.0769023	0.17973082	3.1097180	21	3 20.8	20.9
502506 2015 BK_{420}	16.8	X	222.46060	66.28100	330.56476	8.82793	0.1273971	0.20888214	2.8132080	21	5 22.5	21.4
502507 2015 BQ_{420}	16.3	X	21.20807	232.71200	322.58228	8.02719	0.0895125	0.18086690	3.0966823	21	4 8.6	20.3
502508 2015 BU_{421}	16.5	X	282.08016	146.24456	177.54175	2.26640	0.0566901	0.19693812	2.9258329	21	5 9.4	20.5
502509 2015 BP_{422}	17.4	X	225.91535	121.29776	314.75602	1.72440	0.1850890	0.22897868	2.6460985	21	7 12.9	21.6
502510 2015 BR_{422}	17.3	X	319.85940	223.15212	142.91647	13.63543	0.1940116	0.23792242	2.5793631	21	8 14.1	19.4
502511 2015 BU_{422}	16.8	X	270.50962	89.72070	280.95512	1.27638	0.0906367	0.21504673	2.7591850	21	6 18.8	20.5
502512 2015 BB_{423}	16.9	X	190.25372	269.36482	153.34134	6.57146	0.0486829	0.20199672	2.8767791	21	5 27.5	21.1
502513 2015 BR_{424}	16.9	X	324.01774	304.71473	313.71708	1.26202	0.0807507	0.18232330	3.0801694	21	4 8.1	20.9
502514 2015 BK_{426}	16.7	X	278.61046	353.37624	328.94698	11.19738	0.0413888	0.19350571	2.9603305	21	4 29.9	21.1
502515 2015 BR_{426}	16.0	X	287.61896	301.37764	328.96936	9.70754	0.0278730	0.17376070	3.1805460	21	3 13.6	20.6
502516 2015 BZ_{429}	17.3	X	226.33674	340.92861	120.24708	5.36661	0.1168609	0.23468658	2.6030182	21	8 22.5	21.1
502517 2015 BQ_{430}	15.9	X	248.16213	191.16169	126.31664	14.40666	0.1800082	0.17702627	3.1413107	21	3 17.1	21.1
502518 2015 BC_{432}	16.7	X	13.46785	243.87065	334.74921	22.07243	0.1318527	0.18489370	3.0515558	21	4 17.8	20.8
502519 2015 BL_{433}	16.4	X	290.71068	218.94166	136.68826	16.44057	0.2224275	0.21836156	2.7311900	21	6 8.1	20.4
502520 2015 BY_{433}	17.4	X	3.18317	260.14801	29.22443	3.48760	0.0807430	0.21278860	2.7786711	21	7 20.5	20.7
502521 2015 BA_{434}	17.0	X	205.32478	333.31935	102.79271	5.68283	0.0423697	0.21283273	2.7782870	21	6 30.4	20.9
502522 2015 BO_{434}	17.2	X	299.01095	342.53097	3.52893	5.37626	0.0318484	0.21263001	2.7800526	21	7 4.2	21.0
502523 2015 BC_{435}	16.7	X	23.93048	180.14407	91.43242	4.71210	0.0512536	0.21409536	2.7673529	21	7 26.7	20.1
502524 2015 BY_{435}	16.3	X	347.73228	91.05037	136.13930	12.47513	0.0849916	0.17813491	3.1282637	21	4 7.9	20.5
502525 2015 BK_{436}	17.7	X	253.31066	107.07926	326.95775	10.38722	0.1835128	0.23870478	2.5737240	21	8 9.5	21.3
502526 2015 BD_{437}	16.8	X	312.82334	210.97990	125.84482	5.10138	0.1081164	0.21463229	2.7627357	21	6 30.4	20.2
502527 2015 BA_{438}	17.4	X	201.80500	61.35479	30.22805	2.36088	0.0569729	0.21778827	2.7359809	21	7 16.4	21.2
502528 2015 BM_{438}	17.0	X	248.17968	49.72138	299.38048	2.49876	0.0225062	0.19193389	2.9764706	21	5 2.8	21.2
502529 2015 BY_{438}	17.2	X	116.90323	322.29148	155.42765	2.58264	0.0291786	0.19120363	2.9840445	21	5 8.1	21.3
502530 2015 BG_{439}	17.2	X	137.74606	179.83076	321.88507	4.88681	0.0312852	0.20981718	2.8048438	21	7 4.0	21.2
502531 2015 BP_{439}	16.4	X	259.53261	349.83430	325.72034	8.35991	0.0567265	0.18091561	3.0961264	21	3 29.8	21.0
502532 2015 BU_{439}	17.3	X	209.74787	37.22441	41.51322	0.82810	0.0560600	0.21603531	2.7507612	21	7 8.5	21.2
502533 2015 BF_{440}	16.2	X	201.44779	207.27168	141.67240	5.78603	0.0251569	0.17113374	3.2130116	21	3 12.4	20.8
502534 2015 BH_{440}	16.9	X	106.93811	169.79176	335.70135	6.96530	0.0192802	0.19794029	2.9159489	21	5 26.9	21.0
502535 2015 BF_{442}	17.1	X	294.25122	23.76946	344.96308	6.01255	0.0690227	0.22086594	2.7105050	21	7 24.0	20.7
502536 2015 BU_{442}	16.6	X	214.21471	256.74369	127.45125	6.69144	0.0970431	0.19715207	2.9237158	21	5 5.3	21.2
502537 2015 BK_{443}	16.8	X	223.86478	291.88811	118.48770	5.41507	0.0717209	0.21052965	2.7985122	21	6 16.9	20.8
502538 2015 BY_{445}	17.3	X	7.81568	203.00896	127.34173	10.32664	0.1151453	0.23359627	2.6111117	21	10 3.2	20.4
502539 2015 BC_{446}	17.6	X	213.31781	91.47620	6.54867	5.28437	0.1719720	0.22942495	2.6426660	21	7 31.4	21.8
502540 2015 BM_{449}	16.3	X	357.22856	83.64668	124.28872	10.62343	0.0432410	0.17445237	3.1721336	21	3 31.1	20.7
502541 2015 BG_{450}	16.8	X	357.89305	261.38489	14.75414	7.26599	0.0838056	0.20234131	2.8735120	21	6 21.9	20.4
502542 2015 BH_{450}	17.2	X	175.96048	38.22734	75.49461	4.77454	0.0485692	0.21399701	2.7682007	21	7 14.9	21.3
502543 2015 BQ_{451}	17.9	X	313.21961	32.50491	23.04087	2.31432	0.1922219	0.25629708	2.4545598	21	10 20.4	19.9
502544 2015 BZ_{456}	16.8	X	72.73923	181.46736	328.29244	9.47431	0.0388292	0.18649620	3.0340500	21	4 18.5	21.1
502545 2015 BP_{457}	17.6	X	280.27958	56.72248	341.32411	0.63811	0.1183948	0.23277718	2.6172333	21	8 4.6	20.7
502546 2015 BQ_{459}	16.8	X	303.61501	248.16514	121.64573	8.34534	0.2094822	0.23224727	2.6212129	21	7 16.2	19.5
502547 2015 BP_{463}	17.0	X	144.22649	359.90958	126.49341	10.92161	0.0287989	0.20490946	2.8494522	21	6 21.9	21.1
502548 2015 BA_{466}	16.2	X	236.92408	149.46323	295.65868	21.10591	0.0066660	0.22598555	2.6694120	21	8 18.1	20.1
502549 2015 BM_{467}	17.0	X	249.45036	272.58174	122.00942	7.15511	0.0536372	0.21433989	2.7652478	21	6 29.0	20.8
502550 2015 BG_{468}	16.7	X	167.88625	31.52415	83.79677	3.57199	0.0170558	0.21096740	2.7946397	21	7 6.0	20.4
502551 2015 BJ_{468}	17.2	X	302.35058	37.49764	350.16660	10.66316	0.0863695	0.23404324	2.6077862	21	8 30.5	20.3
502552 2015 BD_{469}	16.0	X	336.08103	246.36888	342.49222	14.11321	0.1422417	0.16978993	3.2299423	21	3 11.9	20.1
502553 2015 BV_{470}	17.4	X	340.71451	144.54125	173.10747	4.92097	0.0238129	0.22465704	2.6799253	21	7 24.1	21.0
502554 2015 BO_{472}	16.2	X	297.61693	331.50009	303.53761	15.10838	0.2281332	0.17980575	3.1088540	21	2 27.7	20.9
502555 2015 BU_{472}	16.9	X	293.36914	54.06664	274.94762	4.70733	0.1061647	0.21042021	2.7994824	21	5 21.6	20.7
502556 2015 BZ_{474}	17.4	X	295.48972	275.63489	142.88645	7.00450	0.1205657	0.25343784	2.4729865	21	10 1.0	20.1
502557 2015 BC_{475}	17.2	X	301.24496	195.08348	142.05685	6.77188	0.0564765	0.21695399	2.7429904	21	6 21.1	20.8
502558 2015 BK_{480}	17.5	X	206.12609	219.39996	229.70631	4.66946	0.1153165	0.22534814	2.6744434	21	7 13.4	21.7
502559 2015 BL_{483}	16.9	X	328.18857	58.78546	197.57620	1.56801	0.0283809	0.19026576	2.9938426	21	4 17.3	20.8
502560 2015 BE_{484}	16.8	X	256.16911	99.66096	236.67313	0.91447	0.1122753	0.19725365	2.9227120	21	4 16.3	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502561 2015 BU_{484}	17.0	X	270.95826	218.15247	143.61672	2.89203	0.0488819	0.21381112	2.7698050	21	6 13.9	20.9
502562 2015 BR_{485}	18.1	X	286.43000	180.24542	292.57606	0.73947	0.1298263	0.26856676	2.3792197	21	12 2.5	20.2
502563 2015 BH_{488}	17.7	X	36.40805	72.54923	300.07705	7.33323	0.1871220	0.27805350	2.3247904	21	—	—
502564 2015 BL_{492}	15.9	X	307.21686	307.05444	318.00011	9.09281	0.1789124	0.17727925	3.1383216	21	3 9.1	20.3
502565 2015 BN_{493}	16.9	X	220.04332	278.10552	138.96480	15.42861	0.1654202	0.22027725	2.7153321	21	6 16.2	21.5
502566 2015 BY_{493}	17.0	X	39.57251	287.45686	314.23002	2.48896	0.0395426	0.21187679	2.7866374	21	7 7.1	20.5
502567 2015 BW_{496}	17.5	X	267.59419	32.27724	351.84602	1.56315	0.0369967	0.21958396	2.7210444	21	7 11.5	21.2
502568 2015 BK_{497}	17.6	X	182.17276	2.69921	117.61497	3.09111	0.0266736	0.22281086	2.6947086	21	7 31.4	21.3
502569 2015 BC_{498}	17.5	X	212.28728	316.19455	123.04709	6.19717	0.0869309	0.22136371	2.7064402	21	7 9.7	21.5
502570 2015 BS_{498}	17.4	X	134.28655	71.10063	127.20612	4.80035	0.0765509	0.23211515	2.6222075	21	9 18.3	21.2
502571 2015 BE_{501}	16.9	X	81.16091	15.32645	159.10835	2.34354	0.0115962	0.20169040	2.8796910	21	5 31.9	20.8
502572 2015 BA_{502}	17.5	X	75.64244	58.59991	154.38371	6.80653	0.0245594	0.21589784	2.7519288	21	7 15.7	21.2
502573 2015 BB_{503}	17.2	X	246.76012	114.15460	265.29839	3.75185	0.0921415	0.21511410	2.7586089	21	5 31.7	21.2
502574 2015 BP_{503}	17.3	X	335.17819	126.55909	198.19664	1.52660	0.0908430	0.22620294	2.6677014	21	7 22.2	20.4
502575 2015 BU_{503}	17.0	X	2.20173	76.88711	141.75602	10.15108	0.0378232	0.18924085	3.0046424	21	4 18.4	21.1
502576 2015 BC_{506}	16.0	X	334.62840	315.55418	298.57529	3.82846	0.1345366	0.18560533	3.0437507	21	4 9.5	19.8
502577 2015 BJ_{507}	17.1	X	240.80862	67.21911	322.17681	5.41343	0.0457713	0.21063014	2.7976220	21	6 11.9	21.1
502578 2015 BP_{507}	16.9	X	320.41139	101.39738	199.22502	1.65071	0.0340907	0.20425762	2.8555112	21	6 2.2	20.7
502579 2015 BJ_{512}	17.0	X	335.07964	265.16871	138.61666	23.29586	0.3096224	0.27340971	2.3510404	21	12 18.1	18.9
502580 2015 BJ_{513}	16.5	X	209.21572	189.48421	276.71687	8.04062	0.0772382	0.23754556	2.5820903	21	8 9.5	20.3
502581 2015 CJ_{1}	17.2	X	315.10367	281.22515	144.02655	13.69121	0.1336826	0.26146403	2.4221150	21	11 19.0	19.9
502582 2015 CL_{2}	16.1	X	32.84966	47.97376	130.11643	13.13200	0.0907509	0.18654762	3.0334924	21	4 13.5	20.1
502583 2015 CJ_{3}	17.8	X	262.19413	315.25662	159.93449	4.75989	0.1436018	0.25605601	2.4561001	21	10 24.5	20.7
502584 2015 CX_{3}	16.7	X	160.61792	311.39754	147.18432	8.35180	0.0756009	0.20938411	2.8087100	21	6 8.9	21.0
502585 2015 CH_{4}	16.6	X	299.97737	218.08638	121.37872	6.68025	0.0720712	0.21463532	2.7627098	21	6 20.2	20.2
502586 2015 CP_{4}	16.9	X	65.58323	160.62877	76.43201	5.45793	0.0727817	0.21909227	2.7251141	21	8 14.0	20.5
502587 2015 CJ_{5}	16.0	X	342.08387	273.86853	304.40203	15.26598	0.0902342	0.17945104	3.1129494	21	3 6.4	20.4
502588 2015 CN_{5}	16.6	X	233.99342	135.98294	284.70589	4.36602	0.0691635	0.22689206	2.6622971	21	7 12.5	20.4
502589 2015 CS_{5}	17.1	X	223.47704	270.56013	129.57865	6.86949	0.0490407	0.21420962	2.7663688	21	6 5.7	21.1
502590 2015 CK_{7}	16.7	X	340.43504	115.76992	161.48068	2.20416	0.0316874	0.20074821	2.8886944	21	5 30.8	20.5
502591 2015 CQ_{7}	16.2	X	336.50405	262.03934	319.59998	8.26821	0.0357863	0.17487788	3.1669859	21	3 13.7	20.6
502592 2015 CS_{7}	16.2	X	305.12872	297.59072	319.77168	14.05082	0.1228648	0.17321074	3.1872747	21	3 4.5	20.8
502593 2015 CW_{8}	16.8	X	117.85172	281.67974	276.27112	3.08091	0.0244378	0.22276807	2.6950537	21	8 20.5	20.5
502594 2015 CB_{9}	16.2	X	69.09882	201.33706	284.24612	3.55184	0.1082394	0.17737693	3.1371693	21	3 26.6	20.4
502595 2015 CP_{9}	15.9	X	236.16008	315.03816	325.75907	9.07003	0.0619571	0.15614857	3.4154194	21	1 29.9	21.0
502596 2015 CW_{9}	18.3	X	309.07811	149.58251	303.92656	1.37248	0.1301634	0.26812452	2.3818351	21	12 16.7	20.4
502597 2015 CZ_{9}	16.5	X	314.25330	64.51152	199.63291	0.57381	0.1311660	0.17605692	3.1528306	21	3 27.2	20.5
502598 2015 CM_{10}	16.7	X	31.48855	30.23479	151.16428	5.23743	0.1766592	0.18684476	3.0302754	21	4 17.1	19.9
502599 2015 CQ_{10}	16.5	X	93.66981	6.98630	109.39663	2.32856	0.0665819	0.18556320	3.0442114	21	4 13.2	20.7
502600 2015 CZ_{10}	17.5	X	252.40635	29.20630	354.80867	4.74313	0.1422630	0.21806442	2.7336706	21	6 6.7	21.5
502601 2015 CY_{11}	16.8	X	183.31652	304.90810	153.31131	6.96544	0.0851212	0.20896537	2.8124610	21	7 2.3	21.2
502602 2015 CD_{14}	15.9	X	332.02502	111.14133	133.67966	13.65224	0.0430415	0.18247384	3.0784750	21	4 12.4	20.3
502603 2015 CK_{14}	17.2	X	328.73338	27.03560	313.54590	5.32279	0.0474566	0.22766682	2.6562537	21	8 7.1	20.3
502604 2015 CN_{14}	16.7	X	325.80046	79.48772	160.95929	2.04708	0.0258590	0.18132738	3.0914374	21	3 26.8	21.0
502605 2015 CC_{15}	16.3	X	138.58909	215.95997	319.74658	28.07566	0.1045033	0.22997095	2.6384815	21	8 20.5	20.4
502606 2015 CE_{15}	15.8	X	349.20873	170.28693	49.13556	5.93262	0.0963990	0.17829391	3.1264037	21	3 27.7	19.7
502607 2015 CB_{16}	16.6	X	350.96584	18.71171	287.93158	3.84808	0.0983649	0.21971136	2.7199925	21	7 23.2	19.7
502608 2015 CW_{16}	16.3	X	38.67719	232.22920	330.46830	9.62804	0.0518776	0.19146350	2.9813437	21	5 12.1	20.4
502609 2015 CF_{17}	16.1	X	359.09927	245.48516	341.64507	25.81892	0.1772082	0.17940777	3.1134500	21	4 1.1	20.0
502610 2015 CY_{18}	16.9	X	279.03139	75.54036	296.45467	4.70433	0.0415562	0.21801901	2.7340502	21	7 9.8	20.5
502611 2015 CF_{19}	16.4	X	132.93315	215.87546	301.57143	5.37598	0.0405363	0.21493974	2.7601005	21	7 19.5	20.2
502612 2015 CJ_{19}	18.2	X	302.76617	174.48621	265.71594	2.93127	0.2303962	0.26548364	2.3976045	21	11 1.4	20.1
502613 2015 CE_{20}	15.8	X	17.24063	217.21230	332.44961	27.31269	0.1396706	0.17960070	3.1112198	21	3 17.4	19.8
502614 2015 CW_{20}	17.5	X	192.20665	116.78082	343.81578	4.86625	0.0106334	0.21866594	2.7286550	21	7 19.1	21.2
502615 2015 CB_{21}	16.8	X	58.55444	297.42391	344.65386	8.04278	0.1129883	0.23531712	2.5983662	21	10 7.1	20.2
502616 2015 CW_{21}	16.7	X	355.12910	13.91809	325.96316	12.32180	0.2733376	0.24167964	2.5525603	21	9 26.2	18.6
502617 2015 CU_{22}	17.4	X	282.20903	4.17863	147.48289	7.33568	0.1380170	0.27494964	2.3422538	21	—	—
502618 2015 CO_{23}	16.6	X	8.41414	76.68029	168.10023	5.56945	0.1293825	0.18764654	3.0216374	21	5 28.9	20.1
502619 2015 CU_{23}	17.1	X	247.56835	119.72805	329.52355	12.00844	0.2291358	0.24043512	2.5613609	21	8 17.2	20.8
502620 2015 CO_{24}	18.0	X	308.89238	281.01494	157.33173	11.82758	0.2217716	0.26227097	2.4171443	21	11 19.2	20.1
502621 2015 CP_{25}	16.6	X	99.03816	53.29735	157.85670	6.30567	0.0335325	0.21387215	2.7692780	21	8 14.9	20.3
502622 2015 CF_{26}	17.0	X	98.85538	166.94490	332.41872	0.87411	0.1721777	0.18925548	3.0044875	21	6 1.5	21.3
502623 2015 CV_{26}	18.2	X	344.52807	248.17852	159.04266	2.36333	0.1589726	0.26847321	2.3797723	21	12 19.6	20.4
502624 2015 CY_{27}	16.7	X	238.55557	85.79507	309.46580	6.00611	0.0405731	0.21266345	2.7797612	21	6 17.8	20.6
502625 2015 CG_{29}	16.3	X	340.17708	98.81948	130.74510	19.08791	0.0499777	0.18023546	3.1039108	21	4 5.3	20.8
502626 2015 CK_{29}	16.3	X	26.63946	212.32343	340.38913	8.40218	0.0769763	0.18407387	3.0606097	21	4 13.4	20.3
502627 2015 CU_{29}	17.6	X	18.27422	15.57480	320.87952	5.40846	0.1117156	0.24505076	2.5290962	21	10 23.3	20.5
502628 2015 CB_{30}	17.0	X	218.98912	258.10984	133.02281	2.90678	0.0759273	0.20284978	2.8687081	21	5 18.2	21.2
502629 2015 CC_{30}	17.3	X	252.39833	65.18190	328.56817	4.14948	0.1018727	0.21945308	2.7221262	21	6 25.4	21.1
502630 2015 CF_{30}	17.2	X	21.21719	297.18250	353.69251	1.55185	0.0666187	0.22411727	2.6842265	21	8 20.1	20.4
502631 2015 CG_{30}	16.4	X	309.75099	155.53161	140.26706	13.39423	0.0791436	0.19567310	2.9384297	21	5 10.9	20.6
502632 2015 CQ_{30}	17.3	X	46.77242	207.70300	52.12373	3.78191	0.0278659	0.22319622	2.6916061	21	8 11.7	20.8
502633 2015 CR_{31}	17.3	X	287.64108	314.83790	88.60275	7.18879	0.2169234	0.24554463	2.5257038	21	8 9.3	20.3
502634 2015 CX_{31}	17.4	X	309.48068	295.96431	94.14298	4.98775	0.1856887	0.24703912	2.5155072	21	9 4.1	19.8
502635 2015 CY_{32}	17.1	X	232.78489	89.22916	357.70597	14.09321	0.1560821	0.22788322	2.6545718	21	8 10.7	21.3
502636 2015 CZ_{32}	16.3	X	236.35106	264.62648	155.57467	17.49019	0.1410087	0.21668608	2.7452509	21	7 6.7	20.7
502637 2015 CF_{33}	16.2	X	307.79835	5.95976	330.00854	13.71824	0.0716280	0.22168315	2.7038396	21	6 28.5	19.8
502638 2015 CC_{35}	17.4	X	231.54985	123.90490	25.01964	4.64482	0.1223556	0.25901686	2.4373470	21	10 30.6	20.7
502639 2015 CD_{35}	16.5	X	19.83769	172.81938	95.46665	10.64560	0.1585606	0.21580757	2.7526961	21	7 25.2	19.4
502640 2015 CH_{38}	16.0	X	4.86907	236.97528	337.54203	15.03750	0.1683155	0.17861238	3.1226862	21	4 2.4	19.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502641 2015 CN_{38}	17.5	X	224.60097	93.37457	344.92036	11.85440	0.1042048	0.22646721	2.6656257	21	7 24.6	21.6
502642 2015 CM_{39}	16.4	X	229.61997	302.37880	166.67973	22.13176	0.0632860	0.23143859	2.6273153	21	9 10.9	20.1
502643 2015 CS_{41}	15.8	X	40.12242	61.48496	115.55598	12.41751	0.0568478	0.18300257	3.0725427	21	4 21.5	20.1
502644 2015 CB_{42}	17.3	X	277.54303	70.61942	25.53046	4.21731	0.1075473	0.25135301	2.4866423	21	10 24.2	20.0
502645 2015 CR_{42}	16.4	X	92.27715	329.02491	165.54147	20.23549	0.1351177	0.18639919	3.0351025	21	5 17.6	21.0
502646 2015 CW_{42}	16.7	X	196.23319	141.47956	313.32302	7.27452	0.1718844	0.21798801	2.7343093	21	7 10.2	21.2
502647 2015 CX_{42}	16.4	X	166.94493	305.14937	167.83007	8.97196	0.1038146	0.21053575	2.7984582	21	7 3.6	20.9
502648 2015 CC_{43}	17.7	X	24.16314	288.93418	150.91480	5.48456	0.0876304	0.29098686	2.2553839	21	—	—
502649 2015 CF_{43}	16.1	X	322.69110	306.67749	331.10201	26.83274	0.1208994	0.18651166	3.0338822	21	4 9.0	20.6
502650 2015 CG_{43}	16.9	X	58.45554	196.15485	315.96175	3.30332	0.0740672	0.17905829	3.1174998	21	4 10.1	21.0
502651 2015 CK_{43}	16.5	X	11.73067	350.22273	331.00484	12.61309	0.1876498	0.22877588	2.6476621	21	9 24.5	19.3
502652 2015 CX_{43}	16.2	X	174.47479	232.83675	162.91054	10.02851	0.0654660	0.18184418	3.0855774	21	4 8.7	20.8
502653 2015 CE_{44}	16.4	X	327.30637	141.68785	205.11388	5.52482	0.0618605	0.22114885	2.7081929	21	8 10.1	19.8
502654 2015 CO_{44}	15.9	X	22.01685	269.70943	309.42540	9.35552	0.0299288	0.18821964	3.0155006	21	5 9.4	20.1
502655 2015 CE_{45}	16.8	X	215.14878	277.01245	156.13738	7.05927	0.1177292	0.21607633	2.7504131	21	7 2.7	21.1
502656 2015 CS_{46}	15.8	X	274.00233	345.17548	332.56520	9.53032	0.0059794	0.18375556	3.0641432	21	4 24.8	20.3
502657 2015 CO_{48}	17.2	X	205.15028	89.53797	14.91888	5.32871	0.0751975	0.22038982	2.7144074	21	8 6.6	21.2
502658 2015 CU_{48}	16.9	X	180.56337	102.73554	0.59403	8.01811	0.2158087	0.21489747	2.7604625	21	7 7.2	21.7
502659 2015 CN_{49}	16.8	X	201.28120	280.25049	152.88730	14.12983	0.1978097	0.21092062	2.7950528	21	6 17.5	21.7
502660 2015 CY_{49}	17.1	X	267.43126	343.59822	66.07326	4.38566	0.0595269	0.22096698	2.7096787	21	8 13.1	20.8
502661 2015 CC_{50}	16.1	X	30.79903	259.09007	321.39945	5.43600	0.0733943	0.19084970	2.9877327	21	5 28.4	19.9
502662 2015 CM_{50}	17.6	X	202.91689	224.93761	275.65555	1.28644	0.1418332	0.23404127	2.6078008	21	9 13.3	21.5
502663 2015 CE_{51}	16.3	X	56.68575	198.70024	342.25973	8.55362	0.0569507	0.18286138	3.0741240	21	5 10.8	20.6
502664 2015 CF_{51}	16.3	X	110.36314	149.24047	337.38673	8.07078	0.0545876	0.18450449	3.0558457	21	5 11.5	20.8
502665 2015 CM_{51}	16.8	X	125.68967	244.17763	301.90099	5.94707	0.0527538	0.21426405	2.7659002	21	8 17.1	20.7
502666 2015 CX_{52}	16.5	X	116.01031	62.07280	151.49257	8.14376	0.0293711	0.21844201	2.7305194	21	9 10.3	20.3
502667 2015 CB_{53}	16.1	X	236.06072	230.08636	155.58742	9.60387	0.0334923	0.19122447	2.9838277	21	6 5.1	20.5
502668 2015 CD_{53}	16.6	X	134.71761	301.55741	158.12837	10.70251	0.2681729	0.19161470	2.9797751	21	5 30.5	21.8
502669 2015 CG_{53}	17.6	X	320.52089	347.51434	108.94476	3.47905	0.1526881	0.26605099	2.3941947	21	—	—
502670 2015 CK_{53}	17.1	X	142.00730	19.84165	159.05701	10.16859	0.1184209	0.21727606	2.7402791	21	9 1.1	21.4
502671 2015 CZ_{53}	17.1	X	273.96432	270.79221	166.78083	10.07803	0.0953835	0.23451720	2.6042714	21	9 23.9	20.2
502672 2015 CC_{54}	16.4	X	338.14001	345.58210	347.87839	6.37079	0.0398445	0.21172652	2.7879558	21	8 12.6	20.0
502673 2015 CR_{54}	16.6	X	223.45728	60.73963	352.06526	14.34706	0.1465207	0.20458138	2.8524978	21	6 12.6	21.4
502674 2015 CZ_{54}	16.6	X	17.53537	207.69885	353.08246	21.23709	0.0741292	0.17268960	3.1936839	21	4 7.1	20.9
502675 2015 CH_{56}	16.3	X	133.87359	302.87009	169.90201	11.61357	0.0961335	0.19093829	2.9868084	21	5 31.2	20.9
502676 2015 CN_{56}	16.2	X	263.25728	340.98923	343.83504	8.96550	0.0624230	0.17654086	3.1470663	21	4 14.4	20.9
502677 2015 CO_{56}	16.5	X	61.38992	32.52226	173.80872	13.00095	0.1741625	0.19188498	2.9769764	21	7 9.1	20.6
502678 2015 CQ_{56}	16.4	X	141.09779	98.87550	348.88900	5.60418	0.1487329	0.18625807	3.0366354	21	5 8.9	21.2
502679 2015 CZ_{56}	16.4	X	70.64825	170.03436	338.68809	16.73424	0.0853381	0.17526332	3.1623410	21	4 17.9	20.9
502680 2015 CB_{57}	17.0	X	255.44360	123.97082	336.70987	8.55705	0.1243414	0.23850390	2.5751689	21	9 22.1	20.6
502681 2015 CS_{57}	16.5	X	155.67355	291.27019	166.45726	16.10682	0.0801279	0.19328218	2.9626124	21	6 4.2	21.3
502682 2015 CT_{57}	16.9	X	156.13192	137.95008	3.78930	4.28465	0.0448849	0.20969078	2.8059709	21	7 28.6	20.9
502683 2015 CB_{58}	16.5	X	113.01954	58.02376	36.65443	0.69009	0.1592327	0.17685844	3.1432978	21	4 21.9	21.1
502684 2015 CX_{58}	16.7	X	219.41642	229.00070	158.92929	11.81296	0.0179567	0.19560346	2.9391271	21	5 20.9	21.0
502685 2015 CR_{60}	16.2	X	216.87963	327.19000	84.84649	8.01628	0.0653499	0.21599878	2.7510713	21	6 11.2	20.2
502686 2015 CE_{61}	16.4	X	86.96134	233.80989	288.33142	8.73766	0.1410902	0.19277103	2.9678472	21	6 11.8	20.6
502687 2015 CQ_{61}	16.2	X	118.81399	267.11683	26.11345	7.57689	0.2112130	0.25275621	2.4774306	21	—	—
502688 2015 CD_{62}	15.9	X	145.16562	157.58543	355.37256	13.78958	0.1464599	0.20925472	2.8098677	21	8 8.4	20.5
502689 2015 CJ_{62}	15.9	X	346.88815	6.18107	302.53975	25.73130	0.0859381	0.21961865	2.7207580	21	7 21.1	19.1
502690 2015 DK	16.7	X	214.57775	297.80018	168.83726	9.44710	0.1999056	0.22528003	2.6749823	21	8 7.2	21.1
502691 2015 DW_{3}	17.5	X	196.13609	78.10278	121.74995	4.47641	0.1097381	0.26370130	2.4083958	21	11 28.1	20.9
502692 2015 DG_{8}	17.2	X	277.42400	72.14339	273.89214	3.10311	0.0815734	0.21316611	2.7753895	21	5 26.9	20.8
502693 2015 DH_{8}	17.1	X	207.55481	189.40553	263.11858	1.15067	0.0466811	0.22727852	2.6592783	21	7 24.7	20.9
502694 2015 DN_{9}	17.4	X	221.46177	76.56313	344.95546	2.27395	0.1798498	0.22665250	2.6641727	21	6 20.3	21.7
502695 2015 DU_{10}	16.7	X	53.09599	131.61981	115.10272	9.63876	0.1764624	0.21717824	2.7411019	21	8 25.9	20.1
502696 2015 DP_{11}	16.9	X	136.03248	197.58425	327.12171	7.92154	0.0326238	0.22427719	2.6829504	21	8 2.6	20.7
502697 2015 DL_{14}	16.8	X	312.95739	181.20005	146.27817	6.83760	0.0739959	0.21799621	2.7342408	21	6 22.5	20.4
502698 2015 DK_{17}	17.5	X	328.06674	287.67041	118.05535	7.11285	0.1216146	0.25400477	2.4693054	21	11 11.5	20.1
502699 2015 DN_{17}	17.1	X	311.79235	332.15160	29.50451	6.63706	0.0420375	0.22310895	2.6923079	21	8 14.4	20.6
502700 2015 DS_{17}	17.8	X	323.06577	349.63557	112.86219	6.06038	0.1702619	0.27719552	2.3295851	21	—	—
502701 2015 DO_{18}	17.0	X	249.17950	304.20091	92.03057	5.11868	0.1075403	0.21434798	2.7651782	21	6 23.9	21.1
502702 2015 DW_{18}	16.7	X	34.53877	112.07617	85.42157	5.36083	0.0751795	0.18443568	3.0566057	21	5 6.6	20.5
502703 2015 DY_{18}	16.3	X	128.67481	352.65407	70.04804	2.82193	0.1129915	0.17453914	3.1710821	21	3 27.2	20.9
502704 2015 DG_{19}	17.1	X	301.20296	281.38817	86.13854	5.91661	0.0973116	0.22270610	2.6955536	21	7 28.2	20.4
502705 2015 DC_{20}	15.9	X	266.78884	175.80622	134.75226	11.54700	0.0556227	0.17913498	3.1166099	21	4 9.6	20.5
502706 2015 DO_{20}	17.0	X	340.69756	295.92585	31.01273	7.02444	0.0440822	0.21922646	2.7240019	21	8 9.2	20.5
502707 2015 DA_{21}	16.9	X	329.41499	255.93066	37.11295	6.16443	0.0440793	0.19835384	2.9118945	21	6 2.9	20.8
502708 2015 DD_{21}	17.6	X	269.44008	6.43875	95.21724	2.90610	0.1389833	0.25238316	2.4798713	21	10 16.4	20.4
502709 2015 DE_{22}	16.4	X	32.39512	184.19869	356.09370	10.46564	0.1645446	0.17567937	3.1573462	21	4 12.7	20.1
502710 2015 DH_{22}	16.8	X	266.36990	66.02157	357.58062	7.89399	0.0634398	0.23159917	2.6261008	21	8 30.7	20.2
502711 2015 DR_{22}	17.1	X	250.02425	330.81010	118.17500	6.05908	0.0805828	0.23599625	2.5933789	21	9 10.3	20.6
502712 2015 DM_{23}	17.0	X	275.37323	248.95215	127.10949	4.86192	0.0882904	0.21443805	2.7644038	21	7 2.7	20.8
502713 2015 DS_{24}	16.5	X	261.31234	29.04457	352.46004	9.88707	0.2418771	0.21684471	2.7439119	21	5 31.4	21.0
502714 2015 DZ_{24}	17.8	X	281.49899	68.32555	24.22342	2.89174	0.1387275	0.25353729	2.4723398	21	10 21.1	20.6
502715 2015 DF_{25}	17.7	X	289.60879	276.62763	114.45463	4.15732	0.0923963	0.22752780	2.6573356	21	8 13.2	21.1
502716 2015 DP_{26}	17.0	X	41.67169	155.76227	104.84335	5.39150	0.0226784	0.21485047	2.7608650	21	8 3.6	20.7
502717 2015 DN_{27}	17.2	X	214.90608	55.96835	39.22473	5.06819	0.1069082	0.22372026	2.6874012	21	8 3.1	21.3
502718 2015 DZ_{27}	16.6	X	219.68419	342.07139	41.58988	6.56996	0.1052598	0.19552434	2.9399199	21	5 7.2	21.0
502719 2015 DH_{28}	16.6	X	162.07707	305.87028	122.80812	10.11906	0.1189919	0.19174594	2.9784154	21	5 9.5	21.4
502720 2015 DN_{28}	16.7	X	244.77050	27.29311	40.55206	7.03142	0.1081609	0.22665683	2.6641388	21	8 2.1	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502721 2015 DT_{30}	16.9	X	254.00022	282.82690	138.91957	17.46478	0.2021321	0.23141340	2.6275060	21	7 20.9	20.9
502722 2015 DY_{30}	17.0	X	228.06277	329.09272	98.71354	7.53645	0.0356790	0.21482156	2.7611127	21	7 18.7	20.8
502723 2015 DA_{31}	17.5	X	339.38967	339.46083	101.88970	5.69863	0.1033390	0.27214429	2.3583227	21	—	—
502724 2015 DY_{31}	16.4	X	248.01719	223.47942	135.34079	9.96017	0.1192066	0.19316549	2.9638054	21	5 8.9	21.0
502725 2015 DC_{32}	17.3	X	328.54713	274.83281	133.21207	8.47829	0.1522518	0.25480353	2.4641422	21	11 16.7	19.7
502726 2015 DJ_{32}	16.6	X	163.17074	78.66022	58.11150	4.25231	0.1397840	0.21705545	2.7421356	21	8 1.9	21.0
502727 2015 DM_{32}	17.9	X	184.04666	84.50199	90.07156	4.89434	0.0688133	0.23944332	2.5684290	21	10 14.9	21.6
502728 2015 DA_{33}	16.6	X	152.23791	354.05879	139.47811	11.75050	0.2280202	0.21262526	2.7800940	21	7 19.9	21.4
502729 2015 DC_{33}	17.1	X	251.59015	342.61945	79.41984	4.88539	0.0895402	0.22418346	2.6836982	21	8 4.0	20.8
502730 2015 DL_{33}	16.1	X	92.80189	114.03748	358.67027	8.37324	0.0542897	0.17615194	3.1516967	21	4 4.1	20.6
502731 2015 DX_{33}	16.1	X	342.61970	201.85542	20.47761	4.99276	0.1074653	0.16937692	3.2351908	21	3 20.5	20.1
502732 2015 DY_{34}	16.4	X	217.82107	264.78613	143.60110	12.59089	0.1261650	0.20573323	2.8418408	21	6 6.1	21.0
502733 2015 DZ_{34}	16.3	X	262.14745	144.40788	149.11618	16.75508	0.1763248	0.16173211	3.3363522	21	2 28.8	21.5
502734 2015 DW_{35}	16.6	X	325.99582	216.68890	64.59313	3.10184	0.0380394	0.18951880	3.0017039	21	5 15.7	20.7
502735 2015 DG_{36}	17.3	X	227.65956	302.73696	147.74715	12.12481	0.2162726	0.23118472	2.6292384	21	7 29.5	21.6
502736 2015 DG_{37}	16.7	X	306.22730	167.68985	137.86048	10.30142	0.0819331	0.18991789	2.9974973	21	5 17.4	20.9
502737 2015 DD_{38}	16.4	X	314.76680	184.20406	91.29193	5.53569	0.0754133	0.17955494	3.1117484	21	4 21.2	20.6
502738 2015 DF_{38}	16.8	X	204.79648	62.84981	33.05182	6.59078	0.0231008	0.21464532	2.7626239	21	7 29.6	20.7
502739 2015 DP_{38}	16.4	X	166.86595	295.97205	129.04199	12.05571	0.0738161	0.18847703	3.0127546	21	5 8.6	21.1
502740 2015 DH_{40}	16.0	X	277.24167	246.65842	96.98609	9.42669	0.0715414	0.19693108	2.9259027	21	5 27.8	20.1
502741 2015 DR_{42}	17.1	X	229.51908	319.41649	102.77481	9.51334	0.1904729	0.21890561	2.7266629	21	6 28.2	21.4
502742 2015 DX_{42}	16.3	X	328.02006	215.93328	68.21838	8.54972	0.0443751	0.19035980	2.9928564	21	5 21.8	20.3
502743 2015 DU_{44}	16.9	X	294.11547	268.14630	95.62739	5.65470	0.0864738	0.21347783	2.7726871	21	7 12.8	20.5
502744 2015 DW_{44}	16.9	X	184.98291	62.49144	51.26928	4.85483	0.0175407	0.21304291	2.7764594	21	7 27.3	20.7
502745 2015 DM_{45}	16.6	X	43.50776	108.88091	82.84790	4.61187	0.0706733	0.18345223	3.0675199	21	5 11.6	20.5
502746 2015 DX_{45}	17.4	X	287.52801	335.87655	79.61747	5.67494	0.1993267	0.24098143	2.5574884	21	8 30.3	20.4
502747 2015 DZ_{45}	16.4	X	28.58681	173.59714	130.14450	10.37060	0.1782971	0.21971682	2.7199474	21	10 7.8	19.7
502748 2015 DH_{46}	17.1	X	302.43881	231.64544	120.74526	7.40955	0.0706090	0.21032135	2.8003596	21	7 11.4	20.7
502749 2015 DR_{46}	16.5	X	102.43713	63.83365	54.90150	5.34298	0.1365051	0.18315860	3.0707975	21	5 6.6	20.7
502750 2015 DR_{48}	16.7	X	294.08300	250.91183	113.78719	7.44368	0.0670346	0.21585898	2.7522590	21	7 16.9	20.1
502751 2015 DV_{48}	16.5	X	295.18226	292.21504	359.99672	15.51000	0.2039950	0.17691227	3.1426601	21	3 26.0	21.1
502752 2015 DV_{50}	16.8	X	151.59730	121.34908	39.52260	8.79159	0.1141162	0.21966338	2.7203885	21	8 23.4	21.1
502753 2015 DM_{53}	16.1	X	1.83578	141.70001	122.77440	3.25144	0.0565792	0.19747352	2.9205421	21	6 12.9	19.9
502754 2015 DN_{57}	16.2	X	274.62741	313.33623	331.32969	10.46947	0.0680992	0.17440363	3.1727245	21	3 10.4	20.8
502755 2015 DQ_{58}	16.7	X	72.41668	28.17468	114.12026	2.22960	0.0937282	0.18346241	3.0674064	21	4 21.9	20.7
502756 2015 DX_{58}	16.5	X	348.94958	75.44308	172.44814	0.51394	0.1083072	0.18707766	3.0277599	21	4 29.2	20.1
502757 2015 DQ_{63}	17.3	X	166.36512	340.47569	144.89064	8.92772	0.0912886	0.21685023	2.7438654	21	7 18.6	21.5
502758 2015 DN_{65}	16.7	X	18.84382	64.14909	134.30385	10.39156	0.0372198	0.18255612	3.0775500	21	4 16.7	21.0
502759 2015 DH_{66}	18.5	X	317.57604	0.87099	67.51614	2.37124	0.1635893	0.26403515	2.4063653	21	11 23.8	20.2
502760 2015 DE_{68}	17.6	X	265.25377	338.08749	81.06726	3.72887	0.0490147	0.23114685	2.6295256	21	8 25.2	21.0
502761 2015 DT_{68}	16.2	X	265.91712	300.36858	348.98017	10.28351	0.0624359	0.17103911	3.2141965	21	3 9.5	20.8
502762 2015 DW_{68}	17.7	X	289.60399	20.16505	26.25099	2.63609	0.0606546	0.23633827	2.5908763	21	9 9.3	20.9
502763 2015 DZ_{69}	17.8	X	326.54560	261.80772	150.68975	6.75859	0.1612712	0.26014171	2.4303159	21	11 19.8	20.0
502764 2015 DZ_{73}	17.2	X	169.93329	139.88399	337.75810	3.05585	0.0337601	0.21290873	2.7776258	21	7 12.5	21.2
502765 2015 DQ_{74}	16.4	X	14.83481	59.58484	149.17306	10.96005	0.0814580	0.18130464	3.0916959	21	4 24.2	20.4
502766 2015 DG_{76}	17.1	X	0.64778	286.91500	18.27091	2.57924	0.1653999	0.21528906	2.7571141	21	8 10.8	19.8
502767 2015 DZ_{80}	16.6	X	316.88623	274.50665	359.60226	8.74348	0.1189070	0.18147699	3.0897381	21	4 11.5	20.7
502768 2015 DL_{81}	16.4	X	278.62510	171.40444	133.53969	12.42707	0.0734042	0.18115410	3.0934085	21	4 14.7	21.0
502769 2015 DO_{81}	15.9	X	280.73312	299.96585	0.71569	13.37983	0.2589770	0.17367394	3.1816051	21	3 16.6	21.0
502770 2015 DV_{81}	17.4	X	236.31845	346.54485	76.97670	4.28612	0.1090243	0.22130651	2.7069065	21	7 15.0	21.2
502771 2015 DN_{82}	17.2	X	281.86673	286.14074	108.31693	3.29010	0.0892670	0.22683761	2.6627231	21	8 6.7	20.5
502772 2015 DA_{83}	16.5	X	308.73576	195.78945	81.50091	2.65676	0.1620381	0.17677703	3.1442627	21	4 2.0	20.7
502773 2015 DV_{83}	17.2	X	255.07172	278.52991	151.41213	11.01039	0.1116429	0.23225153	2.6211809	21	8 14.3	20.6
502774 2015 DF_{87}	17.0	X	17.09761	158.53143	127.01095	3.53022	0.0438085	0.21556237	2.7547832	21	8 3.6	20.6
502775 2015 DB_{89}	17.5	X	195.72559	71.91839	17.74136	1.92786	0.0374870	0.21414112	2.7669586	21	7 7.1	21.3
502776 2015 DD_{89}	18.0	X	257.69000	315.41415	135.76236	5.02651	0.1873868	0.24697540	2.5159399	21	9 7.0	21.3
502777 2015 DX_{89}	17.6	X	247.98267	47.10440	26.39034	3.36805	0.1884450	0.23620797	2.5918290	21	8 2.2	21.5
502778 2015 DR_{90}	16.5	X	310.35625	284.69184	356.94569	4.35244	0.1357148	0.18334105	3.0687599	21	4 10.4	20.6
502779 2015 DD_{92}	16.3	X	276.39864	316.71037	359.77025	10.05989	0.0077617	0.18824975	3.0151791	21	4 26.6	20.6
502780 2015 DX_{92}	17.3	X	128.25896	22.61274	143.91030	4.15848	0.0273261	0.21366365	2.7710793	21	7 23.7	21.2
502781 2015 DO_{94}	16.4	X	119.07808	333.47385	117.78635	10.91362	0.0300734	0.17842739	3.1248442	21	4 13.0	21.0
502782 2015 DC_{97}	16.6	X	245.99694	310.06752	71.49653	2.98382	0.0837546	0.19951486	2.9005869	21	6 4.2	20.9
502783 2015 DK_{97}	16.8	X	325.33348	236.13500	106.51141	4.49550	0.0992543	0.21387224	2.7692772	21	7 30.9	20.0
502784 2015 DQ_{97}	16.6	X	249.57574	301.85339	125.22193	4.96287	0.0650997	0.22136871	2.7063994	21	8 10.6	20.3
502785 2015 DA_{98}	16.3	X	358.62472	192.07285	128.12407	6.70428	0.0413820	0.21791103	2.7349532	21	8 24.9	19.6
502786 2015 DD_{98}	16.7	X	351.00923	9.47504	4.27015	15.47515	0.1451425	0.24246101	2.5470733	21	10 28.7	19.5
502787 2015 DE_{98}	17.4	X	238.70310	201.70404	227.86961	1.41414	0.0650987	0.21841925	2.7307091	21	7 30.2	21.2
502788 2015 DT_{98}	16.1	X	314.43457	156.73946	155.98911	10.81442	0.1132392	0.18784583	3.0194998	21	6 2.1	20.2
502789 2015 DP_{99}	16.8	X	35.22794	117.70583	111.39940	4.23263	0.0492310	0.19032978	2.9931712	21	6 14.9	20.8
502790 2015 DQ_{99}	16.4	X	192.29216	299.53407	170.65686	6.29783	0.0443504	0.21195232	2.7859753	21	7 28.2	20.4
502791 2015 DX_{99}	17.2	X	167.67428	264.30888	221.86575	7.76066	0.1154722	0.22133668	2.7066605	21	7 20.2	21.5
502792 2015 DY_{99}	16.0	X	36.22768	271.72818	276.58210	12.23317	0.2151156	0.18534872	3.0465595	21	5 5.1	19.5
502793 2015 DF_{100}	17.0	X	338.54156	85.40063	145.42586	10.33678	0.1909001	0.17699380	3.1416950	21	3 14.4	20.8
502794 2015 DJ_{102}	17.1	X	146.53890	131.77474	47.67501	6.62846	0.0622515	0.23280854	2.6169983	21	9 8.8	20.9
502795 2015 DR_{104}	17.8	X	249.08662	80.32071	4.66143	11.19489	0.0753232	0.24119523	2.5559768	21	9 5.6	21.2
502796 2015 DJ_{105}	16.5	X	91.61571	207.61171	27.53829	9.22641	0.1252030	0.22894883	2.6463285	21	9 23.2	20.3
502797 2015 DL_{105}	17.1	X	249.32160	322.54051	130.26749	4.02573	0.1873865	0.23821029	2.5772846	21	8 29.0	20.7
502798 2015 DD_{107}	16.8	X	88.08741	130.35498	111.49544	14.77609	0.0525671	0.23207670	2.6224971	21	9 21.9	20.6
502799 2015 DE_{107}	16.4	X	333.86856	288.30041	23.50431	10.08002	0.0499917	0.21600607	2.7510095	21	7 6.4	20.0
502800 2015 DP_{107}	16.3	X	127.04338	86.59989	106.28766	15.10145	0.0523567	0.22885774	2.6470307	21	9 3.9	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502801 2015 DZ_{108}	17.1	X	12.12734	229.50940	58.15050	12.72954	0.1799966	0.21743670	2.7389293	21	8 15.0	20.2
502802 2015 DB_{109}	16.8	X	275.38835	309.52512	56.08053	11.91750	0.1262406	0.21935479	2.7229394	21	6 11.7	20.6
502803 2015 DV_{110}	16.0	X	50.76594	106.49448	39.11272	12.14444	0.0942916	0.17781964	3.1319602	21	3 29.9	20.0
502804 2015 DD_{111}	16.4	X	257.97596	260.58822	56.67357	12.22477	0.0645653	0.18571082	3.0425980	21	4 6.5	20.9
502805 2015 DP_{111}	17.7	X	245.65161	97.65123	346.21623	22.17480	0.1120074	0.23931778	2.5693271	21	8 26.9	21.3
502806 2015 DX_{111}	17.0	X	103.21779	137.73242	69.60502	10.21104	0.0678750	0.22292233	2.6938103	21	8 25.9	20.9
502807 2015 DB_{112}	17.1	X	132.75869	102.17974	58.15506	9.09481	0.1453003	0.21633307	2.7482365	21	8 3.7	21.5
502808 2015 DR_{112}	16.2	X	74.58116	134.48484	24.22721	10.36222	0.0227457	0.19273328	2.9682347	21	5 2.5	20.3
502809 2015 DS_{112}	16.8	X	104.40343	119.29621	106.78398	13.80642	0.1474337	0.22707773	2.6608457	21	10 1.9	21.1
502810 2015 DW_{112}	16.4	X	233.80888	263.94389	108.81217	15.67078	0.1678692	0.20461055	2.8522266	21	5 9.6	21.2
502811 2015 DO_{117}	16.8	X	187.99874	280.61663	192.99129	6.38298	0.1164691	0.21576715	2.7530399	21	7 25.2	21.1
502812 2015 DO_{118}	16.3	X	227.08316	320.10936	125.89530	10.45620	0.0883804	0.22127049	2.7072003	21	8 5.0	20.0
502813 2015 DU_{119}	17.2	X	313.24548	321.64789	52.67417	6.86013	0.0234685	0.22316165	2.6918840	21	9 5.5	20.8
502814 2015 DV_{120}	16.4	X	148.98607	354.03439	107.30014	11.23003	0.0754142	0.19352650	2.9601185	21	5 31.7	20.9
502815 2015 DP_{121}	16.0	X	342.87639	217.81714	30.82707	14.88190	0.1338498	0.17652576	3.1472458	21	4 19.3	19.7
502816 2015 DZ_{122}	17.5	X	211.30590	94.53950	34.01780	12.19352	0.2449464	0.23579436	2.5948591	21	9 5.7	22.0
502817 2015 DM_{123}	16.8	X	263.50676	354.21728	91.70573	9.58240	0.1057842	0.23740623	2.5831005	21	9 23.7	20.3
502818 2015 DA_{127}	15.7	X	343.39176	124.80997	136.81779	18.17466	0.0859504	0.17926295	3.1151265	21	5 17.4	20.1
502819 2015 DM_{127}	17.4	X	265.59805	350.11772	112.09431	13.20556	0.1842517	0.24674694	2.5174925	21	10 8.9	20.8
502820 2015 DK_{131}	16.4	X	50.85743	153.55118	118.56346	13.22091	0.0402290	0.21474358	2.7617811	21	9 6.5	20.2
502821 2015 DC_{135}	16.1	X	325.64970	259.69036	122.39848	15.22969	0.2063342	0.22774151	2.6556729	21	9 26.1	18.8
502822 2015 DU_{135}	16.4	X	259.06984	322.15146	100.40075	14.45369	0.0608671	0.21508292	2.7588755	21	8 20.6	20.3
502823 2015 DM_{139}	17.1	X	212.22237	284.67516	141.92059	7.83738	0.0286945	0.21634787	2.7481112	21	6 27.3	21.0
502824 2015 DH_{143}	18.3	X	8.20757	205.13150	210.83175	3.91343	0.1399141	0.28634225	2.2797073	21	—	—
502825 2015 DK_{144}	16.9	X	205.29555	181.06853	276.48979	12.93776	0.1408794	0.23172825	2.6251254	21	7 21.1	21.1
502826 2015 DA_{145}	17.0	X	185.78060	228.31537	281.19361	11.49890	0.1229269	0.23978850	2.5659635	21	9 3.3	21.1
502827 2015 DG_{146}	16.5	X	3.03328	341.37358	226.78391	3.81685	0.1030050	0.18356659	3.0662457	21	3 29.7	20.2
502828 2015 DJ_{148}	17.8	X	218.44949	24.58019	155.86148	9.41434	0.1403867	0.26321859	2.4113394	21	11 26.1	21.3
502829 2015 DK_{148}	16.5	X	333.17333	163.80850	145.24176	15.83487	0.0879647	0.21833795	2.7313869	21	6 27.6	20.0
502830 2015 DS_{149}	17.0	X	145.71443	241.11077	269.72979	4.53109	0.0464554	0.22444828	2.6815868	21	7 26.2	20.7
502831 2015 DU_{149}	17.0	X	7.30978	44.75855	147.50629	11.14047	0.1639675	0.17710334	3.1403994	21	3 17.8	20.5
502832 2015 DD_{150}	15.9	X	40.85906	349.53698	308.09061	32.52616	0.2648261	0.23402917	2.6078907	21	10 7.6	20.1
502833 2015 DQ_{151}	16.4	X	4.57720	136.58747	102.74982	11.47575	0.1760733	0.18263239	3.0766932	21	5 16.6	19.8
502834 2015 DV_{151}	16.3	X	209.59649	72.37915	19.37319	5.46377	0.0496241	0.21401122	2.7680782	21	7 27.6	20.3
502835 2015 DG_{152}	17.1	X	191.37333	6.52831	103.07833	5.30392	0.0584491	0.21345475	2.7728870	21	7 27.5	21.0
502836 2015 DL_{152}	16.9	X	321.27832	274.41162	86.01801	5.19751	0.1082872	0.22018407	2.7160981	21	8 19.6	20.0
502837 2015 DB_{153}	16.9	X	274.25996	233.99513	154.00039	4.94955	0.0856967	0.21173870	2.7878488	21	7 17.2	20.6
502838 2015 DT_{153}	16.5	X	158.90700	356.38230	139.61254	10.10654	0.1380605	0.21126773	2.7919906	21	7 25.8	20.9
502839 2015 DF_{154}	15.9	X	45.97064	101.27364	117.49288	10.07546	0.0494216	0.19144592	2.9815263	21	6 17.1	19.9
502840 2015 DY_{155}	17.0	X	184.47120	258.75214	215.11752	10.33843	0.1881734	0.21961277	2.7208065	21	7 19.9	21.7
502841 2015 DZ_{163}	16.5	X	333.18646	189.14028	152.32071	13.48217	0.1364453	0.21461805	2.7628580	21	8 7.4	19.5
502842 2015 DR_{165}	16.2	X	278.74794	170.62168	162.86573	9.55758	0.0556894	0.18605234	3.0388736	21	5 20.3	20.6
502843 2015 DB_{166}	16.0	X	229.54360	221.12494	154.15232	10.11584	0.0817543	0.18518803	3.0483215	21	5 12.6	20.7
502844 2015 DF_{166}	17.3	X	96.13416	174.23864	67.44328	4.52420	0.0415339	0.22302288	2.6930005	21	9 25.5	21.0
502845 2015 DW_{167}	17.3	X	179.66252	317.24692	158.98019	9.88415	0.0850262	0.21053598	2.7984561	21	7 20.7	21.6
502846 2015 DX_{167}	15.9	X	320.59990	255.60663	7.69263	12.94492	0.0594059	0.17281044	3.1921949	21	4 11.8	20.3
502847 2015 DZ_{169}	15.9	X	141.75812	252.21834	251.86322	16.20203	0.0945459	0.21621015	2.7492781	21	7 13.1	20.2
502848 2015 DA_{171}	16.8	X	268.63871	240.52759	170.42095	22.11632	0.0281279	0.23293797	2.6160288	21	8 18.1	20.4
502849 2015 DV_{172}	16.4	X	270.00254	175.43631	207.40008	13.47728	0.0051875	0.22408987	2.6844454	21	7 14.6	20.4
502850 2015 DS_{173}	16.2	X	319.93541	167.28773	105.76278	12.36718	0.0627603	0.18303811	3.0721450	21	4 29.7	20.5
502851 2015 DK_{175}	16.7	X	305.46787	113.64021	276.48593	14.37662	0.0936403	0.22716748	2.6601448	21	8 27.3	20.2
502852 2015 DX_{176}	17.0	X	2.18019	64.53534	234.61379	12.87077	0.1202399	0.22234834	2.6984443	21	7 28.2	20.3
502853 2015 DO_{178}	15.9	X	87.37924	207.92755	271.11899	8.71243	0.0954943	0.18045248	3.1014217	21	4 7.9	20.3
502854 2015 DU_{179}	17.0	X	225.97742	218.02738	234.08026	10.16686	0.0549884	0.22645371	2.6657316	21	8 10.9	21.0
502855 2015 DB_{180}	16.2	X	195.27331	196.56626	277.74221	9.51276	0.1030330	0.22253333	2.6969486	21	8 2.6	20.4
502856 2015 DJ_{180}	15.5	X	358.19809	333.14138	233.74836	11.02133	0.0903756	0.17307793	3.1889050	21	3 20.0	19.7
502857 2015 DL_{185}	16.5	X	323.89053	256.15662	14.70027	11.58731	0.0244085	0.18671595	3.0316690	21	4 28.2	20.7
502858 2015 DF_{189}	16.5	X	338.48151	154.76556	79.33672	10.91879	0.0377064	0.17401998	3.1773860	21	4 9.2	21.0
502859 2015 DD_{190}	16.5	X	89.85295	52.75502	88.33615	10.72600	0.0459607	0.18409448	3.0603813	21	5 8.9	20.8
502860 2015 DX_{196}	16.7	X	256.87510	113.30317	325.37343	14.17854	0.1520203	0.23327687	2.6134945	21	8 22.4	20.4
502861 2015 DA_{197}	15.9	X	196.12461	118.98361	334.50314	21.42299	0.1531579	0.21248058	2.7813559	21	7 14.0	20.7
502862 2015 DV_{201}	16.5	X	82.29496	177.01993	331.81712	4.74448	0.1162151	0.18306301	3.0718664	21	5 14.5	20.8
502863 2015 DL_{202}	16.3	X	233.65937	84.30910	309.01555	13.56140	0.1595133	0.20406752	2.8572843	21	5 27.7	21.0
502864 2015 DM_{202}	17.0	X	286.28202	113.93458	285.73653	8.52918	0.1329104	0.22903065	2.6456983	21	8 10.5	20.4
502865 2015 DT_{202}	15.8	X	240.00924	113.31404	250.26312	7.74241	0.0547364	0.18876421	3.0096982	21	5 8.1	20.1
502866 2015 DU_{202}	16.7	X	24.49289	336.57107	230.61009	9.03280	0.0527741	0.18130285	3.0917162	21	5 1.5	20.7
502867 2015 DH_{203}	16.7	X	190.96165	131.65211	326.58399	16.55216	0.1145378	0.21121826	2.7924265	21	7 13.8	21.2
502868 2015 DE_{204}	16.8	X	167.54176	272.09461	199.41982	11.16399	0.0774496	0.20461330	2.8522011	21	7 1.1	21.3
502869 2015 DK_{204}	15.9	X	16.38888	248.70368	324.27389	16.60357	0.1211178	0.17431789	3.1737649	21	4 20.5	20.1
502870 2015 DE_{205}	16.6	X	334.84014	181.32970	160.69665	10.45303	0.1024975	0.20402184	2.8577108	21	8 12.7	20.1
502871 2015 DX_{205}	16.1	X	155.07490	258.77173	178.06605	16.43359	0.1146515	0.17427645	3.1742679	21	5 12.3	21.2
502872 2015 DY_{205}	17.0	X	173.49511	331.88767	160.26130	10.99238	0.1921774	0.21058969	2.7979803	21	8 3.3	21.9
502873 2015 DF_{207}	16.2	X	194.56292	277.16371	157.70044	11.90824	0.0755212	0.19052788	2.9910961	21	6 16.4	20.9
502874 2015 DS_{207}	16.7	X	173.30779	78.84694	80.29253	10.27198	0.1149243	0.21784515	2.7355046	21	9 13.3	21.1
502875 2015 DU_{209}	16.2	X	347.62810	169.46797	105.13359	10.98387	0.0540854	0.17922694	3.1155438	21	6 7.1	20.3
502876 2015 DY_{209}	17.0	X	121.70528	7.95126	149.11664	14.43332	0.0524703	0.19045298	2.9918802	21	7 5.8	21.5
502877 2015 DA_{210}	16.4	X	61.01772	126.50209	55.65246	17.14620	0.1516146	0.17632969	3.1495784	21	6 2.4	20.5
502878 2015 DQ_{211}	17.4	X	228.49709	341.69114	170.91788	12.16503	0.1126505	0.23699055	2.5861202	21	11 2.3	21.1
502879 2015 DY_{212}	16.7	X	98.14598	334.21474	185.38997	18.05226	0.1483092	0.18545878	3.0453540	21	6 23.0	21.5
502880 2015 DZ_{212}	17.0	X	192.90959	318.73250	169.18872	7.67840	0.1629554	0.21562038	2.7542890	21	8 16.0	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502881 2015 DJ_{214}	16.4	X	359.29723	248.81999	351.59611	13.47625	0.0712184	0.18101314	3.0950142	21	5 2.5	20.6
502882 2015 DO_{216}	16.1	X	83.35815	149.29622	342.69520	8.80718	0.0408473	0.17560386	3.1582513	21	4 12.4	20.6
502883 2015 DY_{216}	16.3	X	342.52870	124.48548	147.44804	4.39662	0.1270376	0.18117138	3.0932117	21	5 21.1	20.0
502884 2015 DK_{217}	16.3	X	18.23969	26.42050	173.20633	29.26295	0.1844148	0.17169208	3.2060420	21	4 20.1	20.1
502885 2015 DS_{217}	16.2	X	26.92360	322.53009	239.76536	9.81029	0.0467232	0.17656718	3.1467536	21	4 28.1	20.4
502886 2015 DL_{219}	16.0	X	109.87040	134.95302	337.65016	12.74939	0.1046396	0.17757038	3.1348904	21	4 27.7	20.7
502887 2015 DD_{220}	16.0	X	163.30682	134.85010	329.67447	10.32552	0.0435797	0.19258503	2.9697578	21	6 17.5	20.5
502888 2015 DO_{220}	16.5	X	185.42536	96.24121	350.00676	10.72741	0.0529772	0.19537442	2.9414236	21	6 19.9	21.0
502889 2015 DU_{220}	16.3	X	230.82035	162.63286	338.84166	12.67527	0.1087464	0.24159898	2.5531284	21	10 14.1	20.0
502890 2015 DX_{220}	15.9	X	280.19495	108.65441	241.54025	9.36308	0.0134633	0.19262239	2.9693738	21	6 16.3	20.0
502891 2015 DC_{221}	15.8	X	13.64407	194.88729	351.99057	4.51122	0.0419018	0.17032664	3.2231535	21	3 22.7	20.1
502892 2015 DJ_{222}	16.3	X	93.22236	319.66288	182.80483	11.31515	0.0533214	0.18320789	3.0702466	21	5 14.9	20.7
502893 2015 DA_{223}	13.9	X	315.92970	183.16549	235.75785	8.70523	0.0571972	0.08380043	5.1717623	21	10 10.5	20.6
502894 2015 DD_{223}	17.2	X	175.93309	296.51602	229.66240	4.25801	0.1717483	0.22714097	2.6603518	21	9 16.9	21.6
502895 2015 DL_{223}	17.5	X	272.59602	33.28690	99.98608	5.91354	0.1975220	0.26461596	2.4028428	21	11 27.6	19.9
502896 2015 EH_{2}	17.5	X	200.06696	131.01515	23.98319	4.36483	0.0345554	0.23907096	2.5710952	21	10 9.1	21.0
502897 2015 EL_{3}	17.3	X	252.72513	289.78597	161.15823	9.44081	0.0643810	0.23858986	2.5745504	21	9 17.9	20.6
502898 2015 EA_{4}	15.5	X	106.78351	111.50236	352.79365	13.37853	0.0338699	0.17475969	3.1684137	21	4 6.0	20.0
502899 2015 EW_{5}	16.3	X	282.35052	345.27167	332.80563	9.87253	0.0839956	0.19014990	2.9950585	21	4 23.8	20.8
502900 2015 EH_{6}	16.8	X	187.93082	162.72516	357.02124	12.69152	0.0562948	0.23285974	2.6166147	21	9 26.7	20.5
502901 2015 EU_{7}	16.2	X	131.85360	111.52040	80.94519	15.14020	0.1244041	0.21943530	2.7222733	21	9 16.6	20.7
502902 2015 EZ_{8}	16.1	X	152.00592	334.24271	130.25150	4.13490	0.0269835	0.19397407	2.9555632	21	6 3.2	20.4
502903 2015 EB_{9}	16.3	X	0.38973	169.92059	112.26097	3.20376	0.0238048	0.20282481	2.8689435	21	7 4.5	20.2
502904 2015 EL_{9}	16.3	X	340.54141	346.02793	7.86401	14.91232	0.0598190	0.22552625	2.6730350	21	9 15.9	19.5
502905 2015 EP_{10}	17.2	X	178.48142	143.54912	2.15561	4.18262	0.0515377	0.23198953	2.6231540	21	8 30.4	20.9
502906 2015 EA_{11}	17.1	X	39.81575	258.53778	20.21288	5.47163	0.0465940	0.22789796	2.6544574	21	8 31.1	20.5
502907 2015 ES_{12}	16.0	X	11.47506	207.77256	349.98469	16.35134	0.1631798	0.17670974	3.1450609	21	3 26.7	19.7
502908 2015 EV_{12}	17.2	X	224.33511	2.56144	57.45223	6.46577	0.0537154	0.21707322	2.7419859	21	7 1.6	21.1
502909 2015 EY_{12}	17.7	X	348.23286	323.03984	59.35276	6.71043	0.1239635	0.25685063	2.4510319	21	11 13.4	19.9
502910 2015 ET_{14}	15.8	X	334.44844	105.25319	132.45273	10.35223	0.0510815	0.17907777	3.1172736	21	4 4.9	20.1
502911 2015 EK_{15}	16.6	X	113.66439	167.35533	4.07558	8.78371	0.0884228	0.21112958	2.7932083	21	7 22.1	20.7
502912 2015 EW_{16}	17.1	X	270.18398	309.99913	82.98853	7.35926	0.0404431	0.22373339	2.6872960	21	7 27.7	20.7
502913 2015 EB_{17}	16.7	X	349.61445	239.46351	348.35530	21.85428	0.1808297	0.17715149	3.1398303	21	3 23.3	20.5
502914 2015 EW_{17}	17.3	X	98.48368	181.91144	12.72312	9.23644	0.0798157	0.21391300	2.7689254	21	8 2.9	21.3
502915 2015 ED_{18}	16.7	X	277.42971	18.72559	5.73470	12.94108	0.0600515	0.22293442	2.6937129	21	7 26.3	20.5
502916 2015 EC_{19}	16.1	X	306.98823	273.78912	342.56799	13.96086	0.1625057	0.17077254	3.2175405	21	3 4.3	20.6
502917 2015 ED_{20}	16.6	X	336.12796	74.08563	157.66931	27.12723	0.0598767	0.17631049	3.1498070	21	3 29.4	21.0
502918 2015 EH_{20}	16.9	X	329.02989	163.34757	169.08507	5.36389	0.0513151	0.21873145	2.7281101	21	7 25.4	20.3
502919 2015 EE_{22}	17.0	X	248.97843	262.85679	160.97789	12.94584	0.1410431	0.22962741	2.6411125	21	7 24.6	21.1
502920 2015 EJ_{22}	16.8	X	35.84561	11.42025	163.33427	10.59403	0.1015827	0.17721909	3.1390318	21	4 12.7	20.8
502921 2015 EX_{23}	16.5	X	318.08507	284.68372	350.86138	7.01743	0.1260377	0.18395797	3.0618951	21	4 13.6	20.6
502922 2015 EK_{25}	17.6	X	281.74354	236.88919	156.57681	6.58836	0.0465471	0.22467322	2.6797966	21	8 10.5	21.1
502923 2015 EO_{25}	16.0	X	33.18837	191.92365	344.98290	11.05581	0.0248216	0.17747641	3.1359969	21	4 1.2	20.4
502924 2015 EM_{27}	17.0	X	253.65761	61.64117	337.59892	3.61610	0.0726002	0.21615390	2.7497550	21	7 8.5	20.8
502925 2015 EZ_{27}	17.0	X	144.49169	357.40914	161.73864	7.12924	0.0397634	0.21722833	2.7406805	21	8 3.9	21.0
502926 2015 EX_{29}	16.9	X	310.25078	326.48416	31.67953	2.68975	0.0895777	0.22118021	2.7079369	21	7 30.2	20.1
502927 2015 EF_{30}	16.0	X	282.77566	321.66910	349.97127	15.40280	0.0779316	0.18580516	3.0415681	21	4 15.7	20.6
502928 2015 EV_{30}	16.4	X	154.89804	279.81730	130.52480	9.98616	0.0794872	0.17871656	3.1214725	21	4 8.4	21.2
502929 2015 EJ_{33}	17.1	X	277.58848	348.08087	39.26608	5.58346	0.0509720	0.21834437	2.7313334	21	7 28.9	20.8
502930 2015 EP_{33}	17.1	X	204.03719	346.18072	100.89734	4.90818	0.0655464	0.21356038	2.7719726	21	7 12.1	21.2
502931 2015 ET_{33}	17.0	X	251.07709	281.25062	117.13836	6.35361	0.0728793	0.21278057	2.7787410	21	7 3.5	21.0
502932 2015 EX_{34}	16.8	X	318.59057	339.68333	355.30715	4.37076	0.1280077	0.21061385	2.7977663	21	7 5.2	20.1
502933 2015 EG_{37}	16.8	X	288.20579	8.60471	8.60374	6.03304	0.0908553	0.22008379	2.7169231	21	7 23.9	20.4
502934 2015 EF_{39}	17.7	X	228.88075	96.56153	351.45879	12.36213	0.2420426	0.23344126	2.6122674	21	7 30.1	22.1
502935 2015 EL_{39}	17.1	X	8.60507	259.94047	28.97143	4.71305	0.0406260	0.21278623	2.7786917	21	7 27.8	20.6
502936 2015 EB_{40}	16.5	X	104.34726	186.41337	348.76364	15.26834	0.0702117	0.20487249	2.8497950	21	7 14.6	20.8
502937 2015 EO_{40}	17.2	X	28.12284	265.53048	56.50207	3.87640	0.0393777	0.23843771	2.5756455	21	10 11.9	20.5
502938 2015 EQ_{44}	16.6	X	132.97016	258.32434	190.58682	2.55770	0.0946115	0.18618877	3.0373889	21	4 28.9	21.0
502939 2015 EP_{45}	17.0	X	195.09227	308.65148	173.09378	13.12374	0.1805835	0.22688604	2.6623442	21	8 9.1	21.5
502940 2015 EE_{46}	17.1	X	182.26594	270.22062	173.03522	6.61865	0.0306837	0.20100734	2.8862112	21	6 12.6	21.3
502941 2015 EA_{47}	17.4	X	209.65599	108.87958	349.47591	2.44331	0.1059756	0.22186679	2.7023474	21	7 31.2	21.5
502942 2015 EO_{51}	17.5	X	278.01781	202.11534	220.31292	5.30580	0.2113909	0.24294523	2.5436878	21	8 18.1	20.8
502943 2015 EG_{52}	16.2	X	276.62903	54.83925	245.12344	7.21954	0.0359112	0.17875304	3.1210478	21	4 3.9	20.8
502944 2015 EC_{54}	16.6	X	309.57836	34.52902	233.70356	7.61928	0.0246324	0.18020704	3.1042371	21	4 7.6	20.9
502945 2015 ED_{55}	16.6	X	309.95281	123.86006	167.34566	9.95827	0.0652890	0.18771583	3.0208937	21	5 5.7	20.8
502946 2015 EK_{57}	15.5	X	17.49692	163.74820	38.98754	28.70831	0.1447662	0.17125539	3.2114898	21	4 22.4	19.3
502947 2015 EP_{58}	15.9	X	125.82835	77.33928	86.27093	17.81364	0.0661264	0.20144191	2.8820587	21	7 22.1	20.2
502948 2015 ER_{58}	15.8	X	106.33280	22.38128	89.66387	19.85300	0.0270249	0.17010844	3.2259092	21	4 27.8	20.7
502949 2015 ED_{59}	16.2	X	61.95844	255.78563	336.23837	24.24109	0.1011719	0.21363904	2.7712921	21	8 10.7	20.0
502950 2015 EF_{59}	16.6	X	60.81076	273.92704	20.99832	8.32511	0.0866357	0.24429865	2.5342843	21	10 25.9	19.8
502951 2015 EU_{59}	16.6	X	178.48731	105.64769	15.32258	13.32113	0.1781879	0.21441454	2.7646059	21	7 31.0	21.4
502952 2015 EB_{62}	16.6	X	166.55483	17.95263	123.25643	9.55667	0.0744314	0.21972774	2.7198573	21	8 9.5	20.6
502953 2015 EE_{62}	16.3	X	181.58177	67.88567	38.39067	8.11941	0.1872648	0.21672676	2.7449074	21	7 11.7	21.0
502954 2015 EW_{62}	16.2	X	158.28678	189.77619	322.70068	13.64474	0.1023979	0.21269271	2.7795062	21	8 14.8	20.3
502955 2015 EY_{62}	17.1	X	159.84380	307.99760	190.73830	7.72601	0.1736002	0.21196498	2.7858644	21	7 29.7	21.8
502956 2015 ES_{65}	16.7	X	9.41920	174.14446	33.68983	1.96875	0.1226751	0.18136014	3.0910651	21	4 10.0	20.3
502957 2015 EB_{66}	16.8	X	137.69822	62.85798	76.83644	5.43476	0.0073509	0.21163968	2.7887183	21	6 28.3	20.5
502958 2015 EL_{66}	16.2	X	339.99468	215.49159	351.98796	10.72421	0.0639324	0.16885571	3.2418447	21	3 3.1	20.5
502959 2015 ED_{68}	16.7	X	295.92055	185.70092	155.61325	6.73190	0.0691174	0.20883324	2.8136471	21	6 17.6	20.5
502960 2015 EO_{70}	17.4	X	214.93664	315.23352	111.37549	5.01727	0.0880844	0.21105070	2.7939043	21	6 26.4	21.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
502961 2015 EF_{71}	17.7	X	340.00489	260.12651	148.50333	6.84350	0.1184436	0.25904385	2.4371777	21	12 7.4	20.2
502962 2015 EJ_{71}	17.2	X	55.65344	147.72200	137.72618	2.62664	0.0397658	0.23104847	2.6302719	21	9 29.6	20.6
502963 2015 EL_{71}	16.9	X	64.49331	157.62747	8.29205	0.41100	0.0364883	0.18852259	3.0122692	21	5 2.2	21.0
502964 2015 EP_{72}	16.5	X	78.18276	24.71167	196.08256	6.53673	0.1511824	0.21020812	2.8013651	21	8 16.5	20.4
502965 2015 EC_{73}	16.5	X	331.39370	44.10563	217.89259	1.45059	0.0833537	0.18168965	3.0873267	21	4 23.5	20.5
502966 2015 FV_{1}	16.8	X	81.39228	206.53146	14.72981	11.27174	0.0990900	0.21746849	2.7386624	21	8 21.0	20.7
502967 2015 FJ_{6}	16.5	X	40.46153	308.67371	324.07348	14.39673	0.1117688	0.22908325	2.6452933	21	8 28.6	19.7
502968 2015 FH_{8}	18.5	X	328.95412	276.79776	161.19007	2.13055	0.2168652	0.27953242	2.3165833	21	—	—
502969 2015 FK_{12}	16.6	X	276.59680	298.92431	102.60463	9.18485	0.1148880	0.21673773	2.7448148	21	8 5.3	20.2
502970 2015 FP_{17}	15.9	X	5.86595	242.98291	25.04065	10.52450	0.0715378	0.18486153	3.0519098	21	6 23.8	20.0
502971 2015 FM_{21}	15.7	X	251.92994	292.02589	98.55359	13.13503	0.0928746	0.20091094	2.8871343	21	6 22.1	19.9
502972 2015 FE_{39}	16.4	X	162.68281	247.62730	192.39707	9.55431	0.0822249	0.17678397	3.1441805	21	5 20.6	21.2
502973 2015 FQ_{39}	17.1	X	197.31037	107.22082	42.90710	3.38350	0.0915917	0.22331850	2.6906234	21	9 24.2	21.0
502974 2015 FA_{44}	15.6	X	48.25107	329.86275	194.84424	21.80558	0.0719538	0.15927704	3.3705487	21	4 16.3	20.0
502975 2015 FZ_{44}	15.9	X	270.85332	312.31851	33.60237	9.96636	0.0912908	0.17473416	3.1687223	21	5 17.9	20.4
502976 2015 FC_{45}	16.2	X	275.44799	150.08589	200.28549	18.38788	0.0799518	0.17807177	3.1290031	21	6 1.9	20.9
502977 2015 FP_{47}	15.7	X	49.86202	196.71192	319.73628	14.35857	0.1104757	0.17893457	3.1189366	21	3 31.8	19.9
502978 2015 FA_{51}	16.5	X	211.43231	285.35445	157.57873	22.19894	0.0607748	0.22200908	2.7011927	21	7 15.1	20.7
502979 2015 FO_{56}	17.0	X	232.67950	135.49050	269.77219	11.66965	0.1181484	0.21494497	2.7600557	21	6 15.9	21.0
502980 2015 FJ_{59}	16.3	X	334.97111	18.91996	232.38129	10.64167	0.0648337	0.18221218	3.0814215	21	4 15.1	20.5
502981 2015 FA_{60}	16.0	X	128.67203	187.61257	254.63309	10.47813	0.0494524	0.18133968	3.0912976	21	4 6.6	20.6
502982 2015 FQ_{66}	16.3	X	37.53582	290.19962	261.55806	10.14018	0.0717773	0.17670328	3.1451376	21	4 30.3	20.5
502983 2015 FD_{72}	16.3	X	253.84517	345.19601	28.07650	11.35402	0.0450776	0.18509589	3.0493331	21	6 6.4	20.8
502984 2015 FC_{73}	17.8	X	226.74887	284.05556	187.88819	11.24942	0.2579039	0.22862892	2.6487966	21	8 19.4	22.3
502985 2015 FG_{74}	16.8	X	180.39107	97.00689	36.27177	6.05912	0.0185430	0.20451833	2.8530840	21	8 17.3	20.8
502986 2015 FQ_{74}	16.9	X	167.67389	87.89691	57.94162	5.85954	0.1061339	0.20861015	2.8156528	21	8 18.5	21.3
502987 2015 FG_{75}	17.3	X	170.76439	112.69771	33.57321	8.20486	0.1679769	0.21135717	2.7912028	21	8 23.4	22.0
502988 2015 FP_{75}	15.9	X	2.15555	224.53738	25.55804	13.90970	0.0900637	0.17338908	3.1850889	21	5 22.0	20.1
502989 2015 FE_{76}	15.9	X	241.56168	167.64821	201.89096	16.81902	0.0293695	0.17306189	3.1891021	21	5 23.2	20.6
502990 2015 FG_{76}	16.6	X	207.17090	252.87888	199.08394	12.93893	0.0471334	0.19676719	2.9275271	21	7 19.9	21.1
502991 2015 FH_{76}	17.4	X	225.75238	288.18586	196.92794	11.04654	0.1397189	0.22470546	2.6795403	21	9 15.7	21.4
502992 2015 FH_{82}	16.7	X	112.76933	196.64143	267.36672	8.77636	0.0788652	0.18283194	3.0744540	21	4 19.2	21.2
502993 2015 FA_{88}	16.2	X	1.96893	265.90966	321.37498	13.33867	0.0347669	0.18157937	3.0885766	21	4 19.2	20.6
502994 2015 FM_{93}	16.5	X	226.32583	94.25272	332.63111	13.80039	0.2153787	0.21460326	2.7629849	21	7 1.3	21.3
502995 2015 FD_{94}	15.8	X	152.28809	187.08394	273.73822	7.46102	0.0278810	0.18826317	3.0150358	21	5 28.9	20.1
502996 2015 FG_{94}	16.4	X	89.48419	231.93523	259.92410	8.25044	0.0476238	0.17476129	3.1683942	21	4 22.1	20.9
502997 2015 FF_{95}	16.7	X	333.85220	97.07277	282.54226	9.60526	0.2057930	0.23246385	2.6195846	21	9 29.1	19.2
502998 2015 FB_{96}	16.4	X	187.70851	115.33226	328.96580	10.62420	0.0936301	0.19915775	2.9040533	21	6 19.9	21.0
502999 2015 FE_{96}	15.9	X	143.28233	128.20432	332.85938	13.37765	0.0718021	0.18575393	3.0421272	21	5 18.9	20.7
503000 2015 FK_{96}	15.7	X	16.42654	237.03921	337.98032	12.80203	0.1000942	0.17451547	3.1713689	21	4 25.8	20.0
503001 2015 FX_{96}	16.6	X	126.75532	222.75336	227.16901	8.53118	0.0411325	0.17352267	3.1834539	21	4 16.2	21.1
503002 2015 FS_{98}	16.3	X	297.13528	341.47682	342.75724	16.19505	0.0930550	0.18648085	3.0342164	21	5 19.0	20.8
503003 2015 FW_{99}	16.3	X	68.55043	292.81839	221.76472	8.49047	0.0467025	0.17428201	3.1742004	21	4 25.5	20.7
503004 2015 FV_{101}	16.4	X	261.90640	125.32833	286.56391	7.42462	0.1204485	0.21659296	2.7460377	21	7 27.5	20.1
503005 2015 FK_{102}	17.1	X	161.77741	258.94102	249.06508	7.91167	0.1628721	0.21461386	2.7628939	21	8 10.6	21.8
503006 2015 FT_{102}	15.9	X	302.59519	59.70894	250.44531	9.52424	0.1020683	0.18043132	3.1016641	21	5 11.9	20.1
503007 2015 FX_{102}	16.5	X	60.55472	264.76901	306.90457	9.13172	0.0534087	0.19211260	2.9746245	21	6 28.8	20.5
503008 2015 FD_{106}	16.5	X	225.83558	102.76138	315.09148	4.84612	0.0567364	0.20006398	2.8952770	21	6 30.6	20.7
503009 2015 FN_{106}	15.7	X	66.95085	308.04854	213.07545	8.70327	0.0347104	0.17460897	3.1702366	21	4 30.7	20.0
503010 2015 FW_{108}	16.5	X	188.65881	238.94040	237.05506	8.45089	0.1638046	0.21412160	2.7671268	21	7 26.7	21.1
503011 2015 FG_{109}	15.8	X	264.03633	40.79926	336.52425	11.48433	0.0426627	0.19583047	2.9368552	21	6 27.9	20.1
503012 2015 FK_{110}	17.2	X	253.36500	145.42876	344.61477	7.20651	0.0864617	0.24426057	2.5345477	21	11 3.5	20.5
503013 2015 FL_{110}	16.1	X	33.71417	202.05990	6.12564	27.48740	0.0932489	0.17701069	3.1414951	21	5 6.8	20.6
503014 2015 FW_{110}	13.9	X	309.61898	141.25171	291.22071	3.67847	0.0356951	0.08251845	5.2251892	21	10 20.2	20.7
503015 2015 FW_{111}	17.5	X	251.05759	236.52962	238.10982	3.92771	0.2427251	0.24458291	2.5323203	21	9 19.2	21.2
503016 2015 FP_{112}	16.0	X	359.28055	268.19430	357.63088	9.83185	0.0615130	0.18588486	3.0406986	21	6 9.6	20.1
503017 2015 FB_{113}	16.1	X	323.69150	3.86934	342.71214	20.46024	0.0857143	0.20979362	2.8050538	21	8 10.2	19.7
503018 2015 FL_{115}	16.2	X	130.35453	299.00559	180.20038	9.41058	0.0490582	0.17977813	3.1091724	21	5 30.2	20.8
503019 2015 FT_{115}	15.7	X	16.28209	225.93976	357.68235	16.49425	0.1147549	0.17713947	3.1399724	21	5 6.2	19.8
503020 2015 FW_{116}	16.2	X	177.96185	228.43713	194.86597	9.73991	0.1227662	0.18767140	3.0213705	21	5 16.4	21.0
503021 2015 FE_{121}	16.2	X	330.74671	236.25228	91.16395	6.70374	0.0424173	0.21182138	2.7871233	21	7 23.3	19.8
503022 2015 FJ_{121}	16.1	X	42.34314	163.09437	17.06006	8.40061	0.0814549	0.18013449	3.1050705	21	4 23.6	20.1
503023 2015 FM_{121}	16.2	X	227.92069	89.35025	6.98394	14.48309	0.0546570	0.22240501	2.6979859	21	8 28.8	20.1
503024 2015 FB_{123}	16.9	X	190.76496	79.28830	31.85103	9.11528	0.1089001	0.21311171	2.7758618	21	7 29.7	21.3
503025 2015 FY_{135}	16.1	X	130.25987	326.25708	153.29508	11.13320	0.0705164	0.18849332	3.0125811	21	6 2.3	20.7
503026 2015 FL_{136}	16.1	X	108.54660	137.30374	327.37051	15.07771	0.0709912	0.17777638	3.1324682	21	4 9.6	20.8
503027 2015 FG_{139}	16.1	X	196.69150	2.76010	27.88486	11.62105	0.0867043	0.17425454	3.1745340	21	4 23.8	21.0
503028 2015 FF_{140}	16.7	X	173.82371	75.04646	23.95679	9.35152	0.0846992	0.19680478	2.9271543	21	6 23.2	21.3
503029 2015 FT_{140}	16.3	X	269.95019	150.67272	177.77201	8.74288	0.0705464	0.17456861	3.1707253	21	5 1.4	20.9
503030 2015 FM_{141}	16.3	X	193.89895	8.06583	51.69079	4.49682	0.1334126	0.18897458	3.0074641	21	5 25.7	21.2
503031 2015 FV_{141}	16.8	X	40.19443	170.77956	47.36167	1.44985	0.1078951	0.18389513	3.0625926	21	6 13.6	20.7
503032 2015 FK_{143}	16.7	X	192.24926	255.25091	190.23851	10.88802	0.0860644	0.19785345	2.9168021	21	6 25.5	21.3
503033 2015 FE_{144}	16.9	X	151.12668	327.16523	165.74294	5.99782	0.1142793	0.20145066	2.8819753	21	7 12.8	21.5
503034 2015 FN_{144}	16.5	X	77.71438	122.46607	46.53356	5.23276	0.0788581	0.18215829	3.0820293	21	5 30.0	20.6
503035 2015 FX_{145}	17.0	X	228.44505	115.14093	20.61429	12.47599	0.1296896	0.23704062	2.5857560	21	10 7.6	20.6
503036 2015 FU_{146}	17.4	X	255.04545	77.10033	31.26282	8.61087	0.1107163	0.23768523	2.5810788	21	10 7.9	20.7
503037 2015 FX_{146}	16.4	X	256.77934	46.91557	32.16359	10.64917	0.1431746	0.22674619	2.6634388	21	8 29.9	20.2
503038 2015 FG_{149}	17.0	X	267.75040	262.09407	175.43580	16.49548	0.1873751	0.23170907	2.6252703	21	8 28.4	20.6
503039 2015 FR_{149}	16.7	X	311.30866	251.85977	63.49388	6.32086	0.1298782	0.18284061	3.0743568	21	5 27.5	20.5
503040 2015 FR_{150}	16.3	X	186.38573	322.29099	49.58613	5.58373	0.0122894	0.15822280	3.3855041	21	3 24.9	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503041 2015 FW_{150}	16.9	X	168.36496	42.74588	69.13912	2.86953	0.0732104	0.19761998	2.9190990	21	7 3.7	21.3
503042 2015 FJ_{151}	16.3	X	156.17431	250.25270	179.81617	15.73574	0.0861937	0.17370866	3.1811812	21	5 3.2	21.3
503043 2015 FD_{152}	16.2	X	292.45418	274.52429	23.76701	4.71236	0.0850719	0.16861551	3.2449228	21	4 17.8	20.6
503044 2015 FU_{152}	16.6	X	117.76808	43.11722	105.26323	1.99176	0.1005754	0.19136625	2.9823537	21	6 25.8	20.8
503045 2015 FL_{153}	17.4	X	222.26005	334.70953	185.78707	14.93517	0.0969315	0.24166919	2.5526339	21	11 7.2	21.1
503046 2015 FL_{158}	15.8	X	43.77600	144.96200	51.79974	11.41319	0.0511848	0.17613378	3.1519135	21	5 15.9	20.1
503047 2015 FV_{158}	16.4	X	294.61501	15.27738	50.13481	11.51312	0.1289954	0.23305721	2.6151364	21	10 7.7	19.5
503048 2015 FY_{158}	16.4	X	307.36243	138.36229	175.16652	15.84182	0.0788262	0.18014598	3.1049385	21	5 29.4	20.9
503049 2015 FB_{159}	17.2	X	150.39118	114.12359	51.81665	6.06720	0.1174666	0.21163938	2.7887210	21	8 26.9	21.6
503050 2015 FO_{161}	17.8	X	235.73806	346.03037	122.40712	5.57012	0.2586748	0.23334530	2.6129835	21	8 27.0	21.9
503051 2015 FR_{162}	16.0	X	168.29022	262.39394	154.75671	8.73786	0.0075088	0.16791026	3.2540026	21	4 26.8	20.7
503052 2015 FJ_{164}	17.1	X	254.44585	9.09970	74.20537	2.97662	0.1081045	0.22208608	2.7005683	21	9 2.5	20.9
503053 2015 FS_{165}	15.9	X	225.49447	338.84234	44.23671	10.02536	0.0530341	0.17786896	3.1313812	21	5 16.6	20.4
503054 2015 FH_{166}	16.0	X	64.74279	343.72463	191.80034	18.62516	0.0971009	0.17726702	3.1384659	21	5 25.7	20.4
503055 2015 FB_{168}	16.9	X	33.21392	192.31512	76.27177	3.13076	0.0212678	0.20087506	2.8874781	21	8 1.9	20.8
503056 2015 FM_{170}	16.5	X	66.20098	152.42964	37.63963	8.72822	0.0822438	0.18432185	3.0578641	21	6 10.6	20.7
503057 2015 FE_{171}	16.6	X	262.69049	341.03724	78.95769	5.32645	0.0542020	0.21439579	2.7647671	21	8 21.5	20.4
503058 2015 FC_{174}	17.0	X	207.15503	85.15525	57.24812	12.71890	0.1598623	0.22899800	2.6459498	21	9 25.6	21.3
503059 2015 FP_{174}	16.7	X	213.83547	303.44972	158.82201	12.17167	0.1469955	0.21334693	2.7738211	21	8 4.5	21.1
503060 2015 FM_{177}	16.0	X	191.43821	184.19477	256.19717	5.59859	0.0403355	0.19793370	2.9160136	21	6 19.4	20.2
503061 2015 FZ_{179}	17.2	X	313.78951	313.85790	41.48802	3.62086	0.0466788	0.21078130	2.7962844	21	8 5.9	20.7
503062 2015 FZ_{195}	16.4	X	44.80411	226.16155	332.32173	14.19454	0.1600451	0.18308784	3.0715886	21	5 29.1	20.4
503063 2015 FA_{196}	15.8	X	43.94960	224.58119	307.98745	8.35455	0.0446255	0.17450472	3.1714991	21	4 10.8	20.2
503064 2015 FT_{205}	17.4	X	200.73051	316.46758	194.19689	11.19006	0.1277431	0.23375772	2.6099092	21	9 24.5	21.3
503065 2015 FU_{208}	16.6	X	37.96100	324.29911	221.20406	3.64201	0.0268353	0.17822005	3.1272673	21	4 21.5	20.8
503066 2015 FU_{211}	16.0	X	208.35414	337.27427	98.41272	6.88208	0.1265976	0.20028455	2.8931509	21	6 28.8	20.5
503067 2015 FV_{211}	17.0	X	275.40130	312.95961	104.06433	6.43539	0.1163292	0.21933565	2.7230977	21	8 25.4	20.5
503068 2015 FW_{212}	16.8	X	193.69857	21.59512	83.60797	10.45314	0.1828921	0.20959486	2.8068269	21	7 20.7	21.5
503069 2015 FG_{214}	15.6	X	229.27797	290.36510	93.07916	11.69614	0.1152014	0.17978542	3.1090884	21	5 19.8	20.5
503070 2015 FX_{222}	16.8	X	133.32051	324.26519	155.27956	8.37784	0.0913096	0.19200557	2.9757298	21	6 6.9	21.3
503071 2015 FO_{224}	16.2	X	209.33729	276.21480	161.94431	9.18922	0.1630991	0.21078575	2.7962449	21	6 30.7	20.9
503072 2015 FR_{229}	16.4	X	338.47323	164.27415	88.27232	2.48631	0.1219430	0.17236897	3.1976431	21	4 19.8	20.3
503073 2015 FK_{237}	17.0	X	275.11233	250.08241	148.60133	7.05213	0.0418466	0.21398786	2.7682797	21	8 8.8	20.7
503074 2015 FN_{247}	16.4	X	133.04780	309.26614	155.21151	11.42544	0.0881739	0.18292362	3.0734266	21	5 20.4	21.1
503075 2015 FK_{251}	16.5	X	239.82545	4.41504	71.71083	4.92997	0.0685265	0.21606737	2.7504891	21	8 11.0	20.4
503076 2015 FK_{253}	16.5	X	20.45366	205.88950	34.38876	6.45142	0.2359636	0.18292606	3.0733994	21	6 20.7	19.5
503077 2015 FQ_{263}	17.0	X	233.11229	347.35221	79.76538	4.97687	0.0741316	0.21646165	2.7471481	21	7 20.0	20.9
503078 2015 FY_{265}	16.3	X	104.65279	103.39185	95.69112	4.88258	0.0326563	0.21312577	2.7757397	21	8 7.8	20.1
503079 2015 FO_{267}	16.8	X	110.44326	35.38952	70.71021	1.90064	0.1429143	0.18253322	3.0778074	21	5 1.0	21.2
503080 2015 FF_{268}	16.3	X	66.48093	35.49791	102.77120	2.26882	0.0359083	0.17214616	3.2004016	21	4 2.7	20.7
503081 2015 FM_{279}	16.3	X	118.98708	28.79390	159.81194	14.75827	0.1027164	0.21257267	2.7805525	21	8 17.5	20.4
503082 2015 FE_{280}	17.2	X	221.94716	356.34961	133.33844	7.64836	0.0775748	0.23572184	2.5953912	21	9 30.2	20.9
503083 2015 FG_{284}	16.4	X	263.06119	274.27705	152.29538	13.09316	0.2572493	0.22414999	2.6839653	21	7 29.4	20.4
503084 2015 FM_{284}	16.9	X	224.03464	42.30776	68.89658	12.07885	0.1117291	0.22244363	2.6976736	21	9 7.3	21.1
503085 2015 FE_{290}	16.3	X	63.29846	353.85474	181.93683	13.53204	0.0881426	0.17961207	3.1110885	21	5 23.1	20.6
503086 2015 FF_{290}	15.5	X	347.69735	163.94618	102.16325	23.72138	0.0802986	0.18162112	3.0881033	21	5 30.3	19.7
503087 2015 FT_{291}	17.2	X	184.68460	60.26591	107.13679	9.73424	0.0761857	0.23549894	2.5970287	21	10 8.2	21.1
503088 2015 FN_{294}	16.5	X	352.27405	167.77640	97.52557	12.20854	0.1150583	0.17333639	3.1857343	21	5 30.8	20.4
503089 2015 FP_{294}	15.7	X	256.66769	280.30993	95.03155	13.37532	0.0622005	0.18246089	3.0786208	21	6 12.9	20.2
503090 2015 FZ_{295}	16.1	X	301.43203	278.23947	59.64879	16.71058	0.0312307	0.18429380	3.0581742	21	6 25.0	20.4
503091 2015 FR_{296}	15.7	X	55.85727	112.02886	99.86988	11.70054	0.0385954	0.18107903	3.0942634	21	6 20.4	19.9
503092 2015 FA_{298}	16.5	X	73.11708	14.54128	187.06926	13.92655	0.1331231	0.18432578	3.0578205	21	7 12.0	21.0
503093 2015 FV_{298}	16.3	X	121.08426	6.75983	138.81591	10.45127	0.1654199	0.18540560	3.0459363	21	7 2.8	21.1
503094 2015 FT_{300}	17.0	X	249.05191	339.14643	151.70612	12.82390	0.2330798	0.24116270	2.5562067	21	10 14.7	20.7
503095 2015 FN_{301}	16.4	X	85.00196	93.56949	92.35462	10.05446	0.0283840	0.18249791	3.0782044	21	6 23.7	20.7
503096 2015 FF_{304}	17.9	X	91.66626	242.77937	59.82727	22.54518	0.0909964	0.38800155	1.8617173	21	—	—
503097 2015 FJ_{306}	15.9	X	53.08462	155.18009	31.26709	11.44410	0.0235132	0.17846908	3.1243576	21	5 10.9	20.2
503098 2015 FJ_{309}	16.3	X	293.97849	265.57051	138.66956	7.70472	0.0951616	0.22390608	2.6859141	21	9 7.3	19.5
503099 2015 FE_{312}	16.8	X	196.06137	101.03365	47.81031	12.32856	0.1359695	0.22961810	2.6411839	21	9 23.7	21.1
503100 2015 FG_{314}	16.1	X	272.89595	192.32218	143.65658	11.20942	0.0910016	0.17860862	3.1227300	21	5 12.9	20.8
503101 2015 FE_{315}	17.3	X	215.43952	26.96730	96.69075	6.09448	0.0888203	0.22488046	2.6781500	21	9 12.6	21.3
503102 2015 FK_{315}	16.1	X	181.17752	0.77473	61.61243	10.16502	0.1066397	0.18331141	3.0690907	21	5 17.4	20.7
503103 2015 FT_{315}	16.9	X	253.51728	328.15545	134.16061	7.17632	0.0765662	0.23155084	2.6264661	21	10 3.6	20.4
503104 2015 FV_{315}	16.2	X	126.62849	306.00269	147.80589	10.80199	0.0383758	0.17019328	3.2248371	21	4 25.8	21.0
503105 2015 FL_{316}	16.0	X	305.83127	300.48621	44.78414	9.16344	0.0346718	0.19914682	2.9041595	21	7 12.8	20.0
503106 2015 FS_{316}	16.0	X	317.24007	165.94197	103.94431	6.25346	0.0869771	0.16791503	3.2539409	21	4 17.8	20.4
503107 2015 FQ_{317}	16.9	X	313.15832	240.89110	165.21999	10.42456	0.1280056	0.23174154	2.6250251	21	10 9.7	19.7
503108 2015 FN_{318}	16.5	X	293.50116	179.32011	149.18509	11.31413	0.0402646	0.18447312	3.0561922	21	6 4.2	20.9
503109 2015 FA_{319}	16.3	X	135.34603	328.09595	132.70165	9.16962	0.0930927	0.17913732	3.1165828	21	5 18.9	21.1
503110 2015 FJ_{319}	16.3	X	236.75090	292.90383	81.87086	10.21221	0.1142648	0.18104439	3.0946580	21	5 16.2	21.0
503111 2015 FB_{320}	16.3	X	154.38139	289.80219	162.48649	16.56502	0.0323031	0.18098315	3.0953561	21	5 25.2	21.1
503112 2015 FU_{320}	17.5	X	230.63861	50.84258	87.78743	7.73520	0.2309891	0.24329423	2.5412546	21	10 5.7	21.5
503113 2015 FV_{323}	16.0	X	242.45918	276.73878	95.57099	11.14085	0.1544642	0.18148901	3.0896017	21	5 16.5	20.9
503114 2015 FS_{325}	15.7	X	295.83344	254.91013	67.80998	11.85306	0.1316602	0.17857233	3.1231531	21	5 16.6	19.9
503115 2015 FJ_{327}	16.6	X	93.98306	52.16638	127.98605	7.54019	0.1483801	0.19220181	2.9737040	21	7 14.7	21.0
503116 2015 FF_{329}	16.4	X	339.82286	201.91211	85.29791	11.12992	0.0736817	0.18562499	3.0435359	21	6 9.6	20.2
503117 2015 FH_{329}	15.5	X	257.72023	265.59459	83.07856	11.35327	0.1384697	0.17560087	3.1582871	21	5 5.6	20.4
503118 2015 FG_{330}	17.0	X	212.34001	89.03484	64.65602	8.27682	0.1341019	0.23547580	2.5971988	21	10 14.5	20.9
503119 2015 FL_{331}	16.5	X	36.64243	145.52763	57.22423	4.75319	0.1300832	0.17664004	3.1458882	21	5 20.7	20.2
503120 2015 FX_{331}	16.1	X	350.94435	94.03462	184.67199	23.99529	0.0287714	0.19140929	2.9819067	21	6 16.6	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503121 2015 FE_{334}	16.4	X	157.73816	288.69000	173.50159	9.10804	0.0596459	0.17434037	3.1734920	21	6 10.1	21.3
503122 2015 FY_{341}	16.1	X	85.80315	22.16880	110.39545	6.50356	0.1056664	0.17390265	3.1788150	21	5 1.8	20.5
503123 2015 FA_{342}	16.2	X	318.50608	136.08743	217.57633	5.23577	0.0483536	0.21052181	2.7985817	21	8 6.8	19.8
503124 2015 FB_{342}	16.7	X	62.97647	312.64740	297.39850	3.35247	0.0158359	0.21084497	2.7957214	21	8 15.9	20.4
503125 2015 FE_{343}	17.2	X	149.24196	135.18318	27.94207	9.47625	0.2025214	0.21267020	2.7797023	21	8 26.6	22.0
503126 2015 FL_{343}	17.4	X	24.02256	259.23519	30.56390	20.04036	0.0834233	0.36169083	1.9509421	21	9 20.3	19.4
503127 2015 FS_{363}	16.9	X	272.68322	218.97713	152.50102	11.93915	0.1191587	0.21583761	2.7524407	21	6 19.3	20.9
503128 2015 FS_{366}	16.0	X	44.33224	215.18829	312.81094	22.98503	0.1300708	0.17683425	3.1435844	21	4 2.5	20.4
503129 2015 FP_{371}	16.6	X	284.78090	117.36017	294.02652	12.26653	0.1480027	0.22983494	2.6395224	21	8 20.2	20.1
503130 2015 FL_{377}	16.1	X	124.78718	185.32141	275.26573	9.65740	0.0412036	0.18525891	3.0475439	21	4 23.9	20.7
503131 2015 FF_{380}	15.7	X	330.93123	19.36462	261.17730	8.18390	0.0254146	0.19241812	2.9714749	21	5 21.9	19.7
503132 2015 FO_{383}	15.7	X	325.47464	312.73677	308.59685	12.50424	0.1756735	0.17226452	3.1989356	21	3 26.9	20.1
503133 2015 FB_{384}	16.4	X	178.68160	105.56629	299.91258	9.16616	0.0503061	0.18176213	3.0865059	21	4 18.0	21.1
503134 2015 FE_{390}	16.3	X	154.14042	106.75658	333.33334	6.99997	0.0913196	0.17991204	3.1076295	21	5 8.0	21.1
503135 2015 GK_{3}	15.9	X	293.88663	314.12599	2.03024	12.85051	0.1201928	0.18369221	3.0648476	21	5 1.3	20.3
503136 2015 GJ_{7}	15.6	X	283.40415	177.26195	139.99484	15.36828	0.0477298	0.17616533	3.1515371	21	5 10.4	20.3
503137 2015 GE_{14}	16.7	X	200.93940	26.19395	83.93095	7.12790	0.0110179	0.20607485	2.8386993	21	8 13.1	20.7
503138 2015 GB_{15}	17.1	X	226.74954	74.38213	346.39880	1.46415	0.0561640	0.20273525	2.8697884	21	7 5.4	21.1
503139 2015 GT_{15}	16.2	X	279.83586	143.66674	194.47511	9.41859	0.1098620	0.18447977	3.0561187	21	5 18.9	20.6
503140 2015 GX_{15}	16.5	X	308.10505	109.86840	190.68543	1.56593	0.0387795	0.18162221	3.0880909	21	5 17.0	20.6
503141 2015 GL_{17}	15.5	X	157.73306	52.27282	14.53104	13.76648	0.0650470	0.17559570	3.1583490	21	4 23.7	20.3
503142 2015 GR_{17}	16.9	X	112.74021	101.57630	32.45184	2.21582	0.1160742	0.18689084	3.0297773	21	6 3.4	21.4
503143 2015 GZ_{19}	16.9	X	209.44496	243.87258	183.78774	11.96659	0.0274118	0.19466345	2.9485813	21	6 25.1	21.3
503144 2015 GD_{21}	17.0	X	193.11225	291.16132	168.52191	2.19983	0.0212323	0.20238704	2.8730791	21	7 16.9	20.9
503145 2015 GE_{21}	16.5	X	21.19615	49.59367	154.14471	1.61695	0.0601661	0.17130250	3.2109010	21	4 24.6	20.7
503146 2015 GT_{21}	16.9	X	239.63120	259.85493	152.24119	2.58169	0.0639491	0.20293308	2.8679230	21	7 8.3	20.9
503147 2015 GG_{23}	16.5	X	134.20575	7.90075	105.74164	14.92085	0.2357198	0.18364671	3.0653539	21	6 13.1	21.7
503148 2015 GV_{24}	16.3	X	170.95893	341.05647	99.59537	9.99201	0.0717066	0.18086706	3.0966805	21	5 29.8	21.0
503149 2015 GR_{25}	15.8	X	151.76009	15.17384	84.59670	17.00930	0.0722093	0.17962993	3.1108823	21	6 1.7	20.5
503150 2015 GZ_{25}	16.0	X	34.34431	109.90241	108.95502	12.48472	0.0192632	0.17641480	3.1485653	21	5 31.6	20.4
503151 2015 GJ_{26}	16.4	X	316.03813	223.26003	96.74958	10.37817	0.0383625	0.18794177	3.0184722	21	6 21.9	20.5
503152 2015 GY_{28}	16.1	X	28.84398	9.35843	190.35322	8.93855	0.0141072	0.17592044	3.1544611	21	4 28.6	20.4
503153 2015 GL_{29}	16.2	X	343.22725	246.69728	14.24161	17.65587	0.0292201	0.17853018	3.1236446	21	5 8.5	20.7
503154 2015 GN_{30}	16.9	X	195.14121	90.13749	12.06294	1.94191	0.0173946	0.20297807	2.8674992	21	7 23.9	21.0
503155 2015 GM_{31}	16.7	X	145.78516	337.78939	112.42053	2.12045	0.1503043	0.18315788	3.0708055	21	5 19.1	21.5
503156 2015 GU_{32}	16.2	X	268.25045	181.36670	161.23307	16.04103	0.0743680	0.17557347	3.1586157	21	5 18.3	21.0
503157 2015 GZ_{32}	16.6	X	98.04118	89.41332	88.94403	11.42082	0.0503211	0.19092815	2.9869141	21	7 3.8	20.8
503158 2015 GA_{33}	16.3	X	253.53121	237.48984	123.88697	12.60449	0.0952389	0.17809592	3.1287203	21	5 21.7	21.1
503159 2015 GE_{34}	16.4	X	141.69811	281.13940	170.16633	14.59809	0.0874899	0.17401441	3.1774537	21	5 14.2	21.4
503160 2015 GQ_{36}	16.1	X	99.90003	46.13157	203.06693	34.08596	0.2097434	0.21078585	2.7962441	21	10 23.5	20.5
503161 2015 GS_{36}	15.7	X	264.58093	237.93764	58.57466	10.76895	0.0631111	0.15611027	3.4159780	21	3 23.7	20.8
503162 2015 GT_{36}	16.4	X	71.87133	99.46300	69.41017	8.58233	0.0904914	0.17872543	3.1213692	21	5 24.6	20.6
503163 2015 GK_{37}	16.6	X	286.32664	256.81621	137.77930	6.16087	0.0375750	0.21302186	2.7766423	21	8 20.2	20.2
503164 2015 GM_{37}	15.7	X	230.92178	312.11213	56.11565	9.94260	0.0904185	0.17672995	3.1448211	21	5 3.5	20.5
503165 2015 GC_{38}	16.6	X	254.09827	244.39562	139.44140	7.56223	0.0923235	0.19387824	2.9565371	21	6 16.5	20.9
503166 2015 GD_{38}	16.6	X	179.09147	33.79219	84.81207	6.99417	0.0199165	0.20282765	2.8689168	21	7 25.5	20.6
503167 2015 GM_{38}	16.6	X	29.53418	77.15055	146.47785	10.05218	0.0849100	0.18136475	3.0910127	21	6 4.0	20.7
503168 2015 GO_{38}	16.4	X	231.75666	10.72811	66.64377	10.17258	0.1768320	0.21597544	2.7512695	21	7 22.3	20.8
503169 2015 GS_{38}	16.2	X	325.60532	237.92126	67.40783	11.79385	0.0787802	0.18828857	3.0147646	21	6 10.7	20.1
503170 2015 GB_{39}	16.6	X	203.56772	334.74132	159.05669	13.62194	0.1017638	0.22340631	2.6899183	21	9 8.7	20.6
503171 2015 GC_{39}	16.0	X	237.00392	300.84280	84.29545	11.14905	0.0726828	0.18746472	3.0235908	21	5 31.9	20.5
503172 2015 GE_{40}	16.5	X	186.71975	1.60215	122.91537	4.77962	0.0456259	0.20919792	2.8103763	21	8 10.8	20.5
503173 2015 GQ_{40}	15.9	X	98.84072	306.95888	188.84466	25.27216	0.0921281	0.17630811	3.1498353	21	5 19.5	20.7
503174 2015 GQ_{41}	16.6	X	211.07240	313.80906	153.65907	14.64623	0.1694545	0.21751560	2.7382669	21	8 7.3	21.0
503175 2015 GH_{43}	16.4	X	85.94571	9.20246	126.50394	6.65472	0.1605543	0.17328518	3.1863619	21	5 13.7	20.9
503176 2015 GK_{43}	16.0	X	252.29588	279.46109	157.38338	9.08556	0.1412736	0.21855356	2.7295903	21	8 14.9	19.8
503177 2015 GL_{43}	16.9	X	21.10962	196.91684	60.15789	11.21926	0.0671595	0.18832798	3.0143441	21	7 2.7	20.9
503178 2015 GM_{43}	16.9	X	118.40952	64.89855	85.66151	7.70575	0.1477236	0.19232192	2.9724658	21	7 4.6	21.5
503179 2015 GA_{44}	15.6	X	278.91230	158.21675	187.39551	26.95504	0.1169092	0.17889441	3.1194034	21	5 26.7	20.5
503180 2015 GD_{44}	16.3	X	119.50566	300.97727	173.49151	13.53277	0.1366191	0.18104693	3.0946291	21	5 22.9	21.2
503181 2015 GH_{44}	16.4	X	296.69619	260.47436	62.13817	15.03153	0.0569616	0.18377117	3.0639696	21	5 26.9	20.4
503182 2015 GQ_{44}	16.0	X	65.67337	124.34362	48.99331	10.96408	0.0643111	0.17709073	3.1405484	21	5 17.3	20.1
503183 2015 GF_{45}	16.4	X	325.62506	214.95505	156.07923	14.12017	0.1718263	0.21348974	2.7725840	21	9 3.6	19.0
503184 2015 GH_{45}	16.2	X	279.55120	193.67420	154.35639	11.04492	0.0495642	0.18472156	3.0534513	21	6 9.2	20.6
503185 2015 GX_{46}	16.1	X	79.99299	139.12874	75.50640	7.21548	0.0148815	0.20029181	2.8930810	21	7 23.9	20.1
503186 2015 GS_{48}	16.2	X	237.04471	315.81471	75.09149	16.27516	0.0563395	0.18719405	3.0265047	21	6 8.9	20.5
503187 2015 HM	16.2	X	59.41134	313.48597	223.85465	9.55876	0.1605605	0.17451070	3.1714267	21	5 28.4	20.2
503188 2015 HX_{2}	16.5	X	227.23821	183.81152	266.31233	11.38233	0.1233031	0.22235493	2.6983910	21	8 2.9	20.8
503189 2015 HX_{3}	16.5	X	102.52317	230.79540	272.62356	9.64315	0.1325092	0.18806904	3.0171102	21	6 5.7	20.8
503190 2015 HE_{4}	16.1	X	309.73359	29.00677	270.26607	9.08930	0.0239963	0.18423488	3.0588263	21	5 17.9	20.3
503191 2015 HC_{5}	15.7	X	287.88340	340.33082	333.65945	14.87299	0.0083931	0.18048463	3.1010533	21	5 5.6	20.4
503192 2015 HD_{5}	16.2	X	333.44781	14.00118	259.55500	10.04794	0.0290497	0.18205470	3.0831983	21	5 16.2	20.3
503193 2015 HL_{5}	16.0	X	166.61067	223.24152	279.34355	9.30725	0.0941213	0.21312469	2.7757491	21	8 7.9	20.3
503194 2015 HQ_{5}	16.2	X	114.62035	201.36368	292.11992	9.12123	0.0296862	0.18472878	3.0533717	21	5 23.7	20.7
503195 2015 HL_{6}	16.3	X	61.56497	356.60738	266.61351	12.07140	0.0933502	0.21517936	2.7580511	21	9 6.5	20.3
503196 2015 HA_{9}	17.2	X	250.82477	103.02843	48.66136	20.02099	0.2866442	0.26077481	2.4263808	21	11 5.5	20.3
503197 2015 HA_{11}	18.0	X	147.01027	23.79734	179.06662	23.09946	0.0432784	0.37890989	1.8913799	21	10 28.7	20.2
503198 2015 HD_{12}	16.3	X	126.83218	102.51646	9.67524	7.20676	0.0611147	0.18598184	3.0396414	21	5 14.9	20.8
503199 2015 HJ_{14}	16.4	X	73.45939	341.61299	164.10408	14.27962	0.1800827	0.17815500	3.1280285	21	5 13.6	20.7
503200 2015 HV_{14}	15.9	X	323.89245	221.34257	99.05078	10.32665	0.0699884	0.18013294	3.1050884	21	6 30.1	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503201 2015 HF_{16}	16.5	X	213.96819	29.22959	105.10015	15.42636	0.1324218	0.23997456	2.5646370	21	9 26.2	20.6
503202 2015 HM_{18}	16.0	X	21.82955	51.88165	189.83824	10.61537	0.0166670	0.18496881	3.0507296	21	6 11.1	20.3
503203 2015 HT_{20}	16.2	X	37.12814	20.94934	182.80752	6.40986	0.0771812	0.17486505	3.1671408	21	5 19.5	20.3
503204 2015 HB_{21}	17.1	X	214.52880	94.38139	42.02939	7.73734	0.1240395	0.22823021	2.6518806	21	9 24.9	21.1
503205 2015 HY_{23}	16.4	X	109.84507	91.04081	42.35214	10.04496	0.0729893	0.17833536	3.1259191	21	5 23.9	21.0
503206 2015 HJ_{25}	16.1	X	251.98024	95.17423	199.62364	17.82491	0.0300269	0.14821261	3.5362744	21	3 3.6	21.4
503207 2015 HY_{28}	16.2	X	89.79529	322.77795	186.11393	20.08647	0.1308499	0.17797046	3.1301904	21	5 30.1	20.9
503208 2015 HH_{30}	16.2	X	113.59688	149.17242	34.65051	16.09371	0.1554022	0.20111648	2.8851669	21	8 19.4	20.9
503209 2015 HS_{30}	16.2	X	345.54561	249.65829	59.85212	12.74280	0.0118767	0.19645040	2.9306735	21	7 22.9	20.4
503210 2015 HB_{31}	16.0	X	253.66264	196.07587	171.17536	10.73280	0.0611383	0.18030590	3.1031023	21	5 31.3	20.6
503211 2015 HN_{34}	16.4	X	34.80055	202.22641	52.54682	10.85083	0.0589708	0.19082908	2.9879478	21	7 21.7	20.5
503212 2015 HM_{35}	15.7	X	190.50690	216.85090	193.36510	17.51192	0.1158833	0.17215103	3.2003413	21	5 13.8	20.9
503213 2015 HN_{36}	16.6	X	163.72585	63.80138	80.20498	11.21152	0.0390071	0.20240905	2.8728708	21	8 11.1	20.9
503214 2015 HX_{36}	15.6	X	326.14025	196.72299	76.95244	11.78826	0.0560863	0.16832121	3.2487040	21	5 8.5	20.0
503215 2015 HV_{37}	15.9	X	23.31800	56.35379	187.00642	15.25123	0.1335581	0.17849243	3.1240851	21	6 22.0	20.0
503216 2015 HB_{40}	15.7	X	132.62158	286.97517	199.47916	26.48463	0.1774388	0.18433150	3.0577573	21	6 19.4	21.1
503217 2015 HD_{41}	17.6	X	224.60894	338.54256	166.35073	4.59275	0.1855680	0.23646640	2.5899403	21	10 8.6	21.5
503218 2015 HA_{42}	15.9	X	63.95602	26.16177	177.24900	11.17105	0.0113257	0.19041759	2.9922509	21	6 16.6	20.2
503219 2015 HN_{42}	15.9	X	67.96503	138.15240	54.02740	12.40005	0.1334722	0.18029475	3.1032302	21	6 24.0	20.2
503220 2015 HS_{42}	16.1	X	4.47380	205.65783	39.86876	17.60568	0.1410518	0.17202069	3.2019577	21	5 19.6	19.9
503221 2015 HV_{47}	16.3	X	79.13093	91.91432	70.04344	9.19933	0.1119960	0.17929868	3.1147126	21	5 28.6	20.4
503222 2015 HB_{51}	15.7	X	316.37427	235.68698	73.52681	11.72279	0.1165050	0.18007447	3.1057604	21	5 29.6	19.6
503223 2015 HL_{63}	16.7	X	95.19880	160.13142	327.80292	0.30419	0.1641691	0.17212877	3.2006172	21	5 13.6	21.3
503224 2015 HL_{64}	16.2	X	69.63695	321.51694	213.85158	11.04022	0.1601571	0.17786997	3.1313693	21	6 9.4	20.4
503225 2015 HC_{74}	16.2	X	189.05362	234.72751	198.88400	8.93656	0.0609557	0.18194128	3.0844794	21	6 8.7	20.9
503226 2015 HO_{84}	17.0	X	109.93194	10.72116	161.51322	2.88904	0.0952972	0.19099315	2.9862364	21	7 16.2	21.3
503227 2015 HG_{95}	15.5	X	234.79622	178.85644	99.00856	4.52476	0.1419357	0.12357039	3.9920236	21	1 25.2	21.7
503228 2015 HK_{99}	16.7	X	260.99459	28.73775	50.66841	14.29177	0.2261692	0.22310266	2.6923585	21	8 25.6	20.8
503229 2015 HU_{101}	16.5	X	152.33476	287.74450	231.34009	6.50905	0.1001840	0.20489647	2.8495727	21	8 13.6	21.1
503230 2015 HC_{103}	15.2	X	249.58109	302.70856	53.86877	27.70261	0.2214923	0.17166283	3.2064062	21	5 1.5	20.5
503231 2015 HP_{104}	16.3	X	44.34909	129.03337	83.84836	10.45889	0.0513653	0.18000648	3.1065424	21	6 7.2	20.3
503232 2015 HE_{108}	17.3	X	187.51642	341.81795	139.10319	10.04818	0.2226697	0.21192685	2.7861986	21	8 1.7	22.2
503233 2015 HD_{109}	16.6	X	57.55226	58.85886	136.09068	12.36107	0.1049351	0.17765250	3.1339243	21	6 11.0	20.9
503234 2015 HE_{118}	15.2	X	201.16948	85.92321	218.62852	7.88576	0.1083869	0.12396323	3.9835853	21	1 23.5	21.4
503235 2015 HL_{137}	16.6	X	91.55073	41.53463	129.77171	5.15892	0.0749240	0.18020794	3.1042267	21	6 20.3	21.0
503236 2015 HQ_{138}	15.5	X	306.59122	118.69674	205.45638	17.11600	0.0994977	0.17627194	3.1502663	21	6 6.3	19.9
503237 2015 HH_{145}	15.9	X	46.76914	233.94985	317.51582	3.65876	0.1051430	0.17105768	3.2139639	21	5 18.7	20.0
503238 2015 HD_{149}	16.4	X	89.97224	167.65258	16.96846	11.11187	0.0997761	0.18560855	3.0437156	21	7 10.9	20.9
503239 2015 HO_{152}	15.5	X	81.47302	137.22229	35.69043	17.00315	0.0659667	0.17664054	3.1458822	21	6 4.6	20.1
503240 2015 HX_{171}	17.4	X	233.95295	129.26900	344.74924	3.98509	0.2222024	0.23754285	2.5821100	21	9 4.2	21.2
503241 2015 HK_{173}	15.8	X	21.52797	10.25835	244.36838	9.82925	0.0664498	0.18546752	3.0452584	21	6 29.0	19.7
503242 2015 HL_{175}	16.8	X	215.41259	84.09533	52.89278	13.72340	0.1061210	0.22725339	2.6594743	21	10 1.9	20.9
503243 2015 HN_{176}	15.5	X	343.58224	177.97445	83.71409	19.64683	0.0205545	0.17374559	3.1807303	21	5 20.9	20.0
503244 2015 HR_{181}	16.0	X	2.50678	72.64351	199.57839	10.50306	0.1677675	0.17987140	3.1080976	21	6 24.1	19.6
503245 2015 JM_{2}	15.8	X	100.75782	34.27983	121.91224	14.52063	0.2210769	0.18962396	3.0005940	21	7 1.6	20.4
503246 2015 KV_{6}	15.7	X	337.70803	105.00225	189.64478	12.91711	0.1220038	0.17066749	3.2188607	21	6 12.9	19.9
503247 2015 KP_{7}	15.7	X	141.16141	19.72289	94.43216	18.04979	0.0873546	0.17125880	3.2114472	21	6 9.4	20.6
503248 2015 KN_{9}	16.4	X	188.37544	325.84028	111.00999	13.94947	0.1241105	0.17473795	3.1686765	21	6 12.6	21.6
503249 2015 KU_{10}	16.4	X	41.85738	59.91351	160.07815	12.09953	0.1108860	0.17206452	3.2014140	21	6 20.2	20.7
503250 2015 KO_{15}	16.2	X	310.82591	191.99034	139.23614	10.93355	0.0567728	0.17332598	3.1858618	21	6 27.4	20.6
503251 2015 KX_{17}	16.0	X	134.11708	340.12963	159.95265	10.87957	0.0615879	0.17539623	3.1607432	21	6 29.9	20.8
503252 2015 KJ_{18}	16.4	X	48.18248	31.36387	184.46365	16.87014	0.1347158	0.17163132	3.2067986	21	6 26.2	20.8
503253 2015 KB_{28}	15.6	X	232.24280	50.57510	245.31108	10.10831	0.2322861	0.12504130	3.9606553	21	2 3.2	22.3
503254 2015 KF_{45}	17.6	X	237.16252	322.67062	245.70116	2.65585	0.1729628	0.25554693	2.4593609	21	—	—
503255 2015 KM_{71}	15.3	X	272.77450	258.60747	94.06176	17.30391	0.0745619	0.17294622	3.1905238	21	6 4.0	20.0
503256 2015 KL_{76}	16.3	X	4.07864	195.85459	105.18469	11.87234	0.0789905	0.18837940	3.0137955	21	8 6.8	20.1
503257 2015 KT_{78}	15.8	X	47.53199	51.09331	105.31795	11.20963	0.0918576	0.15098075	3.4929175	21	4 12.6	20.5
503258 2015 KR_{81}	16.9	X	291.62394	276.96707	170.23586	12.78485	0.2513361	0.23136488	2.6278733	21	10 11.3	19.7
503259 2015 KG_{84}	16.2	X	143.10255	339.44878	135.95402	11.06560	0.0115466	0.17231758	3.1982789	21	6 6.8	20.9
503260 2015 KS_{105}	16.5	X	58.92044	46.70842	189.56365	8.52723	0.0188259	0.18246437	3.0785815	21	7 21.5	20.9
503261 2015 KY_{116}	15.6	X	354.48366	207.64745	99.53578	11.20923	0.0543447	0.18195300	3.0843470	21	7 30.3	19.6
503262 2015 KE_{127}	14.2	X	166.98478	173.62051	75.55834	5.93099	0.0925173	0.08214111	5.2411789	21	11 30.9	21.6
503263 2015 LT_{2}	15.9	X	275.52675	268.02490	93.18033	10.91755	0.1150160	0.18394768	3.0620093	21	6 10.6	20.2
503264 2015 LG_{4}	16.9	X	225.23937	104.84258	17.36058	14.20312	0.1488661	0.21938749	2.7226688	21	9 16.4	21.1
503265 2015 LK_{35}	15.4	X	326.02641	178.08889	87.61176	17.60209	0.1062958	0.15632821	3.4128025	21	4 28.5	20.1
503266 2015 MS_{1}	16.0	X	252.70924	101.25243	272.58891	8.75363	0.0201016	0.17954842	3.1118238	21	6 11.1	20.4
503267 2015 MG_{51}	16.0	X	39.75476	241.60878	83.38734	10.14396	0.1100328	0.18601527	3.0392772	21	11 4.7	20.1
503268 2015 OA_{2}	17.8	X	66.91951	11.55706	293.85786	18.39988	0.0510556	0.36130627	1.9523262	21	12 4.2	20.2
503269 2015 OB_{3}	16.3	X	65.57069	31.72321	264.51512	9.09760	0.1748498	0.18817241	3.0160052	21	11 5.9	20.7
503270 2015 OA_{20}	15.9	X	350.10090	129.86328	242.22731	9.48863	0.0716822	0.17829404	3.1264021	21	10 12.4	20.1
503271 2015 PQ_{33}	16.1	X	249.35130	229.86825	264.46175	10.65035	0.0706124	0.18735973	3.0247203	21	10 28.5	20.5
503272 2015 PE_{231}	15.8	X	358.64252	292.65093	78.28474	10.59106	0.0503233	0.18364575	3.0653646	21	10 29.8	19.9
503273 2015 PN_{291}	11.6	X	16.36475	30.62849	12.77208	9.48372	0.5429566	0.01787705	14.4856778	21	—	—
503274 2015 QE_{9}	19.4	X	231.99584	321.95194	135.93462	11.37136	0.2484415	0.49023020	1.5929519	21	8 22.8	20.6
503275 2015 RS_{5}	18.1	X	338.87815	48.68697	332.05635	17.50456	0.0812204	0.35147202	1.9885761	21	10 31.9	20.3
503276 2015 RE_{12}	18.3	X	17.58157	222.64122	154.43843	23.28818	0.0731500	0.36386147	1.9431754	21	—	—
503277 2015 RT_{83}	19.8	X	213.35751	117.88181	316.10785	12.25113	0.3030324	0.45994409	1.6621340	21	6 21.5	22.4
503278 2015 SR_{1}	16.5	X	43.62658	45.57759	255.47437	9.02649	0.1223905	0.17508430	3.1644962	21	10 3.7	20.8
503279 2015 TS_{144}	17.9	X	193.74070	358.87478	234.17607	19.09197	0.0602818	0.36655435	1.9336467	21	—	—
503280 2015 TD_{300}	16.0	X	20.58588	88.88482	285.67484	9.26819	0.1732476	0.17523636	3.1626653	21	12 12.5	19.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503281 2015 TC_{303}	17.0	X	266.30749	215.79714	88.38957	7.70673	0.1384808	0.26668142	2.3904200	21	3 11.8	20.5
503282 2015 UN_{4}	17.3	X	157.52461	222.33257	116.80502	2.87983	0.0878621	0.23049366	2.6344910	21	1 3.7	21.1
503283 2015 UU_{17}	16.7	X	359.92313	303.04483	163.00386	4.93553	0.0712245	0.20860905	2.8156626	21	—	—
503284 2015 VF_{78}	16.1	X	198.96256	138.06212	107.56899	10.24287	0.0178415	0.19008410	2.9957497	21	—	—
503285 2015 VW_{108}	16.2	X	4.17388	284.73986	112.37546	9.60739	0.1321884	0.17624081	3.1506372	21	12 11.7	20.2
503286 2015 VM_{118}	18.2	X	127.57615	136.98420	199.80330	22.07809	0.1393643	0.38221543	1.8804592	21	—	—
503287 2015 VA_{126}	16.2	X	312.25226	295.34608	191.27338	24.28160	0.3366035	0.17536258	3.1611476	21	12 20.1	19.5
503288 2015 XT_{170}	18.3	X	34.32314	178.49001	315.25567	15.61056	0.0877079	0.38260495	1.8791827	21	—	—
503289 2015 XU_{288}	18.2	X	97.69580	43.59042	125.70644	3.22229	0.1483861	0.26396147	2.4068130	21	7 5.3	21.2
503290 2015 YF_{2}	17.7	X	284.89909	337.79769	252.45905	20.13118	0.0599330	0.38796359	1.8618388	21	—	—
503291 2015 YY_{7}	18.7	X	215.90216	12.80663	295.81772	18.86764	0.0606012	0.39264745	1.8470027	21	—	—
503292 2016 AD_{3}	17.5	X	28.26553	227.43186	268.79727	20.09731	0.0795307	0.38213760	1.8807145	21	—	—
503293 2016 AA_{9}	19.2	X	235.72663	115.51340	275.04023	7.01252	0.2426609	0.44576405	1.6971987	21	5 9.5	21.4
503294 2016 AF_{24}	18.0	X	111.58001	5.23307	209.48441	1.96161	0.1678923	0.27613613	2.3355396	21	9 23.2	21.3
503295 2016 AM_{30}	17.0	X	86.98822	340.96955	129.64634	5.61188	0.1363839	0.22435360	2.6823412	21	4 3.9	20.4
503296 2016 AN_{36}	16.4	X	13.71883	329.14301	285.92267	12.57903	0.2247004	0.23054921	2.6340678	21	6 25.7	18.4
503297 2016 AY_{53}	16.8	X	46.09315	88.23110	114.42509	11.66033	0.0757099	0.24329816	2.5412272	21	5 28.8	19.9
503298 2016 AW_{61}	17.8	X	359.47066	245.45687	112.97383	7.12047	0.0621291	0.30616784	2.1802000	21	11 4.9	20.1
503299 2016 AP_{66}	18.3	X	68.97247	129.38464	307.67860	18.79778	0.1228569	0.37979911	1.8884265	21	—	—
503300 2016 AF_{75}	17.8	X	150.20506	300.10632	268.40753	7.39213	0.1542444	0.28560686	2.2836189	21	10 20.4	21.5
503301 2016 AX_{78}	17.8	X	148.10318	57.19514	117.84676	7.20122	0.1992537	0.27202779	2.3589960	21	9 10.7	21.7
503302 2016 AB_{99}	17.9	X	137.40984	71.13304	115.80010	3.33376	0.1381950	0.27286353	2.3541767	21	9 12.8	21.5
503303 2016 AB_{109}	17.4	X	76.42712	119.77154	76.81785	6.31578	0.1487840	0.24407667	2.5358206	21	7 15.8	20.6
503304 2016 AV_{110}	18.1	X	124.73504	96.24659	99.50365	3.83183	0.1320332	0.26840969	2.3801478	21	9 11.0	21.6
503305 2016 AO_{111}	18.0	X	89.86673	138.10157	310.52142	20.04499	0.0439409	0.38695131	1.8650845	21	1 17.6	19.3
503306 2016 AB_{113}	16.0	X	262.47027	97.08773	121.43892	23.18006	0.0459508	0.17340475	3.1848969	21	—	—
503307 2016 AH_{113}	16.5	X	306.49975	162.10338	98.48469	10.27972	0.1085305	0.21431983	2.7654203	21	3 15.4	20.4
503308 2016 AL_{115}	17.7	X	128.56953	88.76322	114.93140	5.48293	0.1706945	0.27140300	2.3626150	21	9 28.6	21.4
503309 2016 AN_{122}	17.0	X	50.55252	328.22545	316.57081	24.02757	0.1679420	0.27109189	2.3644222	21	9 29.6	20.5
503310 2016 AF_{124}	16.8	X	143.08963	320.45362	129.99516	13.59022	0.1216665	0.23133996	2.6280620	21	5 16.0	21.0
503311 2016 AU_{124}	17.5	X	104.75797	245.42051	337.07181	2.01345	0.1232791	0.26998917	2.3708559	21	9 21.6	20.9
503312 2016 AK_{125}	17.7	X	123.69703	69.86038	129.28876	5.27078	0.1591369	0.26634397	2.3924386	21	9 16.0	21.3
503313 2016 AC_{126}	16.7	X	146.39312	246.41831	313.14167	19.93479	0.1676423	0.27693208	2.3310623	21	9 25.8	20.8
503314 2016 AO_{127}	16.0	X	214.26964	256.23018	95.11329	13.64439	0.1209251	0.20348343	2.8627496	21	3 29.4	20.8
503315 2016 AG_{128}	18.6	X	94.33409	98.48941	8.24597	20.35144	0.1090465	0.38968228	1.8563603	21	3 11.5	19.9
503316 2016 AQ_{129}	15.8	X	202.44470	190.74964	124.48999	12.82253	0.0726964	0.17384965	3.1794610	21	1 31.7	20.6
503317 2016 AA_{131}	18.1	X	192.49549	350.82840	303.97165	17.63546	0.0728107	0.37061786	1.9194869	21	—	—
503318 2016 AC_{131}	17.8	X	281.01025	309.74820	272.67897	17.91264	0.0565876	0.37265599	1.9124818	21	—	—
503319 2016 AR_{142}	16.5	X	332.53013	357.53835	259.18795	11.58136	0.1514139	0.22401847	2.6850157	21	3 29.0	19.9
503320 2016 AZ_{160}	16.4	X	29.35220	253.66629	263.83160	13.70688	0.0982245	0.20346313	2.8629400	21	2 23.7	20.2
503321 2016 AK_{164}	18.5	X	56.82155	133.39408	313.39171	17.34409	0.0753275	0.37722066	1.8970222	21	—	—
503322 2016 AV_{178}	17.2	X	30.29143	319.39176	276.50473	10.63630	0.1512616	0.23366028	2.6106348	21	6 25.3	19.6
503323 2016 AL_{181}	16.8	X	322.32978	316.85475	235.72665	8.08819	0.0254417	0.18161204	3.0882062	21	1 20.4	21.2
503324 2016 AA_{192}	17.0	X	78.23989	325.92955	301.14185	4.77457	0.1000550	0.27648653	2.3335658	21	10 15.8	20.1
503325 2016 BB	18.0	X	112.96978	285.16179	105.57636	22.01638	0.1045489	0.37881263	1.8917036	21	—	—
503326 2016 BZ_{5}	16.9	X	91.59060	352.07182	282.16912	6.92021	0.1094790	0.28307891	2.2971942	21	11 13.1	20.1
503327 2016 BB_{6}	17.0	X	14.93155	333.68110	274.02361	8.02924	0.1275770	0.22806197	2.6531846	21	6 10.9	19.8
503328 2016 BN_{8}	16.9	X	12.82582	288.95815	324.28484	12.47094	0.1501789	0.22614530	2.6681547	21	6 16.5	19.8
503329 2016 BO_{8}	17.9	X	143.83794	13.29072	184.10211	4.84568	0.1132015	0.27053108	2.3676887	21	9 30.8	21.4
503330 2016 BT_{9}	17.1	X	64.93883	37.78069	171.92071	13.84253	0.1984321	0.23139829	2.6276203	21	7 22.9	20.7
503331 2016 BT_{10}	17.4	X	20.39740	329.40251	296.05663	13.39867	0.1120264	0.24089979	2.5580662	21	7 17.4	19.9
503332 2016 BN_{12}	18.5	X	159.70752	69.66448	295.76149	18.12777	0.1162194	0.38963808	1.8565007	21	1 10.9	20.0
503333 2016 BG_{19}	18.2	X	169.96222	265.87078	307.96443	4.29168	0.1306862	0.30259283	2.1973385	21	11 20.3	21.5
503334 2016 BD_{20}	18.4	X	178.34550	85.56716	113.99016	4.58702	0.1337679	0.30022930	2.2088556	21	11 12.6	21.5
503335 2016 BG_{20}	18.5	X	159.21464	252.35796	328.30007	3.71840	0.1124657	0.30079762	2.2060725	21	11 18.5	21.7
503336 2016 BO_{25}	18.8	X	164.94113	60.54826	319.43703	18.76942	0.0580393	0.39448986	1.8412474	21	1 31.6	20.3
503337 2016 BA_{26}	17.7	X	119.32753	89.01407	85.90422	4.62244	0.1321717	0.26062782	2.4272930	21	8 7.2	21.1
503338 2016 BM_{30}	17.9	X	178.45163	162.41629	9.56208	3.44994	0.1630389	0.28612612	2.2808552	21	10 3.0	21.1
503339 2016 BW_{36}	18.0	X	135.56408	167.32684	36.74007	2.68207	0.1451690	0.27716953	2.3297307	21	10 3.2	21.3
503340 2016 BY_{36}	17.6	X	89.51706	121.29119	93.49897	3.25780	0.1619282	0.25951103	2.4342518	21	8 30.4	20.9
503341 2016 BB_{39}	17.6	X	337.33226	263.78503	277.49096	19.73545	0.0393094	0.37710510	1.8974097	21	—	—
503342 2016 BL_{39}	18.5	X	155.75996	29.32578	327.51517	19.39246	0.0976675	0.38128798	1.8835073	21	—	—
503343 2016 BG_{41}	17.6	X	32.85672	279.41724	324.46690	7.74543	0.1617300	0.24535535	2.5270026	21	7 15.6	20.1
503344 2016 BM_{44}	17.8	X	103.25834	59.92378	158.28082	1.41675	0.1427441	0.26737887	2.3862613	21	9 16.7	21.1
503345 2016 BJ_{48}	16.6	X	318.84774	75.64914	126.78014	11.56850	0.0403983	0.19109270	2.9851992	21	1 26.3	20.5
503346 2016 BM_{48}	17.9	X	145.78466	53.64489	124.35403	7.87002	0.1715578	0.26987195	2.3715424	21	9 11.5	21.7
503347 2016 BP_{56}	17.7	X	80.60065	279.36117	327.75792	5.39011	0.1621851	0.27654054	2.3332620	21	9 30.3	21.0
503348 2016 BX_{58}	18.0	X	146.25258	329.54457	304.92045	2.16840	0.1664747	0.31641955	2.1328510	21	—	—
503349 2016 BX_{59}	17.5	X	54.08938	289.60162	317.70883	5.19906	0.1425464	0.25551151	2.4595882	21	8 22.4	20.4
503350 2016 BH_{62}	16.8	X	316.36395	28.03761	169.74995	5.68113	0.1603279	0.19024379	2.9940730	21	—	—
503351 2016 BS_{62}	18.6	X	201.47612	21.54679	148.48986	5.16673	0.1325464	0.30163075	2.2020084	21	10 30.4	21.6
503352 2016 BJ_{63}	18.2	X	64.08628	347.00350	293.96488	1.07015	0.1500675	0.28316090	2.2967507	21	10 26.9	21.1
503353 2016 BR_{70}	17.8	X	18.56416	227.95747	5.01721	3.91769	0.2435789	0.22650369	2.6653394	21	6 1.4	19.8
503354 2016 BZ_{72}	16.6	X	302.36732	161.51073	59.09028	1.83812	0.1532465	0.18558659	3.0439557	21	1 14.3	21.0
503355 2016 BH_{75}	18.1	X	177.04081	130.72207	65.91934	4.84455	0.1582592	0.29392913	2.2403075	21	11 4.5	21.3
503356 2016 BS_{79}	18.5	X	65.13423	276.44246	357.23735	5.47268	0.0714832	0.28037077	2.3119631	21	10 5.5	21.2
503357 2016 BW_{79}	18.0	X	107.71606	152.98915	103.29491	6.85770	0.0818799	0.29145851	2.2529500	21	11 10.8	21.1
503358 2016 CT	18.6	X	185.45146	49.12027	155.35399	3.60399	0.0955430	0.30671930	2.1775860	21	11 30.5	21.5
503359 2016 CO_{3}	17.8	X	107.79213	20.92662	255.51467	3.82355	0.1784698	0.30042199	2.2079110	21	12 11.2	21.3
503360 2016 CB_{5}	17.8	X	118.12543	297.45856	276.76967	3.39610	0.0860064	0.27691291	2.3311699	21	9 21.6	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503361 2016 CG_7	17.9	X	86.08793	251.45766	335.55908	0.93376	0.1365920	0.26441978	2.4040311	21	9 7.3	21.0
503362 2016 CT_7	17.1	X	90.86013	351.88483	135.61295	3.27010	0.0492881	0.22454099	2.6808486	21	4 17.5	20.5
503363 2016 CW_7	17.4	X	114.66183	255.68151	294.66426	1.59709	0.1360311	0.26145319	2.4221819	21	8 21.4	20.9
503364 2016 CE_8	18.0	X	134.96007	270.98516	278.28495	1.43484	0.1490126	0.27066349	2.3669165	21	9 11.5	21.7
503365 2016 CH_9	17.7	X	172.15179	68.16438	148.32431	6.78017	0.1040677	0.30419490	2.1896167	21	11 30.8	20.8
503366 2016 CK_{13}	17.6	X	100.31381	358.40046	234.70189	2.07577	0.1509739	0.27121504	2.3637064	21	10 3.3	20.9
503367 2016 CR_{13}	17.5	X	61.57462	283.74256	294.24866	7.41299	0.1296072	0.24501845	2.5293185	21	7 20.3	20.5
503368 2016 CW_{14}	18.3	X	124.34493	293.18665	300.06114	2.73280	0.1697918	0.28152570	2.3056357	21	10 29.2	21.9
503369 2016 CQ_{23}	17.1	X	126.71857	279.59016	313.31172	23.51977	0.2833152	0.28221380	2.3018864	21	10 23.9	21.7
503370 2016 CL_{24}	17.9	X	165.48427	199.13627	353.05548	9.70449	0.0963798	0.29356508	2.2421593	21	10 16.3	21.1
503371 2016 CD_{28}	16.1	X	241.61179	159.65951	135.01493	29.69346	0.1107295	0.18241659	3.0791192	21	2 12.9	20.9
503372 2016 CQ_{30}	19.1	X	127.24568	100.82709	311.48094	20.34085	0.1696342	0.39309603	1.8455973	21	2 8.3	20.3
503373 2016 CL_{31}	18.1	X	111.36566	63.23963	304.45120	16.88648	0.1088785	0.35656878	1.9695810	21	—	—
503374 2016 CS_{32}	17.7	X	100.34510	355.80688	237.65451	4.61124	0.1329944	0.27040601	2.3684187	21	9 30.9	21.2
503375 2016 CX_{32}	17.2	X	39.70824	59.29508	134.82125	8.60796	0.2233805	0.21309447	2.7760115	21	5 25.2	20.1
503376 2016 CR_{35}	17.1	X	102.07021	249.80883	335.20264	11.27328	0.1620807	0.27134132	2.3629730	21	9 22.9	20.7
503377 2016 CG_{49}	18.0	X	103.10151	283.54276	347.55654	7.61886	0.1987003	0.29096164	2.2555142	21	11 28.3	21.7
503378 2016 CO_{61}	17.1	X	48.53368	119.88327	105.95262	9.44568	0.1137788	0.24053981	2.5606177	21	7 8.2	19.9
503379 2016 CK_{70}	15.9	X	352.62077	56.97668	90.00479	10.54745	0.0527053	0.18003601	3.1062028	21	1 3.0	20.1
503380 2016 CJ_{72}	16.0	X	184.78768	203.17079	128.07751	12.98688	0.0342594	0.18343158	3.0677500	21	1 28.8	20.4
503381 2016 CP_{72}	17.8	X	123.13900	236.04380	359.27681	2.41217	0.1763874	0.27706199	2.3303335	21	10 30.9	21.5
503382 2016 CC_{79}	17.9	X	76.91886	138.78512	115.81526	7.42728	0.1065898	0.27111324	2.3642981	21	10 3.9	21.1
503383 2016 CF_{94}	16.6	X	339.75107	344.95384	241.19079	7.76714	0.0965805	0.21171195	2.7880836	21	3 10.4	20.2
503384 2016 CO_{102}	17.4	X	245.40983	211.49358	210.52932	7.43938	0.0968188	0.27233916	2.3571976	21	7 23.9	20.7
503385 2016 CX_{107}	17.7	X	118.60974	332.18117	229.05708	5.25139	0.0942169	0.26847114	2.3797846	21	9 3.9	21.0
503386 2016 CZ_{114}	17.3	X	75.89194	296.94335	257.35967	7.55267	0.1500733	0.23967806	2.5667517	21	7 10.3	20.6
503387 2016 CP_{118}	18.1	X	135.57128	359.13275	213.98010	5.13954	0.1066159	0.28072518	2.3100168	21	10 12.7	21.5
503388 2016 CY_{120}	17.6	X	77.31409	304.76360	250.20502	3.77764	0.1913581	0.23906741	2.5711207	21	7 19.9	20.9
503389 2016 CQ_{143}	17.3	X	241.79311	342.82355	156.09904	23.47295	0.1706452	0.29557704	2.2319729	21	11 4.7	20.6
503390 2016 CN_{148}	18.3	X	248.85762	357.55997	119.97799	1.04971	0.0317301	0.29593625	2.2301664	21	10 31.9	20.9
503391 2016 CO_{160}	18.2	X	144.13976	58.85959	159.37754	1.48287	0.1562807	0.28903724	2.2655145	21	10 30.8	21.7
503392 2016 CC_{163}	17.8	X	102.47974	132.33912	133.44916	6.29770	0.1503309	0.29830198	2.2183596	21	11 22.7	21.1
503393 2016 CV_{188}	17.8	X	175.80480	348.11441	158.39882	3.58948	0.0817194	0.26416760	2.4055609	21	8 28.5	21.1
503394 2016 CP_{189}	16.5	X	35.38169	334.30680	194.72194	2.49383	0.1677069	0.19272208	2.9683497	21	4 3.7	19.7
503395 2016 CY_{196}	17.2	X	43.05980	90.80762	141.71284	13.14285	0.2103767	0.23369707	2.6103608	21	7 23.3	20.1
503396 2016 CK_{202}	17.7	X	104.46354	273.10248	350.96696	6.40338	0.1245222	0.28884484	2.2665204	21	11 15.5	21.0
503397 2016 CX_{202}	17.6	X	99.29375	118.17203	102.08636	2.88508	0.1161256	0.26366996	2.4085867	21	9 12.9	21.0
503398 2016 CL_{206}	17.6	X	99.78206	259.13652	318.19594	4.52138	0.0632887	0.26510666	2.3998768	21	8 31.5	20.8
503399 2016 CF_{207}	18.2	X	147.24497	33.00735	147.74136	2.71920	0.1459110	0.26945177	2.3740071	21	9 13.7	21.6
503400 2016 CX_{207}	17.5	X	25.59556	114.70681	121.14226	2.53551	0.1357055	0.23167017	2.6255642	21	6 14.5	20.3
503401 2016 CC_{215}	17.9	X	71.27876	205.51706	73.40343	3.56612	0.1533905	0.27534545	2.3400086	21	11 2.7	20.9
503402 2016 CG_{227}	17.3	X	55.96667	196.23817	25.81366	9.88081	0.1324156	0.24309893	2.5426155	21	7 20.9	20.5
503403 2016 CG_{242}	15.7	X	305.47494	120.82258	85.18157	18.27620	0.0851294	0.17683312	3.1435978	21	1 11.2	20.2
503404 2016 CW_{245}	16.7	X	312.01178	84.55942	174.44148	16.30778	0.1900241	0.17761619	3.1343514	21	3 8.4	20.8
503405 2016 CU_{247}	17.9	X	130.74186	54.78013	303.12697	17.81245	0.0845208	0.36179786	1.9505573	21	—	—
503406 2016 CJ_{250}	17.9	X	60.07305	157.38873	85.29671	2.75059	0.1462388	0.25711739	2.4493363	21	8 27.6	20.8
503407 2016 CC_{251}	16.9	X	74.10624	50.92507	99.60649	22.93241	0.0225777	0.22597263	2.6695137	21	5 1.8	20.9
503408 2016 CV_{258}	16.3	X	107.56245	37.69889	152.17765	15.28730	0.0414290	0.23278672	2.6171618	21	7 29.8	20.0
503409 2016 CM_{259}	16.4	X	349.43085	302.19167	274.19114	8.14134	0.2231642	0.18472444	3.0534195	21	3 1.9	19.9
503410 2016 CH_{261}	16.5	X	44.92155	264.11806	15.06911	12.17202	0.1558178	0.23577542	2.5949980	21	9 25.6	19.6
503411 2016 CR_{261}	17.1	X	13.88625	65.47558	209.96660	8.21340	0.1429704	0.22395271	2.6855413	21	7 19.5	20.1
503412 2016 DD	18.2	X	116.58021	76.10798	349.88266	21.11282	0.0513668	0.38671380	1.8658480	21	2 4.8	20.1
503413 2016 DE	18.1	X	291.64850	275.99589	295.16732	18.00985	0.0604952	0.36158946	1.9513067	21	—	—
503414 2016 DY_1	18.2	X	133.78523	67.37479	335.41120	18.38444	0.1179891	0.37827915	1.8934817	21	2 5.6	19.9
503415 2016 DC_2	17.8	X	116.56151	124.55172	269.85508	17.84766	0.1033765	0.36900952	1.9250603	21	—	—
503416 2016 DS_{17}	18.3	X	193.40365	284.39550	251.80757	1.30939	0.1494217	0.28736427	2.2742989	21	10 23.9	21.4
503417 2016 DA_{21}	17.5	X	138.40085	62.61162	130.94632	2.92634	0.0578872	0.26760507	2.3849164	21	9 18.2	20.7
503418 2016 DD_{24}	16.2	X	88.69329	287.96401	138.04265	10.37521	0.0284306	0.18234909	3.0798790	21	1 28.6	20.4
503419 2016 DZ_{24}	17.7	X	126.21285	50.95307	124.05238	3.36102	0.1301223	0.25405146	2.4690028	21	8 13.6	21.4
503420 2016 DE_{26}	18.8	X	282.74214	328.91637	144.76941	2.40733	0.0365022	0.30632539	2.1794524	21	12 17.2	21.0
503421 2016 DL_{27}	17.3	X	56.42898	256.24054	32.29538	9.89667	0.1114185	0.27095073	2.3652433	21	10 20.9	20.2
503422 2016 DP_{30}	16.5	X	4.62166	135.86380	123.02922	14.51728	0.1861991	0.21987888	2.7186108	21	6 10.4	19.3
503423 2016 EC_2	18.0	X	153.72081	249.40307	142.36341	24.09767	0.1009673	0.37991391	1.8880460	21	2 10.5	19.7
503424 2016 EX_4	17.8	X	95.20583	103.54123	133.78713	3.10373	0.1585358	0.25495676	2.4631547	21	10 4.7	21.3
503425 2016 EC_8	17.6	X	241.80814	349.96270	123.24878	6.20595	0.0288686	0.28638551	2.2794778	21	10 17.4	20.4
503426 2016 EY_{17}	16.5	X	0.68113	167.87852	127.62871	15.80431	0.1360973	0.24147526	2.5540003	21	7 26.1	18.8
503427 2016 EX_{24}	16.6	X	323.55774	13.00986	267.69588	12.02802	0.2018513	0.20138835	2.8825698	21	4 12.4	20.4
503428 2016 EY_{24}	16.3	X	341.23721	324.63275	300.02719	11.49847	0.0904243	0.20878741	2.8140589	21	5 4.4	20.1
503429 2016 ES_{25}	16.3	X	14.38272	251.62265	307.44444	7.51217	0.1044113	0.19735795	2.9216822	21	3 31.1	19.9
503430 2016 ED_{32}	16.5	X	253.07066	254.97942	93.97643	15.37652	0.1288583	0.22203905	2.7009496	21	5 1.9	20.8
503431 2016 EP_{36}	16.1	X	312.64811	273.36133	331.84653	15.20317	0.3082354	0.17635407	3.1492881	21	2 6.9	20.5
503432 2016 EK_{54}	18.3	X	180.07743	240.25869	325.64110	6.91657	0.0711411	0.28616633	2.2806415	21	11 22.1	21.4
503433 2016 EF_{55}	18.0	X	125.41125	268.20446	149.05536	21.19328	0.0915537	0.38266550	1.8789844	21	2 2.8	19.6
503434 2016 ES_{55}	19.1	X	115.38067	297.48342	164.33171	13.75726	0.2595395	0.40327577	1.8144067	21	5 4.1	21.1
503435 2016 EK_{61}	16.1	X	313.63501	278.03229	317.97325	25.53045	0.1691120	0.18391006	3.0624269	21	2 11.2	20.3
503436 2016 EX_{74}	18.5	X	248.82495	358.77013	142.51568	4.03146	0.0537679	0.30428600	2.1891796	21	12 3.2	20.8
503437 2016 EG_{75}	17.7	X	70.84209	327.44154	328.02239	6.50975	0.1256683	0.28634430	2.2796964	21	11 19.2	20.9
503438 2016 ES_{75}	17.2	X	63.51137	232.78051	333.37475	10.86718	0.1271404	0.23616290	2.5921588	21	7 8.0	20.5
503439 2016 EA_{77}	17.9	X	109.81001	278.37894	347.09088	6.11636	0.1130917	0.28830617	2.2693428	21	11 22.5	21.2
503440 2016 EK_{80}	16.9	X	31.73170	73.55337	129.48466	15.94602	0.2324660	0.21384145	2.7695430	21	5 24.9	19.8

Planet		H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
		m		°	°	°	°		°				
503441	2016 ET_{87}	17.3	X	110.37351	179.11353	106.85046	7.62851	0.0986513	0.28238488	2.3009566	21	12 19.7	20.6
503442	2016 EL_{88}	16.9	X	31.02346	16.32346	207.62792	11.63984	0.2727860	0.21944938	2.7221568	21	6 24.3	19.5
503443	2016 EZ_{88}	18.2	X	167.14936	307.91128	292.66160	2.44324	0.0631899	0.30935591	2.1651955	21	12 30.1	20.9
503444	2016 EO_{95}	18.0	X	122.13137	200.48468	74.98196	7.61072	0.1658140	0.29566321	2.2315392	21	12 21.7	21.5
503445	2016 EM_{110}	16.0	X	283.03985	108.31174	118.23507	9.55672	0.0136042	0.17005392	3.2265987	21	1 20.0	20.5
503446	2016 EJ_{111}	17.9	X	120.10801	259.55915	352.12195	1.84534	0.1800724	0.27639100	2.3341036	21	11 17.8	21.6
503447	2016 EA_{112}	18.3	X	143.94508	34.88827	152.77590	5.93276	0.0668264	0.26684182	2.3894620	21	9 17.1	21.5
503448	2016 EB_{112}	18.1	X	73.88999	117.60990	152.91305	4.98300	0.2253846	0.26125497	2.4234069	21	11 2.4	21.7
503449	2016 EQ_{113}	17.4	X	44.08069	158.35885	139.47480	6.31758	0.0557554	0.27144416	2.3623761	21	10 9.7	20.2
503450	2016 EV_{115}	16.5	X	60.27250	191.01724	7.40904	14.64447	0.1927194	0.22574449	2.6713120	21	7 2.6	20.0
503451	2016 EY_{115}	18.5	X	241.97957	14.80622	139.93328	6.11583	0.1391775	0.30375650	2.1917230	21	11 28.9	21.0
503452	2016 EC_{116}	17.8	X	90.03084	152.71917	36.21668	4.33936	0.1455227	0.23845401	2.5755281	21	7 23.4	21.4
503453	2016 EW_{118}	18.0	X	124.68479	168.89948	54.52452	3.23530	0.1399711	0.27144652	2.3623625	21	10 16.8	21.5
503454	2016 EQ_{119}	17.9	X	25.85788	104.18355	163.86109	9.63599	0.1789737	0.23830968	2.5765679	21	8 7.2	20.5
503455	2016 EV_{119}	18.2	X	100.57890	214.13145	28.73002	3.67315	0.1102177	0.26803088	2.3823898	21	10 13.2	21.3
503456	2016 EX_{121}	18.1	X	152.95753	157.32619	71.86358	4.76283	0.1022147	0.28901357	2.2656382	21	11 23.1	21.1
503457	2016 EF_{122}	18.1	X	119.28667	311.70502	248.98268	0.99304	0.1528310	0.25625275	2.4548428	21	9 10.1	21.8
503458	2016 EN_{124}	17.0	X	354.83228	88.87456	200.42683	11.01128	0.1814530	0.22973318	2.6403018	21	7 1.5	19.7
503459	2016 EC_{126}	17.8	X	71.65469	347.20176	321.86943	1.84277	0.2225128	0.27853863	2.3220902	21	12 18.6	21.3
503460	2016 ET_{127}	16.8	X	323.85985	114.36901	177.15496	8.38316	0.1144221	0.21823090	2.7322801	21	5 16.4	20.2
503461	2016 EC_{133}	18.6	X	146.64316	55.25515	202.72342	5.58433	0.0777011	0.29573233	2.2311915	21	12 24.9	21.6
503462	2016 EH_{139}	17.3	X	42.36646	62.56109	171.59490	10.16964	0.0882665	0.22868854	2.6483362	21	7 5.5	20.6
503463	2016 EU_{139}	17.8	X	118.38427	46.23456	178.02197	5.78377	0.1753387	0.26128209	2.4232392	21	10 12.7	21.7
503464	2016 EK_{141}	17.8	X	127.75592	214.05937	24.65872	2.73468	0.1426143	0.27413377	2.3468988	21	11 7.3	21.3
503465	2016 EC_{144}	18.2	X	175.06649	312.78969	211.64545	2.06770	0.1075953	0.26673780	2.3900831	21	9 19.5	21.7
503466	2016 ET_{144}	18.0	X	182.90414	156.38518	359.95185	1.97834	0.1052122	0.26675832	2.3899605	21	9 18.2	21.4
503467	2016 ED_{145}	18.4	X	118.95728	179.03011	30.63083	2.82030	0.1654094	0.25509913	2.4622382	21	9 23.5	22.0
503468	2016 EG_{145}	17.8	X	66.88371	214.25903	29.43347	3.25944	0.1218015	0.24252804	2.5466040	21	9 2.7	21.1
503469	2016 EW_{145}	17.9	X	69.76662	71.71515	170.25710	13.06588	0.2013991	0.24021004	2.5629607	21	9 14.7	21.2
503470	2016 EK_{146}	18.8	X	69.37007	276.86166	183.68390	21.92605	0.1217686	0.36953222	1.9232446	21	1 1.3	20.8
503471	2016 ES_{147}	17.9	X	189.09857	61.36981	64.04965	6.01408	0.1038174	0.25421875	2.4679196	21	8 16.7	21.6
503472	2016 EY_{147}	17.7	X	59.90596	93.40189	115.41134	6.13291	0.0934502	0.22340121	2.6899593	21	6 28.8	21.0
503473	2016 EO_{148}	17.4	X	44.50249	73.05310	141.33350	8.50780	0.1610932	0.21652414	2.7466195	21	6 22.2	20.6
503474	2016 EY_{152}	17.6	X	93.45285	222.49284	10.19170	2.35509	0.1503288	0.25843379	2.4410116	21	9 24.9	20.9
503475	2016 EP_{157}	18.0	X	103.88030	99.17422	273.46068	16.98036	0.0590063	0.34936410	1.9965669	21	—	—
503476	2016 ET_{158}	16.6	X	172.03561	279.88969	152.26724	22.28689	0.0462611	0.22819386	2.6521622	21	5 21.2	20.9
503477	2016 EJ_{159}	17.1	X	3.69723	190.61381	74.79581	14.18955	0.1373538	0.22867927	2.6484077	21	6 15.0	19.6
503478	2016 EF_{162}	16.8	X	342.77236	279.98127	333.85895	3.27990	0.1555209	0.21012760	2.8020808	21	4 17.4	19.9
503479	2016 ET_{163}	18.2	X	151.82595	350.59352	237.23550	6.65349	0.0952659	0.28923829	2.2644646	21	11 20.0	21.4
503480	2016 EX_{164}	18.1	X	223.54251	271.06342	210.64484	5.95389	0.0505538	0.27425955	2.3461812	21	9 24.5	21.0
503481	2016 EU_{167}	17.5	X	100.02570	226.71595	8.72782	5.57541	0.1257175	0.26016098	2.4301958	21	10 3.1	20.7
503482	2016 EO_{172}	16.4	X	104.44659	23.65842	97.23505	7.19696	0.0182792	0.20181490	2.8785066	21	4 26.1	20.4
503483	2016 EJ_{173}	16.3	X	308.72485	93.08788	149.81498	26.17335	0.2085766	0.17943731	3.1131082	21	2 10.0	20.7
503484	2016 EQ_{175}	17.5	X	74.07387	195.99608	13.49653	5.38011	0.2189709	0.23481936	2.6020369	21	8 11.7	21.0
503485	2016 EU_{175}	18.2	X	233.14774	120.08532	4.28978	5.40803	0.1038121	0.28334561	2.2957525	21	10 5.3	20.9
503486	2016 EN_{178}	17.8	X	42.63727	304.75272	291.85100	2.12813	0.1341752	0.22876831	2.6477205	21	7 16.9	20.6
503487	2016 EA_{181}	17.1	X	77.73890	248.22482	337.31712	3.07694	0.2132837	0.23835953	2.5762087	21	9 3.8	20.5
503488	2016 EZ_{181}	18.0	X	71.74323	226.66190	194.97745	23.29671	0.1080337	0.34401268	2.0172192	21	—	—
503489	2016 EM_{186}	16.6	X	5.65667	252.10867	354.33327	12.58769	0.1945686	0.21622291	2.7491698	21	5 16.3	19.4
503490	2016 ES_{187}	17.2	X	91.08456	274.11861	276.62804	7.89983	0.1831676	0.24224989	2.5485529	21	7 29.6	20.8
503491	2016 EH_{188}	17.6	X	99.30940	343.11187	225.95758	7.20994	0.0619748	0.25740957	2.4474825	21	8 16.3	20.9
503492	2016 EM_{188}	17.7	X	69.12632	299.08029	313.55797	15.13506	0.1183584	0.25910008	2.4368251	21	9 10.5	21.1
503493	2016 EP_{191}	17.3	X	159.16310	225.55057	338.95580	23.87596	0.1718084	0.28022049	2.3127896	21	10 12.7	21.5
503494	2016 EY_{191}	16.2	X	257.26051	18.49133	268.32628	9.51495	0.1258749	0.18857833	3.0116756	21	2 12.8	21.1
503495	2016 EC_{192}	17.6	X	107.31154	4.68493	232.56578	6.56216	0.0677255	0.27322003	2.3521284	21	10 7.6	20.8
503496	2016 EK_{192}	19.0	X	71.28676	112.05754	337.10954	19.81311	0.1321788	0.37380587	1.9085577	21	—	—
503497	2016 EC_{196}	17.6	X	153.33401	75.51786	118.14858	8.44943	0.0444849	0.27677662	2.3319350	21	10 10.7	20.8
503498	2016 EO_{196}	17.9	X	183.58079	116.71864	80.20041	6.83311	0.0987444	0.28658009	2.2784458	21	11 15.3	21.0
503499	2016 EX_{198}	17.7	X	114.72350	152.87660	77.87311	3.21859	0.1413639	0.26730400	2.3867068	21	10 16.3	21.2
503500	2016 EJ_{199}	18.0	X	190.63927	182.32746	5.01430	4.45880	0.1319971	0.28839142	2.2688955	21	11 5.3	21.2
503501	2016 EX_{200}	17.4	X	15.93363	350.19979	260.74384	1.90388	0.1318902	0.22770841	2.6559303	21	6 18.1	20.0
503502	2016 EG_{201}	18.1	X	139.46389	189.74455	87.69042	5.43601	0.1595189	0.30061278	2.2069767	21	—	—
503503	2016 EH_{201}	18.1	X	99.07625	100.48744	130.99345	7.65934	0.0632570	0.26258583	2.4152116	21	9 22.8	21.4
503504	2016 ER_{202}	17.9	X	42.02618	14.06183	125.03833	24.33097	0.0692381	0.37404017	1.9077606	21	1 13.9	19.4
503505	2016 ES_{202}	17.2	X	120.14105	112.91356	138.59767	13.31894	0.1205576	0.27757570	2.3274575	21	11 20.1	20.9
503506	2016 FP	18.7	X	268.83074	237.22818	222.78461	2.82867	0.0357740	0.28954846	2.2628471	21	11 2.8	21.0
503507	2016 FK_{1}	18.1	X	115.23419	52.25470	214.58893	5.20239	0.2237108	0.28078174	2.3097065	21	12 5.1	21.9
503508	2016 FO_{1}	18.6	X	105.11455	276.70651	169.48864	22.93562	0.1094732	0.38943266	1.8571535	21	2 14.4	20.2
503509	2016 FQ_{3}	17.2	X	154.79134	310.12570	45.20915	21.18090	0.1239510	0.36077766	1.9542328	21	—	—
503510	2016 FE_{4}	17.4	X	68.80855	356.56006	172.34227	7.53351	0.2403935	0.21585872	2.7522612	21	6 11.5	20.9
503511	2016 FL_{4}	16.9	X	41.48686	207.27928	4.25070	8.20263	0.1303402	0.21714477	2.7413835	21	6 6.5	20.1
503512	2016 FD_{5}	18.3	X	217.75481	331.90273	144.07417	1.59796	0.1355161	0.27318913	2.3523058	21	8 31.9	21.7
503513	2016 FJ_{5}	16.3	X	304.24900	296.93454	359.74644	11.42721	0.2107334	0.20448866	2.8533600	21	4 6.4	20.1
503514	2016 FY_{6}	16.8	X	152.34942	228.91112	342.38803	23.67017	0.1453973	0.28616335	2.2806574	21	10 16.2	20.8
503515	2016 FN_{7}	16.1	X	292.82629	278.65667	32.17220	9.38657	0.0846014	0.21004367	2.8028272	21	4 29.9	19.8
503516	2016 FW_{8}	17.6	X	120.58150	163.90153	68.09430	6.10544	0.1542769	0.26707805	2.3880528	21	10 24.9	21.2
503517	2016 FE_{9}	17.3	X	51.65533	152.04014	159.92210	5.51462	0.1407732	0.27398149	2.3477683	21	11 21.3	20.4
503518	2016 FK_{9}	17.9	X	180.29604	340.36090	156.44391	3.91172	0.0885536	0.26041249	2.4286309	21	8 20.0	21.4
503519	2016 FO_{9}	16.6	X	352.91206	185.57638	49.44901	5.96088	0.0974390	0.20389035	2.8589393	21	4 18.3	19.9
503520	2016 FZ_{9}	16.6	X	347.96025	354.83685	159.84964	9.59567	0.0713750	0.17339484	3.1850184	21	1 5.2	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503521 2016 FB_{11}	16.0	X	241.82967	183.64480	109.22612	6.59855	0.1289473	0.18299590	3.0726174	21	2 10.5	20.8
503522 2016 FT_{11}	18.0	X	185.44764	126.90188	36.90833	2.66774	0.1600353	0.27446158	2.3450297	21	9 29.2	21.6
503523 2016 FN_{12}	17.9	X	137.43346	194.00343	180.77932	22.21226	0.0848678	0.35543507	1.9737669	21	—	—
503524 2016 FW_{15}	17.0	X	293.51566	203.57422	74.03116	4.36480	0.1332413	0.18925755	3.0044656	21	3 17.8	21.2
503525 2016 FV_{16}	16.6	X	308.78786	76.59486	127.59769	10.29121	0.0437680	0.17488399	3.1669121	21	1 18.7	21.0
503526 2016 FL_{17}	17.3	X	15.61073	301.50833	2.46882	15.58326	0.1737101	0.24129752	2.5552544	21	9 14.8	19.7
503527 2016 FM_{17}	16.4	X	316.33670	281.98805	306.89156	3.68176	0.1154334	0.17823860	3.1270503	21	2 15.8	20.5
503528 2016 FO_{17}	16.1	X	245.84025	221.24693	118.34434	12.05816	0.1839169	0.18414885	3.0597788	21	4 10.2	21.2
503529 2016 FG_{20}	17.2	X	347.86232	216.59943	97.07149	3.85191	0.2543587	0.23044793	2.6348396	21	7 23.0	19.0
503530 2016 FN_{20}	17.3	X	356.36584	182.94628	99.07364	3.57552	0.1640803	0.22240906	2.6979532	21	6 25.6	19.6
503531 2016 FF_{21}	16.6	X	18.71050	130.36759	99.10913	6.40231	0.0466372	0.21229393	2.7829859	21	5 21.9	20.1
503532 2016 FJ_{21}	17.4	X	338.84608	225.51232	97.40000	6.86226	0.0657852	0.23753752	2.5821487	21	7 29.2	20.3
503533 2016 FL_{21}	16.6	X	264.68506	149.54987	154.11751	12.76734	0.0902291	0.18532890	3.0467767	21	3 22.6	21.1
503534 2016 FN_{21}	17.4	X	84.78452	174.23480	117.92996	7.48262	0.1236207	0.27207762	2.3587080	21	12 1.6	20.9
503535 2016 FL_{24}	18.1	X	72.22686	294.93184	23.15650	2.70995	0.0258890	0.29008234	2.2600698	21	12 10.9	20.9
503536 2016 FN_{24}	18.1	X	119.14806	235.85724	19.20262	3.21275	0.1527160	0.27501805	2.3418653	21	11 19.8	21.8
503537 2016 FL_{25}	17.4	X	26.61724	192.81743	134.48416	2.09165	0.1942628	0.26083403	2.4260135	21	11 12.5	19.9
503538 2016 FP_{25}	17.7	X	20.58197	197.42441	153.46866	3.05993	0.1936255	0.27391490	2.3481488	21	12 8.6	20.3
503539 2016 FD_{27}	17.0	X	346.48150	222.99470	41.09151	4.94438	0.0277438	0.21557344	2.7546888	21	5 20.0	20.5
503540 2016 FK_{27}	17.4	X	24.10673	82.97769	180.33117	8.55292	0.1717154	0.22687715	2.6624137	21	7 25.2	20.2
503541 2016 FF_{29}	18.5	X	215.33451	335.32408	169.20018	1.95807	0.1546620	0.28014897	2.3131832	21	10 5.3	21.6
503542 2016 FN_{30}	17.2	X	304.94242	157.60887	142.68788	5.06557	0.0418877	0.21128849	2.7918077	21	5 11.3	20.9
503543 2016 FD_{31}	17.5	X	13.52859	147.55555	126.81839	3.38614	0.1233907	0.22881959	2.6473249	21	7 18.2	20.2
503544 2016 FL_{31}	17.0	X	6.51892	131.77763	179.81197	14.60406	0.2320458	0.23807733	2.5782440	21	9 9.3	19.1
503545 2016 FQ_{34}	17.3	X	326.06179	322.87660	356.10798	1.73511	0.1978935	0.22391708	2.6858261	21	6 14.2	20.2
503546 2016 FC_{35}	17.1	X	326.38340	89.29598	202.00358	10.64325	0.0629156	0.21627355	2.7487408	21	5 26.0	20.6
503547 2016 FS_{36}	16.9	X	323.08965	281.63278	26.57810	7.89185	0.2170225	0.21370469	2.7707245	21	5 19.5	20.0
503548 2016 FW_{36}	17.2	X	358.87437	286.91029	57.30414	2.14996	0.2027699	0.25585681	2.4573748	21	10 16.2	19.0
503549 2016 FL_{41}	16.8	X	18.46580	61.75895	205.38936	8.68318	0.2671403	0.22137089	2.7063817	21	7 29.7	19.2
503550 2016 FM_{41}	15.9	X	320.62647	220.43429	3.17334	16.96698	0.1806812	0.17603769	3.1530603	21	2 13.3	20.3
503551 2016 FN_{42}	17.6	X	244.46254	78.42774	71.99794	6.31192	0.0617889	0.29641126	2.2277832	21	12 5.9	20.0
503552 2016 FB_{43}	16.6	X	150.01556	70.62275	29.24817	5.67663	0.0127883	0.21829326	2.7317597	21	5 21.4	20.3
503553 2016 FF_{43}	18.6	X	239.91765	116.85297	76.38094	1.36826	0.0944033	0.31316216	2.1476155	21	—	—
503554 2016 FP_{46}	17.6	X	116.89110	231.17093	338.46682	6.22631	0.0933203	0.26459065	2.4029960	21	9 14.5	20.8
503555 2016 FR_{47}	17.4	X	310.31888	199.00523	121.33084	4.63641	0.0892128	0.22244140	2.6976916	21	6 6.6	20.7
503556 2016 FE_{48}	18.5	X	105.18612	181.66582	100.11420	3.49189	0.1612911	0.27851752	2.3222076	21	12 11.6	22.1
503557 2016 FM_{48}	16.7	X	300.54196	286.61161	330.58465	8.44337	0.1114319	0.18579492	3.0416798	21	3 1.5	20.9
503558 2016 FO_{48}	18.1	X	129.44659	227.82588	38.36523	5.75889	0.0987463	0.28711692	2.2756049	21	12 14.8	21.3
503559 2016 FT_{49}	17.5	X	42.32852	222.79256	98.84183	3.46989	0.1420864	0.26896303	2.3768822	21	11 20.5	20.4
503560 2016 FV_{51}	17.6	X	48.78338	211.98734	342.54673	1.77876	0.1233410	0.21303301	2.7765454	21	5 26.1	20.7
503561 2016 FT_{52}	17.2	X	177.03465	156.05179	325.46814	4.54128	0.0675554	0.24436615	2.5338176	21	7 27.3	20.7
503562 2016 FP_{54}	16.2	X	19.16972	48.61366	225.75611	8.41975	0.2211903	0.22402863	2.6849345	21	8 5.1	18.8
503563 2016 FJ_{56}	17.4	X	37.49731	197.06199	50.65755	7.55806	0.1737421	0.23073463	2.6326565	21	8 2.2	20.4
503564 2016 FH_{57}	17.9	X	274.47082	205.14711	245.64978	6.51521	0.0757558	0.28485974	2.2876101	21	10 20.6	20.5
503565 2016 FT_{57}	16.9	X	30.13026	52.37970	215.38605	11.19158	0.1439394	0.23687657	2.5869497	21	8 6.8	20.0
503566 2016 GO_{5}	16.8	X	17.73479	301.28683	191.00536	16.32049	0.1874057	0.17928010	3.1149278	21	1 10.3	20.6
503567 2016 GZ_{6}	16.9	X	318.31554	356.26747	298.08790	3.70838	0.1025455	0.21735631	2.7396046	21	5 10.1	20.3
503568 2016 GL_{9}	16.7	X	294.51722	192.16795	93.53796	3.23035	0.0120600	0.19854234	2.9100512	21	4 13.8	20.7
503569 2016 GU_{9}	17.9	X	136.87105	158.38486	67.69838	2.08626	0.1326948	0.27081514	2.3660328	21	10 31.4	21.5
503570 2016 GK_{11}	17.8	X	296.50392	82.95818	339.89304	7.04316	0.0807772	0.28408954	2.2917429	21	10 13.4	20.2
503571 2016 GX_{11}	17.7	X	61.16269	38.10320	183.91471	12.84854	0.1803268	0.22851935	2.6496432	21	7 30.6	21.2
503572 2016 GC_{14}	17.8	X	135.63067	130.56042	77.96915	4.68717	0.0658608	0.26323910	2.4112142	21	10 6.3	21.1
503573 2016 GD_{20}	17.3	X	349.28266	301.97097	11.36557	4.31456	0.1185065	0.24194781	2.5506738	21	8 1.7	19.9
503574 2016 GN_{29}	17.5	X	296.99368	300.49596	36.69412	1.18413	0.0366754	0.23105613	2.6302138	21	6 17.4	20.7
503575 2016 GL_{33}	17.3	X	358.20703	15.37194	246.31524	1.52220	0.0082307	0.22351623	2.6890363	21	6 3.3	20.9
503576 2016 GP_{34}	18.1	X	26.84619	120.28716	212.81308	4.99761	0.1193186	0.27081424	2.3660380	21	11 10.3	20.8
503577 2016 GN_{39}	18.3	X	314.08986	39.67983	12.66067	4.93883	0.0980169	0.28255426	2.3000369	21	10 29.1	20.5
503578 2016 GS_{48}	17.3	X	322.79400	325.25521	273.57370	1.21372	0.1857163	0.18483538	3.0521976	21	2 25.4	21.1
503579 2016 GY_{49}	16.0	X	261.63025	294.60078	0.47766	5.19150	0.1188662	0.18205208	3.0832279	21	3 5.0	20.7
503580 2016 GV_{50}	17.9	X	71.30445	304.67119	16.81097	5.52155	0.1872086	0.28181320	2.3040673	21	12 31.5	21.4
503581 2016 GF_{51}	17.2	X	300.90363	166.28767	196.71800	2.22870	0.1151614	0.24331524	2.5411083	21	7 17.4	20.1
503582 2016 GY_{51}	17.8	X	4.54240	128.27783	242.57207	2.47359	0.1713969	0.28072825	2.3100000	21	12 8.4	20.0
503583 2016 GD_{53}	17.4	X	104.49323	336.20667	204.32658	3.47160	0.1380999	0.23620083	2.5918813	21	7 26.3	21.1
503584 2016 GY_{54}	17.4	X	332.38595	307.55101	28.45253	3.12030	0.0542905	0.24476442	2.5310682	21	8 8.1	20.3
503585 2016 GX_{55}	18.2	X	272.30271	275.97537	192.27747	3.90318	0.0851349	0.28947125	2.2632494	21	11 13.8	20.4
503586 2016 GY_{56}	16.4	X	279.79348	221.40791	42.46556	1.45257	0.1331503	0.17424903	3.1746009	21	2 14.4	21.2
503587 2016 GB_{57}	17.3	X	321.56799	223.40074	68.34985	1.14286	0.0367870	0.21566072	2.7539455	21	5 21.7	20.9
503588 2016 GN_{59}	18.0	X	211.06588	119.95657	319.16385	4.00950	0.0186839	0.24134114	2.5549465	21	7 14.1	21.5
503589 2016 GO_{64}	18.2	X	220.15699	100.22815	63.94438	4.64684	0.0507969	0.28580481	2.2825643	21	11 20.9	21.1
503590 2016 GZ_{64}	17.0	X	272.56066	283.13498	114.30828	3.57964	0.0964041	0.24662384	2.5183302	21	7 27.9	20.1
503591 2016 GF_{65}	18.1	X	93.71503	241.67725	19.57305	3.43557	0.0981550	0.26638682	2.3921820	21	10 27.2	21.3
503592 2016 GT_{65}	18.1	X	157.36129	117.09914	62.91938	3.33629	0.1432265	0.26229743	2.4169817	21	9 23.3	21.8
503593 2016 GF_{66}	16.8	X	343.61061	159.73971	60.19638	4.94178	0.1270018	0.18755163	3.0226567	21	3 15.3	20.6
503594 2016 GC_{68}	17.0	X	18.41440	162.37941	84.44665	4.55815	0.1398523	0.21633162	2.7482488	21	6 17.6	19.7
503595 2016 GH_{70}	17.1	X	249.85953	2.45212	14.49178	6.34491	0.0578967	0.22559427	2.6724977	21	6 3.9	21.0
503596 2016 GS_{71}	18.4	X	91.79350	93.14299	195.44813	0.45314	0.1832707	0.27336292	2.3513087	21	12 8.1	22.0
503597 2016 GC_{75}	17.3	X	350.95835	127.47019	149.99517	3.83687	0.1629624	0.21667014	2.7453856	21	6 7.8	20.0
503598 2016 GA_{78}	17.5	X	300.66621	200.30293	127.58054	2.67645	0.1698224	0.21691546	2.7433152	21	5 21.2	21.0
503599 2016 GQ_{78}	17.5	X	316.48782	319.75524	11.53111	1.60160	0.1620521	0.22821904	2.6519671	21	6 20.3	20.4
503600 2016 GY_{87}	17.1	X	68.55416	152.05623	66.20412	3.58069	0.1421949	0.23196997	2.6233015	21	8 3.1	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503601 2016 GQ_{91}	16.7	X	304.76548	163.37075	138.10599	6.37407	0.0414671	0.21001615	2.8030720	21	5 13.3	20.5
503602 2016 GA_{93}	17.0	X	272.70954	232.12368	124.89709	5.43473	0.1353711	0.21942420	2.7223651	21	5 28.9	20.8
503603 2016 GT_{93}	17.8	X	134.25427	67.98099	134.55141	5.97933	0.0884792	0.25832254	2.4417125	21	9 27.2	21.3
503604 2016 GQ_{95}	16.6	X	272.65325	124.11935	168.64486	10.24643	0.1029485	0.18296401	3.0729743	21	3 15.2	21.2
503605 2016 GP_{96}	17.5	X	325.16086	166.58698	144.83354	6.25320	0.0379070	0.22409953	2.6843682	21	6 22.7	21.0
503606 2016 GX_{98}	17.5	X	59.03670	39.39113	155.04806	5.32737	0.0530387	0.21542320	2.7559695	21	6 2.9	21.1
503607 2016 GG_{101}	17.3	X	247.65847	227.99561	181.22065	9.32860	0.0516804	0.23994664	2.5648360	21	7 15.3	20.9
503608 2016 GZ_{107}	17.6	X	10.32755	227.05560	41.71132	5.92902	0.1645610	0.21975891	2.7196001	21	7 6.3	20.3
503609 2016 GK_{108}	16.6	X	284.98626	194.06642	71.62595	2.44057	0.1411855	0.17445745	3.1720720	21	2 21.6	21.3
503610 2016 GZ_{108}	16.7	X	271.93860	303.36291	45.55391	7.23239	0.0903268	0.21510976	2.7586460	21	5 21.9	20.5
503611 2016 GN_{109}	17.3	X	43.43537	167.25673	72.07232	3.61184	0.0805977	0.22703773	2.6611582	21	7 15.0	20.4
503612 2016 GF_{111}	17.7	X	145.26113	129.69700	90.86849	2.26204	0.1358845	0.27105291	2.3646489	21	11 1.9	21.4
503613 2016 GH_{124}	16.8	X	154.37457	325.97882	163.80864	12.96095	0.1482614	0.22689833	2.6622481	21	7 13.5	21.3
503614 2016 GT_{125}	16.7	X	350.15702	349.09479	206.96210	5.80216	0.1438888	0.17999233	3.1067053	21	2 17.7	20.5
503615 2016 GC_{126}	18.1	X	206.48981	199.95006	18.98293	6.00453	0.0883692	0.30255893	2.1975026	21	—	—
503616 2016 GM_{126}	17.4	X	106.87975	263.83602	8.08760	6.25657	0.1151746	0.27357272	2.3501064	21	11 25.9	20.9
503617 2016 GU_{127}	18.5	X	200.11827	187.47736	0.11643	5.53926	0.0435813	0.28727783	2.2747551	21	11 26.1	21.4
503618 2016 GN_{128}	16.8	X	110.65798	152.55754	340.93375	4.14427	0.0568885	0.21519053	2.7579557	21	5 20.9	20.6
503619 2016 GP_{128}	16.2	X	275.18250	293.93787	7.11928	15.20361	0.2003771	0.18521231	3.0480551	21	3 18.0	20.8
503620 2016 GY_{129}	18.1	X	203.00893	170.12052	337.54145	1.27763	0.1244068	0.27278287	2.3546407	21	9 27.4	21.4
503621 2016 GL_{130}	18.5	X	128.86217	231.80625	25.64832	1.24946	0.1585727	0.27735643	2.3286840	21	12 2.7	21.9
503622 2016 GS_{130}	17.5	X	106.95563	266.48269	255.51406	1.79686	0.0702290	0.22682214	2.6628441	21	6 26.2	20.9
503623 2016 GK_{132}	17.9	X	155.94656	358.39092	218.97614	6.69727	0.0535596	0.28044349	2.3115634	21	11 11.0	21.0
503624 2016 GD_{133}	18.0	X	204.53446	354.17478	156.73544	2.41231	0.1479849	0.27370787	2.3493327	21	10 2.4	21.5
503625 2016 GO_{135}	17.9	X	96.51871	258.84685	164.32224	22.86497	0.1124687	0.36569049	1.9366907	21	—	—
503626 2016 GV_{135}	16.9	X	63.72063	194.40322	97.05301	9.07076	0.1099693	0.26491472	2.4010359	21	11 5.4	20.1
503627 2016 GE_{138}	17.3	X	79.24736	30.99439	164.60093	8.40885	0.1557467	0.22852262	2.6496179	21	7 17.3	20.9
503628 2016 GU_{140}	17.1	X	40.10323	204.34906	63.22481	10.38017	0.1138783	0.22953559	2.6418168	21	8 29.2	20.5
503629 2016 GB_{145}	16.6	X	107.49155	175.96477	339.11634	12.79075	0.1129323	0.22906905	2.6454026	21	6 24.5	20.6
503630 2016 GX_{146}	17.9	X	267.72148	222.11668	218.76027	5.93648	0.0720851	0.26986625	2.3715758	21	9 24.3	20.7
503631 2016 GC_{147}	18.4	X	253.43618	112.21558	20.05111	7.04105	0.0290065	0.29146412	2.2529211	21	11 25.7	21.0
503632 2016 GA_{166}	17.8	X	87.95527	182.52660	105.01081	2.52462	0.1741679	0.26704099	2.3882737	21	12 1.8	21.5
503633 2016 GL_{169}	16.8	X	272.80194	264.58165	91.30551	7.34939	0.0736744	0.21797318	2.7344334	21	6 4.9	20.6
503634 2016 GR_{169}	16.1	X	204.32447	261.60585	75.52373	10.05338	0.0313996	0.17294799	3.1905021	21	3 4.9	20.9
503635 2016 GW_{170}	17.2	X	113.30939	153.92316	65.87914	6.98202	0.1016103	0.25305017	2.4755116	21	9 28.3	20.8
503636 2016 GX_{170}	17.1	X	91.15553	82.84135	131.30897	5.67708	0.1701636	0.23857915	2.5746274	21	8 30.8	20.8
503637 2016 GV_{172}	16.6	X	357.42571	234.18816	47.64229	10.96666	0.1273323	0.21893876	2.7263877	21	6 28.2	19.7
503638 2016 GF_{173}	17.4	X	65.27954	287.86231	59.90033	7.31706	0.1442062	0.28996518	2.2606786	21	—	—
503639 2016 GP_{173}	17.7	X	168.32872	346.06629	154.34722	4.98926	0.0575334	0.24384119	2.5374530	21	8 10.2	21.3
503640 2016 GU_{174}	17.0	X	310.44713	101.21603	163.89904	6.16746	0.2820726	0.17923935	3.1153999	21	2 28.9	21.3
503641 2016 GC_{178}	17.5	X	17.50127	232.78322	102.79460	7.29862	0.1706919	0.25307657	2.4753394	21	11 6.1	20.2
503642 2016 GW_{178}	17.3	X	194.12153	314.02254	108.20860	7.25078	0.0306407	0.21289888	2.7777114	21	5 30.9	21.2
503643 2016 GQ_{182}	16.2	X	245.46756	175.95441	151.08409	10.23163	0.0786674	0.18352159	3.0667469	21	3 31.8	20.8
503644 2016 GU_{188}	16.6	X	277.27661	215.53728	79.51755	10.38174	0.0679113	0.18414633	3.0598068	21	4 1.8	21.1
503645 2016 GO_{189}	16.7	X	226.55234	305.53473	120.79485	9.84375	0.0546087	0.23226309	2.6210939	21	7 12.5	20.4
503646 2016 GQ_{189}	18.3	X	277.94849	354.59152	122.44968	5.56021	0.1013044	0.29039019	2.2584722	21	12 4.3	20.5
503647 2016 GE_{190}	17.1	X	346.43623	171.33418	165.79805	6.29809	0.1704856	0.22781507	2.6551012	21	8 28.5	19.5
503648 2016 GG_{191}	17.0	X	37.54339	140.63028	105.16706	9.88508	0.2417703	0.21435124	2.7651501	21	8 8.6	19.9
503649 2016 GX_{191}	16.7	X	47.25936	147.80096	132.30154	9.69380	0.1160356	0.23264919	2.6181932	21	9 25.1	20.0
503650 2016 GM_{192}	17.6	X	194.54865	45.34813	151.01219	6.61861	0.0851405	0.27837620	2.3229934	21	11 27.5	20.8
503651 2016 GJ_{200}	17.4	X	118.22143	195.39505	58.97146	6.64149	0.1911650	0.27119704	2.3638110	21	11 19.9	21.2
503652 2016 GU_{204}	16.9	X	21.59185	92.09071	194.15041	14.32055	0.1106000	0.23312994	2.6145926	21	8 14.8	20.1
503653 2016 GV_{205}	17.5	X	142.91717	198.81601	2.40348	4.74596	0.1419367	0.26951604	2.3736297	21	10 4.8	21.0
503654 2016 GU_{207}	17.0	X	56.78346	100.47024	148.58449	12.26468	0.1489556	0.24148259	2.5539486	21	8 30.2	20.1
503655 2016 GW_{207}	15.8	X	237.13134	284.96221	25.50384	16.65559	0.0538089	0.17101190	3.2145374	21	3 10.8	20.7
503656 2016 GC_{218}	16.4	X	355.25618	197.52404	71.89832	13.23446	0.0831393	0.21914334	2.7246906	21	6 7.2	19.4
503657 2016 GO_{219}	16.0	X	353.22093	286.92679	26.81303	22.12532	0.1050607	0.22723214	2.6596401	21	8 21.2	19.5
503658 2016 GT_{222}	17.4	X	51.55112	98.54532	138.25355	8.34220	0.1893444	0.21825239	2.7321008	21	8 9.4	20.6
503659 2016 GV_{222}	16.4	X	272.99616	185.06242	140.97564	12.10125	0.1847707	0.17877371	3.1208072	21	4 19.6	21.3
503660 2016 GZ_{232}	18.0	X	324.07082	302.99264	167.90511	6.96633	0.0285275	0.30002068	2.2098795	21	—	—
503661 2016 GR_{237}	16.5	X	280.45784	170.35538	198.70327	10.56970	0.1616271	0.20646221	2.8351475	21	6 18.9	20.6
503662 2016 GH_{240}	16.2	X	264.45637	137.14291	182.17096	27.81568	0.2523814	0.17168619	3.2061153	21	3 23.9	21.4
503663 2016 GG_{242}	17.7	X	211.54347	47.28062	164.94946	7.40020	0.0821513	0.29973009	2.2113076	21	—	—
503664 2016 GB_{245}	17.6	X	55.53126	355.38688	276.38381	1.80848	0.1999826	0.24377789	2.5378922	21	10 5.4	20.8
503665 2016 GE_{245}	16.8	X	345.72491	47.68582	227.62495	4.32492	0.0635938	0.21595749	2.7514220	21	6 1.7	20.2
503666 2016 GP_{245}	16.4	X	323.79544	221.43006	30.05218	2.50611	0.0860875	0.19086902	2.9875310	21	3 29.2	20.2
503667 2016 GH_{246}	17.4	X	190.00578	107.97052	351.16714	4.56397	0.1025653	0.23784835	2.5798985	21	7 11.7	21.3
503668 2016 GW_{246}	17.6	X	343.90260	59.05879	252.92120	2.39449	0.0639707	0.23074591	2.6325707	21	7 20.0	20.7
503669 2016 GW_{248}	18.2	X	91.98407	105.51366	181.11343	0.99002	0.1729214	0.26893801	2.3770296	21	12 4.5	21.7
503670 2016 HY	16.7	X	32.55765	354.71277	251.57564	5.09338	0.1093693	0.22316443	2.6918616	21	7 9.4	19.8
503671 2016 HA_{1}	16.2	X	36.02766	257.57092	8.73275	11.54989	0.1673833	0.23058435	2.6338002	21	8 27.9	19.2
503672 2016 HZ_{1}	18.0	X	92.76649	209.64313	73.79289	4.57488	0.1850013	0.26313960	2.4118219	21	12 1.4	21.8
503673 2016 HX_{2}	17.2	X	98.61535	230.69103	342.12854	9.06069	0.1480921	0.23787166	2.5797300	21	9 2.8	21.0
503674 2016 HH_{3}	17.6	X	90.10659	212.79823	254.56731	19.00985	0.0923855	0.37785345	1.8949036	21	2 11.5	19.7
503675 2016 HM_{5}	17.3	X	35.11523	65.47217	205.92844	12.88306	0.0691948	0.23313446	2.6145587	21	8 10.3	20.8
503676 2016 HH_{6}	16.6	X	295.46407	81.92428	187.76447	13.89540	0.2480042	0.17235791	3.1977799	21	2 20.9	21.5
503677 2016 HZ_{6}	17.3	X	341.05693	219.25279	105.66562	5.06021	0.0618659	0.23071543	2.6328025	21	8 4.4	20.3
503678 2016 HR_{7}	15.9	X	213.86984	289.19030	63.92538	17.89724	0.1606992	0.17468190	3.1693542	21	4 3.8	21.3
503679 2016 HZ_{7}	17.3	X	0.77081	88.49708	207.47502	2.42476	0.2101397	0.21589792	2.7519281	21	7 27.2	19.6
503680 2016 HH_{8}	16.9	X	289.22645	237.30852	114.16315	7.26978	0.0560937	0.22341322	2.6898628	21	6 23.5	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503681 2016 HL_8	15.8	X	255.83261	207.28306	101.28956	14.98941	0.1503148	0.17619663	3.1511638	21	3 18.7	21.0
503682 2016 HY_8	16.8	X	86.35916	197.40114	79.99370	9.27961	0.0912147	0.26298538	2.4127647	21	11 10.4	20.2
503683 2016 HS_9	16.4	X	274.98770	221.01373	71.06380	11.25114	0.1813488	0.17506289	3.1647543	21	3 14.4	21.4
503684 2016 HZ_9	17.4	X	355.20225	253.97027	142.38045	5.60285	0.1417693	0.28239961	2.3008766	21	12 25.2	19.6
503685 2016 HL_{10}	16.0	X	126.69566	240.12587	176.30705	11.87291	0.0763064	0.17399011	3.1777496	21	3 11.5	20.6
503686 2016 HS_{10}	16.7	X	41.51387	148.36618	130.56534	7.92052	0.2309993	0.23203540	2.6228083	21	10 3.4	19.9
503687 2016 HK_{15}	17.4	X	321.24834	219.47609	68.19652	2.44905	0.0838027	0.20367386	2.8609648	21	5 10.8	21.0
503688 2016 HW_{17}	17.3	X	273.79212	218.20960	134.60306	5.63743	0.0813540	0.20974550	2.8054828	21	6 1.8	21.2
503689 2016 HR_{18}	17.2	X	306.22130	222.07583	70.34346	3.11918	0.0317124	0.20114147	2.8849279	21	5 3.8	21.1
503690 2016 HH_{20}	18.4	X	262.30623	188.77831	289.77818	1.48904	0.1430209	0.28404726	2.2919703	21	10 31.9	21.0
503691 2016 HD_{22}	18.4	X	220.78550	183.49060	6.75565	1.97148	0.0544713	0.29251395	2.2475274	21	12 28.3	21.0
503692 2016 JM_2	16.2	X	328.50037	142.12217	89.33643	10.96378	0.0200134	0.18235972	3.0797593	21	3 25.1	20.6
503693 2016 JG_4	17.1	X	93.25619	353.10839	207.65016	9.00181	0.1303465	0.22887796	2.6468748	21	8 5.5	21.0
503694 2016 JJ_4	16.7	X	16.32089	90.20949	219.15686	11.51132	0.1409722	0.23099557	2.6306735	21	9 11.2	19.8
503695 2016 JP_6	16.0	X	272.04363	118.94117	147.40546	26.93968	0.2269696	0.16949733	3.2336584	21	1 30.9	21.3
503696 2016 JB_7	17.1	X	67.35827	126.61382	71.22411	12.38306	0.1816328	0.21810431	2.7333372	21	7 9.4	20.6
503697 2016 JF_9	17.0	X	285.86945	204.06223	156.62462	6.52232	0.0345834	0.22206258	2.7007588	21	7 4.3	20.7
503698 2016 JL_9	17.1	X	306.29611	205.58206	124.66004	6.59964	0.0229085	0.21636700	2.7479492	21	6 23.5	20.8
503699 2016 JU_{10}	18.1	X	210.56577	69.37710	106.85209	7.20202	0.1088618	0.27857731	2.3218753	21	11 17.7	21.3
503700 2016 JV_{10}	16.2	X	297.13243	100.00364	189.84583	10.77880	0.0693575	0.18414561	3.0598147	21	4 15.0	20.5
503701 2016 JF_{11}	16.4	X	338.08089	140.80889	99.64214	11.92528	0.0909668	0.18253712	3.0777636	21	4 11.1	20.6
503702 2016 JP_{11}	16.3	X	304.13059	127.80541	130.65111	12.43991	0.0573243	0.17270622	3.1934790	21	3 22.0	20.9
503703 2016 JO_{12}	16.7	X	87.97673	45.21714	154.34963	25.91974	0.0174112	0.22344159	2.6896352	21	7 14.3	20.8
503704 2016 JE_{14}	16.7	X	66.66013	85.85247	154.85148	15.36095	0.0476371	0.22803775	2.6533724	21	8 13.9	20.3
503705 2016 JD_{15}	16.4	X	265.52311	177.68835	158.83006	18.38378	0.2219751	0.18159336	3.0884180	21	4 20.4	21.5
503706 2016 JJ_{15}	16.9	X	83.06661	84.15886	145.16471	13.67465	0.2299264	0.23454935	2.6040335	21	9 19.3	20.8
503707 2016 JL_{16}	16.2	X	250.66917	238.53330	72.31368	10.07015	0.0462861	0.17623537	3.1507020	21	3 24.6	20.9
503708 2016 JU_{16}	17.4	X	13.52411	225.91255	79.18360	3.35263	0.1309238	0.23261025	2.6184853	21	9 5.3	20.1
503709 2016 JZ_{19}	17.4	X	339.91669	312.74175	65.52002	4.06053	0.2137583	0.25508037	2.4623589	21	10 26.7	19.0
503710 2016 JB_{20}	16.7	X	240.90004	248.93773	138.63549	1.28046	0.1222169	0.21193914	2.7860908	21	6 1.9	20.9
503711 2016 JU_{20}	16.5	X	55.76748	91.67606	52.69342	9.02490	0.0065684	0.17817135	3.1278372	21	3 26.8	21.0
503712 2016 JL_{21}	16.4	X	83.03237	83.16800	39.55088	10.47873	0.0867354	0.18457960	3.0550166	21	4 11.4	20.5
503713 2016 JO_{21}	17.8	X	225.57927	143.25439	359.26174	2.09168	0.1163295	0.27217334	2.3581549	21	10 17.4	20.9
503714 2016 JE_{23}	16.3	X	211.36149	112.51043	210.22574	7.96029	0.1400906	0.15532326	3.4275073	21	2 16.7	21.9
503715 2016 JH_{23}	17.7	X	171.77519	162.09183	54.26782	7.54950	0.0736928	0.27848080	2.3224117	21	11 26.2	20.8
503716 2016 JE_{25}	16.8	X	44.96323	207.26598	16.34659	4.17936	0.0381561	0.21256305	2.7806364	21	6 19.6	20.4
503717 2016 JY_{25}	18.2	X	194.85633	118.37940	96.38339	4.85591	0.1133559	0.28938144	2.2637177	21	12 19.2	21.2
503718 2016 JT_{27}	15.7	X	192.44461	292.74553	67.84851	12.71474	0.0707936	0.16887870	3.2415505	21	3 22.5	20.8
503719 2016 JY_{27}	16.9	X	349.70648	112.02629	107.17081	4.53443	0.1339064	0.18184839	3.0855298	21	3 24.1	20.6
503720 2016 JP_{28}	17.2	X	26.27684	170.90353	118.56808	12.47696	0.1800193	0.23294106	2.6160057	21	9 15.8	20.2
503721 2016 JN_{30}	16.6	X	55.33486	23.84171	189.33951	7.81975	0.1492620	0.21517092	2.7581232	21	7 5.5	20.1
503722 2016 JG_{33}	16.2	X	22.60264	54.86362	120.76421	11.33296	0.0346993	0.17761379	3.1343796	21	3 24.9	20.6
503723 2016 JL_{35}	16.8	X	26.87581	59.79381	214.82083	11.80013	0.1591203	0.22244754	2.6976419	21	8 11.7	20.1
503724 2016 JP_{36}	16.6	X	88.00746	176.80218	49.00591	12.81421	0.1228555	0.23930299	2.5694330	21	9 11.7	20.4
503725 2016 JB_{37}	15.9	X	278.21208	66.50614	256.52960	8.77062	0.0894727	0.19165907	2.9793153	21	4 26.6	20.1
503726 2016 JV_{38}	15.9	X	316.75280	251.30088	88.86241	13.71273	0.1988664	0.22007112	2.7170274	21	6 27.9	18.7
503727 2016 KO_2	17.0	X	74.54373	44.63931	199.73711	6.87181	0.1538340	0.23263449	2.6183035	21	9 14.6	20.5
503728 2016 LR_3	15.9	X	350.30496	68.15129	128.79974	26.82551	0.2390531	0.17905073	3.1175875	21	2 10.2	19.4
503729 2016 LE_5	16.5	X	310.76457	121.84254	160.60488	16.80674	0.1168327	0.18489800	3.0515084	21	4 19.9	20.8
503730 2016 LF_5	16.6	X	319.38686	60.10416	190.38306	26.41126	0.1509075	0.17202807	3.2018661	21	3 13.1	21.0
503731 2016 LM_7	16.8	X	97.67389	93.60150	123.36201	10.01348	0.0665097	0.23167910	2.6254967	21	8 29.5	20.4
503732 2016 LV_{16}	16.6	X	83.59040	21.80611	126.54367	11.66621	0.0374344	0.18745705	3.0236733	21	5 9.8	21.0
503733 2016 LT_{20}	16.7	X	37.87237	68.73992	144.85384	10.12243	0.0424789	0.19608026	2.9343605	21	5 30.3	20.7
503734 2016 LV_{21}	16.5	X	97.09443	276.45413	200.49973	9.23132	0.0477363	0.17922929	3.1155165	21	4 15.3	20.9
503735 2016 LG_{24}	16.7	X	330.48340	26.07643	213.96783	12.34279	0.0811161	0.17435601	3.1733023	21	3 23.9	21.1
503736 2016 LH_{24}	16.6	X	326.80262	199.42236	103.97717	11.16525	0.1426656	0.19937123	2.9019798	21	6 3.9	20.2
503737 2016 LQ_{24}	16.5	X	146.91514	272.36123	146.00700	7.04267	0.0620589	0.17059785	3.2197367	21	4 7.0	21.3
503738 2016 LJ_{25}	16.9	X	257.63412	202.17766	190.29819	5.83233	0.0368910	0.21575656	2.7531300	21	7 8.3	20.7
503739 2016 LU_{25}	17.6	X	335.23738	183.99314	154.11165	4.12464	0.0798012	0.22397737	2.6853441	21	8 11.3	20.8
503740 2016 LU_{27}	16.3	X	341.90482	144.65231	94.75105	16.86855	0.0475788	0.18054839	3.1003232	21	4 21.9	20.8
503741 2016 LU_{28}	17.5	X	195.37535	73.08607	130.52470	7.01883	0.0569892	0.27638662	2.3341282	21	12 10.2	20.7
503742 2016 LD_{31}	16.3	X	249.04338	275.83370	92.86374	14.71551	0.2553684	0.18343002	3.0677675	21	5 11.3	21.5
503743 2016 LN_{31}	17.2	X	120.41663	42.28560	149.12095	5.12269	0.0328610	0.22789576	2.6544744	21	8 17.4	20.7
503744 2016 LU_{34}	16.4	X	178.54272	211.53453	221.66405	11.48318	0.0387787	0.19322288	2.9632185	21	5 26.5	20.7
503745 2016 LY_{36}	16.3	X	237.26791	204.31834	144.23533	8.03027	0.1477959	0.17376509	3.1804925	21	4 13.9	21.4
503746 2016 LY_{41}	17.7	X	190.96635	95.20356	105.29251	6.53014	0.0798446	0.27348964	2.3505823	21	11 28.0	20.9
503747 2016 LV_{43}	15.9	X	244.09381	201.78192	156.33590	28.89809	0.1593632	0.17962049	3.1109913	21	5 3.9	21.3
503748 2016 LQ_{47}	16.0	X	141.13683	282.09778	224.52177	23.62693	0.1175222	0.21823797	2.7322211	21	7 14.2	20.7
503749 2016 MM_1	16.5	X	317.28359	124.36982	147.06629	18.16078	0.1760869	0.17731273	3.1379266	21	4 8.1	20.8
503750 2016 MJ_2	17.0	X	327.13494	120.03046	236.38864	10.44331	0.1770422	0.22112590	2.7083803	21	8 10.2	20.1
503751 2016 MW_2	16.7	X	96.27976	42.34716	148.47868	14.13278	0.1934415	0.22394029	2.6856406	21	8 6.2	20.6
503752 2016 MZ_2	16.6	X	306.63122	120.44279	195.64844	13.78101	0.1962249	0.18855581	3.0119154	21	5 12.8	20.6
503753 2016 NP_2	16.5	X	35.80705	191.26276	114.30895	15.26190	0.1827961	0.23079655	2.6321856	21	10 27.3	20.0
503754 2016 NY_2	16.7	X	212.70165	320.24285	136.18734	22.71433	0.0800987	0.22326818	2.6910277	21	8 2.3	20.7
503755 2016 ND_3	16.2	X	317.72819	54.33479	219.18491	11.45783	0.1094735	0.17808290	3.1288727	21	4 14.7	20.4
503756 2016 NN_4	15.9	X	349.01309	152.13547	120.66307	15.67679	0.2312747	0.18317606	3.0706023	21	5 28.5	19.2
503757 2016 NQ_4	15.7	X	306.05994	43.82591	288.97909	15.71400	0.0862066	0.18450276	3.0558648	21	6 19.2	19.8
503758 2016 NP_{11}	16.7	X	347.48215	143.22233	147.72967	7.68069	0.1196606	0.18920654	3.0050056	21	6 24.0	20.4
503759 2016 NB_{20}	16.4	X	331.56359	207.95995	98.36948	16.30826	0.1320739	0.20430442	2.8550751	21	6 16.7	19.7
503760 2016 NT_{23}	16.4	X	294.40946	167.37765	191.94731	8.33122	0.0681814	0.19189663	2.9768559	21	7 8.3	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503761 2016 NT_{53}	16.4	X	309.15304	171.66092	146.31917	11.08650	0.0678024	0.17583636	3.1554666	21	6 7.9	20.8
503762 2016 OS_{4}	16.0	X	75.54084	222.92694	317.39746	15.09318	0.0725650	0.17904166	3.1176928	21	6 10.4	20.5
503763 2016 PS_{9}	16.1	X	6.22440	139.50050	121.28279	8.60146	0.1024526	0.17397324	3.1779550	21	6 16.1	20.0
503764 2016 PZ_{12}	16.8	X	271.66868	18.41696	93.44785	14.26317	0.1792630	0.22972505	2.6403641	21	10 29.2	20.3
503765 2016 PE_{37}	15.3	X	63.87058	299.95325	278.26089	17.86142	0.0576781	0.18104894	3.0946062	21	7 10.6	19.5
503766 2016 PX_{67}	16.4	X	308.01514	156.69873	186.78745	9.66136	0.1199872	0.18198484	3.0839873	21	6 29.9	20.6
503767 2016 PC_{68}	15.7	X	184.68349	270.13670	178.72263	15.94738	0.0658476	0.17376978	3.1804352	21	6 22.5	20.8
503768 2016 PH_{74}	15.7	X	354.64330	1.49404	352.33707	16.32551	0.0679422	0.19235352	2.9721402	21	9 27.2	19.5
503769 2016 QA_{10}	14.8	X	329.93349	149.65743	83.76347	9.11885	0.0564882	0.12614962	3.9374230	21	3 31.5	20.2
503770 2016 QB_{29}	16.1	X	250.88603	333.47470	93.51953	9.37214	0.1276161	0.19053735	2.9909970	21	8 3.6	20.6
503771 2016 QX_{31}	17.0	X	247.96865	26.62300	139.73047	6.01204	0.1309119	0.24465492	2.5318234	21	12 11.1	20.3
503772 2016 QQ_{36}	15.1	X	240.57478	9.96890	286.69257	8.69443	0.2402053	0.12488572	3.9639442	21	2 10.9	21.6
503773 2016 QB_{43}	16.3	X	31.54087	79.76363	191.38541	13.02960	0.0171352	0.18383244	3.0632888	21	7 29.1	20.7
503774 2016 QS_{47}	15.9	X	190.22877	338.57497	138.53815	10.96773	0.0211596	0.18031825	3.1029606	21	8 4.4	20.2
503775 2016 QD_{55}	16.0	X	320.27997	155.02503	160.49723	7.33616	0.1643742	0.17452522	3.1712508	21	6 7.3	20.0
503776 2016 QK_{57}	16.3	X	268.66143	195.09509	182.15251	13.87379	0.0784595	0.17388747	3.1790000	21	6 26.8	21.1
503777 2016 QV_{65}	16.5	X	306.52702	184.41371	179.01994	10.20538	0.0380030	0.19006598	2.9959401	21	8 2.9	20.7
503778 2016 QE_{66}	16.1	X	311.07519	204.52733	173.33374	9.86426	0.0793707	0.19823527	2.9130556	21	8 25.2	19.8
503779 2016 QR_{67}	15.9	X	311.37785	150.96097	182.96305	10.87602	0.0415082	0.17987261	3.1080836	21	7 2.4	20.3
503780 2016 QS_{67}	15.5	X	10.75349	321.86041	298.34288	13.70187	0.1053022	0.17760912	3.1344346	21	6 23.2	19.5
503781 2016 QN_{68}	16.4	X	0.61052	86.61620	178.22973	5.30664	0.1053846	0.17263956	3.1943010	21	6 12.0	20.4
503782 2016 RZ_{21}	16.4	X	325.65011	200.46164	169.32221	10.28382	0.1012447	0.20240946	2.8728669	21	9 5.5	19.7
503783 2016 RA_{23}	16.4	X	351.19523	131.36190	164.04936	8.76447	0.1305013	0.18328446	3.0693915	21	7 5.7	20.1
503784 2016 RD_{42}	15.9	X	325.36987	148.62006	183.46665	9.36578	0.0927214	0.17473305	3.1687356	21	7 13.9	20.2
503785 2016 UW_{67}	16.2	X	253.00164	45.95540	69.94162	11.03794	0.1859730	0.17497534	3.1658098	21	10 1.8	21.0
503786 2016 UJ_{146}	15.7	X	237.01135	270.52279	233.80381	11.18789	0.0459199	0.18788946	3.0190324	21	10 31.2	20.1
503787 2016 WW_{6}	16.3	X	296.94378	33.78252	49.75100	10.98633	0.1080343	0.18797873	3.0180765	21	10 27.9	20.1
503788 2016 WL_{25}	15.6	X	235.92602	73.98071	57.19814	11.37507	0.0286982	0.17726372	3.1385048	21	10 19.3	20.1
503789 2016 XR_{21}	18.3	X	163.22596	93.76118	66.01298	23.40743	0.0614396	0.36338498	1.9448737	21	9 26.7	21.3
503790 2016 YV_{7}	17.8	X	43.37692	100.66677	190.70203	21.60814	0.0447543	0.36445747	1.9410564	21	10 8.2	19.4
503791 2016 YB_{10}	17.6	X	30.63061	223.54496	113.87103	21.68420	0.0634680	0.38040188	1.8864311	21	12 11.1	19.8
503792 2017 AB_{15}	16.9	X	13.64622	171.36058	284.95906	5.08062	0.1620746	0.22117002	2.7080200	21	—	—
503793 2017 BK_{4}	17.5	X	159.22675	66.19480	134.00809	24.21196	0.0829642	0.35874257	1.9616165	21	11 11.8	20.6
503794 2017 BK_{12}	18.1	X	193.39604	206.65242	315.99508	18.02727	0.0433062	0.35623575	1.9708083	21	10 13.6	20.8
503795 2017 BQ_{111}	16.5	X	29.34232	248.00525	311.71038	4.09946	0.2113747	0.24105075	2.5569980	21	4 29.5	18.6
503796 2017 CW_{6}	16.7	X	23.19273	111.63359	328.79021	7.41058	0.1768124	0.21294639	2.7772983	21	—	—
503797 2017 DT_{33}	16.5	X	311.40082	243.17175	342.03392	10.92631	0.1461242	0.23290708	2.6162601	21	1 24.7	20.2
503798 2017 DK_{35}	18.0	X	103.06234	141.23982	142.88779	23.72741	0.0680659	0.36909681	1.9247568	21	12 26.9	20.8
503799 2017 EX_{11}	17.5	X	344.27819	130.17049	57.03941	6.43371	0.1111179	0.22036469	2.7146137	21	1 27.2	20.9
503800 2017 FM_{55}	16.1	X	13.48055	335.49694	106.83050	10.29939	0.0329068	0.17852456	3.1237102	21	—	—
503801 2017 GA_{7}	18.1	X	34.78857	185.24143	76.72597	6.92571	0.2080136	0.26972294	2.3724157	21	8 28.8	20.4
503802 2017 HR_{22}	16.2	X	279.81871	116.24260	104.17265	8.26821	0.1896088	0.17853489	3.1235897	21	—	—
503803 2017 HW_{31}	17.0	X	33.17678	75.61910	102.45837	9.77175	0.0232330	0.22419829	2.6835798	21	4 5.6	20.7
503804 2017 HB_{32}	16.9	X	290.36018	184.61070	152.29264	5.24991	0.2213936	0.24248116	2.5469322	21	5 10.8	20.4
503805 2017 HU_{42}	16.0	X	251.47159	177.57414	96.02553	13.68680	0.1701350	0.18475459	3.0530873	21	1 25.2	21.0
503806 2017 JP_{1}	17.5	X	175.13080	140.74832	100.18018	23.60522	0.0569710	0.36153354	1.9515079	21	—	—
503807 2017 JO_{3}	16.1	X	281.50003	181.74345	114.33772	14.40372	0.2493773	0.21217413	2.7840333	21	3 12.9	20.6
503808 2017 JB_{4}	15.8	X	280.29978	73.24562	152.79102	15.28128	0.0527588	0.17299262	3.1899534	21	1 10.2	20.6
503809 2017 KU_{2}	17.8	X	28.40571	242.58754	130.93378	25.61929	0.1130947	0.34993401	1.9943985	21	—	—
503810 2017 KL_{5}	17.7	X	106.25389	226.88699	106.07791	23.57924	0.0771042	0.36378199	1.9434584	21	—	—
503811 2017 KV_{5}	16.1	X	200.49399	314.03764	66.94767	28.73739	0.0374937	0.22804909	2.6532845	21	4 26.0	20.3
503812 2017 KZ_{8}	17.0	X	5.27214	6.36722	236.43870	12.25907	0.0976178	0.24444662	2.5332615	21	5 14.8	19.8
503813 2017 KN_{10}	16.9	X	275.03199	92.61906	188.90744	8.94892	0.1045475	0.20627169	2.8368931	21	2 26.7	21.0
503814 2017 KA_{12}	16.1	X	241.94376	48.36375	240.56916	20.97371	0.1597197	0.18172605	3.0869144	21	1 26.9	21.5
503815 2017 KB_{12}	17.7	X	49.60352	349.10346	229.14814	4.69173	0.0910422	0.25730369	2.4481538	21	6 24.9	20.5
503816 2017 KK_{12}	16.9	X	357.18817	172.89194	79.23835	10.31849	0.1241387	0.24071284	2.5593904	21	5 15.2	19.6
503817 2017 KO_{12}	18.0	X	94.08249	143.08841	119.92893	4.33527	0.1276184	0.31093218	2.1578716	21	11 10.1	21.0
503818 2017 KU_{12}	17.7	X	50.17762	174.08031	93.93759	7.34485	0.1773362	0.28372875	2.2936853	21	9 29.5	20.4
503819 2017 KX_{15}	15.8	X	245.88565	49.97734	224.59114	16.23641	0.2078520	0.17561592	3.1581066	21	1 15.7	21.4
503820 2017 KC_{16}	15.6	X	257.47548	21.33535	229.61460	29.43735	0.2197875	0.17306994	3.1890032	21	—	—
503821 2017 KE_{16}	17.4	X	17.36631	180.89766	124.24762	7.35594	0.1691347	0.28099917	2.3085149	21	9 26.5	19.5
503822 2017 KG_{16}	16.8	X	4.20436	5.75089	220.88929	17.09532	0.1514891	0.23292199	2.6161484	21	4 15.9	19.6
503823 2017 KT_{18}	16.8	X	335.75768	38.65139	183.98913	9.23171	0.0993349	0.21128474	2.7918406	21	3 2.0	20.4
503824 2017 KV_{19}	18.3	X	85.51337	43.16168	186.39751	4.61977	0.1329802	0.29348728	2.2425554	21	9 11.3	21.2
503825 2017 KX_{19}	16.5	X	241.00513	167.17694	126.81740	5.02458	0.2092954	0.18688404	3.0298508	21	2 5.5	21.4
503826 2017 KY_{19}	16.4	X	231.38698	158.37939	129.63754	5.12118	0.1488460	0.18057124	3.1000617	21	1 24.8	21.5
503827 2017 KP_{20}	16.6	X	268.54395	112.28219	129.71826	6.96218	0.1049414	0.18027292	3.1034807	21	1 9.5	21.3
503828 2017 KU_{24}	17.9	X	39.88136	201.39090	83.16712	6.17832	0.1582526	0.28684279	2.2770545	21	10 4.3	20.4
503829 2017 KK_{25}	16.7	X	312.18892	173.38536	84.25480	13.89897	0.1430041	0.21583030	2.7525029	21	3 16.3	20.6
503830 2017 KL_{26}	16.2	X	202.97248	189.98067	131.27946	11.69986	0.0266803	0.18121311	3.0927369	21	2 6.7	20.5
503831 2017 KR_{26}	15.7	X	270.31963	113.32982	240.89211	28.77172	0.1840891	0.23516126	2.5995142	21	5 13.8	19.6
503832 2017 KZ_{26}	15.7	X	245.73989	131.30198	132.37808	11.73474	0.0468554	0.17649091	3.1476600	21	1 16.4	20.3
503833 2017 KT_{27}	16.5	X	305.46076	168.71718	108.72389	14.98384	0.1715700	0.21853770	2.7297223	21	3 28.0	20.5
503834 2017 KV_{27}	17.0	X	353.86367	41.51200	202.27512	12.43732	0.1911590	0.23131081	2.6282828	21	4 19.1	19.3
503835 2017 KZ_{27}	16.7	X	245.11297	152.16254	150.19549	6.98379	0.2214321	0.18730707	3.0252872	21	2 17.2	21.7
503836 2017 KS_{29}	17.4	X	13.85495	31.21638	242.39235	4.68559	0.1629739	0.26271425	2.4144245	21	7 20.6	19.5
503837 2017 KX_{30}	16.8	X	1.00390	344.85089	220.04854	13.04743	0.1869563	0.22304112	2.6928537	21	3 3.3	19.9
503838 2017 KR_{33}	16.1	X	255.52212	139.92102	99.57325	17.56411	0.0879918	0.17058632	3.2198817	21	—	—
503839 2017 KU_{33}	17.3	X	333.50900	158.41712	119.80717	15.95674	0.1554693	0.23911249	2.5707975	21	5 11.1	20.5
503840 2017 KO_{35}	16.2	X	301.13651	16.28703	244.62523	16.14700	0.1961649	0.20958174	2.8069441	21	2 13.0	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503841 2017 KR_{35}	15.7	X	198.73595	197.20492	117.70544	23.93316	0.0805136	0.17411853	3.1761869	21	1 27.6	20.5
503842 2017 KU_{35}	17.6	X	354.44136	230.00660	96.21074	3.18149	0.2206195	0.27466297	2.3438832	21	9 11.3	19.0
503843 2017 KW_{35}	17.6	X	38.09920	44.67525	209.57906	2.93127	0.2054710	0.26884183	2.3775965	21	8 16.9	19.8
503844 2017 LK_1	17.2	X	0.34433	32.40021	180.37509	13.75129	0.1943482	0.22250926	2.6971431	21	3 17.7	19.6
503845 2017 MV_3	17.6	X	40.78415	251.07179	59.75752	10.87312	0.2653955	0.27839212	2.3229049	21	11 23.6	20.3
503846 2017 MG_5	16.2	X	258.48954	168.72765	136.63461	15.33285	0.1236019	0.17852084	3.1237536	21	3 16.6	21.1
503847 2017 MF_8	18.0	X	336.33820	34.63679	268.72678	5.58955	0.3577479	0.23218618	2.6216727	21	5 12.3	20.2
503848 4702 $P–L$	18.2	X	76.69310	243.48407	77.12065	0.78419	0.2795398	0.29434823	2.2381804	21	—	—
503849 1453 $T–2$	18.1	X	30.99938	357.41188	344.90453	2.70995	0.2656706	0.26934562	2.3746309	21	12 21.5	21.1
503850 4150 $T–3$	17.7	X	20.66139	342.32067	37.94111	7.34381	0.2284490	0.27186499	2.3599376	21	—	—
503851 1995 TZ_3	17.5	X	256.67413	79.45794	17.71933	7.31745	0.1293008	0.22526253	2.6751209	21	9 20.9	21.1
503852 1995 TN_4	16.4	X	239.46287	8.29303	20.27020	14.14266	0.0247955	0.17948639	3.1125407	21	6 10.6	21.1
503853 1995 VU_8	16.5	X	281.06749	288.26724	56.15187	12.34846	0.2969426	0.18037199	3.1023442	21	5 3.8	21.3
503854 1996 RA_7	16.3	X	296.17233	355.10828	352.79694	10.27355	0.0800258	0.19124927	2.9835697	21	6 25.8	20.5
503855 1996 SO_5	18.5	X	50.40147	307.38816	178.57184	22.64700	0.0664923	0.37709654	1.8974384	21	1 4.8	20.8
503856 1996 TC_{34}	16.5	X	206.49251	218.69439	220.64721	11.29863	0.1533703	0.18584967	3.0410824	21	6 29.1	21.6
503857 1996 VM_{16}	17.4	X	217.66129	1.16194	64.02706	3.16792	0.1031266	0.18553247	3.0445476	21	6 26.7	21.9
503858 1998 HQ_{151}	8.8	X	40.65897	347.35261	228.88466	11.93905	0.2858699	0.00394254	39.6842942	21	7 5.4	24.0
503859 1998 QO_{52}	18.5	X	332.61105	224.09989	163.95068	6.20477	0.4146814	0.25770846	2.4455897	21	10 31.3	18.2
503860 1998 TM_1	18.0	X	57.15091	285.47595	207.90714	21.11553	0.0339677	0.36601442	1.9355479	21	1 27.9	20.4
503861 1998 WZ_1	19.8	X	23.76526	137.43100	344.84256	4.31431	0.5569873	0.30983225	2.1629757	21	—	—
503862 1999 BG_{31}	18.2	X	24.22989	325.75931	104.42991	3.71626	0.1298693	0.30526036	2.1845188	21	—	—
503863 1999 SU_3	16.9	X	316.56862	1.87091	17.62584	9.93215	0.2681966	0.22188494	2.7022000	21	8 20.1	19.5
503864 1999 SJ_{24}	18.5	X	13.76365	23.88907	7.15730	1.11965	0.2910601	0.27518028	2.3409448	21	—	—
503865 1999 VM_{11}	20.7	X	256.01441	206.39498	218.01771	17.04880	0.2790916	0.48930344	1.5949627	21	7 16.2	22.6
503866 1999 VH_{83}	18.0	X	299.14619	201.30858	164.29849	1.65239	0.2511106	0.21666491	2.7454297	21	6 25.8	21.2
503867 1999 VS_{84}	17.7	X	322.16347	156.65028	228.52101	2.43165	0.1338858	0.22068289	2.7120037	21	9 20.2	20.7
503868 2000 AK_{42}	17.4	X	75.96527	20.41713	97.85886	24.42166	0.0497109	0.37859344	1.8924337	21	2 17.3	19.5
503869 2000 GW_{23}	17.7	X	165.81351	235.06099	322.86853	0.70867	0.1779845	0.25378787	2.4707121	21	10 20.5	21.8
503870 2000 QW_{225}	17.7	X	354.58311	18.76716	323.36930	6.14790	0.3023520	0.23567878	2.5957074	21	10 3.9	19.2
503871 2000 SL	18.2	X	350.94526	70.21971	207.73926	38.34991	0.3947841	0.51564019	1.5401802	21	2 17.1	20.7
503872 2000 SK_{52}	16.7	X	6.39582	91.91454	240.81285	11.52037	0.3016407	0.23518669	2.5993268	21	10 22.6	19.0
503873 2000 SQ_{164}	17.4	X	329.96038	5.61386	15.15726	17.43784	0.2919895	0.23387667	2.6090243	21	9 26.6	18.9
503874 2000 SH_{272}	18.6	X	60.36762	41.02846	298.55829	1.51073	0.2904036	0.29053604	2.2577163	21	—	—
503875 2000 SB_{304}	16.9	X	288.68740	149.41731	222.15485	13.45214	0.3253421	0.22844360	2.6502289	21	6 7.8	20.7
503876 2000 ST_{336}	16.8	X	330.63130	343.69544	25.14760	13.93930	0.2911457	0.23202473	2.6228887	21	9 10.9	18.7
503877 2000 SR_{344}	17.0	X	357.26749	177.05589	178.20357	12.13047	0.2641293	0.23524329	2.5989099	21	11 4.1	19.2
503878 2000 SS_{347}	15.7	X	276.89334	64.38951	274.20211	14.76193	0.2494700	0.17803455	3.1294392	21	4 22.2	20.8
503879 2000 UJ_3	17.5	X	341.06483	39.79056	45.44052	27.44759	0.3318532	0.28576637	2.2827690	21	—	—
503880 2000 YJ_{29}	18.0	X	150.64374	327.80644	266.14110	43.68762	0.8320074	0.35953971	1.9587160	21	11 22.6	23.4
503881 2001 BZ_2	16.8	X	298.30381	307.24703	128.49166	32.46062	0.4727667	0.22874558	2.6478959	21	8 24.8	20.0
503882 2001 BL_{40}	17.2	X	257.00333	153.55989	310.02070	5.47607	0.3010739	0.22554612	2.6728781	21	9 2.6	21.4
503883 2001 QF_{331}	7.8	X	350.55606	248.56680	156.71963	2.67121	0.2558028	0.00355820	42.4928549	21	10 23.8	22.8
503884 2001 SP_{152}	16.7	X	257.48582	108.19314	196.00504	23.37835	0.3781345	0.18055808	3.1002123	21	2 15.9	22.6
503885 2001 SU_{166}	15.8	X	333.19304	314.87229	2.55661	10.49026	0.0944498	0.19059634	2.9903798	21	7 10.3	19.7
503886 2001 SM_{243}	17.3	X	293.96309	120.14507	192.09006	22.06287	0.4705540	0.18784843	3.0194720	21	3 15.6	22.6
503887 2001 TB_{53}	16.3	X	263.73249	194.52110	199.30533	8.38594	0.2604359	0.18776857	3.0203280	21	6 18.8	21.1
503888 2001 TE_{213}	16.9	X	261.76416	129.93596	234.23024	12.31881	0.3302842	0.18567145	3.0430281	21	5 4.8	22.1
503889 2001 TQ_{259}	18.5	X	181.34169	120.02614	204.10965	22.27008	0.0365111	0.36708171	1.9317943	21	—	—
503890 2001 TM_{263}	16.6	X	74.51188	0.51517	332.98460	8.65351	0.1355139	0.20509277	2.8477541	21	12 30.8	21.0
503891 2001 UT_6	17.0	X	279.94350	24.40043	5.87180	8.23612	0.3258497	0.18908219	3.0063230	21	6 23.0	21.7
503892 2001 UF_{18}	19.1	X	126.54810	202.58586	45.98003	31.26643	0.6095945	0.80853599	1.1411336	21	12 28.9	20.8
503893 2001 UX_{38}	16.4	X	228.35275	5.97528	72.04773	2.39692	0.2398660	0.18566831	3.0430624	21	7 13.2	21.5
503894 2001 UO_{131}	16.7	X	247.04902	354.33771	60.36922	1.21786	0.2921508	0.18538828	3.0461260	21	6 26.3	21.6
503895 2001 UY_{171}	18.2	X	93.16868	168.48707	188.28989	4.81610	0.2003364	0.31052665	2.1597499	21	—	—
503896 2001 UL_{220}	18.0	X	301.85634	220.59817	223.14796	11.02625	0.2526597	0.24577734	2.5241093	21	10 27.3	20.0
503897 2001 VA_4	18.0	X	345.20415	120.48748	248.34420	5.44809	0.2711341	0.24483495	2.5305821	21	10 22.9	19.7
503898 2001 WO_{64}	17.7	X	348.90180	315.58115	60.39021	2.11713	0.2119398	0.24512463	2.5285880	21	11 9.9	19.8
503899 2001 XX_{11}	16.6	X	211.11377	64.60402	43.20695	14.70644	0.2747206	0.18179646	3.0861173	21	8 7.3	22.2
503900 2001 XU_{33}	16.7	X	203.00732	28.54969	87.71548	10.48454	0.2159019	0.18120657	3.0928113	21	8 10.9	22.0
503901 2001 XN_{181}	16.2	X	233.21226	294.58398	106.58814	17.48960	0.2467881	0.17848392	3.1241844	21	6 5.1	21.6
503902 2001 YH_{44}	16.5	X	222.98950	150.45417	271.18272	15.47891	0.2204366	0.18037532	3.1023061	21	6 20.0	21.7
503903 2002 AR_{147}	18.1	X	282.94867	142.14511	332.28558	4.62165	0.2592197	0.24227765	2.5483583	21	10 30.7	20.9
503904 2002 AO_{193}	17.1	X	224.84330	238.42959	294.88017	20.36731	0.2496948	0.28828152	2.2694721	21	11 5.6	20.9
503905 2002 CU_5	16.0	X	141.65269	34.64251	138.03955	26.55281	0.1535827	0.17491682	3.1665158	21	8 24.7	21.1
503906 2002 CK_9	16.9	X	19.54503	181.77617	137.56674	16.21030	0.0283450	0.23084219	2.6318387	21	9 27.3	20.5
503907 2002 CD_{66}	18.0	X	322.44494	167.56102	319.38347	8.12356	0.1274183	0.29953453	2.2122699	21	—	—
503908 2002 CQ_{162}	17.4	X	264.19188	120.14520	333.20963	15.56237	0.1836576	0.23585069	2.5944459	21	9 12.9	21.0
503909 2002 CH_{293}	16.2	X	141.01787	191.33035	327.01432	14.12961	0.2050855	0.17167782	3.2062195	21	8 9.8	21.5
503910 2002 CD_{316}	16.9	X	35.81911	302.11303	323.29367	8.42434	0.0970859	0.22247888	2.6973887	21	8 10.9	20.1
503911 2002 FD_6	22.3	X	339.61531	256.88726	15.17317	10.06475	0.3419111	0.71985602	1.2330262	21	1 12.6	23.3
503912 2002 FM_{23}	18.3	X	35.04220	111.43722	5.79852	19.63646	0.0561161	0.35373400	1.9800896	21	—	—
503913 2002 JD_{58}	18.1	X	193.00621	3.13530	228.85199	2.36774	0.1749858	0.28529237	2.2852968	21	12 31.6	21.5
503914 2002 OK_{33}	17.2	X	310.26086	163.99358	180.30995	5.26504	0.2629922	0.20530434	2.8457973	21	6 12.3	20.7
503915 2002 QD_{71}	17.4	X	307.58947	22.45269	330.84985	5.88580	0.1156678	0.20421694	2.8558904	21	7 15.1	20.9
503916 2002 QT_{96}	18.5	X	50.77464	225.47914	105.04225	4.23970	0.2568472	0.26913928	2.3758444	21	12 27.2	21.9
503917 2002 RW_{71}	16.2	X	285.38127	44.77750	339.07799	14.44893	0.1565739	0.20316389	2.8657504	21	7 20.2	20.2
503918 2002 RD_{156}	18.1	X	12.02029	15.30762	294.28288	1.44086	0.2060136	0.25959703	2.4337142	21	9 19.7	20.1
503919 2002 RJ_{266}	16.7	X	1.38780	328.83180	326.51129	9.22730	0.0764557	0.20561773	2.8429049	21	7 26.3	20.1
503920 2002 TT_{299}	18.1	X	356.94987	137.52680	262.87344	1.20674	0.2029199	0.26366289	2.4086298	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
503921 2002 TB_{335}	17.3	X	316.32926	304.11240	41.75754	7.04617	0.1005837	0.20084177	2.8877972	21	7 21.4	21.0
503922 2002 UF_{4}	16.7	X	43.08837	108.31053	269.71823	22.94223	0.2849991	0.26844039	2.3799663	21	—	—
503923 2002 WL_{32}	14.9	X	225.67295	257.57619	52.45697	13.20477	0.1472033	0.12665928	3.9268535	21	2 26.6	21.2
503924 2002 XW_{71}	17.4	X	335.22396	158.58632	276.46975	10.32546	0.2534021	0.26199179	2.4188611	21	—	—
503925 2002 YT_{15}	15.9	X	164.03691	219.45888	293.43622	15.23948	0.1698069	0.18727467	3.0256360	21	8 16.1	21.0
503926 2003 BG_{59}	16.9	X	153.20932	131.71489	11.32926	6.36985	0.2455970	0.18267665	3.0761961	21	8 3.8	22.3
503927 2003 BN_{93}	16.7	X	194.24772	335.53217	153.37443	10.71385	0.1882564	0.18555220	3.0443318	21	8 16.9	21.7
503928 2003 EL_{35}	19.5	X	137.36529	172.66755	343.84558	8.92022	0.2008480	0.44897110	1.6891069	21	8 13.9	21.5
503929 2003 KJ_{11}	17.9	X	157.50365	296.92788	64.13653	26.23253	0.1239734	0.36843503	1.9270609	21	1 5.4	20.3
503930 2003 NA_{11}	17.1	X	27.73248	9.81070	282.93790	12.96560	0.1200458	0.22171053	2.7036170	21	8 31.5	20.6
503931 2003 QN_{8}	18.2	X	60.30162	353.95599	340.89792	2.47220	0.2536167	0.28514474	2.2860855	21	—	—
503932 2003 QW_{102}	17.2	X	315.97030	214.57175	120.88311	8.08293	0.3419232	0.21464991	2.7625846	21	5 27.4	20.4
503933 2003 SK_{28}	16.9	X	269.80975	180.14013	247.32878	7.32335	0.2069692	0.21453494	2.7635715	21	8 12.1	20.9
503934 2003 SR_{48}	16.8	X	292.89735	154.28089	283.21019	6.09243	0.2558864	0.21823601	2.7322375	21	9 20.5	20.1
503935 2003 SW_{96}	17.7	X	343.56579	96.44271	242.68772	0.55335	0.1228618	0.21779969	2.7358853	21	8 25.5	20.5
503936 2003 SV_{278}	16.7	X	323.63413	140.88748	228.33784	12.91163	0.2011700	0.21533695	2.7567053	21	8 17.7	19.8
503937 2003 SO_{323}	17.4	X	299.87046	52.30583	300.70472	1.57168	0.2107882	0.21247963	2.7813642	21	6 16.3	20.7
503938 2003 SL_{429}	18.7	X	41.95043	343.89222	34.88363	3.64017	0.1804401	0.28422302	2.2910253	21	—	—
503939 2003 TR_{36}	17.3	X	324.63064	70.87532	279.79569	3.24685	0.0893981	0.21259625	2.7803469	21	8 9.6	20.6
503940 2003 UA_{3}	18.4	X	339.65048	133.23054	29.09421	20.75223	0.0813813	0.35125015	1.9894134	21	—	—
503941 2003 UV_{11}	19.5	X	9.26963	124.82430	31.86852	5.92693	0.7631596	0.56257841	1.4532735	21	—	—
503942 2003 UV_{30}	18.3	X	40.49599	134.37469	242.19143	5.60348	0.1532059	0.28460363	2.2889822	21	—	—
503943 2003 UV_{84}	18.7	X	11.89033	3.50911	41.46822	6.05699	0.2337678	0.28134297	2.3066339	21	—	—
503944 2003 UB_{138}	17.1	X	76.82525	156.50222	160.50782	3.93240	0.2594235	0.28237510	2.3010097	21	—	—
503945 2003 UF_{190}	18.0	X	358.31028	186.17080	218.10744	9.89106	0.2415170	0.27886950	2.3202532	21	—	—
503946 2003 UU_{232}	18.4	X	3.03638	40.83366	24.05405	3.21286	0.1879178	0.28246455	2.3005239	21	—	—
503947 2003 UD_{242}	18.3	X	40.13172	311.76640	58.85924	3.70831	0.2703403	0.28252728	2.3001833	21	—	—
503948 2003 UW_{247}	17.8	X	35.10374	169.34187	230.41136	5.82545	0.2179108	0.28471475	2.2883867	21	—	—
503949 2003 UN_{287}	18.5	X	17.19075	155.83458	180.44515	2.33413	0.2460009	0.27653607	2.3332872	21	11 22.1	20.6
503950 2003 WJ_{49}	16.5	X	353.74848	201.63987	240.73227	23.61168	0.1881070	0.28269075	2.2992965	21	—	—
503951 2003 WY_{154}	16.4	X	244.04256	195.20076	213.06755	11.79364	0.1739651	0.20455275	2.8527639	21	6 25.4	21.0
503952 2003 YM_{130}	17.5	X	332.91493	146.94614	302.92565	8.29216	0.1607619	0.27675216	2.3320724	21	—	—
503953 2004 CG_{68}	17.9	X	297.78312	158.81133	336.65637	4.89289	0.1736444	0.27365003	2.3496638	21	—	—
503954 2004 EL_{27}	16.6	X	248.93156	338.56038	321.46898	16.20833	0.1742846	0.17181047	3.2045691	21	2 20.5	21.8
503955 2004 ED_{107}	17.5	X	126.15485	245.48724	357.43703	4.81896	0.0804035	0.25725666	2.4484522	21	11 5.3	21.0
503956 2004 NM_{25}	18.2	X	357.29619	258.39132	290.34576	18.52042	0.0714730	0.38986858	1.8557689	21	1 9.8	19.4
503957 2004 PU_{9}	17.0	X	8.14445	217.44961	144.92024	9.80836	0.1375873	0.24004974	2.5641016	21	11 20.3	20.0
503958 2004 PK_{13}	16.6	X	325.83483	62.95692	320.76164	30.05776	0.2252951	0.23390071	2.6088455	21	9 4.9	19.3
503959 2004 PO_{69}	17.1	X	342.17697	3.05872	350.91180	5.35208	0.2820843	0.23244409	2.6197331	21	9 14.7	18.3
503960 2004 QF_{1}	18.3	X	107.51369	174.04439	332.92230	17.82673	0.2906125	0.91449179	1.0511939	21	7 12.9	18.1
503961 2004 QU_{15}	17.8	X	358.40307	87.89158	221.83627	3.61696	0.1500156	0.22947645	2.6422706	21	8 10.6	20.5
503962 2004 QD_{28}	17.2	X	303.70571	289.22961	78.90155	12.41440	0.2867864	0.22760885	2.6567047	21	6 29.9	20.3
503963 2004 RE_{88}	17.7	X	332.18499	159.04171	200.63074	2.45031	0.1953196	0.23109278	2.6299357	21	8 30.2	20.0
503964 2004 RB_{97}	16.3	X	355.83981	52.40150	304.76749	10.87177	0.1015898	0.23440687	2.6050886	21	10 8.0	19.5
503965 2004 RK_{102}	17.6	X	18.79677	30.91526	289.41022	3.37106	0.2094802	0.23452402	2.6042210	21	10 14.8	20.2
503966 2004 RX_{109}	18.1	X	65.58967	37.30362	200.59063	29.03512	0.8114050	0.29992571	2.2103459	21	11 6.1	23.2
503967 2004 RC_{113}	16.8	X	278.80837	122.78528	293.94493	16.72002	0.2708962	0.22595530	2.6696502	21	7 31.8	20.5
503968 2004 RB_{158}	16.3	X	102.46003	65.66640	185.75633	16.69631	0.2468050	0.23992475	2.5649920	21	11 4.9	20.7
503969 2004 RE_{159}	18.4	X	89.43913	15.91003	310.24146	4.68106	0.2138689	0.30511941	2.1851915	21	—	—
503970 2004 RQ_{162}	17.4	X	353.49864	105.88500	232.05292	11.99300	0.3083814	0.23220865	2.6215035	21	9 19.7	19.3
503971 2004 RD_{180}	18.2	X	100.67773	22.58188	300.24545	4.31228	0.2025110	0.30642433	2.1789832	21	—	—
503972 2004 RT_{271}	17.6	X	356.14166	162.51829	165.12474	6.25362	0.2230423	0.23154085	2.6265417	21	9 8.6	19.6
503973 2004 RM_{275}	19.1	X	85.27595	156.80615	189.15322	3.15368	0.1940818	0.30748412	2.1739735	21	—	—
503974 2004 SK_{19}	16.5	X	293.95242	77.68403	344.33084	21.17409	0.1415545	0.23127559	2.6285496	21	9 19.7	19.7
503975 2004 SE_{44}	17.1	X	298.85508	196.64269	212.34591	12.54125	0.2769993	0.22883390	2.6472145	21	8 17.2	20.3
503976 2004 SZ_{52}	17.6	X	325.25713	139.81246	213.57286	5.08158	0.2655081	0.22896905	2.6461727	21	7 23.8	20.1
503977 2004 TB_{22}	16.9	X	302.74014	222.96279	201.97083	14.61098	0.1669214	0.23231389	2.6207118	21	10 10.4	19.7
503978 2004 TG_{34}	17.5	X	302.67204	27.78585	3.99847	2.52181	0.1705464	0.22716202	2.6601874	21	8 23.1	20.5
503979 2004 TK_{43}	17.6	X	302.14068	109.53818	256.68393	2.04585	0.1831995	0.22372167	2.6873899	21	7 12.8	20.8
503980 2004 TG_{86}	17.8	X	17.96447	120.72943	193.63007	11.98318	0.1439159	0.23082389	2.6319778	21	9 25.2	20.6
503981 2004 TS_{90}	18.1	X	55.70977	313.56493	1.28294	5.39422	0.1595857	0.29494268	2.2351721	21	12 3.9	21.0
503982 2004 TV_{91}	17.0	X	10.37555	85.51777	208.07080	15.84995	0.2197829	0.22634736	2.6665665	21	8 12.5	19.9
503983 2004 TN_{93}	17.6	X	276.46420	187.00129	255.99337	0.88978	0.1980692	0.22839576	2.6505990	21	9 16.2	20.8
503984 2004 TT_{99}	18.8	X	98.44774	157.31087	166.29678	2.07323	0.2761221	0.30491936	2.1861471	21	—	—
503985 2004 TU_{108}	18.4	X	113.44124	107.97171	197.46135	5.05303	0.2704706	0.30589157	2.1815125	21	—	—
503986 2004 TP_{183}	17.3	X	293.14216	40.65777	356.61179	6.65976	0.2196468	0.22632976	2.6667048	21	8 7.9	20.5
503987 2004 TQ_{188}	17.4	X	328.98920	148.10424	208.45730	3.12312	0.1175796	0.22753966	2.6572432	21	8 23.9	20.4
503988 2004 TJ_{202}	17.0	X	314.38371	348.03963	38.41959	18.94599	0.1373269	0.22566584	2.6719326	21	9 20.5	20.3
503989 2004 TQ_{295}	17.3	X	311.32980	159.41612	228.71303	5.52612	0.1596007	0.22601857	2.6691519	21	8 31.3	20.3
503990 2004 TG_{297}	16.8	X	340.77179	79.72195	273.68511	9.51569	0.2596802	0.22793512	2.6541689	21	9 1.8	19.0
503991 2004 TX_{359}	17.0	X	296.90166	111.12260	238.73350	6.29634	0.1713655	0.21971651	2.7199500	21	6 13.8	20.5
503992 2004 VC_{12}	16.1	X	305.04858	18.49706	38.70867	30.73207	0.2014141	0.22770291	2.6559730	21	10 12.5	19.2
503993 2004 VR_{20}	17.1	X	319.28388	325.25245	51.20070	5.58232	0.2342960	0.22712835	2.6604503	21	8 25.9	19.5
503994 2004 VZ_{22}	16.5	X	307.10354	243.43667	231.81054	29.06977	0.3502021	0.23392574	2.6086594	21	12 11.9	18.3
503995 2004 VU_{54}	18.3	X	127.36523	1.57169	45.51555	21.76974	0.1141827	0.37557823	1.9025487	21	2 8.5	20.7
503996 2004 VJ_{75}	18.3	X	121.21951	25.86138	33.97725	22.12802	0.0947406	0.37705834	1.8975666	21	2 18.4	20.7
503997 2004 XB_{71}	17.6	X	314.02947	50.52346	14.69721	4.38758	0.2491085	0.22716476	2.6601660	21	10 23.1	19.5
503998 2004 XD_{78}	16.7	X	325.91711	100.25505	258.10393	14.91969	0.3042493	0.22462339	2.6801930	21	7 22.9	19.2
503999 2004 XN_{111}	17.6	X	282.49556	29.38911	58.75400	6.36271	0.3345628	0.22427316	2.6829825	21	9 13.2	20.9
504000 2004 YC_{26}	18.0	X	2.72447	151.96982	283.46150	7.27966	0.1185828	0.29409762	2.2394517	21	—	—