Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520001 2013 TH_{170}	16.6	X	82.36027	58.37767	45.10561	11.24035	0.0514508	0.18005633	3.1059690	21	3 16.5	21.0
520002 2013 TM_{170}	17.2	X	210.04620	3.80408	71.94330	4.93451	0.1822389	0.21285560	2.7780880	21	6 27.7	21.7
520003 2013 TN_{170}	17.5	X	318.69403	214.60721	148.23059	4.31866	0.1060761	0.23142495	2.6274185	21	8 17.4	20.3
520004 2013 TP_{170}	16.7	X	158.25811	329.17000	61.94706	1.24957	0.1890252	0.18201129	3.0836884	21	3 23.6	21.7
520005 2013 TU_{170}	17.3	X	251.82686	2.25693	54.82205	12.12369	0.0508599	0.22168462	2.7038277	21	8 6.2	21.2
520006 2013 TZ_{170}	17.4	X	213.10204	225.77803	217.41145	3.32642	0.0745691	0.21261146	2.7802143	21	7 16.1	21.4
520007 2013 TC_{171}	16.7	X	278.23137	341.85448	52.94987	11.99377	0.1334942	0.22166469	2.7039897	21	7 28.6	20.5
520008 2013 UQ_{19}	17.3	X	188.95896	23.08591	57.47764	4.27620	0.0731802	0.21055695	2.7982703	21	6 15.9	21.3
520009 2013 UU_{19}	17.6	X	20.11441	225.11003	67.79950	2.97690	0.0280981	0.22692906	2.6620077	21	8 18.9	20.9
520010 2013 UV_{19}	17.5	X	188.55418	12.55981	94.84415	3.85913	0.1102781	0.21529526	2.7570612	21	7 19.9	21.7
520011 2013 UH_{20}	18.0	X	260.52059	5.25724	64.52810	4.00676	0.1633767	0.22667201	2.6640199	21	8 15.6	21.6
520012 2013 UN_{20}	17.4	X	262.22904	182.23290	230.07016	10.81628	0.1635743	0.22160583	2.7044685	21	7 20.2	21.5
520013 2013 UQ_{20}	17.0	X	263.44715	332.78997	6.25021	2.26094	0.0070557	0.19938963	2.9018013	21	5 11.1	21.0
520014 2013 UT_{20}	17.4	X	242.88440	239.11355	254.76159	9.74637	0.0823436	0.23882409	2.5728668	21	10 25.9	20.9
520015 2013 UY_{20}	16.7	X	251.44418	321.75089	50.88144	14.19721	0.1698826	0.21276682	2.7788608	21	5 19.1	20.9
520016 2013 UZ_{20}	17.6	X	230.10417	275.96562	184.33009	6.01816	0.0810948	0.22553195	2.6729900	21	8 26.8	21.4
520017 2013 UB_{21}	17.8	X	266.98434	255.98561	213.86437	3.38255	0.1727993	0.23902641	2.5714147	21	10 14.7	20.8
520018 2013 UE_{21}	17.3	X	304.20924	311.37606	78.52087	3.37383	0.0986818	0.22993741	2.6387382	21	9 3.8	20.3
520019 2013 UH_{21}	17.3	X	293.23516	107.67477	262.86251	4.79343	0.0710437	0.21945350	2.7221228	21	7 22.2	20.9
520020 2013 UL_{21}	17.4	X	273.07073	4.17745	28.89364	8.37380	0.0674573	0.21867846	2.7285508	21	7 29.1	21.2
520021 2013 UO_{21}	16.8	X	255.25274	236.91138	133.15812	2.96636	0.0823405	0.20353448	2.8622708	21	5 31.9	20.9
520022 2013 UP_{21}	17.1	X	292.27421	124.34115	230.59387	5.71109	0.0588612	0.21703147	2.7423375	21	7 1.5	20.8
520023 2013 UA_{22}	16.8	X	343.61419	300.48540	65.17339	22.86248	0.0615792	0.23647646	2.5898669	21	10 18.1	20.3
520024 2013 UB_{22}	17.1	X	249.25865	318.84166	98.99113	6.00008	0.1447069	0.21856209	2.7295192	21	7 18.1	21.0
520025 2013 UD_{22}	17.1	X	295.65785	38.70957	40.76273	17.98340	0.1646471	0.24035247	2.5619481	21	10 23.6	19.7
520026 2013 VB_{27}	17.3	X	314.58482	192.03268	139.69872	5.53333	0.1173460	0.22109312	2.7086479	21	6 24.7	20.7
520027 2013 VG_{27}	15.8	X	198.88504	254.02207	80.12443	14.49180	0.0925865	0.17261717	3.1945772	21	2 24.8	21.0
520028 2013 VJ_{27}	17.0	X	225.52047	359.46947	66.67542	5.92985	0.1059339	0.21303698	2.7765109	21	7 6.4	21.1
520029 2013 VU_{27}	17.6	X	0.55225	260.04596	70.66101	3.95868	0.1076268	0.23025206	2.6363336	21	9 17.3	20.5
520030 2013 VY_{27}	16.5	X	81.11398	1.36092	260.92244	11.22852	0.0954574	0.23281432	2.6169550	21	10 4.3	20.3
520031 2013 VZ_{27}	16.5	X	196.88780	256.54406	103.67268	2.48927	0.1627353	0.18235655	3.0797949	21	3 20.0	21.5
520032 2013 VE_{28}	17.1	X	221.39141	280.42550	104.68589	2.42994	0.1207697	0.19678154	2.9273848	21	5 10.8	21.6
520033 2013 VF_{28}	16.8	X	318.25423	78.06809	248.83501	11.63719	0.1500772	0.21359238	2.7716957	21	6 18.8	20.0
520034 2013 VG_{28}	16.6	X	355.84589	101.78927	247.74820	9.91335	0.1995048	0.23731356	2.5837730	21	10 7.8	19.1
520035 2013 VJ_{28}	17.4	X	305.28184	310.41790	64.89934	2.56129	0.0883904	0.22198902	2.7013554	21	8 15.9	20.6
520036 2013 VK_{28}	17.2	X	202.09162	35.74002	82.78068	4.38756	0.1482021	0.21477256	2.7615327	21	8 16.3	21.5
520037 2013 VP_{28}	17.2	X	306.65421	221.28636	183.26672	9.35411	0.1259002	0.23419398	2.6066671	21	9 23.8	19.8
520038 2013 VT_{28}	17.5	X	47.58153	224.21477	58.45044	2.27155	0.1673551	0.23571891	2.5954127	21	10 4.9	20.6
520039 2013 VU_{28}	17.1	X	121.84519	151.01831	124.57429	5.55246	0.0409407	0.25011481	2.4948424	21	12 11.3	20.6
520040 2013 VW_{28}	17.4	X	7.64671	299.39092	22.59998	2.21401	0.1854134	0.23293128	2.6160789	21	9 23.8	19.6
520041 2013 VA_{29}	16.4	X	134.42396	231.32128	220.12247	9.87388	0.0725621	0.18864624	3.0109528	21	4 30.7	20.7
520042 2013 VE_{29}	16.5	X	235.31506	30.88867	103.33232	13.06731	0.0619183	0.22045994	2.7138318	21	10 26.2	20.5
520043 2013 VJ_{29}	16.9	X	84.38443	44.65214	222.03878	14.50252	0.1073853	0.23508348	2.6000876	21	10 19.7	20.6
520044 2013 VL_{29}	16.7	X	187.89236	254.76834	97.81768	2.28905	0.2220457	0.18034949	3.1026022	21	3 4.8	22.1
520045 2013 VN_{29}	17.1	X	28.36245	96.51345	202.00103	5.64159	0.0771871	0.22643399	2.6658864	21	9 10.2	20.4
520046 2013 VP_{29}	17.0	X	144.18956	334.55682	194.36843	7.49796	0.1480911	0.21257049	2.7805715	21	8 20.8	21.6
520047 2013 VV_{29}	17.6	X	238.79384	288.16202	153.75409	3.09061	0.1541529	0.21957437	2.7211237	21	8 4.9	21.5
520048 2013 VW_{29}	16.5	X	307.33129	11.13163	258.12228	9.95501	0.1071012	0.18865924	3.0108144	21	3 21.3	20.8
520049 2013 VY_{29}	17.6	X	270.57957	63.62695	30.50338	7.49354	0.0958746	0.23800002	2.5788023	21	10 11.9	20.9
520050 2013 VZ_{29}	17.6	X	248.75239	178.95739	244.63448	4.64002	0.1215053	0.21913724	2.7247412	21	7 26.4	21.5
520051 2013 VA_{30}	16.8	X	278.12018	156.05332	240.36655	12.40653	0.1895921	0.22262364	2.6962192	21	7 15.2	20.6
520052 2013 VE_{30}	16.9	X	169.94793	204.86187	265.32373	2.84017	0.0598988	0.20893381	2.8127441	21	7 2.7	21.1
520053 2013 VF_{30}	17.0	X	14.12094	28.65854	262.02243	3.83353	0.1284838	0.22406500	2.6846440	21	8 11.4	20.0
520054 2013 VK_{30}	17.4	X	16.44066	126.98962	291.33362	9.28944	0.1270094	0.26576043	2.3959395	21	—	—
520055 2013 VO_{30}	17.1	X	257.18393	55.13549	359.62261	11.90969	0.0764017	0.22040420	2.7142894	21	8 6.4	21.0
520056 2013 VQ_{30}	17.1	X	21.75129	95.48687	244.21139	7.16685	0.1635830	0.24077432	2.5589548	21	11 11.5	20.1
520057 2013 VR_{30}	16.2	X	293.42628	33.76335	251.92242	9.31516	0.0272807	0.18320055	3.0703287	21	4 6.9	20.6
520058 2013 VT_{30}	17.1	X	322.32990	94.28679	241.61110	3.71917	0.0719841	0.21402443	2.7679643	21	7 17.9	20.5
520059 2013 WR_{111}	17.1	X	292.41206	312.90016	58.63644	6.88829	0.0550653	0.21782608	2.7356643	21	7 27.6	20.7
520060 2013 WS_{111}	16.1	X	189.22395	349.80408	54.33329	11.17978	0.0955980	0.19159846	2.9799436	21	5 3.3	20.7
520061 2013 WU_{111}	16.1	X	214.68368	261.86637	77.42327	10.69829	0.1563918	0.18289938	3.0736982	21	3 15.2	21.3
520062 2013 WX_{111}	16.7	X	98.38284	25.71835	110.46714	6.99652	0.0758661	0.18441111	3.0568772	21	5 16.7	21.0
520063 2013 WY_{111}	17.5	X	242.33942	9.61697	100.37629	7.22975	0.1169301	0.22708825	2.6607635	21	9 24.0	21.3
520064 2013 WZ_{111}	16.7	X	246.89430	238.47965	101.83607	4.08712	0.0590057	0.18704685	3.0280923	21	4 19.4	21.1
520065 2013 WB_{112}	17.1	X	155.97277	299.57002	247.39895	6.42439	0.1459079	0.22005640	2.7171486	21	9 22.8	21.7
520066 2013 WH_{112}	16.4	X	194.00998	261.17132	269.00990	22.85092	0.1931444	0.22557799	2.6726263	21	9 27.5	21.4
520067 2013 WP_{112}	18.4	X	182.40116	129.05790	268.88953	2.65825	0.0214911	0.31310176	2.1478917	21	3 31.1	20.9
520068 2013 WQ_{112}	16.9	X	267.57684	357.72093	49.21066	6.34808	0.0295593	0.21676524	2.7445825	21	8 15.1	20.6
520069 2013 WU_{112}	17.2	X	237.67183	134.52003	268.23776	6.06738	0.0737673	0.20456522	2.8526480	21	6 22.9	21.4
520070 2013 WX_{112}	17.2	X	180.97802	60.64996	115.68592	12.18022	0.0584583	0.22075346	2.7114257	21	10 15.6	21.4
520071 2013 WY_{112}	17.3	X	20.60321	251.60547	82.22437	1.54434	0.1814466	0.23552251	2.5968554	21	11 4.3	20.0
520072 2013 WA_{113}	16.6	X	321.04845	77.52826	271.35476	11.70704	0.1366399	0.21862059	2.7290323	21	7 25.1	19.7
520073 2013 WC_{113}	17.4	X	286.61825	131.95545	307.40082	3.75103	0.0580216	0.22918722	2.6444932	21	10 16.3	20.7
520074 2013 WK_{113}	16.3	X	227.28194	59.44599	356.51342	14.51497	0.1451683	0.20367400	2.8609635	21	6 21.9	21.1
520075 2013 WL_{113}	16.5	X	272.39718	310.50791	95.06164	14.55297	0.1595660	0.22142106	2.7059728	21	7 29.3	20.2
520076 2013 WM_{113}	16.7	X	274.82648	276.92085	98.98800	12.60123	0.1487263	0.21344728	2.7729517	21	6 22.9	20.6
520077 2013 WO_{113}	17.2	X	282.37698	224.24180	160.28829	9.52564	0.1417197	0.21754136	2.7380508	21	7 14.5	21.0
520078 2013 WP_{113}	16.9	X	219.42352	322.48137	252.03768	10.64762	0.1999373	0.23192257	2.6236589	21	12 24.4	20.7
520079 2013 XD_{27}	16.1	X	160.14933	113.06252	291.74964	9.45000	0.1131104	0.17151565	3.2082403	21	4 1.2	21.3
520080 2013 XE_{27}	17.2	X	262.65380	118.97602	317.70112	11.10993	0.0611905	0.21748442	2.7385286	21	9 6.1	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520081 2013 XG_{27}	16.6	X	262.27277	62.63956	312.11199	11.10162	0.0629932	0.19763831	2.9189185	21	6 18.5	20.8
520082 2013 XL_{27}	16.3	X	259.01454	337.33167	1.74655	9.45181	0.0714265	0.18231062	3.0803122	21	4 26.1	20.8
520083 2013 XN_{27}	16.6	X	291.31123	115.04388	278.23201	9.59683	0.2096910	0.22456876	2.6806276	21	7 27.7	19.9
520084 2013 XR_{27}	17.0	X	248.92975	18.06004	93.31065	4.54333	0.0510188	0.22128340	2.7070950	21	10 11.5	20.7
520085 2013 XS_{27}	16.9	X	276.21576	180.23183	306.68091	13.73594	0.0619027	0.23127848	2.6285277	21	12 4.3	20.4
520086 2013 XT_{27}	17.2	X	263.97590	19.66133	110.86582	4.59979	0.1343227	0.22790907	2.6543711	21	11 13.1	20.5
520087 2013 XW_{27}	16.9	X	294.21381	260.29376	130.74439	13.62713	0.2284045	0.22369302	2.6876194	21	7 27.6	20.0
520088 2013 XZ_{27}	16.8	X	319.23498	311.40910	164.74777	15.15914	0.0870543	0.23319886	2.6140774	21	—	—
520089 2013 YJ_{88}	16.8	X	224.52407	16.80534	98.39411	6.29328	0.1182419	0.21101342	2.7942333	21	9 7.7	21.0
520090 2013 YB_{104}	16.6	X	166.30996	297.36612	237.80221	11.78034	0.0864824	0.22787697	2.6546204	21	9 16.9	20.8
520091 2013 YE_{146}	17.2	X	359.07599	358.94182	40.88654	6.36439	0.1122379	0.24278162	2.5448304	21	12 20.9	20.2
520092 2013 YQ_{153}	17.2	X	258.60142	43.20888	100.70045	6.08681	0.1337685	0.23535482	2.5980888	21	11 24.4	20.4
520093 2013 YR_{153}	16.9	X	133.84070	288.12300	285.46191	5.19283	0.0686718	0.20899516	2.8121937	21	9 30.0	21.2
520094 2013 YS_{153}	17.4	X	324.90980	256.83731	163.15972	3.58515	0.0809462	0.23048713	2.6345408	21	11 19.1	20.5
520095 2013 YU_{153}	16.8	X	244.96797	350.81285	127.75832	14.74514	0.1892165	0.22264819	2.6960210	21	9 29.8	20.9
520096 2013 YW_{153}	17.0	X	287.02440	255.08527	138.59365	4.38266	0.1096901	0.21112237	2.7932719	21	8 8.5	20.5
520097 2013 YA_{154}	17.3	X	157.77915	315.74824	232.00862	3.89403	0.0899575	0.21415492	2.7668398	21	9 26.0	21.5
520098 2013 YD_{154}	16.5	X	193.70777	255.19636	134.28606	10.40648	0.1099303	0.17505348	3.1648677	21	4 24.1	21.6
520099 2013 YE_{154}	16.6	X	258.90267	93.48150	301.49709	9.32506	0.1625477	0.20445758	2.8536491	21	6 27.4	20.8
520100 2013 YF_{154}	16.2	X	189.05855	255.35544	139.77053	10.45374	0.1006531	0.17374409	3.1807486	21	4 26.2	21.3
520101 2013 YK_{154}	16.4	X	344.93423	310.73651	318.96796	10.33388	0.0536993	0.17426583	3.1743969	21	5 24.4	20.8
520102 2013 YN_{154}	17.1	X	104.89267	9.08682	315.65909	14.11064	0.1357344	0.24301357	2.5432108	21	—	—
520103 2013 YR_{154}	16.2	X	209.46517	240.99762	122.71756	11.14320	0.1939060	0.17510013	3.1643055	21	4 7.3	21.7
520104 2013 YU_{154}	16.5	X	55.41308	69.58701	132.54420	5.81531	0.0640224	0.18072766	3.0982727	21	6 10.6	20.7
520105 2013 YV_{154}	17.0	X	230.80685	166.95233	263.00567	9.62922	0.1376459	0.20237401	2.8732024	21	7 12.5	21.5
520106 2014 AO_{9}	16.4	X	219.84539	275.36050	83.98988	6.85308	0.1722585	0.18988499	2.9978435	21	4 8.8	21.4
520107 2014 AK_{22}	16.2	X	306.98185	200.90800	112.11805	15.53505	0.1607071	0.18688338	3.0298579	21	5 18.6	20.4
520108 2014 AE_{42}	17.4	X	242.56107	294.27870	299.09158	9.99226	0.0672415	0.25532980	2.4607550	21	—	—
520109 2014 AG_{43}	17.1	X	102.26442	72.34186	83.50767	2.10154	0.0857779	0.18985681	2.9981402	21	6 15.0	21.1
520110 2014 AK_{47}	16.7	X	336.76626	80.28595	306.54978	5.47073	0.0821217	0.22550493	2.6732035	21	10 18.9	19.9
520111 2014 AL_{58}	18.1	X	335.41428	103.47380	60.75326	4.57209	0.1268624	0.26979724	2.3719801	21	—	—
520112 2014 AN_{58}	16.9	X	145.66457	130.87997	105.41895	4.55647	0.0600061	0.22425335	2.6831405	21	11 15.9	20.8
520113 2014 AP_{58}	16.9	X	313.86324	347.65019	83.45784	10.19960	0.1551396	0.23403864	2.6078204	21	11 14.7	19.5
520114 2014 AQ_{58}	15.7	X	320.87273	347.03950	307.83007	7.17914	0.0558377	0.17939719	3.1135723	21	5 23.2	20.0
520115 2014 AY_{58}	16.1	X	353.54249	179.42036	94.58890	11.78410	0.0615772	0.18042559	3.1017297	21	6 13.9	20.2
520116 2014 AZ_{58}	16.6	X	93.62373	221.84959	273.62085	8.38253	0.0537458	0.17438035	3.1730070	21	5 3.0	21.2
520117 2014 AB_{59}	16.6	X	166.33951	184.99177	297.17620	7.79580	0.0904354	0.18552392	3.0446412	21	7 14.9	21.4
520118 2014 AE_{59}	16.1	X	103.83323	151.22125	76.23286	19.13187	0.1031204	0.17766502	3.1337771	21	9 28.4	21.2
520119 2014 AF_{59}	18.3	X	327.64949	32.22263	153.81738	1.81686	0.1200139	0.26895709	2.3769172	21	—	—
520120 2014 AL_{59}	16.9	X	251.31962	149.19659	328.76614	9.17682	0.1454091	0.21586332	2.7522221	21	10 2.3	21.0
520121 2014 AO_{59}	17.6	X	250.94049	24.86223	135.26480	5.51662	0.0755246	0.23302785	2.6153561	21	12 12.6	20.9
520122 2014 AS_{59}	17.0	X	193.33609	54.39981	162.52121	13.61624	0.1619760	0.22801282	2.6535659	21	12 7.2	21.4
520123 2014 AU_{59}	17.1	X	330.38734	221.18816	243.73929	11.50097	0.1792427	0.24709308	2.5151409	21	—	—
520124 2014 AA_{60}	17.0	X	292.93735	21.62558	136.76759	8.75358	0.1429953	0.23336444	2.6128407	21	—	—
520125 2014 AB_{60}	17.0	X	301.01984	88.41406	81.40776	9.90156	0.0683708	0.23738888	2.5832264	21	—	—
520126 2014 AD_{60}	17.2	X	229.03792	251.36126	304.62551	4.44067	0.1302396	0.23204241	2.6227555	21	12 21.8	20.9
520127 2014 BG_{39}	17.9	X	321.10838	36.30802	158.83319	5.06156	0.1620077	0.26339370	2.4102706	21	—	—
520128 2014 BE_{66}	16.3	X	182.18947	334.19898	112.29238	2.22276	0.1565086	0.18107025	3.0943634	21	6 16.9	21.2
520129 2014 BF_{67}	17.9	X	305.62375	108.36465	103.21937	2.34700	0.1256161	0.26326631	2.4110480	21	—	—
520130 2014 BL_{67}	17.5	X	277.63703	298.44222	301.44211	4.32284	0.1243422	0.26697070	2.3886929	21	—	—
520131 2014 BN_{67}	17.1	X	164.80576	269.18603	205.99096	1.83774	0.1115817	0.18611612	3.0381792	21	7 4.8	21.9
520132 2014 BR_{67}	16.8	X	168.37832	151.92199	110.34493	15.67834	0.1690496	0.23607348	2.5928133	21	—	—
520133 2014 BT_{67}	17.0	X	182.11903	249.49703	331.24815	11.76660	0.1366223	0.22546068	2.6735533	21	11 28.4	21.4
520134 2014 BV_{67}	16.2	X	183.29451	99.37757	330.40879	11.38151	0.1192538	0.17916634	3.1162462	21	5 26.0	21.3
520135 2014 BX_{67}	18.1	X	341.99904	85.67178	80.22813	3.37820	0.1076688	0.26879535	2.3778706	21	—	—
520136 2014 BZ_{67}	16.5	X	72.27609	40.45312	155.68894	10.89136	0.0427090	0.18037403	3.1023208	21	6 22.7	21.0
520137 2014 BC_{68}	17.1	X	161.36531	280.34718	306.03222	11.55053	0.0234781	0.22312643	2.6921673	21	11 17.6	21.1
520138 2014 BD_{68}	16.5	X	30.96913	302.66222	313.13620	7.53773	0.0186055	0.18708211	3.0277118	21	7 12.4	20.7
520139 2014 BG_{68}	15.8	X	215.97372	138.21032	282.06916	14.48276	0.0866175	0.18325225	3.0697512	21	6 20.4	20.5
520140 2014 BH_{68}	17.1	X	210.27820	282.28724	170.25380	13.20557	0.0497496	0.19308465	2.9646326	21	7 25.2	21.6
520141 2014 BK_{68}	16.0	X	274.32890	197.56114	176.67362	11.35986	0.0910227	0.19066761	2.9896345	21	6 28.3	20.4
520142 2014 BT_{68}	17.7	X	1.72777	352.97835	136.43724	6.00370	0.1003302	0.26246720	2.4159394	21	—	—
520143 2014 BU_{68}	17.4	X	326.58631	306.67053	124.87440	4.05659	0.1450379	0.23277970	2.6172145	21	12 8.1	20.0
520144 2014 BX_{68}	17.2	X	27.20060	347.77593	67.46748	7.53415	0.1090728	0.25129166	2.4870470	21	—	—
520145 2014 BZ_{68}	17.5	X	286.03461	171.81190	317.14118	8.87999	0.0802110	0.23243712	2.6197854	21	12 20.8	20.8
520146 2014 BC_{69}	17.1	X	299.33753	136.40086	318.48255	11.50254	0.0190728	0.22292094	2.6938215	21	11 25.7	20.9
520147 2014 BL_{69}	17.3	X	154.20202	1.78243	266.93717	2.58430	0.1365476	0.23000720	2.6382043	21	—	—
520148 2014 BM_{69}	17.4	X	344.16765	110.32420	314.61521	8.58056	0.1931906	0.23814998	2.5777197	21	—	—
520149 2014 BN_{69}	17.2	X	323.44813	270.35233	159.17763	13.75201	0.0722830	0.22735705	2.6586659	21	11 30.8	20.7
520150 2014 BO_{69}	16.5	X	201.69139	257.44062	268.81443	11.86525	0.1517683	0.21420124	2.7664409	21	10 6.9	21.1
520151 2014 BR_{69}	16.7	X	143.46086	50.78640	187.68495	13.38921	0.1359211	0.21602219	2.7508726	21	11 16.8	21.2
520152 2014 BS_{69}	16.4	X	170.93239	211.62429	238.93050	9.93381	0.0526146	0.17822916	3.1271608	21	6 9.1	21.0
520153 2014 CC_{25}	15.8	X	51.16445	257.68706	336.44080	13.90116	0.1606583	0.17914289	3.1165182	21	8 2.3	19.9
520154 2014 CD_{25}	17.2	X	276.81436	116.78035	328.10705	3.37657	0.0221686	0.21580961	2.7526787	21	10 13.4	20.8
520155 2014 CG_{25}	16.3	X	246.07882	345.15920	81.06956	9.01587	0.0487108	0.20370466	2.8606764	21	8 8.7	20.4
520156 2014 CJ_{25}	17.3	X	191.60920	96.87471	176.59677	5.55102	0.0660398	0.24759931	2.5117115	21	—	—
520157 2014 CM_{25}	17.7	X	217.79612	333.66094	243.12823	0.71628	0.1195595	0.23327561	2.6135040	21	—	—
520158 2014 CP_{25}	17.4	X	223.34325	258.12011	241.98102	1.94676	0.1463242	0.21455396	2.7634081	21	10 1.5	21.7
520159 2014 CR_{25}	17.0	X	286.06930	29.28702	130.91293	13.22717	0.0821174	0.24108564	2.5567513	21	—	—
520160 2014 CS_{25}	16.5	X	234.11559	50.53971	349.56811	9.18587	0.0932600	0.18172775	3.0868952	21	6 13.2	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520161 2014 CV_{25}	17.1	X	248.74369	191.45962	310.38699	9.32251	0.0761218	0.22108296	2.7087310	21	11 10.1	21.0
520162 2014 CY_{25}	16.9	X	141.79612	23.61258	123.80676	2.68489	0.1177538	0.18257383	3.0773510	21	7 22.1	21.7
520163 2014 CZ_{25}	16.7	X	87.30452	225.55022	40.41270	6.13591	0.0341683	0.20182701	2.8783915	21	10 11.3	20.7
520164 2014 CA_{26}	17.5	X	110.29065	266.64239	43.86019	9.98893	0.0740583	0.23646214	2.5899714	21	—	—
520165 2014 CH_{26}	16.9	X	201.69926	116.01305	135.73878	14.69468	0.1866664	0.23793900	2.5792432	21	—	—
520166 2014 CJ_{26}	18.1	X	306.44762	228.43462	356.70601	2.65034	0.1273988	0.26967531	2.3726951	21	1 11.4	21.2
520167 2014 CQ_{26}	16.4	X	111.97825	244.28515	287.55336	8.03388	0.0692120	0.18049050	3.1009861	21	7 14.9	21.0
520168 2014 CW_{26}	16.4	X	174.41668	51.66282	32.80068	11.29238	0.0913340	0.17927711	3.1149624	21	6 4.4	21.4
520169 2014 CC_{27}	17.0	X	263.31712	263.98040	268.11782	8.14510	0.1706773	0.22449010	2.6812537	21	12 28.5	20.2
520170 2014 CE_{27}	16.9	X	181.56588	52.55574	230.21415	14.14477	0.1151987	0.22600602	2.6692508	21	—	—
520171 2014 CF_{27}	16.3	X	182.87468	292.09338	318.60863	12.77477	0.2059839	0.21323028	2.7748326	21	—	—
520172 2014 CK_{27}	16.5	X	265.01083	64.74795	357.07197	9.66256	0.0868012	0.19985685	2.8972771	21	8 21.8	20.5
520173 2014 CM_{27}	17.7	X	291.67931	14.03650	134.78425	6.79919	0.1110446	0.23834036	2.5763468	21	—	—
520174 2014 CN_{27}	16.9	X	207.55956	142.32789	123.86306	8.25847	0.1818404	0.24174562	2.5520958	21	—	—
520175 2014 CP_{27}	16.7	X	248.13368	201.45065	14.18820	15.71258	0.0479144	0.24515250	2.5283964	21	—	—
520176 2014 DT	18.5	X	351.56209	225.44886	313.01094	0.81121	0.1237070	0.27292055	2.3538487	21	1 9.4	20.9
520177 2014 DT_{8}	17.3	X	307.39166	251.99595	174.11510	2.25118	0.0617557	0.22580120	2.6708647	21	10 30.8	20.6
520178 2014 DJ_{9}	17.7	X	337.03675	262.68253	297.96157	3.32441	0.1600147	0.27434986	2.3456663	21	1 12.1	20.4
520179 2014 DS_{29}	17.5	X	303.10535	326.34833	309.35544	5.80030	0.1777244	0.29009372	2.2600107	21	3 2.1	20.4
520180 2014 DG_{36}	18.2	X	347.95643	55.18367	142.12894	6.44649	0.1059126	0.27867667	2.3213233	21	1 31.1	20.7
520181 2014 DH_{53}	17.9	X	19.95400	138.13131	343.03204	0.87700	0.1407910	0.26136411	2.4227322	21	—	—
520182 2014 DM_{59}	17.7	X	259.27479	164.38402	127.96195	7.93531	0.1224926	0.27084245	2.3658737	21	2 14.8	21.2
520183 2014 DM_{68}	17.7	X	280.07573	173.38640	84.12292	5.06395	0.1496058	0.26267104	2.4146893	21	1 22.4	21.3
520184 2014 DS_{71}	17.7	X	269.01759	223.47047	40.47459	6.33445	0.1678887	0.25943201	2.4347461	21	1 19.1	21.5
520185 2014 DT_{74}	17.6	X	38.77781	78.33802	45.56047	7.72922	0.0787527	0.26541020	2.3980467	21	1 18.9	20.3
520186 2014 DQ_{79}	18.0	X	300.01375	195.93730	42.14879	2.68972	0.1608069	0.26474095	2.4020864	21	1 17.4	21.2
520187 2014 DC_{98}	18.1	X	341.31948	348.05041	182.45746	5.75266	0.1670676	0.26331245	2.4107664	21	—	—
520188 2014 DD_{108}	18.0	X	316.44380	253.75887	327.69876	1.59438	0.1694809	0.26753418	2.3853377	21	1 12.9	21.2
520189 2014 DB_{118}	18.0	X	282.75162	131.15619	128.45508	6.02266	0.1680325	0.26723940	2.3870915	21	1 24.3	21.6
520190 2014 DE_{123}	16.0	X	37.14518	123.19665	163.13078	9.46233	0.1658158	0.18498214	3.0505830	21	9 17.6	19.7
520191 2014 DG_{149}	17.8	X	289.05493	69.21303	184.02781	1.10989	0.1288378	0.26563189	2.3967123	21	1 27.2	21.0
520192 2014 DQ_{149}	16.7	X	309.70832	46.51296	90.49323	11.57589	0.0922791	0.22698391	2.6615788	21	—	—
520193 2014 DR_{149}	17.0	X	255.50672	135.70552	84.17815	15.98673	0.0697719	0.23147971	2.6270041	21	—	—
520194 2014 DT_{149}	16.6	X	110.34953	117.05861	28.10054	5.49292	0.1396645	0.17450908	3.1714463	21	6 17.9	21.3
520195 2014 DW_{149}	16.5	X	173.25573	130.70548	319.43144	16.71595	0.0680644	0.17943532	3.1131313	21	6 11.7	21.5
520196 2014 DY_{149}	17.0	X	89.78124	69.78856	169.75661	11.61528	0.0775822	0.19606487	2.9345140	21	9 14.9	21.0
520197 2014 DZ_{149}	16.1	X	185.24113	250.54342	173.67957	9.52191	0.0967447	0.17482598	3.1676126	21	5 25.4	21.2
520198 2014 DA_{150}	17.5	X	270.00025	252.81226	261.48600	3.48062	0.2008425	0.23185934	2.6241359	21	12 12.6	20.2
520199 2014 DC_{150}	17.1	X	221.39697	192.45426	348.18708	14.28967	0.1112177	0.22045486	2.7138735	21	11 19.5	21.4
520200 2014 DE_{150}	17.1	X	259.82628	124.62361	16.64317	5.45425	0.1088530	0.22539211	2.6740955	21	11 21.9	20.7
520201 2014 DG_{150}	16.1	X	241.86378	344.24745	60.78154	8.65307	0.0533782	0.18385097	3.0630830	21	7 3.6	20.6
520202 2014 DK_{150}	16.1	X	304.85600	234.43393	114.85176	13.10924	0.0177296	0.18125663	3.0922419	21	7 17.4	20.2
520203 2014 DN_{150}	17.7	X	1.75548	29.64099	117.22280	5.70799	0.0998663	0.26489558	2.4011515	21	—	—
520204 2014 DS_{150}	16.7	X	29.98168	288.92731	347.40994	10.79351	0.0926785	0.18584120	3.0411748	21	8 16.3	20.5
520205 2014 DX_{150}	15.8	X	225.31714	71.86242	352.27423	11.87550	0.1222435	0.17787358	3.1313270	21	7 3.7	20.9
520206 2014 DY_{150}	16.8	X	244.59551	201.88425	353.42886	13.43847	0.0373082	0.22986052	2.6393265	21	—	—
520207 2014 DB_{151}	18.0	X	4.07680	300.27960	172.53965	6.21063	0.0670409	0.25464235	2.4651818	21	—	—
520208 2014 DE_{151}	17.2	X	169.95355	251.49698	335.41973	7.66265	0.1536684	0.21670646	2.7450788	21	11 22.9	21.7
520209 2014 DM_{151}	17.0	X	326.55175	64.60807	326.91441	1.53200	0.0555263	0.20136276	2.8828140	21	10 8.5	20.7
520210 2014 DQ_{151}	17.3	X	192.80689	26.40436	157.37206	3.16769	0.0207592	0.20849674	2.8166737	21	11 3.9	21.1
520211 2014 DS_{151}	16.8	X	70.02161	206.99970	71.53213	2.98497	0.0483730	0.19465680	2.9486484	21	10 6.8	20.8
520212 2014 DT_{151}	17.0	X	102.64227	157.28458	128.67871	4.84415	0.0700939	0.20849762	2.8166657	21	11 27.7	21.1
520213 2014 DU_{151}	17.2	X	247.08724	353.48383	168.24225	2.23403	0.0940685	0.22113315	2.7083210	21	12 4.3	20.7
520214 2014 DV_{151}	16.6	X	121.44903	198.20693	0.54857	8.77399	0.0742081	0.18433009	3.0577729	21	8 31.9	21.2
520215 2014 DY_{151}	17.5	X	289.59978	288.27266	223.21521	2.98134	0.1645918	0.23481352	2.6020800	21	—	—
520216 2014 DZ_{151}	17.6	X	239.54399	204.10520	320.90842	3.40034	0.1490942	0.21953684	2.7214338	21	11 19.6	21.5
520217 2014 DA_{152}	16.7	X	266.33709	248.59730	194.66245	10.83759	0.0662099	0.19888963	2.9066626	21	9 19.1	20.7
520218 2014 DC_{152}	16.7	X	111.76998	37.93252	166.67502	2.77112	0.0583781	0.18298243	3.0727681	21	8 24.0	21.0
520219 2014 DE_{152}	16.6	X	273.82159	15.90872	51.96380	2.82812	0.0387738	0.19754661	2.9198216	21	9 15.8	20.5
520220 2014 DH_{152}	18.0	X	220.62531	99.77444	131.95147	4.98403	0.1424033	0.23197352	2.6232747	21	—	—
520221 2014 DO_{152}	16.3	X	204.00062	104.52110	9.24942	10.74385	0.1516234	0.18873754	3.0099817	21	8 13.7	21.3
520222 2014 DP_{152}	16.7	X	84.77668	180.34316	54.11244	8.01662	0.0593941	0.18471310	3.0535444	21	9 2.9	21.1
520223 2014 DQ_{152}	16.5	X	209.71102	75.34133	41.15574	10.22751	0.0396634	0.18940341	3.0029230	21	9 1.0	21.0
520224 2014 DU_{152}	17.5	X	328.87261	65.55628	99.32270	8.67658	0.0789895	0.25488458	2.4636197	21	—	—
520225 2014 DY_{152}	17.5	X	222.18971	30.18458	183.36968	13.86387	0.2012608	0.22884472	2.6471311	21	12 25.4	21.7
520226 2014 DA_{153}	16.4	X	231.25380	240.61851	177.60432	16.61853	0.1137768	0.18210362	3.0826461	21	6 30.8	21.4
520227 2014 DB_{153}	16.5	X	68.47740	312.03831	325.50798	3.89544	0.0956190	0.19467222	2.9484928	21	10 7.4	20.6
520228 2014 DD_{153}	17.4	X	224.00932	353.18705	193.08472	4.20171	0.0720857	0.22236885	2.6982784	21	12 9.9	21.2
520229 2014 DE_{153}	17.9	X	298.18924	212.67857	265.93797	1.02045	0.1549645	0.23077372	2.6323592	21	12 18.8	20.6
520230 2014 DF_{153}	16.6	X	120.21675	351.38577	191.48743	9.30357	0.0104142	0.18220419	3.0815116	21	7 29.9	21.1
520231 2014 DG_{153}	16.1	X	86.48643	24.81393	181.83656	17.09001	0.1376388	0.17583902	3.1554349	21	8 3.9	21.0
520232 2014 DH_{153}	16.8	X	14.68041	97.63800	331.02224	14.01458	0.0615309	0.23779747	2.5802665	21	—	—
520233 2014 DL_{153}	16.0	X	38.26327	224.93425	348.62803	11.95891	0.0643900	0.16214874	3.3306347	21	5 29.4	20.6
520234 2014 DP_{153}	16.2	X	142.87265	136.29191	10.29623	12.68330	0.1060662	0.17541251	3.1605476	21	7 25.3	21.3
520235 2014 DU_{153}	17.0	X	76.44086	327.95006	1.09170	3.13599	0.0989888	0.21277769	2.7787661	21	12 23.9	21.0
520236 2014 DV_{153}	16.3	X	172.98576	294.87818	185.22123	26.33310	0.0681325	0.17606316	3.1527562	21	7 15.9	21.6
520237 2014 DX_{153}	16.9	X	90.28388	193.75796	60.03938	1.69186	0.2877767	0.18325373	3.0697346	21	10 24.8	21.8
520238 2014 DZ_{153}	16.8	X	142.21273	167.04481	96.71955	3.69958	0.0412081	0.21519900	2.7578833	21	12 13.1	20.6
520239 2014 DA_{154}	16.9	X	290.37141	339.15705	98.34076	3.27542	0.0343691	0.20383031	2.8595007	21	10 21.8	20.8
520240 2014 DG_{154}	17.2	X	323.11873	332.99667	172.22852	14.39430	0.1123980	0.24072527	2.5593023	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520241 2014 DJ_{154}	17.2	X	211.11544	270.06287	67.70540	7.00648	0.0994232	0.26567415	2.3964581	21	2 26.8	20.8
520242 2014 DL_{154}	16.4	X	84.68837	55.92333	153.83800	12.55226	0.0746860	0.17076188	3.2176744	21	7 29.5	21.0
520243 2014 DN_{154}	17.0	X	260.23494	21.54874	119.38608	5.16569	0.0664742	0.21605641	2.7505821	21	11 28.8	20.7
520244 2014 DR_{154}	17.3	X	117.98937	193.62455	96.72381	3.06030	0.0131250	0.21644680	2.7472737	21	12 16.7	21.0
520245 2014 DT_{154}	16.9	X	270.89236	329.26483	159.41612	12.68557	0.1414536	0.21764254	2.7372021	21	11 19.4	20.6
520246 2014 DU_{154}	16.7	X	84.18013	124.85846	182.77103	5.79817	0.0573571	0.20002631	2.8956405	21	11 30.4	20.9
520247 2014 DV_{154}	17.1	X	248.64282	209.50940	34.73134	13.37015	0.1206858	0.23747898	2.5825730	21	—	—
520248 2014 DY_{154}	17.4	X	238.11599	114.16515	152.73572	8.06463	0.1662844	0.24048161	2.5610308	21	—	—
520249 2014 DZ_{154}	16.4	X	106.61624	173.90955	87.57165	12.65923	0.0652622	0.19222390	2.9734762	21	11 3.3	20.9
520250 2014 DB_{155}	17.5	X	311.11417	105.89120	82.13922	13.72595	0.0894710	0.24444996	2.5332384	21	—	—
520251 2014 DF_{155}	17.1	X	235.51697	186.79839	79.49618	15.82480	0.0765123	0.24073558	2.5592292	21	—	—
520252 2014 EF_{13}	16.9	X	311.82079	14.41173	48.05859	3.97860	0.1472294	0.21812326	2.7331789	21	10 24.4	19.6
520253 2014 EP_{13}	17.9	X	336.51597	47.47359	117.60281	3.89153	0.1362476	0.25931938	2.4354510	21	—	—
520254 2014 EP_{19}	18.0	X	290.44562	128.26370	132.88387	5.09887	0.2259396	0.26766574	2.3845560	21	1 27.9	21.4
520255 2014 ES_{30}	17.4	X	301.80203	104.81457	150.37806	8.19571	0.0911674	0.27375640	2.3490551	21	2 17.9	20.2
520256 2014 EG_{38}	17.7	X	307.49774	155.71257	57.57563	6.47171	0.1532191	0.26052548	2.4279286	21	—	—
520257 2014 EE_{39}	17.8	X	348.90788	33.51353	153.40053	2.13844	0.1231936	0.26742640	2.3859785	21	1 18.2	20.3
520258 2014 EJ_{49}	17.6	X	286.45659	223.92226	39.11408	3.23946	0.1820896	0.26281724	2.4137937	21	2 1.9	21.2
520259 2014 ES_{60}	17.1	X	266.96310	179.55935	329.64736	12.28938	0.0920440	0.22763699	2.6564858	21	12 16.4	20.7
520260 2014 ER_{68}	16.8	X	244.69523	224.58848	177.27440	15.96204	0.0738688	0.18199613	3.0838597	21	6 29.6	21.6
520261 2014 EA_{70}	16.3	X	179.36101	170.02488	299.72738	7.12296	0.1402247	0.18364020	3.0654263	21	7 13.1	21.3
520262 2014 EY_{101}	17.5	X	127.00844	163.77108	265.05939	4.42876	0.1544750	0.28790079	2.2714725	21	3 21.1	20.5
520263 2014 ET_{105}	17.5	X	272.26978	214.17145	251.97725	4.40186	0.0614235	0.21564771	2.7540563	21	10 29.9	21.2
520264 2014 ER_{109}	16.7	X	284.11637	123.48089	238.57313	9.15085	0.0329379	0.18339475	3.0681608	21	7 3.3	21.1
520265 2014 EB_{118}	16.6	X	340.90994	142.03995	181.88647	6.57445	0.1095051	0.18461118	3.0546682	21	7 27.1	20.3
520266 2014 EZ_{121}	17.0	X	340.28108	42.70634	328.87845	9.22228	0.1188086	0.20370547	2.8606689	21	9 29.1	20.4
520267 2014 EJ_{124}	15.8	X	326.97359	21.42548	283.59425	9.78420	0.0433368	0.17601193	3.1533679	21	6 17.2	20.0
520268 2014 EQ_{124}	16.4	X	277.48667	70.47460	278.14669	8.36254	0.1076083	0.17587530	3.1550009	21	5 28.1	20.9
520269 2014 EM_{136}	16.4	X	59.74241	53.91864	198.08371	4.33059	0.1165528	0.18233140	3.0800781	21	8 26.7	20.5
520270 2014 ES_{143}	16.6	X	336.59752	110.71104	217.37386	9.28009	0.1172963	0.18470255	3.0536607	21	7 23.6	20.5
520271 2014 EM_{156}	16.6	X	21.87116	71.70574	221.54257	4.93759	0.1149130	0.18536934	3.0463336	21	8 23.6	20.5
520272 2014 ED_{163}	16.7	X	47.52095	10.16317	255.37186	6.77719	0.0211857	0.18973259	2.9994486	21	8 13.1	21.0
520273 2014 EW_{167}	16.7	X	93.25440	349.25485	308.88706	3.96905	0.1372767	0.21395414	2.7685705	21	12 8.1	21.0
520274 2014 EF_{172}	17.6	X	139.36934	356.74754	263.78344	2.71355	0.0548587	0.21749354	2.7384520	21	12 6.4	21.5
520275 2014 EX_{199}	18.3	X	44.55604	178.92128	206.42290	1.65744	0.1771914	0.23718507	2.5847060	21	—	—
520276 2014 EL_{211}	16.1	X	284.10186	100.87125	314.50610	7.16458	0.0373589	0.19941065	2.9015974	21	9 9.8	20.1
520277 2014 EF_{212}	17.1	X	276.53314	108.55043	276.77183	3.31622	0.1660410	0.18799489	3.0179035	21	7 4.9	21.4
520278 2014 EN_{213}	18.1	X	67.46438	255.04286	171.06919	14.43175	0.0530715	0.25733017	2.4479859	21	—	—
520279 2014 ET_{226}	16.3	X	295.98663	111.49640	219.70574	10.96358	0.0385077	0.17587546	3.1549990	21	6 9.5	20.7
520280 2014 ET_{233}	17.7	X	28.57677	180.53469	217.91355	2.73505	0.0579052	0.23403871	2.6078199	21	—	—
520281 2014 EW_{248}	16.7	X	90.03670	261.74470	354.86916	4.58352	0.2089924	0.18538056	3.0462106	21	10 19.0	21.5
520282 2014 EX_{248}	16.4	X	85.36484	223.58924	4.93312	7.34237	0.1054700	0.17782417	3.1319070	21	8 30.9	20.9
520283 2014 EC_{249}	16.5	X	54.41426	205.05855	71.10164	11.23875	0.0592966	0.18896830	3.0075308	21	9 19.6	20.8
520284 2014 ED_{249}	16.4	X	137.53005	173.37404	113.88585	11.06886	0.0418058	0.23366634	2.6105897	21	—	—
520285 2014 EJ_{249}	16.6	X	175.11132	130.17058	121.72784	6.05420	0.1161154	0.21949600	2.7217713	21	12 31.4	20.9
520286 2014 EN_{249}	16.2	X	56.37476	96.94455	154.19595	11.48977	0.0347923	0.17632120	3.1496795	21	8 9.3	20.6
520287 2014 EP_{249}	17.3	X	220.57265	127.51038	106.19217	10.18654	0.1201272	0.23195856	2.6233875	21	—	—
520288 2014 EQ_{249}	16.0	X	126.36997	317.20219	233.81598	11.84142	0.0633254	0.18375165	3.0641866	21	8 19.5	20.8
520289 2014 ES_{249}	17.2	X	153.88457	268.27968	20.56334	12.21006	0.0624113	0.22634223	2.6666069	21	—	—
520290 2014 FA_{3}	17.5	X	328.68182	112.09361	104.23786	8.78858	0.0650752	0.27154203	2.3618085	21	2 7.9	20.3
520291 2014 FT_{18}	15.8	X	6.90884	332.13656	273.18439	7.30588	0.0265177	0.17205613	3.2015180	21	5 26.3	20.1
520292 2014 FA_{19}	17.8	X	288.97862	225.87533	246.66074	4.37254	0.1720063	0.23131568	2.6282459	21	11 21.4	20.7
520293 2014 FL_{27}	17.9	X	353.36999	292.00853	208.49333	5.52947	0.1628279	0.25746843	2.4471094	21	—	—
520294 2014 FB_{28}	16.1	X	233.54794	208.07976	201.41587	9.18645	0.0723880	0.17765932	3.1338440	21	6 26.5	20.8
520295 2014 FV_{30}	17.2	X	146.18367	192.18816	122.76824	15.17970	0.1002541	0.23797613	2.5789749	21	—	—
520296 2014 FE_{48}	18.3	X	328.17533	41.40144	164.85858	5.28126	0.1390986	0.26605346	2.3941798	21	1 11.9	21.3
520297 2014 FF_{50}	17.5	X	314.13749	70.86221	154.57384	5.36897	0.1814500	0.26200463	2.4187821	21	1 14.0	20.9
520298 2014 FW_{68}	16.8	X	264.87182	16.37129	194.18498	33.55290	0.1670480	0.23595416	2.5936873	21	—	—
520299 2014 FU_{74}	17.8	X	252.53676	118.28121	134.48099	10.10705	0.1752540	0.23921374	2.5700721	21	—	—
520300 2014 FA_{75}	16.2	X	38.02271	245.33053	35.40355	15.93916	0.0401076	0.18128770	3.0918885	21	9 2.5	20.7
520301 2014 FC_{75}	17.1	X	93.57896	313.58626	66.04587	10.33546	0.0647749	0.24127042	2.5554457	21	—	—
520302 2014 FE_{75}	16.3	X	198.17484	87.14751	77.15574	11.39804	0.0680724	0.19995858	2.8962943	21	10 16.5	20.7
520303 2014 FL_{75}	16.9	X	205.35143	84.56696	164.78858	11.95705	0.1163657	0.22799549	2.6537003	21	—	—
520304 2014 FM_{75}	17.5	X	209.46540	146.16530	120.95361	4.76541	0.1929517	0.23263738	2.6182818	21	—	—
520305 2014 FN_{75}	17.6	X	332.69255	294.68030	181.21893	10.84085	0.1423411	0.23579497	2.5948546	21	—	—
520306 2014 FP_{75}	17.8	X	253.25541	54.09799	189.72845	14.86328	0.0848050	0.24346607	2.5400587	21	—	—
520307 2014 FQ_{75}	17.3	X	250.13206	94.48694	108.65587	3.11718	0.0914598	0.22904773	2.6455667	21	—	—
520308 2014 FT_{75}	16.0	X	34.10806	239.49220	68.99992	11.25518	0.1111733	0.17892732	3.1190209	21	10 8.4	20.2
520309 2014 FU_{75}	16.4	X	159.08503	352.36090	155.05428	10.81709	0.0795653	0.17554091	3.1590063	21	8 6.0	21.2
520310 2014 FV_{75}	15.9	X	47.17259	171.25645	88.81641	12.62831	0.0743427	0.17749945	3.1357255	21	8 18.5	20.2
520311 2014 FY_{75}	17.1	X	168.01761	111.33595	105.72027	3.12705	0.1523452	0.20106214	2.8856867	21	11 10.7	21.9
520312 2014 FB_{76}	16.4	X	275.13775	269.60645	189.68217	26.17906	0.1715813	0.20593755	2.8399609	21	10 8.7	20.0
520313 2014 FD_{76}	16.0	X	183.09141	72.95854	90.56573	10.90055	0.0465877	0.18875238	3.0098240	21	9 29.2	20.6
520314 2014 FO_{76}	16.8	X	44.39872	259.59780	179.74099	15.53470	0.0954074	0.24541183	2.5266149	21	—	—
520315 2014 GN_{15}	18.1	X	316.01743	77.73435	139.45536	2.25152	0.1347525	0.26209316	2.4182374	21	1 12.6	21.3
520316 2014 GR_{25}	17.3	X	40.59673	181.94059	274.15634	5.88038	0.0966891	0.25481203	2.4640874	21	—	—
520317 2014 GR_{43}	17.7	X	287.20456	90.09193	148.86378	10.32018	0.1347942	0.25839390	2.4412629	21	1 7.6	21.3
520318 2014 GN_{49}	16.5	X	164.61286	216.69631	120.02465	32.53754	0.0642693	0.23538555	2.5978626	21	1 6.8	20.2
520319 2014 GE_{58}	17.3	X	293.50539	126.08713	112.83534	3.13511	0.1425444	0.25357689	2.4720824	21	1 14.9	20.9
520320 2014 GS_{59}	17.2	X	221.72427	282.79046	7.32515	5.73846	0.1491038	0.24183678	2.5514544	21	1 10.9	21.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520321 2014 GU_{59}	17.2	X	234.73919	211.74330	34.51419	13.75629	0.0293725	0.23695082	2.5864092	21	—	—
520322 2014 GY_{59}	17.4	X	206.57292	150.41136	124.40316	7.08401	0.2023357	0.23136672	2.6278594	21	—	—
520323 2014 GZ_{59}	17.2	X	65.92246	144.92458	233.43479	5.52012	0.0495282	0.22238345	2.6981602	21	—	—
520324 2014 GA_{60}	16.7	X	75.88660	113.15832	152.94435	2.82697	0.2090006	0.17739977	3.1369000	21	10 17.6	21.3
520325 2014 GC_{60}	16.8	X	205.37243	350.09246	145.32494	4.51905	0.0681307	0.19088889	2.9873237	21	9 13.2	21.1
520326 2014 GH_{60}	16.6	X	77.16809	308.71915	348.48825	6.07339	0.0354435	0.20155868	2.8809455	21	11 3.6	20.6
520327 2014 GJ_{60}	17.6	X	204.42950	352.28363	273.35392	1.62694	0.1605476	0.23261716	2.6184335	21	—	—
520328 2014 GM_{60}	16.7	X	261.72540	110.66153	17.60176	25.17990	0.1256802	0.21221226	2.7836999	21	10 28.3	20.6
520329 2014 GQ_{60}	16.8	X	130.79138	229.10743	75.05334	2.50280	0.0646878	0.22045733	2.7138532	21	—	—
520330 2014 GT_{60}	17.4	X	161.18560	289.31284	7.26103	12.50784	0.1033571	0.22775940	2.6555339	21	—	—
520331 2014 GV_{60}	17.0	X	168.01024	334.11472	270.66407	3.63441	0.0747763	0.21322609	2.7748690	21	12 16.9	21.1
520332 2014 GW_{60}	16.3	X	182.02332	340.93220	215.83277	14.52668	0.0779509	0.20473647	2.8510571	21	11 2.5	20.4
520333 2014 GX_{60}	16.3	X	217.61718	276.85401	169.66079	11.53775	0.0047524	0.17195274	3.2028012	21	7 29.9	21.0
520334 2014 GA_{61}	16.5	X	53.66426	238.48514	67.39830	10.52566	0.0545341	0.18847009	3.0128286	21	10 22.9	20.8
520335 2014 GD_{61}	17.2	X	200.61685	18.61601	210.80679	5.62534	0.0938695	0.22304925	2.6927883	21	—	—
520336 2014 GJ_{61}	16.3	X	212.20569	339.36060	145.14572	14.23649	0.2008071	0.19189157	2.9769083	21	8 28.0	21.1
520337 2014 GT_{61}	17.2	X	224.04607	113.66784	81.76019	9.21684	0.1295476	0.21798768	2.7343121	21	12 12.6	20.9
520338 2014 GB_{62}	16.6	X	47.91465	276.86524	26.91389	10.67747	0.0681522	0.18479548	3.0526369	21	10 11.6	20.8
520339 2014 GC_{62}	16.9	X	91.67192	41.16668	241.90993	2.10393	0.0226371	0.19586784	2.9364816	21	11 3.0	20.9
520340 2014 GE_{62}	17.2	X	237.33829	338.83099	263.63323	3.48639	0.0915717	0.23481134	2.6020961	21	—	—
520341 2014 GG_{62}	16.6	X	57.76831	265.72281	21.43115	10.07476	0.1941051	0.17745171	3.1362879	21	10 19.2	21.0
520342 2014 GH_{62}	17.4	X	210.44564	237.70021	22.24315	10.48772	0.0628714	0.23063660	2.6334024	21	—	—
520343 2014 GL_{62}	17.0	X	206.09548	343.85546	225.53258	5.83432	0.0169957	0.21159106	2.7891455	21	12 21.5	21.0
520344 2014 GR_{62}	16.1	X	15.90042	93.51421	231.65238	15.10306	0.0730287	0.18037931	3.1022603	21	9 17.7	20.4
520345 2014 GS_{62}	16.2	X	19.70745	355.20552	305.36862	3.53070	0.0368317	0.17319791	3.1874322	21	8 23.5	20.6
520346 2014 GT_{62}	16.6	X	198.26834	88.02778	19.72299	10.93294	0.0603993	0.17260660	3.1947077	21	8 4.5	21.5
520347 2014 GU_{62}	17.2	X	99.80159	17.92269	337.74288	4.80456	0.0799721	0.22374204	2.6872268	21	—	—
520348 2014 GV_{62}	16.9	X	228.24342	293.14385	262.53512	5.22206	0.0757666	0.21561580	2.7543280	21	12 24.4	20.6
520349 2014 GB_{63}	16.9	X	25.98304	187.53898	137.99957	2.69230	0.0537760	0.18781238	3.0198584	21	10 8.1	20.9
520350 2014 GD_{63}	18.0	X	238.80190	125.06969	150.54102	3.70345	0.1762426	0.24506598	2.5289915	21	1 6.3	22.0
520351 2014 GK_{63}	16.8	X	262.91989	270.09790	210.96473	10.61138	0.0640601	0.20381752	2.8596203	21	11 4.8	20.5
520352 2014 GM_{63}	17.5	X	326.29786	84.13619	51.93870	10.05517	0.0637997	0.23312935	2.6145969	21	—	—
520353 2014 GO_{63}	15.7	X	277.13814	346.96046	40.72734	25.50705	0.1107238	0.16879458	3.2426275	21	7 21.6	20.7
520354 2014 GQ_{63}	16.4	X	60.56632	268.14801	51.40102	14.01495	0.1237380	0.19356170	2.9597596	21	11 23.1	20.5
520355 2014 GS_{63}	16.9	X	72.30565	134.21744	180.86722	1.97623	0.1007629	0.19705269	2.9246987	21	11 30.1	21.1
520356 2014 GU_{63}	17.8	X	208.60147	62.48902	201.80036	2.92787	0.1264750	0.22992670	2.6388200	21	—	—
520357 2014 GD_{64}	16.6	X	78.80245	234.71290	25.90155	9.41111	0.0423740	0.18349777	3.0670123	21	9 24.5	20.9
520358 2014 GL_{64}	17.3	X	211.44211	147.53023	121.15211	3.22687	0.1692837	0.23050254	2.6344234	21	—	—
520359 2014 GN_{64}	16.3	X	159.33755	258.38442	265.65259	9.99901	0.0563973	0.18347769	3.0672361	21	8 22.9	21.1
520360 2014 GP_{64}	16.7	X	34.67835	6.99366	264.60384	8.43182	0.1150310	0.17043868	3.2217409	21	8 12.7	21.0
520361 2014 HR_{7}	16.6	X	141.72123	150.01671	49.93903	13.77644	0.0422393	0.18668062	3.0320514	21	9 27.9	21.2
520362 2014 HN_{11}	17.8	X	254.06206	238.25941	35.72366	5.10531	0.1571532	0.25511223	2.4621539	21	1 18.5	21.6
520363 2014 HQ_{34}	17.8	X	271.57859	26.73574	192.79783	12.78676	0.1150789	0.24128143	2.5553680	21	—	—
520364 2014 HV_{107}	17.6	X	322.95504	79.78670	58.26432	12.14752	0.1258570	0.23571579	2.5954357	21	—	—
520365 2014 HK_{160}	18.1	X	322.97993	39.01709	148.61034	6.12559	0.1572711	0.25311838	2.4750668	21	—	—
520366 2014 HW_{162}	16.9	X	54.85998	135.55564	139.74866	8.98744	0.0297998	0.18025599	3.1036750	21	9 9.5	21.2
520367 2014 HS_{202}	17.4	X	288.84296	123.69309	96.74691	13.51790	0.0918648	0.24451533	2.5327869	21	—	—
520368 2014 HP_{203}	17.9	X	346.75716	303.31923	192.35792	12.07460	0.1756242	0.24345639	2.5401260	21	—	—
520369 2014 HR_{203}	16.8	X	289.66785	13.44257	125.55075	15.09571	0.1495715	0.22106368	2.7088884	21	12 29.7	20.0
520370 2014 HF_{204}	16.9	X	343.10596	92.43140	47.74004	9.56628	0.0648339	0.23591230	2.5939941	21	—	—
520371 2014 HL_{204}	17.4	X	210.89467	61.75412	165.90206	9.98531	0.1558950	0.22302546	2.6929797	21	—	—
520372 2014 HM_{204}	17.1	X	212.24028	114.57198	192.28176	8.25623	0.1924745	0.23963268	2.5670758	21	1 20.3	21.5
520373 2014 HP_{204}	17.6	X	291.15375	237.81699	58.85180	3.82400	0.1211707	0.26967086	2.3727212	21	3 30.3	20.6
520374 2014 HT_{204}	16.8	X	149.99214	225.09006	75.88612	7.03756	0.0417834	0.22431039	2.6826856	21	—	—
520375 2014 HU_{204}	17.7	X	354.12893	303.63597	147.31240	5.83114	0.0452359	0.22524387	2.6752686	21	—	—
520376 2014 HA_{205}	17.4	X	193.36117	164.61740	140.07627	6.34533	0.1909339	0.23395707	2.6084265	21	1 4.6	21.8
520377 2014 HC_{205}	16.2	X	39.41148	217.08388	103.87822	11.65306	0.0591102	0.18718464	3.0266062	21	10 25.5	20.5
520378 2014 HK_{205}	17.3	X	345.01871	0.88749	146.22624	15.43654	0.0471966	0.24102238	2.5571986	21	—	—
520379 2014 HN_{205}	17.5	X	314.62148	70.17823	106.72700	2.75301	0.1043575	0.24020117	2.5630238	21	—	—
520380 2014 HA_{206}	17.0	X	186.10926	251.86978	28.13977	18.79831	0.0317918	0.22866905	2.6484866	21	—	—
520381 2014 HE_{206}	17.2	X	77.27433	89.27660	256.69562	5.17598	0.0310307	0.21270027	2.7794403	21	—	—
520382 2014 HG_{206}	17.3	X	142.01907	312.02828	349.02824	2.75820	0.0554715	0.21858752	2.7293076	21	—	—
520383 2014 HK_{206}	17.1	X	14.91759	335.96240	359.78839	1.16764	0.0718100	0.18381091	3.0635280	21	10 5.6	20.9
520384 2014 HL_{206}	16.3	X	92.18371	6.71206	231.72863	9.81553	0.1640837	0.17797678	3.1301164	21	9 21.7	21.2
520385 2014 HO_{206}	17.3	X	182.07182	160.28928	136.93774	9.55109	0.0384586	0.23814579	2.5777499	21	—	—
520386 2014 HY_{206}	17.8	X	245.46738	223.85539	42.15397	10.62373	0.1414531	0.24264438	2.5457899	21	1 2.9	22.0
520387 2014 HA_{207}	18.0	X	336.70421	240.26146	33.08413	7.65280	0.0993204	0.28050883	2.3112044	21	5 4.7	20.4
520388 2014 HB_{207}	17.5	X	141.53631	20.23671	302.93931	1.70295	0.0779546	0.22411598	2.6842368	21	—	—
520389 2014 HF_{207}	16.8	X	77.32038	345.26260	27.18539	6.47965	0.0489144	0.21992140	2.7182604	21	—	—
520390 2014 HO_{207}	17.6	X	279.77147	120.15367	50.44499	13.99546	0.2010479	0.22741827	2.6581887	21	—	—
520391 2014 HY_{207}	17.4	X	217.09846	33.26599	219.05536	4.09519	0.1292973	0.22666559	2.6640701	21	—	—
520392 2014 HZ_{207}	15.8	X	133.94849	77.35150	56.78755	11.67413	0.1017738	0.15576232	3.4210633	21	6 25.9	21.0
520393 2014 HH_{208}	17.5	X	224.67747	144.46067	151.47557	15.39940	0.1330090	0.23929084	2.5695200	21	1 18.9	21.7
520394 2014 JJ_{10}	17.9	X	230.39178	180.34929	105.04461	4.31715	0.1819671	0.24012377	2.5635745	21	1 11.8	22.1
520395 2014 JX_{11}	18.0	X	5.47787	61.71592	96.73863	3.42956	0.1316614	0.25552029	2.4595319	21	1 7.8	20.4
520396 2014 JT_{26}	17.5	X	245.97132	175.04166	142.75174	14.01349	0.2222237	0.25795353	2.4440405	21	3 2.0	21.5
520397 2014 JB_{42}	17.4	X	270.69945	98.16410	127.19650	15.33565	0.1446979	0.23809539	2.5781137	21	—	—
520398 2014 JF_{42}	17.6	X	222.98834	189.91871	100.26512	14.58886	0.2431686	0.23438466	2.6052531	21	1 11.9	22.2
520399 2014 JQ_{54}	18.2	X	272.07039	84.53378	169.54263	7.62085	0.4239227	0.24005897	2.5640358	21	—	—
520400 2014 JT_{60}	17.6	X	247.83571	59.59123	186.94962	13.14396	0.1398001	0.23306450	2.6150819	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520401 2014 JY_{70}	17.1	X	235.45104	9.05786	249.47239	9.16195	0.0838087	0.23714380	2.5850059	21	—	—
520402 2014 JY_{74}	17.1	X	338.08744	128.70901	20.36596	8.37122	0.1318448	0.24197942	2.5504517	21	—	—
520403 2014 JX_{77}	17.7	X	240.33306	55.60106	204.55927	8.10462	0.1342763	0.23982109	2.5657311	21	—	—
520404 2014 JB_{84}	17.4	X	346.98414	357.02338	156.68972	4.01057	0.1031127	0.24269283	2.5454510	21	—	—
520405 2014 JB_{85}	17.7	X	211.63298	172.42304	134.37711	5.82515	0.1341918	0.24068504	2.5595875	21	1 20.4	21.7
520406 2014 JA_{87}	17.0	X	9.42842	66.55351	74.01859	5.90211	0.0981408	0.24429890	2.5342826	21	—	—
520407 2014 JM_{87}	16.4	X	78.40416	179.68270	113.47236	6.19733	0.2407429	0.18441763	3.0568051	21	11 25.5	21.2
520408 2014 JN_{87}	16.1	X	177.59094	71.67669	84.10955	11.56045	0.0647940	0.18129987	3.0917502	21	9 12.3	20.9
520409 2014 JO_{87}	16.3	X	29.40209	205.59131	148.70271	10.46766	0.0916783	0.19178236	2.9780382	21	11 24.9	20.4
520410 2014 JR_{87}	16.9	X	64.48827	292.22783	71.98493	7.21747	0.0338876	0.21578210	2.7529127	21	—	—
520411 2014 JY_{87}	17.3	X	132.12699	200.90776	127.10299	5.78032	0.1203393	0.22083459	2.7107616	21	—	—
520412 2014 JZ_{87}	17.2	X	135.21650	172.32945	135.36555	4.56589	0.0685277	0.21681394	2.7441715	21	—	—
520413 2014 JU_{88}	17.1	X	188.18113	80.68356	164.22109	4.92963	0.0363295	0.21608234	2.7503620	21	—	—
520414 2014 JW_{88}	16.6	X	105.07339	155.92332	125.91517	4.58445	0.0951629	0.19285871	2.9669476	21	11 25.2	21.0
520415 2014 JE_{89}	16.0	X	36.18168	57.66930	264.22692	8.77313	0.0789301	0.18175257	3.0866142	21	10 15.1	20.2
520416 2014 JM_{89}	16.9	X	343.94663	323.15348	131.77912	6.72682	0.0847053	0.21352145	2.7723095	21	—	—
520417 2014 JN_{89}	17.2	X	184.21813	86.07862	137.60039	7.04195	0.0409532	0.20069584	2.8891969	21	12 9.9	21.5
520418 2014 JO_{89}	16.3	X	230.68796	32.82380	95.48567	11.54661	0.0981074	0.18444536	3.0564988	21	10 4.3	21.0
520419 2014 JW_{89}	16.3	X	329.92122	291.40490	114.47007	12.43028	0.1081855	0.18490345	3.0514485	21	11 3.1	20.2
520420 2014 JX_{89}	16.4	X	125.00675	136.95722	114.43987	12.38651	0.0284293	0.18800920	3.0177504	21	11 8.3	20.9
520421 2014 JE_{90}	16.7	X	225.57470	32.14305	165.27183	8.02472	0.0268505	0.21134416	2.7913174	21	12 28.9	20.7
520422 2014 JS_{90}	17.0	X	186.49529	123.95715	109.77601	14.32889	0.1657312	0.21421241	2.7663447	21	12 17.7	21.5
520423 2014 JT_{90}	17.1	X	234.54951	35.10877	217.88758	13.27188	0.1234634	0.23636564	2.5906763	21	—	—
520424 2014 JV_{90}	17.9	X	239.65762	204.55022	77.30165	3.92038	0.0912112	0.24774526	2.5107250	21	1 17.5	21.5
520425 2014 JW_{90}	17.2	X	158.06665	281.65163	57.83367	4.31246	0.0923279	0.23782186	2.5800901	21	1 4.1	20.9
520426 2014 JZ_{90}	16.1	X	307.20118	215.90790	181.80580	19.88275	0.0346960	0.17600477	3.1534535	21	9 17.9	20.4
520427 2014 JF_{91}	16.8	X	228.78682	16.28838	289.86337	12.33905	0.1110728	0.23475449	2.6025162	21	2 3.5	21.0
520428 2014 JK_{91}	16.3	X	193.23278	41.46502	234.86707	12.81301	0.1898049	0.21036117	2.8000062	21	—	—
520429 2014 JO_{91}	17.0	X	275.05870	75.69176	116.39120	14.65096	0.1018420	0.22423108	2.6833182	21	—	—
520430 2014 JT_{91}	16.7	X	121.39721	128.09035	123.06897	16.79465	0.1613446	0.18540144	3.0459818	21	11 13.4	21.9
520431 2014 JU_{91}	16.9	X	203.10428	19.65918	168.15327	15.24992	0.0078022	0.19282102	2.9673342	21	11 22.1	21.3
520432 2014 JV_{91}	17.1	X	96.45625	277.07240	126.96648	12.26255	0.0412841	0.23387053	2.6090699	21	1 1.9	20.5
520433 2014 JX_{91}	16.2	X	318.68174	258.29654	151.00305	10.78013	0.0170858	0.18177853	3.0863202	21	10 23.8	20.6
520434 2014 KN	16.6	X	170.46400	213.14362	75.65656	14.50972	0.1778528	0.22230728	2.6987765	21	—	—
520435 2014 KU_{2}	17.5	X	276.33431	218.91554	97.54922	6.59128	0.2164708	0.26913208	2.3758868	21	3 29.2	21.1
520436 2014 KR_{4}	17.1	X	311.10142	154.60374	66.19876	6.26239	0.1084612	0.25726337	2.4484096	21	1 17.2	20.3
520437 2014 KF_{16}	17.6	X	216.79639	186.34488	95.95562	5.05017	0.1218560	0.23449335	2.6044480	21	—	—
520438 2014 KU_{28}	17.6	X	315.32064	57.68684	122.66770	4.17581	0.1433162	0.24145014	2.5541775	21	—	—
520439 2014 KW_{32}	17.4	X	268.89215	336.07932	209.86448	12.68736	0.1309585	0.22586918	2.6703288	21	—	—
520440 2014 KQ_{42}	17.6	X	249.83736	215.74233	58.97924	13.98916	0.1591184	0.24344791	2.5401850	21	1 17.9	21.8
520441 2014 KW_{51}	17.5	X	229.45420	140.28555	160.81854	15.09060	0.1402298	0.24299696	2.5433267	21	1 28.4	21.6
520442 2014 KM_{59}	17.6	X	307.96469	4.96534	199.57927	9.81584	0.0958123	0.24238052	2.5476371	21	—	—
520443 2014 KK_{65}	16.9	X	174.32798	86.63461	105.76297	6.63314	0.1287190	0.18948608	3.0020494	21	10 19.9	21.7
520444 2014 KQ_{73}	16.9	X	161.72413	230.02327	89.08896	16.47936	0.1599942	0.22287305	2.6942073	21	—	—
520445 2014 KU_{90}	17.3	X	264.09308	145.46713	106.29710	18.74498	0.1973475	0.24121016	2.5558713	21	—	—
520446 2014 KH_{94}	17.5	X	211.57784	263.21767	43.81060	2.64391	0.1856515	0.23614424	2.5922953	21	1 22.9	21.8
520447 2014 KR_{99}	17.4	X	220.59830	201.80214	111.28343	16.99455	0.1638469	0.24451505	2.5327889	21	2 6.4	21.6
520448 2014 KJ_{104}	17.5	X	230.24432	235.15173	68.40620	7.50496	0.0881828	0.24670645	2.5177681	21	2 5.7	21.3
520449 2014 KC_{105}	17.6	X	226.20764	98.58472	198.13077	14.52009	0.1317723	0.24235871	2.5477900	21	1 18.7	21.9
520450 2014 KQ_{105}	17.0	X	191.59961	166.54542	163.89329	13.47192	0.1762931	0.22488814	2.6780890	21	2 1.7	21.5
520451 2014 KW_{106}	17.2	X	152.24076	194.60987	85.71310	4.82674	0.0674895	0.21064807	2.7974633	21	—	—
520452 2014 KX_{106}	17.4	X	249.96484	345.95617	203.89360	3.26527	0.0408662	0.21606268	2.7505288	21	—	—
520453 2014 KC_{107}	17.3	X	66.96672	317.32418	163.80678	23.86233	0.1227333	0.25822085	2.4423535	21	3 7.6	19.6
520454 2014 KH_{107}	16.7	X	8.21833	260.98761	63.18857	16.51792	0.0896753	0.17424951	3.1745951	21	9 21.0	21.1
520455 2014 KL_{107}	17.7	X	291.70700	46.77376	252.26839	5.52223	0.1055119	0.26832161	2.3806686	21	4 1.4	20.9
520456 2014 KQ_{107}	16.8	X	176.75293	85.30321	93.88106	2.40766	0.0737458	0.18406026	3.0607606	21	10 5.5	21.3
520457 2014 KU_{107}	17.6	X	203.65076	206.43012	101.29715	4.02134	0.1570087	0.23495527	2.6010334	21	1 16.1	21.6
520458 2014 KV_{107}	17.2	X	160.67361	196.77801	68.59871	3.09386	0.0251241	0.20738027	2.8267740	21	—	—
520459 2014 KY_{107}	16.2	X	142.07167	321.58398	254.39155	9.37297	0.1020235	0.18375214	3.0641812	21	10 10.0	21.1
520460 2014 KA_{108}	17.3	X	265.10738	255.38127	300.86192	1.11543	0.1383592	0.22550900	2.6731714	21	—	—
520461 2014 KE_{108}	17.0	X	158.99569	98.89772	109.82487	4.67922	0.1774912	0.18991946	2.9974808	21	10 24.0	22.0
520462 2014 KJ_{108}	16.3	X	165.82660	137.65207	78.11032	10.77138	0.0330994	0.19084226	2.9878103	21	11 10.0	20.7
520463 2014 KK_{108}	17.0	X	113.87665	136.32379	239.08307	14.17673	0.0676194	0.22842211	2.6503951	21	—	—
520464 2014 KM_{108}	17.1	X	266.26867	281.20045	220.03055	9.64802	0.0519437	0.20152155	2.8812994	21	12 5.5	21.0
520465 2014 KP_{108}	17.6	X	208.46712	220.16082	63.64880	5.77908	0.0809426	0.23193460	2.6235682	21	—	—
520466 2014 KS_{108}	16.8	X	188.48607	215.80199	67.03842	16.20472	0.0238449	0.22467355	2.6797941	21	—	—
520467 2014 KV_{108}	16.4	X	214.18679	80.88340	82.88973	13.11074	0.0833376	0.19129496	2.9830946	21	10 30.7	21.0
520468 2014 KW_{108}	17.4	X	288.23893	131.82078	97.73958	7.14475	0.0335912	0.24361247	2.5390409	21	1 12.6	20.8
520469 2014 KD_{109}	16.5	X	300.38261	226.95546	173.49229	9.38258	0.0990038	0.17409253	3.1765031	21	9 4.2	20.5
520470 2014 KF_{109}	17.0	X	235.17881	78.12542	112.19327	10.39167	0.0948264	0.21203270	2.7852712	21	12 23.2	20.8
520471 2014 KO_{109}	17.8	X	240.35247	125.52327	152.19723	6.36209	0.1093506	0.23983514	2.5656309	21	1 12.7	21.8
520472 2014 KP_{109}	17.5	X	312.40153	317.19697	190.39490	11.14898	0.1432269	0.22646984	2.6656050	21	—	—
520473 2014 KQ_{109}	16.6	X	135.61778	60.98232	164.63416	9.48271	0.0874717	0.18364535	3.0653690	21	10 20.2	21.3
520474 2014 KD_{110}	17.2	X	160.96761	108.34968	194.48890	12.95336	0.1483476	0.21636962	2.7479270	21	—	—
520475 2014 KG_{110}	16.9	X	195.30547	156.44782	109.75915	13.87009	0.0871622	0.21976395	2.7195586	21	—	—
520476 2014 KJ_{110}	16.6	X	18.11699	218.76566	149.55583	11.20743	0.0633332	0.18912109	3.0059107	21	11 23.3	20.8
520477 2014 KK_{110}	16.4	X	58.12023	121.16327	167.44050	11.40329	0.0802852	0.17668434	3.1453624	21	10 7.4	20.7
520478 2014 KM_{110}	16.4	X	73.72545	169.17822	141.46659	10.70556	0.0827160	0.18777736	3.0202338	21	11 24.9	20.9
520479 2014 KO_{110}	16.9	X	69.66283	98.45498	191.42928	9.35206	0.0469477	0.18351335	3.0668387	21	10 18.4	21.2
520480 2014 KZ_{110}	16.2	X	99.50899	347.33682	271.78881	11.26314	0.1531198	0.18031112	3.1030424	21	10 22.5	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520481 2014 KA_{111}	16.5	X	239.72175	282.06691	284.33090	7.45667	0.0466005	0.21620892	2.7492885	21	—	—
520482 2014 KB_{111}	17.4	X	206.23355	277.96535	3.05867	3.51309	0.1109482	0.22793786	2.6541476	21	—	—
520483 2014 KD_{111}	17.1	X	161.46265	270.17421	27.62205	4.23754	0.1913221	0.21285804	2.7780668	21	—	—
520484 2014 KG_{111}	16.1	X	109.39066	174.18167	94.24987	17.01191	0.1835182	0.17607921	3.1525646	21	11 21.4	21.4
520485 2014 KJ_{111}	16.6	X	109.14869	65.55041	190.09413	8.28484	0.0683382	0.18089924	3.0963132	21	10 25.2	21.1
520486 2014 KL_{111}	16.9	X	96.67132	224.09170	137.87929	10.42722	0.0411200	0.21485531	2.7608236	21	—	—
520487 2014 KM_{111}	16.2	X	129.84272	12.36906	194.34802	15.90844	0.0032265	0.17070377	3.2184047	21	9 8.7	20.9
520488 2014 KR_{111}	17.5	X	236.53311	123.81901	179.56794	11.65441	0.1858266	0.24229328	2.5482487	21	2 4.5	21.9
520489 2014 KT_{111}	16.9	X	287.04322	346.53706	212.41855	14.03037	0.2092654	0.23371670	2.6102146	21	—	—
520490 2014 KD_{112}	17.5	X	203.24558	96.32240	161.34676	6.18589	0.1146931	0.21949150	2.7218086	21	—	—
520491 2014 KH_{112}	17.2	X	136.52907	167.56990	111.83787	3.83259	0.1255136	0.20178006	2.8788380	21	12 24.6	21.7
520492 2014 KP_{112}	16.2	X	117.52425	42.39807	235.85419	9.97573	0.0687271	0.17806331	3.1291022	21	11 28.8	20.9
520493 2014 KQ_{112}	16.2	X	284.30031	289.84772	262.36068	11.52078	0.1092567	0.21289230	2.7777687	21	—	—
520494 2014 KS_{112}	15.7	X	129.43726	21.53290	241.16272	9.86284	0.0620652	0.17657296	3.1466849	21	11 22.1	20.2
520495 2014 KT_{112}	17.0	X	344.93119	40.79837	249.23245	5.45124	0.1137358	0.26174914	2.4203558	21	6 16.1	19.2
520496 2014 LA_{11}	17.6	X	223.75036	86.47600	187.90561	11.96134	0.1515925	0.23330870	2.6132568	21	—	—
520497 2014 LW_{11}	16.6	X	186.47430	29.40040	226.65339	4.35090	0.1248471	0.21278842	2.7786726	21	—	—
520498 2014 LV_{12}	17.5	X	260.24725	134.01667	107.99907	2.75774	0.1391471	0.23633296	2.5909151	21	—	—
520499 2014 LV_{20}	17.4	X	228.17205	179.03994	90.37392	15.30522	0.2237743	0.23094005	2.6310951	21	—	—
520500 2014 LQ_{29}	17.1	X	346.68960	312.86011	203.66060	13.04739	0.0958661	0.24129659	2.5552610	21	—	—
520501 2014 LR_{29}	16.8	X	92.08806	186.25381	228.17074	14.37532	0.0772120	0.23406325	2.6076375	21	1 10.4	20.3
520502 2014 LL_{30}	16.2	X	118.23504	104.15470	217.75804	7.33521	0.0745736	0.18164680	3.0878123	21	—	—
520503 2014 LQ_{30}	16.2	X	143.52409	30.55904	172.22917	16.36450	0.1424046	0.17819056	3.1276124	21	10 1.5	21.3
520504 2014 LX_{30}	16.1	X	132.79794	8.94102	266.35679	7.65902	0.0687326	0.18390931	3.0624352	21	12 11.8	20.8
520505 2014 LA_{31}	16.6	X	76.54346	137.81438	228.77730	1.50016	0.0990967	0.19195520	2.9762503	21	—	—
520506 2014 LC_{31}	16.8	X	114.55554	152.82128	168.94190	10.10176	0.1026356	0.19060703	2.9902680	21	—	—
520507 2014 LD_{31}	16.4	X	353.67955	263.08019	158.70831	15.22908	0.0751342	0.17886249	3.1197745	21	12 22.4	20.7
520508 2014 LE_{31}	16.5	X	224.41152	73.38269	196.29250	7.70314	0.1078121	0.21398505	2.7683039	21	—	—
520509 2014 LF_{31}	16.6	X	242.64251	344.24543	262.18459	11.60046	0.0928773	0.21173081	2.7879181	21	—	—
520510 2014 LM_{31}	16.7	X	86.09010	153.35012	160.61563	12.50894	0.1405810	0.17539705	3.1607334	21	12 15.2	21.7
520511 2014 LP_{31}	16.9	X	156.94567	219.40704	196.99963	9.34277	0.0603172	0.24196714	2.5505379	21	4 6.0	20.2
520512 2014 LQ_{31}	16.4	X	116.14045	88.21236	227.31543	9.32776	0.1551735	0.18587217	3.0408370	21	—	—
520513 2014 LS_{31}	15.6	X	169.66175	253.78818	284.08187	13.98413	0.0958424	0.15514616	3.4301151	21	9 15.1	21.2
520514 2014 LT_{31}	16.3	X	76.45427	86.31888	276.68554	9.73961	0.1931547	0.17641202	3.1485984	21	—	—
520515 2014 LA_{32}	16.5	X	235.96482	169.63376	108.21732	14.38697	0.1394954	0.22702836	2.6612314	21	1 10.5	20.7
520516 2014 LC_{32}	16.0	X	162.81639	157.62117	66.92300	11.64085	0.0481209	0.17980044	3.1089153	21	11 14.2	20.5
520517 2014 LG_{32}	16.7	X	190.81793	340.11612	201.59339	9.73772	0.0754185	0.18662194	3.0326870	21	10 22.7	21.3
520518 2014 LJ_{32}	17.2	X	345.59695	63.75883	262.57919	7.08945	0.0699010	0.28383872	2.2930927	21	8 13.1	19.7
520519 2014 LO_{32}	16.6	X	118.15523	281.72247	11.91915	9.68161	0.0904834	0.18884908	3.0087964	21	12 19.9	21.4
520520 2014 LP_{32}	17.1	X	201.62728	203.17657	79.82452	15.36435	0.0894654	0.22643796	2.6658552	21	—	—
520521 2014 MQ_{2}	16.7	X	208.11741	167.50571	171.59385	16.68047	0.2611918	0.24574501	2.5243306	21	2 24.3	21.4
520522 2014 MT_{4}	16.8	X	148.84917	150.73974	197.67279	17.32542	0.2554882	0.20777359	2.8232055	21	1 23.1	21.8
520523 2014 MF_{15}	16.8	X	222.10757	32.77538	255.60716	10.99662	0.2897740	0.22592285	2.6699058	21	1 8.6	21.7
520524 2014 MV_{25}	16.7	X	154.55476	226.16681	116.92174	14.17336	0.0382195	0.21727993	2.7402466	21	1 2.2	20.6
520525 2014 MG_{42}	16.6	X	30.24639	35.15739	59.30008	22.85686	0.0586110	0.23552267	2.5968542	21	—	—
520526 2014 MO_{45}	16.7	X	300.92142	1.02230	208.28871	17.24798	0.1098917	0.23980852	2.5658207	21	—	—
520527 2014 MH_{49}	16.7	X	237.52262	160.65468	102.05765	15.32930	0.1478431	0.22496780	2.6774568	21	—	—
520528 2014 MD_{73}	17.7	X	236.39525	102.88233	152.29796	1.95196	0.1829643	0.21944326	2.7222074	21	—	—
520529 2014 MV_{73}	15.9	X	31.20782	166.97428	235.44687	10.69500	0.1121875	0.17738216	3.1371076	21	—	—
520530 2014 MA_{74}	17.5	X	200.35066	181.18061	80.75145	10.89252	0.1808007	0.21128769	2.7918147	21	—	—
520531 2014 ME_{74}	15.9	X	92.83554	4.39018	286.71788	10.12332	0.0919611	0.17756812	3.1349170	21	11 17.9	20.7
520532 2014 MO_{74}	16.5	X	175.37166	142.33075	125.38683	15.98589	0.1228917	0.20217327	2.8751040	21	—	—
520533 2014 MW_{74}	16.5	X	95.99404	333.32345	3.16321	9.90812	0.1012487	0.19351407	2.9602452	21	—	—
520534 2014 MX_{74}	16.9	X	154.37289	209.52902	32.33656	9.61416	0.0849454	0.18451602	3.0557184	21	11 23.3	21.6
520535 2014 MY_{74}	15.8	X	101.85695	309.89655	327.60171	14.63823	0.0488155	0.17571202	3.1569550	21	11 2.3	20.7
520536 2014 MB_{75}	16.1	X	171.12720	169.80015	61.12385	11.11537	0.0520847	0.18517132	3.0485049	21	11 29.6	20.7
520537 2014 ME_{75}	16.9	X	202.76246	85.63529	223.41409	5.56009	0.0400138	0.21737262	2.7394675	21	1 14.9	21.0
520538 2014 MG_{75}	15.7	X	162.07117	347.53977	248.84553	4.89093	0.1263897	0.17449666	3.1715968	21	11 24.0	20.7
520539 2014 MJ_{75}	16.6	X	127.96891	18.91648	304.94793	9.04673	0.0620283	0.19222706	2.9734436	21	—	—
520540 2014 MK_{75}	16.2	X	3.34412	128.77304	294.09362	16.55454	0.0584903	0.18981568	2.9985732	21	—	—
520541 2014 MR_{75}	16.1	X	105.97602	344.11209	305.62736	10.72119	0.0181214	0.18319460	3.0703951	21	11 24.1	20.6
520542 2014 MX_{75}	16.0	X	97.56901	343.28338	302.18940	16.24438	0.1786424	0.17862956	3.1224860	21	11 24.1	21.2
520543 2014 MD_{76}	17.3	X	163.50377	21.68116	333.99902	4.57204	0.0674870	0.22321495	2.6914555	21	1 30.8	21.1
520544 2014 MF_{76}	16.2	X	196.31232	242.12538	307.38889	8.44017	0.1561900	0.17834064	3.1258574	21	10 27.5	21.4
520545 2014 MH_{76}	16.6	X	146.70547	159.85871	94.59239	4.19521	0.0785510	0.18022054	3.1040820	21	12 1.7	21.4
520546 2014 MK_{76}	17.4	X	130.09050	35.03981	359.11289	6.42266	0.0616739	0.22377752	2.6869428	21	2 8.9	21.0
520547 2014 MM_{76}	16.6	X	148.28554	267.96765	339.90993	9.40111	0.0444043	0.17719592	3.1393054	21	11 21.7	21.5
520548 2014 MP_{76}	17.4	X	141.73452	9.46684	338.00108	4.60254	0.0563732	0.21114774	2.7930481	21	—	—
520549 2014 MS_{76}	16.3	X	148.21811	108.94618	130.95261	11.60266	0.0417356	0.17393585	3.1784104	21	11 17.9	21.2
520550 2014 MY_{76}	17.2	X	191.78641	216.02335	84.91466	8.84872	0.2051050	0.21122321	2.7923828	21	1 3.2	21.9
520551 2014 MC_{77}	18.1	X	335.44924	57.23479	165.52710	4.25415	0.0839084	0.24486135	2.5304003	21	2 26.9	21.0
520552 2014 MD_{77}	17.0	X	83.01380	329.16817	133.19651	22.66752	0.0483008	0.23508282	2.6000925	21	3 4.4	20.5
520553 2014 MF_{77}	17.4	X	324.61891	296.68064	276.48074	5.20327	0.1327228	0.23838145	2.5760507	21	1 23.3	20.8
520554 2014 MG_{77}	16.2	X	199.45991	71.52784	148.83170	13.54153	0.0748156	0.18785172	3.0194367	21	12 17.8	20.9
520555 2014 MJ_{77}	17.4	X	175.53715	63.74044	271.12722	4.36413	0.0264848	0.21974808	2.7196895	21	1 14.6	21.3
520556 2014 MQ_{77}	16.5	X	37.30639	69.69118	307.73562	6.80123	0.0555996	0.18059781	3.0997575	21	12 24.0	20.7
520557 2014 MT_{77}	15.8	X	179.03770	66.32425	90.92644	13.84582	0.1735877	0.15750427	3.3957927	21	9 12.6	21.6
520558 2014 MV_{77}	16.1	X	81.57748	278.91131	31.97062	10.31761	0.0754394	0.17489135	3.1668232	21	11 26.6	20.8
520559 2014 MY_{77}	17.8	X	21.30210	222.83571	25.39390	5.86459	0.0918606	0.27441861	2.3452745	21	6 20.2	20.2
520560 2014 MZ_{77}	16.7	X	201.53622	40.83245	261.25382	14.31523	0.0960823	0.21361529	2.7714975	21	1 7.1	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520561 2014 MC_{78}	17.3	X	280.67813	91.34282	191.18409	13.25256	0.1372471	0.23904213	2.5713020	21	2 24.9	21.3
520562 2014 NV_{1}	17.1	X	265.92362	6.59976	224.51949	14.57217	0.1227729	0.23305400	2.6151604	21	—	—
520563 2014 NK_{18}	17.4	X	303.46277	52.76467	138.76090	6.15052	0.1116877	0.23674694	2.5878939	21	—	—
520564 2014 NH_{35}	16.7	X	158.67809	229.19094	83.43348	16.11850	0.1451861	0.20268830	2.8702315	21	—	—
520565 2014 NQ_{52}	16.2	X	125.19201	272.28482	46.92243	16.38455	0.0832745	0.19074316	2.9888450	21	—	—
520566 2014 NX_{55}	17.1	X	167.88099	232.28315	112.66846	14.57581	0.2238969	0.21410450	2.7672742	21	2 5.5	21.7
520567 2014 NR_{65}	15.6	X	95.23838	202.69603	93.27100	18.07609	0.1731394	0.18086859	3.0966630	21	12 7.7	20.6
520568 2014 NM_{69}	16.2	X	237.51594	264.95306	300.56812	9.70118	0.0597929	0.20347500	2.8628286	21	—	—
520569 2014 NR_{69}	16.3	X	187.84224	146.28470	41.35214	8.99389	0.0306823	0.17456824	3.1707297	21	10 27.9	20.9
520570 2014 NS_{69}	15.7	X	209.26146	215.25014	316.14223	26.83381	0.1467729	0.17997817	3.1068682	21	10 6.6	21.2
520571 2014 NC_{70}	16.3	X	247.78252	246.81636	282.32128	9.18538	0.0446603	0.18823416	3.0153455	21	12 14.6	20.4
520572 2014 NJ_{70}	16.8	X	232.71558	150.86019	107.15716	14.99971	0.1449339	0.22269739	2.6956239	21	—	—
520573 2014 NO_{70}	16.9	X	132.37855	222.34727	56.34552	3.60996	0.0611699	0.18147591	3.0897504	21	12 14.6	21.4
520574 2014 NB_{71}	16.7	X	114.02102	2.58235	296.25666	2.33737	0.0992958	0.18123946	3.0924371	21	12 21.5	21.5
520575 2014 NC_{71}	16.7	X	56.28677	301.15525	90.35825	3.40906	0.2388039	0.18465035	3.0542362	21	—	—
520576 2014 NG_{71}	17.4	X	166.07342	53.41759	262.10489	2.86855	0.0916840	0.20928740	2.8095752	21	—	—
520577 2014 NQ_{71}	17.2	X	139.34623	292.65205	114.98370	6.26123	0.1159411	0.22140755	2.7060829	21	3 16.7	21.2
520578 2014 NB_{72}	16.5	X	96.26525	304.28745	86.05865	4.59874	0.0352956	0.19844729	2.9109803	21	—	—
520579 2014 NE_{72}	16.8	X	351.98730	82.17715	354.15808	7.16895	0.0314242	0.18539098	3.0460965	21	—	—
520580 2014 NM_{72}	16.3	X	184.09279	242.35367	342.63723	14.97085	0.0878746	0.18105997	3.0944806	21	12 1.2	21.4
520581 2014 NP_{72}	17.5	X	262.95215	153.05262	86.01813	5.90562	0.1077546	0.21776024	2.7362157	21	—	—
520582 2014 NR_{72}	16.6	X	223.64963	125.87113	67.45254	10.26418	0.1331396	0.18303779	3.0721486	21	12 3.2	21.0
520583 2014 NT_{72}	16.5	X	91.64197	319.80897	31.28411	10.70435	0.0521661	0.18882551	3.0090468	21	—	—
520584 2014 NZ_{72}	16.5	X	170.05830	110.84475	102.64213	12.60941	0.2209425	0.17402305	3.1773486	21	11 7.8	22.1
520585 2014 OA_{2}	21.3	X	152.22560	184.57003	118.76041	6.17962	0.2665639	0.48579410	1.6026348	21	—	—
520586 2014 OO_{36}	17.3	X	252.11590	106.83135	110.82682	8.63777	0.1659185	0.21351880	2.7723324	21	—	—
520587 2014 OZ_{79}	17.1	X	211.04548	174.23907	89.01505	10.53531	0.0745681	0.21275812	2.7789365	21	—	—
520588 2014 OC_{92}	16.8	X	258.78233	325.19052	244.10937	6.72909	0.1599516	0.21339721	2.7733854	21	—	—
520589 2014 ON_{126}	17.3	X	238.88531	135.82215	97.75687	3.74536	0.1370957	0.21231176	2.7828300	21	—	—
520590 2014 ON_{134}	17.1	X	178.89585	208.11107	110.93466	7.96175	0.0414253	0.21847504	2.7302442	21	1 1.1	20.9
520591 2014 OJ_{191}	16.8	X	117.32316	344.81109	4.85921	1.39524	0.1408162	0.18731340	3.0252190	21	—	—
520592 2014 OC_{239}	16.6	X	94.61626	229.22949	123.21789	12.99647	0.0649575	0.19601147	2.9350470	21	—	—
520593 2014 OE_{381}	17.5	X	248.16045	71.46129	237.63522	4.20103	0.1301803	0.24098635	2.5574535	21	2 25.1	21.4
520594 2014 OQ_{385}	17.2	X	196.66516	128.23102	143.42449	15.07259	0.1483434	0.20930679	2.8094017	21	—	—
520595 2014 OM_{387}	16.9	X	186.83852	276.04479	29.32821	4.32935	0.0855522	0.21419005	2.7665373	21	—	—
520596 2014 OM_{399}	16.9	X	195.05877	169.32490	99.44306	3.28293	0.0608477	0.19600838	2.9350778	21	—	—
520597 2014 OZ_{404}	15.7	X	263.08122	122.86630	315.28801	8.77743	0.0751130	0.14558191	3.5787479	21	9 1.9	20.9
520598 2014 OK_{405}	17.5	X	204.87928	262.41311	7.35811	3.45770	0.0581032	0.21077856	2.7963086	21	—	—
520599 2014 OR_{405}	17.2	X	201.19903	278.49142	85.85266	3.10521	0.0886758	0.23884317	2.5727298	21	3 23.4	21.0
520600 2014 OY_{405}	17.5	X	274.69777	250.11450	10.90307	4.98098	0.0535994	0.23081663	2.6320329	21	2 6.6	21.1
520601 2014 OK_{406}	16.8	X	196.63767	78.20565	139.95193	10.87953	0.0706042	0.18196778	3.0841800	21	12 11.7	21.6
520602 2014 OV_{406}	17.5	X	219.96692	219.23084	35.04460	2.46316	0.0172724	0.20291895	2.8680561	21	—	—
520603 2014 OR_{407}	17.2	X	297.82256	76.13903	136.03753	14.21632	0.0345410	0.21603294	2.7507813	21	1 7.9	21.1
520604 2014 OH_{408}	16.6	X	136.46416	195.82737	100.82343	6.82897	0.1182432	0.18636445	3.0354798	21	—	—
520605 2014 OX_{408}	17.4	X	206.57949	170.91210	122.69868	5.32870	0.1503618	0.21385458	2.7694297	21	1 4.8	22.0
520606 2014 OM_{409}	16.3	X	226.36312	53.72041	145.55247	15.97636	0.0717373	0.18196085	3.0842583	21	12 21.7	21.0
520607 2014 OP_{409}	16.7	X	204.21827	75.58495	134.50796	12.75018	0.1196935	0.18364434	3.0653803	21	12 6.9	21.6
520608 2014 OH_{411}	16.5	X	17.13190	124.47761	304.12285	7.68209	0.0752721	0.18956783	3.0011864	21	—	—
520609 2014 OK_{411}	17.2	X	90.96050	74.69695	340.04711	3.45678	0.0620454	0.21313809	2.7756328	21	1 16.3	20.7
520610 2014 OO_{411}	17.4	X	145.22196	182.24606	173.00497	3.73662	0.1047895	0.21149679	2.7899743	21	1 14.8	21.5
520611 2014 OX_{411}	17.8	X	218.19611	133.74926	179.47764	6.34810	0.0651876	0.22224526	2.6992786	21	2 5.3	21.7
520612 2014 OM_{412}	17.5	X	121.02876	259.50915	151.72238	8.20100	0.1611375	0.21429917	2.7655980	21	3 5.2	21.5
520613 2014 ON_{412}	17.1	X	201.83432	178.65161	63.56974	2.32161	0.1697417	0.19292312	2.9662872	21	—	—
520614 2014 OO_{412}	17.1	X	260.72114	297.37223	338.75836	9.73109	0.0573517	0.22407467	2.6845668	21	2 9.8	20.9
520615 2014 OQ_{412}	17.1	X	246.27956	354.22887	32.92010	10.19848	0.1347193	0.24171281	2.5523267	21	6 2.9	21.0
520616 2014 OR_{412}	16.7	X	26.93453	50.02200	2.16674	9.44976	0.0660692	0.18359354	3.0659457	21	—	—
520617 2014 OU_{412}	17.4	X	98.50280	179.05722	339.88780	10.95862	0.0779208	0.26562277	2.3967672	21	6 9.8	20.7
520618 2014 OA_{413}	16.8	X	162.67137	135.84444	113.40715	10.51519	0.0689213	0.18112923	3.0936916	21	12 12.5	21.5
520619 2014 OB_{413}	16.4	X	217.28762	192.72944	20.94617	7.08303	0.0396149	0.18573628	3.0423200	21	—	—
520620 2014 OC_{413}	17.1	X	249.76147	72.99227	169.12967	8.83294	0.0511702	0.21473081	2.7618906	21	—	—
520621 2014 OK_{413}	16.6	X	127.28355	221.29772	104.69343	2.81619	0.0720040	0.19045520	2.9918569	21	—	—
520622 2014 OS_{413}	16.5	X	268.67207	112.78284	30.35221	10.57538	0.0558842	0.17497807	3.1657769	21	12 3.0	20.9
520623 2014 OD_{414}	16.9	X	183.10154	260.03076	36.46242	3.97967	0.1722859	0.19860586	2.9094306	21	—	—
520624 2014 OE_{414}	17.2	X	263.84207	314.25573	355.19340	3.75085	0.1621573	0.23441400	2.6050357	21	3 13.5	21.2
520625 2014 OJ_{414}	17.1	X	211.69712	328.87548	40.26574	12.15318	0.0794965	0.24202400	2.5501385	21	4 10.8	20.8
520626 2014 OM_{414}	17.7	X	322.82488	196.01005	112.57390	6.80121	0.0926588	0.25924809	2.4358974	21	6 7.7	20.4
520627 2014 OW_{414}	16.0	X	106.26841	182.62783	129.79844	9.06900	0.1250534	0.17293139	3.1907062	21	12 30.0	21.1
520628 2014 OY_{414}	17.4	X	70.54457	132.82371	97.19196	6.92312	0.0639000	0.26879887	2.3778498	21	8 12.2	20.3
520629 2014 OB_{415}	17.1	X	219.02367	289.74123	24.82522	12.64553	0.1356808	0.21897504	2.7260866	21	2 14.3	21.7
520630 2014 OC_{415}	16.9	X	142.83347	255.58367	89.18951	9.04577	0.0558293	0.19675792	2.9276190	21	—	—
520631 2014 PW_{12}	16.4	X	267.77745	12.72091	138.81341	10.31387	0.0929856	0.18126756	3.0921175	21	12 11.5	20.8
520632 2014 PT_{67}	16.8	X	225.23162	40.52087	244.88727	12.92141	0.2465583	0.22368180	2.6877092	21	1 7.2	21.7
520633 2014 PS_{72}	17.2	X	191.74392	84.85047	171.21695	10.11810	0.0524607	0.18931487	3.0038591	21	—	—
520634 2014 PZ_{72}	17.0	X	297.84678	43.85220	125.99119	11.57805	0.0542117	0.19751525	2.9201307	21	—	—
520635 2014 PE_{73}	16.7	X	146.37753	292.64314	25.73070	2.60240	0.0909030	0.19643051	2.9308713	21	—	—
520636 2014 PC_{74}	17.3	X	3.09343	339.02210	125.72531	3.05120	0.0247287	0.19895822	2.9059945	21	—	—
520637 2014 PM_{74}	17.4	X	281.60150	248.47522	0.67294	1.90328	0.1601550	0.23077410	2.6323563	21	1 17.7	21.2
520638 2014 PU_{74}	16.7	X	136.15738	136.98096	131.64429	10.36492	0.0617943	0.17539664	3.1607383	21	12 7.5	21.6
520639 2014 PC_{75}	17.4	X	110.60690	3.25559	145.39308	8.13270	0.1446990	0.25760856	2.4462219	21	6 22.6	20.9
520640 2014 PK_{76}	18.0	X	216.05551	13.18906	348.36781	2.44535	0.0439345	0.23787783	2.5796854	21	4 3.9	21.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520641 2014 PQ_{76}	16.5	X	185.29511	103.47543	146.17817	9.70469	0.1781172	0.18796030	3.0182738	21	12 29.3	21.6
520642 2014 PU_{76}	16.4	X	21.89232	265.51747	152.08513	9.66292	0.0885120	0.18013416	3.1050743	21	—	—
520643 2014 PX_{76}	16.6	X	220.13728	155.01467	97.63327	16.11760	0.1831172	0.20204192	2.8763500	21	—	—
520644 2014 PD_{77}	16.4	X	74.99808	328.60193	82.58428	3.31857	0.0560863	0.19757621	2.9195300	21	—	—
520645 2014 PL_{77}	17.0	X	171.77827	85.39420	198.98768	3.39575	0.0930548	0.19326300	2.9628084	21	—	—
520646 2014 PM_{77}	16.8	X	167.06866	182.84163	180.28088	6.36258	0.0385040	0.21924929	2.7238128	21	2 8.8	20.7
520647 2014 PN_{77}	16.3	X	71.12253	40.55843	27.94615	15.60522	0.1298623	0.20017823	2.8941752	21	1 20.6	20.1
520648 2014 PQ_{77}	17.3	X	184.46690	98.15608	173.64831	4.00172	0.2008707	0.19983970	2.8974428	21	—	—
520649 2014 PX_{77}	17.3	X	160.06791	176.01481	219.48247	3.48440	0.0670710	0.22726213	2.6594061	21	3 14.9	21.2
520650 2014 PY_{77}	16.7	X	224.54089	218.31035	93.23904	12.09022	0.1720200	0.21820788	2.7324723	21	2 12.5	21.3
520651 2014 PZ_{77}	17.2	X	225.14919	229.92438	128.68429	11.57140	0.1103527	0.23162886	2.6258763	21	4 13.8	21.4
520652 2014 PB_{78}	16.2	X	50.54969	260.58449	135.54870	12.04187	0.0665500	0.17410853	3.1763085	21	—	—
520653 2014 PJ_{78}	17.3	X	115.83375	109.73137	271.31714	4.89461	0.0693116	0.21072434	2.7967882	21	1 7.3	20.9
520654 2014 QC_{55}	17.6	X	240.75167	88.31617	169.59342	9.42718	0.1196630	0.22025597	2.7155070	21	—	—
520655 2014 QW_{149}	16.7	X	170.87415	274.19123	350.10666	9.72855	0.1152998	0.18458199	3.0549903	21	—	—
520656 2014 QG_{214}	16.7	X	134.79065	177.93519	166.10853	11.71514	0.0994421	0.19932214	2.9024563	21	—	—
520657 2014 QO_{254}	15.9	X	62.61928	253.80689	126.35829	12.63483	0.0803495	0.17750136	3.1357030	21	—	—
520658 2014 QH_{274}	16.0	X	93.69560	216.33241	144.54297	13.16494	0.1677804	0.17769036	3.1334791	21	—	—
520659 2014 QY_{277}	17.2	X	210.73335	147.08484	128.97331	5.93134	0.1316200	0.21303447	2.7765327	21	—	—
520660 2014 QY_{336}	16.9	X	164.59974	289.97941	13.85525	6.88665	0.1598125	0.19475100	2.9476975	21	—	—
520661 2014 QK_{381}	16.7	X	210.26504	97.02284	187.76978	12.66053	0.2132794	0.20909558	2.8112932	21	—	—
520662 2014 QG_{387}	16.5	X	220.48157	227.27351	144.22896	13.01917	0.0857176	0.22893603	2.6464272	21	4 26.4	20.7
520663 2014 QN_{398}	16.0	X	54.37757	187.31947	187.03360	14.51562	0.2051149	0.17052484	3.2206556	21	—	—
520664 2014 QM_{435}	17.4	X	167.23859	350.80047	34.61348	5.65598	0.1717479	0.21784789	2.7354817	21	3 21.7	21.8
520665 2014 QL_{438}	15.9	X	147.28374	255.49444	62.25000	15.69769	0.1853344	0.17801232	3.1296997	21	—	—
520666 2014 QB_{448}	17.0	X	166.84188	152.46303	165.77433	2.26053	0.0604663	0.20183068	2.8783566	21	—	—
520667 2014 QP_{448}	16.9	X	170.82782	269.22326	66.37468	8.26566	0.2279068	0.21077383	2.7963504	21	1 29.5	21.7
520668 2014 QC_{449}	16.7	X	123.80739	156.50116	162.62026	10.09829	0.0805905	0.17550152	3.1594789	21	—	—
520669 2014 QN_{450}	16.0	X	16.69981	250.27051	193.62553	9.86274	0.0851826	0.18711459	3.0273615	21	—	—
520670 2014 QO_{450}	17.0	X	228.20000	51.87403	154.22932	9.15717	0.0612343	0.18309466	3.0715124	21	12 31.9	21.6
520671 2014 QU_{450}	16.1	X	133.02907	218.72457	92.79388	17.57375	0.1922981	0.17718008	3.1394926	21	—	—
520672 2014 QQ_{453}	16.1	X	214.19371	199.59956	37.81549	16.05226	0.1936915	0.19012743	2.9952945	21	—	—
520673 2014 QO_{456}	16.1	X	86.30800	137.56180	199.95054	9.55346	0.0740187	0.17490990	3.1665994	21	—	—
520674 2014 QY_{456}	16.2	X	160.06998	263.93331	12.00993	10.59756	0.0986384	0.18026776	3.1035400	21	—	—
520675 2014 QS_{457}	16.1	X	25.37304	3.48012	46.73739	10.41888	0.0834177	0.17202833	3.2018629	21	—	—
520676 2014 QX_{457}	16.9	X	132.53022	115.33044	192.57961	1.06280	0.0906619	0.18249021	3.0782909	21	—	—
520677 2014 QF_{458}	17.2	X	227.49189	39.90165	272.63242	1.12818	0.1121281	0.22297245	2.6934066	21	2 13.9	21.5
520678 2014 QG_{458}	16.5	X	58.30354	103.84728	296.49847	4.54822	0.0956130	0.18440608	3.0569328	21	—	—
520679 2014 QM_{458}	16.7	X	68.43738	234.69380	194.84053	11.60563	0.1092357	0.20116681	2.8846856	21	1 8.8	20.4
520680 2014 QV_{458}	16.5	X	29.60266	233.13446	181.71948	9.63386	0.0524992	0.17942104	3.1132964	21	—	—
520681 2014 QA_{459}	16.6	X	255.77682	298.72403	305.16379	7.20373	0.1572517	0.21097930	2.7945346	21	—	—
520682 2014 QE_{459}	16.8	X	137.93558	128.65551	175.22983	10.07435	0.1004640	0.19045642	2.9918442	21	—	—
520683 2014 QJ_{459}	17.0	X	290.67436	68.65731	156.41073	5.46186	0.1941029	0.22469127	2.6796532	21	—	—
520684 2014 QZ_{459}	16.9	X	227.20690	59.43323	162.67881	8.28899	0.0159985	0.18607528	3.0386238	21	—	—
520685 2014 QR_{460}	17.0	X	231.34462	3.72787	239.46940	1.04752	0.0574009	0.19776451	2.9176766	21	—	—
520686 2014 QA_{461}	16.8	X	112.21305	212.44544	124.05268	2.35106	0.0708298	0.18320535	3.0702751	21	—	—
520687 2014 QJ_{461}	17.1	X	239.53264	248.13777	82.43653	5.85369	0.1084216	0.23248468	2.6194281	21	3 22.7	21.1
520688 2014 QP_{461}	16.6	X	115.43240	357.44469	19.87079	11.47750	0.1021632	0.19732220	2.9220351	21	1 12.4	20.8
520689 2014 QQ_{461}	17.3	X	216.44784	322.20690	34.21447	5.33943	0.0463265	0.23001071	2.6381775	21	3 31.5	21.0
520690 2014 QU_{461}	15.6	X	128.50025	219.47867	110.49549	12.21569	0.0677427	0.18279343	3.0748858	21	—	—
520691 2014 QW_{461}	16.1	X	166.06854	232.46562	72.67659	10.54120	0.0518169	0.19005939	2.9960093	21	—	—
520692 2014 QY_{461}	16.4	X	122.14883	188.67448	182.25627	15.35695	0.1405902	0.20363690	2.8613110	21	1 12.4	20.7
520693 2014 QT_{462}	17.1	X	339.33005	262.23352	237.32182	2.75352	0.0542543	0.19583218	2.9368382	21	—	—
520694 2014 QY_{462}	17.1	X	5.62767	310.11834	151.50991	2.08955	0.1335185	0.18562267	3.0435612	21	—	—
520695 2014 QG_{463}	16.3	X	34.79724	288.40559	107.95534	11.02730	0.0784880	0.17508629	3.1644722	21	—	—
520696 2014 QL_{463}	16.4	X	204.21955	122.58210	99.74641	10.32180	0.0676868	0.17578446	3.1560877	21	12 22.6	20.9
520697 2014 QT_{464}	16.4	X	100.66741	234.68154	101.05595	10.12889	0.0848684	0.17904736	3.1176267	21	—	—
520698 2014 QV_{464}	15.9	X	189.20279	187.64138	64.63569	10.50048	0.1436624	0.18432100	3.0578734	21	—	—
520699 2014 QX_{465}	16.6	X	160.61404	116.21768	166.51435	12.42684	0.0654703	0.17882516	3.1202086	21	—	—
520700 2014 QZ_{465}	16.3	X	149.49292	94.33432	172.79191	24.95290	0.2006720	0.17407231	3.1767492	21	12 19.1	22.1
520701 2014 QE_{466}	16.6	X	117.35183	197.74362	109.02233	2.63573	0.1647828	0.17331481	3.1859987	21	—	—
520702 2014 QF_{466}	17.4	X	270.28697	170.04636	162.49602	5.22811	0.0633406	0.24127516	2.5554123	21	5 2.5	20.9
520703 2014 QG_{466}	16.4	X	92.46882	213.76095	173.65310	10.96741	0.1427781	0.18707270	3.0278134	21	—	—
520704 2014 QH_{466}	16.3	X	74.99941	318.15967	134.72238	6.48075	0.0400564	0.20408166	2.8571524	21	2 10.9	20.1
520705 2014 QK_{466}	16.6	X	122.50122	158.78873	157.36663	10.91813	0.2087237	0.17752194	3.1354607	21	—	—
520706 2014 QQ_{466}	17.4	X	110.30756	78.21593	61.95273	5.76714	0.1406357	0.23730745	2.5838173	21	6 10.1	21.0
520707 2014 QU_{466}	17.0	X	309.41586	119.11064	151.39766	10.28490	0.0811170	0.23079941	2.6321638	21	3 31.9	20.4
520708 2014 QZ_{466}	16.5	X	68.47209	257.99908	159.02450	10.36227	0.1202122	0.18509479	3.0493452	21	—	—
520709 2014 QF_{467}	16.3	X	79.33490	248.14258	141.16612	10.65667	0.0766601	0.17932589	3.1143976	21	—	—
520710 2014 QL_{467}	16.8	X	251.39312	208.48388	101.22016	14.86473	0.1485428	0.23520291	2.5992073	21	3 8.4	21.1
520711 2014 QM_{467}	16.5	X	196.97617	197.20091	103.79648	14.41255	0.1892051	0.21233312	2.7826434	21	1 6.7	21.0
520712 2014 QO_{467}	17.9	X	289.60797	184.99976	115.69956	4.00359	0.0833352	0.24279988	2.5447028	21	4 11.9	21.3
520713 2014 QS_{467}	16.8	X	135.45739	141.16864	164.56281	7.33640	0.0135257	0.17877068	3.1208425	21	—	—
520714 2014 QG_{468}	16.7	X	137.88957	309.58672	333.24378	9.51380	0.1014501	0.17340659	3.1848745	21	12 25.4	21.8
520715 2014 QO_{468}	16.3	X	134.72293	252.35272	27.34085	3.45110	0.0540073	0.16925162	3.2367873	21	12 15.8	21.1
520716 2014 QS_{468}	17.2	X	243.60262	241.19360	29.56914	4.22908	0.0746790	0.20907219	2.8115029	21	1 16.1	21.4
520717 2014 QV_{468}	17.6	X	142.80991	203.78257	215.10404	4.23887	0.1258572	0.22057265	2.7129072	21	4 1.2	21.6
520718 2014 QC_{469}	16.6	X	358.87327	55.11249	23.18190	11.19354	0.0978117	0.16952480	3.2333090	21	—	—
520719 2014 QD_{469}	16.3	X	140.57259	147.61335	169.78591	11.54306	0.0984335	0.18461182	3.0546612	21	—	—
520720 2014 QE_{469}	17.0	X	245.90907	325.89170	5.06514	9.94586	0.0558568	0.23064925	2.6333061	21	3 30.8	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520721 2014 QF_{469}	17.0	X	183.29992	247.11925	175.71708	12.73012	0.1826627	0.23475547	2.6025090	21	5 20.7	21.5
520722 2014 QG_{469}	17.3	X	224.06865	175.55033	154.61244	6.64330	0.0405901	0.22060669	2.7126282	21	3 7.7	21.0
520723 2014 QN_{469}	16.8	X	86.46732	119.72845	344.10818	8.54128	0.1187661	0.21856813	2.7294690	21	3 19.1	20.2
520724 2014 QX_{469}	16.8	X	83.54663	14.00549	73.75698	6.51531	0.0928371	0.21741944	2.7390742	21	2 23.0	20.3
520725 2014 QF_{470}	16.6	X	216.07139	101.24633	100.81598	6.42382	0.0918877	0.17829970	3.1263359	21	12 9.8	21.3
520726 2014 QG_{470}	17.3	X	201.20776	226.72872	103.77862	6.37241	0.1207664	0.22159798	2.7045324	21	2 12.3	21.6
520727 2014 QX_{470}	16.3	X	341.10865	283.65793	293.03944	8.34394	0.0363035	0.22649722	2.6653902	21	3 4.5	19.9
520728 2014 QJ_{471}	16.8	X	181.33280	261.59898	139.18982	13.27945	0.1898239	0.22129480	2.7070020	21	4 25.2	21.5
520729 2014 QT_{471}	16.7	X	137.79369	224.36700	149.28954	12.69781	0.0716012	0.19813479	2.9140404	21	1 26.9	20.9
520730 2014 QW_{471}	16.5	X	145.26501	216.31312	152.49988	11.93045	0.1335229	0.19895362	2.9060393	21	2 5.3	20.8
520731 2014 QX_{471}	17.3	X	254.16491	189.23932	169.67756	13.00775	0.1864587	0.24145619	2.5541348	21	5 5.2	21.4
520732 2014 QE_{472}	17.2	X	249.32736	239.69715	97.66050	12.64389	0.0941576	0.22992236	2.6388533	21	4 15.7	21.3
520733 2014 QM_{472}	16.6	X	213.31944	67.78300	264.32523	4.93431	0.0611620	0.22069909	2.7118709	21	2 22.5	20.7
520734 2014 QN_{472}	16.9	X	148.60078	129.15603	200.88781	10.64629	0.1173859	0.19588965	2.9362637	21	—	—
520735 2014 QV_{472}	16.7	X	53.76564	253.10898	192.37972	12.52885	0.1035431	0.19919677	2.9036740	21	1 6.7	20.4
520736 2014 QN_{473}	16.4	X	66.45977	237.47553	172.33307	9.29434	0.0857566	0.17867580	3.1219472	21	—	—
520737 2014 QV_{473}	16.4	X	55.78824	283.07907	161.12099	11.07911	0.1131853	0.18454962	3.0553475	21	1 13.6	20.3
520738 2014 QW_{473}	17.2	X	216.00596	357.83677	94.17092	7.82058	0.0815907	0.25355756	2.4722080	21	8 2.8	20.7
520739 2014 QZ_{473}	16.6	X	140.21724	198.69070	133.58292	9.10552	0.1411261	0.18173001	3.0868696	21	—	—
520740 2014 QB_{474}	16.5	X	78.77732	270.75552	192.56865	11.87557	0.0702004	0.20090038	2.8872355	21	3 2.8	20.4
520741 2014 QD_{474}	16.2	X	177.59113	219.16440	73.50121	12.16387	0.0788116	0.17626763	3.1503176	21	—	—
520742 2014 QE_{474}	16.4	X	262.39928	165.61507	81.22583	13.29373	0.0782062	0.18954352	3.0014429	21	1 10.2	20.9
520743 2014 QJ_{474}	16.2	X	130.66932	129.89390	208.42889	29.78854	0.1484904	0.17849000	3.1241134	21	—	—
520744 2014 QK_{474}	16.8	X	188.05630	159.69408	153.86557	2.48467	0.0921968	0.19413694	2.9539100	21	1 12.0	21.3
520745 2014 QL_{474}	16.8	X	117.95024	243.94263	178.30389	4.88884	0.0692526	0.20425168	2.8555666	21	3 2.9	20.8
520746 2014 QR_{474}	17.2	X	178.36164	294.19490	130.48199	5.10111	0.0617889	0.22862470	2.6488291	21	5 15.1	21.1
520747 2014 RM_{10}	16.6	X	193.05695	57.64076	203.43237	7.78362	0.1690897	0.18809007	3.0168853	21	—	—
520748 2014 RH_{59}	16.7	X	39.29246	10.40411	42.69337	2.49511	0.0258387	0.18014797	3.1049157	21	—	—
520749 2014 RF_{65}	16.0	X	53.64972	293.71629	113.58466	13.03716	0.0617959	0.18494344	3.0510086	21	—	—
520750 2014 RD_{66}	16.5	X	141.49259	253.10422	71.86637	9.96372	0.2726384	0.18087480	3.0965921	21	—	—
520751 2014 RY_{66}	17.3	X	191.98160	325.85443	7.01623	4.94858	0.2053056	0.21869117	2.7284451	21	2 9.6	21.9
520752 2014 RG_{67}	16.4	X	146.85521	138.92426	179.88957	9.79680	0.1016910	0.18335279	3.0686288	21	—	—
520753 2014 RS_{67}	16.5	X	324.90997	299.14912	278.08956	6.08055	0.0509615	0.21951264	2.7216338	21	2 12.4	20.2
520754 2014 RE_{68}	16.8	X	288.75222	335.13005	286.51955	3.45012	0.0787878	0.21675641	2.7446570	21	2 20.2	20.7
520755 2014 RH_{68}	16.2	X	34.09532	144.90786	287.65041	10.89986	0.1361080	0.18895689	3.0076518	21	—	—
520756 2014 RK_{68}	15.7	X	112.49609	107.46342	227.64736	12.09312	0.0688247	0.18640552	3.0350339	21	—	—
520757 2014 RN_{68}	16.8	X	130.69020	159.22788	191.27032	12.84102	0.1034958	0.18011276	3.1053203	21	—	—
520758 2014 RP_{68}	16.2	X	217.60877	185.95564	96.57508	12.74101	0.0649514	0.18629580	3.0362253	21	1 6.6	20.7
520759 2014 RS_{68}	16.0	X	194.01604	221.76408	90.61696	12.34692	0.1072859	0.18950872	3.0018103	21	1 18.8	20.7
520760 2014 RW_{68}	16.4	X	167.70073	207.70520	136.86634	9.00632	0.0492477	0.18789384	3.0189855	21	1 25.5	20.9
520761 2014 RY_{68}	16.4	X	177.17725	126.27003	144.62068	10.02709	0.0674378	0.17977491	3.1092095	21	—	—
520762 2014 RA_{69}	16.8	X	110.28410	149.74082	85.73252	16.00108	0.0428602	0.26104080	2.4247323	21	10 16.3	20.4
520763 2014 RE_{69}	16.7	X	116.56383	232.47098	180.42748	12.71237	0.1061336	0.21635648	2.7480383	21	2 19.3	20.6
520764 2014 RM_{69}	16.3	X	37.42949	152.69595	276.03781	9.08904	0.0911822	0.17991699	3.1075724	21	—	—
520765 2014 RN_{69}	17.0	X	125.40530	176.83551	255.87998	5.78715	0.1144992	0.21562550	2.7542454	21	3 27.4	21.0
520766 2014 RV_{69}	16.3	X	47.94808	302.30651	98.36554	20.07457	0.1549642	0.17116984	3.2125598	21	—	—
520767 2014 SJ_{31}	16.7	X	41.67812	256.26477	147.63816	10.27284	0.0634961	0.17950381	3.1123393	21	—	—
520768 2014 SM_{79}	16.4	X	174.60005	186.30669	47.19111	9.02627	0.1618385	0.17985187	3.1083226	21	11 30.7	21.6
520769 2014 SQ_{118}	16.7	X	355.92551	287.52034	165.87006	2.99616	0.0469428	0.17616731	3.1515135	21	—	—
520770 2014 SW_{134}	16.0	X	157.60466	146.59938	171.76070	11.32872	0.1151826	0.18870973	3.0102774	21	—	—
520771 2014 SU_{145}	16.7	X	139.72892	175.78889	125.42110	10.43886	0.0222743	0.18053579	3.1004674	21	—	—
520772 2014 SN_{157}	16.7	X	127.37792	128.87851	207.15401	6.32943	0.1246274	0.18375380	3.0641628	21	—	—
520773 2014 SZ_{173}	18.0	X	185.80599	167.34720	35.98433	5.22976	0.0468387	0.30374949	2.1917567	21	12 2.5	20.6
520774 2014 SE_{231}	16.0	X	105.51236	307.31584	27.20528	10.83407	0.0998342	0.17434705	3.1734109	21	—	—
520775 2014 SR_{300}	15.8	X	140.76644	278.87242	21.28453	16.06552	0.1766986	0.17389847	3.1788659	21	—	—
520776 2014 SJ_{322}	16.6	X	152.56787	204.93464	91.41331	6.35522	0.1238442	0.18205161	3.0832331	21	—	—
520777 2014 SF_{335}	16.3	X	143.04989	154.11887	153.75027	10.19250	0.0605854	0.17648022	3.1477871	21	—	—
520778 2014 SB_{355}	16.6	X	142.96172	11.24992	296.82800	4.00025	0.1367828	0.17769939	3.1333730	21	—	—
520779 2014 SM_{355}	15.9	X	164.91214	213.68845	55.61482	16.62173	0.1258486	0.17370929	3.1811735	21	—	—
520780 2014 SV_{356}	16.6	X	256.82374	202.85853	95.44453	12.78779	0.1608265	0.22423100	2.6833189	21	2 26.9	21.0
520781 2014 SD_{357}	17.6	X	212.95415	331.18301	72.75138	4.15669	0.0683008	0.24059844	2.5602016	21	5 25.8	21.3
520782 2014 SG_{357}	16.2	X	128.27974	238.56886	78.93121	12.50998	0.0716593	0.17141983	3.2094357	21	—	—
520783 2014 SJ_{357}	16.5	X	115.14697	250.68939	90.73362	12.90367	0.0985665	0.17668312	3.1453768	21	—	—
520784 2014 SO_{357}	16.9	X	175.43883	224.94887	162.96418	15.34540	0.1326303	0.21247555	2.7813997	21	3 31.4	21.3
520785 2014 SQ_{357}	16.6	X	128.33918	190.91901	135.42301	11.68620	0.1680719	0.17333804	3.1857141	21	—	—
520786 2014 SR_{357}	16.9	X	194.51316	267.71749	150.71449	12.14694	0.0626634	0.22948759	2.6421852	21	5 26.9	21.0
520787 2014 SX_{357}	17.5	X	186.14846	158.46972	226.93882	4.11478	0.0569499	0.22587456	2.6702864	21	3 31.4	21.3
520788 2014 SG_{358}	16.5	X	17.71405	120.81698	313.41231	3.87084	0.0843476	0.17366572	3.1817056	21	—	—
520789 2014 SS_{358}	17.3	X	171.18536	150.71740	198.65479	1.77686	0.1022575	0.20613438	2.8381527	21	2 4.8	21.7
520790 2014 SU_{358}	16.2	X	179.69464	60.22942	197.84382	16.14920	0.1202636	0.17424595	3.1746383	21	—	—
520791 2014 SD_{359}	16.8	X	161.17335	6.49315	15.71108	4.40969	0.0809079	0.21162166	2.7888766	21	3 5.4	20.9
520792 2014 SO_{359}	16.8	X	198.40904	286.84979	56.54294	5.71550	0.0983850	0.21641794	2.7475179	21	2 26.7	21.0
520793 2014 ST_{359}	16.6	X	156.73777	300.31599	48.81688	2.96341	0.0672625	0.20025810	2.8934057	21	1 19.4	20.7
520794 2014 SZ_{359}	16.9	X	274.25419	286.96518	28.11599	14.77310	0.1321707	0.23772840	2.5807662	21	4 6.1	20.5
520795 2014 ST_{360}	16.8	X	236.88149	142.15518	155.06034	10.24924	0.0171343	0.19918182	2.9038192	21	2 13.3	21.0
520796 2014 SW_{360}	16.6	X	81.47316	322.06655	91.66102	11.38051	0.0529369	0.18122083	3.0926491	21	1 8.3	20.7
520797 2014 SB_{361}	16.5	X	160.55244	218.46593	142.40915	10.93590	0.1148623	0.19293209	2.9661952	21	2 11.3	21.0
520798 2014 SM_{361}	17.2	X	192.16412	219.87717	122.06851	8.81445	0.2092799	0.21716760	2.7411914	21	2 20.6	21.9
520799 2014 SH_{362}	16.2	X	58.45410	298.65905	105.73625	11.61666	0.0908016	0.17840003	3.1251637	21	—	—
520800 2014 SK_{362}	16.2	X	252.63750	181.43749	104.46869	13.72633	0.0452111	0.20893175	2.8127627	21	2 17.8	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520801 2014 SM_{362}	16.2	X	161.96967	104.15436	268.54614	10.79505	0.0902950	0.21188394	2.7865747	21	2 17.2	20.5
520802 2014 SP_{362}	17.2	X	193.74769	76.80961	326.97578	4.98914	0.1055649	0.23089932	2.6314045	21	5 1.7	21.3
520803 2014 SA_{363}	16.8	X	265.88626	47.96258	264.32179	14.20253	0.1329565	0.23355916	2.6113882	21	3 14.5	21.1
520804 2014 SG_{363}	17.0	X	50.89731	102.70680	58.53934	9.71536	0.0919499	0.22517552	2.6758099	21	4 12.3	20.2
520805 2014 TX_{29}	15.6	X	125.17351	249.68256	70.12729	18.16940	0.0851637	0.17153614	3.2079848	21	—	—
520806 2014 TK_{42}	16.7	X	110.51317	170.75782	189.44465	3.78891	0.1726576	0.18206300	3.0831046	21	—	—
520807 2014 TD_{63}	16.9	X	75.47291	223.15709	187.27112	1.81845	0.0607815	0.19429549	2.9523028	21	—	—
520808 2014 TF_{64}	20.1	X	131.36412	114.24387	217.97646	52.67140	0.4182051	0.48096050	1.6133544	21	—	—
520809 2014 TK_{87}	15.8	X	161.79719	225.75150	69.86860	24.45510	0.1392934	0.17547773	3.1597645	21	—	—
520810 2014 TQ_{90}	16.1	X	137.09874	24.20494	283.94216	7.35239	0.1653830	0.17743865	3.1364418	21	—	—
520811 2014 TP_{91}	17.2	X	239.44568	258.24450	246.84191	6.20233	0.0462278	0.29177908	2.2512995	21	11 22.6	19.6
520812 2014 TA_{92}	16.1	X	145.47880	12.06070	57.00365	10.98413	0.0892595	0.19703933	2.9248310	21	4 19.4	20.5
520813 2014 TB_{92}	16.7	X	156.39344	138.44756	205.94738	2.43777	0.0960430	0.19330803	2.9623483	21	1 16.3	21.0
520814 2014 TG_{92}	16.4	X	135.06320	148.85516	164.81058	9.85675	0.0700038	0.17490252	3.1666884	21	—	—
520815 2014 TL_{92}	16.1	X	325.38616	28.13377	142.03422	12.66624	0.0372033	0.18620771	3.0371828	21	—	—
520816 2014 TP_{92}	16.8	X	194.88192	256.48994	75.09213	3.10170	0.0442187	0.20026584	2.8933311	21	2 7.9	20.9
520817 2014 TD_{93}	17.0	X	178.83802	293.51453	138.63500	15.16055	0.0227109	0.22890182	2.6466909	21	5 27.0	21.0
520818 2014 TH_{93}	16.9	X	195.90432	87.60553	272.87237	5.20437	0.0396519	0.21787323	2.7352696	21	3 10.0	20.9
520819 2014 TQ_{94}	16.3	X	269.59702	176.67671	47.47081	10.78390	0.0590322	0.17374032	3.1807947	21	—	—
520820 2014 TW_{94}	16.8	X	342.76131	5.27884	260.85804	15.99778	0.1001829	0.23820597	2.5773157	21	5 7.4	19.9
520821 2014 TE_{95}	17.0	X	63.38300	3.04034	29.22539	3.30978	0.1762800	0.17212280	3.2006913	21	—	—
520822 2014 UJ_{8}	15.1	X	106.41681	93.36606	232.87721	20.02283	0.1306656	0.17060886	3.2195981	21	—	—
520823 2014 UQ_{118}	16.6	X	199.62435	117.88167	290.31843	13.39286	0.1033617	0.23710438	2.5852924	21	5 12.3	20.8
520824 2014 UQ_{201}	16.0	X	127.42128	260.56128	49.75486	16.06414	0.2620443	0.17815898	3.1279819	21	—	—
520825 2014 UB_{216}	16.0	X	102.16007	283.50418	79.87151	18.93590	0.3154244	0.18163851	3.0879061	21	1 10.6	20.4
520826 2014 UH_{216}	16.1	X	106.18056	245.69106	103.44100	16.66489	0.2485676	0.17640218	3.1487155	21	—	—
520827 2014 UU_{216}	15.5	X	132.66608	255.22199	68.00374	27.04624	0.1650537	0.17762571	3.1342394	21	—	—
520828 2014 UU_{232}	16.5	X	137.89262	110.08436	227.49058	9.51106	0.1912810	0.18272668	3.0756346	21	—	—
520829 2014 UC_{234}	16.7	X	241.48757	269.79043	335.30823	2.79593	0.0589938	0.18349837	3.0670056	21	—	—
520830 2014 UD_{234}	16.7	X	228.40158	352.71641	254.66317	4.55524	0.0426666	0.17880605	3.1204309	21	—	—
520831 2014 UN_{234}	17.0	X	51.35141	53.90022	53.97202	0.85443	0.1355749	0.18556403	3.0442024	21	2 8.7	20.5
520832 2014 UP_{234}	16.9	X	28.45936	45.07434	80.27856	5.99736	0.1179915	0.18566277	3.0431229	21	1 24.3	20.6
520833 2014 UT_{234}	17.1	X	109.89409	52.57290	47.24787	6.73987	0.0235082	0.21165378	2.7885945	21	4 4.7	20.9
520834 2014 UU_{234}	17.4	X	305.17617	259.68015	56.00114	7.06873	0.1821682	0.24270836	2.5453425	21	5 6.8	20.3
520835 2014 UA_{235}	16.9	X	94.21753	199.55187	205.02681	2.38742	0.1233926	0.18756310	3.0225335	21	1 20.9	20.9
520836 2014 UB_{235}	17.4	X	178.25024	274.97371	105.32841	4.58829	0.1032373	0.21228743	2.7830427	21	3 23.4	21.7
520837 2014 UK_{235}	16.9	X	84.86768	90.53996	293.16417	1.90350	0.0378858	0.17499635	3.1655564	21	—	—
520838 2014 UN_{235}	17.5	X	327.82253	218.69932	82.61950	2.98206	0.1382436	0.24466041	2.5317856	21	5 30.1	20.1
520839 2014 UU_{235}	17.0	X	143.27545	349.00164	20.97243	3.04368	0.1358045	0.19101017	2.9860590	21	2 7.9	21.4
520840 2014 UF_{236}	16.6	X	3.06157	75.88035	47.55934	9.35252	0.0404684	0.17847880	3.1242441	21	—	—
520841 2014 UT_{236}	17.8	X	177.33208	307.06228	274.00553	6.86544	0.0778824	0.29071801	2.2567741	21	12 10.9	20.9
520842 2014 UQ_{237}	18.2	X	245.83548	53.55560	83.25589	6.25202	0.0962401	0.28426867	2.2907800	21	11 12.3	20.8
520843 2014 UX_{237}	16.1	X	331.36913	51.45433	82.51832	11.72682	0.0263863	0.17345931	3.1842291	21	—	—
520844 2014 UZ_{237}	16.3	X	358.19108	6.87989	116.52198	9.09882	0.1458849	0.17462405	3.1700542	21	—	—
520845 2014 UA_{238}	17.0	X	187.88507	234.48153	160.26678	5.58930	0.0361736	0.22279829	2.6948100	21	4 17.2	20.7
520846 2014 UC_{238}	17.6	X	157.98603	358.78559	103.23660	6.19028	0.2125725	0.23105772	2.6302018	21	6 15.6	21.9
520847 2014 UP_{238}	16.6	X	295.89448	306.72140	253.85576	9.22767	0.0492342	0.18727744	3.0256062	21	—	—
520848 2014 UW_{238}	17.3	X	255.55962	30.29131	298.61491	4.35665	0.0649859	0.22499623	2.6772313	21	4 6.6	21.1
520849 2014 UX_{238}	16.2	X	218.65528	15.36638	261.95747	8.87717	0.0563243	0.18698153	3.0287975	21	1 1.0	20.7
520850 2014 UC_{239}	15.7	X	268.80468	321.78674	304.05641	8.20987	0.0418452	0.17731778	3.1378670	21	2 12.8	20.3
520851 2014 UD_{239}	16.5	X	94.11748	124.60959	68.43360	10.12298	0.1727544	0.21272075	2.7792619	21	8 7.7	20.7
520852 2014 UM_{239}	16.3	X	120.55237	194.39169	154.19816	12.25922	0.0719136	0.17812216	3.1284130	21	—	—
520853 2014 UN_{239}	15.8	X	53.79635	303.00227	100.62159	14.03259	0.0416596	0.17103913	3.2141962	21	—	—
520854 2014 UZ_{239}	16.7	X	39.33135	309.77186	170.67408	9.84855	0.1767019	0.18760600	3.0220727	21	2 3.9	20.1
520855 2014 UD_{240}	16.7	X	202.51841	40.42057	319.96892	8.25965	0.1085047	0.21503116	2.7593182	21	3 17.7	21.0
520856 2014 UO_{240}	16.6	X	138.42772	194.37112	125.90976	10.94561	0.1904845	0.18075779	3.0979283	21	—	—
520857 2014 UQ_{240}	16.5	X	168.32234	163.73697	159.35245	17.47493	0.1109850	0.18588772	3.0406674	21	1 6.2	21.4
520858 2014 US_{240}	18.2	X	257.25965	115.22816	8.66471	4.31659	0.0962584	0.27555048	2.3388477	21	11 6.4	20.9
520859 2014 VY	16.1	X	117.38667	289.41412	61.65971	16.78201	0.2141225	0.17520297	3.1630671	21	—	—
520860 2014 VZ_{6}	15.9	X	138.80190	76.31772	234.68950	11.46431	0.0576497	0.17375438	3.1806231	21	—	—
520861 2014 VE_{39}	16.2	X	177.96016	313.75107	78.30476	26.60049	0.1592089	0.21756412	2.7378598	21	4 20.5	21.1
520862 2014 WG_{7}	20.6	X	141.24585	251.18892	56.54826	35.34815	0.2954860	0.47482702	1.6272181	21	—	—
520863 2014 WB_{70}	16.8	X	286.17444	87.72610	312.53558	30.91736	0.1366280	0.24835881	2.5065883	21	8 10.8	19.9
520864 2014 WC_{90}	17.0	X	43.27271	92.54476	62.18919	12.47236	0.0729716	0.20649957	2.8348056	21	3 26.9	20.7
520865 2014 WG_{92}	16.4	X	249.24090	115.36301	124.18562	5.51870	0.0892597	0.17912136	3.1167680	21	—	—
520866 2014 WO_{101}	16.4	X	270.44706	113.05592	112.04851	7.52457	0.0883668	0.18113218	3.0936580	21	—	—
520867 2014 WB_{105}	16.5	X	188.26999	240.62786	41.06933	4.16090	0.1836030	0.19160876	2.9798367	21	—	—
520868 2014 WS_{124}	15.8	X	266.11682	208.16788	54.03731	10.38981	0.0309053	0.19053749	2.9909954	21	2 9.9	20.2
520869 2014 WJ_{162}	16.4	X	331.93750	359.59972	252.64339	11.33200	0.0690028	0.21846316	2.7303432	21	4 4.4	20.2
520870 2014 WB_{177}	16.7	X	178.84760	115.32626	196.68090	9.57163	0.1017954	0.19210227	2.9747312	21	1 1.3	21.4
520871 2014 WO_{207}	17.2	X	246.37895	275.17987	43.76074	4.39385	0.1964978	0.21953599	2.7214409	21	3 9.6	21.6
520872 2014 WP_{233}	15.8	X	220.75026	212.85825	46.57061	13.02642	0.0312900	0.19277606	2.9677956	21	—	—
520873 2014 WY_{277}	16.2	X	132.57120	239.28690	93.51481	20.05437	0.2601718	0.17702077	3.1413758	21	—	—
520874 2014 WG_{299}	16.8	X	260.24452	55.08581	257.66543	11.61453	0.1628081	0.23136255	2.6278910	21	3 8.2	21.1
520875 2014 WV_{311}	17.2	X	257.43490	358.37579	343.74298	5.62038	0.0463162	0.22282424	2.6946007	21	4 28.6	21.0
520876 2014 WS_{413}	15.9	X	156.57985	235.13292	108.97782	9.68087	0.1451704	0.18502906	3.0500673	21	1 22.9	20.7
520877 2014 WP_{497}	17.5	X	129.31641	213.08951	212.40073	1.32819	0.0538842	0.20297380	2.8675394	21	3 19.0	21.4
520878 2014 WS_{500}	16.1	X	86.72519	248.85418	129.43675	13.59342	0.2037186	0.17837523	3.1254533	21	—	—
520879 2014 WN_{501}	15.7	X	84.12460	301.17300	75.79115	19.53017	0.0705823	0.17102084	3.2144255	21	—	—
520880 2014 WV_{503}	16.9	X	204.72432	200.76232	170.90912	6.17659	0.0837002	0.22224921	2.6992466	21	4 6.6	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520881 2014 WO_{518}	18.1	X	295.02814	264.14943	151.74959	7.88346	0.0938339	0.26339714	2.4102496	21	10 1.3	20.8
520882 2014 WR_{522}	15.7	X	124.34808	227.61040	89.52381	28.76991	0.2254178	0.17426065	3.1744598	21	—	—
520883 2014 WV_{522}	17.4	X	249.85018	303.00639	11.55671	1.94183	0.0623133	0.21598267	2.7512081	21	3 16.6	21.5
520884 2014 WB_{523}	17.6	X	150.67350	87.36171	1.51886	1.73274	0.0459476	0.22070318	2.7118375	21	5 11.2	21.4
520885 2014 WE_{523}	17.3	X	213.06921	257.26486	71.92390	3.02714	0.0748103	0.20063520	2.8897790	21	2 25.1	21.6
520886 2014 WQ_{523}	18.2	X	296.02049	311.99332	93.60054	3.89092	0.0847102	0.26375988	2.4080393	21	9 19.1	20.9
520887 2014 WG_{524}	16.7	X	167.10565	234.55007	273.84810	15.77069	0.0771747	0.24211144	2.5495244	21	8 13.0	20.8
520888 2014 WH_{524}	16.9	X	157.77453	220.05651	283.40702	8.76503	0.0959630	0.23524658	2.5988856	21	8 1.3	20.9
520889 2014 WP_{524}	18.2	X	288.90783	75.58699	48.66152	8.13570	0.0522299	0.28928153	2.2642389	21	—	—
520890 2014 WG_{525}	16.7	X	269.73367	191.02435	133.72208	9.80190	0.1526043	0.22471641	2.6794533	21	4 13.9	20.8
520891 2014 WS_{525}	17.1	X	202.43938	217.56765	157.61409	14.71181	0.1045364	0.21245247	2.7816012	21	4 11.9	21.5
520892 2014 WX_{525}	16.3	X	214.17063	172.69681	135.24678	15.60527	0.0152417	0.18546730	3.0452608	21	2 2.5	20.7
520893 2014 WA_{526}	17.2	X	151.35633	339.09789	142.69633	14.18415	0.1132182	0.22777319	2.6554267	21	6 29.8	21.4
520894 2014 WU_{526}	17.9	X	297.11115	93.96268	9.70820	6.95250	0.0634499	0.27550930	2.3390807	21	12 14.8	20.5
520895 2014 WX_{526}	15.5	X	180.08875	236.14007	90.69835	17.73537	0.2249157	0.17508262	3.1645165	21	1 30.8	21.0
520896 2014 WA_{527}	18.3	X	313.02447	126.78540	2.35064	4.75187	0.0810821	0.29014362	2.2597516	21	—	—
520897 2014 WD_{527}	16.2	X	129.17569	1.26282	43.18596	9.93779	0.0724476	0.17991766	3.1075648	21	3 3.9	20.8
520898 2014 WE_{527}	16.4	X	190.35133	286.08875	51.94181	9.88807	0.0649300	0.17676110	3.1444516	21	2 18.4	21.3
520899 2014 WN_{527}	17.4	X	235.97997	119.07619	343.99554	10.05368	0.1045707	0.24683295	2.5169078	21	9 6.6	20.8
520900 2014 WT_{527}	18.1	X	264.35566	152.30288	352.59808	7.40317	0.0558317	0.27414898	2.3468120	21	12 23.3	20.9
520901 2014 WU_{527}	17.1	X	210.51889	39.79461	26.58467	5.41469	0.1910924	0.22549173	2.6733078	21	6 15.5	21.5
520902 2014 WV_{527}	16.3	X	140.30096	342.91613	42.24745	9.90407	0.0806298	0.17507589	3.1645976	21	2 22.8	21.1
520903 2014 WW_{527}	17.5	X	250.24594	105.84130	331.62173	13.11342	0.0906336	0.24346019	2.5400996	21	8 22.9	21.0
520904 2014 WM_{528}	17.5	X	251.05379	331.60070	348.94334	6.13937	0.0571963	0.21201194	2.7854530	21	3 25.1	21.6
520905 2014 WY_{528}	16.5	X	148.45865	43.69189	36.70601	10.67171	0.1342744	0.19737373	2.9215264	21	5 6.3	20.9
520906 2014 WE_{529}	17.1	X	139.14800	293.32861	191.34400	21.62560	0.0597635	0.22325500	2.6911336	21	6 14.9	21.4
520907 2014 WP_{529}	17.1	X	159.93304	317.37596	63.79688	5.02832	0.0712094	0.20122670	2.8841133	21	3 4.6	21.4
520908 2014 WQ_{529}	18.5	X	233.66391	22.25745	100.26420	6.02792	0.0651151	0.26685491	2.3893838	21	10 11.0	21.6
520909 2014 WZ_{529}	16.0	X	59.51893	279.84473	199.79030	9.96892	0.0698019	0.17757097	3.1348835	21	2 28.4	20.2
520910 2014 WA_{530}	16.1	X	92.22035	301.99724	240.96746	15.27975	0.1184354	0.20979815	2.8050135	21	7 9.2	20.2
520911 2014 WE_{530}	16.7	X	229.99035	318.70345	26.44838	11.21702	0.1960873	0.21932066	2.7232218	21	3 27.6	21.2
520912 2014 WG_{530}	17.3	X	148.54859	211.86218	316.98692	7.73942	0.0713033	0.24746272	2.5126357	21	8 24.7	20.8
520913 2014 WJ_{530}	17.1	X	179.87180	286.63116	166.11097	14.66895	0.0647977	0.23295970	2.6158661	21	6 21.8	21.2
520914 2014 WM_{530}	17.0	X	146.46774	347.04506	177.00862	10.20147	0.1072542	0.22113743	2.7082861	21	8 15.7	21.2
520915 2014 WY_{530}	15.8	X	185.86761	208.86181	103.49021	19.58684	0.1788243	0.18451209	3.0557618	21	1 14.2	20.9
520916 2014 WC_{531}	17.5	X	202.26031	342.76934	125.92328	8.93599	0.1063214	0.24396406	2.5366009	21	8 6.1	21.1
520917 2014 WG_{531}	16.8	X	289.65763	260.66720	73.52439	7.40194	0.0595652	0.22301617	2.6930545	21	5 30.9	20.3
520918 2014 WH_{531}	16.4	X	93.24008	354.45154	70.36929	4.47253	0.0297439	0.17650948	3.1474392	21	2 4.8	20.9
520919 2014 WK_{531}	17.4	X	341.30558	56.19504	292.67165	5.51622	0.1147376	0.25271088	2.4777268	21	9 6.1	19.9
520920 2014 WQ_{531}	16.3	X	316.85648	235.82486	330.40177	16.35300	0.1107646	0.17322277	3.1871272	21	1 25.8	20.8
520921 2014 WB_{532}	16.5	X	90.29527	258.34093	199.34322	5.44527	0.1686573	0.18176036	3.0865259	21	3 30.1	20.6
520922 2014 WQ_{532}	16.7	X	201.13560	323.12697	339.82313	8.89217	0.0682241	0.18365144	3.0653012	21	1 15.9	21.5
520923 2014 WV_{532}	16.0	X	302.62822	170.93273	104.69756	10.34063	0.0094575	0.18390207	3.0625156	21	4 16.9	20.4
520924 2014 WW_{532}	16.5	X	99.67393	301.62853	251.05889	11.47640	0.0537314	0.21393527	2.7687333	21	7 22.4	20.5
520925 2014 WL_{533}	16.1	X	287.80075	76.77291	159.26977	10.41022	0.0771466	0.18153966	3.0890270	21	1 25.3	20.7
520926 2014 WS_{533}	17.4	X	90.36699	119.79150	146.86311	15.51086	0.1049802	0.24265960	2.5456834	21	11 2.8	21.4
520927 2014 WA_{534}	18.2	X	292.02439	131.95163	279.38435	4.89666	0.0986416	0.26229922	2.4169707	21	9 13.3	20.9
520928 2014 WD_{534}	16.7	X	108.02032	306.51373	243.73123	8.62725	0.0827064	0.22643541	2.6658752	21	8 2.9	20.7
520929 2014 WN_{534}	16.8	X	322.13546	22.37544	30.17865	6.72726	0.1077027	0.25436620	2.4669657	21	11 6.8	19.3
520930 2014 WX_{534}	16.1	X	128.92280	0.37061	32.14430	10.14787	0.0931338	0.17913526	3.1166067	21	2 19.8	20.8
520931 2014 WC_{535}	15.9	X	138.81832	309.62472	108.28322	17.27541	0.1090942	0.17285149	3.1916895	21	4 8.0	21.1
520932 2014 XT_{42}	16.5	X	2.31660	196.75273	351.11617	12.81041	0.0623327	0.18304697	3.0720458	21	3 6.9	20.6
520933 2014 XV_{42}	16.1	X	5.24811	189.34697	347.85288	16.56553	0.1623418	0.17492731	3.1663892	21	2 23.5	19.8
520934 2014 XY_{42}	16.6	X	96.53259	42.74001	32.54554	12.58834	0.0479517	0.17947050	3.1127244	21	2 28.1	21.1
520935 2014 XZ_{42}	17.3	X	236.27925	140.43731	2.64785	12.57287	0.0605618	0.26296533	2.4128874	21	11 3.5	20.5
520936 2014 XD_{43}	16.4	X	77.62140	17.55064	268.58754	12.89260	0.1464986	0.24665828	2.5180958	21	11 11.3	20.2
520937 2014 XG_{43}	16.9	X	149.51549	299.78736	266.53080	14.13942	0.0647042	0.24317563	2.5420808	21	10 8.4	20.9
520938 2014 XH_{43}	16.6	X	139.03683	39.36364	179.40796	13.73823	0.1039965	0.24316470	2.5421570	21	10 22.2	20.5
520939 2014 XM_{43}	16.2	X	356.08336	144.91802	96.55403	11.08558	0.0529651	0.19194460	2.9763600	21	5 8.6	20.2
520940 2014 XN_{43}	16.9	X	188.87380	298.59087	191.88548	12.27761	0.1468588	0.22549134	2.6733109	21	8 14.5	21.3
520941 2014 XR_{43}	16.5	X	77.02324	254.32822	186.86767	18.05578	0.0983358	0.18051518	3.1007034	21	2 6.9	20.8
520942 2014 XS_{43}	17.5	X	312.18049	258.04070	77.94267	5.41291	0.0904987	0.24103241	2.5571277	21	6 30.6	20.5
520943 2014 XT_{43}	17.4	X	13.76087	255.22546	73.94925	8.20996	0.1344756	0.26649237	2.3915504	21	10 19.2	19.9
520944 2014 XU_{43}	16.3	X	172.36820	279.13782	63.78283	4.68233	0.1970538	0.19174072	2.9784694	21	2 8.4	21.2
520945 2014 YJ_{2}	18.0	X	273.24843	261.66191	124.41192	25.13982	0.0938449	0.38220509	1.8804931	21	7 15.3	19.5
520946 2014 YH_{15}	19.0	X	68.42726	213.38401	62.21995	22.70195	0.0927673	0.40566572	1.8072733	21	11 10.5	20.8
520947 2014 YG_{16}	16.3	X	52.97869	355.43967	129.51926	2.42278	0.1444505	0.17636819	3.1491200	21	3 8.6	19.9
520948 2014 YP_{50}	18.4	X	299.30439	203.71479	162.39767	23.37506	0.0573565	0.38150474	1.8827938	21	8 1.9	20.4
520949 2014 YA_{58}	15.7	X	49.51570	226.14296	216.52755	15.63000	0.1034991	0.15462137	3.4378719	21	1 7.4	20.4
520950 2014 YL_{58}	16.8	X	251.36117	255.62649	178.07293	21.87038	0.1257588	0.23708656	2.5854219	21	8 10.4	20.8
520951 2014 YO_{58}	17.0	X	11.67996	33.80106	177.17070	1.94402	0.0125149	0.19559096	2.9392523	21	4 17.7	20.8
520952 2014 YQ_{58}	16.8	X	7.07451	108.69208	114.15246	5.30788	0.0706996	0.19650056	2.9301748	21	4 27.7	20.5
520953 2014 YU_{58}	17.8	X	334.35696	76.17869	300.92659	8.44784	0.1248136	0.25421415	2.4679493	21	10 3.3	20.4
520954 2014 YV_{58}	18.0	X	278.57385	54.94043	118.65923	4.00001	0.0450061	0.29014338	2.2597528	21	—	—
520955 2014 YX_{58}	16.9	X	22.03686	286.39642	340.14381	11.80757	0.1214756	0.23164690	2.6257400	21	7 26.2	19.9
520956 2014 YD_{59}	17.3	X	213.85772	317.53446	74.87949	7.31531	0.0512521	0.20998370	2.8033608	21	5 15.1	21.4
520957 2014 YN_{59}	16.9	X	44.17444	353.25258	284.95167	12.17998	0.1613544	0.23552664	2.5968251	21	9 14.3	20.3
520958 2014 YO_{59}	16.9	X	145.30411	342.53104	129.92191	5.31137	0.0244097	0.21123151	2.7923097	21	6 4.5	20.9
520959 2014 YP_{59}	17.9	X	199.79762	104.28495	114.08826	7.56229	0.0619555	0.27630551	2.3345850	21	—	—
520960 2014 YV_{59}	16.8	X	342.66078	0.61563	319.06705	11.27242	0.1946670	0.23258537	2.6186721	21	7 24.6	19.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
520961 2014 YP_{60}	17.3	X	246.64940	344.88400	8.73604	1.85101	0.0851600	0.20521252	2.8466461	21	4 29.4	21.4
520962 2014 YU_{60}	16.8	X	305.10589	6.32702	284.60507	13.97543	0.1166603	0.20333310	2.8641603	21	4 9.9	21.0
520963 2014 YV_{60}	17.4	X	87.47752	47.82434	127.94318	3.02600	0.0674525	0.21154077	2.7895875	21	6 19.0	21.1
520964 2014 YA_{61}	16.7	X	90.31947	179.28380	77.51480	15.13752	0.2109152	0.23190794	2.6237692	21	10 31.4	21.0
520965 2014 YM_{61}	17.2	X	243.11482	41.67605	342.39735	6.34229	0.0844432	0.22292979	2.6937502	21	6 2.0	21.2
520966 2014 YO_{61}	16.8	X	264.42104	263.27725	88.83036	14.20475	0.1367941	0.21995577	2.7179772	21	5 15.1	20.9
520967 2014 YT_{61}	16.4	X	142.55836	30.09206	352.07679	19.40144	0.0992629	0.17429815	3.1740045	21	2 23.6	21.2
520968 2014 YU_{62}	16.6	X	247.81157	340.52771	21.84197	9.75564	0.2445823	0.21858843	2.7292999	21	4 25.6	21.3
520969 2014 YA_{63}	16.2	X	231.58578	269.78511	121.25153	13.87558	0.1240614	0.20005060	2.8954060	21	5 30.7	20.8
520970 2014 YC_{63}	16.9	X	120.07639	166.02978	95.50428	14.76954	0.1507294	0.24011363	2.5636467	21	11 27.4	21.1
520971 2014 YG_{63}	16.9	X	123.58209	241.42508	64.68590	10.20719	0.0923736	0.26304511	2.4123995	21	—	—
520972 2014 YM_{63}	16.5	X	36.00714	310.00852	23.12814	15.03029	0.0812405	0.23795496	2.5791279	21	11 7.7	19.9
520973 2014 YN_{63}	16.0	X	303.24619	242.23901	35.68939	16.32345	0.0637832	0.17143924	3.2091935	21	4 12.1	20.5
520974 2014 YS_{63}	17.4	X	216.19224	151.76056	58.55103	9.97100	0.1014685	0.26069481	2.4268772	21	—	—
520975 2014 YU_{63}	18.1	X	2.11921	64.70499	12.82408	7.01575	0.0793575	0.29002991	2.2603422	21	—	—
520976 2015 AV_{1}	15.9	X	145.07918	214.51669	108.55747	28.54627	0.1633323	0.17492815	3.1663791	21	—	—
520977 2015 AF_{3}	15.8	X	122.01540	234.01141	90.85485	28.12671	0.2548229	0.17212985	3.2006038	21	—	—
520978 2015 AT_{35}	14.9	X	50.18682	246.37701	99.90569	6.16044	0.1084585	0.12490214	3.9635967	21	11 30.1	20.4
520979 2015 AC_{285}	16.7	X	146.13275	205.69819	308.20140	14.55539	0.1832446	0.22739359	2.6583811	21	8 7.1	21.0
520980 2015 AE_{285}	16.8	X	91.30637	229.97014	1.14441	12.93248	0.2074189	0.22766320	2.6562819	21	9 24.2	20.7
520981 2015 AJ_{285}	17.1	X	164.26732	128.54923	331.54449	26.57232	0.2205107	0.21652475	2.7466144	21	6 22.2	22.3
520982 2015 AN_{285}	17.0	X	76.67181	164.41930	45.87635	10.14280	0.1202547	0.21849661	2.7300646	21	8 1.9	20.8
520983 2015 AR_{285}	17.4	X	322.19638	314.28898	82.63029	16.71270	0.0457667	0.25161447	2.4849194	21	10 26.6	20.7
520984 2015 AS_{285}	18.1	X	250.22867	347.97112	154.76054	1.95446	0.0887293	0.26644413	2.3918390	21	11 23.5	20.8
520985 2015 AE_{286}	16.7	X	73.47012	260.42342	207.30995	8.95491	0.0626690	0.17444725	3.1721956	21	3 4.3	21.1
520986 2015 AH_{286}	16.8	X	138.80394	264.51330	274.11287	12.76455	0.0714074	0.22821608	2.6519900	21	8 20.3	20.9
520987 2015 AJ_{286}	16.6	X	207.42818	136.37484	213.64458	9.25454	0.0642855	0.18118524	3.0930540	21	3 14.9	21.4
520988 2015 AN_{286}	17.2	X	96.89942	330.10553	195.78878	5.68484	0.0294476	0.20567816	2.8423481	21	6 12.9	21.2
520989 2015 AP_{286}	17.1	X	293.12607	77.24576	269.53800	5.07265	0.0554789	0.21356928	2.7718956	21	6 22.7	20.8
520990 2015 AY_{286}	17.3	X	153.54940	105.81011	26.31007	9.36236	0.1081656	0.21681481	2.7441641	21	7 16.9	21.6
520991 2015 AZ_{286}	17.3	X	118.24001	185.72711	55.28510	12.79563	0.1309684	0.23982517	2.5657020	21	10 30.2	21.3
520992 2015 BM_{3}	18.3	X	300.94263	273.82500	105.18999	23.37759	0.0786538	0.39427843	1.8419056	21	9 10.0	20.2
520993 2015 BB_{302}	18.1	X	216.32230	297.99658	142.98996	25.48903	0.0681663	0.36654398	1.9336832	21	7 21.1	20.5
520994 2015 BD_{311}	18.9	X	43.09093	175.98985	92.57787	22.54579	0.0491150	0.38636932	1.8669569	21	9 17.3	21.3
520995 2015 BJ_{325}	16.9	X	329.71131	251.37640	57.19947	4.65550	0.0864040	0.21348814	2.7725978	21	6 20.5	20.2
520996 2015 BB_{373}	17.5	X	286.63047	329.76550	352.36653	2.91929	0.0935259	0.21276758	2.7788541	21	5 4.8	21.4
520997 2015 BG_{514}	17.9	X	98.25121	67.69099	171.21678	23.63123	0.0471854	0.39246655	1.8475702	21	10 17.6	19.9
520998 2015 BQ_{514}	18.6	X	270.09335	244.95765	170.28875	23.02435	0.0928572	0.39395512	1.8429132	21	8 29.2	20.1
520999 2015 BJ_{515}	17.8	X	340.26804	262.65126	91.75434	24.53626	0.0771419	0.38954776	1.8567877	21	10 27.4	20.0
521000 2015 BD_{520}	18.1	X	165.11976	335.92326	144.06847	23.99595	0.0664034	0.36047603	1.9553228	21	7 11.9	20.8
521001 2015 BV_{545}	16.2	X	241.96797	7.63676	356.59913	10.08913	0.0798098	0.18199697	3.0838502	21	5 6.4	20.9
521002 2015 BU_{546}	17.4	X	41.42864	20.23514	247.70158	4.23598	0.0096220	0.22561433	2.6723393	21	8 9.6	21.0
521003 2015 BE_{547}	16.2	X	131.02090	147.55514	328.20385	8.79693	0.0376958	0.18639116	3.0351897	21	5 21.2	20.7
521004 2015 BT_{547}	16.0	X	204.88205	313.71506	22.51476	8.53563	0.3170128	0.19882951	2.9072485	21	2 27.5	21.4
521005 2015 BS_{552}	17.1	X	329.89061	65.97906	189.49777	4.90457	0.1157398	0.18771655	3.0208861	21	4 8.5	20.8
521006 2015 CV_{36}	15.7	X	215.43981	246.44496	100.33783	12.50104	0.0191731	0.18463554	3.0543996	21	3 29.6	20.3
521007 2015 CD_{65}	16.8	X	104.04318	54.27562	20.99671	3.64807	0.1779882	0.17634074	3.1494468	21	3 22.4	21.3
521008 2015 CW_{65}	17.5	X	168.33882	248.74930	325.91566	7.06996	0.0385881	0.25414415	2.4684025	21	11 16.1	21.0
521009 2015 CW_{66}	15.6	X	265.76867	327.66473	348.47831	11.74310	0.1236933	0.17114734	3.2128414	21	3 31.3	20.5
521010 2015 CB_{67}	17.2	X	259.57024	78.31298	341.95359	11.17872	0.1256513	0.23273683	2.6175358	21	8 8.4	20.8
521011 2015 CM_{67}	17.1	X	248.02839	265.83378	117.03354	7.07766	0.1092992	0.21630856	2.7484441	21	6 5.8	21.1
521012 2015 CS_{67}	16.8	X	96.67396	135.56865	120.34124	13.53823	0.1289187	0.24332518	2.5410391	21	10 30.5	20.8
521013 2015 CC_{68}	15.8	X	268.57396	3.28049	278.25900	8.59574	0.0287282	0.17804649	3.1292993	21	3 2.1	20.4
521014 2015 CD_{68}	16.0	X	177.55544	70.35871	322.01313	15.21618	0.1225733	0.18572358	3.0424587	21	3 30.8	21.1
521015 2015 CF_{68}	16.8	X	100.28793	312.75659	158.19809	14.39586	0.0172056	0.17971236	3.1099310	21	4 10.7	21.3
521016 2015 CG_{68}	17.9	X	7.32576	187.54345	126.87785	3.14750	0.0757513	0.23040618	2.6351578	21	9 1.9	21.0
521017 2015 CK_{68}	16.4	X	308.52919	221.27601	73.40058	4.58164	0.0886748	0.18986096	2.9980964	21	5 3.1	20.4
521018 2015 CM_{68}	17.4	X	226.67946	268.96032	176.72852	1.81893	0.0628902	0.22419735	2.6835873	21	8 6.2	21.1
521019 2015 CO_{68}	16.8	X	350.84804	83.08917	150.26057	9.80172	0.0396188	0.18153671	3.0890604	21	4 21.8	21.0
521020 2015 CP_{68}	16.9	X	219.28321	255.01183	161.51436	9.42622	0.1516839	0.21073388	2.7967038	21	6 14.7	21.5
521021 2015 CS_{68}	16.5	X	63.89081	340.84796	164.90945	9.61629	0.0419117	0.17643176	3.1483635	21	4 9.9	20.8
521022 2015 CT_{68}	16.2	X	355.00928	74.91301	127.82658	3.62006	0.0240686	0.16932571	3.2358431	21	3 20.4	20.6
521023 2015 CB_{69}	16.6	X	69.36373	87.60184	163.95514	14.92904	0.1309162	0.21308663	2.7760796	21	9 14.6	20.2
521024 2015 CN_{69}	16.3	X	202.62520	37.49403	74.49921	22.62497	0.0430255	0.22689943	2.6622394	21	8 22.9	20.5
521025 2015 CR_{69}	17.1	X	29.54280	205.04843	74.14844	9.74838	0.0957878	0.22386648	2.6862309	21	8 24.5	20.5
521026 2015 CU_{69}	17.1	X	30.48430	214.60082	94.65219	13.66283	0.0966271	0.23800794	2.5787451	21	10 12.3	20.5
521027 2015 CB_{70}	16.6	X	285.42340	336.91670	350.81829	12.86557	0.1062592	0.19976990	2.8981177	21	5 5.4	20.9
521028 2015 CG_{70}	16.9	X	234.30556	147.65715	284.80194	5.65426	0.0441249	0.22039505	2.7143644	21	7 30.7	20.7
521029 2015 CJ_{70}	16.9	X	72.87475	111.04811	162.91149	8.08417	0.1572614	0.22960847	2.6412577	21	10 25.0	20.7
521030 2015 CL_{70}	16.6	X	224.35015	226.39283	185.61262	5.78086	0.0514155	0.21093283	2.7949450	21	6 21.1	20.7
521031 2015 CO_{70}	16.1	X	309.46888	133.86904	144.01996	11.04578	0.0381218	0.17948237	3.1125871	21	4 23.9	20.5
521032 2015 CP_{70}	17.3	X	257.82976	291.21084	172.85410	14.89403	0.0851337	0.23730053	2.5838676	21	10 10.3	20.7
521033 2015 CR_{70}	16.3	X	347.64082	298.67570	309.00576	0.20331	0.1474109	0.17380366	3.1800218	21	4 24.7	20.1
521034 2015 DJ_{20}	16.1	X	205.86234	320.27959	29.68416	8.09020	0.2098198	0.17420832	3.1750955	21	3 17.5	21.5
521035 2015 DS_{176}	17.4	X	326.99746	282.66181	131.19952	7.04723	0.1263219	0.26863835	2.3787970	21	11 24.6	19.7
521036 2015 DP_{198}	18.8	X	290.60567	193.17683	166.87152	24.22408	0.0711021	0.37048773	1.9199363	21	7 4.7	21.4
521037 2015 DX_{215}	18.2	X	289.62244	271.21812	127.39011	24.99649	0.0969117	0.38983203	1.8558849	21	9 15.8	20.0
521038 2015 DA_{232}	16.3	X	82.87705	202.22713	273.22098	3.98391	0.0545114	0.16912703	3.2383767	21	3 26.1	20.9
521039 2015 DC_{234}	16.9	X	282.96631	51.10425	308.16634	1.07466	0.0824925	0.20341041	2.8634346	21	6 21.5	20.8
521040 2015 DF_{235}	16.4	X	124.75031	125.49616	324.78190	9.84784	0.0864209	0.19026277	2.9938739	21	4 14.7	21.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521041 2015 DG_{235}	18.4	X	176.84898	257.32472	331.03862	1.91374	0.1383181	0.26491178	2.4010537	21	12 10.5	22.1
521042 2015 DT_{235}	17.0	X	20.17558	235.22956	106.32393	4.42858	0.1949987	0.24005045	2.5640965	21	11 18.2	19.8
521043 2015 DU_{235}	17.1	X	189.07852	353.22865	69.07238	3.33572	0.0508029	0.19505996	2.9445841	21	5 24.5	21.5
521044 2015 DV_{235}	17.0	X	12.29952	200.24060	111.15413	6.15077	0.0570971	0.22199883	2.7012758	21	9 4.9	20.3
521045 2015 DX_{235}	17.0	X	280.68192	314.21046	41.37837	7.48961	0.0768256	0.20410559	2.8569290	21	6 13.7	21.0
521046 2015 DD_{236}	17.8	X	347.42606	7.86675	38.30014	7.67764	0.0870647	0.25761450	2.4461843	21	12 11.4	20.6
521047 2015 DG_{236}	17.6	X	136.40666	311.29050	282.37227	4.23975	0.1176828	0.24033757	2.5620539	21	11 3.6	21.5
521048 2015 DH_{236}	16.1	X	310.64883	17.23396	291.58828	6.07690	0.0616651	0.19562819	2.9388793	21	5 26.2	20.0
521049 2015 DL_{236}	16.2	X	246.10499	161.42495	157.52242	8.97905	0.0771628	0.17136076	3.2101732	21	3 23.0	21.0
521050 2015 DO_{236}	17.5	X	44.66294	314.03559	355.10325	2.25664	0.1121076	0.23450679	2.6043485	21	10 25.9	20.7
521051 2015 DS_{236}	16.4	X	358.05509	82.11918	164.73668	11.15270	0.0911225	0.18562344	3.0435528	21	5 16.6	20.3
521052 2015 DV_{236}	17.4	X	88.30908	84.84569	165.40693	5.31382	0.0570324	0.22636983	2.6663901	21	9 27.7	21.0
521053 2015 DA_{237}	17.1	X	125.01733	203.63813	356.66312	7.75500	0.0572956	0.22213296	2.7001883	21	9 7.2	20.9
521054 2015 DC_{237}	17.8	X	246.21828	116.17228	7.09616	3.51565	0.0298812	0.24490040	2.5301313	21	10 26.8	21.0
521055 2015 DE_{237}	16.9	X	291.10661	211.82964	134.50460	2.94604	0.0783176	0.20351312	2.8624711	21	6 16.1	20.6
521056 2015 DJ_{237}	17.5	X	313.15596	353.44253	24.25095	5.56355	0.0378627	0.22725327	2.6594752	21	9 7.5	20.8
521057 2015 DK_{237}	17.4	X	100.55658	127.67638	84.53535	3.62117	0.0360170	0.21681301	2.7441794	21	8 21.0	21.2
521058 2015 DZ_{237}	17.6	X	268.10294	200.46190	261.24916	3.81782	0.0494348	0.24297069	2.5435101	21	10 23.9	20.7
521059 2015 DA_{238}	18.4	X	303.86616	229.89069	310.61054	6.48623	0.0500445	0.28973593	2.2618709	21	—	—
521060 2015 DC_{238}	16.9	X	258.48195	152.54979	199.63574	8.40376	0.0158248	0.18786016	3.0193463	21	5 22.9	21.2
521061 2015 DJ_{238}	17.0	X	13.67997	85.29506	217.99504	2.80550	0.0803769	0.21077974	2.7962981	21	8 23.9	20.5
521062 2015 DL_{238}	16.5	X	322.23784	332.74456	330.61797	3.05722	0.1241758	0.18652938	3.0336902	21	5 28.3	20.2
521063 2015 DN_{238}	17.5	X	211.52411	273.21362	200.52905	1.39664	0.0276272	0.22007947	2.7169587	21	8 28.0	21.2
521064 2015 DO_{238}	16.7	X	250.20105	222.20782	177.01656	5.81638	0.0814454	0.20557591	2.8432905	21	7 1.9	20.9
521065 2015 DU_{238}	17.4	X	28.56141	176.95966	167.95798	5.18460	0.0954385	0.23678697	2.5876022	21	11 19.7	20.6
521066 2015 DB_{239}	18.4	X	279.57586	150.48733	10.94391	1.25787	0.1147105	0.27224004	2.3577697	21	—	—
521067 2015 DG_{239}	17.5	X	354.29858	8.36877	326.68374	5.19879	0.0142031	0.22012213	2.7166076	21	9 5.2	21.0
521068 2015 DH_{239}	16.5	X	265.61832	157.63983	196.65938	9.18011	0.0831432	0.18955063	3.0013678	21	5 25.3	20.9
521069 2015 DJ_{239}	17.9	X	124.59753	108.39931	210.14011	3.96963	0.1066676	0.26564175	2.3966530	21	—	—
521070 2015 DK_{239}	17.4	X	252.35894	129.48112	323.90803	3.75791	0.0258172	0.22837760	2.6507395	21	9 23.2	20.8
521071 2015 DL_{239}	17.7	X	324.09405	65.37769	7.57347	5.65806	0.1101354	0.25385551	2.4702732	21	12 9.7	20.3
521072 2015 DP_{239}	15.8	X	86.92124	60.04754	95.97687	18.61890	0.0664407	0.17480244	3.1678970	21	5 28.4	20.4
521073 2015 DQ_{239}	17.2	X	109.26441	128.99328	136.45178	14.90087	0.0834014	0.22624510	2.6673700	21	11 17.4	21.4
521074 2015 DR_{239}	17.1	X	169.27484	122.58906	87.73467	13.90470	0.0717179	0.23177937	2.6247395	21	11 13.2	21.1
521075 2015 DT_{239}	16.4	X	9.31018	141.26171	126.62770	15.25909	0.1848668	0.18078691	3.0975957	21	7 3.4	19.8
521076 2015 DG_{240}	17.2	X	325.49283	359.32162	80.00312	7.22610	0.0713941	0.25931756	2.4354624	21	12 22.4	19.7
521077 2015 DK_{240}	16.6	X	325.48363	259.55315	101.67565	11.91556	0.0328707	0.21814634	2.7329861	21	9 5.1	20.3
521078 2015 DL_{240}	16.8	X	56.50557	219.30830	69.71646	12.77677	0.0796576	0.22078571	2.7111617	21	10 15.5	20.6
521079 2015 DM_{240}	17.2	X	253.00244	29.00333	16.65196	6.59742	0.0740943	0.21789588	2.7350800	21	7 17.2	21.1
521080 2015 DY_{240}	16.2	X	321.11789	176.08072	117.77816	12.12000	0.0586504	0.19220923	2.9736275	21	5 25.9	20.3
521081 2015 DB_{241}	16.8	X	106.81709	121.97426	97.43750	10.46711	0.0208639	0.23062408	2.6334977	21	9 10.3	20.5
521082 2015 DF_{241}	17.9	X	198.01975	335.49332	228.10322	12.47977	0.1494263	0.25817304	2.4426549	21	11 29.5	21.6
521083 2015 DJ_{241}	17.0	X	136.60536	297.92630	224.50992	11.20234	0.0444525	0.21984451	2.7188942	21	7 27.2	21.1
521084 2015 DK_{241}	16.6	X	38.70304	189.10816	161.23876	11.99944	0.1044184	0.24545661	2.5263076	21	12 13.8	20.1
521085 2015 DQ_{241}	16.7	X	2.31014	230.59230	71.97864	16.11821	0.1439717	0.20117700	2.8845882	21	8 13.2	20.2
521086 2015 DR_{241}	16.8	X	33.32297	183.11203	81.54228	16.77325	0.1642322	0.19732040	2.9220528	21	8 18.8	20.6
521087 2015 DW_{241}	16.6	X	245.66908	51.73482	40.43976	22.45555	0.0324021	0.22459652	2.6804067	21	9 25.4	20.6
521088 2015 DY_{241}	17.1	X	57.00351	70.34683	125.54786	5.90721	0.1165651	0.18821895	3.0155080	21	6 11.5	21.0
521089 2015 DZ_{241}	16.0	X	165.12568	19.28991	23.86336	9.80919	0.0637285	0.17311766	3.1884171	21	4 6.8	20.6
521090 2015 DL_{242}	17.3	X	69.50854	178.60831	135.39629	9.79596	0.0443655	0.24318883	2.5419888	21	11 28.1	20.9
521091 2015 DQ_{242}	17.2	X	87.52721	73.48301	180.90119	13.65439	0.0973022	0.22536378	2.6743196	21	10 7.6	20.9
521092 2015 DT_{242}	16.2	X	322.26589	278.47615	0.96011	15.51421	0.1955000	0.17570524	3.1570363	21	4 13.3	20.3
521093 2015 DV_{242}	18.1	X	269.28615	46.84379	60.16421	2.04084	0.0491607	0.24447692	2.5330522	21	11 3.7	21.1
521094 2015 DX_{242}	16.9	X	1.11228	90.20471	139.64127	7.51615	0.1931016	0.17194266	3.2029263	21	4 26.2	20.4
521095 2015 DY_{242}	17.2	X	74.23411	170.87043	85.80499	4.66003	0.0463113	0.21804993	2.7337916	21	9 17.4	20.9
521096 2015 DG_{243}	17.5	X	147.62477	344.45798	213.65221	7.74904	0.0992845	0.23150382	2.6268218	21	9 30.0	21.6
521097 2015 DR_{243}	16.8	X	276.80969	132.79127	299.62328	14.02378	0.0791900	0.23500166	2.6006910	21	9 14.3	20.4
521098 2015 DS_{243}	16.0	X	146.08875	176.95087	252.56286	16.11638	0.0225726	0.17270672	3.1934728	21	4 8.3	20.8
521099 2015 DT_{243}	16.0	X	30.75477	300.43413	273.63728	16.43144	0.0918891	0.17732991	3.1377238	21	5 21.9	20.1
521100 2015 DD_{244}	16.1	X	20.83011	96.94492	102.55337	9.47352	0.0420002	0.17961032	3.1111087	21	4 21.4	20.4
521101 2015 DF_{244}	15.7	X	140.94170	118.98209	295.66853	16.72205	0.1174134	0.17178025	3.2049448	21	3 20.6	20.9
521102 2015 DH_{244}	16.5	X	359.18817	15.74004	194.36315	16.64089	0.0721650	0.16985546	3.2291115	21	3 30.7	20.6
521103 2015 DO_{244}	17.9	X	248.62735	313.34020	241.03469	13.92684	0.1157930	0.26765073	2.3846451	21	—	—
521104 2015 DR_{244}	15.9	X	352.94691	322.17654	316.85779	19.54505	0.0880140	0.18261158	3.0769269	21	6 20.4	20.1
521105 2015 DU_{244}	17.3	X	142.19611	123.89190	93.98877	4.45006	0.0561651	0.22495246	2.6775785	21	10 20.9	21.2
521106 2015 DY_{244}	16.6	X	287.23849	186.09965	144.03670	9.73324	0.0579656	0.17751762	3.1355115	21	5 27.1	21.1
521107 2015 DF_{245}	16.6	X	18.86279	192.88324	58.90486	11.85023	0.0403763	0.18320018	3.0703328	21	6 20.1	20.7
521108 2015 DG_{245}	17.4	X	164.78672	172.41182	108.38823	7.07983	0.1161383	0.25478929	2.4642340	21	—	—
521109 2015 DH_{245}	16.5	X	164.58190	349.22470	150.54987	9.77364	0.0524388	0.19926765	2.9029854	21	8 2.8	20.9
521110 2015 DP_{245}	17.6	X	106.59561	357.94339	250.85791	4.51579	0.1562890	0.22988671	2.6391261	21	10 25.4	21.6
521111 2015 DS_{245}	15.9	X	178.15873	86.55121	330.62139	8.51742	0.0810155	0.18700612	3.0285321	21	5 3.3	20.7
521112 2015 DW_{245}	16.2	X	85.56933	295.36605	186.32058	10.99281	0.0634768	0.17238561	3.1974374	21	4 10.2	20.5
521113 2015 DG_{246}	16.6	X	17.96986	122.21352	143.42830	9.94030	0.0479990	0.18666373	3.0322343	21	7 7.9	20.6
521114 2015 DK_{246}	18.0	X	263.50873	267.37378	290.50672	5.40536	0.0793523	0.26586479	2.3953124	21	—	—
521115 2015 DL_{246}	17.2	X	68.34031	49.26247	214.14375	4.23948	0.1245620	0.21807543	2.7335786	21	9 26.5	20.9
521116 2015 DN_{246}	17.3	X	270.50536	155.05142	235.42804	4.44336	0.0755678	0.21646937	2.7470828	21	7 16.7	21.0
521117 2015 DP_{246}	18.0	X	208.06172	57.24206	202.71019	6.30895	0.1100671	0.27754633	2.3276216	21	—	—
521118 2015 DZ_{246}	16.6	X	180.79434	17.29450	213.97976	13.92822	0.0447359	0.24033096	2.5621010	21	12 20.7	20.4
521119 2015 DA_{247}	17.7	X	224.51238	190.13489	0.00833	4.87083	0.0650722	0.25532978	2.4607552	21	12 22.8	20.9
521120 2015 DC_{247}	17.8	X	126.41047	88.21939	168.37061	6.74932	0.1863606	0.24151177	2.5537430	21	11 27.0	22.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521121 2015 DE_{247}	16.8	X	265.06055	169.93798	295.06195	9.00107	0.0814853	0.24178233	2.5518375	21	10 15.6	20.2
521122 2015 DG_{247}	18.0	X	255.01077	4.22122	204.95943	5.48530	0.0987615	0.27598267	2.3364052	21	—	—
521123 2015 DL_{247}	17.5	X	55.74142	33.09031	238.26628	5.20526	0.0946474	0.21548481	2.7554441	21	9 13.9	21.1
521124 2015 DQ_{247}	17.5	X	35.67141	338.86933	327.75394	1.28645	0.0766908	0.22114692	2.7082086	21	10 2.7	21.0
521125 2015 DR_{247}	16.5	X	20.77164	33.04277	186.68923	11.72293	0.0380693	0.17864318	3.1223273	21	5 14.7	20.8
521126 2015 DT_{247}	16.8	X	318.72047	298.98264	357.27490	4.97556	0.1156220	0.18014037	3.1050029	21	5 14.1	20.9
521127 2015 DW_{247}	17.4	X	86.79457	221.72499	47.56119	4.13192	0.0100765	0.22984126	2.6394740	21	10 14.8	20.8
521128 2015 DK_{248}	16.2	X	39.33429	158.33357	67.46532	13.45820	0.0770274	0.17467922	3.1693866	21	6 18.7	20.3
521129 2015 DM_{248}	16.0	X	118.47412	66.98103	88.46607	11.97190	0.0683449	0.18002361	3.1063454	21	7 1.9	20.5
521130 2015 DN_{248}	16.1	X	24.75912	172.73496	115.08540	11.27235	0.0306882	0.18975490	2.9992135	21	8 17.1	20.1
521131 2015 ET_{6}	18.5	X	241.86327	261.94590	142.38067	23.54388	0.1268216	0.36204723	1.9496616	21	6 24.8	21.4
521132 2015 EF_{62}	18.1	X	237.35902	270.71945	156.96151	23.49925	0.0904480	0.37672766	1.8986768	21	7 26.4	20.4
521133 2015 EG_{75}	16.6	X	350.39990	185.05054	38.24830	1.20039	0.0799901	0.17480775	3.1678328	21	4 3.1	20.7
521134 2015 EN_{75}	16.9	X	316.47949	104.38478	157.05791	13.06432	0.0545150	0.17672943	3.1448273	21	4 9.8	21.3
521135 2015 EP_{75}	16.0	X	273.63360	257.82680	89.82610	17.08084	0.0641089	0.18772484	3.0207971	21	5 30.8	20.3
521136 2015 FS_{5}	18.4	X	171.72288	356.85963	112.00933	23.04695	0.0693695	0.37261943	1.9126069	21	7 3.7	20.6
521137 2015 FD_{43}	16.2	X	43.98016	29.33326	200.21379	15.03552	0.1535038	0.18218135	3.0817691	21	7 8.6	20.3
521138 2015 FK_{332}	17.8	X	306.60618	248.52107	113.18672	24.61590	0.0867501	0.36147614	1.9517145	21	8 5.9	19.4
521139 2015 FX_{340}	17.8	X	344.01748	234.61285	98.88917	24.35544	0.0866086	0.37672975	1.8986698	21	9 21.7	20.0
521140 2015 FZ_{345}	18.0	X	313.79487	327.44837	359.84601	19.49426	0.0637264	0.36728756	1.9310725	21	6 21.8	20.3
521141 2015 FK_{405}	17.7	X	322.72374	211.25498	32.44264	5.90286	0.0135174	0.30652532	2.1785046	21	3 12.3	20.1
521142 2015 FX_{405}	16.6	X	97.10958	148.92343	355.20545	8.38728	0.1259942	0.18093608	3.0958930	21	5 28.6	21.1
521143 2015 FA_{406}	16.6	X	86.48057	183.14896	72.98407	13.88114	0.0709096	0.21936528	2.7228525	21	10 10.8	20.6
521144 2015 FC_{406}	16.4	X	333.00830	267.64405	21.25580	25.53653	0.2671263	0.17321564	3.1872147	21	4 30.6	20.2
521145 2015 FD_{406}	18.3	X	267.87130	134.37403	100.56521	3.15912	0.0811741	0.28821052	2.2698448	21	—	—
521146 2015 FE_{406}	16.3	X	259.63094	338.53123	15.64696	10.30331	0.1197882	0.18112708	3.0937161	21	5 10.1	21.0
521147 2015 FH_{406}	17.2	X	114.75426	190.70911	55.91823	13.33012	0.0399881	0.23074882	2.6325485	21	10 26.6	20.9
521148 2015 FJ_{406}	17.4	X	165.74112	120.83974	43.89116	4.21280	0.0317309	0.21266756	2.7797254	21	9 8.8	21.3
521149 2015 FM_{406}	16.8	X	143.62056	317.14467	185.16916	10.72310	0.0158775	0.18975708	2.9991905	21	7 8.9	21.2
521150 2015 FO_{406}	17.6	X	293.74916	299.81658	158.18892	7.41790	0.1031309	0.24275804	2.5449952	21	11 22.8	20.5
521151 2015 FR_{406}	16.4	X	10.35888	188.68134	60.88984	10.32800	0.0360038	0.17713547	3.1400196	21	6 5.3	20.5
521152 2015 FG_{407}	16.1	X	235.98797	348.66920	22.62674	15.45384	0.1685023	0.17980243	3.1088924	21	5 2.0	21.2
521153 2015 FJ_{407}	17.0	X	231.15097	47.16190	79.87943	5.43376	0.1028708	0.23339424	2.6126183	21	10 4.3	20.7
521154 2015 FK_{407}	17.4	X	24.36122	227.96081	79.25765	5.43787	0.0552238	0.21325825	2.7745900	21	9 16.9	21.0
521155 2015 FO_{407}	16.6	X	71.87734	12.94946	187.72376	10.10705	0.0429282	0.18956982	3.0011653	21	6 27.0	20.9
521156 2015 FP_{407}	17.1	X	275.32304	250.07623	170.44794	6.70333	0.1115276	0.22082115	2.7108716	21	8 27.9	20.6
521157 2015 FU_{407}	16.9	X	54.11129	52.88816	168.23152	8.40465	0.0494995	0.18684483	3.0302746	21	6 30.7	21.1
521158 2015 FV_{407}	16.2	X	331.61451	168.13229	111.50282	6.39921	0.1350224	0.17209667	3.2010152	21	5 13.9	20.3
521159 2015 FY_{407}	16.5	X	328.84962	234.49608	89.29199	11.64520	0.1054274	0.18915200	3.0055833	21	7 8.8	20.1
521160 2015 FA_{408}	16.4	X	339.68480	112.29211	171.36226	12.01278	0.1139453	0.17570773	3.1570064	21	6 3.2	20.5
521161 2015 FB_{408}	16.5	X	333.81930	133.75516	148.57449	9.06272	0.0394536	0.17541180	3.1605562	21	5 30.4	20.9
521162 2015 FC_{408}	16.3	X	191.24094	337.41009	99.11656	6.83996	0.0977835	0.18823209	3.0153676	21	6 13.9	21.0
521163 2015 FH_{408}	17.7	X	221.39065	128.55526	128.33181	3.09894	0.0618808	0.26751776	2.3854353	21	—	—
521164 2015 FK_{408}	17.1	X	147.60951	212.68689	47.66295	15.73714	0.0848754	0.23436185	2.6054222	21	12 16.0	21.1
521165 2015 FM_{408}	16.5	X	36.58879	226.61395	43.60031	12.68082	0.0677195	0.18916451	3.0054507	21	8 18.9	20.7
521166 2015 FO_{408}	16.0	X	89.96720	298.24474	233.69096	16.19922	0.1848728	0.17868196	3.1218755	21	7 1.9	20.8
521167 2015 FS_{408}	16.7	X	48.56206	263.74684	73.40511	11.40193	0.2414795	0.21266206	2.7797733	21	12 20.5	20.7
521168 2015 FV_{408}	17.5	X	142.89738	164.60833	105.12936	4.47897	0.1183307	0.23502191	2.6005416	21	12 24.4	21.4
521169 2015 FX_{408}	17.1	X	117.52041	236.94941	285.82154	1.47673	0.0563015	0.19909371	2.9046759	21	7 8.8	21.1
521170 2015 FZ_{408}	16.4	X	345.03249	28.93873	241.39873	2.41532	0.0693138	0.18385785	3.0630066	21	5 26.1	20.1
521171 2015 FH_{409}	17.8	X	348.63634	66.65246	36.96131	7.41797	0.0727436	0.27298443	2.3534816	21	—	—
521172 2015 FM_{409}	17.3	X	116.63585	194.71557	66.64747	12.57458	0.0267080	0.23484439	2.6018520	21	11 14.4	20.8
521173 2015 FY_{409}	16.4	X	250.45441	143.18443	6.91742	13.35903	0.1204476	0.24138502	2.5546368	21	11 18.9	20.0
521174 2015 FB_{410}	16.9	X	187.94150	320.94952	233.28065	17.69339	0.1633175	0.23239807	2.6200789	21	11 2.7	21.0
521175 2015 FF_{410}	17.6	X	260.79983	349.03388	246.42391	4.56357	0.1120171	0.27454560	2.3445512	21	—	—
521176 2015 FG_{410}	16.7	X	64.10903	221.08238	10.44731	5.21446	0.1377192	0.18633031	3.0358505	21	8 12.8	20.8
521177 2015 FL_{410}	17.8	X	163.85475	318.90130	223.20857	1.49709	0.0906439	0.22672540	2.6636016	21	9 27.4	21.8
521178 2015 FV_{410}	17.1	X	240.74317	344.10102	143.18714	15.39683	0.0427200	0.23804495	2.5784778	21	10 28.6	20.8
521179 2015 FW_{410}	16.1	X	155.80832	107.17440	349.39761	10.09780	0.0406742	0.18347212	3.0672981	21	5 26.9	20.7
521180 2015 FZ_{410}	17.4	X	257.63099	92.28913	81.47605	5.96073	0.0623569	0.26319848	2.4114622	21	—	—
521181 2015 FF_{411}	16.6	X	298.95087	194.80470	152.10426	12.17734	0.0693053	0.19332787	2.9621456	21	6 29.3	20.7
521182 2015 FL_{411}	16.1	X	339.71710	156.07084	151.37521	16.34936	0.1204666	0.18009728	3.1054982	21	7 3.3	20.2
521183 2015 FP_{411}	16.9	X	158.43252	296.48121	277.73742	11.24144	0.2084828	0.22855081	2.6494000	21	10 27.8	21.6
521184 2015 FQ_{411}	16.8	X	160.90400	321.52965	283.35782	13.81626	0.0451051	0.24058384	2.5603053	21	12 15.9	20.4
521185 2015 FR_{411}	16.4	X	322.09100	196.02658	140.55734	10.57939	0.0809245	0.19143441	2.9816457	21	7 17.4	20.2
521186 2015 FT_{411}	17.2	X	273.04637	314.60239	159.04809	8.80449	0.1163806	0.23995371	2.5647856	21	11 10.1	20.4
521187 2015 FU_{411}	16.4	X	170.55345	302.73316	139.90271	9.15176	0.0616339	0.17699259	3.1417093	21	5 31.9	21.2
521188 2015 FX_{411}	16.9	X	83.46109	58.39181	172.41297	10.36957	0.0623238	0.19860334	2.9094553	21	8 23.2	21.1
521189 2015 FY_{411}	15.9	X	86.50368	88.24440	91.70251	13.06516	0.0545131	0.18019497	3.1043757	21	6 21.8	20.2
521190 2015 FL_{412}	16.4	X	329.52340	155.16652	158.30636	14.96868	0.0451929	0.17892457	3.1190528	21	7 1.4	20.8
521191 2015 FM_{412}	17.1	X	156.45308	84.25484	126.59745	13.26312	0.1096937	0.22129940	2.7069645	21	10 30.9	21.5
521192 2015 FN_{412}	16.0	X	169.01895	297.10007	172.48879	17.26584	0.1373553	0.18320367	3.0702938	21	7 2.2	21.3
521193 2015 FP_{412}	16.9	X	197.16646	25.98571	132.59521	15.50983	0.1053043	0.21775346	2.7362725	21	10 7.6	21.3
521194 2015 FS_{412}	17.1	X	202.13096	262.84347	199.25651	14.95950	0.1834814	0.21423145	2.7661808	21	7 20.2	22.0
521195 2015 FY_{412}	17.1	X	104.62271	340.20795	208.89201	4.09372	0.0462889	0.20033096	2.8927040	21	7 24.7	21.3
521196 2015 FA_{413}	15.9	X	113.45945	271.58413	197.46152	25.17761	0.2257636	0.17992294	3.1075039	21	5 18.7	21.0
521197 2015 FB_{413}	17.9	X	177.79206	68.67692	236.87789	2.95856	0.0958499	0.27736189	2.3286534	21	—	—
521198 2015 FG_{413}	18.0	X	209.27814	248.09423	8.81194	2.67037	0.0570615	0.27151959	2.3619386	21	—	—
521199 2015 FH_{413}	16.1	X	53.46682	41.90385	167.33416	10.38881	0.0564882	0.17682972	3.1436381	21	6 16.3	20.5
521200 2015 FJ_{413}	16.6	X	1.14457	93.92682	168.37062	16.30307	0.0408872	0.17419339	3.1752768	21	6 11.3	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521201 2015 FM_{413}	16.2	X	303.37651	247.66583	95.32493	17.48103	0.2281949	0.17530519	3.1618374	21	6 8.3	20.3
521202 2015 FN_{413}	17.3	X	101.34794	178.73604	132.13984	14.15280	0.1949825	0.23114860	2.6295123	21	—	—
521203 2015 FW_{413}	17.2	X	211.03316	83.13373	161.37916	7.71843	0.0516871	0.25525165	2.4612573	21	—	—
521204 2015 FX_{413}	16.5	X	347.08593	153.62474	148.01460	10.46818	0.0605579	0.17902733	3.1178592	21	7 9.9	20.7
521205 2015 FZ_{413}	16.8	X	82.95385	43.24550	170.04558	10.34189	0.0866119	0.18495912	3.0508361	21	8 2.4	21.2
521206 2015 FA_{414}	16.9	X	20.53463	205.19288	147.24050	6.82280	0.0248874	0.21654973	2.7464031	21	11 6.5	20.6
521207 2015 FC_{414}	17.4	X	157.69351	12.19174	193.07988	9.13581	0.0733767	0.21959826	2.7209263	21	10 20.5	21.5
521208 2015 FE_{414}	16.9	X	46.59830	81.17229	186.11606	10.30376	0.0931271	0.19197726	2.9760224	21	8 24.6	20.8
521209 2015 FF_{414}	16.9	X	45.30716	86.70173	180.33999	10.08371	0.0259616	0.19207743	2.9749876	21	8 13.5	21.1
521210 2015 FG_{414}	16.8	X	140.87813	346.90598	200.12375	14.91429	0.0782449	0.20120592	2.8843118	21	9 3.8	21.3
521211 2015 FH_{414}	16.6	X	188.65740	323.01469	154.12910	11.03889	0.0574825	0.19083279	2.9879091	21	7 31.9	21.1
521212 2015 FJ_{414}	16.6	X	347.48545	181.14296	133.24239	11.00828	0.0240890	0.18546780	3.0452553	21	7 28.8	20.7
521213 2015 FL_{414}	15.8	X	336.51152	359.85019	317.32961	11.36143	0.0896001	0.18844733	3.0130712	21	7 15.2	19.5
521214 2015 GC	16.6	X	202.69900	9.52866	102.73904	33.10965	0.1090111	0.23473980	2.6026248	21	8 12.7	20.9
521215 2015 GS_{31}	18.1	X	285.22278	74.59346	38.69676	2.11901	0.1503108	0.25573781	2.4581370	21	11 24.8	20.5
521216 2015 GL_{52}	17.4	X	226.14841	281.62072	200.33279	13.07365	0.1163620	0.22895328	2.6462943	21	9 14.4	21.3
521217 2015 GO_{52}	17.4	X	145.53254	201.23272	358.09694	4.48198	0.0980513	0.22158253	2.7046581	21	9 29.6	21.5
521218 2015 GQ_{52}	16.9	X	107.47504	218.38373	58.52201	15.65292	0.1143228	0.22623985	2.6674113	21	11 26.4	20.9
521219 2015 GV_{52}	18.0	X	237.61386	191.84326	39.69896	6.40555	0.0529509	0.26894151	2.3770090	21	—	—
521220 2015 GW_{52}	16.4	X	325.14267	249.13793	45.02582	16.55166	0.0845331	0.17133066	3.2105491	21	5 24.6	20.7
521221 2015 GX_{52}	16.1	X	26.88773	205.37295	39.49410	18.00000	0.1263392	0.18004472	3.1061026	21	6 29.6	20.2
521222 2015 GA_{53}	17.0	X	47.32680	188.53043	144.07588	14.92724	0.1084141	0.22404491	2.6848045	21	11 30.8	20.9
521223 2015 GC_{53}	16.5	X	359.15765	261.20544	120.86135	14.17909	0.1108489	0.22538938	2.6741171	21	11 26.9	19.9
521224 2015 GH_{53}	16.6	X	4.66454	182.44777	92.26807	13.29557	0.1077283	0.18702411	3.0283378	21	7 1.6	20.2
521225 2015 GJ_{53}	16.8	X	335.88836	213.99313	127.67171	11.49818	0.0924177	0.20169869	2.8796122	21	8 16.7	20.2
521226 2015 GK_{53}	16.2	X	268.71033	264.49795	103.52701	11.54919	0.1759005	0.18360788	3.0657861	21	6 3.8	20.9
521227 2015 GL_{53}	17.3	X	295.63847	293.07270	141.19374	13.76858	0.1326444	0.23310147	2.6148054	21	10 21.9	20.5
521228 2015 GU_{53}	16.4	X	55.50404	179.06577	47.05003	3.28288	0.1102505	0.18152377	3.0892073	21	7 18.9	20.4
521229 2015 HD_{19}	16.4	X	30.51187	44.12015	199.69651	9.32366	0.0654220	0.18824482	3.0152318	21	6 28.1	20.4
521230 2015 HZ_{126}	18.1	X	293.83713	266.22192	223.00210	3.63454	0.1525226	0.25767263	2.4458164	21	—	—
521231 2015 HT_{179}	18.6	X	116.85322	301.21363	201.47898	23.05022	0.0934746	0.34369782	2.0184509	21	6 11.6	21.4
521232 2015 HX_{186}	16.1	X	117.95007	80.82101	92.89380	10.00588	0.0406032	0.18923685	3.0046847	21	7 22.3	20.4
521233 2015 HO_{188}	16.0	X	356.07845	79.45771	207.24802	17.25028	0.1150695	0.17998994	3.1067327	21	6 30.8	20.1
521234 2015 HX_{188}	16.2	X	248.96009	52.46431	334.56610	10.12390	0.0755287	0.18290665	3.0736168	21	6 16.1	20.8
521235 2015 HG_{189}	16.6	X	120.82274	254.49943	262.50905	9.45567	0.0457611	0.18596573	3.0398170	21	7 3.4	21.0
521236 2015 HK_{189}	17.4	X	23.58653	59.16455	293.88671	4.79258	0.0672336	0.22358191	2.6885097	21	11 14.1	20.8
521237 2015 HL_{189}	17.3	X	24.13033	214.52342	260.34703	6.66924	0.0466100	0.28235111	2.3011400	21	—	—
521238 2015 HN_{189}	17.3	X	164.25340	265.18047	348.91255	4.39831	0.0838670	0.24153022	2.5536129	21	12 29.3	21.1
521239 2015 HO_{189}	16.2	X	153.57374	120.94098	1.68350	10.68288	0.0283940	0.17972510	3.1097840	21	6 29.1	20.9
521240 2015 HS_{189}	16.8	X	44.21658	251.29910	137.71887	13.49282	0.1529273	0.23894345	2.5720098	21	—	—
521241 2015 HT_{189}	16.6	X	22.04995	151.92588	138.85376	11.85474	0.1498814	0.18432386	3.0578418	21	8 27.7	20.1
521242 2015 HX_{189}	17.4	X	130.71133	87.57186	171.46243	14.42186	0.0745265	0.23413263	2.6071224	21	11 30.6	21.5
521243 2015 HY_{189}	18.3	X	235.26186	225.24533	8.16679	1.12091	0.1372874	0.26661161	2.3908372	21	—	—
521244 2015 HA_{190}	16.6	X	96.33732	234.80610	65.54739	13.53283	0.1516891	0.22802736	2.6534530	21	12 16.6	20.7
521245 2015 HO_{190}	16.7	X	35.73054	165.58243	86.57995	5.15753	0.1801552	0.18126736	3.0921198	21	8 2.3	20.4
521246 2015 HU_{190}	18.0	X	150.36717	170.27412	159.88034	4.97216	0.0438627	0.27179802	2.3603253	21	—	—
521247 2015 HX_{190}	16.8	X	93.56627	326.85580	301.32472	3.77012	0.0742041	0.22022467	2.7157642	21	10 25.9	20.7
521248 2015 HY_{190}	17.2	X	214.62952	285.96548	234.12506	12.51104	0.1186571	0.23299550	2.6155982	21	10 20.9	21.2
521249 2015 HZ_{190}	17.3	X	187.85895	244.70466	260.86916	3.09456	0.0484680	0.21080267	2.7960953	21	9 6.2	21.3
521250 2015 HA_{191}	16.8	X	99.29067	14.08914	244.33646	7.16269	0.1259572	0.21604771	2.7506559	21	10 25.3	20.9
521251 2015 HH_{191}	17.1	X	220.84345	175.09700	288.61719	4.69671	0.0214497	0.20462359	2.8521055	21	8 25.0	21.0
521252 2015 HJ_{191}	16.1	X	234.78846	25.46167	24.43581	9.83575	0.1199309	0.18713085	3.0271862	21	6 24.1	20.9
521253 2015 HO_{191}	16.7	X	332.22407	262.39674	66.02510	16.95522	0.0914174	0.18518205	3.0483871	21	7 24.3	20.8
521254 2015 HP_{191}	16.6	X	209.18565	283.54486	181.61850	10.14623	0.1365808	0.20106336	2.8856750	21	8 2.9	21.3
521255 2015 HQ_{191}	16.7	X	84.39287	357.36480	186.23158	10.40232	0.0198049	0.17559295	3.1583820	21	6 18.8	21.3
521256 2015 HS_{191}	17.7	X	253.50082	80.10380	113.72699	7.55091	0.1025359	0.25836333	2.4414554	21	—	—
521257 2015 HC_{192}	17.1	X	170.74576	319.51159	174.32794	9.89486	0.0340336	0.19054378	2.9909297	21	7 31.8	21.6
521258 2015 HJ_{192}	17.0	X	113.73605	81.00095	143.16116	5.71515	0.0393901	0.20284883	2.8687170	21	9 21.5	21.1
521259 2015 HK_{192}	16.0	X	249.61973	176.03134	213.11534	12.70692	0.1140402	0.17131676	3.2107229	21	6 15.0	20.9
521260 2015 HL_{192}	16.8	X	1.13719	101.92155	212.68133	11.32208	0.1913725	0.18294469	3.0731907	21	8 18.2	20.3
521261 2015 HN_{192}	16.8	X	295.52201	306.63480	83.17271	17.58500	0.0365727	0.19477082	2.9474976	21	9 1.9	21.1
521262 2015 HP_{192}	16.2	X	329.91206	205.24827	68.90074	11.78000	0.0400491	0.16108180	3.3453257	21	5 14.9	20.8
521263 2015 HQ_{192}	16.3	X	16.08038	177.77992	99.76575	12.24616	0.0491059	0.18477033	3.0529140	21	7 22.0	20.3
521264 2015 HS_{192}	16.6	X	213.80354	132.19099	270.08622	8.98157	0.0574491	0.17591000	3.1545860	21	5 27.5	21.2
521265 2015 HV_{192}	17.3	X	170.31728	300.21078	225.72099	3.43492	0.0097771	0.21179383	2.7873650	21	9 12.6	21.3
521266 2015 HY_{192}	17.2	X	186.17588	119.97915	28.00538	13.78965	0.1180938	0.21507116	2.7589761	21	9 12.6	21.7
521267 2015 HH_{193}	17.8	X	313.91929	80.45985	78.96373	6.98298	0.0452487	0.27155625	2.3617260	21	—	—
521268 2015 HN_{193}	16.8	X	8.39222	277.27851	75.20490	7.32092	0.0364513	0.21700269	2.7425800	21	10 22.8	20.4
521269 2015 HT_{193}	16.3	X	316.04323	289.02705	63.69991	10.62990	0.0943805	0.19103546	2.9857955	21	7 31.9	20.2
521270 2015 HV_{193}	16.7	X	293.37461	298.49982	68.27698	10.79067	0.0681518	0.18655676	3.0333932	21	7 19.3	20.9
521271 2015 HY_{193}	17.0	X	40.65384	187.54056	139.12006	7.19182	0.0127123	0.21901980	2.7257151	21	10 30.1	20.7
521272 2015 HD_{194}	17.1	X	186.23356	52.20293	103.95743	5.49613	0.0145630	0.21201202	2.7854523	21	9 24.4	21.0
521273 2015 HG_{194}	16.5	X	330.45710	177.18799	138.44895	11.38430	0.0506240	0.17631986	3.1496954	21	7 5.1	20.7
521274 2015 HH_{194}	16.3	X	117.71059	323.88073	174.59338	16.12357	0.1680600	0.17329117	3.1862885	21	6 21.2	21.5
521275 2015 HK_{194}	16.5	X	48.52334	81.26006	137.83242	12.36123	0.0502298	0.17069819	3.2184748	21	6 21.8	21.0
521276 2015 HO_{194}	17.0	X	66.98506	216.99807	165.02343	15.10398	0.1312429	0.24246589	2.5470391	21	—	—
521277 2015 HQ_{194}	16.6	X	311.44832	200.85039	154.72486	11.95583	0.0921062	0.17794496	3.1304895	21	7 24.5	20.9
521278 2015 HT_{194}	16.9	X	337.48428	202.69883	186.95317	15.13681	0.1387098	0.20418102	2.8562254	21	10 25.1	20.1
521279 2015 HV_{194}	16.9	X	336.70867	178.57594	205.86991	13.30458	0.0334316	0.21726147	2.7404017	21	10 17.0	20.3
521280 2015 HW_{194}	16.8	X	29.32582	26.50287	216.64136	16.26289	0.1334028	0.17710486	3.1403814	21	6 30.1	20.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521281 2015 JN_{14}	17.2	X	68.60313	269.50054	329.43370	0.27158	0.0724213	0.19382964	2.9570313	21	8 17.1	21.1
521282 2015 JO_{14}	16.5	X	28.80927	260.84303	33.15126	9.41084	0.0710916	0.19894664	2.9061073	21	9 7.7	20.3
521283 2015 JS_{14}	17.0	X	130.84400	115.14364	95.37354	14.24304	0.1216013	0.21220107	2.7837977	21	10 6.8	21.6
521284 2015 JU_{14}	16.7	X	120.35737	274.24835	243.70619	11.11881	0.0570639	0.18558294	3.0439956	21	7 4.5	21.3
521285 2015 JV_{14}	16.8	X	289.11331	355.96157	32.56653	13.45975	0.0376425	0.19825184	2.9128932	21	8 21.6	21.0
521286 2015 JX_{14}	18.2	X	260.68536	230.43445	14.69050	1.49036	0.0778477	0.28088575	2.3091363	21	—	—
521287 2015 JZ_{14}	17.1	X	264.29546	256.64378	236.97076	11.90362	0.1313949	0.24076154	2.5590453	21	11 18.9	20.2
521288 2015 JH_{15}	16.3	X	271.01685	226.40355	149.57209	14.67311	0.0862346	0.18081394	3.0972869	21	6 28.0	20.9
521289 2015 JO_{15}	16.6	X	3.54920	114.84296	170.02039	10.87876	0.0747407	0.17598136	3.1537331	21	7 11.9	20.8
521290 2015 JP_{15}	16.2	X	66.58971	83.30495	136.35966	11.29991	0.0582627	0.17803971	3.1293788	21	7 17.1	20.5
521291 2015 JR_{15}	16.3	X	70.50160	62.95810	150.04448	13.13792	0.0932614	0.17679470	3.1440532	21	7 18.4	20.7
521292 2015 JT_{15}	16.0	X	54.54419	29.06167	195.87989	17.08001	0.1528997	0.17523082	3.1627320	21	7 17.9	20.5
521293 2015 JY_{15}	18.0	X	201.31100	23.81568	272.04874	5.16314	0.1068881	0.27129528	2.3632403	21	—	—
521294 2015 JB_{16}	16.5	X	31.78469	1.86248	259.00831	16.53610	0.1600439	0.18152139	3.0892343	21	7 28.4	20.4
521295 2015 JC_{16}	16.8	X	138.27360	275.29241	279.72592	7.99111	0.0709920	0.20425764	2.8555111	21	9 9.9	21.2
521296 2015 JD_{16}	17.2	X	13.64336	30.81372	265.91954	3.94959	0.0779213	0.18837761	3.0138146	21	8 12.9	21.1
521297 2015 KN_{112}	16.9	X	205.46790	308.53929	180.98948	9.97617	0.0828899	0.20240802	2.8728806	21	9 3.4	21.1
521298 2015 KX_{122}	17.2	X	199.40092	7.53671	163.57700	13.92284	0.1714517	0.23063729	2.6333972	21	10 19.5	21.5
521299 2015 KS_{148}	17.7	X	260.48082	267.49652	64.02275	9.54754	0.1379315	0.30094722	2.2053414	21	4 7.1	20.8
521300 2015 KP_{168}	16.6	X	3.92199	153.69578	121.29979	11.59771	0.0625827	0.17612109	3.1520649	21	6 30.6	20.7
521301 2015 KA_{169}	16.5	X	27.40519	66.42606	175.13883	11.40957	0.1862675	0.17129390	3.2110085	21	7 1.9	20.4
521302 2015 KC_{169}	16.2	X	139.02382	321.99694	276.81157	10.58727	0.2011235	0.19948909	2.9008367	21	11 8.7	21.3
521303 2015 KD_{169}	15.8	X	107.82079	336.63540	257.16108	9.90161	0.2257136	0.18323135	3.0699845	21	10 6.8	21.0
521304 2015 KJ_{169}	16.4	X	359.78685	158.37858	127.22981	11.34923	0.0820899	0.17546693	3.1598941	21	7 8.1	20.4
521305 2015 KM_{169}	16.1	X	292.87678	260.07929	90.72625	12.12740	0.1346495	0.17185328	3.2040368	21	6 16.7	20.3
521306 2015 KP_{169}	18.2	X	283.53777	354.10084	190.16209	2.35212	0.1270247	0.26450485	2.4035157	21	—	—
521307 2015 KQ_{169}	16.5	X	312.75942	299.37562	24.17383	10.82631	0.0823758	0.17790181	3.1309957	21	6 15.3	20.8
521308 2015 KV_{169}	16.6	X	346.25523	231.85022	71.14110	12.86604	0.0360581	0.17886682	3.1197242	21	7 12.6	20.9
521309 2015 KX_{169}	17.4	X	235.85327	294.88955	210.45728	5.49115	0.1676988	0.23048236	2.6345771	21	10 21.6	21.3
521310 2015 KY_{169}	18.0	X	87.06538	121.64867	192.11586	4.70097	0.1971346	0.22171277	2.7035988	21	12 27.1	22.3
521311 2015 KA_{170}	18.0	X	274.36615	355.20870	241.20432	4.99489	0.0549243	0.27976019	2.3153258	21	—	—
521312 2015 KE_{170}	17.2	X	136.64715	170.00666	16.88990	0.89175	0.0149230	0.19521829	2.9429918	21	8 28.8	21.3
521313 2015 KJ_{170}	17.2	X	113.07673	147.24862	109.87182	5.08886	0.0527757	0.21539187	2.7562367	21	11 4.4	21.1
521314 2015 KK_{170}	17.5	X	107.85610	231.66543	127.49779	5.26239	0.0850838	0.25481163	2.4640899	21	—	—
521315 2015 KP_{170}	17.4	X	284.50708	252.12017	208.38112	13.91013	0.0835927	0.22339944	2.6899735	21	11 9.1	20.8
521316 2015 KY_{170}	17.0	X	55.22037	185.98455	187.54621	5.85791	0.1719761	0.23414161	2.6070557	21	—	—
521317 2015 KB_{171}	17.9	X	73.34716	328.33359	138.47183	7.00462	0.0400837	0.29234599	2.2483881	21	2 8.7	20.2
521318 2015 KC_{171}	16.7	X	342.70091	185.45246	117.49727	11.56278	0.0806219	0.17434515	3.1734340	21	7 4.6	20.9
521319 2015 KE_{171}	15.9	X	62.23863	168.16184	75.41412	11.27423	0.0608210	0.17549793	3.1595220	21	8 15.9	20.4
521320 2015 KL_{171}	16.4	X	228.04984	328.69598	122.76483	15.85834	0.0413829	0.19244930	2.9711539	21	8 18.6	20.7
521321 2015 KM_{171}	16.0	X	132.44189	38.09744	127.38408	11.97905	0.0186740	0.18309554	3.0715025	21	7 26.2	20.2
521322 2015 KQ_{171}	17.1	X	142.17316	123.45337	176.31484	10.15873	0.1259635	0.24126534	2.5554816	21	—	—
521323 2015 KS_{171}	17.1	X	93.20121	197.26256	137.33848	15.53777	0.1219775	0.23080817	2.6320973	21	—	—
521324 2015 KZ_{171}	17.7	X	222.46686	349.57798	275.83254	9.16491	0.0907350	0.26938597	2.3743937	21	—	—
521325 2015 KA_{172}	16.8	X	148.86809	257.98592	267.30690	9.23351	0.0579687	0.19880216	2.9075151	21	8 14.5	21.2
521326 2015 KB_{172}	16.7	X	26.70249	335.46626	314.79032	9.94297	0.0939607	0.19101553	2.9860031	21	8 25.7	20.4
521327 2015 KD_{172}	16.6	X	95.17347	266.45515	109.66767	15.62834	0.1158565	0.22365219	2.6879465	21	—	—
521328 2015 LK_{33}	18.2	X	270.01587	210.23340	98.68236	9.43185	0.1815664	0.29175495	2.2514237	21	3 15.2	21.6
521329 2015 LH_{43}	16.8	X	117.53372	1.00532	295.66193	6.06320	0.1633966	0.21042265	2.7994608	21	12 30.4	21.4
521330 2015 LR_{43}	16.6	X	2.84005	169.98728	141.69730	16.87800	0.0888713	0.18241459	3.0791417	21	8 17.9	20.3
521331 2015 LU_{43}	17.3	X	103.01266	150.19539	150.98205	5.58854	0.1656230	0.22394399	2.6856110	21	12 24.9	21.6
521332 2015 LV_{43}	16.3	X	6.34963	130.36337	144.80888	8.77898	0.1176028	0.17265369	3.1941267	21	7 5.2	20.2
521333 2015 LY_{43}	16.3	X	23.37317	135.93216	122.30300	12.44238	0.1947222	0.17401881	3.1774002	21	7 18.9	19.7
521334 2015 LZ_{43}	17.8	X	327.71049	75.95331	120.02482	6.42529	0.0519280	0.28524391	2.2855556	21	1 6.9	20.3
521335 2015 LH_{44}	17.9	X	197.29586	128.32828	129.79673	3.10981	0.1583805	0.25194576	2.4827406	21	—	—
521336 2015 LJ_{44}	16.8	X	142.63991	340.82806	197.73264	4.41324	0.1854420	0.20026553	2.8933341	21	9 2.1	21.7
521337 2015 LK_{44}	16.6	X	126.99743	99.56286	142.89791	12.72810	0.1662914	0.21282248	2.7783762	21	11 9.6	21.3
521338 2015 LO_{44}	16.6	X	330.85343	246.47264	243.66014	13.06896	0.0315599	0.23002334	2.6380809	21	—	—
521339 2015 LQ_{44}	16.2	X	323.37784	41.78025	307.16202	6.52125	0.0610325	0.16858979	3.2452528	21	8 6.1	20.4
521340 2015 LU_{44}	16.1	X	260.86238	172.98484	239.86832	9.81434	0.0185518	0.18817637	3.0159629	21	8 7.3	20.5
521341 2015 LW_{44}	17.1	X	49.48715	215.90652	131.89529	8.65308	0.2047377	0.21612617	2.7499902	21	12 30.7	21.1
521342 2015 LX_{44}	17.5	X	302.48625	329.13999	183.85638	7.65589	0.1327610	0.25943799	2.4347087	21	—	—
521343 2015 LC_{45}	16.3	X	326.26676	97.08635	300.23698	7.96440	0.1400361	0.18772512	3.0207941	21	10 5.4	19.9
521344 2015 LD_{45}	17.7	X	205.11034	307.85522	299.45339	15.75306	0.1077822	0.24078097	2.5589076	21	—	—
521345 2015 LF_{45}	16.1	X	358.46861	254.24995	104.38224	17.44089	0.2473419	0.18084984	3.0968771	21	11 1.2	19.5
521346 2015 LH_{45}	16.7	X	344.52118	12.31507	109.38799	18.44419	0.1124134	0.24140041	2.5545283	21	—	—
521347 2015 LJ_{45}	17.4	X	13.17713	63.03147	357.19366	1.34631	0.0654408	0.22463259	2.6801198	21	—	—
521348 2015 LK_{45}	16.7	X	37.54856	134.41086	151.17595	11.10241	0.0708965	0.18855429	3.0119316	21	9 4.5	20.5
521349 2015 LM_{45}	16.8	X	97.63502	216.64439	139.50608	10.05300	0.1420488	0.24160994	2.5530512	21	—	—
521350 2015 LR_{45}	17.6	X	195.07712	48.22911	132.81337	4.98342	0.1460997	0.22391646	2.6858312	21	10 27.4	21.8
521351 2015 LV_{45}	17.7	X	163.94807	2.06951	263.90681	4.64716	0.0666310	0.22800652	2.6536148	21	—	—
521352 2015 LF_{46}	16.9	X	305.73948	205.72756	303.88375	14.44779	0.0731323	0.23876004	2.5733268	21	—	—
521353 2015 LG_{46}	16.5	X	329.09452	295.61122	100.05407	10.39829	0.0715729	0.18990806	2.9976008	21	10 21.3	20.5
521354 2015 LH_{46}	16.8	X	144.81864	84.62092	121.14820	1.36259	0.0541869	0.19237780	2.9718901	21	10 3.6	21.0
521355 2015 MU_{34}	16.4	X	28.60438	146.74726	118.18618	10.30724	0.0329415	0.18547575	3.0451682	21	7 21.5	20.5
521356 2015 ML_{56}	17.4	X	260.36594	307.21777	299.49456	6.46922	0.1267789	0.26724076	2.3870834	21	—	—
521357 2015 MB_{86}	18.2	X	319.08647	77.24804	178.56066	5.14471	0.0962478	0.29643031	2.2276877	21	3 9.4	20.5
521358 2015 MS_{86}	18.9	X	311.68355	54.24077	238.22001	4.51286	0.1620679	0.30723953	2.1751272	21	4 6.9	21.2
521359 2015 MH_{95}	17.7	X	230.36219	140.52820	175.42569	6.77745	0.2804735	0.26535498	2.3983794	21	2 10.8	22.1
521360 2015 MB_{121}	17.4	X	313.21536	26.79394	234.78679	6.79689	0.1067386	0.28778322	2.2720911	21	3 5.9	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521361 2015 MN_{137}	18.0	X	242.59341	156.50608	135.46860	7.13314	0.1209453	0.26730196	2.3867190	21	1 27.9	21.4
521362 2015 MH_{139}	16.1	X	21.49297	26.41897	270.95352	9.16055	0.0696169	0.17531646	3.1617019	21	8 21.3	20.4
521363 2015 MJ_{139}	17.3	X	24.83440	204.20399	151.75146	6.80577	0.0712427	0.19887884	2.9067677	21	11 18.8	21.2
521364 2015 MK_{139}	17.2	X	101.76599	93.01496	202.03156	3.85680	0.0437754	0.20945719	2.8080566	21	12 4.9	21.1
521365 2015 MP_{139}	16.7	X	316.95505	253.34417	145.70954	19.33558	0.1325494	0.18478083	3.0527983	21	10 1.2	20.6
521366 2015 MW_{139}	16.4	X	317.50771	156.56577	223.53220	8.03550	0.1116491	0.17352385	3.1834395	21	8 30.4	20.6
521367 2015 MX_{139}	16.2	X	46.23556	50.46371	244.66143	8.93523	0.0890570	0.18196707	3.0841881	21	9 26.0	20.5
521368 2015 MZ_{139}	16.5	X	359.40003	22.04817	343.14202	14.55618	0.0571641	0.18555500	3.0443012	21	10 14.0	20.7
521369 2015 MF_{140}	18.2	X	314.45364	199.39293	49.52005	2.99832	0.0855339	0.28363300	2.2942014	21	2 27.2	20.8
521370 2015 MN_{140}	16.0	X	293.96617	348.85624	83.31085	11.12236	0.0728437	0.18059654	3.0997721	21	10 16.2	20.3
521371 2015 MU_{140}	17.3	X	41.79619	213.48075	149.93215	4.83087	0.1141279	0.20977848	2.8051888	21	12 26.8	21.1
521372 2015 MV_{140}	17.2	X	61.17664	200.02456	136.19230	6.91024	0.0662109	0.20936358	2.8088936	21	12 11.0	21.2
521373 2015 MD_{141}	18.1	X	327.23777	110.07566	132.79090	6.54971	0.0375079	0.29177901	2.2512999	21	3 16.1	20.7
521374 2015 ME_{141}	17.1	X	102.60429	144.64641	150.28936	4.58776	0.0866075	0.21074331	2.7966203	21	12 9.8	21.3
521375 2015 MF_{141}	16.5	X	138.96922	349.90453	170.56142	4.26924	0.0987114	0.16761404	3.2578352	21	8 1.9	21.6
521376 2015 MJ_{141}	17.4	X	167.80421	77.06530	237.39511	3.63808	0.0373858	0.24763443	2.5114741	21	—	—
521377 2015 MK_{141}	16.2	X	67.85829	105.30381	154.40697	11.65631	0.0318752	0.17739099	3.1370035	21	9 5.4	20.4
521378 2015 ML_{141}	16.6	X	332.26401	232.84329	149.53583	11.82262	0.2129827	0.17768023	3.1335982	21	9 28.0	19.8
521379 2015 MQ_{141}	16.5	X	285.74406	104.92299	297.07751	9.23189	0.0568002	0.17180045	3.2046936	21	8 20.6	21.0
521380 2015 MS_{141}	17.4	X	64.02578	186.91407	233.08683	2.90492	0.1130316	0.24356350	2.5393813	21	—	—
521381 2015 MT_{141}	16.2	X	69.20139	350.97487	274.19954	10.97009	0.1028179	0.18142953	3.0902769	21	9 17.9	20.8
521382 2015 MA_{142}	16.9	X	69.26691	233.52468	104.60794	5.14430	0.0692684	0.21625042	2.7489367	21	12 23.9	20.6
521383 2015 MB_{142}	16.3	X	64.81767	123.79741	113.25994	10.41459	0.0883782	0.17352353	3.1834434	21	8 12.3	20.7
521384 2015 ME_{142}	17.0	X	82.77664	149.95318	177.51824	2.85071	0.0810864	0.21632966	2.7482654	21	12 27.5	21.0
521385 2015 MH_{142}	18.2	X	274.51082	191.05722	26.35798	1.60545	0.1242147	0.26185503	2.4197032	21	—	—
521386 2015 MT_{142}	16.7	X	322.05735	287.93400	102.95173	3.83887	0.1480895	0.18118785	3.0930243	21	9 24.4	20.2
521387 2015 MV_{142}	16.9	X	67.68220	270.39304	78.94487	5.19677	0.1118634	0.21400027	2.7681726	21	—	—
521388 2015 MX_{142}	16.5	X	0.63087	9.99932	313.71686	9.55546	0.0810228	0.17292501	3.1907848	21	8 26.9	20.5
521389 2015 MY_{142}	17.4	X	74.82239	221.95616	122.84454	5.64555	0.1444709	0.21610308	2.7501861	21	—	—
521390 2015 MZ_{142}	17.6	X	204.81365	250.89049	86.06882	4.40107	0.0751925	0.26832738	2.3806345	21	2 16.3	20.9
521391 2015 MB_{143}	17.1	X	172.08940	303.96200	347.28457	13.69396	0.1121314	0.23250542	2.6192724	21	—	—
521392 2015 MD_{143}	16.0	X	150.35450	321.33125	274.54984	15.32234	0.0785564	0.19163519	2.9795627	21	11 12.5	20.7
521393 2015 MG_{143}	16.6	X	17.46578	202.46704	131.65576	10.80554	0.0951636	0.18785215	3.0194322	21	10 15.0	20.6
521394 2015 MK_{143}	17.3	X	59.88462	189.35144	164.36738	4.14137	0.1109096	0.21389675	2.7690657	21	—	—
521395 2015 MN_{143}	16.5	X	38.99806	3.80788	269.32267	8.90852	0.1023413	0.17252511	3.1957136	21	8 19.2	20.8
521396 2015 MS_{143}	17.5	X	204.45056	88.01616	162.40982	6.82809	0.1201293	0.23922519	2.5699900	21	—	—
521397 2015 MT_{143}	15.8	X	255.68759	131.55185	296.20980	13.28604	0.0574315	0.16976656	3.2302387	21	8 13.9	20.6
521398 2015 MU_{143}	16.9	X	254.42956	189.77369	81.73930	6.19598	0.1573505	0.25547064	2.4598505	21	1 15.1	20.8
521399 2015 MV_{143}	16.0	X	304.24863	31.05880	106.59066	10.29918	0.0770642	0.20456982	2.8526052	21	—	—
521400 2015 MW_{143}	16.8	X	127.29258	18.12749	202.61246	10.25211	0.0535069	0.20566462	2.8424728	21	10 2.1	21.0
521401 2015 MZ_{143}	17.2	X	61.04555	186.42617	168.17737	4.71929	0.0839542	0.21339387	2.7734143	21	—	—
521402 2015 MC_{144}	16.3	X	31.07196	170.62519	129.24462	9.87496	0.1680828	0.17830550	3.1262681	21	9 28.5	20.2
521403 2015 MF_{144}	16.1	X	66.15030	357.75847	255.77753	13.32992	0.0853575	0.17355852	3.1830155	21	8 26.4	20.8
521404 2015 ML_{144}	15.8	X	63.77983	75.47003	207.61571	18.18011	0.1485030	0.17174416	3.2053938	21	10 14.3	20.2
521405 2015 MN_{144}	16.0	X	108.96179	5.78276	256.35746	9.35303	0.0702659	0.18045987	3.1013369	21	10 29.9	20.7
521406 2015 MO_{144}	16.8	X	51.39755	115.76770	268.61582	9.67633	0.1596431	0.20221491	2.8747093	21	—	—
521407 2015 MQ_{144}	15.6	X	339.35865	90.49443	304.18133	14.58714	0.0559107	0.17644900	3.1481584	21	10 20.5	20.1
521408 2015 MR_{144}	16.3	X	50.67388	62.99776	237.92359	14.67663	0.2457481	0.17600220	3.1534842	21	11 2.9	20.6
521409 2015 MW_{144}	16.2	X	28.10262	159.51731	277.29689	21.34827	0.0435946	0.22611266	2.6684115	21	—	—
521410 2015 MC_{145}	16.3	X	71.80191	316.35945	343.04428	4.16328	0.1271636	0.18934258	3.0035661	21	11 11.1	20.8
521411 2015 MJ_{145}	17.3	X	219.12221	342.46272	210.43903	3.62314	0.0262932	0.21581951	2.7525946	21	12 16.8	21.1
521412 2015 MM_{145}	17.1	X	47.41928	282.01003	104.47974	3.59006	0.0914593	0.22423755	2.6832666	21	—	—
521413 2015 MT_{145}	17.0	X	270.65191	326.72376	105.08908	9.27497	0.0191043	0.18356639	3.0662480	21	9 21.3	21.4
521414 2015 MG_{146}	16.8	X	314.30449	115.16497	319.28585	4.84008	0.0549753	0.20307507	2.8665860	21	11 14.7	20.5
521415 2015 MO_{146}	17.4	X	61.18303	29.19655	324.20652	3.99864	0.0802384	0.21290561	2.7776530	21	—	—
521416 2015 MR_{146}	16.9	X	341.04286	69.30697	337.42404	5.89933	0.0588083	0.20103276	2.8859678	21	11 16.8	20.7
521417 2015 MX_{146}	16.6	X	357.89655	243.55607	149.70485	6.19158	0.1732760	0.17977789	3.1091752	21	12 1.6	20.2
521418 2015 MB_{147}	16.6	X	46.26196	264.82594	69.28911	3.41715	0.1244146	0.18094734	3.0957645	21	11 22.4	20.6
521419 2015 MG_{147}	16.9	X	209.27734	245.97061	20.95647	14.17311	0.1287985	0.23102887	2.6304207	21	—	—
521420 2015 ML_{147}	16.5	X	272.24497	243.70311	182.56250	12.73655	0.0956889	0.17388271	3.1790580	21	8 28.9	21.0
521421 2015 MM_{147}	16.6	X	20.68652	123.96827	228.53891	9.49016	0.1176844	0.19109186	2.9852079	21	11 10.9	20.4
521422 2015 MN_{147}	17.0	X	86.81124	131.68831	157.01013	12.44685	0.0248534	0.19818169	2.9135806	21	11 8.7	21.3
521423 2015 MZ_{147}	17.3	X	301.92745	26.71118	159.43904	15.32568	0.0471043	0.24287303	2.5441919	21	—	—
521424 2015 ME_{148}	17.4	X	49.85167	152.89947	242.39344	3.45839	0.1932029	0.21250935	2.7811048	21	—	—
521425 2015 MM_{148}	16.4	X	306.14476	286.06069	143.76965	21.88666	0.1486036	0.18113169	3.0936636	21	10 24.1	20.6
521426 2015 MP_{148}	17.4	X	169.78670	61.15965	219.48148	2.29624	0.0654105	0.22590169	2.6700726	21	—	—
521427 2015 MW_{148}	17.6	X	83.14476	178.04231	185.29877	6.05248	0.0501094	0.21918121	2.7243768	21	—	—
521428 2015 MN_{149}	16.2	X	320.17502	209.98148	190.48781	11.38703	0.0757412	0.18288750	3.0738313	21	10 7.9	20.1
521429 2015 MO_{149}	17.2	X	187.81049	0.33133	265.26340	8.91622	0.1346491	0.23534927	2.5981296	21	—	—
521430 2015 MQ_{149}	16.5	X	338.39435	176.19792	226.22442	9.48858	0.0987301	0.19005220	2.9960849	21	11 7.7	20.1
521431 2015 MR_{149}	16.3	X	218.60989	291.92733	268.13535	11.70558	0.0771229	0.21667622	2.7453342	21	12 18.5	20.2
521432 2015 MT_{149}	16.1	X	27.53870	52.77959	271.16774	14.46234	0.0717059	0.17970538	3.1100115	21	9 30.7	20.6
521433 2015 NZ_{8}	18.4	X	249.56612	189.35939	130.83570	5.89355	0.2093386	0.28560287	2.2836401	21	3 5.8	22.1
521434 2015 NR_{23}	17.9	X	310.71001	189.58871	105.36666	4.26866	0.1891708	0.30743499	2.1742052	21	4 8.8	20.2
521435 2015 NF_{27}	17.2	X	72.25930	236.79032	151.34631	11.50370	0.1077106	0.23217349	2.6217682	21	—	—
521436 2015 NK_{27}	17.1	X	202.53189	293.36306	285.36329	11.59398	0.2147425	0.22870963	2.6481734	21	12 11.8	21.5
521437 2015 NN_{27}	16.7	X	204.67923	328.78275	262.06466	12.46940	0.1071828	0.22690947	2.6621609	21	—	—
521438 2015 NA_{28}	16.0	X	93.42382	294.53378	311.72978	11.27947	0.0887582	0.17797287	3.1301622	21	9 21.7	20.8
521439 2015 NB_{28}	16.2	X	335.77571	245.39620	143.72111	16.36060	0.1377629	0.17700658	3.1415437	21	10 19.9	20.1
521440 2015 NE_{28}	16.9	X	178.23204	123.35169	134.79846	14.87679	0.0857680	0.22737470	2.6585283	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521441 2015 NG_{28}	16.4	X	109.27805	23.29748	256.01181	4.85575	0.0394855	0.20274575	2.8696893	21	11 22.1	20.3
521442 2015 NH_{28}	16.8	X	153.19515	21.50159	260.05630	3.38106	0.0985202	0.22400590	2.6851161	21	—	—
521443 2015 NJ_{28}	17.8	X	191.62850	72.02469	306.70739	5.53775	0.0968840	0.27957365	2.3163556	21	3 22.8	21.2
521444 2015 NM_{28}	17.5	X	98.94213	272.92787	132.48388	3.43417	0.1052869	0.24764782	2.5113836	21	1 12.2	20.4
521445 2015 NP_{28}	17.3	X	96.89493	17.05119	333.95943	4.33032	0.0576241	0.21555727	2.7548266	21	—	—
521446 2015 OG_{11}	18.1	X	55.24995	11.83250	115.89945	6.81007	0.0543200	0.27496813	2.3421488	21	2 16.8	20.6
521447 2015 OJ_{25}	17.6	X	270.64082	346.19555	317.77759	2.73653	0.1696833	0.28646737	2.2790435	21	3 5.7	21.0
521448 2015 OT_{25}	17.1	X	147.56915	331.63007	342.60404	8.92538	0.1325312	0.23856683	2.5747161	21	—	—
521449 2015 OM_{30}	17.7	X	272.05201	325.75305	326.05535	6.29612	0.2547726	0.28018701	2.3129738	21	2 14.1	21.5
521450 2015 OX_{35}	17.3	X	239.70774	353.49093	317.71545	4.28550	0.1048505	0.27203378	2.3589613	21	2 17.9	20.6
521451 2015 OX_{74}	18.0	X	258.23881	340.90684	327.25454	2.92592	0.2294298	0.27838766	2.3229297	21	2 24.2	21.9
521452 2015 ON_{78}	15.9	X	52.78913	175.50084	80.80041	16.22186	0.0964313	0.18669412	3.0319052	21	8 28.2	20.2
521453 2015 OU_{84}	17.8	X	293.84952	166.51790	104.99981	8.93406	0.1063350	0.27614771	2.3354742	21	3 2.8	20.9
521454 2015 OJ_{86}	17.8	X	0.68534	85.49263	97.73132	3.72429	0.1048629	0.27864221	2.3215147	21	2 1.9	20.2
521455 2015 OJ_{90}	18.0	X	349.17836	139.78144	57.58757	3.52177	0.1117974	0.27635864	2.3342858	21	2 3.6	20.6
521456 2015 OY_{90}	17.1	X	92.81323	339.51375	60.42753	9.62325	0.0533675	0.23668971	2.5883111	21	—	—
521457 2015 OG_{91}	16.1	X	119.56978	28.07020	280.27256	24.70850	0.0510221	0.22100362	2.7093792	21	—	—
521458 2015 OJ_{91}	16.4	X	346.99159	240.46560	113.01018	12.38820	0.1401533	0.17442007	3.1725251	21	9 21.7	20.3
521459 2015 OO_{91}	17.4	X	61.97757	36.81629	339.16044	5.71791	0.0359346	0.22363769	2.6880626	21	—	—
521460 2015 OP_{91}	16.0	X	31.36100	81.89792	258.44414	9.90803	0.0847910	0.18417991	3.0594348	21	11 3.4	20.1
521461 2015 OQ_{91}	17.8	X	141.99300	196.56908	193.30708	7.54110	0.1206192	0.26238809	2.4164249	21	2 14.9	21.3
521462 2015 OS_{91}	16.4	X	322.02345	186.29152	190.51124	11.00547	0.0731094	0.17589352	3.1547829	21	9 7.2	20.6
521463 2015 OU_{91}	16.5	X	233.90291	278.63015	263.99399	8.36869	0.0745441	0.21919212	2.7242864	21	12 16.0	20.1
521464 2015 OW_{91}	17.2	X	58.09089	174.04183	131.66854	11.24379	0.0648835	0.19226323	2.9730707	21	10 31.2	21.5
521465 2015 OY_{91}	17.3	X	46.41851	35.83218	339.00503	5.59033	0.0290455	0.21699191	2.7426708	21	—	—
521466 2015 OA_{92}	17.3	X	72.18248	283.66734	52.21337	4.35513	0.1010616	0.20984895	2.8045607	21	12 27.2	21.3
521467 2015 OD_{92}	16.1	X	236.56851	296.82334	190.79504	15.23105	0.0480351	0.18331579	3.0690418	21	10 10.7	20.5
521468 2015 OF_{92}	16.1	X	352.15582	144.90649	246.15254	9.78698	0.1022855	0.18908830	3.0062582	21	11 14.2	19.7
521469 2015 OH_{92}	17.3	X	290.13903	247.14814	234.60981	11.93236	0.0188554	0.20360148	2.8616428	21	12 15.7	21.2
521470 2015 OK_{92}	16.2	X	274.29330	142.37581	297.27598	12.19936	0.0326648	0.17473994	3.1686524	21	9 21.8	20.9
521471 2015 OM_{92}	16.2	X	335.53636	144.40916	238.00071	8.24110	0.0473467	0.17614281	3.1518058	21	10 4.3	20.4
521472 2015 OT_{92}	16.7	X	82.68583	279.94190	87.86327	7.32660	0.0554957	0.21644771	2.7472660	21	—	—
521473 2015 OV_{92}	15.9	X	25.07452	218.64586	125.89414	16.46202	0.0976480	0.17848402	3.1241832	21	11 9.0	20.3
521474 2015 OW_{92}	17.4	X	131.69958	289.09780	76.06916	10.11629	0.1224138	0.23757654	2.5818659	21	1 9.6	20.9
521475 2015 OY_{92}	16.0	X	166.89691	137.78947	76.36178	11.25339	0.0580347	0.18848247	3.0126967	21	11 8.6	20.6
521476 2015 OZ_{92}	15.9	X	141.52089	98.36297	117.05147	17.97276	0.1073236	0.17778863	3.1323243	21	10 19.8	21.1
521477 2015 OD_{93}	16.8	X	148.64421	287.01942	22.54407	11.14012	0.0907220	0.22271009	2.6955214	21	—	—
521478 2015 OH_{93}	16.3	X	83.21335	224.10647	51.95140	13.62318	0.1252856	0.17872590	3.1213638	21	10 28.8	20.9
521479 2015 OS_{93}	16.3	X	296.04321	150.94288	273.09065	5.18159	0.0463688	0.18092795	3.0959856	21	10 3.5	20.5
521480 2015 OV_{93}	15.9	X	32.40525	35.69057	286.13599	8.01065	0.0825784	0.17914572	3.1164853	21	10 9.2	20.2
521481 2015 OW_{93}	16.1	X	35.50416	17.64807	289.24734	7.80486	0.0864367	0.17426040	3.1744628	21	9 24.4	20.4
521482 2015 OA_{94}	17.2	X	351.71423	346.12730	153.76547	8.02145	0.0207304	0.24304345	2.5430024	21	—	—
521483 2015 OC_{94}	16.5	X	98.80573	299.47784	314.45425	9.63035	0.1183044	0.18255836	3.0775249	21	10 11.4	21.4
521484 2015 OD_{94}	17.4	X	164.03803	304.20663	315.22572	7.24442	0.1081797	0.21584097	2.7524121	21	12 29.9	21.7
521485 2015 OE_{94}	16.7	X	339.30778	192.44421	229.22585	1.09604	0.0913677	0.19482403	2.9469608	21	12 4.9	20.2
521486 2015 OF_{94}	16.4	X	86.76589	295.64584	320.79645	7.78878	0.0566412	0.17484118	3.1674290	21	9 24.3	21.0
521487 2015 OG_{94}	15.8	X	126.15955	243.66417	335.75364	16.67797	0.0537002	0.17561950	3.1580638	21	9 21.9	20.7
521488 2015 OH_{94}	17.8	X	209.91681	62.42538	172.29902	6.21906	0.1351617	0.22931458	2.6435139	21	—	—
521489 2015 OK_{94}	17.3	X	107.65178	172.89027	164.71989	6.38932	0.0376042	0.22044387	2.7139637	21	—	—
521490 2015 OP_{94}	16.4	X	299.54385	260.61010	143.93407	2.61924	0.0734786	0.16716376	3.2636829	21	9 12.2	20.8
521491 2015 OR_{94}	16.9	X	178.64791	262.05921	336.51949	4.07379	0.1069098	0.21185525	2.7868263	21	12 18.3	21.2
521492 2015 OW_{94}	16.3	X	119.10922	262.27649	329.84381	15.78431	0.0959213	0.17730099	3.1380650	21	10 1.5	21.3
521493 2015 OX_{94}	17.7	X	263.60745	113.47731	143.63939	14.83638	0.1119123	0.25788824	2.4444530	21	1 7.9	21.4
521494 2015 OB_{95}	16.4	X	337.68666	73.57655	297.63520	14.99787	0.1495069	0.17437418	3.1730818	21	9 14.0	20.4
521495 2015 OD_{95}	16.3	X	2.46271	213.76251	154.93794	10.05006	0.0531014	0.18763733	3.0217363	21	11 1.4	20.4
521496 2015 OF_{95}	16.8	X	36.20422	194.12064	168.12594	8.43226	0.0755167	0.20022982	2.8936781	21	12 11.5	20.9
521497 2015 OG_{95}	17.0	X	78.38682	211.70721	168.90159	14.11165	0.1188082	0.21646994	2.7470780	21	—	—
521498 2015 OH_{95}	17.8	X	164.33336	101.18595	311.63856	6.48807	0.1072624	0.27058578	2.3673696	21	4 7.6	21.2
521499 2015 OJ_{95}	17.2	X	163.41161	138.57363	171.35331	11.87053	0.0763610	0.22892528	2.6465100	21	—	—
521500 2015 OM_{95}	17.4	X	96.28493	189.30773	188.10493	4.81642	0.0417715	0.22445298	2.6815494	21	—	—
521501 2015 OR_{95}	17.3	X	239.06489	28.74433	201.57764	5.92571	0.0146365	0.22333739	2.6904717	21	—	—
521502 2015 OU_{95}	16.5	X	123.37238	303.77435	318.42580	7.62228	0.0718631	0.18654511	3.0335196	21	11 14.9	21.2
521503 2015 OX_{95}	17.3	X	125.24679	145.40925	197.19664	6.14083	0.0492278	0.22162434	2.7043179	21	—	—
521504 2015 OA_{96}	16.2	X	68.23769	337.54981	304.95465	4.12788	0.1453638	0.17238878	3.1973981	21	10 17.1	20.8
521505 2015 OC_{96}	16.9	X	139.85530	91.35223	179.27855	10.69793	0.1273416	0.19972187	2.8985822	21	12 17.4	21.7
521506 2015 OD_{96}	17.1	X	112.70837	355.73063	342.87360	5.78646	0.0719660	0.21350408	2.7724599	21	—	—
521507 2015 OL_{96}	17.4	X	113.46502	6.27786	15.52851	2.04333	0.1041660	0.23264760	2.6182051	21	1 5.7	20.8
521508 2015 ON_{96}	17.9	X	264.50349	115.76040	152.89093	6.83797	0.1422787	0.26010655	2.4305349	21	1 20.1	21.6
521509 2015 OO_{96}	16.9	X	157.06382	307.98443	353.52466	8.55282	0.1433302	0.22276020	2.6951172	21	—	—
521510 2015 OQ_{96}	16.9	X	89.68798	231.28467	105.36391	3.27312	0.0730957	0.20241997	2.8727675	21	—	—
521511 2015 OR_{96}	17.9	X	284.23266	108.25935	163.40322	14.50344	0.1299578	0.26881591	2.3777494	21	2 12.7	21.4
521512 2015 OV_{96}	16.5	X	8.77851	243.47830	114.86385	4.14466	0.1089499	0.17167557	3.2062476	21	10 28.8	20.5
521513 2015 OX_{96}	16.7	X	250.61095	196.79024	308.97961	8.23261	0.0597303	0.18727353	3.0256484	21	11 14.9	21.0
521514 2015 OA_{97}	16.3	X	245.20213	327.18787	166.64447	10.59687	0.0668797	0.17476093	3.1683986	21	10 27.1	20.9
521515 2015 OB_{97}	15.7	X	297.19852	264.16174	88.50035	11.30878	0.0964823	0.15625224	3.4139086	21	6 30.6	20.3
521516 2015 OF_{97}	17.5	X	65.19728	77.91682	333.88079	10.95200	0.2035021	0.22907616	2.6453479	21	—	—
521517 2015 OJ_{97}	17.7	X	23.55883	93.20156	85.73971	10.64018	0.0079024	0.27700816	2.3306354	21	3 17.2	20.8
521518 2015 ON_{97}	16.5	X	207.86377	133.51965	1.70381	11.83102	0.0689618	0.17374399	3.1807499	21	9 14.9	21.1
521519 2015 OR_{97}	17.1	X	185.46573	145.38125	129.01543	15.82479	0.1185502	0.22719725	2.6599124	21	—	—
521520 2015 OV_{97}	16.8	X	268.42650	176.78795	354.33035	8.80043	0.0577937	0.21494099	2.7600898	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521521 2015 OW_{97}	17.2	X	66.03974	265.72343	125.72492	6.34564	0.1009866	0.21854746	2.7296410	21	—	—
521522 2015 OD_{98}	16.8	X	99.28036	140.30597	137.23958	9.50356	0.0274659	0.18825282	3.0151463	21	11 8.6	21.2
521523 2015 OM_{98}	16.5	X	208.57740	144.34644	344.27564	10.00645	0.0490886	0.16706014	3.2650324	21	9 7.2	21.2
521524 2015 OP_{98}	16.9	X	148.30187	166.42915	114.15206	6.15994	0.1325557	0.21687068	2.7436928	21	—	—
521525 2015 OW_{98}	16.3	X	46.34277	313.37838	352.08865	15.50268	0.0559758	0.17538858	3.1608352	21	10 3.8	20.7
521526 2015 OZ_{98}	17.4	X	281.57355	188.25767	94.88246	8.29403	0.1085905	0.27745832	2.3281138	21	3 3.0	20.6
521527 2015 OE_{99}	16.3	X	60.60001	339.66329	40.90103	12.11626	0.1231106	0.18935299	3.0034560	21	—	—
521528 2015 OL_{99}	17.4	X	100.40658	207.73601	95.61231	3.19513	0.0550005	0.20715323	2.8288390	21	12 13.8	21.3
521529 2015 OR_{99}	16.6	X	352.00423	158.52251	262.48336	9.26143	0.0522734	0.19842288	2.9112190	21	12 21.2	20.5
521530 2015 OW_{99}	16.4	X	34.36730	52.61988	280.72045	7.94385	0.0958583	0.17819876	3.1275164	21	10 29.3	20.7
521531 2015 OX_{99}	16.3	X	121.06663	293.44781	305.48013	11.34172	0.0625381	0.17567378	3.1574131	21	10 10.0	21.2
521532 2015 OB_{100}	16.5	X	4.69715	63.44940	301.07770	0.83136	0.0771025	0.17647045	3.1479033	21	10 26.5	20.5
521533 2015 OC_{100}	17.5	X	91.16237	74.73202	296.10526	3.69235	0.1659666	0.21853241	2.7297664	21	—	—
521534 2015 OK_{100}	17.6	X	267.98622	271.13120	265.66217	2.65953	0.0374153	0.21625569	2.7488921	21	—	—
521535 2015 OL_{100}	16.6	X	273.28514	296.38808	175.08512	10.48909	0.0204088	0.18645453	3.0345020	21	11 11.1	20.9
521536 2015 OO_{100}	17.0	X	184.37476	116.00604	167.57712	14.92351	0.1010489	0.23074423	2.6325835	21	—	—
521537 2015 OP_{100}	16.5	X	318.20051	109.33521	294.58631	7.85370	0.0626666	0.17410798	3.1763153	21	10 4.6	20.8
521538 2015 OQ_{100}	17.0	X	163.92968	326.75431	267.60207	4.38729	0.0317404	0.19602454	2.9349166	21	11 28.3	21.3
521539 2015 OU_{100}	16.6	X	74.07884	81.88249	193.76890	8.80357	0.0527475	0.17464703	3.1697760	21	10 5.1	20.9
521540 2015 OX_{100}	16.2	X	326.65549	86.15091	305.05666	7.26497	0.1406577	0.17009197	3.2261174	21	9 25.8	20.1
521541 2015 OD_{101}	16.3	X	356.56537	103.17355	255.22917	7.86377	0.0868497	0.17294563	3.1905312	21	10 3.5	20.4
521542 2015 OF_{101}	16.8	X	263.01222	261.59305	285.74816	11.42673	0.1249365	0.22212928	2.7002181	21	—	—
521543 2015 OG_{101}	16.0	X	324.98471	160.04634	249.08690	8.05038	0.0225558	0.18239957	3.0793107	21	10 26.2	20.2
521544 2015 OK_{101}	16.0	X	27.57149	63.75952	285.92730	8.59269	0.0602058	0.18351367	3.0668352	21	11 6.0	20.2
521545 2015 OM_{101}	16.5	X	98.50839	285.55969	320.99284	14.48934	0.0324262	0.16922301	3.2371520	21	9 19.4	21.3
521546 2015 ON_{101}	16.5	X	23.38878	80.59890	252.83625	4.42069	0.1069855	0.17421364	3.1750309	21	10 15.9	20.6
521547 2015 OR_{101}	16.1	X	164.00503	239.04115	317.37953	8.64258	0.0446868	0.17683939	3.1435235	21	10 6.9	20.9
521548 2015 OZ_{101}	16.6	X	137.76393	11.39937	316.27948	10.32443	0.0734055	0.21584353	2.7523903	21	—	—
521549 2015 OF_{102}	16.7	X	257.88326	307.64684	291.84758	11.29409	0.0431915	0.22798007	2.6538200	21	—	—
521550 2015 OH_{102}	16.3	X	99.82537	25.14056	280.62740	8.53000	0.0330776	0.18486688	3.0518509	21	12 9.7	20.8
521551 2015 OK_{102}	16.7	X	24.25224	96.76275	288.57720	6.70283	0.1403077	0.18477179	3.0528979	21	12 29.0	20.7
521552 2015 OU_{102}	17.1	X	150.90051	81.78349	241.80742	13.37599	0.1979868	0.22383954	2.6864464	21	—	—
521553 2015 OV_{102}	16.4	X	1.27873	75.75245	327.29940	17.97429	0.0815124	0.17984651	3.1083843	21	12 9.0	20.8
521554 2015 OX_{102}	16.6	X	273.06722	275.65341	223.18093	9.02826	0.0191315	0.18580823	3.0415346	21	12 11.9	20.9
521555 2015 OY_{102}	16.6	X	64.93659	217.08374	216.54157	8.67710	0.0495491	0.22481904	2.6786378	21	—	—
521556 2015 OC_{103}	17.2	X	130.08351	130.60145	166.78268	12.86517	0.0479512	0.21407423	2.7675350	21	—	—
521557 2015 OH_{103}	16.3	X	210.88091	202.62616	299.43957	7.35202	0.0215120	0.17640001	3.1487413	21	9 25.9	20.9
521558 2015 OU_{103}	16.4	X	78.89061	287.97038	57.95025	15.54162	0.1654487	0.20426657	2.8554279	21	—	—
521559 2015 OW_{103}	16.3	X	11.34271	278.71022	96.24150	16.78117	0.2896074	0.17888728	3.1194863	21	12 16.9	19.7
521560 2015 OY_{103}	15.7	X	325.36438	97.07014	38.76447	26.17661	0.2308724	0.18240509	3.0792486	21	—	—
521561 2015 OG_{104}	16.8	X	13.47511	246.61435	151.15824	2.68521	0.0857804	0.19907519	2.9048561	21	12 25.5	20.5
521562 2015 OM_{104}	16.0	X	126.31846	312.00620	272.91039	10.04175	0.0826443	0.18606990	3.0386823	21	10 2.3	20.9
521563 2015 OO_{104}	16.5	X	30.35348	330.67263	333.69705	3.42345	0.1225936	0.17353965	3.1832462	21	9 21.7	20.6
521564 2015 OR_{104}	17.4	X	208.44231	292.52589	342.39074	13.25067	0.1452921	0.24486149	2.5303993	21	—	—
521565 2015 OT_{104}	16.5	X	76.43096	177.45917	89.05003	3.50559	0.1386884	0.17901920	3.1179535	21	10 10.7	21.0
521566 2015 OU_{104}	16.1	X	124.36242	85.65781	153.05748	9.09653	0.0303210	0.18539884	3.0460104	21	10 20.9	20.6
521567 2015 OW_{104}	16.0	X	231.48719	198.49750	296.59489	8.98088	0.0348886	0.17922651	3.1155488	21	10 9.8	20.7
521568 2015 OA_{105}	16.0	X	266.76915	304.12155	164.21877	17.30997	0.1149532	0.17668860	3.1453118	21	10 16.6	20.5
521569 2015 OG_{105}	16.5	X	198.48359	353.24962	187.38282	12.15873	0.0660328	0.18622306	3.0370159	21	10 31.6	21.1
521570 2015 OJ_{105}	16.7	X	246.88937	251.91765	297.66442	8.31918	0.0910785	0.21158266	2.7892193	21	—	—
521571 2015 OO_{105}	15.7	X	102.10139	248.51024	356.00359	13.05800	0.1138122	0.17079750	3.2172271	21	10 4.3	20.5
521572 2015 PQ_{5}	18.7	X	312.09996	147.42956	135.90520	4.48502	0.1892327	0.30200264	2.2002003	21	3 24.9	21.2
521573 2015 PQ_{30}	18.1	X	219.38465	144.30195	208.46285	2.99336	0.1571441	0.27775137	2.3264760	21	3 19.9	21.6
521574 2015 PQ_{54}	17.6	X	200.93350	234.56702	128.37580	9.56859	0.1109037	0.26879972	2.3778448	21	3 20.0	21.2
521575 2015 PR_{57}	18.4	X	245.69670	144.04607	201.61203	1.31175	0.2440804	0.28518196	2.2858866	21	3 30.8	22.1
521576 2015 PX_{70}	17.5	X	79.51451	348.30566	120.18101	7.41496	0.0500197	0.27715594	2.3298069	21	2 26.9	20.1
521577 2015 PK_{130}	17.0	X	67.84060	285.12256	133.73343	10.35098	0.0654947	0.24232315	2.5480392	21	—	—
521578 2015 PU_{203}	17.2	X	174.07653	218.89278	35.67265	8.77432	0.1100890	0.21924827	2.7238212	21	—	—
521579 2015 PK_{212}	16.5	X	266.21214	331.89856	240.09848	14.56881	0.0019888	0.23527844	2.5986511	21	—	—
521580 2015 PD_{224}	16.8	X	204.17880	77.78086	239.63254	10.98781	0.1900437	0.25666719	2.4521995	21	1 22.4	21.0
521581 2015 PG_{283}	16.7	X	98.99547	223.05092	58.29343	9.31851	0.1898163	0.19593728	2.9357878	21	11 25.6	21.3
521582 2015 PS_{286}	17.1	X	193.79113	272.25978	88.06923	8.07951	0.1437612	0.26652460	2.3913576	21	3 11.4	20.9
521583 2015 PT_{289}	17.2	X	162.77692	277.68822	111.81617	13.26811	0.1263268	0.26170283	2.4206413	21	3 18.2	21.0
521584 2015 PZ_{301}	17.5	X	249.82146	225.97607	95.27790	6.09679	0.1864171	0.27932450	2.3177328	21	3 10.8	21.1
521585 2015 PD_{302}	17.4	X	297.82603	216.41179	49.15862	7.17985	0.1185664	0.27858835	2.3218140	21	2 25.9	20.5
521586 2015 PO_{309}	17.3	X	196.11690	245.89494	103.32417	10.68956	0.2838975	0.26291962	2.4131670	21	3 3.6	21.7
521587 2015 PB_{311}	17.1	X	151.29639	151.82116	219.34446	5.43871	0.2730218	0.23860210	2.5744623	21	2 20.0	21.4
521588 2015 PD_{314}	17.2	X	172.53726	201.78458	156.35362	14.16457	0.1410923	0.24721441	2.5143179	21	2 13.5	21.1
521589 2015 PB_{316}	17.0	X	242.83883	350.42720	229.24665	3.96710	0.1306514	0.23311818	2.6146804	21	—	—
521590 2015 PS_{316}	16.3	X	37.55040	239.96262	162.53453	12.20455	0.0597507	0.19789043	2.9164388	21	—	—
521591 2015 PV_{316}	16.9	X	128.71993	252.80271	67.39483	10.58692	0.0954350	0.23059352	2.6337304	21	—	—
521592 2015 PW_{316}	17.1	X	18.41929	159.01251	217.67910	1.71755	0.1570381	0.19728191	2.9224328	21	12 15.1	20.6
521593 2015 PY_{316}	17.5	X	292.11645	74.98006	136.97546	14.82516	0.0504600	0.25823689	2.4422523	21	—	—
521594 2015 PB_{317}	16.2	X	238.72173	236.08156	252.42285	8.16774	0.0710391	0.18076120	3.0978894	21	10 7.4	20.8
521595 2015 PD_{317}	16.2	X	51.77943	347.28388	291.60139	4.80827	0.1544458	0.17139752	3.2097142	21	9 22.6	20.6
521596 2015 PE_{317}	17.3	X	187.61729	24.53499	288.81148	2.41595	0.0735609	0.24637236	2.5200436	21	—	—
521597 2015 PK_{317}	17.0	X	41.37776	110.74241	301.22945	8.19051	0.0757555	0.21986388	2.7187345	21	—	—
521598 2015 PN_{317}	16.9	X	237.55498	193.89230	303.24760	5.26085	0.0729442	0.18666303	3.0322419	21	10 17.6	21.3
521599 2015 PO_{317}	16.1	X	191.53008	205.02244	306.44070	7.39707	0.1657094	0.17205310	3.2015557	21	9 8.5	21.4
521600 2015 PT_{317}	16.6	X	4.86877	75.11621	297.68940	7.45870	0.0722896	0.18547529	3.0451733	21	11 5.0	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521601 2015 PW_{317}	16.6	X	98.64512	75.94861	175.46203	10.75094	0.0555746	0.17752476	3.1354275	21	10 6.6	21.1
521602 2015 PB_{318}	16.3	X	21.88707	148.52555	180.09519	10.08002	0.0580954	0.17419214	3.1752921	21	10 4.8	20.4
521603 2015 PA_{319}	16.9	X	336.29071	30.30434	359.19388	2.65576	0.0516538	0.17940323	3.1135025	21	10 16.8	20.9
521604 2015 PO_{319}	16.5	X	19.60454	216.54465	138.55044	4.34151	0.0693923	0.17984420	3.1084110	21	11 6.6	20.6
521605 2015 PP_{319}	16.3	X	14.16916	214.13088	144.92215	16.74058	0.1859399	0.17689565	3.1428570	21	11 19.9	20.4
521606 2015 PS_{319}	16.2	X	234.40634	265.12907	242.13064	11.16048	0.0701724	0.18551660	3.0447212	21	10 27.4	20.6
521607 2015 PX_{319}	17.7	X	92.22266	354.70824	117.74283	6.09634	0.0497746	0.27551979	2.3390214	21	3 24.7	20.5
521608 2015 PZ_{319}	16.6	X	12.36123	88.02080	345.39246	21.81783	0.0128133	0.22996527	2.6385250	21	—	—
521609 2015 PA_{320}	16.2	X	75.33745	259.16198	16.45582	10.30688	0.0999689	0.18839470	3.0136323	21	10 14.3	20.3
521610 2015 PC_{320}	16.4	X	26.00702	292.74582	86.77449	11.24364	0.1287227	0.19439390	2.9513063	21	12 24.6	20.1
521611 2015 PE_{320}	16.1	X	11.04587	221.09059	158.17040	8.28850	0.0556401	0.17856859	3.1231967	21	11 23.6	20.4
521612 2015 PH_{320}	15.9	X	13.42749	199.14952	157.57084	9.86246	0.0629477	0.16977007	3.2301941	21	10 30.3	20.3
521613 2015 PK_{320}	16.8	X	26.87300	241.29441	165.13015	11.59758	0.0573033	0.19687150	2.9264930	21	—	—
521614 2015 PN_{320}	17.1	X	155.61670	214.48201	87.53894	4.89957	0.0526549	0.21355072	2.7720562	21	—	—
521615 2015 PO_{320}	17.7	X	89.28838	321.97142	112.00570	5.34230	0.1530172	0.23529560	2.5985247	21	2 16.6	20.7
521616 2015 PR_{320}	17.1	X	121.68289	243.47507	108.80115	5.66798	0.1242993	0.22056049	2.7130070	21	—	—
521617 2015 PV_{320}	16.8	X	205.29641	118.95672	121.26750	3.11764	0.0146039	0.20291961	2.8680499	21	—	—
521618 2015 PW_{320}	17.6	X	246.49525	162.02477	156.55631	9.14007	0.1338890	0.26528204	2.3988190	21	3 6.7	21.3
521619 2015 PB_{321}	16.2	X	48.30935	204.04382	154.78912	16.06020	0.1189598	0.18137168	3.0909340	21	12 24.7	20.8
521620 2015 PG_{321}	16.6	X	68.61744	215.25880	166.88450	17.67140	0.1325709	0.19786640	2.9166749	21	—	—
521621 2015 PJ_{321}	16.9	X	86.50259	271.65661	175.18263	21.94931	0.0692098	0.23027067	2.6361916	21	2 14.7	20.6
521622 2015 PK_{321}	16.7	X	204.79207	202.11680	348.60761	12.96346	0.0834632	0.20008736	2.8950514	21	11 13.5	21.2
521623 2015 PN_{321}	16.5	X	256.05084	124.96728	333.78351	11.73797	0.0370384	0.17875553	3.1210189	21	9 25.2	21.0
521624 2015 PQ_{321}	16.4	X	304.91142	8.42295	86.73865	11.79668	0.0662650	0.19336127	2.9618045	21	11 28.2	20.3
521625 2015 PV_{321}	16.9	X	146.26168	355.01397	288.67672	3.34147	0.0344922	0.21138688	2.7909413	21	—	—
521626 2015 PC_{322}	17.4	X	70.43003	14.40239	349.79474	3.90479	0.0829517	0.21135244	2.7912444	21	—	—
521627 2015 PN_{322}	17.0	X	123.70753	212.15332	27.27591	4.14873	0.1400207	0.18800964	3.0177457	21	10 25.7	21.7
521628 2015 PP_{322}	17.1	X	88.51227	199.77751	111.61420	3.14802	0.0401477	0.19810928	2.9142905	21	12 6.9	21.2
521629 2015 PZ_{322}	16.7	X	247.86125	38.68956	124.68408	11.11615	0.0534714	0.19933647	2.9023172	21	12 10.1	20.9
521630 2015 PE_{323}	16.8	X	255.60031	351.80653	118.60007	10.42023	0.0764026	0.17493692	3.1662733	21	10 11.9	21.4
521631 2015 QW_{14}	17.8	X	215.58862	117.92251	216.98791	4.02362	0.1025430	0.26502655	2.4003605	21	2 22.7	21.4
521632 2015 QZ_{14}	16.5	X	55.09854	236.51513	174.50702	10.94015	0.1205779	0.19679730	2.9272285	21	—	—
521633 2015 QD_{15}	17.3	X	234.20672	34.20324	227.67270	2.85351	0.1492622	0.25501986	2.4627484	21	—	—
521634 2015 QG_{16}	16.5	X	52.73734	333.87682	342.96442	7.59411	0.0718642	0.17870452	3.1216128	21	10 29.6	20.9
521635 2015 QH_{16}	16.6	X	110.71961	297.32546	319.83149	3.83383	0.0954766	0.18052709	3.1005671	21	10 28.4	21.3
521636 2015 QJ_{16}	16.3	X	84.66875	92.29153	181.89903	9.47127	0.0650234	0.17513685	3.1638632	21	10 19.2	20.8
521637 2015 QO_{16}	17.4	X	122.46760	120.44966	188.40218	4.17291	0.0443775	0.20854970	2.8161969	21	—	—
521638 2015 QR_{16}	17.7	X	213.40242	61.13569	201.03245	3.81004	0.0601639	0.23148352	2.6269754	21	—	—
521639 2015 QU_{16}	16.5	X	115.51937	273.56886	334.02623	6.93031	0.0450652	0.17749570	3.1357697	21	10 16.1	21.1
521640 2015 QV_{16}	16.8	X	98.66972	134.23657	210.40932	2.90040	0.1013018	0.21443277	2.7644492	21	—	—
521641 2015 QW_{16}	16.5	X	27.74186	137.39576	186.07452	8.16071	0.0770748	0.17266608	3.1939739	21	10 7.9	20.7
521642 2015 QG_{17}	16.3	X	317.64678	244.80713	190.03405	10.76147	0.1361625	0.18240104	3.0792941	21	11 14.8	20.0
521643 2015 QM_{17}	16.8	X	22.15422	213.40516	184.36301	10.75248	0.0713298	0.19827896	2.9126276	21	—	—
521644 2015 QP_{17}	16.9	X	23.11157	187.98248	207.25670	2.83239	0.0972970	0.19740261	2.9212415	21	—	—
521645 2015 QR_{17}	16.8	X	302.37351	126.72655	323.17344	15.51891	0.1865648	0.17952330	3.1121140	21	10 23.5	20.8
521646 2015 QW_{17}	16.4	X	351.45335	263.02821	156.91216	10.51985	0.0432701	0.18326620	3.0695953	21	12 16.2	20.7
521647 2015 QB_{18}	16.3	X	61.94794	259.94339	77.72775	10.60084	0.1083090	0.18403633	3.0610259	21	12 13.6	20.5
521648 2015 QJ_{18}	16.4	X	61.09072	190.97081	151.95367	8.70432	0.0473745	0.18078013	3.0976732	21	12 11.2	20.9
521649 2015 QK_{18}	15.9	X	82.49823	287.00570	35.14275	27.07893	0.0564750	0.18273956	3.0754901	21	12 5.0	20.7
521650 2015 QY_{18}	17.0	X	150.84719	218.72003	98.86380	6.51765	0.1853511	0.22178333	2.7030253	21	—	—
521651 2015 QA_{19}	17.1	X	138.18308	238.92243	137.27808	12.86475	0.1322904	0.23462938	2.6034412	21	2 1.2	20.8
521652 2015 QB_{19}	16.3	X	143.04091	208.49852	86.28584	10.54774	0.0780837	0.19861332	2.9093578	21	—	—
521653 2015 RY_{5}	17.0	X	118.69637	234.31172	150.02650	9.81201	0.1361046	0.24743019	2.5128559	21	1 16.2	20.2
521654 2015 RS_{16}	16.9	X	161.73604	59.33235	241.70908	5.35245	0.1647028	0.22631272	2.6668387	21	—	—
521655 2015 RL_{33}	16.6	X	83.49646	304.57747	93.11777	15.80242	0.0923903	0.21851123	2.7299428	21	—	—
521656 2015 RG_{40}	16.7	X	56.18422	112.52972	202.59382	4.94985	0.1990128	0.18267969	3.0761620	21	11 22.7	21.0
521657 2015 RU_{65}	17.6	X	295.79556	237.32240	20.22433	2.68449	0.1519815	0.26876483	2.3780506	21	2 7.4	20.7
521658 2015 RT_{66}	17.8	X	273.30401	202.17318	51.62969	1.97100	0.1433307	0.25543419	2.4600845	21	1 12.3	21.5
521659 2015 RB_{84}	17.0	X	182.94007	154.72302	209.77723	9.93151	0.1779284	0.25636290	2.4541396	21	3 1.8	21.1
521660 2015 RM_{93}	17.2	X	141.11270	252.03698	157.89182	12.71174	0.1804359	0.25849088	2.4406522	21	3 23.7	20.8
521661 2015 RC_{99}	17.6	X	176.98931	165.01482	207.26588	4.48979	0.1151599	0.26015951	2.4302050	21	3 3.4	21.2
521662 2015 RJ_{103}	17.6	X	187.87979	113.71269	247.33461	5.48571	0.1501163	0.26333584	2.4106236	21	2 28.3	21.4
521663 2015 RC_{109}	17.3	X	205.22036	302.61236	51.37160	8.68263	0.1904538	0.26191634	2.4193256	21	3 15.4	21.4
521664 2015 RK_{115}	17.1	X	197.95813	305.29658	50.73168	6.18222	0.1802045	0.26157543	2.4214272	21	3 10.3	21.0
521665 2015 RB_{116}	17.5	X	235.80704	224.12755	118.97976	6.35630	0.2346917	0.27556184	2.3387834	21	3 23.7	21.5
521666 2015 RV_{142}	17.7	X	194.92624	185.24206	94.03010	1.99288	0.1105595	0.23226201	2.6211020	21	—	—
521667 2015 RB_{200}	17.7	X	220.02144	210.74648	115.10940	3.52423	0.0545623	0.25533590	2.4607159	21	2 20.4	21.1
521668 2015 RU_{203}	16.7	X	92.16999	2.25511	27.10108	13.82231	0.0653319	0.22147743	2.7055136	21	—	—
521669 2015 RZ_{208}	17.7	X	270.95644	163.23565	147.18475	3.44480	0.2078321	0.27852552	2.3221631	21	3 13.1	21.2
521670 2015 RP_{213}	18.0	X	234.11010	141.77007	175.63295	4.80403	0.1574568	0.26798410	2.3826671	21	2 18.4	21.7
521671 2015 RZ_{235}	16.7	X	222.82780	123.29275	137.34102	11.93042	0.0144613	0.21408998	2.7673993	21	—	—
521672 2015 RH_{240}	16.5	X	1.50039	327.52760	116.55051	14.14870	0.0787015	0.18938225	3.0031466	21	—	—
521673 2015 RU_{240}	16.7	X	17.10562	292.59790	125.11788	10.07171	0.0431160	0.18657303	3.0332169	21	—	—
521674 2015 RK_{242}	17.3	X	168.69928	229.05128	125.70544	10.18586	0.1696145	0.23773911	2.5806888	21	2 10.6	21.3
521675 2015 RH_{253}	17.1	X	206.06297	64.52469	230.37072	7.45796	0.1200129	0.22813251	2.6526377	21	1 2.0	21.3
521676 2015 RA_{254}	17.6	X	289.47618	73.62573	177.69751	2.33985	0.1307703	0.26025448	2.4296138	21	1 25.7	21.2
521677 2015 RP_{256}	16.6	X	286.92487	22.48143	133.62387	10.41727	0.1493840	0.18528556	3.0472517	21	—	—
521678 2015 RH_{260}	17.4	X	209.40428	326.17206	334.76025	1.84634	0.1437294	0.23056125	2.6339762	21	1 13.6	21.6
521679 2015 RE_{261}	16.8	X	113.55268	192.89905	206.66791	21.56526	0.0163333	0.22926361	2.6439057	21	1 11.5	20.9
521680 2015 RK_{261}	16.0	X	139.83045	196.97044	119.17013	21.72802	0.0891216	0.21031050	2.8004559	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521681 2015 RR_{261}	17.4	X	68.94322	29.92813	352.41623	2.67942	0.0992210	0.21485059	2.7608640	21	—	—
521682 2015 RS_{261}	17.4	X	152.19959	300.51551	4.43754	2.99709	0.0735577	0.22223579	2.6993553	21	—	—
521683 2015 RU_{261}	15.8	X	74.53968	311.57706	339.67830	13.56448	0.0163722	0.17169957	3.2059488	21	10 13.6	20.5
521684 2015 RY_{261}	16.8	X	82.84810	332.27009	13.01792	5.93039	0.0722383	0.20461715	2.8521653	21	—	—
521685 2015 RZ_{261}	17.2	X	127.46694	192.57620	146.00067	5.58367	0.0752223	0.22239768	2.6980452	21	—	—
521686 2015 RC_{262}	17.8	X	115.11414	130.23608	256.10685	2.34211	0.0635312	0.23889202	2.5723790	21	1 5.7	21.2
521687 2015 RD_{262}	16.7	X	193.30413	203.40879	324.73126	4.45043	0.0316235	0.17493679	3.1662749	21	10 8.2	21.3
521688 2015 RH_{262}	17.3	X	108.64282	26.00553	301.16880	3.40496	0.0715422	0.21242348	2.7818543	21	—	—
521689 2015 RL_{262}	17.2	X	320.54752	189.77544	306.17472	1.57625	0.1225713	0.21745876	2.7387440	21	—	—
521690 2015 RM_{262}	16.5	X	339.58890	220.23458	168.91783	8.61453	0.0728648	0.17693230	3.1424230	21	10 23.4	20.5
521691 2015 RT_{262}	16.3	X	67.06674	89.60365	218.04629	8.76447	0.1049106	0.18030436	3.1031199	21	11 13.1	20.6
521692 2015 RY_{262}	16.8	X	94.15415	102.25827	217.00580	10.62110	0.1270467	0.19688765	2.9263330	21	12 29.4	21.5
521693 2015 RZ_{262}	16.4	X	118.26950	295.30950	340.46604	10.70620	0.1318305	0.18933764	3.0036183	21	11 29.9	21.4
521694 2015 RB_{263}	16.9	X	127.29194	21.55054	314.59014	5.41634	0.0273484	0.21570831	2.7535405	21	—	—
521695 2015 RD_{263}	17.2	X	250.26220	347.37764	275.30827	3.15166	0.1216162	0.24547878	2.5261555	21	1 3.3	21.1
521696 2015 RG_{263}	16.3	X	255.93612	307.83684	187.52130	22.39773	0.0928000	0.17857833	3.1230831	21	11 7.5	20.9
521697 2015 RK_{263}	16.3	X	239.04881	146.54779	349.75325	10.78440	0.0515609	0.17181146	3.2045567	21	10 18.1	21.0
521698 2015 RO_{263}	16.3	X	57.49875	228.76711	112.83407	10.00470	0.0771518	0.18371472	3.0645972	21	12 10.1	20.7
521699 2015 RP_{263}	16.1	X	65.15301	237.80365	83.56996	10.28322	0.1458810	0.18122513	3.0926002	21	12 3.1	20.5
521700 2015 RT_{263}	16.2	X	95.76851	198.08409	101.41493	10.57851	0.1189975	0.18336522	3.0684902	21	12 7.2	20.9
521701 2015 RU_{263}	16.8	X	157.64284	218.26816	99.09768	13.34405	0.1954522	0.22362354	2.6881760	21	—	—
521702 2015 RV_{263}	16.0	X	49.50755	238.04795	94.89130	14.62124	0.1858018	0.17698155	3.1418399	21	12 4.5	20.4
521703 2015 RW_{263}	16.8	X	69.18397	348.05379	30.75108	6.55083	0.0823211	0.21076322	2.7964442	21	—	—
521704 2015 RZ_{263}	16.7	X	189.75599	227.53697	313.95553	11.06813	0.0319218	0.18456073	3.0552248	21	10 17.8	21.4
521705 2015 RD_{264}	17.2	X	96.56993	21.63409	348.71713	5.88232	0.0413638	0.22444804	2.6815888	21	—	—
521706 2015 RF_{264}	17.6	X	174.72207	101.12880	177.93695	5.41525	0.0260940	0.22066455	2.7121539	21	—	—
521707 2015 RM_{264}	16.8	X	82.47694	201.98744	126.17210	2.98194	0.0644566	0.19959033	2.8998557	21	12 23.1	20.8
521708 2015 RO_{264}	17.6	X	256.75672	217.04977	6.57856	5.93738	0.1246026	0.23684477	2.5871812	21	—	—
521709 2015 RP_{264}	16.4	X	352.67753	29.01450	355.65534	10.15279	0.0439138	0.18122717	3.0925769	21	10 30.5	20.7
521710 2015 RQ_{264}	17.1	X	24.59245	264.42664	130.26116	2.96887	0.0706440	0.19950200	2.9007116	21	—	—
521711 2015 RL_{265}	15.9	X	289.79859	107.34754	34.27885	9.84226	0.0427074	0.18832179	3.0144101	21	—	—
521712 2015 RY_{265}	17.4	X	167.33255	163.35006	162.83165	5.62361	0.0296934	0.22147257	2.7055532	21	—	—
521713 2015 RU_{266}	17.3	X	161.75641	52.37362	275.34042	2.11226	0.0891489	0.21956606	2.7211924	21	—	—
521714 2015 RY_{266}	16.6	X	346.95520	24.94864	46.02721	6.75826	0.0462253	0.17962716	3.1109143	21	12 21.9	20.9
521715 2015 RZ_{266}	17.8	X	66.69495	252.53586	214.09019	1.94415	0.0757472	0.23193141	2.6235922	21	2 14.0	21.0
521716 2015 RA_{267}	16.6	X	341.96235	230.14367	213.39562	17.65135	0.0550857	0.18163752	3.0879173	21	12 29.2	21.0
521717 2015 RD_{267}	16.8	X	3.36257	77.99113	21.47208	5.05116	0.0690875	0.19680655	2.9271367	21	—	—
521718 2015 RE_{267}	16.6	X	20.82073	127.14617	33.80135	22.35008	0.0380702	0.23624598	2.5915510	21	3 2.8	20.3
521719 2015 RO_{267}	17.5	X	13.92611	70.55978	63.69600	5.01636	0.0688104	0.21736380	2.7395417	21	1 6.1	20.8
521720 2015 RQ_{267}	16.7	X	181.10783	47.06904	207.13990	8.95848	0.0971810	0.18797910	3.0180725	21	—	—
521721 2015 RA_{268}	16.9	X	75.15811	178.84809	321.25814	3.96212	0.1429831	0.24467695	2.5316715	21	4 20.5	19.8
521722 2015 RJ_{268}	17.0	X	358.47833	191.27016	282.10033	4.15128	0.0321909	0.20558392	2.8432167	21	—	—
521723 2015 RV_{268}	16.8	X	166.75852	23.29430	307.22918	4.01582	0.0719765	0.21786252	2.7353592	21	1 4.6	20.8
521724 2015 RX_{268}	17.0	X	180.56247	233.48713	72.47918	15.11553	0.0646429	0.22741258	2.6582331	21	—	—
521725 2015 RC_{269}	17.7	X	85.14390	197.69937	188.39601	6.23195	0.0995928	0.22147383	2.7055430	21	—	—
521726 2015 RH_{269}	16.8	X	141.08073	49.69623	212.23439	1.24382	0.0794574	0.19634350	2.9317372	21	12 6.9	21.2
521727 2015 RJ_{269}	17.7	X	19.78606	85.63696	350.78761	4.42685	0.1032155	0.21093790	2.7949002	21	—	—
521728 2015 RS_{269}	16.2	X	83.56997	33.04904	245.78218	4.63847	0.0528141	0.17342788	3.1846138	21	10 19.0	20.8
521729 2015 RT_{269}	16.4	X	282.04401	110.57542	344.67185	8.60296	0.0485227	0.17445627	3.1720863	21	10 22.2	20.9
521730 2015 RX_{269}	17.5	X	54.00460	280.73481	187.62922	8.61027	0.1208387	0.23872837	2.5735545	21	1 27.4	20.3
521731 2015 RB_{270}	16.7	X	129.50645	252.98519	2.82284	10.40831	0.0705071	0.18408832	3.0604496	21	11 12.4	21.4
521732 2015 RF_{270}	17.4	X	124.65941	156.42557	172.51958	6.13034	0.0160889	0.21512123	2.7585479	21	—	—
521733 2015 RS_{270}	16.3	X	81.04093	251.18814	6.82305	10.10111	0.0380109	0.15872302	3.3783872	21	9 19.6	21.1
521734 2015 RV_{270}	17.3	X	169.53383	295.21551	357.28951	5.69844	0.0451749	0.21746291	2.7387092	21	—	—
521735 2015 RW_{270}	16.6	X	220.87289	171.38437	7.11692	13.32743	0.0822069	0.18467812	3.0539301	21	11 14.7	21.3
521736 2015 RD_{271}	17.7	X	220.00134	352.20864	237.68973	2.58438	0.1376976	0.21851914	2.7298769	21	—	—
521737 2015 RK_{271}	16.3	X	277.41114	136.23355	352.50945	10.19351	0.0903209	0.18610444	3.0383063	21	11 23.4	20.5
521738 2015 RN_{271}	16.9	X	206.21379	318.45654	222.96319	2.14952	0.0599297	0.18045951	3.1013411	21	11 7.9	21.5
521739 2015 RM_{272}	16.9	X	165.20003	86.79976	176.58808	1.91739	0.0490236	0.20027723	2.8932214	21	—	—
521740 2015 RQ_{272}	16.6	X	342.04324	260.91551	159.94334	8.34644	0.0911467	0.18235187	3.0798477	21	12 6.4	20.6
521741 2015 RR_{272}	16.5	X	76.49066	289.03242	28.50913	9.48854	0.0938287	0.18459243	3.0548751	21	12 2.9	21.0
521742 2015 RS_{272}	17.1	X	339.71109	329.69712	111.20872	3.09714	0.2381250	0.18267087	3.0762610	21	—	—
521743 2015 RT_{272}	16.8	X	22.84817	27.58665	57.36745	7.20474	0.0176207	0.21505345	2.7591275	21	—	—
521744 2015 RU_{272}	17.1	X	106.20017	231.31020	161.44300	9.26928	0.1118898	0.22673255	2.6635456	21	1 11.3	20.6
521745 2015 RM_{273}	16.9	X	358.94553	308.95534	150.80519	13.09941	0.0549461	0.19529292	2.9422419	21	—	
521746 2015 RN_{273}	16.6	X	180.65721	340.53092	217.64675	8.62182	0.0343208	0.18887076	3.0085662	21	11 2.7	20.8
521747 2015 RO_{273}	16.1	X	295.55089	73.38745	0.64237	18.18150	0.1172992	0.17036738	3.2226397	21	10 5.0	20.3
521748 2015 RP_{273}	16.2	X	61.64083	291.07241	12.56135	10.66446	0.0350336	0.17631313	3.1497755	21	10 20.3	20.7
521749 2015 RC_{274}	16.2	X	229.79730	328.74446	207.16678	11.58051	0.0699355	0.18492897	3.0511677	21	11 28.1	20.7
521750 2015 RF_{274}	17.0	X	1.26137	170.84412	235.53871	3.46372	0.0961476	0.18404349	3.0609465	21	12 16.4	20.8
521751 2015 RN_{274}	16.9	X	112.66489	309.71344	348.02343	1.36684	0.0675470	0.18980349	2.9987016	21	12 18.2	21.4
521752 2015 RO_{274}	17.1	X	324.89008	56.71843	28.06033	1.32301	0.1567711	0.18041394	3.1018633	21	12 6.9	20.5
521753 2015 RP_{274}	17.3	X	217.70427	190.92822	38.83277	2.42612	0.0140615	0.20425796	2.8555081	21	—	—
521754 2015 RT_{274}	16.7	X	332.29735	75.12055	19.32703	4.59245	0.1423217	0.18685130	3.0302047	21	—	—
521755 2015 RU_{274}	16.5	X	157.57623	35.56082	220.95177	7.98186	0.0638126	0.18937665	3.0032058	21	12 16.2	21.0
521756 2015 RE_{275}	16.2	X	104.21275	29.94624	235.28947	7.79786	0.0579429	0.17104037	3.2141808	21	10 26.9	20.9
521757 2015 RP_{275}	17.3	X	8.15110	106.51144	15.79857	9.71994	0.0573263	0.22206397	2.7007475	21	—	—
521758 2015 RU_{275}	16.8	X	89.59009	263.40486	37.99117	0.92738	0.1337760	0.18642166	3.0348586	21	12 3.9	21.3
521759 2015 RY_{275}	16.7	X	40.52100	305.99873	55.11266	5.82001	0.1168919	0.18630864	3.0360859	21	12 17.5	20.8
521760 2015 RB_{276}	16.4	X	98.94028	270.71520	28.28304	10.65643	0.1044770	0.18760832	3.0220477	21	12 6.4	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521761 2015 RO_{276}	16.8	X	280.92451	328.26355	171.66758	11.47938	0.0984056	0.18484199	3.0521248	21	12 14.4	21.0
521762 2015 RP_{276}	17.9	X	354.19285	198.22565	38.15300	6.25818	0.0679951	0.27677000	2.3319722	21	4 14.8	20.4
521763 2015 RQ_{276}	17.5	X	224.35333	201.93555	51.96668	5.77078	0.0504967	0.22129857	2.7069713	21	—	—
521764 2015 RS_{276}	16.3	X	265.42541	57.24946	75.44850	11.38293	0.0421584	0.17220708	3.1996468	21	11 20.9	20.8
521765 2015 RW_{276}	16.8	X	218.81082	108.94821	105.37980	11.85872	0.0037072	0.18788814	3.0190466	21	—	—
521766 2015 RZ_{276}	16.7	X	273.83522	9.88583	156.54819	11.16700	0.0317600	0.18733309	3.0250070	21	—	—
521767 2015 SV	16.8	X	169.32177	257.58619	83.44818	30.05754	0.3171575	0.23310800	2.6147566	21	2 8.9	21.9
521768 2015 SA_{5}	18.1	X	267.75339	58.37825	248.96140	3.56702	0.2432918	0.28164705	2.3049734	21	2 28.4	21.8
521769 2015 ST_{7}	17.2	X	209.47235	105.41281	230.77997	5.41934	0.1219933	0.26017598	2.4301024	21	2 18.1	21.0
521770 2015 SP_{19}	17.4	X	139.57792	282.36348	103.32164	9.44365	0.1702909	0.23821553	2.5772467	21	2 21.7	21.2
521771 2015 SG_{24}	16.8	X	160.44888	260.88596	94.68624	9.08774	0.0845590	0.23950663	2.5679764	21	1 26.5	20.4
521772 2015 ST_{25}	16.4	X	53.15598	306.72873	12.14594	9.27800	0.0820659	0.17811028	3.1285521	21	11 3.6	20.7
521773 2015 SZ_{25}	16.8	X	108.72324	169.93561	164.36535	9.76509	0.0974728	0.21177548	2.7875261	21	—	—
521774 2015 SB_{26}	16.9	X	3.23789	45.18103	0.51035	9.40684	0.0751843	0.19135829	2.9824364	21	12 17.6	20.9
521775 2015 SC_{26}	17.0	X	283.71315	294.26475	185.29528	3.65905	0.1465312	0.18011432	3.1053024	21	11 15.7	20.9
521776 2015 SX_{26}	16.4	X	311.93755	76.53649	7.39364	14.80379	0.0915003	0.18259304	3.0771351	21	11 13.7	20.5
521777 2015 SB_{27}	16.1	X	4.58594	277.40586	86.95237	9.09962	0.0363006	0.17127664	3.2112242	21	10 26.8	20.5
521778 2015 SD_{27}	17.0	X	218.82758	137.65219	156.98777	15.34290	0.1365501	0.24530016	2.5273817	21	1 11.2	21.2
521779 2015 SE_{27}	16.8	X	338.45561	280.10053	158.30782	16.52784	0.2192343	0.18255806	3.0775282	21	12 27.3	20.2
521780 2015 SH_{27}	16.7	X	163.74401	140.79334	103.27573	9.85021	0.0355038	0.18900849	3.0071044	21	12 9.6	21.1
521781 2015 SL_{27}	16.6	X	43.38923	308.45842	81.07189	9.30226	0.1575538	0.19739053	2.9213607	21	—	—
521782 2015 SR_{27}	16.2	X	123.02054	282.29238	67.85061	12.74494	0.0416114	0.21795728	2.7345663	21	—	—
521783 2015 SX_{27}	16.2	X	120.22768	196.62883	284.88538	21.26919	0.1182295	0.23398172	2.6082433	21	5 24.5	20.3
521784 2015 SY_{27}	16.5	X	72.56339	256.45148	65.00311	9.86363	0.1185361	0.18332343	3.0689565	21	12 7.2	21.0
521785 2015 SZ_{27}	16.5	X	83.00003	234.05690	64.69011	10.55182	0.0728963	0.17531908	3.1616704	21	11 16.3	21.0
521786 2015 SF_{28}	16.4	X	72.29395	206.18788	103.91168	10.20766	0.0961632	0.17547470	3.1598009	21	11 22.2	21.0
521787 2015 SH_{28}	16.6	X	323.08547	264.71125	171.39000	10.84957	0.0438829	0.17659528	3.1464197	21	11 27.8	21.0
521788 2015 SM_{28}	16.3	X	88.78483	248.23110	66.40977	11.62932	0.1271368	0.18434140	3.0576478	21	12 17.1	21.0
521789 2015 SC_{29}	16.5	X	185.13619	64.88432	254.02338	12.04962	0.0856373	0.22083452	2.7107621	21	1 8.7	20.6
521790 2015 SF_{29}	16.2	X	33.91781	164.23215	253.07421	10.54931	0.0591853	0.19029263	2.9935607	21	—	—
521791 2015 SM_{29}	16.8	X	48.63876	98.74284	302.82236	8.84077	0.0973427	0.19044892	2.9919227	21	—	—
521792 2015 SW_{29}	16.1	X	136.30244	77.04780	248.40627	13.62141	0.1588299	0.20314011	2.8659741	21	—	—
521793 2015 SC_{30}	16.4	X	170.05709	26.74600	283.35739	11.88962	0.0754347	0.20522643	2.8465174	21	—	—
521794 2015 SK_{30}	17.3	X	69.22569	84.58748	355.04400	21.98893	0.0608014	0.23473123	2.6026881	21	1 19.9	21.0
521795 2015 SL_{30}	16.1	X	285.66664	257.09278	197.72830	12.88109	0.1141469	0.16980139	3.2297969	21	10 21.2	20.4
521796 2015 TN_{2}	18.0	X	229.17039	349.95434	345.81830	0.79671	0.2044842	0.26994566	2.3711106	21	3 7.9	21.7
521797 2015 TA_{7}	18.6	X	284.19024	176.95177	145.75664	6.30884	0.2064718	0.30030289	2.2084948	21	4 11.9	21.6
521798 2015 TG_{18}	17.1	X	148.95755	254.79226	120.73157	15.64609	0.1449783	0.24319553	2.5419421	21	2 14.4	20.9
521799 2015 TU_{71}	17.1	X	184.20575	100.15306	231.04715	10.12569	0.1074578	0.23296642	2.6158158	21	1 20.9	21.2
521800 2015 TR_{72}	16.2	X	283.72227	257.84058	242.95485	5.52706	0.1691674	0.17386478	3.1792765	21	12 6.9	20.2
521801 2015 TO_{100}	16.4	X	293.70149	80.52503	40.89923	15.45743	0.0666420	0.17521684	3.1629002	21	12 7.4	20.8
521802 2015 TN_{111}	17.1	X	201.21235	117.63441	206.22891	12.77625	0.1240236	0.23156880	2.6263303	21	1 28.9	21.4
521803 2015 TR_{121}	15.9	X	3.78769	304.38795	123.77725	18.47196	0.0225256	0.17336289	3.1854096	21	—	—
521804 2015 TJ_{124}	17.0	X	354.65379	278.99070	164.82338	9.08440	0.0610278	0.18975951	2.9991649	21	—	—
521805 2015 TK_{125}	16.7	X	341.07185	345.97566	116.46555	9.94024	0.0559260	0.19213366	2.9744071	21	—	—
521806 2015 TZ_{135}	16.6	X	297.19464	331.74163	176.60297	14.58125	0.1028076	0.18623005	3.0369400	21	—	—
521807 2015 TL_{137}	17.5	X	210.89131	143.22161	182.27063	14.75302	0.1313893	0.24369587	2.5384616	21	2 8.4	21.7
521808 2015 TT_{139}	16.5	X	327.63348	2.12367	97.95137	13.85813	0.0815253	0.17994241	3.1072798	21	12 31.8	20.5
521809 2015 TF_{140}	16.2	X	351.97346	328.75135	110.21390	13.03277	0.1560961	0.18116354	3.0933010	21	—	—
521810 2015 TM_{141}	16.5	X	338.71007	337.02206	122.73417	9.76498	0.0703493	0.18881148	3.0091958	21	—	—
521811 2015 TD_{161}	17.3	X	153.21595	5.39451	70.53719	7.19802	0.0919695	0.26773008	2.3841739	21	4 30.2	20.6
521812 2015 TV_{198}	17.8	X	202.42586	266.09394	96.45246	3.40934	0.1921807	0.26322745	2.4112853	21	3 20.9	21.7
521813 2015 TB_{207}	17.2	X	157.48242	200.22907	182.32794	14.04226	0.1800764	0.24417843	2.5351161	21	3 3.5	21.2
521814 2015 TG_{215}	17.2	X	96.09479	138.87486	245.19648	1.51322	0.1451859	0.22146983	2.7055755	21	—	—
521815 2015 TB_{233}	17.1	X	234.06351	266.47693	77.61462	2.30321	0.1896423	0.26964089	2.3728970	21	3 24.2	20.9
521816 2015 TE_{235}	17.4	X	257.76262	182.41018	106.64418	5.98379	0.2092016	0.25821235	2.4424071	21	2 5.4	21.3
521817 2015 TE_{250}	17.5	X	249.87269	77.17806	237.46483	8.81108	0.2365965	0.26753738	2.3853186	21	2 22.2	21.7
521818 2015 TJ_{259}	15.8	X	48.33886	31.78541	304.49774	7.83104	0.0831081	0.17575632	3.1564246	21	11 18.9	20.3
521819 2015 TD_{275}	15.9	X	45.99855	117.26244	211.85068	8.77128	0.0893931	0.17549956	3.1595025	21	11 10.6	20.3
521820 2015 TX_{293}	17.0	X	14.65512	253.11158	186.88258	14.57282	0.1288781	0.20489654	2.8495720	21	—	—
521821 2015 TZ_{298}	15.8	X	348.49508	149.50972	265.09275	10.83299	0.0438576	0.17620372	3.1510793	21	12 3.3	19.9
521822 2015 TK_{320}	16.6	X	319.77025	273.05704	195.97540	15.51278	0.1838567	0.18598491	3.0396080	21	12 28.9	20.2
521823 2015 TT_{327}	16.8	X	98.98741	280.70959	107.06970	12.51718	0.0977542	0.22092558	2.7100172	21	—	—
521824 2015 TR_{345}	17.4	X	284.44455	60.23429	182.15545	4.92530	0.0911060	0.24217102	2.5491062	21	1 16.3	21.0
521825 2015 TJ_{348}	17.7	X	253.94328	113.94915	153.10603	4.88115	0.0797922	0.24017314	2.5632232	21	1 15.2	21.5
521826 2015 TB_{358}	16.2	X	302.25497	286.95784	198.41203	10.06841	0.1316360	0.17902639	3.1178700	21	12 21.6	20.2
521827 2015 TP_{358}	17.5	X	256.45527	67.31350	184.72965	8.69827	0.0779982	0.23360905	2.6110165	21	—	—
521828 2015 TG_{359}	16.4	X	313.60893	349.45411	145.28488	10.63789	0.0456135	0.18530097	3.0470828	21	—	—
521829 2015 TH_{360}	16.9	X	112.36203	323.81600	66.91940	7.07393	0.0435636	0.22170692	2.7036464	21	1 9.6	20.5
521830 2015 TL_{364}	16.5	X	187.95888	91.45917	126.46442	9.88884	0.0202979	0.17136061	3.2101750	21	12 4.5	21.2
521831 2015 TR_{364}	17.1	X	222.83515	210.43022	92.69160	10.02005	0.1579807	0.23832378	2.5764663	21	1 28.1	21.3
521832 2015 TK_{368}	16.5	X	274.56846	79.06937	71.91986	4.22834	0.1346117	0.17780621	3.1321179	21	12 11.9	20.7
521833 2015 TU_{369}	17.3	X	32.38516	350.12753	107.22530	1.44926	0.0292457	0.21441879	2.7645694	21	—	—
521834 2015 TB_{370}	17.1	X	93.33411	286.60349	127.18113	12.14948	0.1785836	0.22987731	2.6391980	21	1 30.8	20.1
521835 2015 TS_{370}	16.9	X	106.86394	225.37554	107.03726	6.44512	0.1731814	0.20971521	2.8057530	21	—	—
521836 2015 TY_{370}	16.5	X	104.90336	300.93231	349.12994	8.73785	0.1300803	0.18665006	3.0323824	21	12 4.1	21.3
521837 2015 TC_{371}	17.0	X	10.75807	126.13144	291.19487	1.22399	0.1867071	0.18861408	3.0112950	21	—	—
521838 2015 TE_{371}	16.9	X	348.72168	12.07339	35.29697	6.17148	0.1643630	0.17310412	3.1885834	21	11 28.8	20.6
521839 2015 TJ_{371}	16.9	X	131.38615	290.35728	31.43675	3.49170	0.1793509	0.21007358	2.8025611	21	—	—
521840 2015 TM_{371}	16.6	X	76.38963	306.51509	33.14978	3.34376	0.1544333	0.18867218	3.0106768	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521841 2015 TQ_{371}	16.5	X	208.95354	161.07026	35.02756	9.92257	0.0424017	0.17493286	3.1663223	21	11 27.7	21.2
521842 2015 TW_{371}	16.4	X	122.08546	253.67360	28.79689	12.14570	0.0631824	0.17726181	3.1385274	21	12 5.8	21.2
521843 2015 TX_{371}	17.1	X	359.41745	134.34320	307.91249	2.19752	0.0467793	0.19064454	2.9898758	21	—	—
521844 2015 TB_{372}	16.7	X	115.79692	81.09519	215.65847	8.68989	0.0710549	0.18213800	3.0822582	21	12 19.0	21.4
521845 2015 TQ_{372}	17.5	X	47.98715	320.09399	187.06054	5.13508	0.1343467	0.23573018	2.5953300	21	3 16.0	20.3
521846 2015 TT_{372}	17.1	X	298.52254	222.09045	3.78233	5.00173	0.0835574	0.22785482	2.6547924	21	1 18.1	20.7
521847 2015 TV_{372}	17.1	X	323.43864	350.88419	105.47918	3.65756	0.1071316	0.17468909	3.1692672	21	12 19.3	21.0
521848 2015 TE_{373}	16.3	X	26.88004	304.06003	81.97179	10.00940	0.0713486	0.17527656	3.1621817	21	12 21.7	20.7
521849 2015 TG_{373}	18.1	X	238.96579	197.24810	163.19884	7.10067	0.1121593	0.26755914	2.3851893	21	4 24.9	21.6
521850 2015 TJ_{373}	16.6	X	150.08911	200.88717	88.40163	15.04593	0.1522759	0.19232628	2.9724208	21	—	—
521851 2015 TL_{373}	16.1	X	157.43226	179.14363	83.37672	18.57709	0.1272382	0.17660282	3.1463301	21	12 19.8	21.2
521852 2015 TT_{373}	17.0	X	66.80236	277.75052	190.21099	12.71789	0.1327299	0.22372340	2.6873761	21	2 22.1	20.3
521853 2015 TK_{374}	16.4	X	190.66049	104.19580	133.47359	16.79007	0.0599633	0.17376561	3.1804861	21	12 27.2	21.3
521854 2015 TO_{374}	16.4	X	111.26411	113.16674	172.82794	13.52892	0.0912755	0.17709113	3.1405437	21	12 4.3	21.4
521855 2015 TX_{374}	16.1	X	231.80439	91.36622	80.32195	13.01957	0.0680551	0.17073260	3.2180423	21	11 24.1	20.7
521856 2015 TM_{375}	18.5	X	87.11954	231.09562	310.06481	0.74878	0.1137478	0.27681853	2.3316996	21	7 2.6	21.3
521857 2015 TN_{375}	16.7	X	263.34366	26.85129	226.99308	12.74037	0.1486136	0.23173255	2.6250930	21	1 3.9	21.0
521858 2015 TW_{375}	17.4	X	222.09403	127.31323	132.83265	1.27700	0.0246784	0.21037829	2.7998544	21	—	—
521859 2015 TM_{376}	17.2	X	303.11141	207.20043	355.82277	3.67949	0.0364248	0.21754657	2.7380070	21	1 3.0	21.0
521860 2015 TR_{376}	16.1	X	24.86755	338.24268	74.09949	17.21226	0.0235876	0.18554480	3.0444127	21	—	—
521861 2015 TS_{376}	16.9	X	82.43192	152.89301	184.24994	10.49625	0.0963763	0.18086824	3.0966670	21	—	—
521862 2015 TC_{377}	16.6	X	32.27268	262.38594	138.63775	15.21929	0.0763530	0.18012911	3.1051324	21	—	—
521863 2015 TM_{377}	16.5	X	267.50349	331.54353	191.53477	17.06934	0.1625468	0.17464520	3.1697982	21	12 12.9	21.0
521864 2015 TO_{377}	17.6	X	28.32991	159.45252	59.14667	7.45580	0.0663839	0.27391980	2.3481208	21	5 16.6	19.8
521865 2015 TU_{377}	17.5	X	158.26615	40.61636	35.40706	10.18590	0.0924093	0.26810923	2.3819257	21	5 3.5	20.9
521866 2015 TV_{377}	16.4	X	352.51098	4.91242	45.48495	18.64632	0.0849996	0.17431319	3.1738219	21	12 2.4	20.6
521867 2015 TY_{377}	17.6	X	65.07183	143.23104	288.81850	2.64942	0.0926671	0.22765392	2.6563541	21	—	—
521868 2015 TB_{378}	16.7	X	171.16992	99.42818	112.86866	2.87935	0.0780692	0.17077485	3.2175115	21	11 6.3	21.6
521869 2015 TD_{378}	17.2	X	75.33086	19.56858	355.94723	1.53959	0.0785055	0.20296830	2.8675912	21	—	—
521870 2015 TF_{378}	16.5	X	273.66244	100.22492	40.56398	9.35868	0.0351501	0.18069197	3.0986806	21	12 10.9	20.9
521871 2015 TK_{378}	16.9	X	334.08633	317.99354	126.95565	2.35498	0.1382593	0.17987161	3.1080951	21	12 23.5	20.3
521872 2015 TO_{378}	15.8	X	92.79170	103.51156	208.11267	9.71411	0.0336969	0.17869070	3.1217737	21	12 8.1	20.4
521873 2015 TX_{378}	17.2	X	321.53631	105.79699	12.47847	1.48028	0.1182577	0.18706569	3.0278891	21	—	—
521874 2015 TH_{379}	17.2	X	67.52563	351.85286	69.18623	6.19601	0.0373540	0.21672802	2.7448967	21	—	—
521875 2015 TR_{379}	17.0	X	8.58201	110.42407	43.79540	22.67955	0.0288834	0.23304542	2.6152247	21	1 31.1	20.9
521876 2015 TS_{379}	16.8	X	148.41890	102.35177	205.86594	3.29919	0.0845180	0.20934596	2.8090513	21	—	—
521877 2015 TW_{379}	16.0	X	7.98814	299.74065	85.52716	15.24070	0.2322095	0.17733460	3.1376686	21	12 14.6	19.4
521878 2015 TK_{380}	17.0	X	42.53037	174.05362	341.63128	13.42941	0.0966762	0.23818674	2.5774544	21	3 13.6	19.9
521879 2015 TO_{380}	16.5	X	19.85236	283.69652	138.22117	16.12663	0.0733470	0.18828469	3.0148060	21	—	—
521880 2015 TS_{380}	16.2	X	246.96893	105.34465	57.15528	12.54440	0.0361251	0.17681961	3.1437580	21	12 3.6	20.6
521881 2015 TX_{380}	17.6	X	34.60564	91.08966	53.90600	13.31911	0.1169550	0.23399286	2.6081605	21	2 24.3	20.7
521882 2015 TB_{381}	16.5	X	171.41020	257.10573	67.49991	8.78995	0.0464475	0.22119434	2.7078216	21	—	—
521883 2015 TF_{381}	16.4	X	322.52787	48.22419	66.42953	11.05553	0.0684586	0.18764023	3.0217051	21	—	—
521884 2015 TL_{381}	16.7	X	12.49385	48.63376	60.12832	15.92178	0.1075804	0.20632643	2.8363913	21	—	—
521885 2015 TW_{381}	16.1	X	152.61184	180.76881	68.82313	15.15077	0.1526680	0.17462201	3.1700789	21	11 30.9	21.4
521886 2015 TX_{381}	16.3	X	330.53287	333.20378	107.13130	6.63780	0.0389284	0.17564986	3.1576998	21	12 11.3	20.6
521887 2015 TN_{382}	16.4	X	171.51166	50.66496	209.21417	16.40539	0.0389638	0.18596767	3.0397959	21	—	—
521888 2015 TP_{382}	16.8	X	345.22448	341.56714	155.26343	4.81862	0.0366243	0.20737166	2.8268523	21	—	—
521889 2015 TU_{382}	16.6	X	317.13147	349.86345	102.49329	3.98815	0.0907871	0.17247236	3.1963651	21	12 5.2	20.6
521890 2015 TA_{383}	17.4	X	119.22637	305.39873	71.51226	4.84858	0.0595083	0.22022457	2.7157651	21	1 3.3	21.1
521891 2015 TF_{383}	16.5	X	57.25982	198.51509	195.75886	10.99037	0.0977727	0.19761136	2.9191839	21	—	—
521892 2015 TH_{383}	17.1	X	89.53817	309.73425	94.92446	7.33931	0.0453375	0.21728666	2.7401900	21	—	—
521893 2015 TP_{383}	17.5	X	85.00184	275.20850	98.29209	3.18365	0.0871912	0.20317718	2.8656255	21	—	—
521894 2015 TT_{383}	17.1	X	14.66736	85.61754	344.46229	7.03055	0.1907472	0.19260101	2.9695936	21	—	—
521895 2015 TX_{383}	16.4	X	346.89127	258.63936	165.29566	11.44780	0.0676886	0.18223272	3.0811900	21	12 15.9	20.6
521896 2015 TE_{384}	16.5	X	73.75265	127.35239	186.98703	16.19767	0.2048673	0.18131822	3.0915416	21	12 10.9	21.5
521897 2015 TG_{384}	16.5	X	288.03959	76.05863	53.84591	12.10102	0.0525040	0.18307683	3.0717118	21	12 14.7	20.7
521898 2015 TJ_{384}	15.9	X	251.96931	71.26719	85.43255	8.47763	0.1807526	0.17192873	3.2030994	21	11 14.9	20.5
521899 2015 TN_{384}	17.7	X	59.71202	290.97619	149.53159	8.18243	0.1961427	0.21696235	2.7429199	21	1 13.4	20.5
521900 2015 TY_{384}	17.8	X	219.21282	240.88553	58.89192	12.38382	0.1856915	0.24287795	2.5441574	21	1 21.2	22.2
521901 2015 TC_{385}	17.1	X	352.86297	281.31896	221.51766	10.16684	0.0626842	0.22888467	2.6468231	21	—	—
521902 2015 TG_{385}	16.3	X	156.51638	99.85790	136.54247	11.97392	0.0871554	0.17812710	3.1283552	21	11 22.9	21.3
521903 2015 TN_{385}	15.7	X	81.90418	214.56192	94.60586	15.12232	0.0345936	0.17611375	3.1521524	21	11 25.0	20.3
521904 2015 TO_{385}	17.4	X	74.62553	17.08739	94.41924	15.09505	0.1705081	0.23813644	2.5778173	21	3 26.7	20.6
521905 2015 TP_{385}	16.1	X	285.15276	23.20917	117.03470	13.84235	0.0578315	0.18503270	3.0500273	21	12 25.1	20.2
521906 2015 TQ_{385}	16.9	X	7.68682	310.95819	111.10115	11.02075	0.0598080	0.18811333	3.0166367	21	—	—
521907 2015 TZ_{385}	17.0	X	75.36584	289.99147	236.51983	11.90387	0.2017444	0.23117433	2.6293172	21	6 10.1	20.3
521908 2015 TC_{386}	16.9	X	35.85453	85.20478	345.75864	8.16219	0.1637100	0.19643389	2.9308377	21	—	—
521909 2015 TG_{386}	16.5	X	5.17782	284.37819	119.21299	13.35872	0.1078739	0.18038542	3.1021902	21	12 19.9	20.6
521910 2015 TH_{386}	16.9	X	209.50412	53.91787	191.87209	15.19588	0.1048532	0.20645654	2.8351995	21	—	—
521911 2015 UY_{15}	16.7	X	59.32146	23.75407	37.73290	10.27903	0.0630549	0.21933130	2.7231337	21	—	—
521912 2015 UP_{16}	17.5	X	260.67864	192.90674	99.96263	3.77172	0.1851399	0.26563512	2.3966929	21	2 13.3	21.3
521913 2015 UZ_{20}	17.9	X	269.47102	176.87192	117.25220	2.21936	0.1789609	0.26839932	2.3802091	21	2 22.8	21.5
521914 2015 UN_{44}	16.8	X	160.36678	211.61722	104.15837	10.60888	0.1324019	0.21630585	2.7484671	21	—	—
521915 2015 UO_{45}	17.0	X	165.94246	190.50809	116.83779	8.61360	0.0489811	0.21001759	2.8030592	21	—	—
521916 2015 UB_{46}	16.3	X	199.18249	117.70300	101.27746	11.27466	0.0868698	0.17922289	3.1155907	21	12 12.9	21.0
521917 2015 UY_{46}	18.0	X	223.20954	179.78938	157.81534	9.85838	0.2705261	0.26208404	2.4182935	21	3 5.4	22.3
521918 2015 UQ_{47}	16.8	X	348.62402	292.31476	154.71820	11.13366	0.0883824	0.18428265	3.0582977	21	—	—
521919 2015 US_{50}	17.1	X	149.08915	198.78326	122.48724	11.56069	0.0264101	0.20469876	2.8514072	21	—	—
521920 2015 UK_{71}	17.4	X	217.48090	248.39517	84.49359	4.99701	0.2554203	0.26423222	2.4051686	21	2 25.4	21.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
521921 2015 UU_{75}	16.9	X	169.26601	61.11172	268.84034	13.12109	0.1139241	0.22827118	2.6515633	21	1 7.1	20.8
521922 2015 UQ_{83}	17.8	X	236.54604	186.85398	157.00770	2.44079	0.2336149	0.27270261	2.3551027	21	3 23.2	21.7
521923 2015 US_{83}	17.6	X	208.50909	309.67216	42.80491	3.47622	0.2490244	0.26318351	2.4115537	21	3 13.5	21.8
521924 2015 UE_{88}	17.4	X	99.45311	113.45375	18.00680	6.05504	0.0298710	0.26595149	2.3947918	21	4 24.9	20.4
521925 2015 UH_{88}	17.1	X	148.40781	148.89517	190.74472	1.56989	0.0918042	0.22470204	2.6795675	21	—	—
521926 2015 UL_{88}	18.0	X	44.25360	268.83664	186.09485	8.12367	0.1745245	0.21743127	2.7389748	21	—	—
521927 2015 UE_{89}	17.5	X	81.01569	322.38651	158.89749	12.19576	0.0698369	0.24220554	2.5488640	21	3 27.9	20.6
521928 2015 UK_{89}	16.6	X	6.67302	293.58328	166.95136	14.42442	0.2422247	0.18949964	3.0019063	21	—	—
521929 2015 UP_{89}	17.4	X	34.62283	309.44073	187.47989	8.52443	0.1383657	0.23269554	2.6178455	21	2 3.2	20.3
521930 2015 UR_{89}	17.3	X	173.48872	318.60533	350.70351	4.36661	0.0994921	0.22094950	2.7098216	21	—	—
521931 2015 UA_{90}	16.1	X	212.82954	136.64881	67.36201	10.88392	0.0253165	0.17443950	3.1722896	21	12 14.3	20.6
521932 2015 UC_{90}	17.0	X	198.64674	98.06034	244.44609	13.92167	0.1601382	0.24147085	2.5540315	21	2 14.9	21.5
521933 2015 UH_{90}	15.9	X	326.79704	115.17767	347.98471	7.59769	0.1050826	0.15471969	3.4364155	21	12 28.1	20.3
521934 2015 UM_{90}	16.1	X	149.21119	118.80413	147.25147	17.15618	0.0767989	0.18415117	3.0597531	21	12 19.5	21.1
521935 2015 UN_{90}	16.5	X	172.34594	119.09047	181.53465	20.43712	0.1349738	0.21037782	2.7998585	21	—	—
521936 2015 UR_{90}	16.1	X	314.03489	262.48242	230.99173	9.04154	0.0518289	0.18759404	3.0222011	21	—	—
521937 2015 VC	17.6	X	251.08889	143.27068	196.86808	12.94143	0.2869822	0.27626990	2.3347856	21	3 25.6	21.7
521938 2015 VT_{1}	17.9	X	265.98671	181.09584	144.79178	9.48174	0.3077068	0.27777444	2.3263472	21	3 21.6	21.8
521939 2015 VQ_{6}	16.9	X	174.05662	188.40916	175.10163	11.21267	0.1477354	0.24409608	2.5356863	21	2 21.7	20.9
521940 2015 VA_{32}	16.0	X	306.98367	241.23076	237.04858	11.58107	0.2009526	0.17590212	3.1546801	21	12 13.3	19.4
521941 2015 VN_{38}	16.2	X	4.23168	180.71854	238.12815	12.44571	0.0974214	0.18468381	3.0538674	21	—	—
521942 2015 VN_{65}	17.6	X	249.91309	193.50050	147.64650	12.91282	0.2633546	0.27335014	2.3513820	21	4 1.1	21.6
521943 2015 VF_{72}	16.1	X	312.42988	341.64478	118.70252	14.27242	0.0891602	0.17215528	3.2002886	21	12 9.9	20.4
521944 2015 VW_{74}	16.7	X	177.69027	312.48724	35.37096	9.39030	0.1772928	0.23782004	2.5801033	21	2 14.3	21.0
521945 2015 VR_{78}	17.4	X	231.96027	162.39629	166.54085	6.97549	0.2051365	0.26396862	2.4067696	21	3 2.3	21.4
521946 2015 VZ_{107}	15.9	X	318.37805	183.38563	280.01091	7.64437	0.1140014	0.18117743	3.0931429	21	12 21.7	19.7
521947 2015 VU_{108}	16.5	X	105.49979	305.14220	84.43165	13.54952	0.1882633	0.22430900	2.6826967	21	1 20.5	20.0
521948 2015 VF_{121}	15.8	X	85.98926	302.18755	59.21307	18.85342	0.1003051	0.19208197	2.9749407	21	—	—
521949 2015 VP_{125}	16.6	X	147.46547	263.70895	90.74595	9.00622	0.0727393	0.23074974	2.6325416	21	1 9.5	20.2
521950 2015 VX_{125}	16.2	X	150.67396	271.31953	97.78082	22.45239	0.0441322	0.23777594	2.5804222	21	1 27.7	19.9
521951 2015 VR_{136}	16.8	X	174.94985	289.63160	75.53243	17.97195	0.2471513	0.24062577	2.5600078	21	3 13.3	21.6
521952 2015 VG_{140}	16.5	X	140.88875	92.35614	200.10899	7.86933	0.0399684	0.18834104	3.0142047	21	—	—
521953 2015 VQ_{140}	16.2	X	353.65688	8.05706	61.59997	16.37584	0.0532428	0.18237064	3.0796363	21	12 29.9	20.5
521954 2015 VH_{146}	17.3	X	195.26174	157.95483	173.64877	12.69041	0.1849228	0.24218706	2.5489937	21	2 3.8	21.7
521955 2015 VE_{149}	17.1	X	205.94781	219.96698	93.33315	15.32411	0.1522235	0.23482105	2.6020244	21	1 25.7	21.4
521956 2015 VH_{156}	16.4	X	312.83718	333.77698	147.40475	15.78936	0.0554559	0.17831435	3.1261647	21	—	—
521957 2015 VA_{157}	16.6	X	158.30481	64.62993	222.73656	11.57983	0.0599666	0.19122472	2.9838250	21	—	—
521958 2015 VD_{158}	16.8	X	186.95643	191.83899	140.11972	5.93613	0.1213044	0.23110626	2.6298335	21	1 28.2	20.7
521959 2015 VM_{158}	15.9	X	333.61183	192.75229	262.68713	15.33346	0.0111313	0.18328730	3.0693598	21	—	—
521960 2015 VR_{158}	15.6	X	242.43470	297.78901	239.27592	15.21722	0.1932830	0.17723316	3.1388657	21	11 26.0	20.2
521961 2015 VY_{158}	16.1	X	85.86107	176.32659	262.06009	13.45286	0.0713612	0.22349231	2.6892282	21	2 1.7	19.8
521962 2015 VJ_{159}	16.8	X	24.58027	298.21088	124.41313	10.54369	0.0554014	0.18801855	3.0176504	21	—	—
521963 2015 VM_{159}	16.1	X	19.12538	110.70437	273.33664	15.36422	0.2471833	0.17771521	3.1331871	21	—	—
521964 2015 VQ_{159}	15.4	X	168.84195	173.38523	62.10224	10.39857	0.0589327	0.17479086	3.1680370	21	11 30.7	20.2
521965 2015 VL_{160}	16.4	X	12.47582	287.07554	123.73327	10.81782	0.2142882	0.17593519	3.1542848	21	—	—
521966 2015 VO_{160}	17.0	X	25.85117	228.64658	156.95573	1.87539	0.1367274	0.17958114	3.1114458	21	12 29.5	21.1
521967 2015 VY_{160}	15.8	X	228.47428	126.68034	64.31402	16.58487	0.0957168	0.17717879	3.1395078	21	12 8.2	20.4
521968 2015 VG_{161}	17.0	X	57.31199	110.02815	301.92600	11.24428	0.1075949	0.19946747	2.9010463	21	—	—
521969 2015 VJ_{161}	17.5	X	10.41062	59.02357	73.56697	4.38666	0.0772229	0.21455521	2.7633974	21	—	—
521970 2015 VM_{161}	17.3	X	1.81202	51.55904	86.02147	5.85487	0.0182293	0.21438357	2.7648721	21	—	—
521971 2015 VB_{162}	16.6	X	68.19298	176.45311	158.85438	4.04379	0.0381380	0.17610907	3.1522083	21	12 7.9	21.1
521972 2015 VE_{162}	16.1	X	262.02767	131.99623	91.86304	11.65355	0.1165418	0.17057668	3.2200030	21	—	—
521973 2015 VH_{162}	16.5	X	270.14701	279.26404	238.18145	5.24301	0.1680795	0.17411683	3.1762076	21	12 8.5	20.7
521974 2015 VK_{162}	16.1	X	74.73424	267.11021	67.64479	12.63343	0.1393676	0.17712041	3.1401976	21	12 26.4	20.8
521975 2015 VQ_{162}	16.5	X	193.60493	255.14215	73.85377	14.57320	0.0992061	0.23022866	2.6365122	21	2 3.2	20.7
521976 2015 VX_{162}	17.7	X	154.96317	359.61626	103.41394	7.80589	0.0653671	0.27100408	2.3649330	21	6 5.1	20.8
521977 2015 VB_{163}	17.5	X	178.77867	142.79808	194.11788	6.03920	0.0269205	0.22341705	2.6898321	21	1 19.3	21.3
521978 2015 VE_{163}	16.3	X	64.34951	299.12304	57.89215	9.92915	0.0729027	0.18138799	3.0907487	21	—	—
521979 2015 VR_{163}	16.7	X	19.87739	37.47969	357.46068	4.72165	0.0393768	0.17514455	3.1637705	21	12 19.6	21.1
521980 2015 VX_{163}	16.7	X	29.98342	347.50297	138.55582	14.26859	0.1034298	0.21898736	2.7259843	21	1 17.2	19.8
521981 2015 WE_{16}	15.9	X	23.24098	299.09899	101.88754	28.19420	0.1827430	0.17874476	3.1211442	21	—	—
521982 2015 WE_{19}	15.7	X	166.66885	357.46668	265.99449	15.71766	0.1641657	0.18277027	3.0751456	21	12 28.6	20.8
521983 2015 WP_{19}	17.3	X	51.68175	120.58136	27.96977	12.53797	0.1993913	0.21914828	2.7246497	21	4 7.2	19.9
521984 2015 WQ_{19}	17.2	X	38.04163	153.00663	7.42507	10.45198	0.2071749	0.21630015	2.7485154	21	3 26.4	19.8
521985 2015 WZ_{19}	16.6	X	172.69422	176.07120	135.10565	14.77641	0.1764621	0.21831561	2.7315733	21	—	—
521986 2015 WB_{20}	17.2	X	132.71728	343.13457	69.08324	14.98953	0.0581628	0.23550539	2.5969813	21	3 11.4	21.1
521987 2015 WU_{20}	16.1	X	51.54386	83.91233	273.69869	11.77635	0.1350970	0.17450179	3.1715347	21	12 27.0	20.5
521988 2015 WW_{20}	16.8	X	191.43177	243.28943	91.11750	12.99568	0.1291330	0.23019320	2.6367830	21	2 8.1	21.0
521989 2015 WX_{20}	16.3	X	110.50880	224.08292	105.39117	12.03978	0.0725578	0.18385992	3.0629836	21	—	—
521990 2015 WZ_{20}	16.8	X	325.68253	175.43704	279.16099	1.98815	0.0926978	0.17391673	3.1786434	21	12 20.5	20.8
521991 2015 WB_{21}	17.5	X	20.54162	264.67619	234.31018	2.40365	0.1403806	0.21633231	2.7482430	21	1 17.5	20.3
521992 2015 WH_{21}	17.0	X	100.87500	15.12833	109.59891	15.81145	0.0951864	0.23073937	2.6326205	21	5 9.1	20.8
521993 2015 WS_{21}	17.9	X	236.69628	134.99896	247.50401	6.18877	0.1200130	0.27390267	2.3482187	21	5 18.5	21.1
521994 2015 WY_{21}	16.8	X	201.02997	240.39278	78.20755	13.07683	0.1852048	0.22882147	2.6473104	21	1 30.5	21.3
521995 2015 WK_{22}	16.7	X	114.22327	28.48459	41.52429	14.94509	0.1893179	0.22252764	2.6969946	21	3 29.1	20.7
521996 2015 XR_{17}	16.4	X	245.45404	337.94961	225.35341	9.13974	0.0432201	0.19102588	2.9858953	21	—	—
521997 2015 XC_{28}	16.9	X	99.63528	278.37074	117.29032	4.86065	0.1149554	0.21588223	2.7520614	21	1 9.9	20.3
521998 2015 XJ_{63}	16.5	X	126.56718	115.24335	220.01175	10.46903	0.0908533	0.19523006	2.9428735	21	—	—
521999 2015 XQ_{67}	16.7	X	269.64416	61.29666	95.56140	10.42484	0.0442720	0.17542233	3.1604297	21	12 24.1	20.9
522000 2015 XH_{76}	16.3	X	279.59548	64.23140	111.28919	11.83689	0.0384358	0.19019373	2.9945984	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522001 2015 XS_{79}	17.0	X	268.98501	190.70349	85.81880	6.96289	0.1891708	0.23853237	2.5749641	21	2 5.0	21.1
522002 2015 XN_{92}	16.5	X	218.16981	123.41677	90.77189	12.27444	0.0350494	0.17910298	3.1169811	21	—	—
522003 2015 XD_{117}	16.4	X	68.50504	282.73763	112.30258	12.90867	0.0656964	0.19436623	2.9515865	21	—	—
522004 2015 XY_{132}	17.2	X	102.74036	141.17707	231.47476	1.10811	0.0778459	0.20352037	2.8624031	21	—	—
522005 2015 XT_{133}	17.2	X	148.88310	242.46254	93.51516	1.72333	0.0730611	0.20880774	2.8138762	21	—	—
522006 2015 XH_{135}	17.2	X	202.55210	51.02469	273.61075	0.51747	0.1400200	0.23375873	2.6099017	21	2 3.7	21.4
522007 2015 XV_{143}	16.7	X	95.50672	252.10228	76.12747	9.94371	0.0482498	0.17722866	3.1389188	21	12 31.6	21.4
522008 2015 XK_{166}	17.4	X	133.10466	225.86388	133.23060	3.19359	0.0880593	0.21167422	2.7884150	21	1 3.9	21.3
522009 2015 XS_{188}	15.7	X	218.65608	133.78844	89.64099	17.84289	0.1880515	0.17761819	3.1343279	21	12 26.4	20.5
522010 2015 XW_{198}	16.2	X	309.59993	86.83744	50.02207	10.14217	0.0149619	0.18626434	3.0365673	21	—	—
522011 2015 XJ_{220}	16.1	X	25.95178	173.84354	232.13259	8.41729	0.0700328	0.18024021	3.1038562	21	—	—
522012 2015 XO_{234}	16.4	X	303.23837	245.70723	247.18892	7.97968	0.0526614	0.17474959	3.1685357	21	—	—
522013 2015 XF_{237}	16.3	X	122.22927	267.95813	70.43806	10.23926	0.0275869	0.19087219	2.9874979	21	—	—
522014 2015 XA_{238}	16.1	X	206.22730	174.55900	76.71904	3.79516	0.1374118	0.18664753	3.0324097	21	—	—
522015 2015 XW_{268}	16.5	X	137.70694	76.49509	254.09621	10.64279	0.0508159	0.19727599	2.9224913	21	—	—
522016 2015 XW_{309}	16.5	X	316.16750	87.87798	39.54501	3.01268	0.0806074	0.18323460	3.0699483	21	—	—
522017 2015 XN_{352}	16.2	X	76.38931	120.36751	157.31107	5.79348	0.0411296	0.15245508	3.4703620	21	10 7.9	21.1
522018 2015 XJ_{394}	16.3	X	4.17290	206.81239	236.96152	9.35679	0.1086833	0.18198158	3.0840241	21	—	—
522019 2015 XZ_{394}	16.9	X	78.88822	347.34318	42.22289	2.51280	0.0895832	0.19651335	2.9300476	21	—	—
522020 2015 XG_{395}	16.4	X	240.16326	77.22766	126.80515	9.26955	0.0872772	0.18247722	3.0784371	21	—	—
522021 2015 XK_{404}	16.3	X	152.91862	228.34852	91.25009	14.48176	0.2060002	0.21066640	2.7973010	21	—	—
522022 2015 XL_{404}	17.5	X	130.27886	300.73238	118.35238	4.16285	0.1184651	0.23748191	2.5825517	21	3 18.2	21.0
522023 2015 XM_{404}	16.6	X	311.44281	50.07125	113.50600	11.75340	0.0446859	0.19540191	2.9411478	21	—	—
522024 2015 XZ_{404}	16.5	X	20.79080	347.00495	98.00822	11.32177	0.1010583	0.18044377	3.1015215	21	—	—
522025 2015 XD_{405}	16.6	X	50.08241	108.76346	284.70007	7.33944	0.0728452	0.17183983	3.2042040	21	—	—
522026 2015 XJ_{405}	16.9	X	34.78479	107.67666	85.70967	18.12429	0.0286722	0.23683557	2.5872482	21	4 30.4	20.5
522027 2015 XK_{405}	16.7	X	238.19836	263.35364	81.37990	15.76681	0.1807045	0.24482524	2.5306491	21	4 7.8	21.1
522028 2015 XU_{405}	16.3	X	298.31069	42.33950	100.48715	5.24355	0.0628742	0.18064363	3.0992334	21	—	—
522029 2015 XE_{406}	17.1	X	48.91637	332.03109	181.38045	13.33133	0.1212766	0.23053222	2.6341972	21	3 27.5	19.8
522030 2015 XN_{407}	15.9	X	65.72391	264.14194	266.30458	26.65664	0.1110106	0.22649864	2.6653791	21	5 16.6	19.5
522031 2015 XS_{407}	16.0	X	261.12422	220.61307	4.54471	16.74683	0.1568061	0.17823697	3.1270694	21	—	—
522032 2015 XG_{408}	16.5	X	305.81161	305.31779	180.99447	17.52904	0.0464438	0.17224032	3.1992351	21	12 31.8	21.2
522033 2015 XN_{408}	16.4	X	121.75334	226.02902	84.26387	13.57203	0.0778656	0.17881510	3.1203256	21	—	—
522034 2015 XQ_{408}	16.9	X	8.26620	336.87606	186.80186	13.19592	0.1104553	0.20242074	2.8727602	21	2 1.9	20.6
522035 2015 XS_{408}	16.7	X	0.62714	19.32027	90.85101	10.23365	0.1289785	0.17817296	3.1278184	21	—	—
522036 2015 XX_{408}	17.7	X	135.07102	242.05973	157.41140	2.71630	0.1037996	0.23117217	2.6293336	21	2 23.9	21.4
522037 2015 XW_{409}	16.5	X	235.85253	226.46535	33.50154	10.58969	0.0582405	0.18067165	3.0989130	21	—	—
522038 2015 XH_{410}	16.5	X	311.54465	155.92997	42.09434	10.10151	0.0657517	0.18889778	3.0082792	21	1 10.2	20.8
522039 2015 XQ_{410}	16.4	X	55.45567	327.19504	64.72585	8.35604	0.2352600	0.19054538	2.9909129	21	—	—
522040 2015 XS_{410}	17.9	X	112.15267	15.49201	32.80454	3.21698	0.0778505	0.21986817	2.7186991	21	2 6.6	21.4
522041 2015 XX_{410}	18.1	X	123.36349	337.93696	149.04048	2.92700	0.1453269	0.25557933	2.4591531	21	6 8.3	21.5
522042 2015 XA_{411}	16.8	X	2.84729	317.15759	117.20657	2.41532	0.1424391	0.17763808	3.1340939	21	—	—
522043 2015 XJ_{412}	16.9	X	346.82051	233.11014	248.61050	7.94203	0.0798957	0.18595786	3.0399027	21	—	—
522044 2015 XS_{412}	16.8	X	29.82849	305.67309	246.67860	16.03056	0.1016453	0.21697965	2.7427741	21	4 14.3	20.3
522045 2015 XZ_{412}	16.3	X	292.67528	11.70521	208.85163	17.42460	0.1612416	0.17686161	3.1432602	21	1 1.6	21.3
522046 2015 XU_{413}	17.2	X	315.61011	93.60288	108.31018	4.77731	0.0355931	0.21245808	2.7815522	21	1 18.1	20.8
522047 2015 XX_{413}	16.3	X	9.27310	195.83879	242.20669	9.87199	0.0869589	0.18057610	3.1000060	21	—	—
522048 2015 XE_{414}	17.6	X	115.49076	252.04079	185.91088	7.38570	0.1403035	0.21919571	2.7242566	21	3 28.3	21.2
522049 2015 XH_{414}	15.7	X	221.35170	343.26273	274.15708	18.97355	0.0577193	0.16997737	3.2275673	21	—	—
522050 2015 XJ_{414}	16.7	X	316.26664	305.37263	229.60899	12.14232	0.1329195	0.17625394	3.1504807	21	—	—
522051 2015 XL_{414}	17.3	X	86.56638	241.40593	244.97924	10.26443	0.2106262	0.22103342	2.7091356	21	5 2.8	20.9
522052 2015 XY_{414}	16.1	X	10.36255	316.05784	153.24409	12.11210	0.0588668	0.17156463	3.2076296	21	—	—
522053 2015 XB_{415}	16.9	X	57.67360	292.46612	272.28220	11.61917	0.1956618	0.23123598	2.6288498	21	7 5.5	19.8
522054 2015 XL_{415}	17.2	X	102.60415	251.33066	208.79603	4.01221	0.0779468	0.21098186	2.7945119	21	3 31.9	21.0
522055 2015 XN_{415}	16.6	X	21.71702	198.67420	285.35777	8.14536	0.1986857	0.18246170	3.0786116	21	1 7.9	19.6
522056 2015 XO_{415}	17.4	X	105.39454	313.92703	258.66120	5.46346	0.0700918	0.26130004	2.4231282	21	8 30.7	20.8
522057 2015 XQ_{415}	16.2	X	263.28853	94.11515	172.30015	11.11963	0.1374978	0.18145199	3.0900219	21	1 27.9	21.1
522058 2015 XS_{415}	17.1	X	90.53400	292.25482	242.65348	6.22998	0.1465177	0.23416534	2.6068796	21	7 3.0	20.7
522059 2015 XT_{415}	16.4	X	9.34925	321.71255	170.39460	12.30342	0.0546344	0.17478424	3.1681169	21	1 7.3	20.8
522060 2015 XX_{415}	16.8	X	5.96210	324.46984	280.69863	9.44147	0.1385116	0.22687804	2.6624068	21	5 18.8	19.6
522061 2015 XN_{416}	16.4	X	307.50841	148.30472	59.53462	15.21761	0.1330488	0.19027889	2.9937049	21	1 6.8	20.8
522062 2015 XQ_{416}	16.9	X	55.59158	164.81598	21.06436	14.09163	0.0918141	0.23487729	2.6016090	21	5 15.5	20.2
522063 2015 XP_{417}	16.5	X	227.67482	72.60137	248.45039	16.47572	0.1352550	0.20086024	2.8876202	21	2 19.0	21.5
522064 2015 XU_{417}	16.2	X	320.70029	1.10981	262.69588	13.32970	0.1555250	0.21285978	2.7780516	21	3 19.9	20.1
522065 2015 XV_{417}	16.8	X	230.22277	78.47654	202.23122	10.47337	0.0260638	0.18322302	3.0700776	21	1 17.3	21.4
522066 2015 XW_{417}	16.4	X	264.59879	18.28331	236.62035	10.00982	0.1790274	0.17662535	3.1460626	21	1 12.9	21.6
522067 2015 XA_{418}	17.2	X	133.54635	279.80473	197.96680	13.33134	0.0538714	0.23537851	2.5979144	21	5 30.0	21.0
522068 2015 XC_{418}	16.8	X	359.26971	283.42582	211.86390	11.91727	0.1320066	0.17458260	3.1705558	21	—	—
522069 2015 XK_{418}	16.8	X	342.41918	2.63825	183.22060	13.45696	0.0850822	0.18733732	3.0249614	21	1 29.1	21.0
522070 2015 XR_{418}	17.3	X	126.09978	288.85580	199.46882	8.12965	0.0126924	0.23333528	2.6130583	21	5 29.3	20.8
522071 2015 XU_{418}	16.3	X	147.78003	99.15695	278.26927	11.06117	0.1399332	0.19158072	2.9801275	21	2 16.1	21.0
522072 2015 XA_{419}	17.7	X	79.33188	352.83303	250.13390	11.20068	0.0664146	0.26555969	2.3971467	21	9 4.1	21.0
522073 2015 XJ_{419}	17.0	X	312.54855	24.14031	299.58825	13.70957	0.1776799	0.23849889	2.5752050	21	5 28.9	20.2
522074 2015 XO_{419}	16.1	X	24.35592	258.06580	289.16154	13.62601	0.0984278	0.20499867	2.8486255	21	3 26.4	19.9
522075 2015 XT_{419}	16.6	X	103.55495	123.19066	301.01552	8.75778	0.0225592	0.18649980	3.0340108	21	2 10.8	20.9
522076 2015 XZ_{419}	17.1	X	44.50309	329.23636	195.37066	15.13147	0.0797771	0.20623632	2.8372174	21	4 4.3	20.6
522077 2015 XD_{420}	16.8	X	17.81949	27.81525	231.43847	11.21884	0.0787815	0.23484111	2.6018762	21	6 29.4	19.9
522078 2015 XF_{420}	16.9	X	356.94839	9.77657	232.68420	8.26103	0.1217244	0.21510793	2.7586616	21	4 30.5	19.9
522079 2015 XH_{420}	16.3	X	312.09494	45.62906	125.93962	8.82989	0.1453195	0.18938982	3.0030666	21	—	—
522080 2015 XJ_{420}	16.5	X	43.41342	210.39467	220.69071	10.97183	0.0595016	0.19347538	2.9606399	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522081 2015 XA_{421}	16.5	X	322.38413	35.25843	98.85417	13.72751	0.0340691	0.17888267	3.1195398	21	—	—
522082 2015 XL_{421}	17.4	X	81.62529	347.27418	102.41165	4.61356	0.1673978	0.21689457	2.7434914	21	3 4.6	20.7
522083 2015 XM_{421}	16.7	X	240.57665	191.15161	115.69523	14.42987	0.0587988	0.22421558	2.6834418	21	2 26.8	20.7
522084 2015 XN_{421}	16.9	X	8.01136	194.80093	246.12688	3.62835	0.1420946	0.17940614	3.1134687	21	—	—
522085 2015 XO_{421}	16.5	X	82.96586	289.05688	96.31973	10.95935	0.1008549	0.19174879	2.9783859	21	—	—
522086 2015 XP_{421}	16.8	X	31.83266	88.29933	98.30043	14.00413	0.1257702	0.23384509	2.6092591	21	4 20.8	19.9
522087 2015 XQ_{421}	15.5	X	175.11495	174.66396	97.35310	29.48984	0.1617119	0.17395251	3.1782075	21	—	—
522088 2015 XR_{421}	15.8	X	136.17717	202.16268	109.43037	17.87716	0.1844914	0.18038371	3.1022099	21	—	—
522089 2015 YY_{24}	17.2	X	165.38513	213.75635	332.17612	7.71262	0.1030291	0.27873566	2.3209958	21	10 6.0	20.6
522090 2015 YZ_{24}	16.4	X	81.83715	23.26577	105.20321	11.42596	0.1367177	0.21506950	2.7589902	21	4 24.8	20.1
522091 2015 YD_{25}	16.4	X	62.12232	292.39292	125.82659	10.67175	0.0113428	0.18380471	3.0635969	21	—	—
522092 2015 YE_{25}	16.5	X	61.43088	125.78175	275.33376	14.13036	0.1443050	0.18178067	3.0862960	21	—	—
522093 2015 YH_{25}	16.7	X	166.51851	219.75378	131.37638	12.49892	0.0877196	0.20587411	2.8405443	21	2 1.7	20.9
522094 2015 YJ_{25}	16.2	X	111.20787	236.85573	97.99429	13.27963	0.1582914	0.18704540	3.0281080	21	—	—
522095 2015 YM_{25}	17.3	X	23.72091	65.81128	99.54085	10.00425	0.1057330	0.21489107	2.7605173	21	3 6.8	20.6
522096 2015 YM_{26}	16.3	X	231.48474	24.88007	247.63211	7.00683	0.0518171	0.19629657	2.9322044	21	1 6.9	20.6
522097 2015 YO_{26}	17.5	X	83.19608	101.89813	120.52546	6.47999	0.0762413	0.26881535	2.3777527	21	8 20.8	20.5
522098 2015 YQ_{26}	16.6	X	19.12693	105.97364	342.24061	14.09926	0.1758954	0.18088334	3.0964946	21	—	—
522099 2015 YW_{26}	17.3	X	10.07580	352.94446	193.15413	4.82869	0.1004359	0.21472478	2.7619423	21	3 6.6	20.7
522100 2015 YY_{26}	16.7	X	244.55950	205.84054	112.60237	4.45301	0.0640010	0.22357208	2.6885885	21	3 16.1	20.6
522101 2015 YD_{27}	16.2	X	299.90954	138.41452	92.33103	10.92969	0.0478349	0.19053286	2.9910439	21	2 8.0	20.5
522102 2015 YE_{27}	17.1	X	26.29735	221.58433	298.34856	4.04753	0.1008346	0.21150723	2.7898824	21	2 26.4	20.3
522103 2015 YG_{27}	17.4	X	98.16603	30.68023	88.62445	7.44789	0.2182341	0.22911982	2.6450117	21	5 12.1	21.1
522104 2015 YL_{27}	16.7	X	17.93059	124.47316	103.60932	15.86016	0.0539446	0.23807032	2.5782946	21	5 20.9	20.0
522105 2015 YN_{27}	16.3	X	31.40563	317.04353	112.97110	11.15321	0.0851702	0.17935684	3.1140392	21	—	—
522106 2016 AC_{14}	15.8	X	82.78361	253.21721	104.65122	15.12768	0.0782107	0.17143245	3.2092782	21	—	—
522107 2016 AF_{216}	15.8	X	58.35726	242.52534	171.46808	19.95304	0.1726346	0.17678535	3.1441640	21	—	—
522108 2016 AJ_{238}	16.5	X	10.56984	86.14811	40.31947	12.49466	0.1537487	0.18897375	3.0074729	21	—	—
522109 2016 AN_{238}	16.4	X	47.91956	73.26105	353.81403	10.83456	0.0977232	0.18195666	3.0843057	21	—	—
522110 2016 AS_{238}	16.7	X	6.30208	157.94456	43.63511	8.82675	0.1385882	0.21447889	2.7640529	21	3 24.4	19.8
522111 2016 AA_{239}	16.7	X	117.75124	357.14763	49.25265	12.74607	0.0114457	0.19861843	2.9093079	21	2 9.7	21.0
522112 2016 AK_{239}	17.4	X	144.50319	57.64038	57.79832	6.89858	0.0646896	0.25426009	2.4676520	21	6 8.4	20.7
522113 2016 AY_{239}	16.9	X	161.84876	33.16100	24.58721	6.10128	0.1247915	0.24079338	2.5588197	21	4 18.4	20.6
522114 2016 AC_{240}	16.6	X	301.61416	219.69903	338.59883	11.72839	0.1972564	0.18205932	3.0831461	21	—	—
522115 2016 AD_{240}	17.0	X	116.13057	29.14265	84.50603	12.51132	0.1392286	0.23711868	2.5851884	21	5 15.7	20.8
522116 2016 AN_{240}	16.3	X	182.96399	272.89445	84.56394	7.70042	0.0333257	0.21231014	2.7828442	21	2 25.9	20.3
522117 2016 AQ_{240}	16.9	X	6.71463	172.10148	28.32280	6.61612	0.0177046	0.22369478	2.6876053	21	3 26.0	20.5
522118 2016 AR_{240}	16.5	X	97.04625	47.56082	329.67885	14.39526	0.0607969	0.18187210	3.0852617	21	—	—
522119 2016 AS_{240}	16.0	X	228.07965	253.89673	0.34134	10.91179	0.0490562	0.17869185	3.1217603	21	—	—
522120 2016 AG_{241}	16.0	X	134.35512	32.84630	297.31607	16.98655	0.1698532	0.18012815	3.1051434	21	—	—
522121 2016 AN_{241}	17.3	X	74.33685	346.71432	138.86351	4.00458	0.0868729	0.22173599	2.7034100	21	3 28.4	20.6
522122 2016 AB_{242}	18.1	X	107.70926	243.37719	318.97730	1.18002	0.1236555	0.26958509	2.3732244	21	8 29.2	21.4
522123 2016 AG_{242}	17.5	X	242.78762	234.91841	90.19952	4.61309	0.0855509	0.22778963	2.6552989	21	3 20.8	21.4
522124 2016 AC_{243}	17.2	X	157.15316	279.31663	122.45344	7.00587	0.0751339	0.22403466	2.6848863	21	3 24.9	21.1
522125 2016 AF_{243}	16.6	X	345.65342	5.88884	127.44687	11.75073	0.0408499	0.17917625	3.1161314	21	—	—
522126 2016 AP_{243}	16.9	X	34.87586	336.53323	112.04841	2.61248	0.1506442	0.18568023	3.0429322	21	—	—
522127 2016 AV_{243}	17.1	X	187.44563	238.27654	96.09956	3.29750	0.0692960	0.20198196	2.8769192	21	2 3.6	21.4
522128 2016 AC_{244}	17.1	X	35.02524	300.52526	129.26311	2.67148	0.1687440	0.17793087	3.1306548	21	—	—
522129 2016 AS_{244}	16.6	X	271.47153	322.36072	326.98058	7.30061	0.1777166	0.21538834	2.7562668	21	2 24.5	21.0
522130 2016 AG_{245}	17.0	X	217.02947	348.27852	326.31419	7.87482	0.0585573	0.20527411	2.8460767	21	2 10.2	21.2
522131 2016 AN_{245}	16.6	X	90.38979	355.17422	40.74825	2.91872	0.0767170	0.18741965	3.0240755	21	—	—
522132 2016 AR_{245}	17.1	X	208.54204	325.53564	6.17791	3.69768	0.0987194	0.21299988	2.7768333	21	2 21.3	21.4
522133 2016 AW_{245}	16.1	X	292.08941	259.44381	283.47915	10.11958	0.0232253	0.17801260	3.1296965	21	—	—
522134 2016 AX_{246}	16.5	X	297.40584	79.19906	133.87179	10.25127	0.0675632	0.18157575	3.0886177	21	1 11.1	20.9
522135 2016 AZ_{246}	16.2	X	43.21561	250.35686	339.75812	14.59016	0.0590259	0.23425547	2.6062109	21	6 30.6	19.7
522136 2016 AA_{247}	17.2	X	75.31006	242.67263	338.38542	13.42500	0.1072857	0.24389664	2.5370684	21	8 13.1	20.5
522137 2016 AE_{247}	17.2	X	272.97377	141.33418	125.84943	5.83774	0.0077558	0.21545463	2.7557014	21	2 19.7	20.9
522138 2016 AH_{247}	16.5	X	263.82473	128.78856	109.05606	19.89741	0.1347948	0.18712301	3.0272706	21	—	—
522139 2016 AJ_{247}	17.2	X	259.45601	20.64877	315.90762	3.52390	0.0017182	0.24166246	2.5526813	21	4 28.8	20.5
522140 2016 AU_{247}	17.4	X	100.65995	32.61925	40.12053	8.58806	0.1518125	0.21667672	2.7453300	21	3 9.2	21.1
522141 2016 AV_{247}	16.6	X	1.93532	105.12931	348.31550	15.87136	0.2306504	0.17652592	3.1472439	21	—	—
522142 2016 AC_{248}	17.3	X	323.69976	75.56660	166.02964	13.99774	0.1476585	0.20937492	2.8087922	21	3 3.8	20.9
522143 2016 AG_{248}	17.4	X	166.91625	199.81936	200.63233	5.87425	0.0619764	0.22271448	2.6954860	21	3 29.9	21.2
522144 2016 AW_{248}	16.4	X	44.14364	279.49297	157.96971	9.30495	0.0680520	0.17529635	3.1619437	21	—	—
522145 2016 AG_{249}	17.4	X	17.40946	57.53469	144.55402	9.55867	0.1548962	0.22321150	2.6914832	21	4 13.5	20.2
522146 2016 AH_{249}	16.1	X	12.22966	189.03767	252.96615	9.66698	0.1661648	0.17357544	3.1828086	21	—	—
522147 2016 AY_{249}	17.2	X	261.97779	49.24178	231.91334	3.45830	0.0274589	0.21154459	2.7895539	21	2 19.4	21.1
522148 2016 AH_{250}	16.7	X	65.05264	245.60325	175.62105	3.08516	0.1106711	0.18776350	3.0203824	21	—	—
522149 2016 AS_{250}	16.4	X	359.14877	89.29800	135.59743	13.94786	0.0578768	0.22746937	2.6577906	21	4 18.8	19.9
522150 2016 AZ_{250}	16.1	X	218.36968	98.96542	163.91693	9.01836	0.0845765	0.17462001	3.1701030	21	—	—
522151 2016 AF_{251}	17.7	X	328.24961	149.84773	132.41388	12.73320	0.1781554	0.23940712	2.5686879	21	5 2.6	20.8
522152 2016 AJ_{251}	16.9	X	279.87295	156.48846	140.05335	10.57566	0.0816227	0.22539865	2.6740437	21	3 28.9	20.7
522153 2016 AP_{251}	17.8	X	24.26861	109.89703	121.23446	5.08157	0.1629179	0.23623315	2.5916448	21	6 7.1	20.2
522154 2016 AR_{251}	16.8	X	216.13332	142.52607	143.45146	10.13632	0.0479588	0.19019208	2.9946157	21	1 8.1	21.3
522155 2016 AU_{251}	15.9	X	223.54900	0.82296	266.12040	10.91445	0.0394656	0.18144519	3.0900991	21	—	—
522156 2016 AX_{251}	17.5	X	101.84464	310.58557	158.36176	4.47560	0.0602940	0.22430804	2.6827044	21	4 9.2	21.0
522157 2016 AF_{252}	15.8	X	114.45926	133.79076	256.63202	9.78457	0.0527307	0.18499632	3.0504271	21	1 18.3	20.1
522158 2016 AG_{252}	18.0	X	185.40406	316.19589	250.60361	7.57290	0.0532387	0.30550962	2.1833304	21	12 7.2	20.6
522159 2016 AS_{252}	17.6	X	198.31254	214.45456	287.66920	4.84524	0.0511004	0.27850528	2.3222756	21	9 19.0	20.7
522160 2016 AD_{253}	17.4	X	230.12028	70.33980	287.21112	4.80905	0.0966839	0.22837769	2.6507388	21	4 11.2	21.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522161 2016 AH_{253}	17.5	X	116.21485	256.85300	176.51167	6.15123	0.1387733	0.21367351	2.7709940	21	3 24.0	21.4
522162 2016 AL_{253}	18.0	X	130.65938	226.47993	309.50655	5.75596	0.1310356	0.25791840	2.4442624	21	8 18.6	21.6
522163 2016 AO_{253}	16.9	X	112.43560	101.23357	315.61104	11.25434	0.0518870	0.19531483	2.9420219	21	2 15.7	20.9
522164 2016 AY_{253}	16.3	X	53.32195	285.82114	109.02683	8.47203	0.0846395	0.17241179	3.1971137	21	—	—
522165 2016 AL_{254}	17.0	X	233.26298	86.95008	223.95617	3.25378	0.0548317	0.21442386	2.7645258	21	2 20.4	21.1
522166 2016 AT_{254}	16.4	X	273.59026	114.47924	105.19907	11.78069	0.0988729	0.18222171	3.0813140	21	—	—
522167 2016 AC_{255}	18.5	X	196.00514	336.30292	118.06275	4.03207	0.0764590	0.26764848	2.3846585	21	7 12.2	21.8
522168 2016 AM_{255}	16.4	X	82.75098	305.91879	103.29919	12.34181	0.0871348	0.18896937	3.0075194	21	1 6.5	20.1
522169 2016 AT_{255}	17.3	X	87.84238	234.24449	199.38390	1.36689	0.0473161	0.20107006	2.8856109	21	2 4.4	21.3
522170 2016 AV_{255}	17.1	X	49.07343	353.86903	109.86432	3.21608	0.0267656	0.19805370	2.9148357	21	1 21.3	21.0
522171 2016 AX_{255}	16.6	X	19.20949	293.22111	162.34598	12.98087	0.0814068	0.17586719	3.1550979	21	—	—
522172 2016 AY_{255}	16.7	X	15.75796	240.81327	222.44655	9.67454	0.0590990	0.17455568	3.1708818	21	—	—
522173 2016 AC_{256}	17.5	X	165.68286	303.85970	141.72262	15.20992	0.0520316	0.24572943	2.5244374	21	5 28.7	21.3
522174 2016 AF_{256}	16.4	X	97.89052	245.21433	122.04477	10.16990	0.0766587	0.17408436	3.1766026	21	—	—
522175 2016 AQ_{256}	16.9	X	357.54217	30.07514	127.08744	9.43956	0.0694691	0.19188820	2.9769431	21	1 17.5	20.6
522176 2016 AS_{256}	16.7	X	34.36894	124.96675	316.97939	4.09986	0.1472383	0.18011443	3.1053011	21	—	—
522177 2016 AY_{256}	16.3	X	356.17168	0.35002	106.36841	14.33945	0.0833517	0.16898278	3.2402194	21	—	—
522178 2016 AF_{257}	17.3	X	131.74425	5.09320	18.52308	0.59182	0.0999367	0.19873901	2.9081310	21	2 5.6	21.3
522179 2016 AH_{257}	15.9	X	147.95210	199.46943	124.65901	18.08928	0.1264562	0.17087520	3.2162516	21	—	—
522180 2016 AK_{257}	17.5	X	202.85349	326.65148	65.30210	5.54912	0.0713959	0.23696014	2.5863414	21	4 29.5	21.2
522181 2016 AP_{257}	16.8	X	66.82520	345.42057	86.63150	10.73232	0.0531064	0.18527832	3.0473311	21	1 10.6	20.8
522182 2016 AQ_{257}	16.7	X	314.20847	106.11544	68.06995	5.62927	0.0399694	0.17602441	3.1532188	21	—	—
522183 2016 AR_{257}	17.3	X	281.67763	177.45546	108.79705	8.16787	0.0435916	0.21693540	2.7431471	21	3 24.8	21.2
522184 2016 AU_{257}	17.6	X	153.72773	332.95909	93.51316	6.01611	0.1117526	0.23024318	2.6364014	21	4 23.7	21.6
522185 2016 AB_{258}	17.2	X	248.76365	247.11970	80.85186	6.77539	0.1534424	0.23081441	2.6320498	21	3 26.2	21.4
522186 2016 AJ_{258}	17.2	X	27.18954	239.74121	321.92947	5.10934	0.1388180	0.22923242	2.6441456	21	4 24.5	20.1
522187 2016 AK_{258}	17.0	X	289.16581	85.84143	125.61463	2.45413	0.1150433	0.18130132	3.0917336	21	—	—
522188 2016 AA_{259}	17.1	X	34.43207	163.14962	353.74693	10.44294	0.0696815	0.20908419	2.8113953	21	3 9.4	20.4
522189 2016 AN_{259}	18.2	X	121.07878	154.79262	67.19378	2.35089	0.0941173	0.28008059	2.3135597	21	10 9.4	21.4
522190 2016 AO_{259}	16.8	X	297.94205	342.22442	322.43173	13.42018	0.1575017	0.23163588	2.6258233	21	4 8.6	20.6
522191 2016 AY_{259}	17.3	X	273.46714	106.14001	188.47866	1.41154	0.0443845	0.21354909	2.7720702	21	3 21.4	21.1
522192 2016 AE_{260}	17.4	X	342.18896	246.44832	342.71125	3.26342	0.0399017	0.21439624	2.7647632	21	3 27.0	20.8
522193 2016 AG_{260}	17.4	X	11.95372	102.82069	136.14349	12.45021	0.1704913	0.22608806	2.6686050	21	5 27.5	20.2
522194 2016 AU_{260}	17.1	X	11.06146	132.51014	127.50821	13.29035	0.1527158	0.22776524	2.6554885	21	6 23.9	19.9
522195 2016 AX_{260}	16.5	X	32.87308	147.74411	58.54844	7.95258	0.1493310	0.21577377	2.7529836	21	5 17.7	19.2
522196 2016 AY_{260}	16.4	X	270.46886	196.51378	69.56069	12.22610	0.1152853	0.18228077	3.0806485	21	2 11.7	21.2
522197 2016 AC_{261}	16.3	X	138.59746	291.18600	99.40049	11.66739	0.0593504	0.18240267	3.0792758	21	2 22.8	20.9
522198 2016 AM_{261}	16.1	X	89.53936	29.56631	33.82172	11.64737	0.0070496	0.17661016	3.1462430	21	1 29.2	20.7
522199 2016 AO_{261}	16.7	X	273.46750	223.77894	41.66010	12.38284	0.0372388	0.18404687	3.0609090	21	2 24.8	21.3
522200 2016 AC_{262}	18.4	X	189.63387	272.93886	274.46696	4.07200	0.0433021	0.29216205	2.2493317	21	11 13.8	21.1
522201 2016 AD_{262}	17.9	X	86.52318	2.10291	202.27390	3.08534	0.1157746	0.24460743	2.5321511	21	8 2.5	21.3
522202 2016 AH_{262}	16.5	X	289.89050	267.42911	323.52947	14.35695	0.2636495	0.16661915	3.2707909	21	1 6.2	21.7
522203 2016 AJ_{262}	16.9	X	356.83142	60.46193	193.59706	7.92492	0.0850727	0.22068600	2.7119782	21	5 20.4	20.1
522204 2016 AS_{262}	16.9	X	106.32873	186.84006	291.63158	6.09432	0.0970542	0.21484738	2.7608915	21	4 30.3	20.8
522205 2016 AT_{262}	15.9	X	235.80590	6.93424	282.29996	8.70239	0.1024978	0.17545660	3.1600182	21	1 31.2	20.9
522206 2016 AU_{262}	17.6	X	153.21091	293.52848	182.53833	12.07201	0.1335830	0.24070235	2.5594648	21	6 24.6	21.8
522207 2016 AX_{262}	16.8	X	10.51447	268.45761	213.77023	7.78637	0.1833509	0.17242051	3.1970059	21	—	—
522208 2016 AZ_{262}	17.6	X	50.67093	351.33410	239.49596	7.31180	0.0990630	0.23806274	2.5783493	21	7 14.9	20.8
522209 2016 AD_{263}	17.3	X	163.16459	165.30760	297.05350	5.34855	0.0514288	0.23866683	2.5739969	21	6 13.5	21.0
522210 2016 AE_{263}	16.7	X	122.04517	103.61783	308.63232	7.61866	0.0827075	0.19271845	2.9683870	21	2 25.5	20.9
522211 2016 AK_{263}	16.9	X	139.88857	127.29972	309.57607	8.96678	0.1147603	0.21251972	2.7810143	21	4 16.5	21.2
522212 2016 AO_{263}	16.9	X	48.20254	263.16797	324.00191	11.49811	0.1359379	0.22803901	2.6533627	21	7 15.2	20.0
522213 2016 AP_{263}	16.1	X	233.60751	124.60267	176.28067	16.35495	0.1215915	0.17722772	3.1389299	21	2 9.9	21.2
522214 2016 AQ_{263}	16.8	X	257.20660	160.41543	178.58180	3.98198	0.1068848	0.21313409	2.7756675	21	4 21.1	20.8
522215 2016 AR_{263}	16.8	X	32.41525	243.41031	345.50891	12.62910	0.1273030	0.22198525	2.7013860	21	6 16.1	20.1
522216 2016 AS_{263}	17.5	X	96.65249	284.99517	271.17377	2.26338	0.1501878	0.23962596	2.5671237	21	8 8.9	21.1
522217 2016 AT_{263}	18.0	X	147.35173	214.62912	323.54154	1.83835	0.1339215	0.25908171	2.4369402	21	9 8.5	21.7
522218 2016 AV_{263}	16.7	X	325.72335	46.40905	154.66194	0.46380	0.1189869	0.17422017	3.1749515	21	1 26.1	20.7
522219 2016 AW_{263}	17.5	X	100.65650	287.87745	310.05554	6.88232	0.1065526	0.26364364	2.4087470	21	10 1.9	21.1
522220 2016 AG_{264}	17.4	X	288.44477	108.61963	186.04135	12.56819	0.1755303	0.22611661	2.6683804	21	3 19.9	21.1
522221 2016 AO_{264}	17.7	X	196.54271	297.01420	146.62545	7.88066	0.0875661	0.25600778	2.4564086	21	6 27.8	21.3
522222 2016 AR_{264}	17.3	X	33.11875	139.94343	116.85085	7.75208	0.0935740	0.25150785	2.4856217	21	7 25.5	19.8
522223 2016 AB_{265}	16.5	X	258.77153	157.96353	106.34479	5.97006	0.1016586	0.18417948	3.0594396	21	1 25.9	21.2
522224 2016 AM_{265}	17.0	X	116.68242	78.46648	80.43764	13.23703	0.1220351	0.23832780	2.5764373	21	7 11.0	20.8
522225 2016 AQ_{265}	15.9	X	237.73284	225.89933	62.32487	16.96264	0.0815285	0.17648113	3.1477764	21	2 9.4	21.0
522226 2016 AV_{265}	16.3	X	240.16430	87.17615	235.31956	9.76125	0.1111843	0.20052480	2.8908395	21	3 9.6	20.9
522227 2016 AA_{266}	17.2	X	92.44041	312.03402	235.83164	12.74984	0.0075110	0.24141719	2.5544099	21	6 30.7	20.7
522228 2016 AQ_{266}	15.7	X	225.32659	40.27484	255.12080	11.97060	0.1423581	0.17371011	3.1811635	21	1 25.7	21.1
522229 2016 AH_{267}	16.0	X	67.21150	138.52473	266.96443	13.51355	0.1103224	0.17244969	3.1966452	21	—	—
522230 2016 AM_{267}	17.5	X	23.30234	31.62830	209.60906	9.05097	0.1775803	0.23375254	2.6099478	21	6 21.2	20.1
522231 2016 AP_{267}	17.0	X	39.13285	10.37150	220.00897	8.73878	0.0897829	0.24005690	2.5640505	21	6 24.9	20.1
522232 2016 AV_{267}	16.6	X	255.05717	35.58790	298.02455	14.78260	0.1420507	0.22211473	2.7003360	21	3 29.3	21.1
522233 2016 AG_{268}	16.4	X	132.70800	335.83600	104.60059	22.76390	0.0312301	0.22893372	2.6464450	21	4 18.2	20.6
522234 2016 AR_{269}	16.3	X	328.87556	206.59180	107.76266	15.70561	0.1103282	0.23067516	2.6331089	21	6 25.2	19.2
522235 2016 AT_{269}	16.9	X	39.20200	163.10686	91.71633	18.73375	0.1562272	0.23192204	2.6236629	21	8 14.8	20.2
522236 2016 AV_{269}	16.8	X	88.30657	299.48909	300.73036	9.02298	0.0970872	0.24409290	2.5357083	21	9 16.0	20.4
522237 2016 AB_{270}	17.9	X	255.79948	177.64629	146.38357	2.53757	0.0750226	0.23324803	2.6137100	21	4 1.9	21.6
522238 2016 AR_{270}	17.1	X	186.01792	40.19745	344.00901	14.60002	0.0460239	0.22499590	2.6772339	21	3 26.4	21.1
522239 2016 AL_{271}	17.1	X	57.63598	168.61602	65.47633	7.36684	0.1774364	0.24141835	2.5544017	21	8 17.9	20.3
522240 2016 AO_{271}	17.0	X	51.50680	216.26923	345.55940	12.69805	0.1870922	0.22274563	2.6952347	21	6 20.2	20.3

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522241 2016 AP_{271}	16.5	X	63.37564	314.49259	270.28094	14.90620	0.1848632	0.23198688	2.6231740	21	8 4.8	20.0
522242 2016 AF_{272}	16.7	X	134.68548	339.97033	113.06749	22.61317	0.0349550	0.22483772	2.6784894	21	5 6.4	20.9
522243 2016 AM_{272}	16.5	X	262.05979	220.18367	2.40872	4.43882	0.0708557	0.17869161	3.1217630	21	—	—
522244 2016 AO_{272}	16.5	X	108.86742	26.57765	338.13350	9.95176	0.0516446	0.17891761	3.1191337	21	—	—
522245 2016 AT_{272}	16.5	X	291.55818	157.90287	44.55287	9.52760	0.1165348	0.18028843	3.1033027	21	—	—
522246 2016 AA_{273}	16.1	X	292.42667	79.29808	107.02078	23.61964	0.1274373	0.17083014	3.2168173	21	—	—
522247 2016 AG_{273}	16.2	X	252.37628	30.17571	236.28759	14.21292	0.2256277	0.17392084	3.1785933	21	1 11.9	21.8
522248 2016 AJ_{273}	17.2	X	74.12899	322.61310	240.28382	14.14488	0.0459426	0.24313857	2.5423391	21	7 1.7	20.6
522249 2016 AK_{273}	16.3	X	261.71563	53.28270	221.17802	16.09456	0.1635762	0.18298517	3.0727375	21	1 29.9	21.5
522250 2016 AP_{273}	17.6	X	293.73230	69.32664	235.35262	3.97209	0.1219014	0.22822346	2.6519328	21	4 15.4	21.3
522251 2016 AQ_{273}	16.6	X	354.59511	79.27699	157.77337	13.27646	0.1514677	0.21838782	2.7309711	21	4 20.6	19.7
522252 2016 AD_{274}	17.2	X	231.77943	142.35638	193.38131	6.13771	0.0285391	0.21141120	2.7907272	21	3 24.6	21.2
522253 2016 AM_{274}	17.4	X	125.57093	274.47353	176.06768	5.22263	0.0350357	0.21699113	2.7426774	21	4 12.6	21.1
522254 2016 AP_{274}	16.6	X	75.09078	101.18670	315.69845	15.80408	0.1196918	0.17717443	3.1395592	21	1 14.5	20.7
522255 2016 AY_{274}	17.0	X	251.01342	85.30779	196.86452	1.91605	0.1043344	0.18852353	3.0122592	21	2 6.1	21.5
522256 2016 AZ_{274}	16.6	X	122.97449	227.89225	148.40195	3.45477	0.0304062	0.17741327	3.1367409	21	1 11.9	21.0
522257 2016 AD_{275}	17.4	X	293.81493	74.74574	212.59628	2.49105	0.0578699	0.21705815	2.7421128	21	4 4.1	21.2
522258 2016 AE_{275}	18.0	X	92.46401	300.75518	272.11149	2.02585	0.1353621	0.25553389	2.4594446	21	8 25.1	21.2
522259 2016 AG_{275}	16.0	X	33.46035	252.64817	160.12866	10.23313	0.0934820	0.15531286	3.4276603	21	—	—
522260 2016 AL_{275}	17.3	X	0.26788	290.49206	297.37187	9.20965	0.2243926	0.21012916	2.8020669	21	4 3.0	20.2
522261 2016 AT_{275}	16.8	X	73.38668	278.39582	157.18935	12.53746	0.0370139	0.18518737	3.0483288	21	1 20.5	21.1
522262 2016 AV_{275}	17.8	X	30.31237	86.14619	154.29899	13.78346	0.1054911	0.23913754	2.5706180	21	6 27.4	20.9
522263 2016 AY_{275}	17.3	X	327.31576	10.39424	289.46254	5.20310	0.1640535	0.23968561	2.5666978	21	5 22.2	20.1
522264 2016 AA_{276}	17.5	X	272.05106	146.68151	169.00007	5.39645	0.0402734	0.22387534	2.6861600	21	4 16.8	21.1
522265 2016 AC_{276}	17.3	X	134.00466	167.56284	261.94140	3.09253	0.0469662	0.21439069	2.7648109	21	3 26.2	21.3
522266 2016 AQ_{276}	17.2	X	110.56910	256.66243	218.28253	4.92559	0.1007312	0.22441848	2.6818242	21	5 3.3	20.9
522267 2016 AV_{276}	16.9	X	192.53044	226.63222	142.73759	14.47876	0.1185115	0.22421249	2.6834665	21	3 24.9	21.2
522268 2016 AG_{277}	17.5	X	101.69610	297.08173	287.65501	9.55087	0.1179972	0.27090060	2.3655351	21	9 15.5	21.0
522269 2016 AJ_{277}	17.4	X	308.34541	101.25692	183.34130	1.67348	0.0347265	0.22955291	2.6416839	21	4 22.9	20.8
522270 2016 AO_{277}	16.5	X	319.04915	227.18918	308.58048	10.43418	0.0785796	0.17774190	3.1328733	21	—	—
522271 2016 AR_{277}	16.9	X	32.69951	8.16049	118.68645	2.74499	0.0314470	0.19294325	2.9660809	21	1 29.7	20.8
522272 2016 AX_{277}	16.4	X	353.64314	111.34307	137.49449	14.19997	0.1089575	0.23046284	2.6347259	21	5 9.5	19.7
522273 2016 AA_{278}	16.4	X	49.61079	34.53891	116.30974	10.05554	0.0271161	0.19019346	2.9946012	21	3 27.6	20.6
522274 2016 BC_{5}	15.8	X	271.39769	97.66642	95.54620	23.07617	0.0608038	0.17290202	3.1910676	21	—	—
522275 2016 BN_{5}	16.2	X	176.62099	173.02332	192.59716	12.67082	0.1016956	0.19810143	2.9143675	21	2 28.9	20.8
522276 2016 BX_{20}	16.1	X	62.06382	268.91961	126.51125	17.63815	0.1968299	0.17686426	3.1432288	21	—	—
522277 2016 BD_{65}	16.2	X	238.69463	300.13097	330.21685	4.82259	0.2059299	0.17595440	3.1540552	21	1 10.1	21.5
522278 2016 BQ_{94}	15.8	X	237.44274	347.03927	280.92647	10.21954	0.0719489	0.18313507	3.0710605	21	1 9.9	20.4
522279 2016 BO_{95}	16.4	X	58.46760	93.89015	13.65960	10.72386	0.0981665	0.18364438	3.0653797	21	2 20.4	20.4
522280 2016 BX_{95}	16.2	X	277.26138	329.89460	273.78548	7.69823	0.0438269	0.17387568	3.1791436	21	1 27.4	20.8
522281 2016 BA_{96}	16.8	X	53.67138	270.85571	319.23789	12.95659	0.1216471	0.23332333	2.6131476	21	7 25.8	19.9
522282 2016 BE_{96}	16.7	X	87.81051	187.07271	328.80645	13.43510	0.1522564	0.22015050	2.7163742	21	6 3.7	20.7
522283 2016 BF_{96}	15.8	X	57.74689	262.10576	208.76434	8.82319	0.0421082	0.17965689	3.1105710	21	2 11.9	20.2
522284 2016 BU_{96}	16.7	X	253.13226	77.86253	179.40945	25.82937	0.2317194	0.17276008	3.1928152	21	1 3.9	22.6
522285 2016 BW_{96}	17.6	X	55.13788	2.60955	209.64021	6.83930	0.1402449	0.23724136	2.5842972	21	7 2.5	20.7
522286 2016 BC_{97}	17.6	X	51.78437	4.18486	254.33115	8.40433	0.1042192	0.26053662	2.4278594	21	8 24.9	20.6
522287 2016 BD_{97}	18.9	X	245.97548	306.88985	183.54795	5.55823	0.0548568	0.30206290	2.1999077	21	11 13.4	21.3
522288 2016 BG_{97}	17.4	X	240.76802	88.94794	271.49551	2.22831	0.0602774	0.23370863	2.6102747	21	5 1.3	21.1
522289 2016 BM_{97}	15.5	X	207.20384	348.76992	303.76884	18.12809	0.1482672	0.17213074	3.2005928	21	1 12.1	20.7
522290 2016 BQ_{97}	16.4	X	236.77287	359.88704	282.34513	3.57763	0.1064623	0.18170582	3.0871436	21	1 24.3	21.3
522291 2016 BW_{97}	16.8	X	40.53514	140.13003	335.26601	9.05793	0.0637609	0.18619735	3.0372956	21	1 29.8	20.7
522292 2016 BY_{97}	17.6	X	164.36346	73.97704	2.31358	2.20062	0.0497281	0.23037613	2.6353870	21	5 10.8	21.3
522293 2016 BF_{98}	17.2	X	113.44414	173.55428	259.24978	0.97861	0.0486290	0.20266625	2.8704397	21	3 7.9	21.0
522294 2016 BH_{98}	17.8	X	93.12174	307.81459	283.88557	5.74183	0.0713012	0.26709314	2.3879628	21	9 10.7	21.1
522295 2016 BL_{98}	16.3	X	262.29148	230.61116	35.92569	8.36623	0.1265555	0.16975695	3.2303606	21	2 3.6	21.4
522296 2016 BV_{98}	16.3	X	70.56301	342.64320	104.74395	11.63690	0.0412340	0.17535951	3.1611844	21	2 5.3	20.6
522297 2016 BC_{99}	16.5	X	326.02049	251.79762	36.08402	13.64922	0.1499909	0.21114708	2.7930540	21	5 6.8	19.7
522298 2016 BE_{99}	16.2	X	142.61956	328.74660	64.62367	9.37959	0.1113196	0.17977356	3.1092252	21	3 9.7	21.0
522299 2016 BN_{99}	16.2	X	290.25602	122.63053	120.13381	12.69329	0.0846686	0.17492054	3.1664710	21	2 7.4	20.7
522300 2016 BR_{99}	16.1	X	195.55282	201.39739	126.94180	11.88756	0.0478499	0.16903239	3.2395854	21	2 9.6	20.9
522301 2016 BT_{99}	16.2	X	253.88490	92.00825	133.89795	10.77211	0.0607897	0.17574520	3.1565577	21	—	—
522302 2016 BV_{99}	15.6	X	88.08641	233.80515	117.14089	10.46006	0.0320613	0.15281194	3.4649571	21	—	—
522303 2016 BC_{100}	17.9	X	161.20795	222.40935	301.54022	3.47567	0.0676880	0.26541978	2.3979891	21	9 3.1	21.1
522304 2016 BD_{100}	17.4	X	26.42420	290.11459	292.48988	6.91188	0.1479787	0.21818652	2.7326506	21	5 27.8	20.3
522305 2016 BF_{100}	17.9	X	149.31314	2.64100	177.79413	5.98746	0.1130853	0.26452145	2.4034151	21	9 13.3	21.2
522306 2016 BL_{100}	17.0	X	11.79714	351.31627	264.30241	12.86447	0.2097646	0.22507531	2.6766041	21	6 20.1	19.2
522307 2016 BD_{101}	16.5	X	198.58176	164.57410	167.69494	9.31697	0.0112857	0.18267142	3.0762549	21	2 12.9	21.0
522308 2016 BJ_{101}	17.1	X	72.42434	245.50526	340.69141	14.80718	0.0646082	0.24196136	2.5505786	21	8 10.3	20.4
522309 2016 BL_{101}	18.0	X	194.18869	272.11387	228.11384	2.31750	0.1162593	0.26659967	2.3909086	21	9 7.3	21.5
522310 2016 BO_{101}	17.5	X	156.33490	323.04961	155.68911	11.02121	0.1126217	0.23851783	2.5750687	21	6 30.5	21.6
522311 2016 BQ_{101}	16.5	X	277.40712	260.05198	10.57407	9.74999	0.0839463	0.18438885	3.0571232	21	2 26.8	20.9
522312 2016 BR_{101}	16.5	X	260.45274	311.93520	15.37214	7.05467	0.0318526	0.20833074	2.8181697	21	4 17.6	20.3
522313 2016 BS_{101}	17.5	X	125.37266	163.72215	3.76562	6.16323	0.1208287	0.24398684	2.5364430	21	8 3.2	21.3
522314 2016 BU_{101}	17.0	X	59.74754	309.38893	166.64877	1.23415	0.1648306	0.19117974	2.9842930	21	3 6.9	20.6
522315 2016 BX_{101}	18.1	X	146.42987	173.47001	358.55774	6.89101	0.0378294	0.25794639	2.4440856	21	8 28.6	21.3
522316 2016 BB_{102}	16.8	X	284.84681	212.12398	139.23318	4.89485	0.1035870	0.23374535	2.6100013	21	6 9.8	20.2
522317 2016 BC_{102}	16.9	X	359.49423	148.13896	156.88676	15.56947	0.1330453	0.24162090	2.5529739	21	8 6.1	19.5
522318 2016 BE_{102}	18.5	X	210.69104	351.08564	141.95254	3.45433	0.1133755	0.27429196	2.3459964	21	9 19.1	21.7
522319 2016 BF_{102}	16.8	X	97.21238	208.71249	329.62437	13.04456	0.1476708	0.23404952	2.6077395	21	7 19.8	20.6
522320 2016 BG_{102}	16.8	X	153.43373	355.12299	90.91430	13.78530	0.1443641	0.24136430	2.5547830	21	5 20.9	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522321 2016 BK_{102}	15.7	X	77.35272	58.70587	349.60877	9.26049	0.0824551	0.17319484	3.1874698	21	1 2.7	20.1
522322 2016 BW_{102}	18.2	X	277.48926	101.27670	331.32814	6.16072	0.0645656	0.29633695	2.2281556	21	10 1.3	20.7
522323 2016 BX_{102}	17.4	X	49.68053	165.54536	12.98138	13.73959	0.1030561	0.23270865	2.6177472	21	4 26.9	20.5
522324 2016 BX_{103}	16.9	X	178.03997	223.44557	138.96483	11.81976	0.1976565	0.21661909	2.7458168	21	3 5.0	21.5
522325 2016 BA_{104}	18.4	X	259.20693	146.85827	257.91103	2.56818	0.0821209	0.27370477	2.3493505	21	7 21.9	21.4
522326 2016 BO_{104}	16.0	X	32.84624	285.09779	143.70142	10.28190	0.0403327	0.17349986	3.1837330	21	—	—
522327 2016 BD_{105}	17.5	X	221.14083	245.70094	93.55788	3.85053	0.0791979	0.21524553	2.7574858	21	3 16.4	21.7
522328 2016 BM_{105}	17.8	X	44.91767	128.76309	93.05503	3.31963	0.0697550	0.24149552	2.5538575	21	6 20.2	20.7
522329 2016 BT_{105}	16.5	X	313.39365	31.36502	154.31079	14.20299	0.0698430	0.17963539	3.1108192	21	—	—
522330 2016 BU_{105}	17.5	X	198.42566	20.55316	108.49419	7.38496	0.0468905	0.27497042	2.3421358	21	9 7.0	20.6
522331 2016 CA_{9}	17.4	X	42.50654	253.19661	303.42365	2.51665	0.2039985	0.22431274	2.6826669	21	5 27.9	19.9
522332 2016 CX_{156}	17.1	X	115.87686	268.65475	147.01517	2.68967	0.0615289	0.20295106	2.8677536	21	2 19.9	21.0
522333 2016 CO_{222}	15.8	X	19.87732	329.77164	138.79125	14.24927	0.0870263	0.17265083	3.1941620	21	—	—
522334 2016 CN_{264}	16.4	X	224.96498	104.46880	176.36499	1.04335	0.1307636	0.17911427	3.1168502	21	1 11.7	21.4
522335 2016 CO_{290}	17.9	X	76.45304	251.01815	12.82317	3.97359	0.1236376	0.27178837	2.3603812	21	10 14.1	20.8
522336 2016 CK_{291}	17.5	X	112.52255	253.72638	323.92350	6.60596	0.1119085	0.26500896	2.4004667	21	9 20.4	21.0
522337 2016 CS_{291}	18.0	X	72.58589	117.26691	140.55069	2.04809	0.1537658	0.25795233	2.4440481	21	10 5.0	21.1
522338 2016 CZ_{294}	17.5	X	342.68508	260.40377	322.39909	5.55790	0.0127447	0.22441108	2.6818831	21	3 19.4	21.0
522339 2016 CH_{295}	17.8	X	221.42740	212.51884	180.02799	1.77176	0.0413806	0.24088406	2.5581775	21	5 22.7	21.3
522340 2016 CN_{295}	16.6	X	144.64547	78.15353	270.29310	4.49636	0.1188440	0.18328802	3.0693518	21	1 13.1	21.2
522341 2016 CF_{296}	17.5	X	63.02820	77.77931	86.32809	5.87760	0.0580801	0.22311822	2.6922333	21	4 29.6	20.9
522342 2016 CQ_{296}	16.6	X	231.79593	193.24212	114.60651	12.97966	0.0311723	0.19494031	2.9457889	21	2 23.6	20.9
522343 2016 CS_{296}	16.2	X	259.37460	146.64634	100.46609	11.29888	0.0571047	0.17380008	3.1800655	21	1 11.9	20.9
522344 2016 CX_{296}	16.6	X	288.14988	231.32986	73.72013	10.80713	0.1292954	0.21464669	2.7626122	21	4 15.1	20.6
522345 2016 CB_{297}	15.9	X	331.04370	84.96308	98.31126	16.87093	0.0252782	0.17973580	3.1096606	21	1 23.4	20.3
522346 2016 CG_{297}	16.2	X	211.02506	225.66456	71.36124	10.49927	0.0450067	0.17411767	3.1761974	21	1 20.4	21.0
522347 2016 CQ_{297}	17.5	X	84.49757	71.45544	138.53825	5.40529	0.1566123	0.23937628	2.5689085	21	8 14.5	20.8
522348 2016 CS_{297}	16.1	X	8.78722	299.11834	274.64930	11.10750	0.0609576	0.19795336	2.9158206	21	4 10.6	20.1
522349 2016 CT_{297}	16.4	X	142.96009	181.77528	331.05226	11.72722	0.1061529	0.24115995	2.5562261	21	8 2.1	20.3
522350 2016 CV_{297}	16.7	X	41.27065	335.93807	306.60481	12.80589	0.1623797	0.24437552	2.5337529	21	9 17.4	19.9
522351 2016 CG_{298}	17.0	X	256.86669	320.05999	14.96980	5.37226	0.0777091	0.22177386	2.7031022	21	4 16.6	20.7
522352 2016 CJ_{298}	18.0	X	79.47874	166.97006	74.45126	2.39172	0.1516703	0.25891650	2.4379768	21	9 21.7	21.3
522353 2016 CR_{298}	17.2	X	122.86163	15.19306	103.56587	7.34458	0.0699385	0.22949018	2.6421652	21	5 20.9	20.9
522354 2016 CS_{298}	17.8	X	151.06662	96.07152	97.27644	6.98277	0.0498779	0.27756848	2.3274978	21	10 7.1	21.0
522355 2016 CW_{298}	16.0	X	248.13981	263.30032	11.74307	10.04821	0.1063763	0.17854996	3.1234140	21	1 31.3	20.9
522356 2016 CE_{299}	17.2	X	59.14193	160.54829	10.04934	7.03604	0.0585189	0.21775146	2.7362892	21	4 29.1	20.7
522357 2016 CJ_{299}	18.0	X	146.02818	153.58775	75.37535	6.66638	0.0608323	0.28937443	2.2637542	21	11 16.6	20.9
522358 2016 CK_{299}	17.0	X	18.62940	166.65347	104.33665	5.98849	0.1021002	0.24249796	2.5468146	21	7 21.9	19.7
522359 2016 CN_{299}	18.4	X	231.15800	25.63120	112.77348	7.13986	0.0356349	0.29013389	2.2598021	21	11 6.3	21.2
522360 2016 CP_{299}	16.7	X	112.14757	253.34938	144.37067	19.32270	0.1367390	0.18605329	3.0388632	21	2 6.4	20.9
522361 2016 CS_{299}	17.2	X	9.77657	271.52335	355.45757	14.37079	0.1536477	0.23508297	2.6000913	21	7 3.8	20.1
522362 2016 CK_{300}	17.6	X	49.08730	152.87171	59.25741	4.86554	0.0871000	0.23427232	2.6060860	21	6 15.1	20.5
522363 2016 CU_{300}	17.1	X	314.98275	323.56190	320.38437	5.52989	0.1871958	0.21470783	2.7620877	21	4 6.5	20.6
522364 2016 CV_{300}	18.0	X	151.12238	284.60289	173.64099	9.46193	0.1722693	0.23832165	2.5764817	21	6 3.5	22.3
522365 2016 CX_{300}	16.8	X	17.48851	182.88553	317.23195	8.26962	0.0609876	0.18330866	3.0691213	21	1 27.6	20.6
522366 2016 CD_{301}	17.2	X	331.23521	316.88515	261.12010	0.46430	0.1145904	0.19290072	2.9665168	21	2 20.2	21.0
522367 2016 CO_{301}	16.3	X	242.97331	133.24881	151.24512	10.10355	0.1005623	0.18186314	3.0853629	21	2 1.9	21.1
522368 2016 CQ_{301}	16.4	X	147.00686	199.90614	150.51141	10.32613	0.0689289	0.17196530	3.2026452	21	1 14.2	21.2
522369 2016 CS_{301}	16.4	X	182.09395	39.84618	345.90597	16.74253	0.1406452	0.21400292	2.7681498	21	3 27.9	20.9
522370 2016 CE_{302}	16.9	X	283.72596	132.11787	166.69851	9.30496	0.0824790	0.20946394	2.8079963	21	4 5.7	20.9
522371 2016 CF_{302}	17.2	X	95.12541	245.39633	341.50279	10.77383	0.1285013	0.25862043	2.4398371	21	9 14.9	20.5
522372 2016 CH_{302}	17.3	X	335.87895	290.89226	343.11322	8.39852	0.1271730	0.22023012	2.7157195	21	5 3.9	20.7
522373 2016 CU_{302}	17.6	X	353.32453	355.12891	328.58107	4.10118	0.0568211	0.25973476	2.4328537	21	8 23.9	20.4
522374 2016 CW_{302}	17.5	X	22.49759	329.55042	305.14673	1.88565	0.1231081	0.24360327	2.5391049	21	8 5.4	19.9
522375 2016 CX_{302}	17.2	X	63.91704	277.70117	343.81521	9.49883	0.1223679	0.25824852	2.4421790	21	9 21.5	20.4
522376 2016 CY_{302}	18.3	X	196.28654	168.33686	348.65307	5.70513	0.0848364	0.28074041	2.3099333	21	10 5.4	21.4
522377 2016 CB_{303}	16.5	X	272.75466	267.79960	5.59743	3.79969	0.1308355	0.18483157	3.0522395	21	2 17.5	21.0
522378 2016 CD_{303}	18.1	X	42.71976	113.02305	116.55076	3.34102	0.1446105	0.23065428	2.6332679	21	7 8.2	20.9
522379 2016 CG_{303}	16.2	X	132.59616	266.09400	95.06867	3.92512	0.0294504	0.16742219	3.2603236	21	1 7.6	20.7
522380 2016 CJ_{303}	16.2	X	211.37997	209.38032	106.94046	4.84342	0.1185051	0.18047444	3.1011700	21	2 10.1	21.1
522381 2016 CK_{303}	17.1	X	326.00240	302.34509	2.51303	12.55674	0.1863973	0.22962196	2.6411543	21	5 21.1	20.3
522382 2016 CF_{304}	17.2	X	353.99411	270.15966	42.63702	11.79526	0.1259300	0.24209992	2.5496053	21	8 14.9	20.1
522383 2016 CN_{304}	16.9	X	82.46526	142.47297	103.42248	8.44333	0.1093512	0.25155951	2.4852813	21	9 28.2	20.4
522384 2016 CX_{304}	17.6	X	50.87692	124.14895	110.34708	7.16261	0.1818870	0.23034935	2.6355912	21	8 5.5	20.6
522385 2016 CK_{305}	17.2	X	357.03283	198.65742	118.91141	12.38596	0.0738951	0.24196322	2.5505655	21	8 22.6	20.2
522386 2016 CT_{305}	17.9	X	128.48310	303.49543	169.39063	12.70756	0.1105590	0.23606492	2.5928760	21	5 25.3	21.9
522387 2016 CJ_{306}	18.4	X	183.56111	5.46798	174.35080	6.52704	0.0292657	0.28892452	2.2661037	21	10 30.0	21.2
522388 2016 CK_{306}	17.8	X	95.60610	310.79050	297.68714	4.15340	0.0804571	0.27476077	2.3433270	21	10 9.7	21.0
522389 2016 CS_{306}	18.1	X	98.08151	61.07531	185.55688	4.09015	0.1224910	0.27199301	2.3591971	21	10 17.3	21.3
522390 2016 CV_{306}	17.3	X	37.63957	290.08939	320.19200	10.09247	0.1280962	0.24181976	2.5515741	21	7 29.2	20.0
522391 2016 CX_{306}	17.5	X	118.67199	262.88318	312.76890	5.97619	0.0612484	0.27136127	2.3628572	21	9 20.7	20.8
522392 2016 CG_{307}	16.7	X	342.95157	52.12006	136.17251	2.38393	0.0209115	0.19016719	2.9948770	21	2 11.1	20.8
522393 2016 CF_{308}	17.7	X	40.67284	158.19594	74.08865	2.86355	0.1316960	0.23129324	2.6284159	21	7 6.9	20.5
522394 2016 CH_{308}	16.9	X	290.29146	223.76233	56.78403	2.90314	0.0238934	0.20350825	2.8625167	21	3 30.1	20.7
522395 2016 CS_{308}	16.2	X	244.16912	298.22464	4.06936	16.12149	0.1003918	0.18632694	3.0358871	21	2 28.8	20.9
522396 2016 CA_{309}	16.3	X	265.16607	153.65936	124.70960	8.39098	0.1208105	0.18151131	3.0893487	21	2 17.1	20.9
522397 2016 CC_{309}	17.2	X	261.40531	216.04904	120.12581	5.49066	0.0721031	0.21483695	2.7609809	21	4 27.9	21.1
522398 2016 CE_{309}	16.8	X	310.48632	326.31412	20.65179	6.50373	0.1625784	0.24498555	2.5295449	21	7 3.4	19.7
522399 2016 CF_{309}	17.4	X	284.01649	318.15290	41.44714	6.89978	0.0466140	0.23978042	2.5660212	21	6 28.7	20.7
522400 2016 CL_{309}	17.8	X	285.60550	323.41497	87.96365	7.59491	0.0934864	0.27228470	2.3575119	21	9 12.4	20.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522401 2016 CN_{309}	16.0	X	184.56366	199.64429	148.89354	17.80467	0.1007811	0.17840772	3.1250738	21	2 21.7	20.9
522402 2016 CR_{309}	16.5	X	257.71101	216.97342	120.83576	7.29622	0.0452704	0.21150427	2.7899084	21	4 29.9	20.5
522403 2016 CX_{309}	17.4	X	280.60938	294.46889	356.01757	4.39982	0.0457087	0.21450229	2.7638518	21	3 24.5	21.3
522404 2016 CZ_{309}	17.0	X	95.55740	2.13330	109.15928	5.83719	0.0271579	0.21431380	2.7654722	21	4 1.9	20.8
522405 2016 CC_{310}	17.3	X	156.43665	119.61806	325.37040	2.59055	0.0278321	0.23169631	2.6253667	21	5 10.4	20.9
522406 2016 CD_{310}	16.7	X	348.41559	11.98121	154.18487	9.47620	0.0026408	0.18577356	3.0419129	21	1 23.5	21.1
522407 2016 CG_{310}	17.4	X	49.42674	108.32469	57.07441	1.64123	0.0114495	0.21502934	2.7593337	21	4 6.6	20.9
522408 2016 CS_{310}	18.2	X	39.37242	254.40857	340.66909	11.70681	0.2072907	0.23318501	2.6141808	21	7 23.9	21.0
522409 2016 CT_{310}	17.1	X	230.49440	259.90195	69.42432	2.95630	0.0667206	0.20594745	2.8398699	21	3 15.5	21.3
522410 2016 CZ_{310}	17.7	X	358.33292	197.54723	87.31212	4.33212	0.1925253	0.23820976	2.5772884	21	7 4.1	19.9
522411 2016 CA_{311}	16.1	X	61.95918	71.11085	2.90776	10.45763	0.0381748	0.17625584	3.1504580	21	1 9.2	20.5
522412 2016 CH_{311}	16.4	X	123.81839	335.04439	9.59092	10.12018	0.0821463	0.15943426	3.3683325	21	—	—
522413 2016 CL_{311}	17.3	X	17.14634	319.36770	274.28860	3.85784	0.0596607	0.21332082	2.7740475	21	5 23.7	20.8
522414 2016 CM_{311}	16.4	X	22.24008	250.66251	274.48077	5.12991	0.1470139	0.18644091	3.0346498	21	3 2.4	19.9
522415 2016 CN_{311}	17.4	X	38.58902	301.34899	322.82855	5.28490	0.1290363	0.23496590	2.6009549	21	8 18.5	20.3
522416 2016 CW_{311}	17.1	X	355.23942	42.03365	242.52465	6.58216	0.1808423	0.23371661	2.6102153	21	6 25.8	19.3
522417 2016 CH_{312}	17.2	X	171.98207	207.71354	198.84378	6.09271	0.0209845	0.21146591	2.7902459	21	4 11.9	21.1
522418 2016 CJ_{312}	16.5	X	285.53790	21.09211	213.02031	5.02374	0.0926264	0.17477000	3.1682890	21	1 19.6	21.2
522419 2016 CP_{312}	16.0	X	169.38249	17.94111	331.60512	10.41065	0.0665039	0.17958052	3.1114530	21	2 6.6	20.6
522420 2016 CT_{312}	16.6	X	268.56172	53.49313	193.43992	8.27067	0.0278795	0.17905941	3.1174867	21	1 21.9	21.2
522421 2016 CG_{313}	17.0	X	289.33852	32.37297	268.52127	3.71168	0.0969590	0.20884398	2.8135506	21	4 9.7	20.9
522422 2016 CQ_{313}	16.5	X	261.69169	75.57977	196.63351	9.52449	0.0842940	0.17682132	3.1437377	21	2 6.9	21.3
522423 2016 CB_{314}	16.5	X	311.34808	56.34235	194.27412	16.41634	0.0707410	0.18175566	3.0865791	21	3 12.2	20.9
522424 2016 CE_{314}	17.4	X	58.00412	186.82676	50.46838	3.86624	0.1095506	0.23077168	2.6323747	21	8 9.4	20.7
522425 2016 CF_{314}	17.1	X	45.31193	178.38401	59.45114	5.43905	0.0836009	0.22470869	2.6795147	21	7 16.7	20.3
522426 2016 CH_{314}	17.4	X	14.75846	179.15477	71.97462	3.15144	0.1676889	0.21132108	2.7915206	21	6 18.3	20.1
522427 2016 CM_{314}	17.0	X	17.13248	98.41663	109.43452	7.01427	0.0404781	0.19427475	2.9525129	21	4 24.1	21.0
522428 2016 CQ_{314}	17.9	X	256.59598	35.66616	114.72380	5.45912	0.0398728	0.29050117	2.2578970	21	12 25.6	20.3
522429 2016 CV_{314}	17.6	X	113.52953	192.67246	83.96802	7.12923	0.0983976	0.27459618	2.3442633	21	12 9.8	21.0
522430 2016 CA_{315}	16.2	X	330.67616	195.01531	101.90244	16.69086	0.1079847	0.20939351	2.8086259	21	6 6.2	19.7
522431 2016 CC_{315}	15.9	X	155.59974	271.31404	132.34019	26.77097	0.1324336	0.17707465	3.1407386	21	4 9.5	21.3
522432 2016 CE_{316}	17.1	X	121.75080	24.30487	26.78072	3.86766	0.0609846	0.19750223	2.9202590	21	2 23.8	21.2
522433 2016 CM_{316}	18.0	X	157.96405	93.86677	335.37228	3.98200	0.1706068	0.22983292	2.6395379	21	5 1.6	22.3
522434 2016 CN_{316}	17.0	X	64.42574	72.16081	346.07420	4.59703	0.1622377	0.17558303	3.1585011	21	1 3.4	20.8
522435 2016 CO_{316}	17.1	X	144.58810	268.17215	129.23496	2.28739	0.0092893	0.19616550	2.9335103	21	2 26.9	21.0
522436 2016 CS_{317}	16.7	X	302.42344	217.42013	105.34820	10.81617	0.2293253	0.22013764	2.7164800	21	5 10.4	20.4
522437 2016 CD_{318}	16.9	X	52.65281	149.09459	47.23101	14.27537	0.1239545	0.21026937	2.8008211	21	6 2.6	20.4
522438 2016 CE_{318}	16.5	X	36.17710	217.25295	44.71780	14.43911	0.2302881	0.22424756	2.6831867	21	9 5.0	19.8
522439 2016 CJ_{318}	17.3	X	187.10924	335.44005	128.47037	10.91274	0.0574522	0.23811751	2.5779540	21	7 14.6	21.1
522440 2016 CV_{318}	17.1	X	33.63595	232.36643	47.68712	11.89715	0.1352391	0.23577765	2.5949816	21	9 10.7	20.3
522441 2016 CW_{318}	17.9	X	132.08807	129.57035	43.26538	12.67923	0.1219750	0.24358699	2.5392180	21	8 22.1	21.9
522442 2016 CC_{319}	17.0	X	354.22091	164.53492	134.94924	11.44731	0.0328361	0.23232723	2.6206115	21	7 19.2	20.3
522443 2016 CG_{319}	17.2	X	215.20476	320.13297	119.69319	9.96502	0.0377314	0.23623153	2.5916567	21	7 18.2	20.6
522444 2016 CM_{319}	16.1	X	56.88234	53.18187	64.10751	12.55539	0.0608922	0.17435600	3.1733024	21	3 2.8	20.5
522445 2016 CN_{319}	17.4	X	97.38046	19.88398	124.23347	9.87788	0.1819497	0.21471099	2.7620606	21	6 7.9	21.4
522446 2016 CO_{319}	16.9	X	15.71192	74.11924	146.27906	10.48621	0.0371144	0.20133993	2.8830318	21	5 8.3	20.8
522447 2016 CP_{319}	16.4	X	3.18847	50.76337	148.94902	10.24949	0.0461032	0.18467638	3.0539492	21	3 25.4	20.5
522448 2016 CQ_{319}	16.6	X	18.40760	114.34028	166.78616	13.57607	0.1800752	0.22411694	2.6842292	21	8 10.5	19.4
522449 2016 CU_{319}	17.4	X	108.86640	164.79816	109.49411	12.42331	0.1218902	0.27089483	2.3655688	21	12 4.5	21.0
522450 2016 CV_{319}	17.4	X	87.92311	128.23347	95.30434	9.76419	0.1109387	0.23790414	2.5794951	21	9 3.7	21.1
522451 2016 CA_{320}	16.6	X	106.74891	62.37312	62.36906	15.66081	0.1030232	0.20334157	2.8640808	21	5 14.4	20.7
522452 2016 CD_{320}	16.9	X	291.67282	129.86306	157.49276	13.00880	0.2235350	0.18393163	3.0621875	21	3 15.4	21.5
522453 2016 CH_{320}	16.4	X	208.52621	276.60433	86.99881	11.83647	0.1022314	0.19053654	2.9910054	21	4 8.3	21.2
522454 2016 CJ_{320}	15.9	X	255.93099	276.44919	49.10496	16.46101	0.2335766	0.18081167	3.0973129	21	3 31.7	21.1
522455 2016 CN_{320}	17.1	X	147.38964	39.41342	79.38334	9.56426	0.1179258	0.22300575	2.6931384	21	6 21.5	21.2
522456 2016 CQ_{320}	16.8	X	76.03437	263.05363	334.72725	8.42091	0.1318032	0.23924822	2.5698251	21	9 5.7	20.1
522457 2016 CU_{320}	16.3	X	272.51487	285.67002	9.01904	19.00046	0.1724335	0.17680307	3.1439540	21	3 14.1	21.2
522458 2016 CV_{320}	16.4	X	161.96478	186.33970	205.85842	21.35463	0.0066915	0.18046947	3.1012269	21	3 11.4	21.0
522459 2016 CY_{320}	16.3	X	239.19922	105.98548	228.83343	9.02396	0.0504189	0.18795594	3.0183204	21	3 31.2	20.8
522460 2016 CJ_{321}	16.5	X	18.72921	1.58511	266.39020	13.91634	0.1002272	0.23314042	2.6145142	21	7 14.3	19.6
522461 2016 CK_{321}	16.2	X	1.53332	351.33604	272.45781	12.67766	0.1017042	0.22082200	2.7108646	21	6 9.8	19.2
522462 2016 CN_{321}	16.3	X	326.28562	246.30061	316.86537	15.19747	0.1142320	0.17354273	3.1832086	21	1 31.1	20.5
522463 2016 CP_{321}	17.3	X	105.22095	256.51641	288.89239	13.99531	0.0678244	0.24180840	2.5516540	21	7 24.2	20.8
522464 2016 CR_{321}	17.2	X	322.92868	73.98809	240.67211	5.25360	0.0124396	0.22491932	2.6778415	21	6 26.1	20.6
522465 2016 CT_{321}	16.2	X	339.98311	321.72546	257.25408	10.19254	0.0871702	0.18128753	3.0918904	21	3 6.2	20.5
522466 2016 CU_{321}	16.4	X	163.69050	98.34769	354.44439	15.69655	0.0655143	0.21347486	2.7727129	21	5 30.2	20.8
522467 2016 CV_{321}	17.3	X	55.21488	242.58401	9.57759	4.07863	0.1995827	0.22999498	2.6382978	21	9 8.9	20.6
522468 2016 CX_{321}	16.8	X	91.81724	329.79104	202.21253	12.33343	0.1008275	0.21614132	2.7498617	21	6 23.8	20.8
522469 2016 CP_{322}	16.7	X	60.99839	342.19745	268.70221	13.16932	0.1244891	0.24330985	2.5411458	21	8 26.9	20.2
522470 2016 CU_{322}	16.0	X	244.43551	120.15889	260.04598	13.65243	0.0970504	0.21748998	2.7384819	21	5 29.3	20.0
522471 2016 CW_{322}	16.1	X	140.33533	179.04606	343.65177	13.62421	0.1785308	0.23998633	2.5645532	21	8 17.0	20.2
522472 2016 DO_{33}	17.8	X	147.13829	181.33688	10.67264	6.46452	0.0739333	0.27387531	2.3483751	21	9 27.1	20.9
522473 2016 DR_{33}	16.3	X	358.42265	342.34378	256.69340	16.66358	0.2050736	0.21350696	2.7724349	21	4 17.9	19.3
522474 2016 DD_{34}	17.3	X	25.74294	99.71281	121.74069	10.66345	0.1114771	0.22224386	2.6992899	21	5 26.0	20.5
522475 2016 DH_{34}	17.5	X	345.86902	298.57988	316.99139	6.47138	0.0281424	0.22388519	2.6860812	21	5 4.7	21.2
522476 2016 DB_{35}	18.1	X	84.88640	85.66448	151.56453	5.94997	0.1500592	0.25754841	2.4466028	21	9 22.3	21.5
522477 2016 DE_{35}	17.0	X	152.39726	213.48741	186.78678	1.78503	0.0415265	0.19806664	2.9147087	21	3 14.4	21.2
522478 2016 DN_{35}	18.1	X	70.62038	75.67141	146.05951	3.65537	0.1725248	0.23827073	2.5768487	21	8 14.6	21.2
522479 2016 DQ_{35}	16.1	X	299.87653	171.53090	52.04691	10.22599	0.0443792	0.17433773	3.1735240	21	2 3.9	20.7
522480 2016 DR_{35}	16.5	X	331.04691	164.27811	45.87567	10.48674	0.0531295	0.18424934	3.0586662	21	2 25.2	20.8

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522481 2016 EA_{130}	16.9	X	191.44115	176.52074	200.85285	1.59405	0.1026177	0.20111177	2.8852120	21	3 31.7	21.3
522482 2016 EU_{144}	15.9	X	250.47473	303.94182	14.19544	9.69001	0.0949614	0.19015857	2.9949675	21	3 22.8	20.4
522483 2016 EJ_{222}	16.2	X	262.55082	171.03711	146.69187	6.16341	0.1248243	0.17666096	3.1456399	21	4 3.2	21.0
522484 2016 ER_{227}	17.3	X	92.84369	27.36494	187.34477	13.17912	0.0572778	0.22979015	2.6398654	21	8 13.4	21.2
522485 2016 ES_{229}	16.2	X	232.56804	292.03975	34.18425	4.34883	0.1021572	0.19922262	2.9034229	21	3 12.8	20.6
522486 2016 EU_{229}	17.0	X	135.69808	313.51854	95.63266	3.19466	0.0625575	0.19791094	2.9162372	21	3 10.0	21.1
522487 2016 ED_{230}	17.4	X	250.92243	281.22553	53.67519	7.17791	0.0314846	0.21487953	2.7606161	21	4 17.7	21.2
522488 2016 EG_{230}	17.0	X	357.16036	30.99616	231.64219	12.61192	0.2173630	0.21841977	2.7307048	21	5 25.7	19.4
522489 2016 EL_{230}	17.2	X	134.95545	119.79061	22.48368	6.46602	0.0894898	0.23763876	2.5814152	21	7 7.3	21.0
522490 2016 EN_{230}	16.9	X	4.05570	89.28618	149.90510	5.40651	0.1110974	0.21081813	2.7959586	21	5 12.2	20.1
522491 2016 EW_{230}	16.7	X	345.01010	18.49344	257.59306	7.82176	0.1601277	0.21665949	2.7454755	21	5 23.8	19.6
522492 2016 EZ_{230}	17.9	X	178.27359	268.93254	288.81294	6.27362	0.0615330	0.28408038	2.2917921	21	11 9.5	21.1
522493 2016 ED_{231}	15.6	X	44.68164	350.83202	131.72346	16.72841	0.1140548	0.17641320	3.1485843	21	2 18.2	19.4
522494 2016 EH_{231}	16.9	X	338.96184	262.08707	46.16791	14.38872	0.1858213	0.23757024	2.5819116	21	6 25.3	19.5
522495 2016 EW_{231}	16.3	X	319.87369	257.32782	326.42393	8.93829	0.1006631	0.17901744	3.1179740	21	2 16.5	20.3
522496 2016 EB_{232}	16.6	X	222.20484	194.36472	177.23580	28.21582	0.0840370	0.22884062	2.6471627	21	4 26.9	20.9
522497 2016 EG_{232}	16.8	X	327.51252	43.35274	265.44653	9.36570	0.0454443	0.23175363	2.6249338	21	6 21.4	20.0
522498 2016 EH_{232}	16.1	X	258.50394	341.07360	296.38775	9.05578	0.1474500	0.17166303	3.2064037	21	2 5.9	21.1
522499 2016 EO_{232}	18.0	X	263.69678	45.31187	354.96347	2.27419	0.0316732	0.24674125	2.5175313	21	7 30.3	21.2
522500 2016 ES_{232}	17.3	X	295.84983	129.49483	224.59549	7.85950	0.0845976	0.23557574	2.5964642	21	7 1.0	20.7
522501 2016 EV_{232}	16.7	X	234.24953	322.02423	1.09963	2.96714	0.1370437	0.18102336	3.0948977	21	3 9.6	21.5
522502 2016 EC_{233}	17.0	X	312.77277	31.75507	273.54372	3.53701	0.0987411	0.21265425	2.7798413	21	5 18.4	20.4
522503 2016 EE_{233}	16.6	X	62.00610	283.62469	197.49055	9.04399	0.0276907	0.18114021	3.0935666	21	3 1.3	20.9
522504 2016 EH_{233}	17.2	X	318.02926	90.22019	178.54671	1.04912	0.2764685	0.18860864	3.0113530	21	3 14.5	21.2
522505 2016 EN_{233}	17.0	X	265.02321	162.19927	198.14064	5.42570	0.0369879	0.22079974	2.7110468	21	6 5.9	20.7
522506 2016 EO_{233}	16.7	X	305.33095	142.58759	188.14409	8.86762	0.1308752	0.22008641	2.7169015	21	6 7.3	20.2
522507 2016 EP_{233}	17.1	X	238.69629	8.75866	44.36453	4.50032	0.1663375	0.24061128	2.5601106	21	6 27.7	20.9
522508 2016 EQ_{233}	16.8	X	146.58308	253.26833	149.11669	2.44057	0.0263419	0.18108091	3.0942419	21	3 11.5	21.2
522509 2016 ER_{233}	16.3	X	349.78750	193.49622	29.02186	9.48952	0.0474095	0.19198786	2.9759128	21	4 2.9	20.2
522510 2016 ES_{233}	16.8	X	265.09642	151.49767	204.61300	5.62328	0.0415874	0.21759250	2.7376217	21	5 30.9	20.5
522511 2016 EW_{233}	17.8	X	106.42112	35.57523	201.74601	14.18283	0.0481479	0.26095738	2.4252490	21	10 4.1	20.9
522512 2016 EZ_{233}	17.8	X	49.71710	59.79364	197.50264	13.65863	0.1694856	0.23759321	2.5817451	21	8 29.9	21.1
522513 2016 ED_{234}	16.8	X	349.08155	175.83388	52.75465	11.28618	0.0431642	0.18845529	3.0129864	21	4 12.6	20.9
522514 2016 EH_{234}	17.6	X	61.12555	179.81174	91.17717	7.06270	0.1973273	0.23891523	2.5722124	21	10 15.2	21.1
522515 2016 EO_{234}	16.4	X	341.41426	68.10850	148.92575	9.30311	0.0368354	0.17545326	3.1600582	21	3 19.1	20.7
522516 2016 ER_{234}	17.8	X	198.27127	26.51081	142.95280	7.73753	0.0508657	0.26710063	2.3879182	21	10 30.9	21.1
522517 2016 ES_{234}	17.4	X	273.15481	299.38794	146.10634	6.68598	0.0791613	0.26217477	2.4177355	21	10 11.5	20.3
522518 2016 EA_{235}	17.7	X	111.53655	163.68737	94.26573	8.58414	0.0811439	0.26150626	2.4218542	21	11 13.1	21.2
522519 2016 EF_{235}	16.8	X	138.16671	83.98091	66.57844	10.62147	0.0347730	0.22460939	2.6803044	21	7 17.6	20.6
522520 2016 EL_{235}	16.5	X	265.56450	293.34633	51.85820	10.95943	0.1095543	0.19890828	2.9064809	21	5 8.8	20.6
522521 2016 EP_{235}	17.3	X	94.37637	143.22545	40.80107	4.41402	0.0825120	0.22354738	2.6887866	21	7 12.3	21.0
522522 2016 EQ_{235}	17.0	X	345.92592	146.71309	57.79007	1.56903	0.1156961	0.17571542	3.1569144	21	2 28.7	20.9
522523 2016 EV_{235}	18.1	X	215.41379	95.24185	91.71925	5.03389	0.0976126	0.28446168	2.2897437	21	12 8.6	21.0
522524 2016 EY_{235}	16.8	X	292.16123	209.13468	48.89086	1.57496	0.1316980	0.16977925	3.2300778	21	2 22.0	21.5
522525 2016 EC_{236}	16.1	X	341.68029	274.61502	301.53302	10.91380	0.0891049	0.18468550	3.0538487	21	3 4.8	20.3
522526 2016 EL_{236}	16.7	X	102.59972	36.17483	100.58535	17.82858	0.0608326	0.20158650	2.8806805	21	5 22.6	20.9
522527 2016 EM_{236}	16.7	X	308.01539	248.03048	116.04538	17.02925	0.2045126	0.22684981	2.6626276	21	7 16.5	19.4
522528 2016 EN_{236}	16.3	X	203.34486	243.52532	133.72824	16.80749	0.0300498	0.18600741	3.0393628	21	4 21.8	21.0
522529 2016 ER_{236}	16.8	X	338.42999	119.17544	149.36903	20.08582	0.1868283	0.19836897	2.9117465	21	5 6.1	20.5
522530 2016 EV_{236}	16.4	X	5.25609	62.08003	132.27988	12.30777	0.0206164	0.17940197	3.1135171	21	3 24.8	20.8
522531 2016 EX_{236}	17.0	X	201.33579	7.79837	94.71078	15.67533	0.0595270	0.23362987	2.6108613	21	7 31.7	20.8
522532 2016 EK_{237}	17.4	X	25.90410	100.92331	219.60924	5.68929	0.1520438	0.25495530	2.4631641	21	10 23.5	19.9
522533 2016 EQ_{237}	17.5	X	44.25746	68.67615	187.78649	12.51087	0.1557420	0.22940374	2.6428290	21	8 17.6	20.8
522534 2016 ET_{237}	17.0	X	310.17316	110.00078	173.59793	8.97355	0.2999172	0.18510641	3.0492175	21	3 20.3	21.1
522535 2016 EV_{237}	16.3	X	169.67106	233.85209	152.89826	12.01179	0.1152900	0.18412923	3.0599962	21	3 26.4	21.2
522536 2016 EX_{237}	16.3	X	43.96352	1.11593	135.80552	10.45593	0.1329699	0.18288997	3.0738037	21	3 8.5	19.9
522537 2016 EA_{238}	16.8	X	336.59441	166.59325	38.82648	4.98168	0.1362326	0.18436898	3.0573429	21	2 13.2	20.8
522538 2016 EL_{238}	18.0	X	239.82072	33.91509	119.61070	6.04265	0.0635723	0.29791291	2.2202907	21	12 4.7	20.5
522539 2016 EN_{238}	16.2	X	287.70527	111.49993	116.24467	14.21992	0.0766334	0.17649999	3.1475521	21	1 17.5	20.6
522540 2016 ES_{238}	16.4	X	163.28255	250.68958	102.56398	10.58046	0.1552947	0.18130286	3.0917161	21	2 11.7	21.4
522541 2016 ED_{239}	17.1	X	44.73420	303.27594	311.29628	11.41093	0.0997429	0.23150160	2.6268386	21	8 9.5	20.2
522542 2016 EE_{239}	17.0	X	74.67619	281.31257	279.44917	10.48852	0.1359357	0.22437924	2.6821369	21	7 15.2	20.4
522543 2016 EH_{239}	17.4	X	163.98346	217.68781	321.21482	9.32473	0.0485713	0.25609353	2.4558602	21	9 22.9	21.0
522544 2016 EK_{239}	16.6	X	326.24406	51.42395	207.48572	7.97456	0.3030433	0.18211796	3.0824842	21	3 8.2	20.4
522545 2016 EM_{239}	16.8	X	8.89605	125.34593	69.99620	3.96769	0.1678647	0.18371962	3.0645428	21	3 23.3	20.1
522546 2016 EN_{239}	17.3	X	44.59804	123.24919	165.46108	2.52114	0.1847303	0.23756846	2.5819245	21	10 11.7	20.5
522547 2016 EP_{239}	17.5	X	54.76324	80.72192	195.54538	8.31231	0.1441728	0.23825994	2.5769265	21	10 1.6	20.8
522548 2016 ES_{239}	18.0	X	51.81129	75.33993	152.56466	3.36677	0.2339386	0.21643864	2.7473428	21	8 4.5	21.1
522549 2016 EA_{240}	16.6	X	26.52233	153.88865	135.45238	17.54744	0.1326566	0.24400114	2.5363440	21	9 8.5	19.5
522550 2016 EC_{240}	17.2	X	125.38284	21.56932	140.03143	18.20067	0.0951089	0.23802387	2.5786301	21	7 21.1	21.0
522551 2016 ED_{240}	16.4	X	351.55204	64.55355	129.70151	17.80824	0.1873086	0.18208785	3.0828241	21	2 15.6	19.9
522552 2016 EA_{241}	17.0	X	275.09126	317.19131	344.71302	14.35936	0.2425361	0.19112400	2.9848733	21	3 10.9	21.7
522553 2016 EF_{241}	17.4	X	343.05526	335.48597	349.82213	6.22681	0.1666068	0.24610408	2.5218747	21	8 6.5	19.6
522554 2016 EL_{241}	17.7	X	8.94249	302.85567	352.34344	1.62738	0.1348378	0.24202888	2.5501041	21	8 12.2	20.2
522555 2016 EB_{242}	17.3	X	113.13753	280.99226	164.63710	2.54930	0.0551186	0.19663540	2.9288350	21	3 26.3	21.4
522556 2016 ED_{242}	17.0	X	311.97708	143.73691	176.66374	16.29177	0.2385296	0.22017281	2.7161907	21	5 18.7	20.6
522557 2016 EK_{242}	16.9	X	136.65578	291.24642	140.09289	2.96863	0.0767756	0.20127989	2.8836052	21	4 8.7	21.0
522558 2016 EQ_{242}	17.1	X	276.60450	169.23313	184.31496	11.85056	0.1910523	0.23229704	2.6208385	21	5 21.4	21.0
522559 2016 EU_{242}	17.2	X	287.64259	5.17762	306.56027	2.78485	0.0829832	0.21058658	2.7980078	21	4 23.9	21.1
522560 2016 EQ_{243}	17.6	X	197.65995	306.60831	127.80803	5.54180	0.0323330	0.22957719	2.6414976	21	6 19.1	21.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522561 2016 ET_{243}	17.9	X	125.37888	111.00853	120.86076	4.88490	0.0961516	0.26779474	2.3837902	21	10 27.1	21.3
522562 2016 EU_{243}	17.1	X	7.05937	114.37441	126.95803	5.33273	0.0168315	0.21221517	2.7836744	21	5 21.0	20.8
522563 2016 EV_{243}	17.5	X	194.12761	355.69365	91.30411	6.86814	0.0513819	0.23286024	2.6166109	21	6 30.8	21.2
522564 2016 EY_{243}	18.2	X	167.55609	347.52805	165.84322	4.15120	0.0466205	0.25355732	2.4722096	21	8 27.4	21.5
522565 2016 EZ_{243}	16.9	X	147.14727	328.20225	99.56995	3.17468	0.0513958	0.19837751	2.9116629	21	4 14.2	21.1
522566 2016 ED_{244}	16.3	X	231.46984	106.10195	212.28564	12.28809	0.1047514	0.17224978	3.1991180	21	2 28.2	21.4
522567 2016 EF_{244}	16.8	X	325.06784	298.41746	11.15194	17.23145	0.1895589	0.21046049	2.7991253	21	5 25.8	20.4
522568 2016 EK_{244}	17.1	X	47.52004	225.87104	16.53171	12.47140	0.0863093	0.22126201	2.7072694	21	7 30.9	20.7
522569 2016 EP_{244}	17.5	X	105.77632	256.97281	324.65889	7.52864	0.0824956	0.26209654	2.4182165	21	9 14.7	20.8
522570 2016 ER_{244}	17.9	X	70.35587	351.14991	316.35419	3.04538	0.0919472	0.28561479	2.2835766	21	12 1.8	21.0
522571 2016 EX_{244}	17.6	X	135.29049	267.93490	201.95802	1.24201	0.0434036	0.21894657	2.7263228	21	5 20.4	21.3
522572 2016 EY_{244}	16.4	X	76.28765	303.73546	161.13884	8.84206	0.0827797	0.18245070	3.0787353	21	3 8.8	20.3
522573 2016 EZ_{244}	16.6	X	249.49117	244.90748	127.98162	7.50316	0.0542113	0.22057603	2.7128795	21	6 1.4	20.5
522574 2016 EA_{245}	17.4	X	76.63177	157.58722	130.48173	6.62969	0.0520039	0.27113650	2.3641629	21	11 9.1	20.5
522575 2016 EC_{245}	16.1	X	65.05003	288.46602	281.81260	15.95945	0.1835806	0.21879680	2.7275669	21	7 20.9	19.6
522576 2016 EG_{245}	16.5	X	341.46354	151.70177	151.22852	14.36784	0.0676677	0.22422396	2.6833750	21	7 3.2	20.0
522577 2016 EH_{245}	16.4	X	148.06136	337.53437	108.69095	12.47950	0.0318107	0.20360416	2.8616177	21	5 9.7	20.6
522578 2016 EJ_{245}	16.8	X	144.73182	340.98472	132.64619	13.86470	0.0948347	0.21997764	2.7177970	21	6 12.4	21.1
522579 2016 EO_{245}	17.6	X	92.91444	235.18386	315.02461	5.15435	0.0372543	0.23685680	2.5870936	21	7 11.8	21.0
522580 2016 EQ_{245}	17.5	X	189.67791	105.83215	313.88605	4.67454	0.0627780	0.22180943	2.7028133	21	5 19.1	21.5
522581 2016 EA_{246}	17.5	X	19.55120	299.11474	350.57601	14.97232	0.1100603	0.24192839	2.5508103	21	8 25.2	20.3
522582 2016 EE_{246}	18.1	X	67.33451	337.26524	301.90651	2.51195	0.1171959	0.26127942	2.4232557	21	10 20.1	21.3
522583 2016 EG_{246}	18.0	X	90.04303	284.58806	337.79064	4.63226	0.0894183	0.26625033	2.3929995	21	10 21.9	21.4
522584 2016 EJ_{246}	17.6	X	55.42274	246.97508	334.79794	4.74023	0.1027046	0.22778774	2.6553136	21	7 12.5	20.9
522585 2016 EL_{246}	17.7	X	168.48120	164.18356	23.24397	2.40529	0.1163399	0.26989203	2.3714247	21	10 13.3	20.9
522586 2016 EO_{246}	16.2	X	232.24374	95.42442	195.01748	11.76762	0.0399778	0.17295833	3.1903750	21	1 31.6	21.1
522587 2016 EV_{246}	17.3	X	307.01584	222.32240	45.18969	3.97599	0.1574519	0.19187327	2.9770976	21	3 17.5	21.3
522588 2016 EX_{246}	17.7	X	5.02923	267.10677	31.26958	4.57880	0.1637207	0.23636161	2.5907058	21	8 12.5	20.2
522589 2016 EY_{246}	18.2	X	148.73573	93.08528	93.06067	2.33234	0.0698840	0.26233491	2.4167514	21	9 20.7	21.6
522590 2016 EA_{247}	17.6	X	318.03180	79.09643	224.01631	1.67475	0.0763346	0.21999087	2.7176881	21	5 26.8	20.8
522591 2016 EF_{247}	17.8	X	21.38825	302.70437	298.61601	1.99210	0.0453022	0.22289746	2.6940106	21	6 9.3	21.1
522592 2016 EO_{247}	17.0	X	208.06641	228.75132	187.55934	11.98340	0.1497791	0.22465047	2.6799776	21	6 3.7	21.5
522593 2016 EQ_{247}	18.3	X	226.01497	119.33748	39.02889	4.34654	0.0878209	0.28560789	2.2836134	21	11 14.6	21.0
522594 2016 ER_{247}	17.1	X	301.43981	147.58580	183.64623	6.40160	0.0667177	0.21892272	2.7265209	21	6 11.9	20.7
522595 2016 ES_{247}	17.8	X	99.49782	354.60479	196.82575	8.56259	0.1126693	0.23346569	2.6120852	21	7 30.1	21.6
522596 2016 EU_{247}	16.8	X	289.48854	54.46728	211.85480	7.13733	0.0857668	0.17658125	3.1465863	21	3 2.9	21.4
522597 2016 EW_{247}	17.3	X	312.08981	158.53693	129.21427	3.09612	0.1573873	0.19583969	2.9367630	21	4 18.6	21.0
522598 2016 EX_{247}	17.0	X	332.23765	228.35337	63.06393	5.50614	0.0399154	0.21443818	2.7644027	21	6 5.1	20.4
522599 2016 EZ_{247}	17.3	X	119.52845	92.72715	53.11768	5.88162	0.0578180	0.21908800	2.7251494	21	6 18.7	21.1
522600 2016 EM_{248}	17.0	X	327.46535	242.07408	90.36741	8.27580	0.1266754	0.24024381	2.5627205	21	7 17.8	19.6
522601 2016 EU_{248}	16.8	X	36.19957	44.05891	106.99998	7.74264	0.1863916	0.18528302	3.0472796	21	3 18.3	20.1
522602 2016 EY_{248}	16.5	X	7.15956	7.41028	271.11199	11.73627	0.1384412	0.22232506	2.6986326	21	7 11.4	19.3
522603 2016 EA_{249}	17.1	X	56.40401	14.26658	202.99574	7.06110	0.0839985	0.21708934	2.7418502	21	7 3.0	20.7
522604 2016 EB_{249}	17.6	X	308.79699	224.26976	184.83381	14.31264	0.0142167	0.26158974	2.4213389	21	10 20.1	20.6
522605 2016 EE_{249}	17.2	X	156.19947	337.48081	176.66442	8.93105	0.1033388	0.23913392	2.5706440	21	8 13.9	21.2
522606 2016 EF_{249}	17.6	X	68.08659	60.36810	174.04589	11.61757	0.1370812	0.22904170	2.6456132	21	8 20.7	21.2
522607 2016 EG_{249}	16.7	X	305.64313	304.50278	88.07811	11.82637	0.0539791	0.24259416	2.5461412	21	9 21.7	20.0
522608 2016 EK_{249}	17.7	X	218.31120	342.77820	144.79775	8.71999	0.1097842	0.25706044	2.4496981	21	9 20.6	21.2
522609 2016 FC_{23}	16.9	X	294.44027	265.50601	42.11880	4.21980	0.0823089	0.20900289	2.8121244	21	4 29.2	20.6
522610 2016 FP_{36}	17.2	X	349.27754	89.45860	185.55617	4.12618	0.0837243	0.21777089	2.7361265	21	6 5.9	20.4
522611 2016 FZ_{64}	16.9	X	11.82418	248.45090	294.07894	4.10934	0.0738726	0.18221617	3.0813765	21	3 10.8	20.8
522612 2016 FB_{65}	17.0	X	274.61244	119.54102	231.66704	5.93747	0.0566272	0.21539721	2.7561911	21	6 3.4	20.8
522613 2016 FC_{65}	17.6	X	276.92759	170.06530	231.92010	3.19256	0.0649015	0.24614808	2.5215741	21	8 12.9	20.9
522614 2016 FE_{65}	16.2	X	89.07401	239.61882	216.99344	7.96443	0.0697509	0.17736508	3.1373091	21	3 11.4	20.6
522615 2016 FH_{65}	17.5	X	189.37152	152.91464	334.35559	3.99219	0.0725218	0.24662591	2.5183161	21	8 18.2	21.0
522616 2016 FM_{65}	17.7	X	323.18649	215.22479	109.62442	10.11558	0.1377619	0.23115142	2.6294909	21	6 26.6	20.5
522617 2016 FR_{65}	16.7	X	292.51053	247.35432	127.35121	13.60158	0.0821020	0.24649440	2.5192118	21	7 26.9	19.6
522618 2016 FC_{66}	16.7	X	297.61135	106.62777	164.07869	16.46145	0.1986608	0.17645273	3.1481140	21	3 4.8	21.3
522619 2016 FF_{66}	18.0	X	186.09465	220.45977	10.01689	5.39735	0.0459233	0.29100952	2.2552668	21	—	—
522620 2016 FG_{66}	17.7	X	48.93032	259.03036	28.50620	3.21057	0.1671070	0.23988952	2.5652431	21	10 13.3	20.7
522621 2016 FH_{66}	17.1	X	79.13711	213.04567	29.72244	15.67052	0.1832641	0.23910083	2.5708811	21	9 29.3	20.9
522622 2016 FK_{66}	18.1	X	171.16142	202.84841	39.71465	5.80008	0.0422193	0.28754615	2.2733397	21	—	—
522623 2016 FN_{66}	16.5	X	311.66621	138.47763	160.04417	14.71211	0.1522905	0.19060635	2.9902751	21	5 6.2	20.6
522624 2016 FQ_{66}	16.4	X	91.85411	318.60371	170.19915	14.19531	0.0091008	0.18223434	3.0811717	21	4 20.5	20.8
522625 2016 FR_{66}	16.3	X	307.14204	212.84031	125.36602	16.42577	0.1514173	0.20594572	2.8398857	21	6 18.8	20.0
522626 2016 FS_{66}	16.6	X	157.32993	291.40646	164.44725	15.24402	0.1122504	0.20437555	2.8544127	21	6 5.1	21.3
522627 2016 FZ_{66}	16.3	X	3.32918	239.94681	74.83299	9.53153	0.1361999	0.22373080	2.6873168	21	9 3.4	19.4
522628 2016 FK_{67}	16.0	X	199.70091	189.67007	146.56992	14.63738	0.0969517	0.17067026	3.2188259	21	2 23.1	21.0
522629 2016 FL_{67}	17.7	X	22.12609	123.33431	146.76119	13.49919	0.1468146	0.22819552	2.6521493	21	7 29.7	20.5
522630 2016 FM_{67}	16.0	X	230.87242	231.99234	102.53528	12.51814	0.3238367	0.17397367	3.1779498	21	3 17.3	21.9
522631 2016 FN_{67}	17.9	X	140.09563	11.15052	148.60865	12.08089	0.1255726	0.24409497	2.5356939	21	8 6.4	21.7
522632 2016 FR_{67}	16.5	X	335.76486	25.57582	206.66596	12.99095	0.0868334	0.18428156	3.0583097	21	3 19.5	20.5
522633 2016 FV_{67}	16.9	X	255.37818	245.47087	99.09788	8.70706	0.0887366	0.20259932	2.8710719	21	5 1.6	21.2
522634 2016 FX_{67}	16.5	X	30.33917	15.92019	152.85048	5.11506	0.0649834	0.18585213	3.0410555	21	3 22.9	20.4
522635 2016 FZ_{67}	17.9	X	23.83759	161.63727	143.78422	4.90374	0.1447890	0.24354107	2.5395372	21	9 27.5	20.6
522636 2016 FA_{68}	16.7	X	187.71147	358.58694	126.60704	14.27425	0.1004276	0.24459327	2.5322489	21	8 12.8	20.5
522637 2016 FE_{68}	16.8	X	152.25442	49.20043	69.78382	13.85870	0.0771965	0.22228181	2.6989827	21	6 23.9	20.9
522638 2016 FF_{68}	16.7	X	292.71768	133.40682	167.82451	11.47857	0.1461535	0.18798802	3.0179770	21	4 13.7	21.0
522639 2016 GU_{16}	16.4	X	148.61138	22.42317	335.76401	3.47328	0.1156074	0.16721668	3.2629944	21	1 31.7	21.3
522640 2016 GW_{194}	16.7	X	7.44642	191.77697	57.67775	10.18677	0.1433429	0.21166468	2.7884988	21	5 30.3	19.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522641 2016 GH_{261}	17.4	X	39.98589	68.98292	217.11708	1.87997	0.1728464	0.23586775	2.5943208	21	9 27.7	20.4
522642 2016 GT_{261}	17.4	X	352.32326	194.25580	104.78768	4.76640	0.1776084	0.21654680	2.7464279	21	7 12.9	20.0
522643 2016 GU_{261}	17.6	X	19.50803	164.65014	100.37916	4.66941	0.1535381	0.21710213	2.7417424	21	7 18.5	20.3
522644 2016 GX_{261}	16.7	X	33.42304	119.75012	58.35076	17.16681	0.0407076	0.18652733	3.0337124	21	4 13.4	20.9
522645 2016 GY_{261}	16.7	X	296.11553	89.38739	207.92810	15.72838	0.2397591	0.18080107	3.0974339	21	3 27.2	21.2
522646 2016 GZ_{261}	18.1	X	278.59759	298.85726	191.73827	4.64833	0.0604246	0.29262174	2.2469754	21	12 28.9	20.5
522647 2016 GB_{262}	16.2	X	280.08308	24.63198	286.87813	3.80906	0.1960259	0.18333892	3.0687837	21	4 1.3	20.9
522648 2016 GG_{262}	16.9	X	71.19607	321.36931	211.70648	4.79685	0.0267069	0.20989071	2.8041887	21	5 18.4	20.5
522649 2016 GN_{262}	17.5	X	204.86748	191.91343	335.23284	5.15697	0.0914196	0.28092306	2.3089319	21	10 27.8	20.7
522650 2016 GU_{262}	17.3	X	30.05227	5.23304	284.92223	2.82647	0.1832083	0.23758142	2.5818305	21	9 17.9	20.1
522651 2016 GV_{262}	16.5	X	71.20803	104.76314	16.15059	11.16005	0.0551244	0.18299545	3.0726223	21	3 20.3	20.6
522652 2016 GY_{262}	17.7	X	37.84766	301.28551	331.08391	1.98736	0.1733957	0.23484704	2.6018324	21	9 5.1	20.4
522653 2016 GC_{263}	16.0	X	247.90473	254.21726	69.58199	17.17712	0.2309657	0.17513031	3.1639419	21	3 25.9	21.5
522654 2016 GK_{263}	17.0	X	18.58265	126.74270	174.55843	14.37662	0.1405139	0.22935325	2.6432168	21	9 6.8	19.8
522655 2016 GM_{263}	17.0	X	349.07270	226.26890	106.16348	14.00159	0.1435049	0.23083737	2.6318753	21	9 2.2	19.9
522656 2016 GQ_{263}	16.9	X	313.86102	147.79807	182.58866	13.52471	0.1908096	0.21469288	2.7622159	21	6 11.1	20.5
522657 2016 GS_{263}	17.4	X	67.01472	64.41956	212.44087	16.21128	0.1876292	0.24037955	2.5617557	21	10 24.9	20.8
522658 2016 GT_{263}	16.6	X	276.67280	119.95066	188.68178	10.52461	0.1015908	0.17736688	3.1372878	21	4 9.2	21.0
522659 2016 GW_{263}	16.4	X	110.21230	273.77862	204.78925	9.19886	0.0520702	0.18677858	3.0309912	21	5 4.3	20.7
522660 2016 GE_{264}	16.9	X	346.58330	99.57873	107.81060	2.32950	0.1271032	0.17903124	3.1178138	21	3 3.7	20.8
522661 2016 GL_{264}	16.8	X	66.60586	1.73752	126.06423	3.86921	0.1064072	0.18352371	3.0667233	21	3 28.4	20.7
522662 2016 GP_{264}	17.3	X	323.40207	258.00740	9.12763	0.95041	0.1602861	0.18955369	3.0013355	21	4 6.9	20.9
522663 2016 GQ_{264}	17.3	X	334.22075	289.74311	39.88245	3.23494	0.0715271	0.23053554	2.6341720	21	7 30.9	20.4
522664 2016 GU_{264}	18.1	X	156.00843	23.20561	203.85186	5.96820	0.0564096	0.27692170	2.3311205	21	11 23.7	21.2
522665 2016 GY_{264}	17.1	X	251.45427	131.42148	206.62460	10.93857	0.0852517	0.19241594	2.9714974	21	4 16.7	21.3
522666 2016 GZ_{264}	17.4	X	20.16199	190.78802	63.00516	4.79733	0.0625004	0.21879442	2.7275866	21	6 26.1	20.6
522667 2016 GB_{265}	16.8	X	308.06308	64.66874	183.37689	2.04780	0.0530616	0.17857570	3.1231137	21	3 9.7	21.0
522668 2016 GC_{265}	17.7	X	6.31956	91.49832	205.69932	4.19115	0.1005501	0.23054995	2.6340622	21	8 5.1	20.6
522669 2016 GX_{265}	16.7	X	337.46142	45.54903	245.52320	14.41719	0.2149365	0.20568769	2.8422603	21	5 25.2	19.7
522670 2016 GB_{266}	16.7	X	268.33141	189.00853	131.55936	12.53456	0.1416383	0.17869165	3.1217626	21	4 13.7	21.6
522671 2016 GG_{266}	17.1	X	22.49819	116.82883	150.07629	13.38409	0.1768962	0.21371171	2.7706638	21	7 28.3	20.0
522672 2016 GU_{266}	15.9	X	47.07876	279.56246	218.61379	9.76854	0.0544512	0.17651647	3.1473562	21	3 4.3	20.3
522673 2016 GW_{266}	17.1	X	298.51830	114.87731	230.22302	4.21519	0.1491026	0.21696353	2.7429100	21	6 13.4	20.7
522674 2016 GY_{266}	16.7	X	14.83225	338.14743	226.20803	2.93413	0.0395904	0.18972929	2.9994834	21	4 12.9	20.7
522675 2016 GG_{267}	16.0	X	279.55239	243.63055	79.11346	13.59164	0.1627210	0.19202743	2.9755040	21	4 25.4	20.5
522676 2016 GH_{267}	16.6	X	300.54892	239.34869	113.28817	13.19818	0.1136509	0.21207152	2.7849312	21	7 2.7	20.2
522677 2016 GN_{267}	16.5	X	267.56103	214.59954	118.89417	10.10162	0.0494998	0.19027990	2.9936942	21	5 8.4	20.9
522678 2016 HH_{25}	18.0	X	61.38078	208.14286	57.98307	8.61088	0.1136486	0.24201466	2.5502041	21	9 27.7	21.4
522679 2016 HJ_{25}	16.4	X	201.25126	178.43814	208.37346	10.97142	0.1011200	0.19133411	2.9826877	21	4 23.3	21.1
522680 2016 HL_{25}	17.3	X	2.52140	188.71156	97.78333	4.00648	0.0706206	0.22095045	2.7098138	21	7 14.5	20.6
522681 2016 HM_{25}	17.5	X	355.94360	208.11655	95.94890	5.50549	0.2014050	0.21946695	2.7220116	21	7 30.2	19.8
522682 2016 HN_{25}	17.1	X	322.97529	245.09802	86.14010	7.04137	0.1497927	0.21923615	2.7239216	21	7 3.9	20.2
522683 2016 HP_{25}	16.4	X	244.00032	254.29194	96.80994	9.21108	0.1489393	0.18543070	3.0456614	21	4 23.6	21.3
522684 2016 JP	21.1	X	151.16165	255.66690	202.58252	11.32756	0.3835219	0.99442169	0.9940823	21	5 22.7	19.5
522685 2016 JC_{26}	16.9	X	321.82317	76.10903	195.67695	24.85994	0.2871944	0.18013614	3.1050516	21	3 21.7	20.9
522686 2016 JC_{41}	17.6	X	159.87711	91.81503	113.50053	6.91485	0.0386085	0.25905799	2.4370890	21	10 30.9	21.0
522687 2016 JR_{41}	17.3	X	10.09930	240.76103	116.89368	15.22710	0.1412150	0.25284407	2.4768566	21	11 22.5	20.3
522688 2016 KK_5	17.3	X	146.20828	19.31175	194.57542	8.90439	0.1291320	0.24196608	2.5505454	21	10 22.3	21.3
522689 2016 KL_5	16.8	X	309.89882	158.01871	168.83920	10.92732	0.0973792	0.18305501	3.0719559	21	6 15.2	21.0
522690 2016 KN_5	16.8	X	31.45070	83.45654	167.34888	13.92529	0.1886082	0.19601113	2.9350503	21	7 22.3	20.3
522691 2016 KS_5	16.6	X	238.33802	235.79205	107.68923	10.62231	0.0793247	0.17463452	3.1699274	21	4 16.3	21.5
522692 2016 KT_5	17.0	X	302.35205	271.22953	93.79883	9.95656	0.1488710	0.21697139	2.7428437	21	7 17.8	20.3
522693 2016 KX_5	17.7	X	2.56893	102.51942	203.53611	8.99257	0.0983638	0.21905767	2.7254010	21	8 8.9	21.0
522694 2016 KZ_5	16.4	X	279.52249	249.03150	94.18127	19.17738	0.2531335	0.18420863	3.0591169	21	5 11.3	21.3
522695 2016 LR_2	16.5	X	146.22906	346.42662	150.03524	13.33340	0.0822300	0.22363463	2.6880872	21	7 10.5	20.6
522696 2016 LF_{59}	17.0	X	350.81001	217.47373	90.08488	11.13544	0.1029739	0.21382227	2.7697087	21	7 25.5	20.2
522697 2016 LH_{59}	17.6	X	90.14704	16.89811	227.91042	4.66209	0.1264131	0.23929187	2.5695126	21	9 30.7	21.3
522698 2016 LL_{59}	16.7	X	1.10283	218.55501	146.51008	13.75442	0.1757718	0.24371684	2.5383160	21	11 19.0	19.6
522699 2016 LN_{59}	15.6	X	263.95271	308.53451	60.11612	15.63017	0.1055279	0.17469467	3.1691998	21	6 5.7	20.2
522700 2016 LP_{59}	17.2	X	25.27681	86.33651	198.92012	12.66581	0.1470819	0.21930540	2.7233482	21	8 23.4	20.5
522701 2016 LQ_{59}	17.0	X	308.80587	140.19849	171.70052	10.65086	0.1275690	0.19337857	2.9616279	21	5 21.4	21.0
522702 2016 LU_{59}	16.8	X	158.60540	303.43324	192.22930	24.85232	0.0867434	0.22042994	2.7140780	21	7 19.9	21.4
522703 2016 LV_{59}	17.2	X	14.77018	150.28745	114.14108	6.03150	0.0818301	0.21011846	2.8021620	21	7 3.4	20.6
522704 2016 LX_{59}	17.0	X	294.51231	117.06723	214.68459	6.95407	0.1986815	0.18979001	2.9988436	21	5 15.1	21.2
522705 2016 LZ_{59}	17.3	X	119.45547	353.49000	180.10670	5.89462	0.0078541	0.21490908	2.7603631	21	7 18.6	21.1
522706 2016 LA_{60}	16.6	X	232.06828	241.23875	133.77267	11.10986	0.1269919	0.18359067	3.0659776	21	5 12.4	21.5
522707 2016 LD_{60}	16.4	X	299.34006	103.70980	248.18261	15.48212	0.1235628	0.18288431	3.0738671	21	6 26.9	20.5
522708 2016 LK_{60}	16.0	X	98.84516	305.32671	240.60996	14.62110	0.0515596	0.18371162	3.0646318	21	7 11.6	20.6
522709 2016 LO_{60}	16.1	X	352.86476	33.07092	248.61888	14.56836	0.0780501	0.17785032	3.1316000	21	6 21.3	20.1
522710 2016 LS_{60}	16.8	X	288.54217	166.67866	194.35473	15.21792	0.1407697	0.18030271	3.1031388	21	6 22.1	21.4
522711 2016 LT_{60}	17.0	X	295.35351	244.49300	108.32983	11.81347	0.1655900	0.20180040	2.8786445	21	6 17.8	20.8
522712 2016 LV_{60}	17.2	X	10.15236	191.79755	149.54000	7.04931	0.1437024	0.23617077	2.5921012	21	10 24.9	20.0
522713 2016 LX_{60}	18.3	X	247.96864	357.56055	162.17745	5.80358	0.0986327	0.28346296	2.2951188	21	12 15.7	20.9
522714 2016 LZ_{60}	16.6	X	67.41171	21.73992	211.78337	11.92420	0.1054050	0.22052577	2.7132917	21	8 10.4	20.5
522715 2016 LA_{61}	16.0	X	285.30841	156.83365	206.69295	15.88336	0.0844265	0.17489971	3.1667223	21	6 28.4	20.7
522716 2016 LH_{61}	16.6	X	11.23118	10.78088	252.78819	12.03227	0.0389859	0.18135761	3.0910939	21	6 24.8	20.8
522717 2016 LJ_{61}	17.2	X	312.66002	126.34361	240.68539	10.13135	0.1139487	0.19793441	2.9160067	21	8 5.8	21.0
522718 2016 LV_{61}	17.2	X	46.95480	103.35063	188.22893	7.55242	0.1995720	0.21711405	2.7416422	21	10 18.4	20.7
522719 2016 LX_{61}	16.4	X	224.57562	225.98118	202.11784	8.10386	0.0343133	0.18453159	3.0555465	21	7 12.5	21.0
522720 2016 LA_{62}	17.2	X	309.98384	188.61725	255.47480	12.50227	0.1008885	0.23838229	2.5760447	21	11 27.5	20.0

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522721 2016 LB_{62}	16.8	X	8.12886	198.32653	169.59981	11.86359	0.0878650	0.22967912	2.6407160	21	11 19.1	20.2
522722 2016 LH_{62}	16.9	X	3.88095	203.94067	150.56928	13.96306	0.1617126	0.21689124	2.7435195	21	11 1.6	20.1
522723 2016 LL_{62}	16.5	X	327.82544	87.73308	244.78292	6.81642	0.0914793	0.18928098	3.0042177	21	7 18.7	20.3
522724 2016 LS_{62}	16.6	X	301.53885	187.30257	173.74564	11.43887	0.1533428	0.18408557	3.0604800	21	7 8.2	20.7
522725 2016 LV_{62}	16.4	X	302.55439	206.41264	153.87730	17.43667	0.1332029	0.18494465	3.0509952	21	7 12.4	20.6
522726 2016 LX_{62}	16.2	X	294.84285	94.55894	276.94575	16.32303	0.1301488	0.18453284	3.0555327	21	7 15.1	20.2
522727 2016 LY_{62}	16.8	X	170.15976	314.24411	172.68690	16.00476	0.0462819	0.18500032	3.0503831	21	7 22.1	21.6
522728 2016 LZ_{62}	16.5	X	291.05394	139.70920	214.29661	10.69271	0.1038109	0.18153757	3.0890507	21	6 22.0	20.9
522729 2016 LA_{63}	17.2	X	213.38947	248.57624	261.63118	13.22304	0.0617507	0.23077491	2.6323501	21	10 9.4	21.2
522730 2016 LD_{63}	17.1	X	216.23641	265.76960	246.14842	10.12665	0.1413149	0.23192447	2.6236446	21	10 8.4	21.2
522731 2016 LG_{63}	18.0	X	192.77820	8.19420	219.66711	5.88154	0.0717140	0.26324965	2.4111497	21	—	—
522732 2016 LJ_{63}	17.0	X	297.46847	204.18198	161.43134	10.10277	0.1039285	0.18557178	3.0441176	21	7 15.8	21.1
522733 2016 LO_{63}	16.0	X	249.73687	175.92183	239.38522	15.64171	0.0541945	0.17863790	3.1223888	21	7 21.2	20.8
522734 2016 LR_{63}	16.8	X	314.79681	132.65310	243.42282	21.24905	0.0683505	0.23344785	2.6122183	21	8 22.7	20.7
522735 2016 LT_{63}	16.8	X	83.98889	151.14876	128.99712	13.37062	0.1752736	0.23403159	2.6078727	21	11 18.3	21.0
522736 2016 LB_{64}	16.2	X	14.58810	348.05268	259.56636	7.99801	0.0941246	0.17992280	3.1075055	21	6 11.1	20.0
522737 2016 LC_{64}	15.9	X	327.89185	161.41665	124.18836	23.62977	0.0735966	0.17348990	3.1838548	21	5 28.5	20.5
522738 2016 LD_{64}	17.5	X	111.56661	160.18633	126.49236	6.38232	0.0451767	0.25319888	2.4745422	21	12 14.1	20.9
522739 2016 LK_{64}	15.9	X	18.12595	328.25128	283.17338	9.50251	0.0958028	0.18384560	3.0631427	21	6 22.2	19.7
522740 2016 LO_{64}	17.4	X	34.41880	202.73808	116.94445	9.22135	0.0970718	0.22570307	2.6716387	21	10 26.9	20.9
522741 2016 LP_{64}	16.9	X	20.22406	12.61030	291.73470	13.06274	0.1951700	0.22586602	2.6703536	21	9 13.9	20.0
522742 2016 LQ_{64}	17.7	X	208.15110	359.41489	177.72867	11.37676	0.0684923	0.26836086	2.3804365	21	11 19.5	21.0
522743 2016 LT_{64}	17.3	X	20.88488	274.44519	85.50742	13.56367	0.1945787	0.22905855	2.6454834	21	12 10.8	20.4
522744 2016 LV_{64}	17.3	X	76.88019	217.11492	130.97523	3.13295	0.1545779	0.25119285	2.4876992	21	—	—
522745 2016 MA_{4}	17.5	X	149.37076	14.48049	153.12796	12.13830	0.0690285	0.23060832	2.6336177	21	8 24.0	21.1
522746 2016 MC_{4}	16.8	X	286.46429	105.64454	249.42915	16.29095	0.1726638	0.17893450	3.1189375	21	6 7.5	21.0
522747 2016 MD_{4}	16.8	X	334.94949	134.28777	168.47597	15.36392	0.1027971	0.18539568	3.0460450	21	6 20.8	20.9
522748 2016 MJ_{4}	17.4	X	63.62145	135.67269	238.15125	7.25007	0.1307073	0.26455153	2.4032329	21	—	—
522749 2016 MK_{4}	16.9	X	5.94918	232.66463	168.07668	12.27960	0.1804125	0.24419182	2.5350234	21	—	—
522750 2016 MO_{4}	17.0	X	8.45334	56.76854	235.25833	10.61453	0.1753771	0.19804945	2.9148773	21	8 1.2	20.3
522751 2016 MP_{4}	16.7	X	336.85774	87.99519	205.19922	9.66881	0.1064434	0.18022327	3.1040508	21	6 10.4	20.7
522752 2016 MU_{4}	16.2	X	255.97417	214.11068	170.68064	16.37594	0.0353945	0.18271291	3.0757891	21	6 27.1	20.9
522753 2016 NV_{21}	16.9	X	35.55192	84.13499	241.97963	11.04654	0.0867456	0.21435675	2.7651028	21	10 27.4	20.5
522754 2016 NZ_{25}	17.3	X	149.66497	348.05438	210.72594	11.39436	0.1315116	0.23205772	2.6226401	21	10 3.6	21.4
522755 2016 NC_{44}	16.8	X	11.95641	210.03091	143.11004	14.20022	0.0725349	0.22257353	2.6966239	21	11 4.6	20.4
522756 2016 NE_{75}	16.6	X	112.94919	272.05573	298.93808	7.97662	0.1043922	0.21067488	2.7972259	21	9 6.1	20.8
522757 2016 NF_{75}	17.0	X	84.02826	14.12381	277.87049	2.42605	0.1586190	0.24232242	2.5480443	21	11 27.8	20.8
522758 2016 NJ_{75}	15.9	X	344.96623	357.80353	277.86854	9.26340	0.0727858	0.18067565	3.0988672	21	6 1.6	19.9
522759 2016 NP_{75}	16.2	X	248.09541	251.70017	115.96958	8.64838	0.0669460	0.16956238	3.2328313	21	5 25.3	21.1
522760 2016 NQ_{75}	17.1	X	290.89699	316.26670	111.53613	5.08007	0.0713755	0.22627260	2.6671538	21	10 9.6	20.4
522761 2016 NT_{75}	16.7	X	261.49613	96.46908	293.53268	3.85891	0.1463118	0.18425150	3.0586423	21	6 25.7	21.0
522762 2016 NU_{75}	17.6	X	26.77208	185.41384	120.08800	1.07345	0.0468273	0.21566644	2.7538968	21	9 14.8	21.0
522763 2016 NV_{75}	17.2	X	47.22197	227.28115	119.41346	6.98405	0.1098624	0.24550699	2.5259620	21	12 19.9	20.6
522764 2016 NX_{75}	16.6	X	302.32256	210.60127	115.71139	10.64227	0.0597312	0.17779028	3.1323050	21	6 9.9	20.9
522765 2016 NY_{75}	17.4	X	342.18436	267.17657	108.68134	5.87543	0.1254360	0.22095227	2.7097990	21	10 18.9	20.4
522766 2016 NZ_{75}	16.4	X	280.76346	87.96943	307.34906	12.19444	0.1340447	0.19585560	2.9366040	21	7 28.7	20.3
522767 2016 NG_{76}	15.9	X	325.48043	182.73466	93.42792	8.92624	0.1802711	0.17010769	3.2259187	21	4 25.6	20.0
522768 2016 NO_{76}	16.7	X	319.99491	54.73582	283.03287	10.45072	0.1178890	0.18962401	3.0005936	21	7 11.6	20.4
522769 2016 NP_{76}	17.4	X	13.47841	178.86365	165.84746	5.22612	0.0564210	0.22456291	2.6806742	21	10 21.4	20.8
522770 2016 NQ_{76}	17.3	X	95.07574	123.11555	133.84172	13.81960	0.1486089	0.23033640	2.6356900	21	10 29.9	21.5
522771 2016 NS_{76}	16.8	X	330.81308	123.04104	204.05622	0.38691	0.1488980	0.19030846	2.9933947	21	7 12.2	20.3
522772 2016 NU_{76}	16.7	X	332.76470	59.87939	244.47629	4.32355	0.0720911	0.18072207	3.0983365	21	6 21.7	20.7
522773 2016 NW_{76}	16.2	X	266.60785	222.92168	139.68232	17.37103	0.0163482	0.17407208	3.1767519	21	6 17.2	20.9
522774 2016 NX_{76}	16.9	X	296.56588	112.79368	280.34663	4.72754	0.0751457	0.20333423	2.8641498	21	8 24.4	20.6
522775 2016 NY_{76}	17.6	X	53.42484	189.10843	161.87801	0.60088	0.1355272	0.24603548	2.5223435	21	—	—
522776 2016 NC_{77}	16.5	X	265.88833	78.41287	295.43576	10.14666	0.0932908	0.17382562	3.1797540	21	6 17.9	21.1
522777 2016 NE_{77}	17.0	X	107.84092	310.06342	315.66556	6.09550	0.1266539	0.23818078	2.5774974	21	11 14.4	21.0
522778 2016 NG_{77}	16.8	X	10.59012	173.87415	107.50574	2.98069	0.0164644	0.18567225	3.0430194	21	7 17.4	20.8
522779 2016 NH_{77}	17.1	X	53.35201	193.35043	126.19915	9.54700	0.1415547	0.23332798	2.6131129	21	11 27.1	20.8
522780 2016 NK_{77}	16.9	X	253.01433	107.72393	298.47134	8.57482	0.1626265	0.17903703	3.1177466	21	7 5.1	21.5
522781 2016 NL_{77}	16.6	X	256.75224	286.50858	123.38147	11.56952	0.1056560	0.18662528	3.0326508	21	7 20.7	21.0
522782 2016 NM_{77}	16.5	X	96.82796	207.03425	82.80786	14.15385	0.0291883	0.23926406	2.5697117	21	11 27.7	20.0
522783 2016 NO_{77}	16.0	X	211.88330	4.44304	72.56227	12.72452	0.0247778	0.18019370	3.1043903	21	7 11.3	20.5
522784 2016 NT_{77}	16.9	X	277.43696	179.30946	190.96437	9.22389	0.1005016	0.18387305	3.0628378	21	6 25.8	21.3
522785 2016 NV_{77}	16.9	X	344.37419	50.89586	331.18865	12.21836	0.1981876	0.22161582	2.7043872	21	10 24.9	19.7
522786 2016 NZ_{77}	16.7	X	78.84863	272.79528	3.00517	9.47679	0.1255848	0.22890544	2.6466630	21	10 24.9	20.5
522787 2016 NA_{78}	16.6	X	263.15282	302.73052	72.67831	11.09997	0.0528297	0.17827158	3.1266647	21	6 21.4	21.1
522788 2016 NE_{78}	16.9	X	312.47725	269.16212	90.69519	11.00126	0.1441534	0.19267580	2.9688250	21	7 28.1	20.5
522789 2016 NF_{78}	16.5	X	328.54769	343.71093	328.22066	11.60908	0.0671234	0.18064008	3.0992740	21	6 27.3	20.7
522790 2016 NJ_{78}	17.7	X	83.44136	243.97859	9.94555	6.93776	0.1053586	0.21741973	2.7390718	21	10 1.3	21.6
522791 2016 NN_{78}	17.3	X	101.48124	215.96179	69.99856	5.55717	0.1846821	0.24380968	2.5376716	21	12 9.4	21.4
522792 2016 NQ_{78}	17.6	X	75.76755	270.10796	105.69459	7.77913	0.1254260	0.26631633	2.3926041	21	—	—
522793 2016 NW_{78}	16.2	X	285.20923	260.96823	99.83615	9.99063	0.0961390	0.17396484	3.1780573	21	6 25.0	20.4
522794 2016 NY_{78}	16.3	X	236.72537	337.11935	83.54494	11.27991	0.0851684	0.18001663	3.1064257	21	7 14.1	21.0
522795 2016 NZ_{78}	16.6	X	185.32208	213.85213	333.51989	14.78331	0.0614779	0.23329164	2.6133842	21	10 22.5	20.7
522796 2016 NE_{79}	16.4	X	307.62725	173.78468	148.93782	7.16229	0.0787985	0.18037498	3.1023099	21	6 9.4	20.6
522797 2016 NG_{79}	16.1	X	313.95156	68.58530	226.05827	4.22194	0.1340246	0.17066217	3.2189276	21	5 4.7	20.4
522798 2016 NM_{79}	17.1	X	349.79338	214.96904	189.25833	14.05412	0.1632453	0.22242871	2.6977942	21	12 11.9	20.3
522799 2016 NN_{79}	16.4	X	323.01704	79.57985	250.43661	11.13929	0.1719024	0.17590243	3.1546765	21	6 28.5	20.2
522800 2016 NQ_{79}	16.7	X	333.61402	95.96797	191.23769	11.77387	0.1938810	0.17552602	3.1591850	21	5 19.5	20.5

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522801 2016 NS_{79}	16.5	X	242.10547	163.08127	239.52059	10.00747	0.0297805	0.18041535	3.1018471	21	7 2.3	21.0
522802 2016 NU_{79}	17.5	X	92.01371	4.47222	255.23221	6.07204	0.1320120	0.22694675	2.6618694	21	10 20.6	21.5
522803 2016 NW_{79}	16.6	X	186.90967	262.59492	196.65838	10.56107	0.0968617	0.17761916	3.1343164	21	7 6.1	21.6
522804 2016 NC_{80}	17.3	X	38.80057	125.07024	177.19398	6.57134	0.0575829	0.21456095	2.7633481	21	9 28.8	20.8
522805 2016 NF_{80}	16.8	X	350.29360	22.51227	275.51203	10.45306	0.1223463	0.18448616	3.0560481	21	7 8.1	20.3
522806 2016 NG_{80}	17.6	X	22.10256	103.28657	318.61426	6.81838	0.1159473	0.26306486	2.4122787	21	—	—
522807 2016 NH_{80}	16.8	X	293.05723	305.90450	125.74422	5.80146	0.0970374	0.21931581	2.7232619	21	10 13.9	20.1
522808 2016 NL_{80}	17.6	X	14.87455	292.00872	130.03541	8.82570	0.1550156	0.25584254	2.4574661	21	—	—
522809 2016 NM_{80}	16.6	X	295.32542	221.25139	137.40840	10.67860	0.1011542	0.18109117	3.0941251	21	7 4.9	20.9
522810 2016 NP_{80}	16.1	X	101.00043	207.76166	322.08493	6.54091	0.1185792	0.17499667	3.1655526	21	7 6.8	20.7
522811 2016 NQ_{80}	16.6	X	331.69403	169.88796	138.66167	10.69670	0.0785530	0.17779975	3.1321938	21	6 25.6	20.7
522812 2016 NS_{80}	16.5	X	346.65845	319.62287	330.75265	8.01603	0.1090545	0.17935635	3.1140450	21	6 22.8	20.4
522813 2016 NT_{80}	17.3	X	16.13534	244.49773	126.88195	11.30970	0.1715843	0.22966492	2.6408249	21	12 16.0	20.5
522814 2016 NU_{80}	16.4	X	314.17387	192.11269	134.37333	11.26728	0.2139864	0.17559830	3.1583180	21	6 5.6	20.4
522815 2016 ND_{81}	16.7	X	26.41932	260.60282	81.97532	5.99321	0.1714243	0.22116749	2.7080407	21	11 21.2	20.0
522816 2016 NF_{81}	16.4	X	321.51094	196.68769	124.60596	11.73537	0.0498702	0.17675720	3.1444979	21	6 30.2	20.7
522817 2016 NG_{81}	17.3	X	80.77203	182.03490	107.27916	5.53302	0.2003309	0.23279678	2.6170864	21	11 25.4	21.3
522818 2016 NQ_{81}	16.2	X	261.54392	57.37923	316.72216	9.44942	0.0938311	0.17448864	3.1716939	21	6 12.4	21.0
522819 2016 NS_{81}	17.5	X	23.27441	257.46239	110.32519	5.57561	0.1793772	0.23494134	2.6011361	21	12 23.3	20.5
522820 2016 NT_{81}	16.3	X	297.66374	9.88547	327.33038	9.38048	0.0217907	0.17836359	3.1255893	21	6 22.2	20.8
522821 2016 NW_{81}	17.6	X	153.01042	183.85976	71.33930	6.00798	0.0955017	0.25689078	2.4507765	21	12 20.7	21.3
522822 2016 NY_{81}	16.7	X	72.30017	138.23594	76.94978	3.65300	0.0401501	0.18927694	3.0042605	21	7 17.3	20.7
522823 2016 NZ_{81}	17.4	X	0.21502	258.00702	103.81190	6.63889	0.0624993	0.22506302	2.6767016	21	10 26.9	20.7
522824 2016 NA_{82}	17.6	X	308.56893	233.25648	103.82503	2.60809	0.1772039	0.18089401	3.0963728	21	6 14.4	21.6
522825 2016 NC_{82}	17.4	X	57.09016	271.52142	18.78553	12.32817	0.2039993	0.22396810	2.6854183	21	10 28.3	21.1
522826 2016 NH_{82}	17.1	X	16.25889	134.07555	278.14009	14.24656	0.0919614	0.24162309	2.5529585	21	—	—
522827 2016 NJ_{82}	16.6	X	274.05859	147.35174	215.24911	11.12179	0.0473975	0.18196585	3.0842019	21	6 19.4	21.0
522828 2016 NK_{82}	16.6	X	318.19819	122.37322	175.60459	12.84041	0.1191159	0.17259599	3.1948386	21	5 19.8	20.9
522829 2016 NL_{82}	16.7	X	302.71756	113.60610	241.27983	12.35926	0.0697697	0.19035515	2.9929052	21	7 12.4	20.9
522830 2016 NR_{82}	17.0	X	49.27307	245.62734	91.77323	5.12409	0.1872636	0.22937272	2.6430672	21	12 17.9	20.6
522831 2016 NU_{82}	16.1	X	130.48938	341.65869	281.97044	11.43689	0.1407972	0.22592256	2.6699081	21	12 4.0	20.4
522832 2016 NZ_{82}	16.3	X	250.05288	198.41199	233.09058	11.88851	0.1483060	0.19188199	2.9770073	21	7 30.9	21.0
522833 2016 NO_{83}	16.7	X	208.01534	276.71815	169.05085	9.29669	0.0982874	0.17757035	3.1348908	21	7 11.6	21.7
522834 2016 NQ_{83}	16.4	X	340.83353	358.20985	303.38053	10.16288	0.1305736	0.17990187	3.1077466	21	6 27.1	20.1
522835 2016 NR_{83}	16.9	X	245.95586	259.36782	162.24167	13.70883	0.1754505	0.17941250	3.1133952	21	7 13.9	21.9
522836 2016 NC_{84}	17.5	X	43.63933	74.95208	223.64979	3.47276	0.0472388	0.21221623	2.7836651	21	9 27.3	21.2
522837 2016 ND_{84}	16.6	X	105.17480	290.07927	247.79298	3.49623	0.0841269	0.17959567	3.1112780	21	7 16.0	21.0
522838 2016 NE_{84}	16.4	X	25.11430	320.59296	296.89627	10.12656	0.0698114	0.18012232	3.1052104	21	7 9.9	20.4
522839 2016 NH_{84}	18.0	X	321.12335	203.60807	313.11422	7.04890	0.0420102	0.28644170	2.2791796	21	—	—
522840 2016 NL_{84}	16.8	X	328.45494	28.75894	61.65460	6.83489	0.1100288	0.23770962	2.5809022	21	—	—
522841 2016 NO_{84}	17.7	X	336.27676	60.37430	5.31544	11.83878	0.0950137	0.23064920	2.6333065	21	12 12.9	20.9
522842 2016 NS_{84}	16.4	X	30.58362	162.75604	104.38926	8.02716	0.1216925	0.18587132	3.0408462	21	8 6.7	20.1
522843 2016 NT_{84}	17.2	X	52.77707	263.99614	128.89793	14.96583	0.0991929	0.25690122	2.4507101	21	—	—
522844 2016 NA_{85}	16.9	X	15.36553	228.60243	117.30675	6.25911	0.0692047	0.21383810	2.7695720	21	10 26.8	20.4
522845 2016 NF_{85}	17.6	X	23.75122	293.49220	105.98141	5.79991	0.1110591	0.24424480	2.5346568	21	—	—
522846 2016 NK_{85}	17.0	X	359.21627	293.38914	83.08547	4.57718	0.2050514	0.21710994	2.7416768	21	11 24.3	19.6
522847 2016 NU_{85}	17.0	X	39.20344	334.80446	66.19810	8.47269	0.1110409	0.25278268	2.4772576	21	—	—
522848 2016 NW_{85}	17.6	X	11.75800	4.37219	33.58748	10.03634	0.1894901	0.23175253	2.6249421	21	—	—
522849 2016 ND_{86}	16.8	X	11.00698	217.72935	72.96207	12.13670	0.0918686	0.18350485	3.0669334	21	8 6.1	20.8
522850 2016 NF_{86}	17.0	X	321.17099	270.36317	131.22332	9.04244	0.1062994	0.21000285	2.8031904	21	10 17.2	20.4
522851 2016 NH_{86}	16.4	X	16.71843	150.35696	136.01510	16.70745	0.0449735	0.18432795	3.0577965	21	8 2.6	20.5
522852 2016 NL_{86}	17.4	X	120.84865	9.97902	257.19939	4.60044	0.1463923	0.24568385	2.5247496	21	12 2.7	21.2
522853 2016 NM_{86}	16.5	X	349.15837	348.24505	301.04403	9.84040	0.0463885	0.17950967	3.1122715	21	6 28.4	20.6
522854 2016 NO_{86}	16.7	X	309.32711	199.53116	144.28642	8.88980	0.0630587	0.18690218	3.0296547	21	7 10.3	20.8
522855 2016 NP_{86}	17.8	X	47.77184	185.88583	144.30463	2.87472	0.1403385	0.23194941	2.6234565	21	12 1.5	21.4
522856 2016 NU_{86}	16.8	X	343.03416	37.09554	333.01670	14.63854	0.1550358	0.20357532	2.8618880	21	9 29.4	20.1
522857 2016 NX_{86}	16.6	X	6.80323	62.98825	335.91547	13.29653	0.1430033	0.24777085	2.5105521	21	—	—
522858 2016 NC_{87}	17.1	X	2.43874	330.93755	338.97779	2.79003	0.2379130	0.19136875	2.9823277	21	8 22.9	19.8
522859 2016 NF_{87}	17.5	X	7.09237	181.31545	148.99342	6.68538	0.0556817	0.21566928	2.7538727	21	9 21.3	21.0
522860 2016 NJ_{87}	16.9	X	271.45584	221.97895	137.60639	7.58552	0.1609135	0.17205156	3.2015747	21	5 29.8	21.7
522861 2016 NN_{87}	17.5	X	304.06628	292.31840	141.71739	5.72587	0.1343197	0.23444439	2.6048106	21	11 2.2	20.3
522862 2016 NS_{87}	16.8	X	342.99403	122.54899	192.42832	21.70243	0.2629930	0.18196008	3.0842670	21	7 5.5	20.3
522863 2016 NV_{87}	17.1	X	339.85849	119.16947	285.68258	3.80772	0.1150796	0.22748606	2.6576606	21	11 21.3	20.1
522864 2016 NC_{88}	17.5	X	324.59810	89.94935	270.18419	1.01141	0.0859932	0.20219631	2.8748856	21	8 22.7	21.1
522865 2016 NE_{88}	16.9	X	263.17288	282.52357	115.42961	3.98527	0.0971738	0.18681050	3.0306459	21	7 14.5	21.3
522866 2016 NG_{88}	16.9	X	216.97470	263.77223	155.93338	10.70077	0.0331398	0.17656918	3.1467297	21	6 24.5	21.7
522867 2016 NM_{88}	16.9	X	321.60772	206.15600	127.03418	12.06370	0.0499423	0.18676442	3.0311444	21	7 15.6	20.8
522868 2016 NN_{88}	16.7	X	354.58636	100.86257	163.09153	0.70788	0.1336206	0.17389201	3.1789447	21	5 30.2	20.4
522869 2016 NW_{88}	17.0	X	324.87465	250.24092	148.24725	9.05051	0.1663434	0.21435273	2.7651373	21	10 16.0	19.9
522870 2016 NM_{89}	16.9	X	25.65574	49.71438	325.29596	9.60442	0.0753355	0.23384360	2.6092703	21	12 20.4	20.4
522871 2016 NS_{89}	17.4	X	305.05729	309.16625	69.10015	2.69545	0.1955880	0.18476152	3.0530109	21	8 1.4	21.1
522872 2016 NX_{89}	17.0	X	40.57803	199.11595	131.16871	7.63319	0.0614691	0.21824656	2.7321494	21	11 10.4	20.7
522873 2016 ND_{90}	17.5	X	282.74015	203.83141	345.01562	6.22744	0.0245158	0.27558293	2.3386641	21	—	—
522874 2016 OR_{5}	17.8	X	253.07436	160.06777	227.96664	22.57675	0.1011576	0.35838219	1.9629313	21	6 13.0	20.3
522875 2016 OE_{7}	16.3	X	244.20825	252.82375	257.81009	13.24600	0.0435818	0.23590877	2.5940200	21	11 25.9	19.7
522876 2016 OF_{7}	16.0	X	351.67565	24.80303	268.10317	14.05027	0.0717672	0.17537050	3.1610523	21	7 4.5	20.2
522877 2016 OG_{7}	17.0	X	17.89299	243.33237	108.47356	13.92661	0.1959910	0.22271275	2.6955000	21	11 27.1	20.3
522878 2016 OK_{7}	16.2	X	254.36957	143.73171	307.95538	8.10871	0.0436126	0.17542251	3.1604275	21	9 13.6	20.7
522879 2016 OL_{7}	16.4	X	343.97794	116.47129	274.06314	8.94013	0.1102239	0.19291881	2.9663314	21	10 30.0	20.1
522880 2016 OM_{7}	17.0	X	314.01505	221.65118	287.68419	9.60467	0.0592575	0.23881964	2.5728987	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522881 2016 OO_7	15.9	X	139.37038	323.97098	252.34739	6.59872	0.0280774	0.18187410	3.0852390	21	10 4.7	20.4
522882 2016 OP_7	16.5	X	302.25232	191.43850	239.32138	9.17911	0.0851408	0.18869889	3.0103928	21	10 18.2	20.5
522883 2016 OT_7	17.0	X	130.04290	58.74236	239.00103	3.18117	0.0672237	0.22779813	2.6552328	21	—	—
522884 2016 OU_7	16.4	X	242.35597	167.50775	329.93169	11.05109	0.1035966	0.19045190	2.9918915	21	10 17.4	20.9
522885 2016 OW_7	16.0	X	277.88209	235.99715	159.14810	27.98758	0.2658960	0.17330182	3.1861579	21	7 6.0	21.1
522886 2016 OD_8	17.8	X	149.91760	340.17509	325.17510	5.99689	0.1183984	0.27231581	2.3573323	21	—	—
522887 2016 OH_8	16.3	X	206.70415	299.66911	200.92669	15.02726	0.0900692	0.20392753	2.8585918	21	9 17.1	20.7
522888 2016 OJ_8	16.1	X	285.56995	118.26634	290.56557	9.86115	0.0514208	0.19209453	2.9748110	21	8 29.7	20.3
522889 2016 OP_8	17.1	X	71.75303	288.85181	57.81655	7.81164	0.0691428	0.23711437	2.5852197	21	—	—
522890 2016 OQ_8	17.1	X	84.09977	235.55127	91.60468	8.41815	0.0697898	0.23389670	2.6088753	21	12 31.1	20.9
522891 2016 OS_8	15.9	X	31.53936	226.47855	73.83873	13.15864	0.0713281	0.18797724	3.0180924	21	9 22.1	20.1
522892 2016 OU_8	16.8	X	91.35606	237.98238	85.29204	13.49687	0.0962045	0.23534492	2.5981616	21	—	—
522893 2016 OW_8	16.1	X	333.88554	348.11237	313.33641	9.73501	0.0618594	0.18492882	3.0511694	21	6 20.9	20.2
522894 2016 PW_1	18.2	X	245.37531	290.64522	112.59823	24.67596	0.0832789	0.38800488	1.8617067	21	7 1.9	20.1
522895 2016 PV_{103}	16.8	X	307.94245	293.97586	38.91018	2.23895	0.0566009	0.18217395	3.0818526	21	6 25.3	20.8
522896 2016 PC_{104}	16.9	X	170.98055	13.06718	108.86382	2.88727	0.0772998	0.18689872	3.0296922	21	7 19.3	21.4
522897 2016 PJ_{104}	17.1	X	5.99189	286.63920	96.02360	4.71772	0.1863324	0.22996234	2.6385474	21	12 15.9	19.8
522898 2016 PK_{104}	16.7	X	254.79809	311.09773	102.09143	7.85075	0.1382149	0.18662700	3.0326322	21	7 18.8	21.1
522899 2016 PM_{104}	16.3	X	224.21290	344.06417	29.76149	4.39060	0.0656105	0.15306346	3.4611602	21	5 4.8	21.5
522900 2016 PT_{104}	17.0	X	288.78892	64.89420	345.65226	11.46434	0.2443533	0.19571725	2.9379877	21	8 14.5	20.8
522901 2016 PY_{104}	16.6	X	341.94194	293.11723	73.85634	8.71938	0.0848090	0.20138366	2.8826145	21	10 4.4	20.2
522902 2016 PB_{105}	16.2	X	12.77722	163.00547	130.37971	14.01768	0.0604082	0.17995883	3.1070908	21	8 7.3	20.1
522903 2016 PF_{105}	16.1	X	344.08327	197.17031	116.56411	12.97007	0.0863414	0.17408315	3.1766172	21	7 20.9	20.1
522904 2016 PG_{105}	17.0	X	6.75596	215.11008	91.25679	12.32941	0.2335610	0.18898396	3.0073646	21	9 2.2	20.1
522905 2016 PB_{106}	16.2	X	263.20987	345.48500	97.98649	12.66761	0.0702633	0.19824133	2.9129962	21	9 22.6	20.4
522906 2016 PP_{106}	17.0	X	152.56809	359.74172	239.33070	11.43212	0.1293114	0.24130604	2.5551942	21	11 27.5	21.0
522907 2016 PK_{107}	16.6	X	238.35116	63.24319	1.81336	9.33560	0.0769830	0.18413769	3.0599025	21	7 24.8	21.2
522908 2016 PL_{107}	18.1	X	344.43087	24.21698	103.75053	7.34447	0.0447796	0.28267462	2.2993840	21	—	—
522909 2016 PM_{107}	16.5	X	317.44677	325.21215	0.96018	9.20832	0.1151393	0.17771722	3.1331634	21	6 22.8	20.7
522910 2016 PN_{107}	16.5	X	329.30284	207.66438	126.39329	15.36857	0.0461840	0.18910746	3.0060552	21	7 28.5	20.4
522911 2016 PZ_{107}	17.0	X	299.77349	41.80534	60.67118	5.17298	0.1481092	0.23661550	2.5888522	21	12 1.1	19.7
522912 2016 PK_{108}	16.5	X	292.26623	290.05602	66.66576	9.51306	0.0994959	0.17670498	3.1451174	21	6 28.4	20.8
522913 2016 PL_{108}	16.7	X	282.01544	304.02690	86.33229	11.14923	0.0625241	0.18824812	3.0151965	21	8 5.7	20.9
522914 2016 PM_{108}	16.3	X	316.07595	293.95893	66.43159	10.79159	0.1204554	0.19074438	2.9888323	21	8 9.2	20.1
522915 2016 PO_{108}	18.2	X	358.85064	44.79579	79.48237	8.98297	0.0420448	0.28656153	2.2785442	21	—	—
522916 2016 PP_{108}	16.5	X	309.73470	252.79474	90.54786	9.89486	0.1103013	0.17886485	3.1197470	21	7 4.4	20.6
522917 2016 PS_{108}	16.6	X	257.51069	329.13402	69.48917	10.51274	0.0870636	0.17655601	3.1468863	21	7 10.3	21.2
522918 2016 PV_{108}	16.1	X	300.80820	339.02314	13.94437	10.56027	0.1458713	0.17773722	3.1329284	21	6 29.3	20.4
522919 2016 PX_{108}	17.5	X	224.94378	138.32809	88.74351	5.91660	0.1022462	0.27622043	2.3350643	21	—	—
522920 2016 PB_{109}	17.3	X	168.70099	112.82823	62.59767	6.58194	0.0532468	0.21114844	2.7930420	21	9 27.1	21.4
522921 2016 PF_{109}	17.6	X	288.60030	139.95795	0.21541	8.64888	0.1250609	0.25985131	2.4321262	21	—	—
522922 2016 PT_{109}	16.7	X	17.97039	229.96478	45.20826	5.27246	0.0501418	0.18050590	3.1008098	21	7 22.4	20.8
522923 2016 PA_{110}	16.7	X	352.92869	230.45772	54.29996	6.95928	0.1312632	0.17582772	3.1555700	21	6 24.6	20.5
522924 2016 PK_{110}	15.8	X	81.75140	166.30489	12.76922	10.29884	0.0278542	0.15857396	3.3805041	21	6 9.8	20.7
522925 2016 PS_{110}	16.4	X	218.77744	78.07661	26.67841	10.08908	0.0671347	0.18861240	3.0113129	21	8 24.6	20.9
522926 2016 PJ_{111}	16.9	X	257.69601	56.06043	3.63479	11.01345	0.2023376	0.17611708	3.1521127	21	7 25.1	21.8
522927 2016 PP_{111}	17.6	X	354.92782	114.96382	313.57339	2.13831	0.1370595	0.23087523	2.6315875	21	—	—
522928 2016 PS_{111}	17.5	X	335.06148	258.30228	208.01147	3.96819	0.0287441	0.24627251	2.5207247	21	—	—
522929 2016 PT_{111}	17.0	X	243.30695	183.77484	334.65067	4.95862	0.0356827	0.22421193	2.6834710	21	12 3.1	20.6
522930 2016 PU_{111}	17.3	X	55.15603	205.41060	166.08701	14.68774	0.1582301	0.23848703	2.5752904	21	—	—
522931 2016 PW_{111}	17.1	X	19.31591	210.96081	150.13319	9.27352	0.1188275	0.21441879	2.7645693	21	11 27.2	20.7
522932 2016 PX_{111}	17.8	X	18.43808	346.26912	140.10068	6.02620	0.1086349	0.27833260	2.3232360	21	—	—
522933 2016 PY_{111}	16.1	X	296.72671	240.54734	164.51674	17.38796	0.1415938	0.18459661	3.0548289	21	8 31.0	20.0
522934 2016 PZ_{111}	17.5	X	51.51805	272.54741	156.78444	7.56710	0.0898229	0.26513978	2.3996770	21	—	—
522935 2016 PC_{112}	16.9	X	310.02647	324.51260	94.43368	3.30731	0.0541118	0.20305682	2.8667577	21	10 22.9	20.7
522936 2016 PF_{112}	17.2	X	289.96567	289.59168	126.66429	2.28986	0.1272636	0.18506361	3.0496876	21	9 8.2	21.1
522937 2016 PH_{112}	17.2	X	9.69445	219.81263	164.58880	6.39102	0.0485590	0.21784870	2.7354749	21	12 4.3	20.8
522938 2016 PQ_{112}	17.3	X	62.77044	220.13075	119.00659	2.58222	0.0915140	0.22504247	2.6768645	21	12 22.2	20.8
522939 2016 PS_{112}	16.7	X	349.66757	269.49891	125.00394	4.91253	0.1039434	0.20954437	2.8072778	21	11 21.2	20.1
522940 2016 PT_{112}	16.9	X	241.11083	23.00485	107.82393	3.18011	0.0099766	0.20363203	2.8613566	21	10 29.0	20.8
522941 2016 PV_{112}	17.3	X	352.94496	284.16098	147.17952	4.90437	0.0747696	0.23001541	2.6381416	21	—	—
522942 2016 PX_{112}	16.3	X	179.96513	350.44207	151.13430	10.88204	0.0565658	0.17237273	3.1975966	21	8 21.9	21.1
522943 2016 PY_{112}	16.9	X	244.46685	104.90989	63.50998	6.13750	0.0956320	0.22660898	2.6645138	21	12 9.6	20.5
522944 2016 PB_{113}	17.7	X	349.93055	7.33447	139.42503	6.74491	0.0568392	0.27389278	2.3482752	21	—	—
522945 2016 PC_{113}	16.4	X	76.02534	171.93084	75.77025	6.40865	0.0892792	0.18191405	3.0847873	21	9 12.1	20.8
522946 2016 PD_{113}	17.3	X	61.27435	274.61942	67.52125	6.53588	0.0472253	0.22507124	2.6766364	21	12 17.9	20.9
522947 2016 PE_{113}	16.8	X	10.54245	210.57964	131.62006	6.62853	0.1295332	0.19957867	2.8999687	21	10 18.6	20.3
522948 2016 PF_{113}	16.0	X	344.69978	182.02487	168.09564	16.83455	0.0508536	0.18574589	3.0422150	21	9 9.5	20.0
522949 2016 PM_{113}	17.1	X	44.89764	247.66831	146.36672	14.97559	0.1335356	0.24177629	2.5518799	21	—	—
522950 2016 PO_{113}	16.4	X	8.01331	159.67537	142.45174	10.19210	0.0769984	0.17441880	3.1725406	21	8 11.8	20.5
522951 2016 PY_{113}	16.5	X	4.71359	142.58898	172.09516	10.59599	0.0703267	0.17478364	3.1681241	21	8 21.7	20.7
522952 2016 PZ_{113}	17.5	X	56.74749	263.17606	111.18969	4.92332	0.1363700	0.23674259	2.5879256	21	—	—
522953 2016 PB_{114}	16.6	X	345.19848	187.20966	164.43835	10.45387	0.0902220	0.18307037	3.0717840	21	9 12.2	20.5
522954 2016 PE_{114}	16.5	X	252.28171	37.47349	51.86332	9.60777	0.1004364	0.17877600	3.1207806	21	9 9.0	21.1
522955 2016 PF_{114}	17.7	X	82.61258	311.86905	72.36794	7.22693	0.1070008	0.25649655	2.4532871	21	—	—
522956 2016 PH_{114}	17.2	X	38.97032	318.77371	30.11150	14.20117	0.0979239	0.21608605	2.7503306	21	11 30.9	21.0
522957 2016 PM_{114}	17.3	X	52.56244	39.82545	347.32952	13.75903	0.0308592	0.24707672	2.5152520	21	—	—
522958 2016 PP_{114}	17.1	X	76.69094	101.96913	173.74609	1.93007	0.0292170	0.19842142	2.9112333	21	10 8.3	21.1
522959 2016 PR_{114}	17.2	X	41.43456	299.63933	80.55290	4.96528	0.0537920	0.23466237	2.6031973	21	—	—
522960 2016 PX_{114}	17.1	X	216.81196	156.14371	59.41952	10.88439	0.0868506	0.24093891	2.5577892	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
522961 2016 PY_{114}	16.8	X	351.59525	211.77671	132.59514	10.16121	0.0755360	0.18329955	3.0692230	21	9 15.1	20.7
522962 2016 PZ_{114}	17.1	X	10.53201	74.78823	356.83266	13.41948	0.1829815	0.23729058	2.5839398	21	—	—
522963 2016 PK_{115}	17.2	X	58.30726	289.17693	356.65410	1.96475	0.0596108	0.21641052	2.7475808	21	10 3.6	20.7
522964 2016 PM_{115}	17.3	X	282.16595	313.84345	110.55357	4.21999	0.0543692	0.21122956	2.7923269	21	9 22.4	21.0
522965 2016 PO_{115}	17.7	X	103.05768	116.35159	143.68672	2.55388	0.1293959	0.23138125	2.6277494	21	11 4.8	21.6
522966 2016 PR_{115}	16.9	X	221.17885	283.88147	215.19613	4.13690	0.0553862	0.22064860	2.7122846	21	10 8.8	20.7
522967 2016 PW_{115}	16.5	X	260.98602	92.97525	304.78886	8.81983	0.0977078	0.17956240	3.1116622	21	7 12.1	21.0
522968 2016 PX_{115}	15.9	X	241.37995	137.39859	307.16488	8.81296	0.1281089	0.19196530	2.9761459	21	8 12.5	20.4
522969 2016 PA_{116}	17.1	X	10.86035	107.34872	235.45997	3.11629	0.1106711	0.21291785	2.7775465	21	10 16.2	20.3
522970 2016 PD_{116}	16.9	X	343.62093	142.83286	168.95454	3.37385	0.0811574	0.18316281	3.0707504	21	7 17.4	20.7
522971 2016 PF_{116}	16.8	X	274.79505	236.52322	219.87108	3.64249	0.0271456	0.22009042	2.7168685	21	10 26.9	20.3
522972 2016 PH_{116}	17.7	X	16.42633	200.86838	198.49587	5.33997	0.0911019	0.24447281	2.5330806	21	—	—
522973 2016 PL_{116}	16.3	X	123.72493	218.68645	310.37294	9.66558	0.0632070	0.18435067	3.0575453	21	7 25.5	20.6
522974 2016 PU_{116}	17.0	X	355.20644	192.62140	100.40609	3.16567	0.1467470	0.18486988	3.0518178	21	7 10.2	20.4
522975 2016 PX_{116}	17.9	X	323.12845	185.64385	319.07247	6.59435	0.0411913	0.28115668	2.3076527	21	—	—
522976 2016 PP_{117}	16.9	X	330.29424	244.55597	151.93883	9.69985	0.0989359	0.21912357	2.7248545	21	10 26.8	20.1
522977 2016 PS_{117}	17.6	X	2.95402	46.88082	325.99787	5.06263	0.0690688	0.22629841	2.6669511	21	11 10.4	21.0
522978 2016 PA_{118}	17.4	X	354.49179	8.20816	143.02307	7.88823	0.0604625	0.28722916	2.2750120	21	—	—
522979 2016 PD_{118}	16.7	X	321.09512	323.96640	79.97908	16.22238	0.0999145	0.20264809	2.8706112	21	10 23.5	20.5
522980 2016 PE_{118}	17.6	X	13.93384	335.05854	79.05053	11.12451	0.1913522	0.23274610	2.6174663	21	—	—
522981 2016 PJ_{118}	16.6	X	220.15084	40.02535	49.48002	11.17981	0.0512057	0.19047516	2.9916480	21	8 7.9	21.1
522982 2016 PS_{118}	16.4	X	16.36047	297.15077	81.28935	14.96939	0.1784256	0.22672671	2.6635913	21	12 24.4	19.4
522983 2016 PV_{118}	17.5	X	220.62295	69.35959	77.09756	8.08854	0.0831048	0.22953031	2.6418573	21	10 19.6	21.3
522984 2016 PX_{118}	16.8	X	36.22208	204.27563	58.97669	9.89855	0.0387784	0.19114660	2.9846380	21	8 2.8	20.9
522985 2016 PA_{119}	16.6	X	245.03655	300.93916	105.04262	10.58725	0.0977558	0.17466542	3.1695536	21	7 3.1	21.3
522986 2016 PB_{119}	17.5	X	230.15617	40.55013	110.23723	15.28771	0.0307014	0.23231982	2.6206672	21	11 15.4	21.3
522987 2016 PD_{119}	17.5	X	0.97058	52.50347	2.57487	10.54161	0.1196612	0.24362526	2.5389521	21	—	—
522988 2016 PL_{119}	16.6	X	149.38230	63.97361	64.78576	10.36620	0.0484008	0.17117493	3.2124961	21	7 2.4	21.4
522989 2016 PU_{119}	16.5	X	309.65326	258.03723	87.28261	12.08750	0.0878400	0.17676953	3.1443517	21	7 10.1	20.6
522990 2016 PY_{119}	16.8	X	355.21591	35.74360	31.88904	11.14067	0.1065463	0.24387517	2.5372173	21	—	—
522991 2016 PA_{120}	16.7	X	313.99921	324.67164	26.54672	15.79776	0.0378641	0.18116856	3.0932439	21	8 5.7	21.2
522992 2016 PD_{120}	16.7	X	180.10200	123.30341	79.40657	11.18068	0.1347770	0.23118046	2.6292707	21	11 10.6	20.9
522993 2016 PL_{120}	16.5	X	334.48615	254.39745	74.65273	12.88308	0.0877790	0.17902480	3.1178885	21	7 28.6	20.6
522994 2016 PO_{120}	17.6	X	219.91579	342.30229	133.65795	1.27835	0.0219906	0.21337542	2.7735742	21	9 11.6	21.5
522995 2016 PQ_{120}	16.7	X	213.92259	255.07402	176.96927	8.77693	0.0876906	0.17499639	3.1655559	21	7 1.8	21.7
522996 2016 PT_{120}	16.5	X	346.65016	98.92309	185.56015	4.64185	0.0917502	0.17515630	3.1636290	21	6 15.7	20.4
522997 2016 PV_{120}	16.9	X	241.38590	189.60160	222.00682	8.59060	0.0484705	0.17939823	3.1135603	21	7 10.2	21.5
522998 2016 PZ_{120}	16.2	X	210.15017	115.83392	358.18350	12.70139	0.0367621	0.18773549	3.0206828	21	8 27.8	20.6
522999 2016 PE_{121}	17.1	X	345.81867	269.03279	45.20662	1.26354	0.1481220	0.18420081	3.0592035	21	7 22.5	20.5
523000 2016 PG_{121}	17.4	X	12.97599	221.82173	148.98340	4.52497	0.1208005	0.22346545	2.6894437	21	12 1.3	20.7
523001 2016 PH_{121}	16.8	X	12.95307	230.60929	100.37990	3.24030	0.0597790	0.20447417	2.8534948	21	9 30.1	20.4
523002 2016 PK_{121}	16.6	X	343.18740	15.34629	2.02328	6.07058	0.0738497	0.21038466	2.7997978	21	10 15.3	19.9
523003 2016 PL_{121}	16.4	X	288.01097	60.80640	343.53714	8.94483	0.0571944	0.19256831	2.9699297	21	8 31.4	20.4
523004 2016 PM_{121}	16.7	X	41.43224	207.42693	78.31838	3.31615	0.0708797	0.19705155	2.9247100	21	9 12.0	20.6
523005 2016 PO_{121}	18.0	X	287.56993	18.26712	159.49411	7.14096	0.0342963	0.27143232	2.3624448	21	—	—
523006 2016 PP_{121}	17.0	X	286.56071	335.53749	29.76730	9.69160	0.0718061	0.17973660	3.1096514	21	7 7.2	21.4
523007 2016 PX_{121}	17.0	X	27.80861	286.21039	56.75968	15.28787	0.1402587	0.22219426	2.6996916	21	11 18.5	20.3
523008 2016 PY_{121}	16.5	X	112.69082	156.46588	94.19408	15.63444	0.0294148	0.21909184	2.7251176	21	10 30.6	20.6
523009 2016 PZ_{121}	17.6	X	71.53323	288.37138	41.33507	12.94193	0.1136957	0.24025365	2.5626505	21	12 25.7	21.4
523010 2016 PR_{122}	17.8	X	62.26344	79.92797	272.19874	2.41533	0.1862380	0.23444534	2.6048036	21	—	—
523011 2016 PS_{122}	17.2	X	317.75939	68.86383	342.72088	6.38111	0.0421617	0.20288389	2.8683865	21	10 21.0	21.1
523012 2016 PW_{122}	17.6	X	141.73292	49.17978	230.31707	5.16753	0.1012059	0.24031422	2.5622199	21	—	—
523013 2016 PY_{122}	17.2	X	356.96878	34.95989	339.31582	5.07950	0.0288689	0.20381453	2.8596482	21	10 27.7	21.0
523014 2016 PD_{123}	16.7	X	281.26928	57.61430	343.48919	4.70753	0.1332806	0.17082038	3.2169398	21	8 5.9	21.0
523015 2016 PH_{123}	16.9	X	227.59278	246.88562	274.00515	2.91257	0.0427634	0.21073478	2.7966959	21	11 13.5	20.7
523016 2016 PM_{123}	17.4	X	331.87506	151.24804	274.98200	1.83619	0.1538556	0.21316659	2.7753854	21	12 4.4	20.1
523017 2016 PW_{123}	17.1	X	50.94010	110.09342	218.36012	2.17046	0.0985928	0.21182317	2.7871076	21	11 23.1	20.7
523018 2016 PX_{123}	16.6	X	41.31299	286.03200	4.00191	11.60360	0.0430377	0.18126879	3.0921036	21	9 12.6	20.9
523019 2016 PZ_{123}	16.2	X	306.10456	0.77080	17.09549	10.67093	0.1345248	0.17421471	3.1750178	21	8 15.0	20.4
523020 2016 PE_{124}	16.6	X	4.50662	45.84389	324.26712	1.05443	0.0794858	0.20435532	2.8546010	21	11 7.4	20.1
523021 2016 PF_{124}	16.6	X	40.48059	328.23512	321.54483	1.06073	0.1104513	0.18479373	3.0526562	21	9 17.9	20.5
523022 2016 PK_{124}	16.5	X	265.96962	237.43092	195.08757	9.06925	0.0937861	0.17591724	3.1544994	21	8 28.9	21.0
523023 2016 PL_{124}	16.1	X	230.17642	183.52051	256.02115	4.42763	0.0391329	0.16140506	3.3408574	21	8 1.9	21.0
523024 2016 PP_{124}	16.8	X	248.64787	115.34734	332.79220	11.63597	0.1866142	0.17345639	3.1842648	21	8 18.9	21.6
523025 2016 PQ_{124}	16.7	X	287.37738	126.50838	331.88934	4.89919	0.0405503	0.21310974	2.7758789	21	11 10.9	20.5
523026 2016 PV_{124}	17.9	X	297.34831	224.04569	1.89079	7.09630	0.0613625	0.29217014	2.2492902	21	1 5.8	20.9
523027 2016 PW_{124}	16.7	X	241.82005	337.51262	186.40849	12.64669	0.0767871	0.21923499	2.7239312	21	12 3.4	20.6
523028 2016 PZ_{124}	16.4	X	230.52902	19.45116	78.46871	17.53278	0.1645460	0.17468190	3.1693543	21	8 19.9	21.6
523029 2016 PL_{125}	17.9	X	169.95650	16.55078	254.39861	2.63487	0.1120398	0.26608695	2.3939790	21	—	—
523030 2016 PN_{125}	17.9	X	157.02555	111.53503	186.20517	6.79592	0.1185958	0.26862949	2.3788493	21	—	—
523031 2016 PT_{125}	16.8	X	32.02047	312.93418	84.16769	12.44963	0.1703742	0.23434373	2.6055565	21	—	—
523032 2016 PV_{125}	16.4	X	334.44509	237.96444	126.72225	11.68279	0.1730396	0.18584846	3.0410956	21	9 11.8	19.8
523033 2016 PW_{125}	16.3	X	231.58280	201.66935	229.55058	10.51939	0.1578040	0.18118984	3.0930016	21	7 11.9	21.3
523034 2016 PZ_{125}	16.4	X	22.64232	61.95150	237.95571	8.64385	0.0507488	0.19076834	2.9885821	21	8 25.8	20.5
523035 2016 PA_{126}	15.9	X	39.78932	3.75007	254.44179	7.92391	0.0690202	0.17696015	3.1420932	21	7 29.5	20.1
523036 2016 PF_{126}	16.3	X	239.26413	189.68899	236.15560	9.86511	0.1193657	0.17462903	3.1699939	21	7 16.8	21.2
523037 2016 PN_{126}	17.5	X	92.16245	72.97679	232.52954	3.09148	0.0773707	0.23268592	2.6179177	21	12 13.9	21.1
523038 2016 PP_{126}	16.3	X	200.10585	153.41158	320.19073	8.50110	0.0239481	0.17775839	3.1326796	21	8 12.1	20.8
523039 2016 PU_{126}	17.2	X	99.10428	334.98421	339.92445	5.17351	0.1365274	0.24380520	2.5377027	21	—	—
523040 2016 PX_{126}	17.3	X	64.42153	42.51202	338.27068	5.02826	0.0749282	0.25331293	2.4737994	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523041 2016 PA_{127}	16.3	X	89.07012	41.06532	185.08710	7.62755	0.0219830	0.17995838	3.1070959	21	8 16.9	20.7
523042 2016 PG_{127}	16.1	X	218.12740	117.32379	355.86859	16.07962	0.0839926	0.17939539	3.1135932	21	8 31.4	20.8
523043 2016 PH_{127}	17.1	X	334.82860	119.49270	0.16591	14.80695	0.0751787	0.25289693	2.4765115	21	—	—
523044 2016 PM_{127}	16.4	X	282.40333	185.25936	178.19726	14.78352	0.0782209	0.15948937	3.3675565	21	6 27.0	21.4
523045 2016 PT_{127}	16.4	X	283.32071	81.33373	318.58278	10.88859	0.1560899	0.17622621	3.1508113	21	8 3.7	20.8
523046 2016 QN_{1}	18.0	X	168.07542	261.78614	228.71412	20.72144	0.1149556	0.38264386	1.8790553	21	7 24.3	21.0
523047 2016 QE_{7}	16.6	X	115.59871	279.32330	246.62135	1.91039	0.0302416	0.17827653	3.1266068	21	7 6.9	20.9
523048 2016 QH_{47}	17.7	X	203.84595	289.14432	155.35103	23.31856	0.1264404	0.36793109	1.9288201	21	7 6.1	20.7
523049 2016 QD_{80}	17.5	X	192.16633	7.25412	173.89073	3.03901	0.0462494	0.22612075	2.6683478	21	10 31.0	21.3
523050 2016 QQ_{85}	18.1	X	309.36892	233.11149	121.94644	22.97025	0.0685508	0.37165926	1.9158996	21	8 1.9	19.4
523051 2016 QP_{90}	16.7	X	355.53235	264.09985	117.16970	3.18140	0.0730623	0.20426175	2.8554727	21	11 9.6	20.3
523052 2016 QQ_{90}	16.7	X	349.32573	256.19528	111.48743	3.62870	0.1134392	0.19309023	2.9645755	21	10 13.6	20.1
523053 2016 QR_{90}	17.1	X	11.30580	41.07573	336.07236	2.18075	0.2272752	0.21054510	2.7983753	21	12 18.2	20.2
523054 2016 QS_{90}	16.9	X	48.59497	247.10355	82.32739	5.25384	0.1568652	0.21052600	2.7985445	21	11 29.8	20.7
523055 2016 QT_{90}	15.8	X	317.26708	331.96876	45.51882	13.62083	0.0562518	0.17394484	3.1783009	21	9 11.9	20.2
523056 2016 QX_{90}	16.7	X	94.90016	196.44799	145.29517	15.51477	0.1336935	0.23883915	2.5727586	21	—	—
523057 2016 QB_{91}	16.5	X	307.53397	5.10853	45.91572	19.64950	0.1851967	0.18459701	3.0548245	21	9 30.7	20.4
523058 2016 QC_{91}	16.6	X	138.58903	150.32190	150.40505	14.63330	0.0901470	0.23601363	2.5932516	21	—	—
523059 2016 QE_{91}	16.4	X	12.33513	202.96294	119.76126	11.91469	0.1493834	0.18863070	3.0111182	21	9 27.9	20.1
523060 2016 QF_{91}	16.3	X	15.02904	310.38585	114.23277	15.16363	0.0798872	0.23612730	2.5924193	21	—	—
523061 2016 QG_{91}	16.4	X	46.31353	280.98923	130.23614	14.17310	0.1194935	0.24567710	2.5247959	21	—	—
523062 2016 QH_{91}	16.1	X	328.95379	279.16380	116.87464	13.36699	0.0880505	0.19275469	2.9680150	21	10 22.8	20.0
523063 2016 QO_{91}	17.1	X	296.36380	7.13097	28.68222	5.19251	0.2874607	0.18517180	3.0484997	21	7 28.2	21.0
523064 2016 QT_{91}	16.9	X	306.97227	181.73845	289.34704	11.19776	0.1328377	0.23702451	2.5858731	21	12 28.6	19.6
523065 2016 QA_{92}	17.3	X	30.21701	230.10432	111.95532	1.65574	0.0802238	0.20971032	2.8057966	21	11 10.2	21.0
523066 2016 QE_{92}	16.7	X	286.84530	38.87216	12.44073	9.29321	0.1066306	0.18182663	3.0857759	21	9 2.6	20.9
523067 2016 QG_{92}	17.7	X	331.03270	6.02319	130.66928	5.47451	0.0518897	0.26241647	2.4162507	21	—	—
523068 2016 QP_{92}	16.8	X	26.03283	285.38551	40.21425	2.55145	0.0680812	0.20310219	2.8663308	21	10 11.4	20.5
523069 2016 QR_{92}	17.1	X	23.79860	298.14317	345.90316	4.12163	0.2133524	0.18736405	3.0246737	21	8 29.2	20.3
523070 2016 QT_{92}	17.2	X	354.88546	106.78082	286.04983	2.78246	0.1407134	0.21670093	2.7451254	21	11 30.7	20.3
523071 2016 QU_{92}	17.3	X	46.54830	81.28047	259.35706	3.96117	0.0675461	0.22277699	2.6949817	21	11 30.1	20.9
523072 2016 QW_{92}	16.3	X	37.26347	303.67418	304.89045	7.46287	0.1259873	0.18468948	3.0538049	21	7 22.8	20.1
523073 2016 QX_{92}	16.7	X	236.15722	78.48693	329.66467	12.46377	0.2037170	0.15566003	3.4225619	21	6 16.9	22.4
523074 2016 QC_{93}	16.8	X	9.28346	8.18005	25.02536	10.07677	0.2195223	0.21054628	2.7983648	21	—	—
523075 2016 QH_{93}	16.7	X	25.90201	48.70302	235.28966	10.40708	0.1159013	0.18826209	3.0150473	21	8 15.3	20.6
523076 2016 QK_{93}	16.8	X	113.27752	7.44704	258.14913	10.14278	0.0461476	0.22083860	2.7107287	21	11 12.3	20.6
523077 2016 QL_{93}	17.0	X	308.67293	171.31629	295.76535	12.33705	0.0985255	0.23142040	2.6274530	21	12 26.1	20.0
523078 2016 QM_{93}	15.7	X	227.26231	165.51963	284.98956	13.14917	0.1691925	0.17039392	3.2223050	21	7 30.1	20.9
523079 2016 QN_{93}	17.5	X	39.95902	233.07353	188.92812	6.05277	0.1069175	0.25534776	2.4606397	21	—	—
523080 2016 QQ_{93}	17.6	X	347.89136	129.89815	4.39237	7.55340	0.0724618	0.26965751	2.3727995	21	—	—
523081 2016 QW_{93}	16.7	X	28.02586	301.05789	47.49461	7.73827	0.1477163	0.21786142	2.7353684	21	11 25.5	20.0
523082 2016 QX_{93}	17.2	X	333.41430	11.00042	95.73706	8.25096	0.1740397	0.24145615	2.5541351	21	—	—
523083 2016 QA_{94}	16.3	X	8.72242	220.34583	101.25029	10.93353	0.0763772	0.19099289	2.9862391	21	9 14.5	20.3
523084 2016 QJ_{94}	15.9	X	37.92033	125.21769	121.51352	17.19389	0.1818973	0.17424178	3.1746889	21	7 28.6	19.6
523085 2016 QQ_{94}	16.5	X	300.54792	322.81298	64.35189	12.08263	0.1044846	0.18346895	3.0673335	21	8 24.8	20.7
523086 2016 RV_{2}	17.7	X	277.44614	248.02335	314.17410	5.51851	0.0703844	0.27097456	2.3651047	21	—	—
523087 2016 RF_{28}	16.6	X	63.36119	31.61816	311.25959	13.71976	0.1980141	0.23199210	2.6231346	21	—	—
523088 2016 RS_{41}	16.8	X	286.20115	304.34063	183.11397	13.83818	0.1050496	0.23133623	2.6280903	21	12 16.2	20.2
523089 2016 RO_{42}	18.1	X	98.38147	309.85940	221.56154	21.52699	0.0544692	0.36208697	1.9495189	21	6 20.1	20.5
523090 2016 RF_{47}	17.5	X	8.22789	311.87143	97.44254	3.95296	0.1327481	0.22972849	2.6403377	21	—	—
523091 2016 RH_{47}	16.5	X	65.46121	322.58958	317.16391	4.74064	0.0452417	0.19565704	2.9385905	21	9 28.7	20.6
523092 2016 RL_{47}	16.5	X	236.05498	326.75673	219.61226	13.45712	0.0262055	0.22024455	2.7156008	21	12 28.9	20.4
523093 2016 RO_{47}	17.5	X	48.57605	172.81872	187.07173	7.51708	0.1610607	0.23296441	2.6158309	21	—	—
523094 2016 RY_{47}	17.3	X	0.75198	318.05991	52.33506	5.03918	0.0861789	0.21217257	2.7840469	21	11 5.0	20.5
523095 2016 RB_{48}	16.6	X	356.36875	71.70831	260.15562	8.88288	0.1192537	0.18411391	3.0601660	21	8 30.3	20.4
523096 2016 RD_{48}	16.0	X	45.75706	193.87013	74.47665	16.65329	0.0455459	0.18060276	3.0997009	21	8 27.2	20.5
523097 2016 RG_{48}	16.6	X	326.53915	294.77116	97.72084	10.89737	0.1129610	0.20174250	2.8791953	21	10 14.0	20.2
523098 2016 RM_{48}	17.2	X	309.40360	346.33014	89.99969	14.75908	0.1098976	0.21210871	2.7846058	21	11 14.3	20.6
523099 2016 RR_{48}	17.3	X	38.18579	296.27111	85.95266	14.38814	0.1749881	0.23019507	2.6367687	21	—	—
523100 2016 RT_{48}	17.0	X	34.84309	266.46395	55.84351	3.44466	0.1288269	0.20133687	2.8830611	21	10 27.8	20.6
523101 2016 RW_{48}	17.0	X	345.04354	226.16829	204.13248	15.06994	0.1180455	0.22988324	2.6391526	21	—	—
523102 2016 RY_{48}	17.5	X	3.35991	14.22952	23.57710	6.25372	0.0508087	0.22654952	2.6649800	21	12 13.2	20.9
523103 2016 RZ_{48}	16.9	X	326.76142	31.94320	358.48502	9.13069	0.0842786	0.20106910	2.8856202	21	10 5.2	20.4
523104 2016 RC_{49}	16.7	X	53.71351	266.89700	26.71571	11.27007	0.0062905	0.18988543	2.9978388	21	9 29.9	20.9
523105 2016 RR_{49}	16.6	X	13.98287	48.69926	230.53305	4.68120	0.1013603	0.17110871	3.2133249	21	7 21.8	20.7
523106 2016 RZ_{49}	17.4	X	44.36781	93.45512	247.06275	4.30920	0.0420746	0.21559596	2.7544970	21	11 22.1	20.9
523107 2016 RA_{50}	17.5	X	14.00423	115.36019	293.14388	4.21902	0.0543076	0.23374236	2.6100236	21	—	—
523108 2016 RG_{50}	17.0	X	166.06570	148.24350	138.02185	13.79547	0.0242602	0.24154052	2.5535403	21	—	—
523109 2016 SP	18.8	X	133.11452	307.54612	211.30584	20.14451	0.0475974	0.37401226	1.9078555	21	7 19.4	21.5
523110 2016 SU_{51}	17.1	X	352.09602	210.16734	287.97232	9.40983	0.0545806	0.27596519	2.3365039	21	—	—
523111 2016 SW_{51}	17.4	X	330.26739	29.28198	351.37236	7.42789	0.1192498	0.19667329	2.9284589	21	9 25.9	20.7
523112 2016 SX_{51}	16.3	X	293.48088	59.38675	334.62983	8.68830	0.0812142	0.18076531	3.0978424	21	8 21.3	20.4
523113 2016 SF_{52}	16.7	X	136.46972	135.20087	93.12625	15.19437	0.0698277	0.21409014	2.7673979	21	10 31.5	21.1
523114 2016 SJ_{52}	17.0	X	340.76426	78.88071	333.30791	2.64930	0.0833375	0.21368857	2.7708639	21	11 28.3	20.4
523115 2016 SK_{52}	16.3	X	206.11189	304.04806	198.03130	8.41203	0.0368967	0.18842386	3.0133213	21	9 22.7	20.8
523116 2016 SN_{52}	16.6	X	143.79668	166.55751	79.12631	13.34898	0.0949325	0.21691994	2.7432774	21	11 25.0	20.8
523117 2016 SO_{52}	16.8	X	256.74644	301.53791	160.07848	17.14006	0.1574651	0.18330702	3.0691396	21	9 18.6	21.2
523118 2016 SP_{52}	17.0	X	170.78543	111.30250	143.08650	12.24056	0.0290015	0.23349563	2.6118619	21	—	—
523119 2016 SR_{52}	16.5	X	255.76677	11.75074	78.19270	11.14416	0.0423778	0.18306035	3.0718961	21	9 23.8	21.0
523120 2016 SY_{52}	16.5	X	267.20583	323.88207	140.42314	12.17643	0.1079166	0.18992524	2.9974199	21	10 15.9	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523121 2016 SB_{53}	16.5	X	328.48026	273.14859	98.24071	10.59704	0.0958518	0.18126421	3.0921557	21	9 16.3	20.5
523122 2016 SD_{53}	17.0	X	317.76078	326.31208	91.35464	10.18938	0.0421199	0.20213537	2.8754634	21	11 4.2	20.9
523123 2016 SL_{53}	17.2	X	300.03198	75.00410	359.91632	8.92429	0.1208978	0.20440896	2.8541016	21	10 18.4	20.7
523124 2016 SM_{53}	18.3	X	161.37196	317.97751	4.69167	5.74664	0.1079724	0.27791226	2.3255780	21	—	—
523125 2016 SN_{53}	16.8	X	65.15147	35.55536	226.96142	3.70978	0.1414457	0.19128339	2.9832150	21	9 20.7	21.0
523126 2016 SQ_{53}	17.4	X	79.21751	127.11609	184.55235	8.65750	0.0628424	0.22114657	2.7082115	21	12 4.0	21.3
523127 2016 SS_{53}	17.3	X	286.78716	50.82989	51.64869	4.29638	0.0527444	0.21283060	2.7783055	21	11 15.7	20.8
523128 2016 ST_{53}	17.1	X	306.90047	338.48167	93.03821	2.84127	0.1341481	0.20109398	2.8853822	21	10 26.7	20.4
523129 2016 SY_{53}	17.1	X	293.28338	278.65427	141.13822	4.81394	0.1028249	0.19111129	2.9850056	21	9 22.6	21.0
523130 2016 SZ_{53}	16.7	X	318.68603	168.18655	190.83954	11.26500	0.1356973	0.17951936	3.1121595	21	8 2.4	20.8
523131 2016 SB_{54}	17.0	X	355.17743	126.07244	187.62747	10.87709	0.2065936	0.17664503	3.1458289	21	8 5.2	20.4
523132 2016 SD_{54}	16.1	X	62.92114	210.36881	47.31805	17.96572	0.1694655	0.18137280	3.0909212	21	9 25.9	20.7
523133 2016 SH_{54}	17.5	X	204.70786	244.88914	50.90006	11.84547	0.0220136	0.27587578	2.3370087	21	—	—
523134 2016 SK_{54}	17.3	X	325.44576	46.60161	65.70602	9.00161	0.2021515	0.22455791	2.6807140	21	—	—
523135 2016 SL_{54}	16.8	X	25.96312	241.43268	128.04700	7.05220	0.0385318	0.21164297	2.7886894	21	12 4.9	20.5
523136 2016 SM_{54}	17.0	X	65.68846	251.63796	87.75543	7.81571	0.1100981	0.22114544	2.7082207	21	12 27.4	20.8
523137 2016 SN_{54}	17.2	X	56.95744	236.76238	109.14554	8.00318	0.1289422	0.22021147	2.7158728	21	12 27.8	21.0
523138 2016 SO_{54}	17.1	X	1.65579	287.15149	167.76499	15.01616	0.0799697	0.24203925	2.5500313	21	—	—
523139 2016 SR_{54}	16.5	X	13.84823	222.65945	102.38838	11.15959	0.0895316	0.18403783	3.0610092	21	9 27.8	20.6
523140 2016 SW_{54}	17.3	X	6.71182	327.90723	74.98640	5.83906	0.0557489	0.22073592	2.7115693	21	12 24.2	20.6
523141 2016 SX_{54}	16.7	X	48.70162	144.56588	145.29812	10.48875	0.1325117	0.18708094	3.0277245	21	10 6.9	20.8
523142 2016 SY_{54}	17.8	X	54.65346	317.17340	141.84209	8.08918	0.0454024	0.27951017	2.3167063	21	1 3.2	20.5
523143 2016 SZ_{54}	16.7	X	260.10723	51.24899	113.99465	14.69708	0.0939698	0.22858765	2.6491154	21	12 27.9	20.1
523144 2016 SA_{55}	16.6	X	301.17432	304.34143	108.68930	14.93204	0.0909859	0.18802812	3.0175480	21	10 2.5	20.8
523145 2016 SE_{55}	17.9	X	28.19744	83.08763	50.98587	2.04906	0.0565030	0.28755526	2.2732917	21	1 9.4	20.2
523146 2016 SG_{55}	17.2	X	12.28071	261.64592	96.31906	3.19624	0.0830005	0.20287082	2.8685097	21	11 4.8	20.7
523147 2016 SK_{55}	16.6	X	29.74398	278.43269	134.90578	12.77213	0.1893058	0.23301785	2.6154309	21	—	—
523148 2016 SM_{55}	16.3	X	205.76875	104.25377	32.71087	16.16639	0.0987518	0.17615756	3.1516298	21	9 18.5	21.3
523149 2016 SN_{55}	16.9	X	11.11236	210.45992	126.70385	2.58088	0.1214336	0.18699058	3.0286998	21	10 8.1	20.5
523150 2016 TR	18.1	X	132.19251	300.05210	219.28381	20.32593	0.0494369	0.36533463	1.9379482	21	7 18.2	20.8
523151 2016 TR_{8}	16.4	X	343.31721	287.04827	55.95503	6.77992	0.1676792	0.18071242	3.0984468	21	8 29.8	19.9
523152 2016 TU_{8}	18.2	X	309.19039	93.34175	214.09227	21.30953	0.0351839	0.35458711	1.9769124	21	5 16.9	20.1
523153 2016 TJ_{19}	17.6	X	273.18695	278.49836	121.26711	23.62161	0.1105013	0.37638058	1.8998439	21	8 4.8	19.1
523154 2016 TT_{47}	16.9	X	22.47689	232.12678	150.54269	5.43590	0.1300035	0.21241079	2.7819650	21	12 28.2	20.5
523155 2016 TA_{55}	17.9	X	17.66599	40.36716	238.60226	19.45610	0.0620013	0.37343714	1.9098139	21	7 24.8	20.0
523156 2016 TB_{55}	18.2	X	20.58535	60.56587	225.22041	20.42383	0.1007449	0.38045727	1.8862480	21	8 17.3	20.3
523157 2016 TJ_{57}	16.0	X	297.74761	136.27132	249.95991	9.00819	0.1234521	0.17493946	3.1662426	21	8 6.7	20.3
523158 2016 TA_{90}	18.5	X	357.59120	335.19440	198.48139	3.95952	0.1086194	0.28078736	2.3096757	21	1 11.4	21.0
523159 2016 TK_{97}	16.8	X	329.15458	70.38209	48.36053	22.47070	0.0572725	0.23182417	2.6244013	21	—	—
523160 2016 TR_{97}	17.4	X	356.09758	355.72285	136.47941	12.53369	0.1438669	0.24015888	2.5633247	21	—	—
523161 2016 TW_{97}	16.3	X	232.11035	191.45585	264.39644	10.66541	0.0448432	0.17686733	3.1431925	21	8 21.1	21.1
523162 2016 TX_{97}	17.3	X	50.93949	225.05445	136.71108	4.00372	0.1684933	0.22460440	2.6803440	21	—	—
523163 2016 TB_{98}	16.1	X	358.22801	53.32455	269.92426	8.60027	0.0767565	0.17754660	3.1351704	21	8 21.0	20.3
523164 2016 TN_{98}	16.5	X	29.33948	77.99605	246.57530	14.99050	0.1514547	0.19851266	2.9103412	21	10 21.6	20.4
523165 2016 TT_{98}	17.3	X	113.53259	171.63297	152.78706	3.96737	0.1784050	0.24218573	2.5490030	21	—	—
523166 2016 TW_{98}	17.1	X	291.91731	143.74155	21.73221	12.57882	0.1108294	0.23309358	2.6148644	21	—	—
523167 2016 TY_{98}	16.8	X	342.64787	59.23032	36.95506	22.52556	0.0475044	0.22464997	2.6799816	21	—	—
523168 2016 TB_{99}	16.5	X	341.41101	49.24053	312.47297	9.82448	0.0804412	0.18277170	3.0751296	21	9 14.9	20.5
523169 2016 TD_{99}	16.9	X	49.59460	184.70642	153.87430	5.32775	0.0754295	0.21705939	2.7421023	21	12 2.6	20.6
523170 2016 TE_{99}	16.0	X	281.13710	312.64157	76.09856	10.87933	0.0846161	0.15325307	3.4583048	21	7 28.6	20.9
523171 2016 TF_{99}	16.2	X	315.94565	134.21609	251.31146	9.72983	0.0537450	0.17623138	3.1507496	21	9 8.2	20.6
523172 2016 TG_{99}	16.4	X	12.41801	217.83259	100.53621	16.92301	0.1532899	0.18014061	3.1050002	21	9 24.9	20.4
523173 2016 TJ_{99}	17.2	X	47.68161	240.32076	123.84626	15.22835	0.0214209	0.21640784	2.7476034	21	12 24.3	21.0
523174 2016 TL_{99}	16.1	X	60.58607	318.35949	308.14109	8.25892	0.1819002	0.18472450	3.0534188	21	9 22.6	20.5
523175 2016 TM_{99}	16.5	X	327.61955	46.39215	324.71108	9.76028	0.0952670	0.18126701	3.0921238	21	9 6.9	20.4
523176 2016 TN_{99}	16.7	X	71.09573	304.09310	356.35341	12.14357	0.0838943	0.20479699	2.8504954	21	11 5.0	20.9
523177 2016 TO_{99}	17.1	X	318.38967	168.99102	278.08579	2.26935	0.0626399	0.21276063	2.7789146	21	12 10.1	20.6
523178 2016 TP_{99}	16.7	X	49.59899	282.36710	57.46718	9.25506	0.1796618	0.21125288	2.7921213	21	12 16.2	20.6
523179 2016 TQ_{99}	16.4	X	355.20008	150.94087	205.80854	10.33187	0.0816443	0.18202324	3.0835535	21	10 2.7	20.4
523180 2016 TR_{99}	16.8	X	299.90699	299.82564	132.82808	18.72355	0.1279159	0.18368374	3.0649419	21	10 21.0	21.0
523181 2016 TU_{99}	16.8	X	305.29479	91.03067	50.82180	14.27233	0.1322097	0.22688811	2.6623280	21	—	—
523182 2016 TV_{99}	16.5	X	350.13277	168.56926	194.05157	10.90682	0.0878721	0.18201122	3.0836893	21	10 3.6	20.1
523183 2016 TW_{99}	17.9	X	44.30338	58.74669	73.44461	6.83647	0.0621200	0.28369493	2.2938675	21	2 4.6	20.4
523184 2016 TY_{99}	16.2	X	314.80422	95.96672	293.55175	8.09897	0.1292247	0.17390711	3.1787606	21	9 5.3	20.2
523185 2016 TC_{100}	16.9	X	8.78449	237.94218	202.24918	21.51125	0.0529312	0.22926529	2.6438928	21	—	—
523186 2016 UG_{5}	18.8	X	78.79094	32.34953	211.32754	20.62944	0.0383749	0.38018626	1.8871443	21	9 12.1	21.1
523187 2016 UJ_{55}	19.1	X	352.25838	92.65991	212.76720	21.02183	0.0835905	0.37022639	1.9208397	21	7 21.9	21.3
523188 2016 UC_{124}	17.9	X	79.09794	72.77175	40.48021	8.50286	0.0914559	0.29233444	2.2484474	21	3 10.1	20.3
523189 2016 US_{148}	18.1	X	51.59181	295.66258	230.70427	4.76166	0.0474649	0.30303954	2.1951786	21	3 30.7	20.3
523190 2016 UV_{148}	17.9	X	50.88065	104.98814	355.97682	6.51692	0.0590246	0.27659497	2.3329559	21	1 2.1	20.5
523191 2016 UX_{148}	17.0	X	320.17333	301.16980	152.56516	5.58295	0.0970679	0.21417262	2.7666874	21	12 21.5	20.4
523192 2016 UC_{149}	16.8	X	0.66946	107.03648	261.42704	7.57981	0.0692252	0.19449602	2.9502732	21	10 26.2	20.6
523193 2016 UD_{149}	16.4	X	346.09523	2.56330	27.86567	9.73185	0.0628935	0.19223376	2.9733744	21	11 2.6	20.1
523194 2016 UE_{149}	16.3	X	24.22627	85.91393	241.07754	9.57013	0.0600037	0.18292257	3.0734385	21	10 3.0	20.5
523195 2016 UF_{149}	17.1	X	26.55014	313.83448	97.11977	8.79456	0.1101396	0.22356413	2.6886522	21	—	—
523196 2016 UG_{149}	16.3	X	290.80480	236.93651	224.72359	3.34857	0.1327445	0.19157223	2.9802156	21	11 6.7	19.9
523197 2016 UH_{149}	16.3	X	10.52421	115.33127	249.95531	11.15600	0.0104290	0.18367064	3.0650876	21	10 29.9	20.7
523198 2016 UL_{149}	16.4	X	133.84580	69.28656	165.94432	9.54430	0.0193471	0.17981893	3.1087021	21	10 25.9	20.9
523199 2016 UM_{149}	16.6	X	322.64053	263.15051	157.38856	9.29206	0.1168412	0.19041606	2.9922669	21	11 8.5	20.3
523200 2016 VB_{20}	16.8	X	16.63928	287.76078	106.48066	6.38800	0.0593661	0.20509925	2.8476941	21	12 23.7	20.4

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523201 2016 VC_{20}	17.4	X	136.56089	137.90208	202.93256	6.71540	0.0457658	0.24472324	2.5313522	21	—	—
523202 2016 VE_{20}	17.2	X	68.93686	289.85135	97.95142	5.03882	0.0646705	0.23588109	2.5942229	21	—	—
523203 2016 VF_{20}	16.7	X	9.54308	267.07616	155.08306	6.48038	0.0473440	0.21826040	2.7320339	21	—	—
523204 2016 VG_{20}	17.6	X	332.61727	292.01022	214.60373	16.05141	0.1588818	0.23355758	2.6114000	21	—	—
523205 2016 VH_{20}	16.9	X	60.74413	158.11103	161.49045	8.80878	0.0744606	0.19024012	2.9941115	21	11 19.3	21.2
523206 2016 VL_{20}	16.7	X	279.90567	111.06143	13.23736	12.76268	0.0774221	0.17891839	3.1191246	21	11 20.9	21.1
523207 2016 VM_{20}	16.6	X	314.14879	41.11371	34.13178	12.05361	0.1352122	0.17614652	3.1517614	21	11 5.3	20.3
523208 2016 VP_{20}	16.1	X	5.19533	18.61699	7.06775	12.74607	0.0999264	0.17670479	3.1451196	21	11 21.2	20.3
523209 2016 VR_{20}	16.5	X	27.07754	86.44284	308.61039	8.03217	0.0420666	0.18717779	3.0266800	21	—	—
523210 2016 VU_{20}	16.8	X	27.49276	326.18476	87.45349	11.95188	0.0670782	0.20020061	2.8939595	21	—	—
523211 2016 VY_{20}	16.3	X	231.09024	105.08173	55.68460	11.99809	0.0667325	0.17207982	3.2012241	21	11 9.9	21.0
523212 2016 VB_{21}	16.9	X	5.06795	95.84319	349.07803	9.05952	0.1023873	0.21198584	2.7856817	21	—	—
523213 2016 VC_{21}	17.1	X	326.02884	146.92890	347.50022	6.79070	0.0741885	0.21327858	2.7744137	21	—	—
523214 2016 VE_{21}	17.1	X	98.84365	1.50393	9.61144	6.21006	0.0491063	0.22342454	2.6897720	21	—	—
523215 2016 VF_{21}	16.5	X	249.17493	335.03948	203.10155	5.17653	0.0196680	0.18794497	3.0184379	21	12 30.0	20.8
523216 2016 VM_{21}	16.5	X	140.34370	186.86314	125.74236	16.38059	0.1344639	0.20323267	2.8651038	21	—	—
523217 2016 VP_{21}	16.5	X	228.76164	222.16653	319.51725	9.54464	0.0863837	0.19695620	2.9256539	21	12 1.7	20.9
523218 2016 WF_{11}	15.7	X	259.83246	101.96289	308.88906	14.03237	0.0929353	0.17777168	3.1325234	21	7 27.9	20.1
523219 2016 WZ_{26}	17.8	X	328.85137	179.64166	17.22875	2.40564	0.1568870	0.26378059	2.4079132	21	—	—
523220 2016 WW_{33}	18.0	X	168.95341	120.09958	310.15344	0.99534	0.0667951	0.31898879	2.1213831	21	5 2.9	20.6
523221 2016 WY_{45}	16.9	X	289.51278	270.41661	261.73292	11.65651	0.1218612	0.22923182	2.6441501	21	—	—
523222 2016 WR_{53}	17.3	X	340.47951	80.63538	47.73138	12.58017	0.2213930	0.22789823	2.6544553	21	—	—
523223 2016 WJ_{57}	16.2	X	292.67063	313.74086	146.34484	11.46327	0.1225066	0.18532135	3.0468594	21	11 11.5	20.3
523224 2016 WK_{57}	16.6	X	86.83014	188.16845	188.24212	12.72755	0.1355856	0.24057129	2.5603943	21	—	—
523225 2016 XO_{2}	16.6	X	267.39135	333.79001	236.43045	6.75123	0.1426333	0.23712371	2.5851518	21	—	—
523226 2016 XQ_{4}	17.3	X	56.90050	245.20282	231.35971	1.53050	0.1383931	0.26782472	2.3836122	21	2 8.2	19.4
523227 2016 XC_{14}	16.2	X	344.24735	224.43440	256.28423	13.60727	0.0666374	0.22970861	2.6404900	21	—	—
523228 2016 XX_{24}	17.3	X	345.94180	301.28129	161.10085	7.30310	0.2321001	0.21723854	2.7405946	21	—	—
523229 2016 XY_{24}	15.2	X	234.80214	244.50784	276.88301	14.06938	0.1797488	0.17928836	3.1148321	21	10 28.3	20.2
523230 2016 YZ_{4}	16.2	X	81.59434	25.14755	263.12846	10.41250	0.0953792	0.18280062	3.0748052	21	11 2.9	20.7
523231 2016 YF_{12}	16.4	X	273.80159	93.74873	48.52177	14.74933	0.1671166	0.18029736	3.1032002	21	11 24.7	20.4
523232 2016 YO_{13}	17.4	X	253.81319	203.71856	50.16388	15.55832	0.0767767	0.23821571	2.5772454	21	—	—
523233 2016 YQ_{13}	16.7	X	275.29473	352.82203	161.92351	11.64254	0.1088875	0.18345804	3.0674551	21	12 22.8	20.9
523234 2016 YU_{13}	16.9	X	202.98611	235.33851	53.19142	15.13857	0.1267686	0.22581579	2.6707497	21	—	—
523235 2016 YY_{13}	16.8	X	346.57608	108.34100	30.25678	13.06907	0.0734790	0.22196539	2.7015471	21	—	—
523236 2016 YZ_{13}	16.4	X	259.86356	307.26366	177.89137	26.79520	0.1701858	0.17441661	3.1725671	21	10 19.6	21.1
523237 2016 YA_{14}	16.3	X	343.53301	33.03540	13.83907	9.37348	0.0718895	0.17570989	3.1569806	21	11 15.4	20.4
523238 2016 YD_{14}	16.6	X	263.32997	335.30294	193.24903	9.24150	0.0374392	0.18549459	3.0449620	21	—	—
523239 2016 YE_{14}	17.5	X	48.46878	279.43965	170.76547	12.29811	0.1331744	0.23582631	2.5946247	21	—	—
523240 2016 YF_{14}	17.2	X	254.73293	68.69123	166.78052	8.68700	0.1314403	0.21382634	2.7696735	21	—	—
523241 2016 YH_{14}	16.9	X	51.16446	1.05859	105.28679	13.15172	0.0286371	0.24044471	2.5612928	21	1 18.2	20.0
523242 2017 AF_{1}	17.2	X	301.51014	122.35611	60.62337	14.40976	0.0701457	0.22242154	2.6978522	21	—	—
523243 2017 AW_{5}	17.1	X	226.57420	250.56739	59.19915	4.20919	0.1431885	0.26013262	2.4303725	21	2 5.8	20.8
523244 2017 AG_{8}	16.2	X	279.10135	28.80643	111.23517	18.42734	0.1929587	0.18354404	3.0664969	21	12 2.2	20.3
523245 2017 AJ_{8}	16.7	X	48.30039	66.68833	12.93010	4.96117	0.1058301	0.22587195	2.6703069	21	—	—
523246 2017 AM_{10}	16.4	X	131.05600	126.62144	251.41324	13.15017	0.0638871	0.22651674	2.6652371	21	1 15.4	20.3
523247 2017 AZ_{12}	16.7	X	59.49335	318.12776	114.14790	15.76088	0.1440320	0.23627554	2.5913349	21	—	—
523248 2017 AB_{22}	17.1	X	222.22480	69.92730	167.18407	13.92933	0.1371832	0.19352446	2.9601393	21	—	—
523249 2017 AH_{22}	16.7	X	240.52130	10.29186	196.87231	6.54662	0.0847675	0.18802570	3.0175739	21	—	—
523250 2017 AK_{22}	15.7	X	248.72042	338.27478	229.94513	16.19445	0.0410129	0.18555641	3.0442857	21	—	—
523251 2017 AO_{22}	16.1	X	146.65540	52.98670	244.02317	9.36603	0.0736225	0.18814060	3.0163451	21	—	—
523252 2017 AQ_{22}	16.3	X	234.23737	321.32915	234.36803	4.27773	0.1110922	0.17592533	3.1544027	21	12 18.9	20.9
523253 2017 AR_{22}	16.5	X	266.38849	260.83405	282.95744	8.77333	0.0564516	0.18874635	3.0098881	21	—	—
523254 2017 AU_{22}	16.4	X	46.95654	101.70688	270.94566	9.63639	0.0744591	0.17925842	3.1151790	21	12 31.9	20.8
523255 2017 AY_{22}	17.4	X	104.42913	128.10970	284.67128	4.44238	0.1030068	0.23081372	2.6320551	21	2 1.5	20.8
523256 2017 AC_{23}	17.7	X	100.44555	20.65676	60.06469	4.17339	0.1188659	0.24619387	2.5212615	21	3 7.6	20.8
523257 2017 AD_{23}	16.7	X	342.33679	28.06182	59.58424	5.70220	0.1471253	0.17476694	3.1683260	21	—	—
523258 2017 AE_{23}	16.9	X	252.33411	141.57184	126.63276	6.18034	0.1244393	0.21272969	2.7791840	21	1 17.2	21.1
523259 2017 AJ_{23}	16.4	X	276.97704	282.12230	217.65578	11.75432	0.1441471	0.17444080	3.1722739	21	11 30.1	20.7
523260 2017 AO_{23}	17.4	X	24.02971	293.06813	192.01294	12.75546	0.2078791	0.22911259	2.6450675	21	—	—
523261 2017 AQ_{23}	17.1	X	302.89075	256.80815	293.48608	11.75775	0.0219977	0.21279916	2.7785791	21	—	—
523262 2017 AT_{23}	17.2	X	67.86290	164.99723	259.37044	2.75646	0.1389012	0.22150571	2.7052834	21	—	—
523263 2017 AV_{23}	16.3	X	204.34588	316.12614	310.05514	14.64053	0.2087377	0.18392845	3.0622227	21	—	—
523264 2017 AW_{23}	16.9	X	334.33816	313.57870	106.86123	9.47952	0.1978859	0.18543437	3.0456212	21	11 26.1	20.1
523265 2017 AB_{24}	16.6	X	160.35952	265.00422	53.79734	6.75955	0.0622237	0.20877404	2.8141790	21	—	—
523266 2017 AC_{24}	18.1	X	49.24218	134.71883	55.48874	7.03209	0.0550029	0.28095072	2.3087804	21	5 7.7	20.4
523267 2017 AJ_{24}	16.8	X	57.10110	181.11335	300.55884	15.99909	0.0557709	0.23935944	2.5690290	21	2 12.8	20.1
523268 2017 AL_{24}	16.5	X	247.72020	161.41392	72.11622	11.59411	0.0270711	0.19648056	2.9303735	21	—	—
523269 2017 AO_{24}	16.1	X	80.24071	277.92535	111.66109	11.59720	0.0309117	0.18852682	3.0122241	21	—	—
523270 2017 AP_{24}	17.7	X	354.35042	112.11989	66.91063	12.36045	0.1308457	0.22586374	2.6703716	21	1 29.2	21.0
523271 2017 AR_{24}	16.9	X	8.44376	56.25041	114.88557	14.60793	0.1094482	0.22655200	2.6649605	21	2 11.5	20.0
523272 2017 AW_{24}	17.9	X	348.58339	211.22794	288.26279	2.87946	0.1880548	0.22471310	2.6794796	21	—	—
523273 2017 AX_{24}	17.1	X	6.17164	213.20939	332.72427	12.75063	0.1065125	0.23498532	2.6008116	21	2 23.9	20.1
523274 2017 AZ_{24}	17.5	X	305.97314	147.81002	35.48007	3.95811	0.1284068	0.21762849	2.7373199	21	—	—
523275 2017 BB_{1}	17.1	X	326.01288	95.03643	51.54858	4.13835	0.1355821	0.21766914	2.7369790	21	—	—
523276 2017 BE_{8}	16.0	X	266.43213	58.35214	111.92645	17.25054	0.1447154	0.18070418	3.0985410	21	12 24.7	20.1
523277 2017 BO_{10}	16.8	X	271.36016	125.54274	32.05183	0.57570	0.1211339	0.18100144	3.0951476	21	12 18.3	20.9
523278 2017 BM_{11}	16.2	X	257.07863	113.78374	63.36673	3.45686	0.0833987	0.17949276	3.1124670	21	12 28.5	20.5
523279 2017 BG_{16}	17.1	X	258.61616	304.90443	221.21322	2.26071	0.1470939	0.18012193	3.1052148	21	12 8.4	21.4
523280 2017 BY_{18}	15.7	X	65.06130	269.80123	87.49670	10.20752	0.0785467	0.18348510	3.0671535	21	—	—

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523281 2017 BY_{19}	17.4	X	87.23671	309.35664	139.18570	7.18639	0.0737707	0.25383436	2.4704104	21	2 16.8	20.1
523282 2017 BR_{25}	16.9	X	123.16655	300.96032	93.55716	6.60745	0.0808599	0.23984787	2.5655401	21	1 30.6	20.2
523283 2017 BP_{28}	16.4	X	289.81561	94.56139	149.08527	25.14030	0.1474563	0.22690950	2.6621607	21	1 20.7	20.6
523284 2017 BM_{34}	16.3	X	309.72839	340.01481	121.66120	9.90991	0.0518458	0.17482260	3.1676535	21	12 9.8	20.6
523285 2017 BW_{36}	17.0	X	294.71189	73.69440	98.13039	8.69319	0.0829246	0.21241702	2.7819106	21	—	—
523286 2017 BX_{37}	16.9	X	59.42246	327.97394	104.65169	14.56285	0.0797903	0.22881945	2.6473260	21	—	—
523287 2017 BE_{39}	17.7	X	136.71154	305.21665	119.91120	10.56405	0.0858314	0.27576152	2.3376543	21	3 27.9	20.9
523288 2017 BE_{40}	16.5	X	266.61656	35.35860	119.07945	17.98648	0.1744981	0.17772269	3.1330991	21	12 3.9	21.0
523289 2017 BJ_{48}	16.6	X	225.33580	88.99842	112.38619	10.76946	0.0220233	0.18273561	3.0755344	21	12 28.5	21.0
523290 2017 BT_{48}	17.2	X	64.73319	74.81824	335.61011	8.17103	0.1418139	0.22357718	2.6885476	21	—	—
523291 2017 BD_{62}	16.7	X	351.64324	76.50697	353.23327	8.42451	0.0438316	0.19123428	2.9837257	21	12 30.2	20.8
523292 2017 BC_{64}	17.2	X	209.34158	216.62904	80.29154	7.35281	0.0316993	0.23781794	2.5801185	21	1 4.5	20.8
523293 2017 BY_{67}	17.0	X	136.11127	253.93783	96.06078	7.67951	0.0948254	0.22610852	2.6684440	21	—	—
523294 2017 BB_{80}	16.4	X	226.04736	355.55821	241.68221	4.64745	0.0156582	0.20077737	2.8884147	21	—	—
523295 2017 BP_{80}	17.2	X	143.27216	203.89018	132.02505	5.27739	0.0717930	0.21355216	2.7720437	21	—	—
523296 2017 BG_{82}	16.5	X	296.57104	21.00265	121.88811	3.05392	0.0511396	0.18815673	3.0161727	21	—	—
523297 2017 BK_{82}	15.9	X	75.65232	44.90936	314.95895	7.52654	0.0243431	0.18660830	3.0328347	21	—	—
523298 2017 BJ_{84}	15.5	X	254.98011	269.42219	249.66170	12.45654	0.0605546	0.17442681	3.1724435	21	12 6.3	19.9
523299 2017 BW_{84}	16.5	X	24.08986	210.94116	210.79483	10.13342	0.1436753	0.20452555	2.8530168	21	—	—
523300 2017 BE_{100}	16.7	X	204.20996	201.15885	70.77698	4.68766	0.0609805	0.21401984	2.7680039	21	—	—
523301 2017 BA_{104}	16.2	X	224.63498	140.63646	79.39669	10.39363	0.2109645	0.18114083	3.0935596	21	12 26.4	21.0
523302 2017 BN_{104}	16.4	X	256.55921	187.89253	77.00174	12.28475	0.0090059	0.24127586	2.5554073	21	1 22.9	19.9
523303 2017 BZ_{104}	17.2	X	244.41491	199.03711	96.19935	7.66104	0.1290831	0.25734271	2.4479064	21	2 5.8	20.9
523304 2017 BH_{105}	16.5	X	250.93956	143.09680	104.58820	10.34667	0.0534759	0.22848611	2.6499001	21	—	—
523305 2017 BZ_{105}	17.6	X	142.17653	290.17097	103.64088	14.89912	0.1169503	0.25904399	2.4371768	21	2 27.4	21.2
523306 2017 BC_{106}	17.3	X	71.82271	332.60133	91.52881	16.37275	0.1234621	0.23507839	2.6001251	21	—	—
523307 2017 BS_{109}	15.8	X	107.52687	56.21920	269.48911	9.01965	0.0082622	0.18146809	3.0898392	21	—	—
523308 2017 BD_{111}	16.5	X	50.29446	119.84889	268.91216	8.94490	0.1091865	0.19197757	2.9760191	21	—	—
523309 2017 BH_{111}	16.1	X	180.23439	55.17608	197.97463	15.35934	0.0809806	0.17227074	3.1988586	21	12 30.2	21.3
523310 2017 BE_{116}	15.8	X	297.35624	46.65207	64.35479	26.09864	0.1359882	0.17349522	3.1837898	21	11 24.9	19.7
523311 2017 BD_{121}	16.0	X	279.02349	258.77031	252.36018	10.70556	0.1065649	0.17633452	3.1495209	21	12 21.4	20.2
523312 2017 BF_{124}	16.2	X	59.56685	286.40172	93.99747	11.51672	0.0705664	0.18935194	3.0034671	21	—	—
523313 2017 BH_{126}	17.2	X	73.63595	281.18857	153.16426	12.28259	0.1587776	0.23727197	2.5840749	21	1 20.1	20.0
523314 2017 BA_{127}	17.2	X	5.96251	233.15219	229.29586	3.48294	0.0203513	0.21220776	2.7837392	21	—	—
523315 2017 BB_{128}	16.4	X	44.98866	177.96153	181.57703	2.65084	0.0286456	0.17536853	3.1610760	21	12 7.4	20.8
523316 2017 BU_{132}	17.1	X	224.87447	220.52811	67.44241	3.39439	0.0407527	0.22822535	2.6519182	21	1 13.7	20.9
523317 2017 BX_{136}	16.7	X	181.69956	124.21672	140.59270	11.06600	0.0635663	0.18565894	3.0431648	21	—	—
523318 2017 BG_{137}	16.3	X	197.71354	27.66791	220.95264	4.71657	0.1641606	0.17574629	3.1565447	21	—	—
523319 2017 BV_{137}	16.1	X	141.18142	162.28669	151.00726	6.45103	0.0951862	0.18129593	3.0917950	21	—	—
523320 2017 BG_{138}	17.3	X	45.39808	144.82406	293.85250	14.28032	0.1749748	0.21617256	2.7495967	21	—	—
523321 2017 BJ_{138}	17.6	X	49.41423	112.08440	310.67285	2.41463	0.0737766	0.21878213	2.7276887	21	—	—
523322 2017 BL_{138}	16.8	X	244.61858	264.59215	343.85466	7.09065	0.0546258	0.21133107	2.7914326	21	—	—
523323 2017 BO_{138}	16.5	X	24.61714	164.81535	269.36529	7.99870	0.0794771	0.19191360	2.9766805	21	—	—
523324 2017 BQ_{138}	15.9	X	61.51970	124.34484	255.22899	8.33603	0.1082504	0.17945608	3.1128911	21	—	—
523325 2017 BT_{138}	16.3	X	215.11188	306.89446	322.39417	8.91088	0.0719602	0.19072387	2.9890466	21	—	—
523326 2017 BW_{138}	17.5	X	357.29786	359.06642	196.38607	3.91686	0.1925167	0.23412001	2.6072161	21	2 10.8	20.2
523327 2017 BX_{138}	16.3	X	320.32989	1.58715	84.38385	10.10885	0.1382753	0.17617945	3.1513687	21	12 1.2	20.1
523328 2017 BY_{138}	18.3	X	149.09254	69.49754	357.24422	4.15419	0.1103936	0.27616589	2.3353718	21	4 11.0	21.5
523329 2017 BZ_{138}	16.9	X	304.84733	233.38132	342.27279	15.71878	0.1212710	0.22456659	2.6806449	21	1 10.9	20.9
523330 2017 BB_{139}	17.0	X	273.25581	166.84894	12.69375	3.70939	0.0224942	0.18786992	3.0192417	21	—	—
523331 2017 BE_{139}	16.9	X	218.82361	170.29983	104.69461	6.72373	0.0381902	0.21039322	2.7997219	21	—	—
523332 2017 BF_{139}	17.2	X	258.10070	197.32829	21.68326	1.89652	0.0113350	0.20498645	2.8487387	21	—	—
523333 2017 BH_{139}	17.6	X	126.23692	309.03164	140.09291	6.65757	0.0873437	0.27027916	2.3691597	21	4 15.1	20.7
523334 2017 BO_{139}	16.3	X	160.74978	134.52097	153.90663	10.10903	0.0659958	0.17460283	3.1703109	21	—	—
523335 2017 BU_{139}	17.1	X	269.21741	230.33752	14.05602	4.25659	0.0488283	0.21649847	2.7468367	21	1 12.9	21.0
523336 2017 BV_{139}	17.7	X	103.28012	331.22151	75.32346	2.96563	0.1066815	0.22493727	2.6776991	21	1 26.3	21.0
523337 2017 BX_{139}	16.3	X	261.99645	209.12971	329.36743	9.96984	0.0142334	0.17385949	3.1793410	21	—	—
523338 2017 BY_{139}	16.2	X	286.07795	277.79942	271.69256	9.60472	0.0847929	0.18687346	3.0299652	21	—	—
523339 2017 BC_{140}	17.5	X	101.76098	187.42877	281.74913	3.94691	0.1449376	0.25408549	2.4687823	21	4 15.8	20.8
523340 2017 BL_{140}	17.3	X	354.86717	274.75019	263.19625	11.60568	0.1402174	0.23491771	2.6013106	21	1 18.9	20.4
523341 2017 BN_{140}	16.1	X	117.09297	71.38602	262.50452	8.87543	0.0967513	0.18237326	3.0796068	21	—	—
523342 2017 BO_{140}	16.5	X	347.19717	339.47086	234.21560	8.08092	0.0726060	0.22266097	2.6959178	21	3 5.9	20.1
523343 2017 BS_{140}	17.3	X	129.89631	19.63991	345.30600	4.42299	0.0169023	0.21195610	2.7859422	21	—	—
523344 2017 BT_{140}	16.9	X	36.94634	67.60078	25.88617	5.26673	0.0087956	0.20880777	2.8138760	21	—	—
523345 2017 BV_{140}	16.9	X	277.47071	92.51840	140.92325	25.01931	0.0520956	0.21516714	2.7581555	21	1 8.8	21.1
523346 2017 BW_{140}	17.8	X	25.10475	140.62692	93.65038	4.14711	0.0959507	0.28084304	2.3093705	21	6 5.7	19.8
523347 2017 BD_{141}	16.1	X	181.71562	135.48187	155.19791	8.69112	0.0469493	0.17282757	3.1919839	21	—	—
523348 2017 BE_{141}	17.1	X	304.76619	203.75304	61.25262	3.46669	0.1485576	0.22849072	2.6498646	21	3 7.5	20.6
523349 2017 BF_{141}	16.0	X	250.33646	80.28130	144.27947	11.60867	0.0623712	0.17428127	3.1742094	21	—	—
523350 2017 BL_{141}	16.3	X	178.49799	55.26362	199.67475	12.44079	0.0900483	0.17433687	3.1735345	21	12 30.7	21.4
523351 2017 BQ_{141}	15.9	X	158.14260	153.76235	123.63623	19.30222	0.0794074	0.17046372	3.2214254	21	—	—
523352 2017 CK_{2}	16.5	X	329.65712	241.86972	239.09936	4.90991	0.0902269	0.19696066	2.9256097	21	—	—
523353 2017 CB_{3}	16.9	X	242.86463	15.08594	232.68253	3.28272	0.0539690	0.21159002	2.7891546	21	—	—
523354 2017 CT_{3}	16.5	X	71.89510	20.24127	70.04034	15.76823	0.0757596	0.24535487	2.5270059	21	2 2.0	19.8
523355 2017 CJ_{6}	17.0	X	253.28498	145.90321	79.71232	6.40528	0.0079197	0.21004815	2.8027873	21	—	—
523356 2017 CR_{6}	16.2	X	219.47154	109.57418	104.10792	11.64007	0.0910232	0.17567851	3.1573566	21	12 26.4	20.8
523357 2017 CS_{6}	16.3	X	280.54797	33.95565	109.02077	11.76761	0.0184832	0.17573716	3.1566540	21	12 24.4	20.6
523358 2017 CT_{7}	16.5	X	232.92738	74.35144	149.40209	16.43885	0.0595176	0.18852548	3.0122384	21	—	—
523359 2017 CE_{9}	16.3	X	229.53354	68.20946	145.12298	16.07630	0.0298779	0.18341577	3.0679264	21	—	—
523360 2017 CV_{11}	16.8	X	246.86476	218.17914	62.02443	13.80118	0.1567670	0.24217868	2.5490524	21	1 22.6	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523361 2017 CS_{20}	16.7	X	212.08451	164.15683	131.80171	26.92953	0.0774351	0.22890751	2.6466470	21	1 10.0	20.8
523362 2017 CA_{28}	17.5	X	21.48863	12.28143	97.34264	3.19277	0.0345812	0.21979849	2.7192736	21	—	—
523363 2017 CC_{33}	16.6	X	143.22259	326.47717	355.90147	4.94797	0.0121801	0.21027274	2.8007912	21	—	—
523364 2017 CE_{33}	17.5	X	26.01131	21.19438	102.34080	6.61280	0.0789298	0.23675946	2.5878026	21	1 3.9	20.5
523365 2017 CE_{34}	15.5	X	76.83060	268.91228	101.10580	20.82946	0.0620783	0.17695827	3.1421154	21	—	—
523366 2017 CO_{34}	16.3	X	40.26001	163.64297	243.88960	8.49281	0.0550738	0.18019884	3.1043313	21	—	—
523367 2017 CU_{34}	16.4	X	92.99739	289.91840	86.49390	12.91936	0.0555989	0.18438293	3.0571887	21	—	—
523368 2017 CW_{34}	16.7	X	261.71503	218.56934	57.28297	14.38742	0.1686325	0.21282779	2.7783300	21	2 5.8	21.4
523369 2017 CZ_{34}	16.9	X	266.23083	283.06600	342.58038	3.82052	0.0184008	0.21205221	2.7851003	21	2 8.5	20.7
523370 2017 CD_{35}	17.7	X	344.25617	87.75090	176.30880	6.70011	0.0977920	0.27110513	2.3643453	21	5 8.1	20.1
523371 2017 CQ_{35}	16.6	X	20.12513	132.29901	317.02904	10.59827	0.0537002	0.18920424	3.0050300	21	—	—
523372 2017 CR_{35}	16.9	X	281.43127	294.83557	326.69786	8.43949	0.1393047	0.21711149	2.7416637	21	2 6.2	20.8
523373 2017 CU_{35}	16.0	X	290.50218	261.44647	279.05634	11.98337	0.2049714	0.17956365	3.1116477	21	—	—
523374 2017 DH_{1}	16.5	X	28.79206	289.88644	137.34038	13.23792	0.0346892	0.19735807	2.9216810	21	—	—
523375 2017 DC_{2}	17.4	X	308.89349	85.43141	133.44209	12.73974	0.0593808	0.23508872	2.6000489	21	1 22.3	20.9
523376 2017 DJ_{2}	17.0	X	313.54248	118.78939	22.25885	2.18830	0.0416129	0.19397016	2.9556030	21	—	—
523377 2017 DN_{2}	16.4	X	119.06924	268.28112	59.66887	2.66995	0.0151430	0.18931545	3.0038530	21	—	—
523378 2017 DS_{5}	16.4	X	319.13336	3.81702	130.22470	15.41849	0.1237109	0.19311855	2.9642857	21	—	—
523379 2017 DV_{5}	16.7	X	82.55432	275.70595	133.45869	14.90034	0.1437025	0.22538795	2.6741284	21	1 3.7	19.9
523380 2017 DB_{12}	16.7	X	42.55630	8.86482	74.39414	7.04074	0.0585797	0.21503571	2.7592793	21	—	—
523381 2017 DF_{13}	16.3	X	84.89106	334.84000	39.57812	14.13808	0.0349759	0.19467328	2.9484820	21	—	—
523382 2017 DA_{17}	16.7	X	243.16620	154.93947	41.29026	4.89876	0.0841043	0.18622279	3.0370189	21	—	—
523383 2017 DE_{23}	17.6	X	237.09547	89.92615	172.18499	3.23858	0.0233651	0.21973602	2.7197890	21	—	—
523384 2017 DL_{26}	17.1	X	303.18120	275.13937	306.85300	4.97940	0.1497024	0.22778010	2.6553729	21	1 9.1	20.8
523385 2017 DF_{28}	16.9	X	194.74170	62.59702	234.21613	3.14375	0.0792561	0.21381421	2.7697782	21	—	—
523386 2017 DQ_{39}	16.0	X	126.52883	169.52425	142.71323	20.10486	0.0779302	0.18438036	3.0572170	21	—	—
523387 2017 DY_{41}	16.4	X	209.80456	103.78732	131.49304	16.91663	0.0180826	0.18491873	3.0512803	21	—	—
523388 2017 DW_{44}	16.3	X	287.87929	61.58720	76.11034	2.70097	0.1154893	0.17766378	3.1337917	21	12 16.9	20.3
523389 2017 DD_{47}	16.3	X	294.45323	0.94972	133.59459	11.89519	0.0484338	0.17289096	3.1912037	21	12 28.2	20.7
523390 2017 DN_{51}	15.6	X	182.37466	181.75866	99.55908	9.07638	0.1500429	0.18236344	3.0797174	21	—	—
523391 2017 DC_{56}	16.2	X	116.78311	278.23775	50.54809	10.01327	0.0526249	0.18146730	3.0898481	21	—	—
523392 2017 DK_{58}	15.9	X	20.34030	322.98307	93.20638	11.30625	0.0824925	0.18125572	3.0922522	21	—	—
523393 2017 DZ_{61}	16.5	X	277.11548	9.46594	136.47440	10.66292	0.0650048	0.17203486	3.2017819	21	12 18.1	21.0
523394 2017 DL_{62}	15.9	X	126.42427	251.10562	73.16512	11.09136	0.0403204	0.18018515	3.1044884	21	—	—
523395 2017 DS_{65}	17.5	X	198.81783	161.33622	161.52623	2.72379	0.0882551	0.23097178	2.6308542	21	1 27.5	21.3
523396 2017 DA_{80}	15.5	X	256.63545	31.92047	148.09811	10.61143	0.0463944	0.17657817	3.1466229	21	—	—
523397 2017 DA_{83}	16.3	X	305.26976	68.87626	72.75645	11.58731	0.0400134	0.18593196	3.0401850	21	—	—
523398 2017 DX_{84}	16.1	X	319.01250	355.42866	122.12498	13.73631	0.1933546	0.17924526	3.1153315	21	—	—
523399 2017 DH_{100}	16.7	X	142.05240	24.08110	336.97992	20.17523	0.1021847	0.20975063	2.8054371	21	1 24.7	21.0
523400 2017 DX_{104}	15.8	X	123.71397	265.09278	63.48688	7.04352	0.1177186	0.18985186	2.9981922	21	—	—
523401 2017 DU_{109}	16.2	X	291.80332	268.26456	221.84734	8.93969	0.1892348	0.17738965	3.1370193	21	12 4.4	19.9
523402 2017 DU_{113}	15.8	X	243.24980	151.63310	61.11918	12.70147	0.1275943	0.18939528	3.0030089	21	—	—
523403 2017 DL_{114}	15.9	X	210.89030	187.72770	50.69314	2.96310	0.0772066	0.17768834	3.1335028	21	—	—
523404 2017 DB_{116}	16.3	X	12.11886	350.49587	136.94928	22.51411	0.0496426	0.22512019	2.6762484	21	—	—
523405 2017 DC_{116}	16.6	X	308.80453	330.77827	148.99830	12.62710	0.2466590	0.18880193	3.0092973	21	12 19.9	19.8
523406 2017 DL_{118}	16.8	X	308.98769	324.32849	267.15410	13.03946	0.1188317	0.23328249	2.6134525	21	1 26.8	20.5
523407 2017 DG_{121}	15.9	X	175.14929	146.25983	131.34992	10.26171	0.0898304	0.17888786	3.1194795	21	—	—
523408 2017 DV_{121}	16.9	X	37.78501	263.33946	137.84882	10.40619	0.1071017	0.18755872	3.0225805	21	—	—
523409 2017 DZ_{121}	16.7	X	207.15978	252.31778	29.28033	7.89412	0.2733221	0.17990411	3.1077208	21	—	—
523410 2017 DD_{122}	16.7	X	12.74506	247.86892	215.60112	2.32197	0.0748900	0.19364221	2.9589391	21	—	—
523411 2017 DE_{122}	17.1	X	315.17927	218.06351	342.33529	3.43325	0.0412554	0.21126234	2.7920380	21	1 15.6	21.0
523412 2017 DJ_{122}	16.2	X	235.72084	266.71889	345.94927	14.69890	0.0756003	0.18348256	3.0671818	21	—	—
523413 2017 DN_{122}	16.2	X	292.56349	66.63458	125.64227	13.52770	0.0482386	0.19661578	2.9290299	21	—	—
523414 2017 DQ_{122}	16.2	X	132.81871	89.76528	262.62350	9.42137	0.1351454	0.19186659	2.9771666	21	1 5.1	20.6
523415 2017 DR_{122}	17.0	X	305.36002	237.14985	344.12329	7.78143	0.1458796	0.21137010	2.7910890	21	1 15.8	21.1
523416 2017 DU_{122}	16.1	X	66.34487	336.55247	42.05563	11.07916	0.0626077	0.17460522	3.1702821	21	—	—
523417 2017 DW_{122}	17.0	X	258.84238	239.31322	94.58253	7.87783	0.1246837	0.26093751	2.4253721	21	4 13.3	20.6
523418 2017 DX_{122}	16.0	X	93.97544	313.42087	79.98360	13.07499	0.0650498	0.19707573	2.9244708	21	—	—
523419 2017 DZ_{122}	16.2	X	198.19848	269.49041	28.87373	10.97973	0.0887694	0.17533498	3.1614792	21	1 9.3	21.2
523420 2017 EP_{4}	16.0	X	288.41765	283.08584	215.77333	11.50614	0.1795134	0.17563772	3.1578453	21	12 10.7	20.0
523421 2017 EC_{5}	16.7	X	40.93809	216.20292	309.27381	11.57278	0.1197756	0.24324589	2.5415913	21	3 20.7	19.6
523422 2017 EW_{5}	15.8	X	340.10802	314.79743	148.03992	17.51739	0.1754304	0.17979598	3.1089666	21	—	—
523423 2017 EE_{12}	15.3	X	357.60403	355.02844	94.99758	28.43172	0.0960827	0.17819897	3.1275140	21	—	—
523424 2017 EE_{13}	16.3	X	296.02488	9.72513	144.05745	9.93823	0.0170511	0.18150673	3.0894006	21	—	—
523425 2017 EW_{13}	15.6	X	163.79965	118.99279	180.99891	9.37422	0.0438388	0.18469060	3.0537925	21	—	—
523426 2017 EE_{14}	16.0	X	238.41571	91.48636	131.69536	16.98716	0.0973715	0.17461036	3.1702198	21	—	—
523427 2017 EH_{19}	16.0	X	194.34281	179.48052	74.43282	9.31631	0.1447598	0.17594797	3.1541321	21	—	—
523428 2017 EH_{24}	16.9	X	330.99101	126.63212	96.05550	13.60292	0.1213747	0.23238848	2.6201510	21	2 22.1	20.3
523429 2017 EJ_{24}	15.8	X	38.13237	356.54968	55.13879	21.73062	0.0320335	0.16858258	3.2453453	21	—	—
523430 2017 EK_{24}	17.0	X	221.98379	186.08691	83.94093	3.00963	0.1569981	0.19002415	2.9963797	21	—	—
523431 2017 EL_{24}	17.7	X	9.04864	178.38071	38.66992	2.52097	0.1164134	0.25404252	2.4690607	21	4 11.6	20.1
523432 2017 ES_{24}	17.3	X	40.57659	31.54198	80.56736	7.54346	0.1978273	0.22186599	2.7023539	21	1 17.9	19.7
523433 2017 ET_{24}	16.5	X	266.70081	216.03454	68.26672	12.43712	0.2250664	0.21145140	2.7903735	21	2 15.9	21.2
523434 2017 EW_{24}	17.0	X	298.85305	303.01587	311.32137	3.42659	0.1513302	0.21180137	2.7872989	21	2 14.9	21.1
523435 2017 EZ_{24}	17.2	X	288.22747	277.52851	0.00783	7.28054	0.1928515	0.21501973	2.7594160	21	2 27.8	21.2
523436 2017 EE_{25}	16.9	X	242.43356	230.65013	70.29027	6.70646	0.0530695	0.21448185	2.7640274	21	2 23.1	21.0
523437 2017 EF_{25}	16.5	X	269.62196	67.27508	144.80733	11.21228	0.0656209	0.17896917	3.1185346	21	—	—
523438 2017 EG_{25}	16.5	X	259.00071	79.60508	159.64240	11.59194	0.0751016	0.18415474	3.0597136	21	—	—
523439 2017 EH_{25}	17.1	X	241.22946	235.07086	70.81302	7.46662	0.0137094	0.21821622	2.7324026	21	3 2.9	20.9
523440 2017 EJ_{25}	16.9	X	344.46169	94.99156	90.93970	8.79234	0.1648620	0.21103035	2.7940838	21	1 19.4	20.2

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523441 2017 FM_{5}	16.6	X	323.89898	316.59000	177.70348	9.58185	0.0466364	0.18827412	3.0149188	21	—	—
523442 2017 FL_{7}	17.2	X	322.96470	23.68559	89.01880	2.35373	0.1516470	0.17874179	3.1211789	21	—	—
523443 2017 FE_{9}	17.3	X	57.26543	316.67138	130.18788	13.28755	0.0635248	0.21338855	2.7734604	21	1 9.2	20.8
523444 2017 FJ_{9}	16.0	X	210.79712	152.15285	133.14691	19.20122	0.3212790	0.18111065	3.0939032	21	1 5.0	21.9
523445 2017 FV_{10}	16.8	X	54.28287	227.92730	179.53621	13.14637	0.0434773	0.19238144	2.9718526	21	—	—
523446 2017 FK_{11}	16.3	X	183.02337	88.29901	180.60870	10.19668	0.0794264	0.17709030	3.1405536	21	—	—
523447 2017 FZ_{14}	17.4	X	19.69318	314.63600	160.67637	2.27796	0.0196978	0.20296695	2.8676040	21	—	—
523448 2017 FR_{24}	17.7	X	120.82974	138.71497	278.71053	2.80170	0.0467535	0.23526551	2.5987463	21	2 19.6	21.1
523449 2017 FX_{24}	15.5	X	144.21154	351.04259	251.18489	6.26648	0.1739738	0.12471971	3.9674608	21	11 9.9	21.9
523450 2017 FO_{42}	15.8	X	103.96807	185.13708	165.94385	18.02313	0.0851183	0.17150915	3.2083213	21	—	—
523451 2017 FE_{58}	17.3	X	9.20542	71.10122	79.35477	10.19909	0.1014665	0.21959937	2.7209172	21	1 17.6	20.5
523452 2017 FQ_{58}	17.4	X	25.46194	119.12459	43.10108	13.80470	0.1936370	0.23825585	2.5769560	21	3 2.5	20.0
523453 2017 FU_{58}	16.0	X	56.87214	262.19375	135.76137	15.53257	0.1025988	0.17920689	3.1157761	21	—	—
523454 2017 FH_{68}	16.3	X	146.77560	267.90685	61.70942	11.09894	0.1186386	0.19214631	2.9742766	21	—	—
523455 2017 FM_{68}	16.0	X	85.09952	269.43400	121.39366	12.90144	0.0656319	0.19707338	2.9244941	21	—	—
523456 2017 FC_{69}	15.8	X	162.87835	176.78960	123.34704	11.48059	0.0797443	0.18217349	3.0818578	21	—	—
523457 2017 FR_{75}	15.7	X	166.34075	161.84463	131.25254	23.13781	0.0306155	0.18189274	3.0850282	21	—	—
523458 2017 FX_{79}	16.2	X	106.07253	244.47745	100.81297	12.53850	0.1217737	0.17267721	3.1938367	21	—	—
523459 2017 FN_{83}	15.3	X	86.47564	205.71533	175.63258	18.46621	0.1404520	0.17168540	3.2061252	21	—	—
523460 2017 FU_{84}	16.1	X	108.51746	252.34009	86.04690	13.67376	0.1114057	0.18037157	3.1023490	21	—	—
523461 2017 FM_{85}	15.5	X	125.03557	243.85927	59.86154	9.39068	0.1083792	0.15304439	3.4614477	21	—	—
523462 2017 FT_{92}	16.5	X	286.60618	347.66066	293.44863	12.09757	0.1664435	0.23734498	2.5835449	21	2 23.9	20.5
523463 2017 FG_{94}	16.1	X	271.97512	315.04492	256.54579	10.11407	0.0235656	0.19186002	2.9772346	21	—	—
523464 2017 FK_{104}	16.0	X	5.09453	286.82447	151.73031	20.09084	0.1554333	0.17327004	3.1865476	21	—	—
523465 2017 FD_{107}	16.2	X	80.32611	266.20537	111.66948	17.79193	0.1208378	0.18411005	3.0602088	21	—	—
523466 2017 FX_{107}	17.1	X	258.02327	225.69939	58.21679	12.52914	0.1589996	0.22184514	2.7025232	21	2 11.5	21.6
523467 2017 FX_{117}	17.4	X	267.59899	30.26547	207.13224	6.15128	0.1713350	0.19609689	2.9341946	21	—	—
523468 2017 FK_{120}	15.7	X	128.95763	262.21553	78.51214	10.59487	0.0949699	0.18556053	3.0442406	21	—	—
523469 2017 FP_{126}	16.7	X	134.61465	282.43976	82.51592	13.80252	0.1049363	0.21152244	2.7897487	21	1 16.1	20.7
523470 2017 FA_{162}	17.6	X	355.35339	77.47628	94.41556	2.07836	0.0152490	0.21649869	2.7468348	21	2 2.4	21.3
523471 2017 FB_{162}	17.4	X	317.20151	197.64855	51.70008	2.30466	0.1881296	0.23013196	2.6372507	21	2 24.5	20.9
523472 2017 FJ_{162}	17.3	X	249.98239	336.76663	324.79742	1.15593	0.0551775	0.22191482	2.7019575	21	2 27.9	21.0
523473 2017 FK_{162}	16.8	X	265.79958	252.42708	335.35658	0.25470	0.1115976	0.18463936	3.0543575	21	—	—
523474 2017 FL_{162}	16.0	X	202.63845	284.40440	20.79146	15.00518	0.2497539	0.17853795	3.1235541	21	1 25.7	21.7
523475 2017 FM_{162}	17.2	X	314.97246	14.65792	230.27171	4.59607	0.0190920	0.22837785	2.6507376	21	3 10.2	20.7
523476 2017 FO_{162}	16.8	X	258.71414	206.06635	45.68224	6.32535	0.1859805	0.18560674	3.0437354	21	1 4.8	21.9
523477 2017 FQ_{162}	16.1	X	192.23874	161.87694	144.47345	7.90279	0.0925603	0.17267409	3.1938751	21	1 11.2	21.1
523478 2017 FR_{162}	16.2	X	289.08668	12.96913	190.84398	17.19654	0.1451074	0.17845262	3.1245497	21	—	—
523479 2017 FS_{162}	16.5	X	152.14068	329.93736	75.08803	13.84064	0.1120590	0.23367525	2.6105233	21	3 30.7	20.6
523480 2017 FT_{162}	17.1	X	223.73360	252.28391	23.18777	12.25642	0.0458703	0.19658075	2.9293779	21	1 4.3	21.6
523481 2017 FU_{162}	16.2	X	212.41068	157.38446	139.15987	9.47555	0.1320740	0.18028964	3.1032889	21	1 17.9	21.2
523482 2017 FW_{162}	17.3	X	70.88088	242.74156	242.04066	5.11444	0.1016076	0.22561963	2.6722974	21	3 19.5	20.5
523483 2017 FX_{162}	16.6	X	246.65922	51.45568	215.65933	5.57544	0.0668834	0.18725553	3.0258423	21	1 17.1	21.1
523484 2017 GG_{3}	16.9	X	234.87014	64.68779	178.02420	12.66442	0.1268486	0.17582154	3.1556439	21	—	—
523485 2017 GV_{9}	17.0	X	66.13490	256.09922	222.65554	10.90258	0.1076939	0.22332021	2.6906096	21	3 3.1	20.4
523486 2017 GY_{9}	16.8	X	220.39923	49.53073	239.15181	4.23047	0.1189550	0.18090132	3.0962895	21	1 15.8	21.8
523487 2017 GF_{10}	17.2	X	279.96719	112.51164	175.00217	5.59305	0.0823466	0.21976803	2.7195249	21	3 14.5	21.1
523488 2017 GL_{10}	16.4	X	294.39962	83.73294	92.30757	8.63992	0.1342673	0.17293872	3.1906162	21	—	—
523489 2017 GM_{10}	15.9	X	208.65974	345.56008	303.37329	7.79492	0.0598665	0.17354351	3.1831991	21	1 7.7	20.6
523490 2017 GR_{10}	16.7	X	20.31511	340.01037	181.96248	12.33589	0.1061204	0.21273047	2.7791773	21	2 17.9	20.0
523491 2017 GV_{10}	15.7	X	166.03034	184.57257	148.94358	15.21960	0.0989267	0.17368044	3.1815258	21	1 16.8	20.6
523492 2017 HQ_{8}	16.5	X	92.74303	228.73976	158.83663	9.80201	0.1116921	0.18809254	3.0168590	21	—	—
523493 2017 HM_{16}	16.3	X	187.57657	202.29010	103.74804	4.11443	0.0763072	0.17441963	3.1725306	21	1 5.9	21.2
523494 2017 HQ_{23}	16.5	X	272.34233	211.53241	74.45396	15.39872	0.1611544	0.22757206	2.6569910	21	3 1.4	20.8
523495 2017 HE_{25}	15.7	X	231.38183	62.39537	203.47505	15.56757	0.0496033	0.17297741	3.1901404	21	1 2.4	20.7
523496 2017 HX_{40}	17.1	X	261.33003	133.66416	178.18755	2.64814	0.1396125	0.21496841	2.7598551	21	3 18.1	21.1
523497 2017 HG_{62}	17.2	X	291.34200	84.76324	120.27063	16.25163	0.1962735	0.17798325	3.1300406	21	—	—
523498 2017 HH_{62}	17.1	X	308.50160	121.33635	68.15480	2.52864	0.0921757	0.18623431	3.0368937	21	—	—
523499 2017 HJ_{62}	17.4	X	207.89006	282.29486	81.88248	3.79938	0.1227075	0.22668015	2.6639560	21	3 31.5	21.5
523500 2017 HL_{62}	16.7	X	241.12673	105.11435	164.12221	0.91362	0.1481165	0.18019193	3.1044106	21	1 11.9	21.7
523501 2017 HP_{62}	17.7	X	208.31373	124.79946	273.97992	0.76790	0.1372681	0.24696176	2.5160325	21	5 10.6	21.6
523502 2017 HS_{62}	16.6	X	150.25927	247.25991	121.42951	11.80712	0.0623782	0.18228719	3.0805762	21	2 7.4	21.0
523503 2017 HW_{62}	16.2	X	219.26078	155.28831	149.81351	18.34403	0.1520425	0.17902818	3.1178493	21	2 2.2	21.4
523504 2017 JV_{3}	15.6	X	202.66585	50.35706	257.11870	15.21092	0.0798892	0.18054182	3.1003984	21	1 17.9	20.5
523505 2017 JM_{4}	15.8	X	210.68328	64.22347	221.63722	15.63015	0.2102466	0.17179951	3.2047054	21	1 3.6	21.5
523506 2017 JK_{6}	16.7	X	283.74232	62.35771	245.04328	9.64004	0.0636786	0.22512030	2.6762475	21	4 13.3	20.5
523507 2017 KO_{36}	16.4	X	184.83488	169.54671	149.22614	2.38298	0.0281830	0.16943245	3.2344839	21	1 16.1	21.0
523508 2017 KP_{37}	16.8	X	244.92095	281.25307	48.48997	4.12250	0.0952666	0.21209463	2.7847290	21	3 28.9	20.9
523509 2017 LJ	16.7	X	316.76446	163.23745	183.25742	32.36052	0.1523048	0.23419053	2.6066927	21	7 12.1	20.6
523510 2017 NB_{1}	17.5	X	8.47470	289.68899	319.86690	5.92702	0.1228236	0.22398958	2.6852465	21	5 31.2	20.5
523511 2017 NT_{2}	16.2	X	240.66777	34.50203	310.72039	10.24588	0.0814356	0.18328689	3.0693644	21	4 9.6	21.0
523512 2017 NQ_{4}	17.0	X	37.72892	121.84233	129.91564	14.71916	0.1776005	0.23931339	2.5693585	21	8 7.1	19.5
523513 2017 OE_{6}	17.4	X	278.66989	347.24180	98.33420	7.29281	0.1139647	0.26835756	2.3804560	21	10 17.2	20.1
523514 2017 OW_{9}	17.1	X	274.29450	112.66953	277.10161	11.80784	0.1635483	0.23314037	2.6145145	21	7 7.9	20.5
523515 2017 OG_{10}	16.5	X	9.67060	317.67732	241.50841	8.60523	0.0679027	0.18583446	3.0412484	21	3 27.1	20.5
523516 2017 OD_{15}	17.5	X	175.49215	129.56176	20.09919	1.57873	0.1096718	0.27160084	2.3614675	21	9 1.9	21.0
523517 2017 OY_{24}	16.5	X	10.96403	3.43412	269.80683	12.01689	0.0967267	0.22878914	2.6475598	21	7 9.2	19.4
523518 2017 OS_{29}	17.1	X	170.14680	233.07901	278.72439	11.75194	0.1663905	0.24360866	2.5390674	21	8 22.2	21.5
523519 2017 OZ_{34}	16.7	X	8.69277	329.24915	290.29739	6.63853	0.1584741	0.21834008	2.7313692	21	6 17.8	19.3
523520 2017 OY_{36}	16.4	X	352.12856	348.31885	331.66748	11.24976	0.1679632	0.23558100	2.5964255	21	8 16.9	18.6

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523521 2017 OA_{43}	17.2	X	300.18972	145.57642	260.90109	6.00299	0.1146979	0.25189975	2.4830429	21	9 15.6	20.0
523522 2017 OC_{44}	16.6	X	303.63503	31.91327	257.13191	5.30622	0.1904948	0.18993231	2.9973456	21	3 31.5	20.8
523523 2017 OR_{45}	16.5	X	52.87037	355.63701	237.87942	8.10542	0.1638711	0.22773718	2.6557065	21	7 31.0	19.8
523524 2017 OA_{51}	17.5	X	357.39552	352.24364	297.08599	4.15347	0.1627259	0.22664501	2.6642314	21	7 9.5	19.9
523525 2017 OJ_{59}	16.0	X	263.65607	18.06482	333.51518	10.83196	0.0667444	0.19236683	2.9720031	21	5 16.8	20.4
523526 2017 OB_{60}	17.6	X	233.68450	72.59638	354.42413	1.71753	0.0637645	0.22123771	2.7074676	21	7 21.7	21.4
523527 2017 OH_{61}	16.4	X	306.67562	296.99948	339.23033	11.43307	0.1204703	0.17760572	3.1344746	21	3 29.6	20.8
523528 2017 OR_{64}	16.8	X	193.03674	232.46568	204.42705	1.35318	0.0183910	0.20474670	2.8509621	21	6 17.2	20.7
523529 2017 OR_{65}	16.4	X	347.69205	251.54353	347.91362	16.26829	0.0806157	0.17587108	3.1550513	21	4 12.5	20.7
523530 2017 OA_{66}	16.8	X	33.05615	137.33197	166.88673	15.08971	0.0692667	0.23570617	2.5955063	21	9 28.8	20.0
523531 2017 OR_{66}	16.1	X	284.09242	156.53311	171.56735	16.44421	0.0468057	0.17016304	3.2252192	21	5 23.1	20.9
523532 2017 PY_{5}	17.5	X	267.80482	251.47459	141.50524	2.66716	0.0962558	0.22290538	2.6939468	21	7 14.2	21.2
523533 2017 PA_{6}	17.0	X	270.47607	235.61631	138.49514	4.21495	0.1069770	0.21295464	2.7772266	21	6 21.1	20.9
523534 2017 PA_{7}	16.8	X	283.27824	310.13045	354.04804	2.93914	0.0987257	0.18035473	3.1025421	21	4 10.2	21.2
523535 2017 PC_{21}	17.2	X	133.71308	92.09208	93.23839	4.22404	0.1017230	0.24073771	2.5592142	21	9 3.2	20.9
523536 2017 PZ_{23}	16.5	X	350.11085	225.05020	0.14919	5.42839	0.0967474	0.16966005	3.2315905	21	4 3.5	20.7
523537 2017 QT_{3}	17.6	X	38.23098	132.23990	164.27917	6.82138	0.1213124	0.26218839	2.4176518	21	10 7.2	20.3
523538 2017 QA_{21}	17.0	X	132.84183	294.32985	197.11660	4.08822	0.0703741	0.21055944	2.7982482	21	6 17.9	21.0
523539 2017 QJ_{22}	18.0	X	207.44098	265.40149	189.04979	1.60615	0.0452159	0.23564887	2.5959270	21	7 27.2	21.5
523540 2017 SP_{22}	16.0	X	265.59579	29.61065	327.05194	8.46353	0.0901469	0.17749584	3.1357681	21	5 24.8	20.7
523541 2017 SJ_{29}	17.3	X	26.18781	215.01856	120.20110	8.20207	0.1716799	0.24070039	2.5594787	21	11 17.1	20.4
523542 2017 SN_{30}	16.7	X	42.22137	193.97360	44.58936	9.74369	0.0220335	0.17802685	3.1295294	21	7 5.0	21.1
523543 2017 SF_{34}	17.8	X	7.19699	113.65915	200.59805	10.09795	0.1400823	0.24087479	2.5582432	21	9 3.7	20.5
523544 2017 SC_{37}	16.7	X	303.23135	19.74358	297.70647	11.73331	0.1008088	0.18911201	3.0060070	21	5 20.6	20.9
523545 2017 UH_{30}	17.4	X	54.33464	14.48315	250.61706	4.25840	0.1662208	0.23118619	2.6292272	21	9 16.7	20.8
523546 2017 VP_{9}	16.6	X	300.02998	14.29530	319.16428	7.99232	0.0775779	0.17893336	3.1189507	21	6 11.8	20.9
523547 2017 VH_{11}	16.4	X	196.43620	30.18605	45.75343	9.45499	0.1271184	0.18482150	3.0523504	21	6 16.8	21.3
523548 2017 VN_{21}	16.5	X	176.98650	241.92275	231.90712	9.14975	0.0790724	0.18077524	3.0977290	21	7 13.5	21.4
523549 2017 VK_{24}	16.2	X	346.02023	38.37475	240.14434	9.61161	0.1857648	0.17876896	3.1208626	21	5 30.4	19.5
523550 2017 VC_{27}	17.9	X	252.51943	239.96957	263.92355	2.10714	0.1266254	0.25205394	2.4820302	21	11 18.7	21.0
523551 2017 VJ_{31}	17.9	X	12.61912	255.89726	172.99440	5.47412	0.0545058	0.29359897	2.2419867	21	—	—
523552 2017 WP_{25}	16.1	X	207.41353	332.23261	127.98754	18.27976	0.1714660	0.17514974	3.1637079	21	7 25.6	21.1
523553 2017 XH_{3}	15.8	X	213.07803	194.18177	240.21169	14.61716	0.1678945	0.17262009	3.1945412	21	6 28.1	21.1
523554 2017 XS_{12}	17.3	X	104.82779	137.76439	112.04936	1.11257	0.0450019	0.22794371	2.6541022	21	10 15.9	20.8
523555 2017 XV_{17}	16.9	X	117.04216	194.28662	356.32408	2.48974	0.0499038	0.18567867	3.0429492	21	8 12.7	21.3
523556 2017 XY_{21}	17.3	X	221.68522	144.20024	6.38474	4.05887	0.0304817	0.23518728	2.5993225	21	10 29.1	20.8
523557 2017 XZ_{28}	16.9	X	225.42214	348.50874	98.15323	1.87551	0.1669181	0.18536211	3.0464128	21	7 26.7	21.6
523558 2017 XQ_{30}	16.8	X	318.49206	265.42910	68.63590	10.42170	0.0440641	0.18029555	3.1032210	21	7 13.9	21.1
523559 2017 XM_{45}	16.6	X	282.93692	142.09149	232.52502	8.14566	0.0158624	0.17837789	3.1254223	21	7 19.4	21.1
523560 2017 XM_{55}	17.3	X	192.50268	133.85858	47.79890	6.49544	0.1089387	0.22748670	2.6576556	21	10 27.4	21.2
523561 2017 YH_{2}	16.5	X	348.96139	286.73295	99.65766	13.56953	0.1857162	0.23296834	2.6158014	21	11 23.4	19.1
523562 2017 YR_{9}	17.5	X	344.72170	358.97407	85.18239	6.91976	0.0647616	0.27804905	2.3248152	21	—	—
523563 2017 YM_{11}	17.1	X	30.36781	201.85881	141.77946	6.22072	0.1198151	0.23825614	2.5769539	21	11 24.8	20.3
523564 2018 AF_{14}	16.8	X	359.52520	122.79362	289.76571	14.30490	0.1273517	0.23233308	2.6205675	21	—	—
523565 2018 CA_{6}	16.5	X	318.56775	69.06629	35.31554	10.00826	0.0980871	0.24140031	2.5545289	21	—	—
523566 2018 CS_{11}	17.6	X	212.97487	58.32761	185.59465	5.80857	0.1370261	0.24253825	2.5465325	21	—	—
523567 2018 CW_{15}	17.1	X	279.91384	61.76421	128.73513	14.51037	0.1793721	0.24257509	2.5462747	21	—	—
523568 2018 CD_{16}	16.9	X	275.77865	243.04022	251.63972	8.25836	0.1482484	0.21848872	2.7301303	21	11 30.2	20.2
523569 2018 DH_{2}	16.8	X	258.58294	16.74107	156.26812	13.71301	0.1088517	0.22696025	2.6617638	21	—	—
523570 2018 DL_{2}	16.2	X	145.44410	285.42024	303.78311	5.89214	0.0848620	0.18430658	3.0580329	21	10 29.6	21.0
523571 2018 DY_{2}	17.3	X	285.48502	233.93215	253.39274	2.30547	0.0371957	0.21394664	2.7686352	21	12 17.5	20.9
523572 2018 DD_{3}	16.0	X	217.15218	277.70941	228.66218	2.52879	0.1190465	0.17196246	3.2026805	21	10 1.5	21.0
523573 2018 EM_{6}	16.1	X	230.17190	45.30874	101.43765	8.42434	0.1604304	0.17930109	3.1146848	21	10 16.6	21.0
523574 2018 EX_{6}	16.0	X	170.78240	255.46113	352.49366	24.04546	0.3362108	0.17933227	3.1143237	21	12 6.5	22.2
523575 2018 EY_{6}	16.5	X	304.92650	348.96039	138.84709	13.22351	0.1242174	0.22773588	2.6557167	21	—	—
523576 2018 ED_{7}	17.4	X	328.49150	96.83990	73.96002	7.82173	0.1260037	0.27026600	2.3692367	21	—	—
523577 2018 EW_{7}	17.0	X	323.07516	45.85718	63.64653	12.01653	0.1558368	0.23185137	2.6241960	21	—	—
523578 2018 EO_{8}	16.3	X	186.29218	116.75300	117.31786	26.27890	0.3393001	0.17915243	3.1164075	21	12 9.6	22.3
523579 2018 EN_{9}	17.1	X	286.35054	161.65180	348.88214	8.24512	0.2583153	0.22634563	2.6665801	21	12 26.8	19.7
523580 2018 FP	18.2	X	228.52816	28.40909	9.53666	21.54682	0.0789982	0.37602704	1.9010345	21	5 19.8	20.9
523581 2018 FL_{5}	17.1	X	255.51259	101.27435	163.98114	27.72341	0.4079656	0.23610981	2.5925474	21	1 1.4	22.6
523582 2018 FN_{5}	17.9	X	182.09416	287.04622	159.94677	24.06601	0.0535285	0.36944252	1.9235558	21	6 15.9	20.8
523583 2018 FZ_{21}	18.0	X	318.89301	182.30402	76.35225	4.23013	0.1759960	0.31094251	2.1578238	21	2 28.3	20.4
523584 2018 FE_{27}	16.9	X	273.70895	210.76748	351.67485	12.58960	0.2162233	0.23780509	2.5802114	21	—	—
523585 1998 MW_{5}	19.0	X	233.70794	26.79563	80.23235	6.29067	0.3628631	0.95177272	1.0235614	21	—	—
523586 1999 LK_{1}	22.1	X	326.24527	223.62115	239.95400	11.92674	0.3326267	1.14128574	0.9068590	21	—	—
523587 1999 VQ_{11}	17.5	X	213.21359	353.23955	26.67969	7.95132	0.5976757	0.20984178	2.8046246	21	4 15.2	23.7
523588 2000 CN_{105}	5.6	X	129.46496	6.25517	28.77615	3.42486	0.0998312	0.00334198	44.3064667	21	3 13.9	22.4
523589 2001 HA_{4}	17.7	X	226.71877	95.64832	354.07068	17.17924	0.7935297	0.22373489	2.6872840	21	7 2.8	24.3
523590 2001 QC_{96}	20.9	X	260.28428	277.42779	142.96226	20.58585	0.3796204	0.63858012	1.3355468	21	7 7.2	21.9
523591 2001 QD_{298}	6.4	X	65.02447	204.79592	70.63961	5.02367	0.0603536	0.00349518	43.0021277	21	9 12.2	22.6
523592 2001 SK_{276}	17.5	X	159.29972	119.40677	297.68763	20.74373	0.5932240	0.17312969	3.1882695	21	5 1.9	24.5
523593 2001 TZ_{1}	19.0	X	342.78422	149.30141	189.87105	39.60983	0.4396211	0.34563846	2.0108886	21	11 6.4	19.8
523594 2001 YO_{3}	22.8	X	248.22171	129.63276	272.76855	13.12555	0.1658133	0.63573303	1.3395313	21	6 15.7	22.4
523595 2002 OS_{4}	18.3	X	0.86308	102.16070	289.44671	26.80824	0.4535833	0.36938544	1.9237540	21	—	—
523596 2002 PH_{80}	19.6	X	330.43398	331.31855	351.15149	6.42350	0.4584366	0.30859226	2.1687660	21	4 26.2	21.3
523597 2002 QX_{47}	8.8	X	71.66694	4.46955	275.86753	7.27568	0.3742240	0.00763604	25.5401703	21	10 27.3	23.0
523598 2003 ED_{50}	20.8	X	276.86549	93.99182	173.50870	33.73332	0.5466666	0.58496577	1.4159538	21	—	—
523599 2003 RM	19.6	X	216.19637	324.61711	336.65512	10.85864	0.6011057	0.19729630	2.9222908	21	1 24.7	26.1
523600 2003 RC_{2}	19.5	X	121.48260	273.16395	165.64395	42.31775	0.3711469	0.52336366	1.5249900	21	4 8.3	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523601 2003 UY_{413}	5.5	X	48.22881	345.58313	341.10603	20.70498	0.2136541	0.00301123	47.4941083	21	10 21.9	21.8
523602 2004 LH	18.8	X	116.77335	341.46615	248.67687	39.54584	0.3269872	0.42046613	1.7646099	21	11 7.3	22.2
523603 2004 QJ_{7}	18.6	X	174.80725	63.57945	25.54463	14.50707	0.3301726	0.56825073	1.4435862	21	6 6.1	20.6
523604 2004 QB_{17}	18.5	X	265.84925	148.75487	289.05952	4.82185	0.5031209	0.28384877	2.2930387	21	7 20.1	22.3
523605 2004 RX_{10}	21.3	X	235.62449	334.11375	173.62269	5.95744	0.3513821	1.11719288	0.9198506	21	—	—
523606 2005 CJ	20.2	X	52.14619	81.97398	357.85230	1.08246	0.5253394	0.42592955	1.7494876	21	—	—
523607 2005 CS_{6}	17.9	X	288.01889	268.89341	313.95423	23.50602	0.5499585	0.23314655	2.6144684	21	—	—
523608 2005 EZ_{29}	20.3	X	117.58910	22.10766	158.45668	6.85694	0.4238641	0.38216973	1.8806091	21	9 5.9	23.5
523609 2005 PJ_{2}	19.4	X	347.62677	128.88364	326.45238	17.42494	0.6593430	0.75158602	1.1980738	21	—	—
523610 2005 TG	18.1	X	220.56212	190.83842	230.92083	11.10871	0.5402181	0.22629079	2.6670109	21	6 4.8	23.8
523611 2005 UY_{5}	18.6	X	311.53996	261.98505	56.52340	7.13315	0.4176140	0.29661952	2.2267403	21	4 8.7	21.5
523612 2006 BH	18.2	X	221.54508	249.19618	306.09913	31.08023	0.6445850	0.16914268	3.2381770	21	10 11.0	25.4
523613 2006 SJ_{198}	17.7	X	233.25350	212.63296	266.68376	2.42301	0.4550681	0.32580781	2.0916791	21	8 23.2	21.5
523614 2006 TH_{7}	19.1	X	222.97148	337.79041	161.72877	18.45993	0.8392090	0.24675749	2.5174208	21	8 20.9	25.2
523615 2006 UO_{321}	7.5	X	45.82737	266.68478	65.96832	2.32665	0.0430283	0.00337652	44.0037813	21	10 16.6	23.8
523616 2007 LC_{15}	18.6	X	148.55961	341.18731	107.07604	28.37926	0.7383660	0.65495219	1.3131963	21	6 12.6	21.4
523617 2007 PS_{45}	5.6	X	34.75041	190.27550	130.89317	19.50634	0.2021798	0.00296756	47.9589918	21	10 11.9	21.8
523618 2007 RT_{15}	6.8	X	35.39763	275.51127	82.20128	12.93579	0.2329134	0.00396593	39.5280752	21	11 18.2	22.0
523619 2007 RX_{19}	18.5	X	334.43459	97.09396	349.44587	40.46572	0.5325311	0.36026977	1.9560690	21	—	—
523620 2007 RH_{283}	8.6	X	165.88842	329.67880	286.37743	21.39352	0.3401830	0.01551201	15.9229693	21	12 2.2	21.9
523621 2007 TK_{8}	21.2	X	171.90440	171.98099	217.03078	3.09734	0.1598081	0.53831154	1.4966271	21	2 7.0	21.4
523622 2007 TG_{422}	6.5	X	0.48349	285.51837	112.83452	18.62127	0.9313442	0.00008376	517.3220502	21	12 9.1	22.4
523623 2008 CB_{22}	19.6	X	262.59988	33.37610	51.24393	7.27294	0.6533996	0.27099472	2.3649874	21	7 14.6	24.4
523624 2008 CT_{190}	5.8	X	9.15851	47.51420	103.76260	38.89330	0.3375155	0.00260187	52.3534695	21	3 22.9	21.4
523625 2008 DG_{17}	19.6	X	118.89945	215.05272	324.38154	41.10766	0.4495179	0.39556788	1.8379007	21	8 26.6	23.2
523626 2008 PH_{9}	16.6	X	249.71909	247.92086	341.25434	35.61594	0.5600638	0.19817376	2.9136583	21	—	—
523627 2008 QB_{43}	6.0	X	341.51568	74.85655	320.34793	26.30370	0.1001407	0.00361957	42.0111284	21	9 23.6	21.9
523628 2008 RT_{26}	19.5	X	282.88023	30.76395	7.06829	2.22211	0.4618409	0.29303766	2.2448488	21	6 16.8	22.7
523629 2008 SP_{266}	5.9	X	6.79835	236.59572	141.05212	19.48107	0.1252968	0.00372470	41.2168991	21	10 25.9	21.5
523630 2009 OG	16.2	X	231.85987	114.15867	309.40151	48.38798	0.8584613	0.22165860	2.7040393	21	6 7.9	23.3
523631 2009 SX_{1}	18.9	X	45.01756	115.40021	335.03309	8.29239	0.4470808	0.43611079	1.7221520	21	—	—
523632 2009 UX_{17}	21.5	X	275.13202	278.48435	216.11737	10.80460	0.0834643	0.76003725	1.1891760	21	—	—
523633 2009 XR_{2}	18.6	X	146.91439	131.06789	271.49106	26.72055	0.2888677	0.54132892	1.4910604	21	1 29.0	19.5
523634 2010 AH_{2}	5.8	X	320.79861	56.64462	127.67523	18.07244	0.0408164	0.00385206	40.3033240	21	2 11.1	21.7
523635 2010 DN_{93}	4.8	X	45.13904	30.42164	91.24444	40.59909	0.1816234	0.00242526	54.8652464	21	4 14.4	21.8
523636 2010 EX_{119}	19.3	X	84.00465	22.28932	211.83698	15.56726	0.5950972	0.37541374	1.9031044	21	10 30.9	23.2
523637 2010 LT_{108}	19.7	X	70.77501	9.43152	161.13708	31.87365	0.3707782	0.62886669	1.3492642	21	7 10.5	21.2
523638 2010 MQ_{1}	20.4	X	59.30587	285.57560	284.46146	37.33498	0.5075760	0.36513639	1.9386495	21	8 16.0	23.9
523639 2010 RE_{64}	4.4	X	323.29471	19.60091	67.43012	13.53670	0.4475297	0.00182736	66.2603323	21	10 2.0	21.5
523640 2010 RO_{64}	5.2	X	8.55677	311.85417	60.83490	17.04869	0.1272901	0.00304353	47.1575515	21	10 22.8	21.4
523641 2010 RO_{82}	17.0	X	220.62086	66.52266	21.25447	18.08825	0.6079790	0.24807504	2.5084994	21	7 3.5	22.8
523642 2010 SS_{43}	5.9	X	322.20972	110.20524	341.25524	34.42118	0.2172211	0.00321590	45.4569992	21	10 10.9	21.9
523643 2010 TY_{53}	5.7	X	328.52802	2.79110	111.22843	22.46124	0.4589045	0.00403309	39.0880725	21	11 7.8	20.2
523644 2010 VX_{11}	6.4	X	349.77753	292.12408	170.43907	22.31028	0.2832421	0.00399482	39.3372767	21	12 17.9	21.0
523645 2010 VK_{201}	5.0	X	172.21276	90.12512	156.25002	28.83524	0.1124079	0.00346879	43.2199684	21	11 27.7	21.9
523646 2010 VL_{201}	5.9	X	340.76181	341.53580	104.02034	5.53101	0.0445204	0.00447860	36.4508611	21	11 28.3	21.3
523647 2010 VV_{224}	6.0	X	344.75829	215.99642	225.20864	25.09286	0.1570861	0.00336012	44.1468407	21	11 23.2	21.7
523648 2010 WP_{8}	18.3	X	237.56511	218.34786	269.79788	18.15422	0.4421351	0.34748137	2.0037723	21	8 30.3	22.1
523649 2010 XZ_{78}	13.2	X	158.13785	228.40883	252.31063	39.17950	0.2922459	0.04649790	7.6591484	21	7 1.7	23.2
523650 2011 GQ_{61}	18.4	X	49.41280	155.07828	333.51817	65.16821	0.4125149	0.49158204	1.5900302	21	—	—
523651 2011 GA_{62}	18.9	X	315.19329	12.51759	264.27353	9.97376	0.4981930	0.28493481	2.2872083	21	2 4.1	23.0
523652 2011 LZ_{28}	7.1	X	352.88396	99.73329	315.18253	13.47616	0.5624327	0.00193194	63.8470267	21	10 13.6	21.8
523653 2011 OA_{60}	5.1	X	25.94482	143.15977	129.45640	23.00183	0.1466610	0.00373016	41.1766572	21	7 30.6	20.6
523654 2011 SR_{5}	20.7	X	192.09104	305.54497	180.12130	29.12058	0.7058083	0.77059679	1.1782875	21	8 4.7	23.3
523655 2011 VJ_{24}	5.9	X	350.68036	120.83355	12.67639	9.54117	0.1877424	0.00398808	39.3815806	21	1 21.1	21.0
523656 2011 WO_{4}	19.3	X	50.25059	236.01477	225.18118	60.92955	0.4974181	0.43029233	1.7376420	21	—	—
523657 2012 DJ_{4}	20.4	X	10.99972	271.48143	155.28772	7.84560	0.3395842	0.40979308	1.7951179	21	—	—
523658 2012 DW_{98}	6.0	X	356.96908	0.95007	209.72064	19.05039	0.0319793	0.00375070	41.0262224	21	4 17.0	22.0
523659 2012 HG_{84}	5.4	X	323.15544	25.12301	266.43196	10.85995	0.0919713	0.00347274	43.1871615	21	5 28.8	21.4
523660 2012 KY_{41}	18.1	X	316.80314	144.15127	220.89342	23.05526	0.4720285	0.34028024	2.0319432	21	6 6.6	20.1
523661 2012 LF_{11}	20.8	X	327.00146	263.57669	222.16884	11.65680	0.4831989	1.16045821	0.8968429	21	—	—
523662 2012 MU_{2}	20.8	X	22.41532	16.63727	250.31538	11.21950	0.5140401	0.33454248	2.0551106	21	10 15.1	22.9
523663 2012 OZ	20.1	X	301.19670	224.76869	123.67610	21.84526	0.3962277	0.31817005	2.1250208	21	5 16.2	23.4
523664 2012 OD_{1}	18.6	X	63.45976	224.36454	303.74210	42.27446	0.5026349	1.30621001	0.8288209	21	8 1.7	16.9
523665 2012 RF_{15}	19.9	X	0.85977	297.90139	29.03052	5.36946	0.4074598	0.33461880	2.0547981	21	11 22.9	20.9
523666 2012 RS_{16}	21.2	X	334.27473	99.66590	219.00555	5.02762	0.4359518	0.32388317	2.0999573	21	5 3.8	22.5
523667 2012 TM_{139}	19.7	X	325.38589	45.61729	283.88644	4.49401	0.4422524	0.32035883	2.1153306	21	5 1.6	21.7
523668 2012 UV_{27}	19.7	X	353.96056	349.45417	305.46350	5.17161	0.4396601	0.32289587	2.1042357	21	5 23.1	19.1
523669 2012 XS_{134}	18.4	X	285.14289	290.57947	73.64692	20.39826	0.4692968	0.30876583	2.1679531	21	5 10.2	22.1
523670 2013 EP_{41}	19.3	X	98.77878	173.07841	166.70911	23.06543	0.2511681	0.44133150	1.7085437	21	—	—
523671 2013 FZ_{27}	4.3	X	283.37195	343.51445	285.20304	14.05687	0.2182886	0.00297924	47.8334885	21	3 1.4	21.1
523672 2013 FJ_{28}	8.1	X	329.98818	78.88224	184.94555	21.87923	0.4437044	0.00475624	35.0181759	21	3 31.3	22.0
523673 2013 MZ_{11}	8.0	X	326.90978	18.74793	19.92632	6.36073	0.3102998	0.00815327	24.4482810	21	9 3.4	20.8
523674 2013 MA_{12}	5.6	X	261.17530	311.32334	114.97358	23.32819	0.0641780	0.00364472	41.8176833	21	8 14.9	21.9
523675 2013 PV_{74}	5.6	X	31.71859	238.65178	49.07816	2.27600	0.2341469	0.00274544	50.5119836	21	9 1.5	21.8
523676 2013 UL_{10}	12.8	X	81.85497	186.16811	233.97814	19.16456	0.3775026	0.03156798	9.9152780	21	3 16.5	23.1
523677 2013 UF_{15}	6.2	X	6.74910	8.54581	39.34653	12.36915	0.1656087	0.00357706	42.3433469	21	11 19.2	21.7
523678 2013 XB_{26}	5.3	X	311.24093	295.83074	292.41474	3.59083	0.0058318	0.00321540	45.4617299	21	3 17.8	21.8
523679 2013 YB_{38}	17.8	X	45.40901	306.36905	248.79117	22.98457	0.4969099	0.29570020	2.2313531	21	7 20.4	20.4
523680 2013 YJ_{151}	5.6	X	13.35430	141.10154	302.86795	33.70510	0.4349354	0.00160790	72.1601438	21	1 20.6	21.9

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523681 2014 BV_{64}	4.7	X	264.46858	349.27773	279.33202	15.45463	0.1466917	0.00320945	45.5179178	21	2 19.2	21.5
523682 2014 CN_{23}	8.8	X	268.34625	11.09353	359.90731	14.14459	0.3076275	0.01487390	16.3751846	21	5 23.9	21.4
523683 2014 CP_{23}	6.1	X	359.01465	21.60706	145.88669	28.55201	0.2661227	0.00263246	51.9471733	21	3 7.5	21.9
523684 2014 CQ_{23}	5.7	X	303.05907	239.08130	30.59580	8.71260	0.1597819	0.00317612	45.8358242	21	4 6.4	22.0
523685 2014 DN_{112}	20.1	X	33.19639	145.84356	260.22566	4.29929	0.4936420	0.39208891	1.8487563	21	—	—
523686 2014 DB_{143}	9.1	X	70.79265	339.30025	207.89832	21.34124	0.0898714	0.01083763	20.2230461	21	6 17.8	22.1
523687 2014 DF_{143}	5.5	X	102.34971	66.11828	35.58971	23.75279	0.0462829	0.00354787	42.5752763	21	4 20.6	21.8
523688 2014 DK_{143}	5.5	X	93.55917	336.35632	153.64456	10.86675	0.1567066	0.00358023	42.3183919	21	5 24.2	21.9
523689 2014 DL_{143}	6.2	X	338.65063	210.00102	18.88752	9.38873	0.2169286	0.00308123	46.7720759	21	4 5.3	22.0
523690 2014 DN_{143}	5.3	X	281.08315	323.67168	303.80723	6.79227	0.0693565	0.00306882	46.8980775	21	3 18.3	22.0
523691 2014 DO_{143}	5.7	X	354.10381	331.32577	180.47149	4.19375	0.0964509	0.00303372	47.2590934	21	2 12.1	22.0
523692 2014 EZ_{51}	3.8	X	269.35218	330.47281	27.64273	10.28961	0.2302491	0.00260467	52.3159733	21	5 21.4	21.2
523693 2014 FT_{71}	5.0	X	239.28506	351.22116	346.54688	27.99218	0.1456954	0.00343724	43.4840120	21	4 3.1	21.8
523694 2014 GF_{50}	20.7	X	217.34813	202.88071	86.25750	8.18438	0.2146037	0.51478231	1.5418909	21	—	—
523695 2014 GS_{53}	6.4	X	116.36160	332.28100	132.42700	15.17399	0.0958377	0.00509621	33.4429333	21	5 15.2	21.9
523696 2014 GW_{53}	5.5	X	296.48315	240.33596	54.84534	21.92103	0.0858995	0.00371751	41.2700141	21	5 5.1	21.5
523697 2014 GY_{53}	6.8	X	39.87937	22.20275	137.44037	16.18784	0.2911128	0.00399564	39.3318967	21	5 12.8	21.9
523698 2014 GD_{54}	6.6	X	2.94171	302.76539	253.31590	4.74756	0.6083559	0.00118464	88.4594497	21	4 19.7	22.0
523699 2014 GH_{54}	6.1	X	359.45169	200.54939	31.81269	27.03904	0.3773293	0.00213834	59.6693186	21	5 6.9	21.8
523700 2014 GM_{54}	7.1	X	23.71891	73.02756	159.98734	54.18039	0.3913526	0.00393064	39.7643780	21	7 16.4	21.6
523701 2014 HT_{199}	7.3	X	356.77575	173.33429	73.53426	14.44867	0.2437453	0.00398127	39.4265096	21	5 23.3	22.0
523702 2014 HW_{199}	6.0	X	30.69980	341.00947	222.77202	15.48383	0.1783760	0.00312200	46.3639406	21	5 28.8	22.0
523703 2014 HX_{199}	7.1	X	359.48610	133.20262	109.92002	14.72954	0.2291443	0.00393822	39.7133143	21	5 26.3	22.0
523704 2014 HB_{200}	7.5	X	2.06145	187.07670	39.70625	8.99399	0.2426938	0.00397174	39.4895326	21	5 10.0	22.2
523705 2014 HE_{200}	6.5	X	342.90828	36.64730	231.39443	9.40210	0.3548538	0.00258606	52.5666135	21	5 11.5	22.0
523706 2014 HF_{200}	5.9	X	349.78097	253.88968	21.59902	9.72745	0.4223074	0.00205187	61.3341348	21	5 27.9	21.5
523707 2014 JM_{25}	21.3	X	181.76691	206.14258	93.36703	8.48083	0.1909610	0.50344744	1.5649482	21	—	—
523708 2014 JB_{80}	10.9	X	14.76809	154.01866	131.58221	13.35598	0.3451277	0.01156356	19.3675642	21	8 10.9	22.0
523709 2014 JD_{80}	9.2	X	348.88798	241.69045	109.02089	39.03418	0.2551932	0.00764671	25.5164096	21	8 29.5	22.1
523710 2014 JF_{80}	9.0	X	3.73957	83.85394	261.05299	13.79935	0.4520911	0.00491356	34.2666817	21	9 14.1	21.8
523711 2014 JH_{80}	6.9	X	353.62669	27.89405	306.08343	47.31963	0.2244173	0.00340212	43.7827716	21	8 6.9	22.3
523712 2014 JS_{80}	5.8	X	1.45601	175.95502	125.91195	15.04728	0.1755460	0.00291491	48.5347685	21	7 27.1	21.8
523713 2014 JX_{80}	6.2	X	7.50385	50.19173	196.45296	28.88036	0.3600731	0.00235385	55.9694066	21	6 13.4	21.9
523714 2014 KR_{101}	11.4	X	23.39888	156.97507	128.36810	9.12340	0.2824107	0.01739794	14.7504127	21	8 22.8	21.8
523715 2014 KU_{101}	6.2	X	52.93023	103.01074	61.99941	6.18949	0.1364504	0.00395292	39.6148124	21	5 12.6	21.9
523716 2014 KW_{101}	6.0	X	49.48219	56.68446	200.33657	19.30447	0.0862463	0.00374468	41.0701095	21	8 3.2	22.0
523717 2014 KY_{101}	6.4	X	49.11614	93.13490	96.31531	9.65116	0.1990576	0.00396725	39.5193574	21	6 9.9	21.9
523718 2014 KZ_{101}	6.4	X	2.30924	82.15924	161.22123	18.64416	0.7293719	0.00071008	124.4312771	21	6 16.9	21.8
523719 2014 LM_{28}	9.9	X	0.26498	38.49809	246.22716	84.76860	0.9420778	0.00019995	289.6395565	21	6 13.9	22.6
523720 2014 LN_{28}	8.3	X	356.52210	159.01022	197.17844	8.69627	0.5570406	0.00442104	36.7665559	21	9 3.6	20.4
523721 2014 LR_{28}	5.3	X	153.55793	23.41825	146.72916	1.46567	0.0475891	0.00334090	44.3160087	21	8 19.2	21.9
523722 2014 LV_{28}	5.7	X	351.41400	26.87618	316.73530	10.66614	0.5116138	0.00167578	70.1979704	21	8 6.6	21.2
523723 2014 MY_{69}	5.8	X	127.77604	207.34427	1.09668	17.38352	0.0489264	0.00379617	40.6979206	21	9 6.8	22.0
523724 2014 MA_{70}	5.2	X	39.90442	92.81142	200.19896	4.27354	0.0896614	0.00338750	43.9086430	21	9 1.8	21.3
523725 2014 MC_{70}	6.2	X	12.30038	282.68875	25.68450	7.67941	0.1338763	0.00320781	45.5333885	21	8 20.6	22.2
523726 2014 MJ_{70}	6.2	X	358.75168	252.87175	95.92017	15.50308	0.6999783	0.00069943	125.6914798	21	9 7.0	22.0
523727 2014 NW_{65}	6.6	X	305.86057	232.79149	215.93067	20.44006	0.5179306	0.00879066	23.2517186	21	8 21.4	20.1
523728 2014 ON_{344}	22.5	X	192.68813	335.92905	127.07148	25.69455	0.3418346	0.98020074	1.0036741	21	7 20.7	21.8
523729 2014 OX_{393}	11.1	X	16.12832	330.51532	45.90809	14.69917	0.5337253	0.00758551	25.6534831	21	12 6.1	22.6
523730 2014 OH_{394}	6.1	X	320.69749	74.41663	290.23015	9.66982	0.1701356	0.00313162	46.2689431	21	8 2.0	22.2
523731 2014 OK_{394}	6.2	X	31.71287	248.14325	128.37030	4.14004	0.1661963	0.00356820	42.4133931	21	11 24.2	21.8
523732 2014 PG_{51}	20.6	X	138.58658	294.06960	275.80821	3.79220	0.4527469	0.74431614	1.2058624	21	11 18.9	21.3
523733 2014 PR_{70}	10.5	X	1.76594	52.41450	337.30424	7.61332	0.7976390	0.00164031	71.2062172	21	11 18.5	22.3
523734 2014 QV_{441}	8.7	X	3.63459	234.28447	159.09317	26.46285	0.4086696	0.00549913	31.7887315	21	11 11.9	21.5
523735 2014 QX_{441}	5.5	X	30.05097	298.45399	43.92643	25.97104	0.0453118	0.00409409	38.6988350	21	10 16.4	21.2
523736 2014 QA_{442}	5.5	X	349.76110	280.87764	109.27552	27.40381	0.1877907	0.00344263	43.4385845	21	10 20.1	21.1
523737 2014 RC_{11}	20.6	X	131.15333	243.21567	172.14365	19.53647	0.2447099	0.50608215	1.5595119	21	2 3.7	21.1
523738 2014 SH_{349}	5.4	X	100.46875	97.80384	202.53190	17.26070	0.1549033	0.00346123	43.2828294	21	11 21.3	22.0
523739 2014 TZ_{33}	11.3	X	9.30336	159.09307	171.71608	85.90751	0.7546269	0.00414858	38.3592208	21	10 26.1	23.1
523740 2014 TV_{85}	9.5	X	1.97055	270.00261	257.01016	12.22456	0.3214897	0.00982340	21.5920993	21	3 4.1	21.2
523741 2014 TY_{85}	6.6	X	7.87122	8.63304	42.38581	19.11333	0.2072156	0.00374645	41.0572321	21	11 23.9	21.7
523742 2014 TZ_{85}	4.8	X	157.41841	333.82782	336.86530	14.96778	0.2586110	0.00343432	43.5086177	21	1 19.7	22.2
523743 2014 TA_{86}	6.0	X	39.89596	141.22310	219.27793	9.28785	0.1106135	0.00357199	42.3834303	21	11 12.8	21.9
523744 2014 TC_{86}	5.8	X	35.92393	18.33084	65.22294	1.27246	0.0618766	0.00339284	43.8625671	21	1 23.6	22.0
523745 2014 TD_{86}	5.4	X	152.77536	275.89249	52.64325	1.69366	0.0143756	0.00352103	42.7913777	21	1 21.9	21.8
523746 2014 UT_{114}	9.0	X	1.79597	119.34488	319.51884	15.21648	0.4735209	0.00594604	30.1752478	21	12 20.6	21.0
523747 2014 US_{192}	18.8	X	349.31033	340.61323	175.02405	14.65974	0.7596312	0.30150668	2.2026124	21	—	—
523748 2014 UP_{224}	6.0	X	277.78736	349.77152	178.65526	18.36473	0.0822130	0.00379119	40.7335297	21	12 10.6	22.1
523749 2014 UR_{224}	5.5	X	348.74617	207.51137	244.22742	10.67333	0.2198074	0.00276213	50.3082915	21	12 6.7	21.5
523750 2014 US_{224}	5.0	X	287.26442	176.11630	317.87631	11.03808	0.1127718	0.00307773	46.8075278	21	11 8.0	21.6
523751 2014 UU_{224}	7.1	X	2.61587	265.37635	167.03438	15.26394	0.2247994	0.00397037	39.4986011	21	12 11.1	22.0
523752 2014 VU_{37}	5.1	X	204.24207	342.14877	248.15915	28.62292	0.0442693	0.00379757	40.6878884	21	12 5.0	21.3
523753 2014 WV_{508}	9.4	X	1.33278	110.89020	34.22666	21.20050	0.7086128	0.00252067	53.4718168	21	3 3.9	21.4
523754 2014 WX_{508}	11.1	X	6.14802	264.84469	257.64297	11.57535	0.2863891	0.01242204	18.4646344	21	3 7.0	22.3
523755 2014 WZ_{508}	7.8	X	7.20223	150.02116	338.83403	24.27766	0.6938655	0.00147113	76.5660414	21	3 13.4	22.2
523756 2014 WD_{509}	5.9	X	327.81793	254.46205	201.52025	1.33446	0.0476679	0.00340001	43.8008271	21	11 23.8	22.1
523757 2014 WH_{509}	5.2	X	72.85599	319.99632	76.45180	18.17339	0.1792438	0.00338827	43.9019789	21	2 1.1	21.6
523758 2014 WJ_{509}	5.6	X	310.69897	96.21574	100.38574	20.96402	0.1381176	0.00353102	42.7106642	21	2 3.9	21.6
523759 2014 WK_{509}	4.4	X	275.25346	134.65790	40.92942	14.48746	0.2058611	0.00271221	50.9237391	21	11 28.3	21.6
523760 2014 WQ_{509}	5.7	X	228.96118	210.41047	40.59118	9.81113	0.1437571	0.00402103	39.1661465	21	1 9.7	22.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523761 2014 WU_{509}	5.9	X	290.11747	334.56596	193.04277	19.59268	0.0695864	0.00369914	41.4065090	21	12 21.9	22.0
523762 2014 WX_{509}	6.2	X	20.72888	153.58689	333.71905	12.02617	0.1403957	0.00356639	42.4277477	21	2 22.9	21.9
523763 2014 WZ_{509}	5.5	X	194.50859	62.40978	251.27671	15.88913	0.0988815	0.00388896	40.0479383	21	2 8.3	22.0
523764 2014 WC_{510}	7.2	X	344.88113	288.82713	194.39124	19.53807	0.2480976	0.00399983	39.3044408	21	12 29.2	22.0
523765 2014 WD_{510}	6.0	X	11.01284	11.37532	79.37523	19.05072	0.3396845	0.00223958	57.8573142	21	1 14.0	21.9
523766 2014 WF_{510}	7.0	X	23.13574	196.83326	197.03510	26.04655	0.2247317	0.00398130	39.4263194	21	12 3.7	22.1
523767 2014 WH_{510}	6.6	X	5.87152	213.11188	269.51548	18.64013	0.5694544	0.00149081	75.8906214	21	2 9.2	21.9
523768 2014 WQ_{510}	5.6	X	154.46168	16.32671	334.49819	22.95416	0.1624629	0.00399671	39.3249271	21	2 21.0	22.1
523769 2014 WS_{510}	5.5	X	33.74482	268.75064	161.79623	8.92941	0.3719395	0.00242693	54.8400391	21	2 7.2	21.7
523770 2014 XO_{40}	8.0	X	355.72105	24.14523	212.08904	26.89976	0.7226041	0.00221444	58.2944722	21	4 7.2	20.5
523771 2014 XP_{40}	7.1	X	358.31445	294.54548	258.81141	11.52057	0.7254017	0.00096622	101.3333680	21	3 13.0	21.7
523772 2014 XR_{40}	5.2	X	269.04391	282.79854	3.11877	24.91000	0.1448534	0.00352361	42.7704623	21	3 20.3	21.6
523773 2014 XS_{40}	5.4	X	37.26877	260.94235	186.49867	27.59544	0.1635877	0.00359376	42.2120805	21	2 3.3	21.2
523774 2014 XV_{40}	6.1	X	352.40403	63.21921	93.33926	36.42004	0.4183203	0.00210541	60.2899806	21	2 6.4	21.7
523775 2014 YB_{35}	19.0	X	156.40423	188.63873	3.73129	12.64671	0.4836463	0.38344776	1.8764280	21	10 9.5	22.8
523776 2014 YB_{50}	6.1	X	349.47417	35.88833	104.06366	28.66959	0.0898416	0.00370482	41.3641813	21	1 26.9	21.9
523777 2014 YF_{50}	5.4	X	359.79313	87.07538	72.88332	18.20094	0.5467241	0.00140939	78.7858021	21	3 6.8	21.0
523778 2014 YK_{50}	5.9	X	359.56198	169.58556	27.86771	29.66321	0.6673843	0.00077746	117.1344078	21	4 8.5	21.8
523779 2015 AX_{16}	18.0	X	253.47218	220.98998	182.20059	9.25516	0.5557011	0.25641057	2.4538354	21	5 29.2	23.0
523780 2015 AN_{281}	5.2	X	266.53081	228.88533	53.23058	17.47689	0.1442326	0.00365587	41.7326336	21	3 20.8	21.6
523781 2015 BV_{92}	19.9	X	11.63330	169.27359	320.16688	12.62919	0.2897748	0.46024168	1.6614174	21	—	—
523782 2015 BD_{518}	9.4	X	11.69906	168.50809	344.06924	17.21395	0.2976831	0.00883855	23.1676513	21	3 12.2	21.5
523783 2015 BG_{518}	12.0	X	22.38005	11.34156	213.66548	1.81779	0.3046049	0.01758658	14.6447460	21	6 18.0	22.2
523784 2015 BJ_{518}	8.3	X	288.10333	325.63183	328.57875	6.43934	0.3152809	0.00990822	21.4686998	21	3 23.8	21.6
523785 2015 CM_3	12.8	X	44.85617	163.07899	314.96382	16.76405	0.5060518	0.01870900	14.0529998	21	4 24.3	23.5
523786 2015 DP	18.4	X	41.06254	93.19752	145.34287	59.47807	0.3658554	0.35137181	1.9889541	21	9 4.2	20.6
523787 2015 DV_{224}	7.7	X	15.25490	277.56913	209.30013	29.48788	0.6052185	0.00236263	55.8306712	21	3 30.7	22.2
523788 2015 FP_{118}	19.4	X	338.40656	108.14826	201.36184	2.67895	0.5503427	0.31929765	2.1200148	21	4 1.9	21.3
523789 2015 FN_{345}	6.2	X	323.15360	118.93787	172.69520	27.98184	0.0976887	0.00361758	42.0265700	21	5 31.2	22.2
523790 2015 HP_9	10.4	X	43.80678	36.03517	140.87423	3.06856	0.2696347	0.01270918	18.1854648	21	5 29.1	22.2
523791 2015 HT_{171}	12.4	X	60.94389	140.59989	58.72845	33.22447	0.2896829	0.02508003	11.5589219	21	7 16.5	22.8
523792 2015 MR_{101}	18.4	X	180.11381	188.87991	274.93236	32.13960	0.5223623	0.63843101	1.3357548	21	7 3.9	20.6
523793 2015 OV_{79}	6.0	X	285.03812	305.90030	117.46537	30.28325	0.0877522	0.00377417	40.8559041	21	9 5.6	22.1
523794 2015 RR_{245}	3.8	X	325.63586	260.17519	211.77173	7.54602	0.5843754	0.00132085	82.2685124	21	10 2.4	21.7
523795 2015 TQ_{178}	20.4	X	330.34469	46.81770	262.85365	3.70706	0.4828084	0.31552749	2.1368691	21	4 1.9	22.8
523796 2016 LE_{51}	20.0	X	333.81312	342.83621	91.87431	30.93565	0.6612829	0.85940327	1.0956488	21	—	—
523797 2016 NM_{56}	11.4	X	3.42030	345.53634	349.97025	143.99718	0.8525767	0.00163170	71.4564902	21	7 21.1	23.1
523798 2017 CX_{33}	11.1	X	2.46643	162.93327	315.89076	72.07788	0.8568731	0.00158195	72.9469588	21	2 5.1	22.2
523799 2017 DO_{36}	17.7	X	81.43933	227.94023	138.24975	57.31323	0.3680462	0.42384280	1.7552252	21	—	—
523800 2017 KZ_{31}	10.2	X	4.10862	301.15749	144.77965	161.71555	0.7980943	0.00246304	54.3027879	21	2 21.1	21.3
523801 1993 TQ_2	19.9	X	301.31379	77.80917	13.22680	6.03862	0.4189661	0.35214451	1.9860435	21	—	—
523802 1998 KH_9	18.5	X	12.98031	185.44247	82.63495	17.67326	0.4594294	0.30144747	2.2029009	21	9 28.8	20.3
523803 1999 RV_2	18.7	X	253.51295	45.08437	334.25313	4.75512	0.5114426	0.25935104	2.4352528	21	4 30.6	23.6
523804 2000 YF_{29}	20.3	X	67.15032	28.01853	124.77249	6.29746	0.3716148	0.54074137	1.4921403	21	5 6.5	18.4
523805 2001 QA_{143}	19.9	X	282.19508	98.54420	305.32039	6.82925	0.4930584	0.29017162	2.2596062	21	6 20.9	23.4
523806 2002 WW_{17}	17.4	X	165.72799	91.50787	71.20142	18.30450	0.6519427	0.18656940	3.0332563	21	9 13.5	24.4
523807 2003 LG	18.5	X	323.59039	18.86171	124.48723	11.89764	0.7357801	0.37302881	1.9112073	21	—	—
523808 2007 ML_{24}	19.3	X	297.31004	201.46981	281.88231	33.43828	0.3586282	1.49162244	0.7586302	21	—	—
523809 2007 TV_{18}	23.8	X	45.39464	289.35312	353.24922	0.93266	0.3482224	0.71512976	1.2384529	21	12 31.1	24.7
523810 2008 RG_{98}	17.1	X	292.86946	168.52948	340.04227	10.73448	0.7677306	0.30384167	2.1913134	21	10 3.2	19.1
523811 2008 TQ_2	20.9	X	1.77252	235.49648	225.34224	3.87203	0.4196298	0.39392783	1.8429983	21	—	—
523812 2008 TY_3	23.9	X	46.84001	327.48168	25.40683	3.24786	0.3918103	0.39529957	1.8387322	21	—	—
523813 2008 VB_1	20.5	X	165.32461	136.91931	50.36738	10.31619	0.2750612	0.68251336	1.2776011	21	11 21.4	20.4
523814 2008 WN_2	20.7	X	115.56949	283.30314	227.14169	3.74689	0.3120060	0.58369756	1.4180040	21	7 20.5	21.7
523815 2009 HW_{44}	17.5	X	231.36302	296.60612	37.82811	41.09293	0.5925401	0.22380191	2.6867475	21	3 28.2	23.9
523816 2009 ST_{103}	18.1	X	219.60299	234.57786	226.62175	15.74588	0.7189892	0.22248076	2.6973734	21	7 10.6	24.5
523817 2009 TK	22.3	X	302.15388	181.42883	192.73541	20.17224	0.2042096	0.65898751	1.3078299	21	12 19.8	22.6
523818 2010 SH_{13}	21.2	X	201.00129	10.96351	190.58981	13.86263	0.1370272	0.74425282	1.2059308	21	—	—
523819 2010 VB_{72}	20.9	X	214.35564	337.88299	196.83034	16.06049	0.0673148	0.73357519	1.2176046	21	—	—
523820 2011 GN_{44}	18.3	X	315.60453	319.37154	16.92601	55.02306	0.5981473	0.29316861	2.2441802	21	4 7.4	21.5
523821 2011 RF	20.5	X	71.11609	107.61034	233.51229	9.52224	0.2958313	0.41987140	1.7662758	21	—	—
523822 2012 DG_{61}	18.2	X	190.39158	186.17582	69.99906	15.32314	0.7375380	0.16795028	3.2534856	21	12 16.2	25.3
523823 2015 BG_{311}	18.3	X	250.26530	127.21554	238.89258	5.73468	0.5685555	0.23964314	2.5670010	21	4 12.4	23.7
523824 2016 RO_1	19.6	X	107.84617	187.56163	261.59518	13.68311	0.3330242	0.50866376	1.5542308	21	3 6.4	19.9
523825 1977 RS	16.6	X	278.70810	209.57012	149.52319	4.27089	0.3129903	0.24322942	2.5417060	21	5 14.2	20.6
523826 1990 UP	20.3	X	54.02742	294.22483	33.19241	28.21807	0.1707799	0.64271977	1.3298060	21	—	—
523827 1990 XD_1	17.1	X	212.71997	352.72206	75.75685	31.81103	0.2854541	0.21297376	2.7770604	21	6 14.6	22.2
523828 1992 BC	19.8	X	94.86692	77.21993	123.34403	14.34627	0.3522085	0.58142952	1.4216892	21	9 30.6	21.7
523829 1993 BJ_9	16.5	X	83.16974	228.74280	116.47182	9.80171	0.1785016	0.23815326	2.5776960	21	—	—
523830 1993 RS_1	17.3	X	12.70244	31.98719	347.17235	3.99647	0.0769305	0.21612003	2.7500423	21	12 2.9	20.7
523831 1994 AQ_7	16.2	X	226.46610	38.17347	113.81933	16.13473	0.0818758	0.20516661	2.8470708	21	11 3.0	20.6
523832 1994 GD_2	16.2	X	279.38959	112.57992	150.36637	4.90882	0.1290096	0.17816252	3.1279405	21	2 12.0	20.9
523833 1994 RE_3	15.7	X	103.46068	228.84722	157.00270	7.58048	0.2531012	0.12335323	3.9967075	21	2 7.9	21.5
523834 1994 RK_7	16.2	X	53.07202	47.37930	186.93229	9.71093	0.0289987	0.17639268	3.1488285	21	7 12.7	20.7
523835 1994 UQ_5	17.4	X	316.73504	8.78874	19.96697	8.00235	0.1134827	0.25363040	2.4717346	21	9 25.1	19.8
523836 1994 WU_{12}	16.4	X	290.16936	228.15074	171.83122	6.63139	0.1351713	0.17569625	3.1571440	21	8 14.4	20.5
523837 1995 BE_8	18.3	X	301.61110	104.89708	334.35836	3.55910	0.0625621	0.28743436	2.2739292	21	11 19.5	20.8
523838 1995 BQ_{13}	16.9	X	96.42556	99.33212	73.12249	2.10345	0.0675508	0.19987118	2.8971385	21	6 26.5	20.8
523839 1995 CE_9	16.4	X	249.35961	61.64704	321.33171	21.46779	0.1073245	0.23938034	2.5688795	21	6 4.8	20.6
523840 1995 FJ_2	16.9	X	237.59418	263.57437	154.50391	8.39441	0.1368044	0.23945670	2.5683333	21	7 5.5	20.7

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523841 1995 MS_2	15.7	X	230.92800	352.62345	286.07390	15.08389	0.1870506	0.17334272	3.1856567	21	1 13.1	21.1
523842 1995 ON_{11}	17.0	X	178.33923	267.91120	325.92112	3.59923	0.2002020	0.23965883	2.5668890	21	12 10.9	21.3
523843 1995 OK_{14}	16.7	X	84.46078	14.20571	270.36297	8.21215	0.0883826	0.19676817	2.9275174	21	11 2.8	21.0
523844 1995 OQ_{15}	16.2	X	285.49297	324.80903	275.62000	8.63147	0.1054595	0.17539756	3.1607272	21	1 24.9	21.0
523845 1995 SO_8	16.6	X	203.28994	55.97550	353.25747	7.95422	0.0854730	0.17992183	3.1075167	21	5 21.5	21.5
523846 1995 SA_{21}	16.7	X	200.05207	86.58746	299.54217	13.36098	0.0885105	0.21671426	2.7450129	21	4 12.2	21.2
523847 1995 SW_{26}	18.2	X	291.84569	24.07660	10.46375	3.28233	0.2072326	0.26185150	2.4197250	21	8 4.8	20.7
523848 1995 SV_{38}	16.1	X	163.53197	32.80810	10.65599	11.84508	0.1655244	0.17306138	3.1891084	21	4 9.3	21.2
523849 1995 SA_{47}	16.4	X	300.82373	176.41830	173.14659	5.57062	0.1590208	0.18411632	3.0601393	21	6 22.1	20.5
523850 1995 SQ_{55}	18.1	X	317.04368	23.61251	14.65130	6.78054	0.1369724	0.26500726	2.4004769	21	10 8.2	20.2
523851 1995 SX_{63}	16.7	X	351.57508	269.54707	17.23005	9.63425	0.0950854	0.18306944	3.0717945	21	6 26.5	20.6
523852 1995 SK_{79}	17.3	X	239.13304	182.91093	174.76901	3.58930	0.2063083	0.21755737	2.7379164	21	4 17.3	21.7
523853 1995 SV_{80}	16.4	X	200.13229	312.15452	138.73178	2.71762	0.0847373	0.18164086	3.0878795	21	7 11.1	21.1
523854 1995 SW_{81}	17.9	X	35.03222	295.69231	16.51892	6.18283	0.1183671	0.26601542	2.3944081	21	10 22.1	20.7
523855 1995 SK_{87}	17.1	X	255.90308	41.45973	283.62631	10.49434	0.1936510	0.21722977	2.7406683	21	3 18.2	21.7
523856 1995 SL_{87}	16.3	X	27.59449	73.08940	279.66060	10.78580	0.0760788	0.19538662	2.9413012	21	11 14.5	20.3
523857 1995 TW_4	16.2	X	201.71232	337.13471	21.41808	12.49296	0.1768173	0.17376682	3.1804713	21	3 24.3	21.5
523858 1995 UL_{21}	16.7	X	257.98247	306.81226	19.00741	6.23851	0.0726710	0.21370910	2.7706864	21	4 8.2	20.5
523859 1995 UV_{27}	16.3	X	231.96504	262.26709	182.82129	10.13581	0.0718161	0.18391553	3.0623662	21	8 7.3	20.9
523860 1995 UU_{36}	18.9	X	49.85249	127.17575	202.96627	21.08374	0.0860786	0.38322074	1.8771690	21	12 24.9	21.5
523861 1995 UZ_{52}	15.7	X	229.51569	121.34566	199.73449	15.75702	0.0622768	0.17310010	3.1886328	21	3 4.2	20.7
523862 1995 UX_{66}	16.8	X	238.05678	293.37101	85.83877	4.60402	0.1637213	0.17725812	3.1385709	21	5 17.9	21.7
523863 1995 UG_{74}	16.5	X	120.49733	208.79679	49.96821	10.86652	0.0570624	0.19155919	2.9803508	21	11 10.0	20.9
523864 1995 UY_{74}	17.3	X	339.76843	175.94850	155.59427	5.46093	0.1189702	0.22263932	2.6960926	21	8 7.3	20.2
523865 1995 UK_{77}	17.2	X	190.47743	273.36971	182.75487	0.57607	0.1501541	0.17909825	3.1170360	21	7 6.2	22.1
523866 1995 UT_{80}	17.2	X	259.05754	90.61677	218.47655	23.95341	0.1484370	0.21088732	2.7953471	21	3 6.0	22.0
523867 1995 VW_8	17.9	X	308.64434	285.14623	56.90774	7.52173	0.1258343	0.25729337	2.4482193	21	6 28.0	20.6
523868 1995 VE_9	15.9	X	42.09508	312.87856	229.89379	3.87718	0.0961859	0.17034853	3.2228775	21	4 30.2	19.9
523869 1995 WD_{11}	18.3	X	284.63753	119.41619	232.72273	5.46015	0.1770436	0.25642237	2.4537602	21	5 28.6	21.3
523870 1995 WO_{25}	17.5	X	21.00944	81.72968	291.24190	3.17870	0.1246918	0.22970129	2.6405461	21	12 17.1	20.7
523871 1995 WC_{36}	18.1	X	309.59560	349.08456	58.12164	3.18552	0.1595784	0.26285047	2.4135903	21	10 5.9	20.1
523872 1995 YM_{19}	15.7	X	115.81108	208.12632	307.56899	21.02726	0.0179894	0.17012958	3.2256420	21	6 25.6	20.5
523873 1996 AA_{18}	16.1	X	41.80506	176.98008	136.55823	10.27375	0.0899075	0.18021576	3.1041369	21	10 21.2	20.4
523874 1996 CP_3	16.3	X	206.94639	161.84020	310.61907	9.35021	0.0372424	0.17406922	3.1767867	21	8 16.5	20.9
523875 1996 EE_6	16.8	X	67.58371	66.68104	174.04537	4.81575	0.0608423	0.20868166	2.8150095	21	8 16.2	20.5
523876 1996 JX_8	17.8	X	262.76764	20.66411	112.35257	6.73184	0.0681585	0.29325098	2.2437600	21	12 7.9	20.2
523877 1996 JU_{14}	17.1	X	336.90799	235.24796	65.90855	9.83709	0.1585937	0.23850589	2.5751546	21	6 13.2	19.7
523878 1996 JY_{14}	16.5	X	133.75119	187.08790	79.70376	14.95968	0.0640780	0.21408856	2.7674115	21	12 7.9	20.6
523879 1996 RT_9	17.3	X	84.89046	163.96647	138.17185	2.94243	0.0887952	0.20427231	2.8553743	21	11 28.6	21.5
523880 1996 RJ_{22}	17.2	X	80.39486	311.56681	349.51838	14.32531	0.1739954	0.24392533	2.5368695	21	12 4.8	21.3
523881 1996 TU_{16}	17.1	X	232.87263	63.44158	297.17260	5.60886	0.1172626	0.22498758	2.6772999	21	4 16.7	21.2
523882 1996 TK_{27}	17.8	X	272.95522	312.41027	75.39431	3.93736	0.3076481	0.23011066	2.6374135	21	6 14.1	21.9
523883 1996 TY_{31}	16.3	X	211.60919	308.97422	35.64765	22.82327	0.0734291	0.17955455	3.1117530	21	3 25.5	21.3
523884 1996 TF_{32}	17.0	X	258.84314	301.79382	36.35969	13.46977	0.2814095	0.22548914	2.6733283	21	4 6.7	21.5
523885 1996 TY_{36}	17.6	X	284.78679	20.90622	23.95809	2.11933	0.0885368	0.23150809	2.6267895	21	8 26.2	20.7
523886 1996 TS_{43}	16.6	X	284.74203	153.02740	219.47516	7.23145	0.0911843	0.18984376	2.9982775	21	7 8.9	20.8
523887 1996 TZ_{44}	16.5	X	231.48793	352.74058	49.04482	3.68660	0.1349601	0.18569315	3.0427910	21	6 9.1	21.2
523888 1996 VU_9	18.2	X	273.52860	334.06419	100.50494	6.78348	0.1911876	0.27174164	2.3606517	21	9 9.6	21.0
523889 1996 VW_{10}	17.4	X	258.62808	50.97314	10.22487	13.08231	0.2523226	0.23009229	2.6375538	21	7 23.7	21.6
523890 1996 VJ_{12}	17.5	X	293.21735	25.35330	351.63438	6.90320	0.2778020	0.23155270	2.6264521	21	6 28.9	20.9
523891 1996 VL_{17}	17.4	X	166.19803	12.02249	57.74643	4.60082	0.1977096	0.18036242	3.1024540	21	5 14.9	22.7
523892 1996 VX_{31}	16.4	X	129.51502	102.56894	348.21290	10.19160	0.1208898	0.18002110	3.1063742	21	4 26.3	21.2
523893 1996 VB_{32}	17.8	X	271.83809	167.47491	354.44590	8.23172	0.1243917	0.28314977	2.2968109	21	—	—
523894 1996 VR_{35}	18.4	X	303.78413	286.23989	125.42507	5.75851	0.1732946	0.27339037	2.3511513	21	10 2.6	20.5
523895 1996 VQ_{36}	16.7	X	274.80107	290.65946	53.71559	5.80521	0.1240127	0.18510530	3.0492297	21	5 17.2	20.9
523896 1996 XR_{27}	16.4	X	111.33518	168.76389	276.47260	7.90790	0.1674410	0.17516275	3.1635513	21	4 5.9	21.3
523897 1996 XG_{35}	16.0	X	86.98508	299.66704	287.47406	9.26243	0.1187323	0.18073840	3.0981499	21	8 27.1	20.6
523898 1997 AN_{11}	17.3	X	189.09368	235.08114	272.27465	3.81286	0.1654890	0.22391863	2.6858138	21	9 5.3	21.6
523899 1997 CV_{29}	7.3	X	17.13065	32.50909	121.33566	8.04033	0.0412510	0.00362618	41.9601098	21	3 15.1	23.4
523900 1997 ET_5	17.9	X	181.55848	132.28460	150.51591	1.20800	0.2023438	0.27246153	2.3564918	21	—	—
523901 1997 EB_{11}	17.7	X	178.37170	283.65920	237.83153	4.27449	0.1476873	0.30356325	2.1926530	21	9 19.2	21.0
523902 1997 FH_5	17.0	X	20.94568	202.40579	85.05711	12.35214	0.1226371	0.25376711	2.4708468	21	8 28.9	19.8
523903 1997 GT_2	18.8	X	212.49908	182.26356	13.84091	5.24137	0.2294236	0.26874346	2.3781767	21	11 26.7	22.4
523904 1997 JF_7	13.5	X	296.50211	113.69407	224.89430	27.21777	0.1053975	0.08445648	5.1449449	21	6 10.6	20.4
523905 1997 MV_5	15.7	X	82.57714	75.35905	228.07172	11.95223	0.1107137	0.17852816	3.1236682	21	11 25.8	20.3
523906 1997 QR_4	17.0	X	272.96372	39.89887	308.08686	12.06531	0.1634166	0.23987606	2.5653391	21	5 6.5	20.9
523907 1997 SF_7	16.3	X	195.73172	357.49622	354.22527	10.78339	0.0917046	0.18846035	3.0129324	21	3 7.5	20.8
523908 1997 SO_8	18.2	X	321.13747	32.56513	343.05960	3.49019	0.2600226	0.28593098	2.2818928	21	8 30.4	19.3
523909 1997 SJ_9	17.3	X	231.63182	50.77407	8.01255	17.10878	0.1283540	0.19636673	2.9315059	21	7 3.3	22.1
523910 1997 SY_{14}	18.0	X	310.43512	210.98602	226.91402	4.90417	0.1063515	0.29049378	2.2579353	21	12 3.4	19.8
523911 1997 SN_{15}	17.5	X	232.42367	182.35767	216.82781	6.68292	0.3054415	0.23540631	2.5977099	21	5 25.5	22.2
523912 1997 SV_{26}	16.3	X	248.45666	24.36877	0.15646	15.59248	0.1188529	0.23882638	2.5728503	21	6 2.0	20.4
523913 1997 ST_{32}	17.0	X	167.90091	66.26746	359.63918	13.91353	0.0692809	0.19206781	2.9750870	21	4 30.6	21.6
523914 1997 UE_{17}	16.3	X	176.77210	199.95507	218.26233	11.53398	0.1740450	0.18925949	3.0044451	21	5 9.3	21.2
523915 1997 VM_4	18.2	X	183.00368	124.90345	45.41347	14.21245	0.8137835	0.23242316	2.6198903	21	9 22.9	24.7
523916 1997 VE_9	16.6	X	292.90644	223.95739	207.69734	6.62605	0.0569496	0.20303119	2.8669990	21	10 12.9	20.5
523917 1997 WY_3	17.9	X	275.81674	354.26162	42.83774	5.08820	0.2454882	0.24000212	2.5644407	21	7 8.7	21.4
523918 1997 WF_{13}	16.6	X	108.44834	235.47781	223.51318	9.60393	0.1842254	0.18314067	3.0709979	21	4 24.3	21.2
523919 1997 WB_{17}	18.5	X	253.01935	147.92967	283.05508	3.41728	0.1974975	0.28180329	2.3041213	21	8 3.0	21.7
523920 1997 YO_{19}	17.5	X	174.63640	203.00312	304.98767	8.18608	0.1523942	0.27453881	2.3445899	21	8 26.2	21.1

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
	m		°	°	°	°		°				
523921 1998 AQ_3	16.2	X	134.63914	10.04070	108.87527	12.13316	0.0369932	0.18421212	3.0590783	21	6 3.1	20.7
523922 1998 BV_5	17.4	X	188.16814	333.04843	126.43556	9.03091	0.0725978	0.22899026	2.6460094	21	7 9.6	21.3
523923 1998 BU_{13}	16.9	X	209.00245	1.92917	137.93719	11.26517	0.1430450	0.23662923	2.5887521	21	9 22.5	20.9
523924 1998 BR_{22}	18.7	X	210.13642	33.16126	108.79842	3.08184	0.2040784	0.27679102	2.3318542	21	9 22.7	22.4
523925 1998 BQ_{28}	16.4	X	62.40488	131.27059	128.48562	10.21308	0.0639514	0.18968088	2.9999937	21	9 5.8	20.5
523926 1998 BD_{40}	16.8	X	229.64996	321.60804	131.77444	9.92553	0.0589718	0.19017951	2.9947477	21	8 20.0	21.1
523927 1998 DH_{17}	17.4	X	194.80697	220.20781	279.02499	6.40400	0.0294324	0.27551179	2.3390666	21	9 11.1	20.6
523928 1998 DA_{26}	16.3	X	251.54291	295.07218	92.42464	2.54533	0.0785529	0.18408918	3.0604400	21	6 19.5	20.7
523929 1998 DN_{30}	17.6	X	203.20376	146.54048	73.91071	2.07777	0.0194916	0.28279985	2.2987051	21	—	—
523930 1998 EC_6	17.2	X	129.69153	63.20205	148.31802	6.94082	0.0642126	0.27232886	2.3572570	21	10 3.9	20.4
523931 1998 EC_7	16.3	X	146.60385	214.12675	340.43295	9.15607	0.0525230	0.19002653	2.9963547	21	9 19.1	20.8
523932 1998 ET_{22}	15.8	X	188.99763	87.21281	348.34874	10.08137	0.0643279	0.18240980	3.0791956	21	6 9.4	20.6
523933 1998 FS	18.1	X	319.06812	357.93431	126.04358	2.53354	0.1322271	0.28594344	2.2818265	21	—	—
523934 1998 FF_{14}	20.6	X	128.82853	301.11992	359.83787	38.69168	0.3124168	0.70243095	1.2533344	21	—	—
523935 1998 FJ_{73}	16.5	X	123.89443	258.08057	9.31854	28.41762	0.3459296	0.23100884	2.6305727	21	12 1.3	22.0
523936 1998 GE_{13}	17.7	X	150.32766	206.23802	53.24797	4.11393	0.1291467	0.23629540	2.5911897	21	12 18.9	21.8
523937 1998 HV	16.6	X	358.52911	125.47414	186.32210	12.61907	0.1003030	0.22306419	2.6926680	21	8 10.4	19.9
523938 1998 HX_1	17.6	X	314.96194	284.71316	172.20335	6.65613	0.0586355	0.27999045	2.3140562	21	—	—
523939 1998 HB_{12}	18.4	X	190.72849	163.96456	19.74643	9.76943	0.1455410	0.27523317	2.3406449	21	10 28.7	21.9
523940 1998 HW_{15}	17.1	X	123.92425	194.00242	123.38250	5.39771	0.0784835	0.23884209	2.5727375	21	—	—
523941 1998 HK_{49}	22.3	X	143.98610	81.51792	57.30060	7.62135	0.3315929	0.60668590	1.3819536	21	8 3.5	23.8
523942 1998 KG_{42}	17.1	X	0.08627	166.34247	112.14492	15.81913	0.1753018	0.25885580	2.4383579	21	6 28.2	19.1
523943 1998 KV_{58}	16.3	X	137.69773	156.24292	104.83675	16.26729	0.2897709	0.23209636	2.6223490	21	12 11.7	21.3
523944 1998 QZ_{111}	16.2	X	94.02220	146.23954	120.15715	1.00888	0.1458449	0.17563726	3.1578508	21	10 28.6	21.0
523945 1998 RN_1	18.7	X	160.94003	303.41383	345.04215	26.89830	0.5912884	0.23406519	2.6076232	21	—	—
523946 1998 RT_{43}	17.8	X	125.03062	3.95188	328.92125	1.90785	0.2635932	0.27301742	2.3532920	21	—	—
523947 1998 RO_{81}	17.0	X	145.63796	124.62330	177.00122	28.18907	0.1647920	0.22881371	2.6473702	21	—	—
523948 1998 ST_6	16.8	X	324.33100	183.09787	167.09538	8.65122	0.2341601	0.21237264	2.7822982	21	7 21.2	19.7
523949 1998 SY_{11}	16.3	X	9.76672	253.71311	29.23297	13.59985	0.1534163	0.20964890	2.8063445	21	7 30.8	19.6
523950 1998 SZ_{27}	20.2	X	249.20923	47.72566	166.70191	23.64247	0.5066492	1.14418664	0.9053256	21	—	—
523951 1998 SR_{51}	18.1	X	65.46690	108.80349	203.01313	21.14320	0.0603376	0.34676526	2.0065300	21	12 9.6	20.8
523952 1998 TB_{23}	17.3	X	270.34268	83.15005	16.90716	0.55252	0.0234163	0.21578697	2.7528713	21	10 25.7	20.9
523953 1998 UA_3	18.2	X	280.84034	21.88873	24.66996	6.68725	0.1584725	0.29537229	2.2330042	21	8 17.9	20.6
523954 Guman	18.9	X	315.29658	18.97830	345.48969	5.76573	0.2489442	0.29713451	2.2241666	21	7 28.6	20.3
523955 1998 UU_{43}	7.4	X	297.74782	279.11208	231.30553	9.58153	0.1262869	0.00448985	36.3899552	21	12 7.6	22.8
523956 1998 UB_{46}	17.4	X	212.47647	184.06181	187.83035	5.38003	0.1714350	0.19957669	2.8999878	21	4 14.0	22.2
523957 1998 UZ_{46}	16.8	X	284.94538	191.72741	224.35799	12.86832	0.1150844	0.20969365	2.8059453	21	8 29.5	20.7
523958 1998 UD_{51}	17.7	X	338.93963	351.62169	27.97584	7.34838	0.0760756	0.25626969	2.4547347	21	10 20.8	20.4
523959 1998 UE_{51}	16.2	X	99.98222	222.79241	45.59171	19.51868	0.1276986	0.17151129	3.2082946	21	11 4.1	21.0
523960 1998 VB_{44}	15.3	X	303.79616	260.65838	286.27459	15.35361	0.1488720	0.17486402	3.1671532	21	—	—
523961 1998 VO_{47}	17.5	X	237.43734	65.45394	52.61823	3.04282	0.1422512	0.25286890	2.4766945	21	9 25.3	20.8
523962 1998 VQ_{48}	17.6	X	48.89079	233.52740	57.19888	8.16758	0.1651546	0.29813322	2.2191967	21	10 27.7	20.1
523963 1998 WL_{36}	18.1	X	246.53787	44.93676	49.13734	2.60705	0.2033285	0.25100734	2.4889248	21	8 26.7	21.6
523964 1998 WP_{45}	17.1	X	294.97005	34.14904	54.02622	5.13913	0.0275578	0.21390189	2.7690213	21	11 11.5	20.8
523965 1998 XY_{95}	6.4	X	352.35360	89.77309	47.30542	6.66380	0.4140811	0.00194354	63.5925782	21	1 17.5	22.2
523966 1998 YF_{10}	20.6	X	177.77360	296.51435	85.91202	15.59662	0.2473989	0.54191076	1.4899929	21	3 1.9	22.1
523967 1998 YR_{11}	18.2	X	298.26587	320.88990	112.04462	59.71383	0.4762482	0.34071504	2.0302141	21	8 25.0	21.0
523968 1998 YP_{15}	16.1	X	161.96040	307.64028	108.67583	15.29330	0.1259363	0.18938754	3.0030907	21	4 27.9	21.1
523969 1999 AU_{15}	16.5	X	54.24360	287.21328	305.21415	12.31528	0.1469432	0.23752449	2.5822430	21	8 1.0	19.5
523970 1999 AP_{30}	16.0	X	320.50165	315.21609	298.61128	17.73879	0.0877565	0.18580372	3.0415838	21	3 17.2	20.4
523971 1999 AJ_{39}	21.1	X	188.16722	1.65970	298.51006	10.09116	0.2769787	0.79083173	1.1581016	21	—	—
523972 1999 CW_8	18.6	X	229.65880	262.09720	316.99669	33.64677	0.5991563	0.29487196	2.2355295	21	12 7.1	23.2
523973 1999 CD_{139}	16.9	X	196.23778	303.27876	324.79111	8.38305	0.2316676	0.25613985	2.4555642	21	—	—
523974 1999 CD_{145}	16.3	X	109.74442	164.00094	318.46227	10.69765	0.0084370	0.18748318	3.0233924	21	4 26.6	20.7
523975 1999 CG_{145}	16.7	X	193.37610	86.70566	320.81725	9.30248	0.1129237	0.19024934	2.9940148	21	5 7.1	21.5
523976 1999 CS_{148}	16.2	X	253.37925	211.68247	138.99729	5.19787	0.0604898	0.18932919	3.0037077	21	5 9.6	20.5
523977 1999 ET_2	17.8	X	168.36939	160.76559	144.01318	24.30581	0.0243031	0.34967104	1.9953984	21	—	—
523978 1999 EZ_{10}	15.8	X	296.37489	99.80852	173.29335	10.39036	0.0447585	0.18032020	3.1029382	21	3 28.1	20.0
523979 1999 FS_{15}	15.6	X	285.90814	75.38875	178.89661	15.61652	0.0581590	0.17223761	3.1992688	21	2 16.7	20.3
523980 1999 GY_{55}	16.7	X	136.55295	51.01082	187.22552	14.95630	0.0726039	0.24385703	2.5373431	21	11 12.4	20.5
523981 1999 NE_{51}	16.5	X	90.44701	339.77589	287.83084	23.80347	0.1786441	0.27696662	2.3308684	21	11 4.6	20.5
523982 1999 RY_5	16.3	X	30.64620	263.72356	346.45396	17.79324	0.0676220	0.17323840	3.1869355	21	7 12.6	20.8
523983 1999 RY_{214}	7.4	X	6.71968	69.92788	327.14379	13.68151	0.1814637	0.00323489	45.2789379	21	11 5.4	23.1
523984 1999 RA_{251}	17.7	X	277.36775	324.57456	169.14303	7.10245	0.0406707	0.27864731	2.3214864	21	12 29.4	20.5
523985 1999 TX_{45}	16.7	X	245.40733	358.31324	17.97247	15.51619	0.0538621	0.21143609	2.7905082	21	5 26.4	20.9
523986 1999 TO_{53}	18.3	X	231.28702	74.73840	4.15489	6.03485	0.2407628	0.26024420	2.4296777	21	7 18.8	22.2
523987 1999 TO_{58}	17.3	X	310.81608	192.68682	210.87116	13.20959	0.1516351	0.22063232	2.7124181	21	9 21.8	20.5
523988 1999 TN_{59}	17.6	X	106.26343	91.98550	200.83274	5.66411	0.1304091	0.27853860	2.3220904	21	12 24.5	21.1
523989 1999 TP_{68}	17.3	X	132.97474	277.64064	1.28425	28.54900	0.3169814	0.23729473	2.5839096	21	12 31.1	22.7
523990 1999 TA_{70}	16.1	X	294.27624	11.63197	23.22142	13.29950	0.0730921	0.17325508	3.1867309	21	8 29.9	20.6
523991 1999 TA_{74}	17.0	X	13.48793	313.44395	353.70349	11.20710	0.1123764	0.22270504	2.6955621	21	9 5.0	19.9
523992 1999 TO_{74}	16.4	X	82.03790	4.78990	186.93094	14.62669	0.0803579	0.21428616	2.7657099	21	7 3.6	20.5
523993 1999 TU_{77}	17.5	X	271.24558	157.83192	212.43942	14.25055	0.1288532	0.25823984	2.4422337	21	6 12.1	21.0
523994 1999 TF_{80}	17.4	X	281.23482	345.86955	36.80860	4.44139	0.0993201	0.21759101	2.7376342	21	7 19.3	21.0
523995 1999 TT_{81}	16.3	X	165.76467	212.63920	190.19506	11.67250	0.1105977	0.20546997	2.8442678	21	4 6.6	20.5
523996 1999 TL_{128}	16.9	X	24.97528	189.65832	190.25844	15.39640	0.1781573	0.23045720	2.6347689	21	—	—
523997 1999 TJ_{132}	16.9	X	342.73645	5.63215	7.81016	15.30489	0.1986998	0.22461897	2.6802281	21	10 12.8	19.4
523998 1999 TK_{135}	17.7	X	340.67997	222.45898	205.86703	7.02447	0.1866431	0.27404565	2.3474018	21	—	—
523999 1999 TN_{182}	17.4	X	29.73011	162.40727	245.84189	4.93552	0.1558268	0.27897158	2.3196871	21	—	—
524000 1999 TV_{303}	18.0	X	287.45403	127.07546	31.30680	5.72060	0.0927862	0.28032361	2.3122223	21	—	—