

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
184001	2004	EQ ₇₈	16.8	X	63.46837	159.67394	34.45895	3.35567	0.1517582	0.25547086	2.4598491	20	7 6.5	19.8
184002	2004	EO ₈₀	16.1	X	132.57186	94.56164	103.17711	11.99954	0.1186902	0.26817533	2.3815343	20	10 5.2	19.9
184003	2004	EH ₈₂	16.6	X	140.97403	23.27447	61.03797	6.17311	0.1632064	0.25447029	2.4662929	20	5 12.7	20.2
184004	2004	EO ₈₄	16.2	X	78.01532	254.86152	23.98534	6.88571	0.0978150	0.27374463	2.3491224	20	11 11.9	19.4
184005	2004	EH ₉₀	16.8	X	56.71147	138.37125	34.51088	7.33121	0.0993062	0.25116144	2.4879066	20	5 15.2	19.6
184006	2004	EF ₉₁	17.1	X	161.29095	318.05313	130.20287	2.16613	0.1441924	0.25893467	2.4378627	20	6 5.9	20.8
184007	2004	EX ₉₂	16.2	X	22.38952	151.95979	109.5810	9.34210	0.1917442	0.25551716	2.4595520	20	8 13.9	18.5
184008	2004	EY ₉₂	15.9	X	336.75340	158.02314	52.68938	15.68979	0.0305846	0.24267353	2.5455860	20	3 13.5	19.5
184009	2004	EJ ₉₅	16.2	X	189.41393	66.01719	70.60947	7.29643	0.0684626	0.26868476	2.3785230	20	9 16.5	19.5
184010	2004	EE ₉₇	16.1	X	359.68882	242.23093	37.85462	7.92839	0.1625502	0.25906826	2.4370246	20	7 23.3	18.3
184011		Andypuckett	16.4	X	54.26271	57.73478	185.20245	6.10931	0.0951562	0.26014432	2.4302996	20	8 21.1	19.3
184012	2004	FT ₁₂	15.4	X	46.52507	109.64485	202.76816	13.03950	0.1882944	0.27031106	2.3689733	20	12 2.1	18.8
184013	2004	FY ₂₀	16.2	X	73.08510	84.39032	209.32084	6.21119	0.1239247	0.27245451	2.3565322	20	11 30.1	19.5
184014	2004	FA ₂₄	16.2	X	244.41091	136.26388	326.89219	3.57951	0.0227477	0.21149022	2.7900320	20	10 3.4	20.0
184015	2004	FH ₂₄	16.6	X	51.56975	280.71103	343.89879	2.19589	0.1567025	0.26462333	2.4027982	20	9 28.6	19.4
184016	2004	FW ₂₇	16.8	X	329.34100	239.54072	331.97633	1.85107	0.1419390	0.24197860	2.5504574	20	2 8.3	19.8
184017	2004	FP ₃₁	15.4	X	41.00727	269.26469	55.85855	25.69880	0.2074598	0.27257874	2.3558161	20	12 10.2	18.8
184018	2004	FP ₃₃	15.0	X	167.45856	20.79105	325.68404	14.26384	0.1993400	0.24069946	2.5594853	20	2 9.5	19.2
184019	2004	FM ₃₅	15.8	X	234.19123	275.41316	178.91475	16.46484	0.1967706	0.21019498	2.8014819	20	8 16.1	20.3
184020	2004	FA ₃₆	16.3	X	53.18020	320.11433	172.47063	6.95972	0.1292757	0.24497956	2.5295862	20	3 18.0	18.9
184021	2004	FY ₃₆	16.6	X	66.06608	103.06053	74.94137	4.36330	0.1082204	0.25176478	2.4839303	20	6 8.9	19.6
184022	2004	FE ₃₉	17.0	X	49.82080	94.63068	106.26063	2.10932	0.1294927	0.25437460	2.4669114	20	6 20.3	19.5
184023	2004	FY ₃₉	16.6	X	35.53771	345.60741	106.58945	2.64494	0.0926451	0.23664205	2.5886586	20	—	—
184024	2004	FO ₄₂	17.0	X	75.88512	39.31177	228.40290	1.36022	0.2246929	0.27055593	2.3675438	20	11 8.9	20.5
184025	2004	FG ₄₄	16.8	X	320.38214	230.06691	174.10723	2.73931	0.1558028	0.23675763	2.5878160	20	—	—
184026	2004	FO ₄₅	16.2	X	322.98427	168.14811	123.91459	5.58878	0.1258610	0.25218543	2.4811673	20	5 25.6	18.8
184027	2004	FG ₅₀	16.6	X	357.69713	319.30671	224.03504	4.12676	0.1351180	0.24227651	2.5483663	20	2 14.9	19.3
184028	2004	FJ ₅₅	16.3	X	37.54009	259.75498	36.14670	3.17732	0.0920136	0.26933208	2.3747104	20	10 14.0	19.1
184029	2004	FH ₆₂	16.9	X	56.84489	140.33497	179.18909	3.31897	0.1485282	0.25696259	2.4503199	20	8 2.4	19.7
184030	2004	FT ₆₃	16.2	X	266.66623	85.64728	175.13868	12.53443	0.1456865	0.23659790	2.5889806	20	1 23.8	20.3
184031	2004	FX ₆₄	15.9	X	6.30857	314.49237	186.49675	11.68303	0.1128383	0.23609294	2.5926708	20	1 5.9	19.1
184032	2004	FA ₆₅	15.6	X	180.29228	89.92201	195.55545	12.32243	0.1546440	0.22361214	2.6882674	20	—	—
184033	2004	FD ₆₅	16.0	X	305.88762	351.57077	183.63565	9.63818	0.1294130	0.23031569	2.6358480	20	—	—
184034	2004	FM ₆₆	17.0	X	40.21183	143.17788	57.88457	4.26266	0.1619120	0.25404466	2.4690469	20	6 8.3	19.5
184035	2004	FF ₆₇	14.8	X	210.91025	161.40185	155.20933	12.48764	0.0558007	0.17878017	3.1207321	20	2 16.7	19.5
184036	2004	FL ₆₇	16.5	X	309.68954	104.02813	146.00456	5.22120	0.2194671	0.24173262	2.5521873	20	2 19.5	19.9
184037	2004	FD ₇₅	17.3	X	87.61958	234.81229	172.35004	32.13576	0.3067323	0.24215969	2.5491857	20	2 11.8	20.7
184038	2004	FW ₇₇	16.7	X	205.05796	3.97190	112.29139	2.12444	0.1385470	0.27018689	2.3698055	20	8 28.4	20.2
184039	2004	FG ₈₂	15.7	X	179.71543	279.98400	48.60240	9.32814	0.1776214	0.23790191	2.5795112	20	1 30.9	20.0
184040	2004	FJ ₈₂	16.0	X	108.21626	36.16366	21.35579	14.96319	0.0949026	0.24328962	2.5412867	20	2 22.6	20.2
184041	2004	FQ ₈₄	16.6	X	268.13910	145.02703	206.37701	6.01813	0.1521917	0.25549169	2.4597154	20	5 21.7	19.2
184042	2004	FF ₈₆	16.4	X	86.76884	161.94395	94.97229	7.73557	0.0860020	0.27133378	2.3630168	20	10 27.6	19.7
184043	2004	FG ₈₆	16.3	X	357.06746	64.15274	45.37461	7.09527	0.1023206	0.23427149	2.6060921	20	—	—
184044	2004	FM ₈₆	16.4	X	43.96697	156.42981	109.11037	7.74115	0.1011041	0.26450732	2.4035007	20	9 14.3	19.3
184045	2004	FF ₈₇	17.4	X	107.57469	94.10634	49.58941	3.11288	0.1408750	0.25655489	2.4529151	20	6 21.8	20.7
184046	2004	FH ₉₀	16.7	X	353.86109	54.85961	93.99826	5.51763	0.1680529	0.23698241	2.5861793	20	—	—
184047	2004	FX ₉₂	16.7	X	255.43806	140.93757	112.08260	6.04633	0.1151898	0.23446529	2.6046558	20	1 7.9	20.6
184048	2004	FY ₉₆	15.2	X	63.21597	337.41418	46.19576	13.81991	0.1811699	0.22938786	2.6429509	20	—	—
184049	2004	FB ₉₉	16.2	X	287.36845	230.36496	15.98278	5.13559	0.1107129	0.24351434	2.5397230	20	2 4.4	19.7
184050	2004	FL ₉₉	16.2	X	128.79093	123.40422	92.95106	9.25865	0.1106467	0.20555236	2.8435076	20	10 14.7	20.7
184051	2004	FQ ₁₀₂	16.6	X	212.85230	55.48998	55.00800	3.14309	0.1099911	0.27132532	2.3630659	20	9 2.6	19.8
184052	2004	FR ₁₀₂	16.9	X	259.57611	15.26956	45.66000	4.01121	0.1307743	0.27033255	2.3688478	20	8 22.5	19.7
184053	2004	FN ₁₁₀	16.2	X	68.03151	8.25825	85.36149	3.80349	0.1809230	0.24186122	2.5512825	20	2 26.9	18.9
184054	2004	FM ₁₁₃	16.5	X	188.36705	127.78117	163.92892	13.81890	0.0918211	0.23000970	2.6381852	20	—	—
184055	2004	FD ₁₂₆	16.2	X	113.71100	39.74976	15.58031	7.72972	0.0805984	0.24133151	2.5550145	20	2 27.3	19.6
184056	2004	FE ₁₂₈	15.8	X	88.51940	15.58298	19.44283	11.01696	0.0578485	0.23230707	2.6207631	20	—	—
184057	2004	FY ₁₃₀	16.2	X	1.74249	107.85591	85.09289	11.84007	0.0903201	0.24416265	2.5352253	20	3 19.4	19.3
184058	2004	FC ₁₃₉	17.3	X	64.06324	300.13686	172.57819	3.57640	0.1644882	0.24628521	2.5206381	20	3 13.0	19.7
184059	2004	FG ₁₄₃	16.5	X	329.44406	145.57739	182.80462	4.77711	0.2015486	0.26315626	2.4117202	20	7 26.4	18.4
184060	2004	FR ₁₄₆	16.1	X	315.81279	31.34764	174.62024	17.28095	0.1291931	0.23616823	2.5921198	20	1 13.9	19.8
184061	2004	FM ₁₄₈	16.7	X	133.89737	69.30443	48.58529	19.99818	0.3345431	0.25946450	2.4345428	20	6 27.1	21.4
184062	2004	FZ ₁₅₁	17.8	X	147.12407	21.34116	103.17261	1.21478	0.1452767	0.26321219	2.4113785	20	7 9.5	21.6
184063	2004	FS ₁₆₂	16.0	X	143.56923	299.57039	29.09683	10.93580	0.0874368	0.22883666	2.6471933	20	—	—
184064		Miner	16.4	X	125.35905	5.99582	31.97418	1.88309	0.1762840	0.23834401	2.5763205	20	3 1.0	20.2
184065	2004	GW ₄	16.4	X	212.81188	190.35115	73.83109	4.22982	0.2184748	0.22533393	2.6745557	20	—	—
184066	2004	GQ ₇	16.3	X	344.63655	283.78950	28.66041	4.51841	0.0541166	0.25961336	2.4336121	20	8 9.6	19.0
184067	2004	GT ₇	17.0	X	349.75722	139.22901	49.05014	1.46692	0.1243679	0.24086696	2.5582986	20	2 12.3	19.6
184068	2004	GX ₇	16.9	X	306.83145	37.42399	238.36114	2.44939	0.1547365	0.24486695	2.5303617	20	3 29.6	20.1
184069	2004	GH ₉	16.0	X	40.29704	229.09246	207.41701	12.45386	0.1297403	0.23185246	2.6241878	20	—	—
184070	2004	FM ₁₂	15.9	X	237.77364	112.92995	198.78176	22.97637	0.2848746	0.23399927</				

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ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
184081	2004	GR ₃₃	15.8 ^m	X	273.31900	303.06819	16.23972	14.10651	0.3398917	0.24234561	2.5478818	20	3 25.9	19.9
184082	2004	GY ₃₄	16.4	X	358.92252	297.08639	229.85539	15.47740	0.0991388	0.23970390	2.5665672	20	1 25.5	19.8
184083	2004	GR ₃₆	16.4	X	14.07434	144.46236	40.03547	12.82469	0.1880559	0.24313196	2.5423852	20	3 26.3	18.7
184084	2004	GY ₃₈	16.6	X	328.16905	214.25918	24.28752	8.27120	0.1387243	0.24318194	2.5420368	20	3 17.4	19.5
184085	2004	GS ₃₉	15.1	X	202.51483	306.62906	22.07415	31.57533	0.2378689	0.23273706	2.6175341	20	3 6.2	20.2
184086	2004	GG ₄₀	15.8	X	260.40306	99.83579	118.93432	8.93500	0.1867789	0.22684884	2.6626352	20	—	—
184087	2004	GP ₄₁	16.2	X	313.14556	232.35895	320.69458	6.32647	0.1459966	0.23423968	2.6063280	20	—	—
184088	2004	GD ₅₃	17.6	X	299.60074	85.61734	187.58472	5.44233	0.1505207	0.24342754	2.5403267	20	3 17.4	20.9
184089	2004	GZ ₅₈	16.4	X	332.83452	142.51074	73.66152	3.58488	0.0408672	0.24081988	2.5586320	20	3 6.8	19.6
184090	2004	GE ₇₀	16.3	X	1.49328	46.16127	75.44403	4.41791	0.1177495	0.23179065	2.6246543	20	—	—
184091	2004	GL ₇₂	16.3	X	9.32253	86.37775	48.18850	10.83798	0.0493914	0.23499549	2.6007366	20	1 10.1	19.7
184092	2004	GZ ₇₂	16.1	X	300.65359	92.89130	97.56118	5.15675	0.1223804	0.23108309	2.6300092	20	—	—
184093	2004	GG ₇₇	14.7	X	188.61303	69.33151	257.11803	23.55136	0.0625838	0.17675784	3.1444903	20	1 27.8	19.9
184094	2004	GF ₈₁	16.7	X	257.42769	78.51966	190.98880	5.91398	0.1190980	0.23924015	2.5698929	20	1 27.6	20.6
184095	2004	HH ₃	15.8	X	297.53741	331.95113	234.19028	12.58270	0.1289632	0.23316697	2.6143157	20	—	—
184096	2004	Kazlauskas	16.1	X	21.48728	69.53082	42.75744	10.38312	0.0698096	0.23275677	2.6173864	20	—	—
184097	2004	HQ ₄	16.0	X	95.19614	47.10923	42.26056	13.66465	0.1358638	0.24294394	2.5436968	20	3 30.1	19.4
184098	2004	HG ₈	16.4	X	145.80892	343.79672	295.40637	2.40005	0.1647006	0.21710122	2.7417502	20	—	—
184099	2004	HM ₁₀	16.0	X	13.96455	331.83508	207.68633	12.14683	0.2175586	0.24134302	2.5549332	20	3 6.9	18.2
184100	2004	HQ ₁₀	15.9	X	237.86115	44.50695	191.50157	10.06454	0.1111850	0.22526803	2.6750773	20	—	—
184101	2004	HE ₁₁	16.5	X	264.10866	153.36133	92.80709	5.92314	0.1054384	0.23358369	2.6112054	20	1 9.6	20.4
184102	2004	HC ₁₂	15.8	X	318.50713	90.19119	107.39700	14.85844	0.2005850	0.23488707	2.6015368	20	—	—
184103	2004	HT ₁₇	15.8	X	198.96076	16.76690	228.65795	12.70388	0.2212220	0.22059233	2.7127459	20	—	—
184104	2004	HQ ₂₃	16.2	X	106.22904	44.26103	22.86854	6.98355	0.1599274	0.24057730	2.5603517	20	3 15.1	19.6
184105	2004	HP ₂₄	15.8	X	292.05549	182.04978	65.55418	13.55559	0.1337462	0.23544116	2.5974536	20	2 12.9	19.7
184106	2004	HZ ₂₇	16.0	X	274.56161	112.36278	176.54539	5.13423	0.2162961	0.23831581	2.5765237	20	2 29.1	20.0
184107	2004	HB ₂₈	16.5	X	268.41757	114.47370	149.76682	3.58634	0.1486941	0.23489090	2.6015086	20	1 31.3	20.5
184108	2004	HG ₃₀	16.4	X	227.24596	72.05418	203.90467	1.41153	0.1696624	0.22986368	2.6393024	20	1 6.9	20.7
184109	2004	HZ ₃₀	16.3	X	328.30980	198.17830	352.34130	7.15270	0.1267312	0.23567434	2.5957400	20	1 14.9	19.6
184110	2004	HX ₃₆	15.6	X	226.11286	18.62179	230.33769	10.76007	0.2157514	0.22491020	2.6779139	20	—	—
184111	2004	HC ₃₈	16.1	X	274.28244	123.31595	34.61891	16.18644	0.0715953	0.22170834	2.7036348	20	—	—
184112	2004	HB ₄₃	16.3	X	265.64470	359.96551	271.79151	1.20699	0.1449472	0.23522655	2.5990332	20	2 7.0	20.2
184113	2004	HZ ₄₃	16.1	X	254.65422	126.19981	12.91461	9.24843	0.1359274	0.21678187	2.7444421	20	11 15.1	19.8
184114	2004	HM ₄₇	16.5	X	282.30805	191.90756	55.81617	6.30243	0.0758689	0.23522534	2.5990421	20	2 6.4	20.1
184115	2004	HJ ₄₉	16.0	X	348.01014	153.02884	65.72202	9.16756	0.1316797	0.24115278	2.5562768	20	3 27.3	18.8
184116	2004	HY ₅₄	15.9	X	359.63314	353.12247	220.69611	5.58885	0.1169358	0.24310998	2.5425384	20	4 4.7	18.5
184117	2004	HQ ₅₆	15.9	X	195.68362	169.81048	134.11118	14.99482	0.1705693	0.22727471	2.6593080	20	1 13.3	20.3
184118	2004	HG ₅₈	16.4	X	27.17236	330.58853	106.07517	0.62000	0.1443731	0.22659019	2.6646611	20	—	—
184119	2004	HG ₅₉	15.9	X	227.68572	8.06441	237.94258	10.79144	0.1342158	0.22497631	2.6773893	20	—	—
184120	2004	HJ ₅₉	16.2	X	290.52307	87.05064	45.93007	17.73981	0.1643929	0.22267105	2.6958365	20	—	—
184121	2004	HF ₆₀	16.3	X	315.23206	274.85968	330.69055	6.65039	0.1599595	0.24106326	2.5569096	20	2 29.6	19.5
184122	2004	HG ₆₂	15.4	X	316.63876	355.35897	243.86918	12.40206	0.2206994	0.23822188	2.5772009	20	2 9.1	19.1
184123	2004	HQ ₆₆	16.3	X	117.42998	92.67948	221.81271	2.53129	0.1886336	0.21719447	2.7409653	20	—	—
184124	2004	HW ₇₁	16.8	X	277.32502	266.80254	56.67508	5.24595	0.2114002	0.24403101	2.5361370	20	4 18.1	20.4
184125	2004	HG ₇₂	16.8	X	240.55899	244.81156	25.33292	4.85349	0.1465537	0.23115140	2.6294910	20	1 13.6	20.9
184126	2004	JD ₁	15.6	X	191.44488	153.25531	158.66722	9.14078	0.1283171	0.22687269	2.6624486	20	1 17.1	19.9
184127	2004	JJ ₁	15.9	X	28.74358	316.45016	54.65680	10.34751	0.1676512	0.21038068	2.7998332	20	—	—
184128	2004	JB ₁₁	15.9	X	285.36311	136.31660	132.64482	8.85842	0.1430981	0.23674048	2.5879409	20	2 26.9	19.5
184129	2004	JL ₁₁	16.4	X	280.56861	74.37600	175.27296	8.58144	0.1454041	0.23478771	2.6022707	20	1 25.3	20.3
184130	2004	JT ₁₂	15.7	X	306.35416	164.99864	13.40050	14.58613	0.1117703	0.22924500	2.6440488	20	—	—
184131	2004	JH ₁₄	16.5	X	316.49331	102.83407	129.75590	5.16677	0.1756067	0.23794235	2.5792190	20	2 13.4	19.6
184132	2004	JN ₁₄	15.5	X	40.26731	256.31208	222.82710	21.36403	0.0576511	0.23334288	2.6130016	20	1 26.5	19.3
184133	2004	JX ₁₄	16.0	X	209.69932	140.27726	79.61290	13.72244	0.1398880	0.21766994	2.7369724	20	—	—
184134	2004	JK ₁₅	15.9	X	315.51559	183.37741	66.95513	5.25535	0.1532100	0.23947333	2.5682145	20	3 12.6	19.0
184135	2004	JA ₁₇	15.7	X	230.15148	318.41547	2.02744	5.43322	0.3052853	0.23342699	2.6123739	20	2 26.8	20.4
184136	2004	JB ₁₈	16.0	X	302.72922	310.16260	250.15081	7.47971	0.0621760	0.23246957	2.6195416	20	1 1.8	19.7
184137	2004	JU ₁₈	16.1	X	161.57884	216.25884	36.85801	5.03548	0.0811878	0.21511494	2.7586017	20	12 27.9	20.2
184138	2004	JM ₁₉	16.5	X	142.02162	308.65814	348.63438	0.93514	0.2103575	0.21564870	2.7540479	20	—	—
184139	2004	JC ₂₀	16.4	X	316.72165	138.66968	129.18443	6.91894	0.2010181	0.24253060	2.5465861	20	3 30.6	19.4
184140	2004	JW ₂₂	16.2	X	203.57093	55.37233	207.14255	4.31223	0.1272548	0.22353694	2.6888703	20	—	—
184141	2004	JG ₂₃	16.4	X	277.40466	321.78360	257.56737	1.46590	0.1389724	0.22996925	2.6384945	20	—	—
184142	2004	JN ₂₆	15.2	X	29.85565	38.88337	55.33547	22.80182	0.0646956	0.22805342	2.6532509	20	—	—
184143	2004	JQ ₂₇	16.2	X	332.97286	349.47781	244.27873	2.82440	0.2185391	0.24004615	2.5641271	20	3 2.1	18.8
184144	2004	JY ₃₀	16.0	X	34.39314	69.67611	98.33601	4.65177	0.1880331	0.24233226	2.5479754	20	4 12.9	18.3
184145	2004	JC ₃₂	16.4	X	294.82648	131.79685	88.27258	8.24036	0.1533406	0.23372833	2.6101280	20	1 5.3	20.0
184146	2004	JB ₃₆	16.1	X	263.30158	352.56836	216.80960	13.64080	0.0706356	0.22678771	2.6631137	20	—	—
184147	2004	JW ₃₆	16.2	X	3.05730	32.50107	59.20395	9.61343	0.0765793	0.22330644	2.6907203	20	—	—
184148	2004	JT ₅₁	16.2	X	251.75551	248.24578	99.09628	14.70900	0.0752622	0.24623506	2.5209803	20	5 11.3	19.9
184149	2004	JD ₅₂	16.1	X	314.71689	85.36973	91.20830	10.95708	0.1742245	0.23174357	2.6250097	20	—	—
184150	2004	JY ₅₃	15.9	X	207.72915	163.00925	113.27084	6.98121	0.0121171	0.22646178	2.6656683	20	—	—
184151	2004	KY	16.4	X										

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184161 2004 <i>LM</i> ₂	15.8	X	339.72379	86.74014	138.58688	10.85482	0.1468744	0.24014512	2.5634226	20	3 17.9	18.6
184162 2004 <i>LB</i> ₃	15.9	X	350.43643	67.91335	119.35009	12.75085	0.2426205	0.23781846	2.5801147	20	1 26.4	18.3
184163 2004 <i>LX</i> ₄	15.9	X	176.33654	151.78824	192.65329	14.58021	0.0919869	0.22930825	2.6435626	20	2 6.0	20.1
184164 2004 <i>LX</i> ₆	16.3	X	253.56622	317.63834	323.65850	1.61486	0.1741691	0.23180782	2.6245247	20	2 5.2	20.4
184165 2004 <i>LC</i> ₉	15.9	X	235.59591	113.51020	177.22591	13.41485	0.1199840	0.23121688	2.6289945	20	1 31.7	20.2
184166 2004 <i>LK</i> ₉	15.6	X	178.11155	8.96867	254.06424	11.78904	0.1126087	0.21719732	2.7409413	20	—	—
184167 2004 <i>LS</i> ₁₆	14.7	X	298.75399	60.12156	265.95595	7.35172	0.2317321	0.17436067	3.1732457	20	5 15.8	18.9
184168 2004 <i>LD</i> ₂₈	15.3	X	146.46733	102.07302	211.93558	12.40789	0.2564830	0.21033949	2.8001986	20	—	—
184169 2004 <i>LC</i> ₃₁	14.7	X	280.01817	210.19046	99.97966	15.35542	0.1497309	0.17299164	3.1899654	20	4 22.5	19.5
184170 2004 <i>MX</i> ₁	15.9	X	176.52875	181.55122	78.19107	7.27492	0.2029707	0.21309743	2.7759858	20	—	—
184171 2004 <i>MH</i> ₄	16.8	X	270.64588	106.71057	151.08958	5.35113	0.2345030	0.23186078	2.6241250	20	1 18.1	21.1
184172 2004 <i>NM</i> ₁₉	15.6	X	140.26104	162.40119	144.07167	9.96530	0.1831455	0.21139711	2.7908512	20	—	—
184173 2004 <i>NC</i> ₂₄	15.8	X	139.06411	158.88637	163.72646	6.22354	0.0806296	0.21362599	2.7714050	20	—	—
184174 2004 <i>NS</i> ₂₅	16.0	X	325.16265	170.47233	152.30898	5.71781	0.1720441	0.18336360	3.0685083	20	7 4.2	19.5
184175 2004 <i>NT</i> ₂₈	15.4	X	307.03309	146.54717	237.89471	4.78453	0.1824636	0.18727580	3.0256239	20	8 23.2	19.0
184176 2004 <i>NK</i> ₃₀	15.6	X	247.04587	190.93212	70.56891	15.08369	0.2145865	0.22410220	2.6843468	20	1 5.7	20.2
184177 2004 <i>NA</i> ₃₁	15.7	X	104.14117	210.05041	73.83907	3.00663	0.1706822	0.20161226	2.8804350	20	12 8.6	20.2
184178 2004 <i>NV</i> ₃₁	15.6	X	64.22597	310.78180	301.23386	9.03141	0.0772811	0.19133033	2.9827269	20	9 2.7	19.8
184179 2004 <i>NC</i> ₃₃	15.0	X	198.42232	300.95382	137.45859	16.76695	0.0672580	0.17928559	3.1148643	20	7 1.7	19.8
184180 2004 <i>NN</i> ₃₃	15.0	X	341.08546	223.39883	165.94871	17.59877	0.1059553	0.17926120	3.1151468	20	7 5.3	18.9
184181 2004 <i>OO</i>	16.0	X	311.05326	350.91874	345.34292	1.68472	0.1920235	0.18160861	3.0882451	20	6 25.1	19.6
184182 2004 <i>OC</i> ₄	15.2	X	285.27667	125.92700	187.65414	4.96066	0.1752818	0.17334923	3.1855769	20	4 22.7	19.6
184183 2004 <i>ON</i> ₄	15.7	X	144.21915	340.70064	302.58282	3.92835	0.0640598	0.20892877	2.8127894	20	—	—
184184 2004 <i>OX</i> ₁₁	14.9	X	337.82628	290.45708	344.24768	15.50902	0.2546957	0.17775601	3.1327075	20	5 6.3	18.5
184185 2004 <i>PX</i>	15.1	X	248.53480	238.51237	164.94871	9.91045	0.0889688	0.17905428	3.1175462	20	7 11.2	19.7
184186 2004 <i>PZ</i> ₁	15.3	X	25.86378	312.88929	346.00080	8.99303	0.0927131	0.18890542	3.0081981	20	9 15.4	19.2
184187 2004 <i>PX</i> ₃	15.4	X	20.94870	251.12428	115.82315	6.98059	0.1035945	0.19832895	2.9121381	20	12 9.4	19.2
184188 2004 <i>PX</i> ₁₇	15.9	X	77.60613	223.37909	62.24826	4.05649	0.0937309	0.19454466	2.9406186	20	11 6.9	20.2
184189 2004 <i>PO</i> ₁₉	15.2	X	306.51151	206.32936	133.08239	5.96793	0.1371188	0.17787177	3.1313482	20	6 29.6	19.3
184190 2004 <i>PY</i> ₁₉	15.1	X	11.13634	177.77786	113.14136	13.25952	0.0451798	0.18040675	3.1019458	20	8 10.9	19.2
184191 2004 <i>PD</i> ₂₅	15.7	X	346.89437	269.41416	64.88611	2.05268	0.0903239	0.18627696	3.0364301	20	9 2.9	19.4
184192 2004 <i>PC</i> ₃₀	15.4	X	357.05993	326.42516	320.75334	7.81150	0.1077533	0.18035970	3.1024851	20	7 17.5	19.2
184193 2004 <i>PO</i> ₃₀	14.6	X	193.51272	14.35137	300.08096	9.68726	0.0899716	0.15874282	3.3781064	20	1 29.7	19.9
184194 2004 <i>PS</i> ₃₂	15.5	X	346.50606	294.25615	63.23588	5.06657	0.0643868	0.19020230	2.9945084	20	10 4.4	19.3
184195 2004 <i>PU</i> ₃₃	16.1	X	338.77652	146.09357	216.51904	1.27646	0.1741805	0.18692820	3.0293736	20	9 26.6	19.4
184196 2004 <i>PF</i> ₃₆	15.4	X	344.83679	121.81405	156.90303	16.60975	0.2105062	0.17843950	3.1247028	20	6 10.5	19.0
184197 2004 <i>PA</i> ₄₉	15.6	X	308.88728	184.59264	149.50299	11.89730	0.0749500	0.18073678	3.0981456	20	7 4.3	19.8
184198 2004 <i>PF</i> ₅₅	15.9	X	7.87953	248.02022	99.48390	5.20560	0.0691053	0.19156097	2.9803323	20	10 23.4	19.8
184199 2004 <i>PH</i> ₆₃	15.2	X	262.52273	280.39664	80.01525	5.34641	0.1445469	0.17505677	3.1648280	20	5 28.0	19.9
184200 2004 <i>PZ</i> ₆₅	16.2	X	329.52561	169.63546	155.85538	5.90840	0.1610400	0.18185210	3.0854878	20	7 16.9	19.8
184201 2004 <i>PE</i> ₇₁	16.1	X	316.69182	89.80771	142.92593	12.22485	0.2684873	0.23435540	2.6054700	20	1 30.1	19.6
184202 2004 <i>PL</i> ₇₄	15.5	X	330.30192	145.79058	146.25978	4.04599	0.1139545	0.17771496	3.1331899	20	6 7.7	19.4
184203 2004 <i>PG</i> ₇₅	16.0	X	343.70233	201.93117	127.96996	2.31027	0.2034972	0.18390733	3.0624572	20	8 21.3	18.9
184204 2004 <i>PS</i> ₇₅	14.6	X	300.58237	323.79698	320.16093	20.15982	0.0949813	0.16948953	3.2335756	20	4 4.8	19.5
184205 2004 <i>PJ</i> ₈₁	15.8	X	170.98142	153.17261	133.28756	8.74962	0.1950484	0.21153418	2.7896455	20	—	—
184206 2004 <i>PS</i> ₈₃	14.8	X	16.96152	191.91403	152.11160	11.67599	0.1015035	0.18948850	3.0020239	20	11 5.6	18.8
184207 2004 <i>PQ</i> ₈₈	15.7	X	354.47430	83.80418	226.42481	8.13707	0.1485012	0.18354417	3.0664954	20	8 10.4	19.3
184208 2004 <i>PR</i> ₉₄	15.0	X	330.73244	177.51502	109.74655	6.72491	0.1696257	0.17535498	3.1612388	20	5 27.8	18.7
184209 2004 <i>PA</i> ₉₉	15.0	X	308.88290	338.35979	32.65502	12.53223	0.0237734	0.18475724	3.0530581	20	9 3.3	19.3
184210 2004 <i>PB</i> ₁₀₇	14.8	X	2.77090	261.51836	4.67534	15.68056	0.2121820	0.17996489	3.1070210	20	7 3.3	18.3
184211 2004 <i>PN</i> ₁₁₁	15.0	X	100.24807	275.95483	46.35760	13.97940	0.2966275	0.20411085	2.8568800	20	—	—
184212 2004 <i>PB</i> ₁₁₂	7.3	X	2.79511	3.49466	356.75239	15.41635	0.6752067	0.00086902	108.7551119	20	10 10.1	22.9
184213 2004 <i>PJ</i> ₁₁₅	15.0	X	319.38248	7.53289	39.26000	9.98229	0.0687258	0.19245581	2.9710870	20	10 26.8	18.8
184214 2004 <i>QU</i> ₃	15.3	X	33.05494	46.64447	191.49163	9.37345	0.0626243	0.17810793	3.1285796	20	7 2.8	19.6
184215 2004 <i>QJ</i> ₂₇	14.9	X	4.63425	241.45070	9.92463	15.65885	0.1848289	0.17786082	3.1314767	20	6 9.4	18.6
184216 2004 <i>QV</i> ₂₇	16.3	X	85.24485	251.69635	212.12557	7.97403	0.1405710	0.22313207	2.6921219	20	3 30.9	19.9
184217 2004 <i>RM</i> ₂₃	14.9	X	333.00748	284.28049	354.87355	11.50197	0.1316196	0.17423687	3.1747486	20	5 19.7	19.0
184218 2004 <i>RF</i> ₄₀	14.9	X	257.79025	328.10994	66.10631	14.42647	0.0545171	0.17634957	3.1493417	20	7 17.8	19.5
184219 2004 <i>RU</i> ₄₅	15.0	X	79.51189	21.00755	160.24912	18.57032	0.0558733	0.17313371	3.1882200	20	6 23.3	19.8
184220 2004 <i>RQ</i> ₅₈	15.7	X	340.15616	206.20070	96.33945	3.61809	0.2416710	0.17850624	3.1239239	20	6 29.9	18.8
184221 2004 <i>RS</i> ₆₇	15.2	X	350.72258	105.82009	180.90026	9.82102	0.2150131	0.17760446	3.1344894	20	7 2.2	18.5
184222 2004 <i>RA</i> ₆₈	15.3	X	311.51639	319.07569	11.93592	4.19066	0.1435578	0.17542258	3.1604267	20	6 25.5	19.3
184223 2004 <i>RD</i> ₆₉	15.7	X	36.64958	256.83727	65.37259	2.13101	0.2629469	0.19037961	2.9926489	20	11 25.3	19.8
184224 2004 <i>RB</i> ₇₄	15.7	X	348.80671	353.33258	293.91371	1.81096	0.2109840	0.17798308	3.1300425	20	6 29.6	18.9
184225 2004 <i>RB</i> ₈₁	14.1	X	308.28295	84.12071	342.81645	8.40006	0.1735972	0.12704268	3.9189491	20	10 8.9	18.9
184226 2004 <i>RR</i> ₈₉	14.9	X	297.34495	148.77585	172.52363	19.17357	0.2474083	0.17567534	3.1573945	20	5 9.9	19.5
184227 2004 <i>RW</i> ₈₉	14.8	X	307.42063	106.62160	184.77282	16.00362	0.0673222	0.17306268	3.1890923	20	5 11.1	19.3
184228 2004 <i>RE</i> ₉₀	15.1	X	279.71152	160.90819	220.68785	8.90575	0.1031406	0.18022300	3.1040538	20	7 19.2	19.6
184229 2004 <i>RO</i> ₁₀₃	14.9	X	334.59787	292.16434	49.71377	11.14676	0.1476158	0.17897688	3.1184450	20	8 26.1	18.7
184230 2004 <i>RD</i> ₁₃₆	14.8	X	344.99065	62.64869	230.83078	15.44412	0.1339592	0.17739285	3.1369817	20	6 30.6	18.7
184231 2004 <i>RQ</i> ₁₄₇	15.9	X	58.75319	249.78216	43.01094	1.92690	0.1398828	0.18958978	3.0009546	20	10 29.5	20.0

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184241 2004 <i>RD</i> ₂₃₅	14.1	X	300.82919	218.68089	217.58336	8.77416	0.1339283	0.12635027	3.9332535	20	10 15.3	19.2
184242 2004 <i>RL</i> ₂₄₄	15.8	X	8.00236	66.73676	158.01593	5.15318	0.0869971	0.16857948	3.2453851	20	5 12.4	19.9
184243 2004 <i>RQ</i> ₂₅₃	15.1	X	316.33373	243.39242	75.19530	6.00336	0.1799222	0.17670031	3.1451727	20	6 11.4	18.7
184244 2004 <i>RW</i> ₂₉₀	15.3	X	73.82164	210.96258	74.68232	5.43319	0.1225918	0.19124607	2.9836030	20	11 6.2	19.7
184245 2004 <i>RY</i> ₃₁₅	14.6	X	320.40239	207.88820	96.93730	20.61634	0.1545427	0.17448545	3.1717327	20	6 6.2	18.6
184246 2004 <i>RY</i> ₃₃₂	15.4	X	308.69631	226.07083	66.38459	6.99951	0.1528875	0.17163561	3.2067452	20	5 1.4	19.5
184247 2004 <i>RZ</i> ₃₃₂	15.0	X	303.40142	274.08207	87.89376	6.65176	0.1627410	0.17863159	3.1224624	20	7 22.2	18.8
184248 2004 <i>SX</i> ₁₁	15.2	X	36.90974	185.91733	98.06821	16.04704	0.2133588	0.18586715	3.0408917	20	10 9.2	19.5
184249 2004 <i>SE</i> ₂₉	15.4	X	22.76956	87.94933	186.72814	15.59886	0.2344391	0.18131256	3.0916058	20	8 24.8	19.0
184250 2004 <i>SD</i> ₃₃	15.6	X	12.70007	186.06328	150.48447	5.20186	0.2155949	0.18559679	3.0438442	20	11 1.8	19.1
184251 2004 <i>SD</i> ₄₇	14.8	X	204.64018	335.58933	329.95290	6.25111	0.0810874	0.15163095	3.4829252	20	2 1.5	20.0
184252 2004 <i>TV</i> ₅	16.1	X	13.31829	138.14591	169.42134	0.70311	0.1634042	0.18094084	3.0958386	20	9 15.0	19.7
184253 2004 <i>TP</i> ₇	14.8	X	344.65135	164.15327	157.50383	18.29249	0.2047819	0.17944864	3.1129772	20	8 8.6	18.2
184254 2004 <i>TC</i> ₁₆	14.8	X	22.98067	191.79371	93.88306	21.94789	0.2351426	0.18119481	3.0929451	20	9 24.8	18.9
184255 2004 <i>TQ</i> ₆₅	15.5	X	17.32747	180.02612	116.64091	3.12967	0.1451979	0.18098912	3.0952880	20	9 6.3	19.2
184256 2004 <i>TG</i> ₆₆	14.3	X	307.86738	29.43504	53.52649	12.01143	0.2279154	0.12360374	3.9913055	20	10 25.9	20.1
184257 2004 <i>TF</i> ₉₆	15.0	X	17.46313	179.07353	190.40188	2.15582	0.0292685	0.12652381	3.9296562	20	11 12.6	20.4
184258 2004 <i>TC</i> ₁₀₆	15.4	X	37.53241	114.54591	181.99462	9.19443	0.2566104	0.18731913	3.0251573	20	10 25.8	19.4
184259 2004 <i>TY</i> ₁₁₆	15.3	X	131.77791	132.72773	195.94138	10.91490	0.2472217	0.21224839	2.7833839	20	—	—
184260 2004 <i>TJ</i> ₁₂₄	15.3	X	14.62022	128.40929	158.24630	5.03490	0.1426751	0.17989537	3.1078214	20	8 16.9	19.0
184261 2004 <i>TW</i> ₁₂₄	15.4	X	58.71029	73.28808	203.96418	4.66017	0.0994500	0.18504630	3.0498779	20	10 3.2	19.6
184262 2004 <i>TH</i> ₁₄₇	14.9	X	258.03819	143.53949	337.03323	4.82340	0.0377128	0.12468584	3.9681792	20	10 24.2	20.5
184263 2004 <i>TP</i> ₁₇₉	16.4	X	17.13787	80.49384	181.83815	6.92028	0.2676611	0.24179914	2.5517192	20	8 11.5	18.5
184264 2004 <i>TZ</i> ₂₈₇	15.4	X	23.87363	330.19863	332.59536	0.68781	0.2395004	0.18189905	3.0849569	20	10 7.7	19.1
184265 2004 <i>UL</i> ₈	17.2	X	249.41377	6.82880	328.34428	2.74543	0.1388698	0.28721074	2.2751093	20	4 5.9	20.4
184266 2004 <i>VW</i> ₁₄	19.4	X	350.02299	42.28671	101.15780	3.85159	0.6006309	0.31975867	2.1179766	20	—	—
184267 2004 <i>XD</i>	16.8	X	298.30737	70.17510	35.71073	22.49138	0.0630927	0.37643293	1.8996677	20	—	—
184268 2004 <i>XU</i> ₅	16.6	X	40.53229	255.74594	116.86803	23.46921	0.0975002	0.37787474	1.8948324	20	—	—
184269 2004 <i>XO</i> ₁₁	16.8	X	8.38041	0.58437	153.50872	2.44915	0.1172094	0.26456020	2.4031804	20	1 21.9	19.3
184270 2004 <i>XU</i> ₄₁	17.2	X	127.80358	289.00506	191.02202	3.39640	0.0265325	0.34308061	2.0208710	20	6 1.3	19.2
184271 2004 <i>XL</i> ₉₀	16.7	X	248.59262	4.08003	287.15188	4.08918	0.1254007	0.27320368	2.3522222	20	2 10.4	20.3
184272 2004 <i>XR</i> ₁₁₄	17.1	X	29.59186	297.44484	358.11347	2.49105	0.1580690	0.30084344	2.2058485	20	10 18.1	19.2
184273 2004 <i>XR</i> ₁₃₇	16.4	X	69.91646	144.97805	89.81913	0.22729	0.0589195	0.22942683	2.6426516	20	8 24.0	19.8
184274 2004 <i>YW</i> ₂₄	12.7	X	317.67855	161.77069	116.32531	26.01242	0.1153636	0.08454599	5.1413131	20	5 13.5	19.5
184275 Laffra	17.2	X	41.41947	47.33611	310.55710	18.94826	0.0796944	0.37108248	1.9178843	20	—	—
184276 2005 <i>AU</i> ₁₉	12.8	X	130.77913	0.54245	91.30595	10.71436	0.0902387	0.08307423	5.2018581	20	5 11.5	20.0
184277 2005 <i>AB</i> ₂₂	16.5	X	45.58683	241.61720	270.93515	4.28486	0.1465754	0.26765789	2.3846026	20	3 29.9	18.8
184278 2005 <i>AS</i> ₃₂	16.8	X	97.36803	323.77700	162.40671	2.47764	0.1582232	0.27407453	2.3472369	20	5 19.2	19.8
184279 2005 <i>AM</i> ₄₃	16.8	X	206.91097	106.38266	352.59566	18.18759	0.0709930	0.35304331	1.9826713	20	8 27.2	19.1
184280 Yperion	13.6	X	81.78215	34.07340	109.04401	3.47888	0.0474917	0.08202233	5.2462378	20	5 9.9	20.5
184281 2005 <i>AK</i> ₅₉	17.3	X	344.08820	323.76589	73.89897	2.55800	0.1487921	0.30628693	2.1796348	20	—	—
184282 2005 <i>BV</i> ₂	16.7	X	337.29639	316.69293	138.70771	23.25768	0.0605755	0.37767029	1.8955162	20	—	—
184283 2005 <i>BX</i> ₁₀	16.4	X	27.62652	275.53332	131.93195	23.40956	0.0997357	0.37250832	1.9129872	20	—	—
184284 2005 <i>BK</i> ₁₂	13.5	X	353.71800	276.89717	139.56611	2.10256	0.0663644	0.08436783	5.1485482	20	5 6.7	20.0
184285 2005 <i>CO</i> ₇	16.5	X	67.70103	13.02664	227.47991	19.73774	0.0344423	0.35079825	1.9911215	20	9 1.1	19.2
184286 2005 <i>CW</i> ₁₃	16.9	X	328.61673	188.67461	60.51077	2.06860	0.1571510	0.26818606	2.3814707	20	3 25.9	19.2
184287 2005 <i>CW</i> ₁₇	12.8	X	336.43554	123.35622	118.92157	10.00614	0.0205744	0.08039577	5.3167626	20	4 28.7	19.8
184288 2005 <i>CD</i> ₂₅	14.8	X	70.86799	67.48325	279.75501	31.61553	0.0816445	0.24218590	2.5490018	20	—	—
184289 2005 <i>CG</i> ₃₁	17.1	X	185.32772	190.20639	99.16815	3.40250	0.1860047	0.31359597	2.1456345	20	—	—
184290 2005 <i>CV</i> ₆₁	17.1	X	349.33473	277.71561	294.40457	1.15593	0.1587085	0.25616442	2.4554071	20	3 8.6	19.5
184291 2005 <i>CT</i> ₇₉	17.0	X	160.67361	188.16629	312.66785	6.39022	0.0863970	0.28443217	2.2899020	20	8 14.9	20.2
184292 2005 <i>EK</i>	16.0	X	195.79547	261.93329	314.70801	3.31035	0.1308538	0.24021667	2.5629135	20	12 20.5	19.7
184293 2005 <i>EB</i> ₂	16.4	X	249.22506	270.04172	195.04970	21.29943	0.0915367	0.35841713	1.9628037	20	11 5.9	18.2
184294 2005 <i>ES</i> ₂₅	17.3	X	192.65049	67.74620	137.78459	2.55571	0.0913512	0.29912859	2.2142709	20	12 21.4	20.0
184295 2005 <i>EJ</i> ₃₇	17.0	X	70.28195	5.15762	185.52733	2.72007	0.1402347	0.27285253	2.3542399	20	7 9.6	19.9
184296 2005 <i>EG</i> ₃₈	16.7	X	272.25007	313.19955	140.81467	24.06541	0.0827026	0.36157961	1.9513422	20	12 8.2	19.0
184297 2005 <i>EZ</i> ₄₆	17.6	X	132.62427	86.96465	146.11944	3.24943	0.1216540	0.29128733	2.2538326	20	11 17.9	20.8
184298 2005 <i>ES</i> ₆₀	17.0	X	43.96582	234.13148	308.96984	1.93320	0.1294566	0.26842105	2.3800806	20	5 12.9	19.2
184299 2005 <i>ES</i> ₇₈	15.7	X	340.29680	212.50866	124.33689	4.43095	0.0838353	0.22022441	2.7157664	20	8 31.9	18.8
184300 2005 <i>ED</i> ₁₁₄	17.7	X	213.13673	304.95877	358.83891	2.73786	0.1809565	0.31833384	2.1242918	20	1 18.7	20.9
184301 2005 <i>EY</i> ₁₅₃	17.6	X	31.04868	287.07698	7.32744	17.15187	0.0625961	0.35036995	1.9927439	20	10 10.1	19.4
184302 2005 <i>EY</i> ₁₇₈	16.4	X	120.04917	332.28771	303.83056	2.67230	0.1645585	0.23179603	2.6246136	20	12 18.2	20.5
184303 2005 <i>EP</i> ₁₈₁	16.7	X	24.59018	156.59294	78.30346	4.22069	0.1511653	0.27476442	2.3433063	20	6 30.8	18.6
184304 2005 <i>EV</i> ₁₉₈	17.5	X	121.71279	245.62232	308.56213	1.05403	0.0583426	0.28180396	2.3041176	20	9 9.9	20.4
184305 2005 <i>ET</i> ₁₉₉	17.1	X	305.19652	242.63995	348.83989	1.52878	0.1506142	0.25584678	2.4574390	20	1 21.2	20.4
184306 2005 <i>ES</i> ₂₀₃	12.7	X	293.78370	172.41811	124.29908	11.21014	0.0904314	0.08153621	5.2670692	20	5 2.1	19.6
184307 2005 <i>ED</i> ₂₀₆	16.6	X	65.47988	291.49047	351.68895	7.21445	0.0269465	0.28757876	2.2731679	20	10 25.1	19.5
184308 2005 <i>EY</i> ₂₀₉	16.3	X	95.47169	60.90973	201.34902	1.47117	0.0328931	0.22654656	2.6650032	20	10 27.9	20.1
184309 2005 <i>EC</i> ₂₆₀	17.2	X	57.99591	320.94890	168.44801	2.51860	0.1343290	0.26046254	2.4283197	20	3 20.6	19.7
184310 2005 <i>EZ</i> ₂₆₃	17.6	X	267.76499	125.50908	359.31809	4.68068	0.1080484	0.29922899	2.2137757	20	12 16.3	19.8
184311 2005 <i>ER</i> ₂₇₀	16.9	X	176.23987	32.24432	100.13624	6.24618	0.0978653	0.28503951	2.2866481	20	8 23.9	20.1
184312 2005 <i>EG</i> ₂₇₈												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184321 2005 GA ₈	16.5	X	160.41537	289.41540	22.42675	4.63975	0.2124477	0.30485624	2.1864489	20	—	—
184322 2005 GH ₃₀	15.9	X	12.47328	210.72860	78.14832	4.44814	0.0426272	0.21404712	2.7677687	20	8 13.6	19.4
184323 2005 GD ₃₂	17.4	X	6.64732	344.51476	237.80579	0.61568	0.1413758	0.26595873	2.3947484	20	4 30.4	19.5
184324 2005 GB ₃₉	16.8	X	129.47244	99.42933	44.19262	1.37982	0.1579183	0.27678225	2.3319034	20	7 18.7	20.3
184325 2005 GN ₆₀	17.1	X	38.78639	318.12629	330.80226	7.10428	0.1165284	0.28250814	2.3002873	20	10 8.6	19.8
184326 2005 GA ₇₃	17.0	X	255.13999	353.76862	150.50057	8.10208	0.1354649	0.29770471	2.2213257	20	12 19.5	19.2
184327 2005 GD ₈₁	16.5	X	220.67552	180.84492	96.46733	12.30132	0.2245417	0.24431745	2.5341543	20	1 1.0	20.9
184328 2005 GB ₉₁	17.3	X	170.68385	133.97197	331.18075	3.95554	0.0934824	0.27543513	2.3395006	20	7 8.7	20.7
184329 2005 GY ₉₆	17.0	X	125.33670	274.88737	41.51447	6.83931	0.1212508	0.30086051	2.2057651	20	—	—
184330 2005 GV ₉₇	16.1	X	94.52387	213.01586	105.40738	5.01576	0.0220178	0.23162193	2.6259287	20	—	—
184331 2005 GV ₁₀₁	17.3	X	167.17322	74.72977	142.16927	2.01678	0.1189310	0.29390085	2.2404512	20	12 2.8	20.4
184332 2005 GF ₁₀₂	16.2	X	322.51995	312.17432	73.28118	6.68085	0.0512731	0.22008109	2.7169453	20	10 12.3	19.6
184333 2005 GX ₁₀₈	16.9	X	2.27419	314.05599	56.63880	5.02956	0.1984337	0.28839976	2.2688517	20	12 27.6	19.2
184334 2005 GY ₁₂₇	15.7	X	120.25878	235.89848	41.67749	15.13756	0.0805724	0.22946036	2.6423942	20	12 15.8	19.9
184335 2005 GB ₁₃₃	17.7	X	130.60067	231.62376	60.26766	3.99051	0.0980768	0.29778972	2.2209030	20	—	—
184336 2005 GM ₁₃₉	17.0	X	91.46251	158.89176	165.48901	5.23088	0.1717062	0.29384273	2.2407466	20	—	—
184337 2005 GN ₁₄₃	16.9	X	102.51041	90.20015	171.74564	7.86134	0.1153792	0.28627301	2.2800749	20	11 23.8	20.3
184338 2005 GB ₁₅₁	16.8	X	213.66313	48.44659	145.43466	3.69803	0.1198833	0.29625272	2.2285779	20	12 27.7	19.3
184339 2005 GA ₁₅₄	16.5	X	326.92939	266.08514	123.84799	6.60477	0.1886367	0.28551772	2.2840942	20	11 16.5	18.2
184340 2005 GM ₁₆₃	17.0	X	49.88826	227.28695	194.52573	1.54087	0.0170628	0.24344568	2.5402005	20	—	—
184341 2005 GX ₁₇₆	17.5	X	170.32194	284.03180	11.16151	7.33793	0.2555792	0.30257516	2.1974240	20	—	—
184342 2005 GG ₁₇₈	16.8	X	307.40105	269.13772	115.18177	5.07195	0.1238694	0.28218284	2.3020548	20	9 23.3	18.8
184343 2005 GG ₂₁₈	17.5	X	89.29879	286.54265	158.81261	1.05457	0.1501073	0.25877784	2.4388476	20	3 11.1	20.4
184344 2005 HO ₂	17.2	X	30.58812	203.99562	32.26073	1.52743	0.1489230	0.26977902	2.3720870	20	7 14.7	19.4
184345 2005 HO ₄	17.2	X	76.74588	215.80985	78.17406	3.62662	0.2294309	0.28511731	2.2862322	20	12 14.7	20.9
184346 2005 HF ₆	15.8	X	99.59848	205.08417	166.12216	8.01411	0.3865987	0.23112852	2.6296646	20	1 26.1	19.4
184347 2005 HO ₆	17.1	X	98.88771	90.73617	169.36090	6.06337	0.0779984	0.28352174	2.2948016	20	11 14.6	20.3
184348 2005 HW ₇	17.1	X	109.54763	129.36382	98.43394	6.83131	0.1255130	0.28261433	2.2997110	20	10 19.7	20.5
184349 2005 JV	17.2	X	160.28201	138.94974	107.20774	6.27984	0.0395576	0.29365497	2.2417017	20	—	—
184350 2005 JL ₁	16.8	X	180.06337	191.44830	106.45575	2.04400	0.0605837	0.30608758	2.1805811	20	—	—
184351 2005 JY ₇	17.2	X	297.16658	189.07058	202.84477	4.95069	0.1537237	0.28291373	2.2980882	20	9 6.2	19.4
184352 2005 JA ₁₆	16.5	X	350.97661	29.22437	74.60810	1.37074	0.1078992	0.23961129	2.5672285	20	—	—
184353 2005 JK ₂₂	16.6	X	299.92340	159.52374	153.60677	8.08661	0.2693844	0.26021592	2.4298538	20	4 24.7	19.6
184354 2005 JZ ₃₅	16.9	X	41.29037	307.81427	108.93040	6.18631	0.1185013	0.30198964	2.2002635	20	—	—
184355 2005 JL ₃₈	17.4	X	337.05802	6.06504	94.21829	6.10931	0.0646320	0.30460633	2.1876446	20	—	—
184356 2005 JP ₅₁	15.8	X	317.56857	225.38184	62.95790	6.16462	0.1085519	0.19878747	2.9076584	20	5 13.6	19.3
184357 2005 JJ ₅₅	17.4	X	79.33161	179.90673	170.80706	5.54058	0.1086459	0.29486887	2.2355451	20	—	—
184358 2005 JW ₆₇	16.8	X	234.80667	355.82332	263.17020	3.83749	0.0595144	0.30868190	2.1683461	20	—	—
184359 2005 JB ₆₈	16.6	X	115.93045	307.89199	27.56296	4.98383	0.0416942	0.30151704	2.2025620	20	—	—
184360 2005 JC ₆₈	17.2	X	146.53734	189.67264	35.29313	5.12319	0.0931275	0.28794668	2.2712311	20	11 20.3	20.3
184361 2005 JW ₇₆	17.1	X	61.49562	344.07888	46.81014	6.70355	0.0906375	0.30128826	2.2036768	20	—	—
184362 2005 JF ₉₁	17.2	X	122.79102	253.94186	41.22263	4.07638	0.1740013	0.29250622	2.2475670	20	—	—
184363 2005 JX ₁₀₁	16.9	X	108.28111	93.32506	165.61022	7.15295	0.0836110	0.28464580	2.2887562	20	11 24.3	20.2
184364 2005 JE ₁₀₃	16.4	X	110.76022	177.13848	142.58470	14.12924	0.0862132	0.22852514	2.6495984	20	—	—
184365 2005 JW ₁₀₄	16.3	X	287.80599	304.88732	225.26327	4.11150	0.1180318	0.23959748	2.5673272	20	—	—
184366 2005 JP ₁₀₆	17.2	X	184.69969	167.33782	112.41297	3.89042	0.1481016	0.30425655	2.1893209	20	—	—
184367 2005 JC ₁₁₀	17.7	X	50.85821	93.74451	120.80160	4.61966	0.1088235	0.26880535	2.3778116	20	7 9.7	20.4
184368 2005 JE ₁₁₉	17.0	X	200.63881	18.85235	113.27407	5.24979	0.0766848	0.28110509	2.3079350	20	9 23.4	20.0
184369 2005 JH ₁₃₄	16.5	X	155.16381	121.23016	193.73362	3.50885	0.2206654	0.23611120	2.5925372	20	—	—
184370 2005 JB ₁₄₄	15.7	X	63.71789	181.97190	83.42292	5.52131	0.0210234	0.21234664	2.7825252	20	9 20.6	19.5
184371 2005 JU ₁₅₅	15.9	X	154.52898	189.39883	207.34652	1.85980	0.0938023	0.18948809	3.0020282	20	3 24.8	20.4
184372 2005 JH ₁₆₀	17.9	X	39.76550	280.14007	301.02016	0.59951	0.1358565	0.26834214	2.3805472	20	7 5.5	20.3
184373 2005 JS ₁₆₁	17.8	X	224.68213	178.37351	90.86884	2.26183	0.0686614	0.30871509	2.1681907	20	—	—
184374 2005 KT ₄	16.9	X	262.35084	236.67536	105.69491	8.59061	0.2043693	0.25900215	2.4374393	20	4 28.9	20.6
184375 2005 KM ₇	16.9	X	43.61731	171.53196	111.70400	6.85108	0.2316523	0.27052381	2.3677311	20	10 29.8	20.1
184376 2005 KS ₉	16.7	X	10.37411	214.42279	64.82043	6.42901	0.1822505	0.26835528	2.3804695	20	8 20.1	18.8
184377 2005 KL ₁₀	17.5	X	196.13654	38.08744	240.54180	4.39968	0.1259407	0.30283305	2.1961763	20	—	—
184378 2005 KS ₁₁	17.0	X	249.83344	213.11156	30.65554	0.82158	0.1006367	0.30743384	2.1742106	20	—	—
184379 2005 LL ₈	17.0	X	235.33039	113.73535	102.08873	4.00630	0.1138405	0.30108988	2.2046447	20	—	—
184380 2005 LN ₈	16.7	X	122.10768	222.41089	49.14773	3.18226	0.2196531	0.28511088	2.2862665	20	12 23.9	20.5
184381 2005 LW ₈	17.2	X	106.76640	194.37502	127.81756	2.06459	0.0723885	0.29512403	2.2342564	20	—	—
184382 2005 LZ ₁₅	16.9	X	142.50299	299.50238	248.44397	5.74368	0.1018152	0.27442531	2.3452363	20	9 24.0	20.4
184383 2005 LU ₁₆	17.1	X	166.41060	153.05872	83.46160	4.42232	0.0675722	0.29195835	2.2503779	20	12 31.6	19.9
184384 2005 LA ₁₈	16.7	X	24.42724	331.91613	106.97443	6.03018	0.0923693	0.30309122	2.1949290	20	—	—
184385 2005 LO ₁₈	16.0	X	136.20420	164.75308	169.54123	2.65569	0.2248961	0.23314319	2.6144935	20	—	—
184386 2005 LS ₄₃	17.1	X	119.84335	131.15210	169.50290	1.68963	0.0596436	0.28818388	2.2699847	20	—	—
184387 2005 LY ₄₃	15.6	X	209.68263	302.19581	248.36516	15.38853	0.1363738	0.22816637	2.6523752	20	11 30.2	19.3
184388 2005 LG ₄₄	16.0	X	337.83505	77.62180	232.24901	1.20828	0.0857052	0.19731143	2.9221414	20	7 16.6	19.6
184389 2005 LE ₄₇	16.8	X	20.70219	208.71801	122.12495	3.33737	0.2256691	0.27145080	2.3623376	20	11 29.6	19.4
184390 2005 LY ₄₇	16.3	X	151.66769	162.13007	115.73352	4.99194	0.1901850	0.22463568	2.6800952	20	—	—
184391 2005 LY ₅₂	16.9	X	76.02931	92.53226	183.49150	6.19679	0.2225139	0.27552019	2.3390191	20	11 21.1	20.5
184392 2005 ME ₂	17.1	X	358.87324	53.64394	207.30014	1.81328	0.1664554	0.26517910	2.3994398	20	6 16.6	19.0
184393 2005 MU ₂	17.0	X	27.46182	180.59311	135.17253	2.12476	0.1994974	0.27096860	2.3651394	20	11 14.3	19.8
184394 2005 MH ₅	16.1	X	263.04031	220.61410	133.35555	6.98720	0.1150936	0.25508032	2.4623592	20	5 25.3	19.5
184395 2												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184401 2005 <i>MP</i> ₁₂	16.8	X	88.21297	111.88339	143.66863	2.85282	0.1283829	0.27426798	2.3461331	20	10 29.8	20.0
184402 2005 <i>MA</i> ₁₃	16.7	X	96.79358	152.02273	116.00360	7.11954	0.1064467	0.27724112	2.3293297	20	11 23.5	20.1
184403 2005 <i>MQ</i> ₁₄	16.8	X	79.65919	45.80308	229.35084	3.02417	0.1574972	0.27566843	2.3381804	20	11 16.7	20.3
184404 2005 <i>MD</i> ₁₅	16.5	X	193.37677	164.65472	152.95558	5.55505	0.0684866	0.23569878	2.5955605	20	1 23.0	20.2
184405 2005 <i>MD</i> ₁₈	16.8	X	95.33971	178.71430	166.51085	2.06447	0.0930221	0.22275601	2.6951510	20	—	—
184406 2005 <i>MT</i> ₂₀	17.2	X	69.76246	110.50134	117.70161	2.04528	0.1452342	0.26698610	2.3886011	20	9 2.0	20.2
184407 2005 <i>MF</i> ₂₂	16.4	X	41.02873	215.03496	298.99560	3.47553	0.1245153	0.24557714	2.5254809	20	3 24.3	19.0
184408 2005 <i>MZ</i> ₂₂	16.5	X	47.06692	161.81138	155.47684	9.72865	0.2730032	0.27409042	2.3471462	20	12 19.4	20.1
184409 2005 <i>MJ</i> ₂₅	17.3	X	47.34089	126.15553	150.06923	1.66815	0.1824024	0.27101125	2.3648912	20	10 15.3	20.3
184410 2005 <i>MO</i> ₃₀	16.9	X	89.69524	140.37119	200.98786	4.53190	0.0650896	0.22086574	2.7105066	20	—	—
184411 2005 <i>MG</i> ₃₁	16.2	X	109.96561	186.17472	175.92910	7.81450	0.2012867	0.23281643	2.6169392	20	—	—
184412 2005 <i>MO</i> ₃₁	16.1	X	122.83248	161.27648	131.03489	24.06925	0.1573944	0.28568521	2.2832013	20	—	—
184413 2005 <i>MS</i> ₃₂	16.6	X	326.99467	305.30256	39.70305	3.16252	0.1998433	0.26377043	2.4079750	20	8 22.2	18.2
184414 2005 <i>MQ</i> ₃₇	16.7	X	5.22994	299.08575	257.91480	2.20202	0.0430481	0.24672528	2.5176399	20	3 23.9	19.6
184415 2005 <i>MK</i> ₃₉	16.9	X	60.96283	197.92132	46.91169	1.86691	0.1446534	0.26745386	2.3858152	20	9 13.8	19.9
184416 2005 <i>ML</i> ₃₉	16.8	X	174.73199	281.65802	336.71158	3.25982	0.1410811	0.29043802	2.2582243	20	—	—
184417 2005 <i>MM</i> ₄₁	16.6	X	330.69891	261.82789	111.69286	3.27254	0.0774487	0.20364729	2.8612137	20	10 3.5	20.1
184418 2005 <i>MY</i> ₄₆	16.7	X	66.50476	121.69290	182.63238	6.87294	0.1447922	0.27736255	2.3286497	20	12 9.8	20.1
184419 2005 <i>MF</i> ₅₂	16.5	X	332.37410	236.31382	69.93897	5.56254	0.1580999	0.26031359	2.4292459	20	7 1.0	18.5
184420 2005 <i>MJ</i> ₅₂	15.6	X	146.01938	266.92544	139.82470	5.81977	0.0590331	0.17658718	3.1465159	20	3 28.2	20.2
184421 2005 <i>NG</i> ₂	16.8	X	130.04562	140.83233	129.49203	4.14229	0.1327061	0.28469434	2.2884960	20	12 30.1	20.1
184422 2005 <i>NE</i> ₄	16.9	X	305.58910	318.36825	280.18092	4.06227	0.0874786	0.24444268	2.5332888	20	2 17.0	20.2
184423 2005 <i>NY</i> ₆	16.6	X	15.03518	320.86939	8.84148	4.63621	0.3215346	0.27051412	2.3677877	20	12 3.9	19.4
184424 2005 <i>ND</i> ₈	16.4	X	73.65998	204.56873	246.46927	3.55724	0.0506445	0.23771578	2.5808576	20	2 11.5	19.6
184425 2005 <i>NJ</i> ₉	16.0	X	218.61501	244.23394	157.81491	3.72543	0.1272395	0.18672688	3.0315506	20	6 3.4	20.7
184426 2005 <i>NK</i> ₉	16.6	X	23.41129	225.19236	155.94255	4.02897	0.1023043	0.21445555	2.7642534	20	—	—
184427 2005 <i>NG</i> ₁₂	16.2	X	213.52140	139.66573	220.80526	1.79841	0.1278773	0.24764335	2.5114138	20	4 5.2	20.0
184428 2005 <i>NT</i> ₁₃	16.6	X	64.56402	7.91292	249.96575	1.83235	0.1945126	0.26797357	2.3827295	20	10 11.3	19.8
184429 2005 <i>ND</i> ₁₄	17.1	X	148.25107	162.30138	184.84437	2.43096	0.1543955	0.22849471	2.6498337	20	1 19.8	21.1
184430 2005 <i>NW</i> ₁₇	17.1	X	55.92105	225.05531	109.05025	6.09679	0.2199572	0.27964396	2.3159673	20	—	—
184431 2005 <i>NX</i> ₁₇	16.6	X	337.29044	183.40205	302.95049	2.42739	0.0435003	0.22933896	2.6433266	20	—	—
184432 2005 <i>NI</i> ₁₉	17.1	X	84.23409	298.38988	230.24106	1.77364	0.1247672	0.25713311	2.4492364	20	6 24.6	20.2
184433 2005 <i>NT</i> ₂₀	16.7	X	94.91201	296.91696	346.32878	3.25561	0.2043684	0.28131422	2.3067910	20	12 14.8	20.5
184434 2005 <i>NS</i> ₂₁	16.0	X	46.88599	32.89769	268.82260	4.94326	0.0443818	0.20680121	2.8320484	20	10 12.8	19.9
184435 2005 <i>NM</i> ₂₂	16.3	X	14.46359	182.24753	148.59214	6.80345	0.0869006	0.20458509	2.8524633	20	10 16.0	19.9
184436 2005 <i>NW</i> ₂₃	16.7	X	62.78302	189.51325	184.63948	6.07475	0.0382958	0.22213194	2.7001965	20	—	—
184437 2005 <i>NQ</i> ₂₆	17.2	X	4.57939	90.18862	160.72502	2.93933	0.1460574	0.25961539	2.4335994	20	6 12.5	19.2
184438 2005 <i>NR</i> ₂₈	17.2	X	351.96532	148.39189	165.90244	6.33029	0.1302525	0.26468211	2.4024424	20	8 26.8	19.4
184439 2005 <i>NV</i> ₃₁	15.7	X	355.98391	311.24426	145.35921	18.65889	0.1359000	0.22565570	2.6720126	20	—	—
184440 2005 <i>NX</i> ₃₁	15.6	X	99.68970	249.50522	185.02386	8.62107	0.1439742	0.23948298	2.5681454	20	3 11.0	19.0
184441 2005 <i>NG</i> ₃₂	16.7	X	87.24975	34.86332	208.01032	5.53195	0.1107352	0.27245788	2.3565128	20	10 8.1	19.8
184442 2005 <i>NQ</i> ₃₅	16.9	X	196.24739	8.19232	309.04399	3.42769	0.1591926	0.23684202	2.5872013	20	1 28.4	21.1
184443 2005 <i>NC</i> ₄₅	16.5	X	223.78596	207.07045	100.62237	5.41248	0.1584271	0.24612140	2.5217564	20	2 10.5	20.6
184444 2005 <i>ND</i> ₄₆	16.6	X	304.09073	166.10472	153.59845	1.82820	0.0933835	0.18994120	2.9972520	20	6 6.4	20.5
184445 2005 <i>NF</i> ₄₆	17.2	X	210.48311	220.62347	135.48226	1.11398	0.1678671	0.24404972	2.5360073	20	3 27.7	21.3
184446 2005 <i>NQ</i> ₄₉	16.2	X	224.39452	177.11389	128.09438	5.61993	0.2519217	0.24388107	2.5371764	20	2 5.0	20.6
184447 2005 <i>NR</i> ₄₉	16.0	X	311.40942	100.39093	235.31626	2.62942	0.2049994	0.26024079	2.4296989	20	6 26.4	18.2
184448 2005 <i>NV</i> ₅₁	17.2	X	127.36592	114.82417	167.07532	3.21584	0.1534528	0.28652811	2.2787214	20	—	—
184449 2005 <i>NL</i> ₅₅	17.0	X	91.33098	285.35812	27.37331	5.09574	0.2863807	0.28432655	2.2904691	20	—	—
184450 2005 <i>NV</i> ₅₇	16.7	X	340.38481	202.85135	127.52886	3.03715	0.1961387	0.26435651	2.4044147	20	8 31.6	18.2
184451 2005 <i>NR</i> ₅₉	17.1	X	337.08202	145.31459	116.14577	3.42947	0.1822478	0.25599999	2.4564584	20	4 28.0	19.3
184452 2005 <i>NH</i> ₆₃	15.0	X	242.18055	41.83988	278.47764	15.05969	0.0826711	0.17722299	3.1389857	20	3 15.9	20.0
184453 2005 <i>NX</i> ₆₃	17.4	X	80.79823	146.41736	165.27006	3.86426	0.2452971	0.28122909	2.3072565	20	—	—
184454 2005 <i>NH</i> ₆₄	16.0	X	113.15144	77.16791	152.93486	8.53780	0.0476707	0.20677336	2.8323026	20	10 8.8	20.1
184455 2005 <i>NB</i> ₆₇	16.0	X	327.54796	145.22299	214.83301	6.63231	0.2201006	0.26419655	2.4053851	20	9 13.7	17.7
184456 2005 <i>NY</i> ₆₉	16.7	X	307.92769	198.51790	197.61311	1.63846	0.0711248	0.20463663	2.8519843	20	9 27.1	20.3
184457 2005 <i>NL</i> ₇₆	15.3	X	225.40512	205.25774	146.77504	10.92234	0.0911520	0.18163072	3.0879944	20	4 16.5	20.1
184458 2005 <i>NW</i> ₇₉	16.6	X	48.37340	296.20929	1.50793	5.55181	0.2013607	0.27444885	2.3451022	20	11 15.2	19.9
184459 2005 <i>NH</i> ₈₀	16.5	X	323.73996	329.62311	17.99515	6.64654	0.1349350	0.26539235	2.3981543	20	8 25.0	18.7
184460 2005 <i>NN</i> ₈₀	17.1	X	28.08578	219.89173	71.95171	3.09170	0.2177229	0.27020390	2.3695997	20	10 16.2	19.7
184461 2005 <i>NR</i> ₈₀	17.1	X	15.45228	290.57584	28.29995	2.59169	0.2330770	0.27029251	2.3690817	20	11 4.9	19.5
184462 2005 <i>ND</i> ₈₁	16.4	X	23.77418	39.75317	317.77314	4.46660	0.0726698	0.21198595	2.7856807	20	11 28.9	20.0
184463 2005 <i>NS</i> ₈₁	16.6	X	60.10197	334.78946	116.90023	2.10740	0.0767767	0.23607556	2.5927981	20	1 28.4	19.6
184464 2005 <i>NW</i> ₈₁	16.9	X	34.65146	233.62145	177.79922	3.13950	0.2292946	0.27206420	2.3587855	20	11 22.3	19.8
184465 2005 <i>NZ</i> ₈₄	16.8	X	69.99756	190.61965	115.55760	4.02645	0.2378236	0.27626084	2.3348366	20	12 22.9	20.5
184466 2005 <i>NT</i> ₈₅	17.0	X	18.14838	158.38812	259.34816	1.55150	0.0930306	0.22222680	2.6994281	20	—	—
184467 2005 <i>NZ</i> ₈₆	16.2	X	170.73326	263.68346	131.81640	1.45868	0.0870203	0.24493299	2.5299068	20	4 6.5	19.8
184468 2005 <i>NI</i> ₉₈	15.2	X	219.20895	29.45136	311.63224	7.87565	0.0514805	0.17874965	3.1210873	20	3 22.8	19.9
184469 2005 <i>NC</i> ₉₉	16.8	X	49.09815	185.68629	144.86683	8.59311	0.2518770	0.27546396	2.3393374	20	—	—
184470 2005 <i>NU</i> ₉₉	17.2	X	57.75402	325.34659	14.72395	1.45177	0.1695559	0.28079542	2.3096315	20	—	—
184471 2005 <i>NU</i> ₁₀₀	16.2	X	316.34050	21.83201	324.37803	0.93210	0.2003477	0.26016939	2.4301435	20	7 25.8	18.1
184472 2005 <i>NK</i> ₁₀₁	16.6	X	306.04130	2								

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184481 2005 OE ₁₁	16.4	X	20.25421	171.99538	121.90778	2.20876	0.1685835	0.26624246	2.3930467	20	9 26.7	18.8
184482 2005 OG ₁₂	17.3	X	306.90710	82.14874	272.20172	0.48335	0.2071845	0.25931020	2.4355085	20	7 16.8	19.5
184483 2005 OX ₁₄	16.2	X	292.20359	297.11708	65.98513	6.94689	0.1342862	0.26133525	2.4229106	20	7 16.7	18.9
184484 2005 OQ ₁₅	16.3	X	171.87569	177.26503	175.01956	13.33428	0.1150500	0.23778186	2.5803794	20	2 12.9	20.3
184485 2005 OY ₁₇	15.6	X	193.28026	222.87566	173.59584	10.60329	0.2353022	0.17684395	3.1434695	20	5 4.2	21.1
184486 2005 OA ₁₈	16.0	X	10.28818	222.49351	174.14869	7.75209	0.1725366	0.21039879	2.7996725	20	—	—
184487 2005 OG ₁₈	16.0	X	16.98134	11.83076	272.28416	3.92891	0.0922943	0.19492074	2.9459861	20	8 13.2	19.6
184488 2005 ON ₁₈	16.7	X	135.48600	218.99085	162.94556	8.38847	0.1997492	0.23077979	2.6323130	20	2 22.6	20.6
184489 2005 OY ₁₈	16.6	X	151.17640	158.48306	159.95336	3.45915	0.1316999	0.22670754	2.6637414	20	—	—
184490 2005 OE ₂₁	15.7	X	214.87538	8.35756	342.63960	7.34468	0.1481403	0.17638656	3.1489013	20	3 27.7	20.8
184491 2005 OJ ₂₁	16.5	X	347.75501	115.84052	136.34972	10.19592	0.1417493	0.25295425	2.4761373	20	5 13.2	19.1
184492 2005 OM ₂₁	15.9	X	1.66725	280.01931	123.98055	7.16134	0.0278281	0.21341361	2.7732433	20	12 23.9	19.6
184493 2005 OX ₂₁	15.8	X	341.14518	350.10055	144.98989	14.77680	0.0986601	0.22662863	2.6643598	20	—	—
184494 2005 OE ₂₆	16.4	X	106.28664	355.37496	335.37118	6.80170	0.3030594	0.22060899	2.7126093	20	—	—
184495 2005 OD ₂₇	16.8	X	11.53208	175.40429	140.26848	3.09525	0.2325207	0.26737992	2.3862551	20	10 23.8	19.0
184496 2005 OF ₂₇	15.5	X	169.13547	149.83923	296.26439	4.49642	0.0415851	0.18470700	3.0536117	20	6 7.8	20.0
184497 2005 PC ₁	16.7	X	4.89254	208.89399	61.47966	3.33612	0.1718829	0.26012738	2.4304051	20	7 18.0	18.7
184498 2005 PP ₂	16.6	X	306.42119	285.47448	56.21196	2.01798	0.2007512	0.25943107	2.4347520	20	6 26.8	19.0
184499 2005 PZ ₂	16.0	X	304.31023	202.21111	150.85038	3.01587	0.1834073	0.25993270	2.4316185	20	7 13.3	18.3
184500 2005 PR ₅	16.6	X	133.27198	164.11947	145.11771	8.29182	0.1606390	0.28963592	2.2623915	20	—	—
184501 Pimprenelle	16.8	X	36.08972	289.55768	337.90797	0.82463	0.1731428	0.26572273	2.3961660	20	9 13.4	19.4
184502 2005 PM ₆	16.7	X	90.74363	295.73509	36.29276	5.41295	0.2385239	0.28463543	2.2888118	20	—	—
184503 2005 PN ₇	17.0	X	96.94158	225.00473	38.08221	7.47055	0.2398796	0.27763934	2.3271018	20	11 22.4	20.9
184504 2005 PZ ₉	15.4	X	200.41646	70.42789	332.84693	8.98499	0.0561270	0.18333427	3.0688355	20	5 18.0	20.1
184505 2005 PQ ₁₁	17.3	X	333.45480	239.59163	51.21637	1.94465	0.1705765	0.25674517	2.4517030	20	6 6.1	19.4
184506 2005 PM ₁₃	16.0	X	135.58531	128.09669	122.46101	9.77161	0.1628023	0.21375161	2.7703190	20	11 30.5	20.6
184507 2005 PS ₁₅	15.7	X	276.63688	20.29373	345.65523	9.52027	0.1196220	0.18921382	3.0049285	20	6 25.7	20.0
184508 Courroux	15.9	X	89.75273	303.63093	351.23903	10.64192	0.1478497	0.21070177	2.7969879	20	12 6.8	20.5
184509 2005 PC ₁₉	15.0	X	204.96716	239.10063	140.81464	27.71553	0.1813287	0.17907883	3.1172613	20	5 1.3	20.7
184510 2005 QS	16.7	X	64.74970	156.42125	163.50518	5.51941	0.1836337	0.27821439	2.3238941	20	12 30.6	20.2
184511 2005 QT	16.5	X	302.92860	202.23149	157.09828	2.29846	0.1954760	0.26056226	2.4277001	20	7 18.5	18.9
184512 2005 QP ₂	16.1	X	63.01905	145.43563	196.04461	3.46536	0.1047115	0.21398234	2.7683272	20	—	—
184513 2005 QW ₃	16.5	X	133.21413	125.73690	190.14882	1.75938	0.1228845	0.22105810	2.7089340	20	—	—
184514 2005 QS ₄	15.6	X	18.90277	176.14765	162.95924	7.75800	0.1473907	0.20273337	2.8698062	20	11 9.9	19.2
184515 2005 QL ₆	16.5	X	63.63138	38.86161	311.99441	2.72256	0.1058468	0.21345691	2.7728683	20	—	—
184516 2005 QM ₇	16.2	X	49.11571	351.83986	359.99970	4.04215	0.0772990	0.21044624	2.7992516	20	12 25.3	20.2
184517 2005 QR ₈	16.6	X	76.02681	188.93736	184.51517	5.72136	0.0794679	0.21944705	2.7221761	20	—	—
184518 2005 QT ₉	16.4	X	344.25534	339.82013	297.15356	5.87505	0.1147413	0.25542937	2.4601155	20	6 11.4	18.8
184519 2005 QU ₁₀	15.7	X	136.32400	306.56167	1.72637	12.39479	0.0679960	0.22100362	2.7093792	20	—	—
184520 2005 QD ₁₆	16.1	X	162.16412	294.85743	325.62653	3.43511	0.0855135	0.21692982	2.7431942	20	—	—
184521 2005 QJ ₁₆	15.5	X	155.33377	238.62236	158.98180	6.44858	0.1063829	0.17052610	3.2206397	20	3 30.5	20.5
184522 2005 QS ₁₆	16.7	X	22.17268	190.04006	147.04739	6.13464	0.2448289	0.27045310	2.3681438	20	12 12.8	19.7
184523 2005 QM ₁₈	15.5	X	48.19184	85.75036	167.37963	8.92092	0.0378098	0.19094428	2.9867459	20	8 10.2	19.5
184524 2005 QR ₁₈	15.0	X	264.79166	202.99550	165.63009	11.47054	0.0776549	0.18445406	3.0564027	20	6 19.7	19.6
184525 2005 QA ₁₉	16.8	X	6.53579	170.45676	122.09144	2.15301	0.1628507	0.25985110	2.4321275	20	8 26.2	19.0
184526 2005 QL ₁₉	16.2	X	29.69524	278.47208	159.91558	11.89834	0.1347003	0.22167836	2.7038786	20	—	—
184527 2005 QR ₂₀	15.9	X	100.09077	349.66291	353.99693	13.97995	0.2076105	0.21860495	2.7291624	20	—	—
184528 2005 QO ₂₂	16.8	X	221.34928	109.01659	173.20322	1.29749	0.1256098	0.23289179	2.6163746	20	1 9.6	20.9
184529 2005 QG ₂₄	14.9	X	293.26095	93.58823	165.55052	10.68587	0.1209129	0.17247346	3.1963515	20	3 3.5	19.3
184530 2005 QV ₂₄	16.3	X	233.86190	257.45988	11.83105	8.87111	0.1037178	0.22991513	2.6389086	20	1 8.8	20.5
184531 2005 QC ₂₅	15.7	X	219.18230	304.80127	73.14054	2.38067	0.1931533	0.17696467	3.1420397	20	5 2.4	20.8
184532 2005 QQ ₂₅	16.2	X	56.93826	291.61332	20.30066	6.92277	0.0626095	0.20353609	2.8622557	20	11 9.9	20.1
184533 2005 QA ₂₆	15.9	X	13.53804	281.90914	70.47136	3.02850	0.0736759	0.20217015	2.8751336	20	11 7.5	19.4
184534 2005 QY ₂₉	15.7	X	314.38977	210.87348	185.03220	12.70722	0.1378696	0.20043884	2.8916660	20	10 1.7	18.8
184535 Audouze	15.7	X	226.06888	19.93885	347.44683	13.11630	0.0731771	0.17901287	3.1180271	20	4 28.2	20.6
184536 2005 QV ₃₀	15.7	X	300.88050	210.67873	153.11227	12.73404	0.0188535	0.19472716	2.9479381	20	8 8.2	19.8
184537 2005 QT ₃₂	16.2	X	3.16093	166.08853	159.64077	6.50612	0.2544082	0.20117312	2.8846254	20	10 9.2	18.9
184538 2005 QW ₃₅	15.5	X	51.87344	186.29432	153.70686	9.94278	0.1586293	0.20857210	2.8159952	20	12 24.5	19.7
184539 2005 QG ₃₆	15.3	X	254.89612	202.35485	168.74725	12.82346	0.2262536	0.18292793	3.0733784	20	5 25.5	20.3
184540 2005 QR ₃₇	16.2	X	287.57107	139.56537	264.29213	1.58469	0.1027923	0.19423906	2.9528746	20	8 31.8	19.9
184541 2005 QB ₃₈	16.3	X	152.42582	75.36674	230.70627	2.95673	0.2075444	0.22259883	2.6964195	20	—	—
184542 2005 QM ₃₉	16.2	X	113.03435	178.74499	154.41605	6.47114	0.2222989	0.22130964	2.7068810	20	—	—
184543 2005 QR ₄₀	17.4	X	19.14819	74.11498	226.66147	3.92599	0.2329275	0.26661225	2.3908334	20	10 14.2	19.8
184544 2005 QZ ₄₂	15.9	X	129.39146	181.45544	148.72938	4.39190	0.2174795	0.22214431	2.7000963	20	—	—
184545 2005 QS ₄₄	16.9	X	166.48961	226.52825	128.71646	4.75235	0.1294605	0.23320346	2.6140430	20	2 15.1	20.8
184546 2005 QK ₄₅	15.8	X	191.74430	201.40426	3.60676	9.21164	0.1022678	0.21167637	2.7883961	20	11 26.8	20.2
184547 2005 QJ ₄₆	16.0	X	248.67477	163.68152	14.91126	8.04226	0.0557715	0.21586257	2.7522285	20	—	—
184548 2005 QN ₄₇	16.7	X	188.14714	302.83086	16.61201	4.84190	0.0814445	0.23108434	2.6299997	20	1 22.9	20.6
184549 2005 QT ₄₇	15.3	X	253.57856	8.89739	358.18012	16.71578	0.1098599	0.18353987	3.0665433	20	5 25.4	20.1
184550 2005 QH ₄₈	16.1	X	26.97434	34.55374	25.51511	7.03455	0.0515758	0.21801784	2.7340599	20	—	—
184551 2005 QJ ₄₈	16.8	X	328.50987	240.62003	75.85271	2.40281	0.1877526	0.25768736	2.4457232	20	7 5.9	18.8
184552 2005 QM ₄₈	16.3	X	322.28887	256.34171	93.92397	3.24406	0.2419120	0.26083712	2.4259943	20	8 13.1	17.7
184553 2005 QH ₄₉	16.8	X	195.64137	208.56098	121.42771	5.19397	0.0941690	0.23419985	2.6066235	20	2 11.8	20.6
184554 2005 QK ₄₉	15.9	X	233.68976	189.98211	148.67305	12.98334	0.0835009	0.17544708				

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184561 2005 QH ₆₂	16.1	X	257.55854	174.62560	132.51303	2.33890	0.1630921	0.17724410	3.1387365	20	3 17.2	20.9
184562 2005 QE ₆₆	16.7	X	326.79807	119.32852	193.33770	6.85077	0.1050017	0.25678784	2.4514314	20	7 3.6	19.4
184563 2005 QZ ₆₆	16.2	X	150.83040	336.59998	161.61087	10.67780	0.0438581	0.18883608	3.0089345	20	7 22.1	20.7
184564 2005 QS ₇₂	15.9	X	92.37249	37.29991	312.93729	4.66973	0.0656786	0.21659229	2.7460433	20	—	—
184565 2005 QD ₇₄	15.8	X	167.12266	133.10528	183.37561	12.42802	0.1508644	0.22558776	2.6725491	20	1 1.2	20.2
184566 2005 QX ₇₈	16.1	X	131.17065	134.63110	173.45712	9.16538	0.2581875	0.21958670	2.7210218	20	—	—
184567 2005 QF ₇₉	16.3	X	167.15225	25.89481	297.79606	1.61679	0.0890283	0.22716300	2.6601797	20	1 5.6	20.1
184568 2005 QL ₈₀	16.8	X	48.95259	161.54823	120.55213	2.27997	0.1768181	0.26868561	2.3785180	20	10 24.5	19.8
184569 2005 QU ₈₂	15.7	X	280.56414	136.85674	197.54732	7.02577	0.1333695	0.18380012	3.0636479	20	5 19.1	20.0
184570 2005 QF ₈₅	15.7	X	22.50847	215.64316	200.09011	4.20613	0.1520349	0.21277288	2.7788080	20	—	—
184571 2005 QU ₉₀	16.4	X	52.16745	339.98044	3.70090	5.49254	0.0600432	0.20898645	2.8122719	20	12 15.7	20.4
184572 2005 QE ₉₁	15.9	X	298.60324	340.55350	45.90293	1.31043	0.0785490	0.19683581	2.9268467	20	8 30.0	19.5
184573 2005 QK ₉₂	16.4	X	119.81332	334.39759	343.89547	4.27507	0.1050448	0.21930005	2.7233925	20	—	—
184574 2005 QO ₉₃	16.7	X	89.91491	336.19973	39.97256	4.28335	0.1120314	0.22142368	2.7059515	20	—	—
184575 2005 QW ₉₃	16.1	X	305.66443	3.78384	20.39632	6.49920	0.0706691	0.19615226	2.9336424	20	9 8.9	19.8
184576 2005 QD ₉₄	16.5	X	239.07028	262.69354	92.74817	5.38692	0.2093050	0.24633669	2.5202869	20	4 21.2	20.5
184577 2005 QI ₉₄	16.6	X	92.42961	275.35281	327.37387	1.64791	0.1534916	0.27104225	2.3647109	20	10 17.5	20.2
184578 2005 QB ₁₀₀	15.8	X	28.60347	89.13862	288.39216	5.85280	0.0513350	0.21141973	2.7906521	20	12 28.2	19.4
184579 2005 QP ₁₀₅	16.7	X	227.44741	255.87143	117.38933	4.38543	0.1153176	0.24752579	2.5122089	20	5 8.9	20.5
184580 2005 QD ₁₀₆	14.9	X	311.21698	336.23335	32.94450	7.63830	0.0624177	0.19574355	2.9372745	20	8 30.4	18.7
184581 2005 QM ₁₀₆	15.9	X	91.83142	319.91262	18.28207	9.38335	0.1587417	0.21688502	2.7435719	20	—	—
184582 2005 QC ₁₀₇	17.0	X	58.72606	235.73728	50.79422	5.29731	0.2225926	0.27135836	2.3628741	20	11 15.6	20.4
184583 2005 QY ₁₁₃	16.2	X	55.36251	331.32981	16.18099	4.44946	0.1142143	0.20907317	2.8114941	20	—	—
184584 2005 QX ₁₁₅	16.1	X	7.58972	140.81753	158.19020	11.68606	0.0511769	0.19493747	2.9458174	20	8 15.9	20.0
184585 2005 QZ ₁₁₅	16.0	X	316.99574	194.75242	157.49546	12.40578	0.0707040	0.19423194	2.9529467	20	8 10.5	19.7
184586 2005 QA ₁₁₆	16.2	X	42.08426	219.82532	155.65993	4.03016	0.1059003	0.21369710	2.7707901	20	—	—
184587 2005 QI ₁₁₈	16.7	X	133.80053	203.28549	61.10878	0.81382	0.1263851	0.21181010	2.7872223	20	12 11.5	20.6
184588 2005 QF ₁₁₉	16.2	X	359.40168	183.88498	343.72613	2.60068	0.1236244	0.23583822	2.5945374	20	1 31.9	19.1
184589 2005 QK ₁₁₉	16.7	X	102.23995	10.73372	351.64849	1.96402	0.0955111	0.22298847	2.6932776	20	—	—
184590 2005 QM ₁₂₂	15.6	X	179.57637	121.93255	334.18945	6.61714	0.0307494	0.18654862	3.0334815	20	7 4.2	20.0
184591 2005 QD ₁₂₆	16.6	X	235.98782	29.44141	16.94122	0.37438	0.0780520	0.18685837	3.0301283	20	7 2.7	20.9
184592 2005 QV ₁₂₈	15.9	X	222.09960	47.42914	104.81986	3.06398	0.0300296	0.20541504	2.8447748	20	11 7.0	19.8
184593 2005 QY ₁₃₀	16.6	X	331.19725	94.33735	126.29307	6.21043	0.1542206	0.24119155	2.5560028	20	2 22.9	19.4
184594 2005 QV ₁₄₂	16.1	X	294.16436	284.04669	69.65584	7.69545	0.1261200	0.26025885	2.4295866	20	7 6.4	18.8
184595 2005 QC ₁₄₄	16.4	X	250.49675	190.98796	97.43235	5.60436	0.1582961	0.23870736	2.5737054	20	2 12.7	20.3
184596 2005 QJ ₁₄₈	15.9	X	18.21458	312.36169	85.04569	6.65079	0.0500178	0.21474043	2.7618082	20	—	—
184597 2005 QL ₁₄₈	16.7	X	58.13730	267.22954	49.81555	5.44404	0.2047640	0.27598025	2.3364189	20	12 22.3	20.1
184598 2005 QM ₁₄₈	16.0	X	118.79471	269.97751	71.07615	7.88499	0.0715343	0.22289432	2.6940359	20	—	—
184599 2005 QA ₁₅₀	16.4	X	92.40680	222.78476	119.77800	2.87553	0.0804044	0.21538433	2.7563010	20	—	—
184600 2005 QN ₁₅₄	16.3	X	65.60371	220.55732	61.90131	10.15753	0.1788021	0.27015977	2.3698577	20	11 13.5	19.7
184601 2005 QY ₁₆₀	17.4	X	242.96979	274.74003	38.57849	4.90055	0.1909926	0.24047303	2.5610917	20	3 5.2	21.5
184602 2005 QL ₁₆₁	16.4	X	110.85982	246.31217	68.89301	6.79883	0.1301369	0.21737533	2.7394447	20	—	—
184603 2005 QG ₁₆₂	15.5	X	101.59578	190.61809	166.87707	16.15582	0.1502114	0.21887711	2.7268996	20	—	—
184604 2005 QG ₁₇₄	15.4	X	309.80813	25.19253	306.33952	8.68707	0.0931116	0.18809871	3.0167930	20	7 1.4	19.2
184605 2005 QF ₁₇₇	15.7	X	257.53695	42.53981	268.36566	3.47636	0.0497234	0.17511926	3.1640750	20	3 31.9	20.4
184606 2005 QH ₁₇₈	17.1	X	46.34634	50.51725	200.71819	5.97210	0.1732676	0.26303486	2.4124621	20	9 3.5	20.0
184607 2005 QF ₁₈₂	16.1	X	29.66632	281.72341	86.40584	6.72438	0.0772049	0.20652416	2.8345805	20	12 20.1	19.8
184608 2005 QG ₁₈₂	16.3	X	65.71997	285.21380	76.47037	5.34209	0.0784380	0.21174286	2.7878123	20	—	—
184609 2005 QJ ₁₈₂	16.1	X	227.87503	226.38119	344.02627	4.86258	0.0519988	0.21569392	2.7536630	20	—	—
184610 2005 RN	16.7	X	47.09570	255.30990	128.77662	6.46097	0.0477469	0.21814030	2.7330366	20	—	—
184611 2005 RG ₃	16.4	X	284.68046	245.93404	136.28758	1.88314	0.1978594	0.26017804	2.4300896	20	7 20.3	18.8
184612 2005 RU ₆	17.0	X	45.10837	190.17912	142.32392	5.93414	0.2409952	0.27237875	2.3569691	20	12 31.8	20.5
184613 2005 RV ₈	16.1	X	82.78004	328.71796	18.87583	5.39857	0.1290170	0.21362573	2.7714072	20	—	—
184614 2005 RC ₉	15.4	X	107.06425	324.95841	24.11213	12.99158	0.2413568	0.21814189	2.7330233	20	—	—
184615 2005 RD ₁₀	16.0	X	277.59035	309.05910	43.60375	9.77730	0.2851918	0.25443679	2.4665094	20	5 14.4	19.4
184616 2005 RE ₁₁	14.9	X	4.75579	61.15590	226.48330	9.33983	0.0497354	0.18840034	3.0135722	20	7 24.8	19.0
184617 2005 RJ ₁₂	16.4	X	176.25841	249.95122	339.36219	3.33380	0.0448582	0.21340342	2.7733316	20	12 16.8	20.5
184618 2005 RL ₁₆	16.2	X	272.86388	174.91505	164.66865	3.42893	0.0833249	0.18373645	3.0643556	20	5 23.1	20.4
184619 2005 RS ₂₁	16.2	X	85.62455	125.20645	189.26815	2.97866	0.1622432	0.21123153	2.7923095	20	12 28.6	20.5
184620 Pippobattaglia	15.3	X	247.67394	271.49255	158.11954	11.31323	0.0685739	0.19297015	2.9658053	20	8 16.6	19.6
184621 2005 RD ₂₆	16.1	X	23.51610	350.69878	350.40710	1.52080	0.0730262	0.20343583	2.8631961	20	11 6.1	19.9
184622 2005 RN ₂₆	16.3	X	111.81472	128.50396	188.01508	3.16084	0.1897481	0.21710754	2.7416969	20	—	—
184623 2005 RS ₂₆	15.3	X	224.00949	19.35826	6.42919	18.18722	0.1467258	0.17872319	3.1213954	20	5 12.1	20.5
184624 2005 RT ₂₉	15.7	X	294.83749	14.28995	352.43438	8.30102	0.0358542	0.1888927	3.0083696	20	8 4.8	19.8
184625 2005 RX ₃₂	16.1	X	146.30659	319.81229	6.93973	7.72983	0.2065485	0.22320362	2.6915466	20	—	—
184626 2005 RH ₄₀	16.4	X	125.17400	277.20407	17.27151	3.73194	0.0794179	0.21521711	2.7577286	20	—	—
184627 2005 RX ₄₃	16.4	X	42.19304	297.34478	131.21292	4.66217	0.0658469	0.21813866	2.7330503	20	—	—
184628 2005 RU ₄₅	15.7	X	105.26458	113.03594	60.39124	6.97130	0.0849367	0.18297944	3.0728016	20	7 19.7	20.3
184629 2005 SX ₁	16.5	X	231.04462	195.39573	129.64092	5.47149	0.0751247	0.23856435	2.5747339	20	3 15.4	20.2
184630 2005 SS ₂	16.0	X	49.43996	152.90875	163.45337	2.05965	0.0990341	0.20281908	2.8689976	20	11 13.7	19.9
184631 2005 SK ₄	15.9	X	74.38295	328.09629	10.64788	21.20412	0.1687989	0.21042783	2.7994148	20	—	—
184632 2005 SO ₉	16.7	X	77.35334	106.94366	195.98053	6.18578	0.2360551	0.27455968	2.3444711	20	12 24.5	20.6
184633 2005 SU ₁₁	15.5	X	180.89687	1.82801	82.72917	2.26898	0.1509645	0.17713392	3.1400379	20	6 18.8	20.7
184634 2005 SB ₁₂	14.8	X	245.42098	351.69249	25.35094	12.13389	0.2189811	0.180				

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
184641	2005	SG ₂₀	16.0	X	79.46831	216.22724	136.12734	4.31376	0.1049018	0.21144239	2.7904528	20	—	—
184642	2005	SX ₂₀	15.2	X	331.56778	132.48343	190.05756	15.73377	0.1098347	0.18585106	3.0410673	20	7 18.6	19.3
184643	2005	SB ₂₁	16.0	X	40.90062	222.50611	199.82640	8.63903	0.1731958	0.21740115	2.7392278	20	—	—
184644	2005	SJ ₂₂	16.1	X	47.89039	356.01228	37.92528	6.00991	0.1119215	0.21461586	2.7628767	20	—	—
184645	2005	ST ₂₂	15.8	X	45.68614	217.18930	91.26871	3.35916	0.0438932	0.20031207	2.8928859	20	10 22.4	19.7
184646	2005	SC ₂₄	16.2	X	82.86859	305.93443	44.31380	6.45424	0.1703070	0.21486405	2.7607487	20	—	—
184647	2005	SM ₂₄	15.2	X	216.70706	340.40835	45.56102	11.85861	0.0786981	0.17772119	3.1331167	20	5 15.2	19.9
184648	2005	SY ₂₆	16.8	X	11.23507	202.44275	125.34282	2.92741	0.1924889	0.26587608	2.3952446	20	11 4.2	19.2
184649	2005	SG ₂₉	16.0	X	107.01777	24.67820	273.61258	3.10021	0.0847639	0.20937212	2.8088172	20	12 24.8	20.3
184650	2005	SG ₃₁	17.3	X	43.15154	27.12201	283.86688	0.46218	0.1922090	0.27004602	2.3705231	20	11 25.9	20.5
184651	2005	SX ₃₁	16.5	X	0.34791	281.68113	85.11198	3.17938	0.0798321	0.19968460	2.8989429	20	11 7.4	20.0
184652	2005	SD ₃₃	14.9	X	125.16104	51.25407	50.61386	6.73120	0.0987359	0.17028325	3.2237010	20	5 13.5	19.6
184653	2005	SQ ₃₄	15.6	X	178.98090	54.55039	42.46628	8.84823	0.1350588	0.17860251	3.1228012	20	7 2.8	20.7
184654	2005	SF ₃₅	16.3	X	320.17503	278.53595	116.51117	3.11894	0.0779043	0.19700344	2.9251861	20	10 14.3	19.9
184655	2005	SQ ₃₅	15.9	X	246.93056	312.58296	92.95874	3.44662	0.0515540	0.18435794	3.0574649	20	7 18.5	20.3
184656	2005	SW ₃₅	16.2	X	27.87968	266.01306	140.62703	4.27407	0.0960337	0.21125684	2.7920865	20	—	—
184657	2005	SX ₃₉	16.0	X	231.66481	237.15001	22.89009	2.50097	0.0427500	0.22443797	2.6816689	20	—	—
184658	2005	SO ₄₀	15.6	X	194.38461	241.52971	161.76745	1.63206	0.1915521	0.17443080	3.1723951	20	5 11.9	20.8
184659	2005	SJ ₄₁	15.9	X	260.41538	341.26928	321.29615	4.01732	0.1307935	0.17203628	3.2017643	20	3 16.4	20.7
184660	2005	SK ₄₇	16.2	X	158.36388	320.82862	322.88094	2.37402	0.0650536	0.21522462	2.7576644	20	—	—
184661	2005	SW ₅₁	15.5	X	216.82115	205.59371	205.81013	8.47216	0.0872041	0.17807997	3.1289070	20	6 16.2	20.3
184662	2005	SE ₅₂	15.1	X	324.71233	288.37983	33.70595	12.39573	0.0323873	0.18277779	3.0750612	20	7 18.6	19.5
184663	2005	SM ₅₂	16.3	X	328.87974	116.25599	342.02258	4.93600	0.0597266	0.21598491	2.7511891	20	—	—
184664	2005	SK ₅₅	15.2	X	210.19525	8.65359	26.48013	5.53453	0.1992008	0.17520393	3.1630555	20	5 13.6	20.4
184665	2005	SK ₅₅	16.7	X	77.51995	136.71632	172.20766	1.95477	0.0531238	0.20363214	2.8613556	20	12 1.7	20.7
184666	2005	SQ ₅₈	15.5	X	76.14820	252.87149	12.85266	10.39414	0.0768001	0.19649286	2.9302513	20	10 8.8	19.5
184667	2005	SO ₅₉	16.1	X	41.78980	322.05454	27.64882	2.28451	0.0043931	0.20408912	2.8570827	20	12 1.4	20.0
184668	2005	SK ₆₀	15.9	X	340.90918	21.85137	276.53428	0.39601	0.0658917	0.18672681	3.0315514	20	7 6.2	19.7
184669	2005	SF ₆₁	16.6	X	212.13471	150.18409	185.09654	2.25363	0.0595777	0.23423419	2.6063688	20	3 6.1	20.3
184670	2005	SP ₆₁	16.2	X	202.52108	133.57499	192.86237	7.41454	0.2120892	0.23313415	2.6145610	20	2 12.5	20.7
184671	2005	SW ₆₂	16.1	X	111.18433	295.79909	22.16485	5.06720	0.1580975	0.21392169	2.7688504	20	—	—
184672	2005	SL ₆₄	16.4	X	190.34545	91.49314	39.05037	1.33400	0.0331532	0.19056769	2.9906795	20	8 30.2	20.5
184673	2005	SC ₆₄	15.3	X	312.69537	321.75593	339.14267	8.60058	0.0446786	0.18145644	3.0899714	20	5 29.1	19.7
184674	2005	SC ₆₅	16.0	X	98.77669	16.99753	336.98838	4.58438	0.1278657	0.21839791	2.7308870	20	—	—
184675	2005	SQ ₇₁	15.6	X	307.67788	216.21343	124.22023	2.70779	0.1433961	0.18841534	3.0134122	20	7 2.5	19.2
184676	2005	SC ₇₅	15.5	X	258.30573	279.43204	359.63132	5.31939	0.0755662	0.16792747	3.2537803	20	2 24.3	20.2
184677	2005	SJ ₇₇	16.1	X	151.31987	288.03266	149.70197	1.81034	0.1803210	0.17165872	3.2064574	20	5 16.6	21.3
184678	2005	SO ₇₇	16.3	X	126.24225	219.91993	33.79491	2.40603	0.0177305	0.20385779	2.8592437	20	11 17.3	20.1
184679	2005	SM ₇₈	16.2	X	217.85125	0.91116	134.25760	2.81582	0.0227618	0.19854980	2.9099783	20	10 11.3	20.2
184680	2005	ST ₇₉	16.2	X	294.37679	259.87428	40.81671	1.54890	0.0283988	0.17745698	3.1362258	20	5 8.3	20.6
184681	2005	SB ₈₁	15.9	X	2.60113	276.47485	19.25734	8.95152	0.0852402	0.19013844	2.9951789	20	8 10.2	19.7
184682	2005	SF ₈₄	14.5	X	192.52740	80.96999	192.64224	10.08780	0.0425028	0.15242632	3.4707985	20	—	—
184683	2005	SL ₈₅	16.0	X	102.69784	33.53563	189.60608	9.63809	0.0142486	0.19275649	2.9679964	20	9 7.6	20.3
184684	2005	SS ₈₅	16.1	X	211.93442	192.22487	27.32213	4.02574	0.0385451	0.21267682	2.7796447	20	—	—
184685	2005	SN ₈₆	16.5	X	0.03819	244.50709	145.12169	2.70445	0.0733207	0.20424366	2.8556413	20	12 6.3	20.2
184686	2005	SP ₈₇	16.5	X	169.19746	56.89980	164.33238	2.25654	0.0317437	0.20557725	2.8432782	20	11 28.6	20.4
184687	2005	SR ₈₇	15.3	X	291.59932	121.35206	187.27463	10.62539	0.0118718	0.17714069	3.1399579	20	5 18.9	19.8
184688	2005	SS ₉₀	16.3	X	174.17093	224.59558	49.18660	2.11124	0.1704039	0.21697918	2.7427781	20	—	—
184689	2005	SL ₉₅	16.7	X	179.59520	246.15274	31.53372	3.50698	0.0500975	0.21865774	2.7287231	20	—	—
184690	2005	SV ₉₅	16.1	X	26.58246	190.71128	152.83338	2.54231	0.0526557	0.20189061	2.8777869	20	11 11.7	19.9
184691	2005	SV ₉₇	16.7	X	29.07680	249.60735	55.64609	5.08192	0.1648654	0.26518842	2.3993836	20	10 26.4	19.5
184692	2005	SL ₁₀₁	15.2	X	42.52360	40.50101	216.51771	11.20601	0.0467232	0.18710263	3.0274905	20	8 5.7	19.5
184693	2005	SG ₁₀₃	16.0	X	95.47167	123.97827	121.95846	3.05866	0.1021313	0.21308380	2.7761042	20	—	—
184694	2005	SL ₁₀₄	15.3	X	208.18033	195.46931	197.23418	11.33507	0.0783136	0.17460982	3.1702264	20	5 16.6	20.2
184695	2005	ST ₁₀₄	15.5	X	229.76680	160.67687	176.73381	6.47354	0.1186099	0.17074396	3.2178995	20	3 29.9	20.5
184696	2005	SO ₁₁₁	16.0	X	300.22381	35.16749	215.83785	13.04963	0.1470676	0.23590612	2.5940395	20	2 15.2	19.8
184697	2005	SG ₁₁₄	15.9	X	195.23589	254.01967	7.00840	7.79323	0.1522915	0.22103924	2.7090881	20	—	—
184698	2005	SJ ₁₁₄	15.5	X	244.81385	202.60830	198.62928	21.52143	0.1324329	0.18365297	3.0652842	20	6 27.4	20.5
184699	2005	SK ₁₁₅	15.8	X	89.34928	200.84548	11.99685	9.19116	0.0692807	0.18839684	3.0136095	20	8 20.8	20.2
184700	2005	SV ₁₁₅	15.8	X	274.98620	12.02112	357.44424	2.81958	0.1690568	0.18449639	3.0559351	20	6 19.8	20.2
184701	2005	SN ₁₁₇	15.9	X	135.62208	219.11229	128.47340	6.62697	0.0449241	0.22391345	2.6858552	20	—	—
184702	2005	SH ₁₂₂	15.5	X	194.37494	91.48792	206.83721	12.24060	0.0342099	0.22446432	2.6814591	20	—	—
184703	2005	SD ₁₂₃	16.2	X	37.28413	9.15873	32.05572	4.37040	0.1063293	0.21366855	2.7710370	20	—	—
184704	2005	SG ₁₂₃	15.0	X	272.38995	315.06251	1.60610	10.87246	0.0835125	0.17623386	3.1507201	20	4 19.7	19.7
184705	2005	SJ ₁₂₃	16.0	X	138.86138	107.36154	214.80594	4.08028	0.1854010	0.22117352	2.7079915	20	—	—
184706	2005	SQ ₁₂₉	15.8	X	90.61991	356.24659	24.73145	4.39352	0.1014926	0.21841088	2.7307789	20	—	—
184707	2005	SL ₁₃₁	16.3	X	12.13204	213.16257	223.14401	1.74536	0.0248877	0.21359400	2.7716817	20	—	—
184708	2005	SD ₁₃₄	16.5	X	154.45591	144.96980	192.22899	2.32205	0.0896509	0.22283841	2.6944865	20	1 8.7	20.4
184709	2005	SA ₁₃₈	15.3	X	222.81200	90.21865	344.08992	14.16310	0.0868954	0.19050550	2.9913303	20	7 26.4	19.9
184710	2005	SL ₁₃₈	16.2	X	135.10339	99.77737	182.15628	8.99186	0.1374072	0.21309012	2.7760493	20	—	—

ELEMENTS AND OPPOSITION DATES IN 2020

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
184721	2005	SG ₁₆₃	16.4	X	210.77827	132.58172	183.57194	8.56813	0.1914247	0.23303398	2.6153103	20	2 7.1	20.9
184722	2005	SP ₁₆₄	16.1	X	168.06235	151.57270	181.88152	7.56555	0.2461319	0.22683339	2.6627562	20	1 27.2	20.7
184723	2005	SQ ₁₆₅	15.3	X	221.44893	253.08619	143.12051	11.01825	0.1924909	0.17945709	3.1128794	20	5 28.2	20.6
184724	2005	SU ₁₆₆	16.0	X	65.83083	206.78057	104.63840	8.96127	0.2318365	0.27363467	2.3497517	20	12 24.8	19.7
184725	2005	SE ₁₇₀	15.5	X	245.45658	33.59465	308.58101	9.00476	0.1317439	0.17817954	3.1277413	20	4 13.8	20.4
184726	2005	SQ ₁₇₂	16.2	X	148.20325	242.36123	343.81787	8.97841	0.0196022	0.20307555	2.8665814	20	11 6.1	20.5
184727	2005	SQ ₁₇₃	15.4	X	174.35667	228.39820	188.04846	10.55713	0.0874393	0.17618876	3.1512577	20	5 10.6	20.3
184728	2005	SX ₁₇₆	15.9	X	189.31112	258.80445	355.38326	8.81857	0.1931281	0.21817552	2.7327424	20	—	—
184729	2005	SV ₁₇₉	16.7	X	89.30674	319.80025	7.76474	6.16046	0.0432014	0.21161873	2.7889024	20	—	—
184730	2005	SM ₁₈₀	15.9	X	233.88831	185.42980	182.81560	9.56950	0.1145332	0.17910069	3.1170077	20	5 11.4	20.7
184731	2005	SY ₁₈₀	16.0	X	139.31201	176.23668	328.75197	4.26571	0.0294906	0.18316327	3.0707452	20	7 17.7	20.4
184732	2005	SG ₁₈₅	16.3	X	122.28889	161.88339	15.88168	2.70401	0.0767662	0.18859465	3.0115019	20	8 13.0	20.7
184733	2005	SF ₁₈₆	15.9	X	148.06081	157.85820	173.56494	5.59242	0.0810666	0.22214944	2.7000548	20	—	—
184734	2005	SC ₁₉₀	15.8	X	301.30928	167.68646	158.60311	1.75358	0.0970954	0.18240348	3.0792567	20	6 10.4	19.7
184735	2005	SL ₁₉₂	15.4	X	304.73985	144.49839	195.23728	1.43241	0.2380667	0.18511683	3.0491031	20	6 7.9	19.2
184736	2005	SV ₂₀₄	17.1	X	32.95701	203.49012	102.69947	3.47621	0.2132044	0.26691573	2.3890209	20	11 10.4	19.9
184737	2005	SA ₂₀₅	16.0	X	57.85312	230.69670	136.28690	5.07718	0.2148493	0.21180469	2.7872698	20	—	—
184738	2005	SS ₂₀₇	15.5	X	138.37882	194.07432	351.77539	10.32434	0.0466622	0.19092823	2.9869133	20	9 8.4	19.7
184739	2005	SO ₂₁₀	15.1	X	168.09028	272.81273	222.79286	9.00389	0.0430510	0.18802055	3.0176289	20	8 5.8	19.7
184740	2005	SS ₂₁₇	15.2	X	291.11645	46.06034	195.45660	13.08834	0.1292994	0.23037772	2.6352749	20	1 27.9	19.2
184741	2005	SU ₂₁₇	15.6	X	111.50850	249.06589	67.35513	5.33823	0.0597037	0.21050289	2.7987494	20	—	—
184742	2005	SA ₂₂₅	15.6	X	265.39712	117.42325	194.47834	3.61987	0.1244417	0.17340399	3.1849063	20	4 3.8	20.2
184743	2005	SE ₂₃₀	16.1	X	240.62344	202.22132	203.76119	1.79338	0.0723187	0.18420764	3.0591278	20	7 7.9	20.6
184744	2005	SB ₂₃₈	15.5	X	247.47160	260.31792	15.91541	8.62199	0.1562092	0.22982266	2.6396164	20	1 28.8	19.8
184745	2005	SD ₂₄₅	16.1	X	99.25907	193.33272	122.16683	0.93916	0.1707512	0.19135397	2.9824813	20	9 12.9	20.7
184746	2005	SU ₂₄₆	16.2	X	98.31571	344.01534	212.93786	9.09727	0.0373884	0.18467029	3.0540164	20	7 31.2	20.7
184747	2005	SA ₂₄₇	14.7	X	2.66523	196.19707	24.08904	16.59660	0.0202690	0.17137358	3.2100130	20	4 24.9	19.1
184748	2005	SE ₂₄₇	15.6	X	128.01887	297.99622	203.97991	9.20180	0.0361670	0.17904164	3.1176930	20	6 28.9	20.3
184749	2005	SK ₂₄₇	16.2	X	240.06821	52.57328	205.39037	3.46249	0.0698638	0.22434260	2.6824289	20	1 2.0	20.1
184750	2005	SM ₂₄₈	16.5	X	245.15786	39.56032	182.89523	13.43501	0.1436133	0.22319951	2.6915796	20	—	—
184751	2005	SQ ₂₄₉	16.0	X	158.13893	207.09198	78.41398	4.10399	0.0513720	0.21678546	2.7444118	20	—	—
184752	2005	SM ₂₅₂	16.4	X	115.78501	134.07628	151.53277	7.41149	0.1959243	0.21307830	2.7761519	20	12 23.5	21.2
184753	2005	SF ₂₅₃	15.6	X	115.66344	323.08159	64.08177	7.46781	0.1713042	0.22431355	2.6826605	20	2 8.7	19.4
184754	2005	SJ ₂₅₃	15.1	X	246.50946	5.16029	35.98352	9.95950	0.0926769	0.18007465	3.1057584	20	7 7.3	19.8
184755	2005	SS ₂₅₄	15.5	X	282.66956	289.63328	352.33600	7.29687	0.0589445	0.17531670	3.1616991	20	3 25.9	19.9
184756	2005	SX ₂₅₄	16.2	X	288.01006	107.35934	146.59483	7.47889	0.0909152	0.23856301	2.5747436	20	2 16.4	19.7
184757	2005	SN ₂₅₅	15.7	X	195.62320	5.49394	31.74638	5.04945	0.1711327	0.17586278	3.1551066	20	5 5.1	20.9
184758	2005	SN ₂₅₇	15.2	X	152.94704	42.52990	35.91139	11.39995	0.0948221	0.17339116	3.1850573	20	5 12.5	20.0
184759	2005	SK ₂₆₃	16.1	X	97.33478	202.54183	28.83171	10.60122	0.0488048	0.19371009	2.9582478	20	9 21.2	20.4
184760	2005	SO ₂₆₆	16.4	X	177.69005	24.78963	220.67014	3.51666	0.0094549	0.21262421	2.7801031	20	—	—
184761	2005	SR ₂₆₈	15.8	X	24.32702	277.23491	115.05072	4.95926	0.1059302	0.20910599	2.8112000	20	—	—
184762	2005	SG ₂₇₈	16.1	X	209.16609	237.89401	183.65432	5.35995	0.1307083	0.17937527	3.1138260	20	6 18.1	21.1
184763	2005	SZ ₂₇₈	15.6	X	138.45775	245.59255	267.29395	3.38684	0.0565210	0.18308415	3.0716299	20	7 27.3	20.2
184764	2005	SL ₂₇₉	16.3	X	198.10091	80.40481	184.31013	12.77611	0.1296862	0.22363772	2.6880624	20	—	—
184765	2005	SO ₂₈₅	16.3	X	192.46979	135.03655	113.99574	13.56941	0.1550244	0.21254371	2.7808050	20	—	—
184766	2005	TO ₃	16.3	X	175.95177	162.66625	177.02417	13.72194	0.2581167	0.23032461	2.6357800	20	2 8.9	21.1
184767	2005	TR ₄	16.5	X	98.68314	270.97038	66.00957	1.42443	0.0760493	0.21305466	2.7763573	20	—	—
184768	2005	TS ₇	16.0	X	39.12421	181.34792	61.56106	2.57895	0.1296692	0.18449948	3.0559010	20	7 29.0	19.9
184769	2005	TZ ₈	15.7	X	41.54781	167.76925	86.49084	2.56941	0.0641491	0.18622795	3.0369628	20	8 7.8	19.8
184770	2005	TU ₉	15.8	X	206.57187	187.81103	40.70477	5.47321	0.0916586	0.21254108	2.7808280	20	—	—
184771	2005	TO ₁₀	15.2	X	308.21568	357.79073	359.46505	11.65488	0.0650778	0.18724868	3.0259161	20	8 9.4	19.3
184772	2005	TY ₁₃	15.6	X	283.85647	210.14381	150.69940	3.26349	0.0811712	0.18630367	3.0361399	20	7 3.5	19.7
184773	2005	TC ₁₆	16.1	X	61.61957	162.29147	160.22055	3.98345	0.0903490	0.20995084	2.8036533	20	12 6.2	20.2
184774	2005	TG ₁₇	15.9	X	29.69271	230.72542	120.67403	3.12114	0.0779178	0.20388767	2.8589644	20	11 29.3	19.6
184775	2005	TH ₁₈	15.7	X	265.12777	181.38587	180.50773	5.27656	0.1655459	0.18149365	3.0895490	20	5 30.6	20.3
184776	2005	TN ₁₈	16.0	X	66.45345	224.66936	174.12410	3.38453	0.1072382	0.21585572	2.7522868	20	—	—
184777	2005	TL ₂₆	15.6	X	39.62736	238.25306	40.10833	11.33090	0.1084781	0.18949474	3.0019579	20	9 17.2	19.7
184778	2005	TL ₂₇	16.0	X	135.32023	166.05130	167.51792	6.59957	0.0454112	0.21830598	2.7316536	20	—	—
184779	2005	TO ₂₇	15.7	X	341.96474	18.82624	37.77259	11.78964	0.1183056	0.20334181	2.8640786	20	12 15.7	19.3
184780	2005	TN ₂₈	14.4	X	337.44391	301.54244	123.20660	3.48556	0.1820953	0.12517786	3.9577744	20	11 27.5	18.9
184781	2005	TW ₂₉	16.0	X	261.44873	242.06401	146.89403	2.16261	0.1585373	0.18580180	3.0416047	20	6 29.8	20.5
184782	2005	TT ₃₃	16.9	X	206.69292	206.38342	49.29568	3.62165	0.0166764	0.21907472	2.7252595	20	—	—
184783	2005	TU ₃₉	16.3	X	227.06093	219.15205	104.65518	2.99571	0.2030842	0.23616160	2.5921683	20	3 2.9	20.5
184784	2005	Bettiepage	15.1	X	245.21193	186.57395	202.35096	8.56904	0.0732037	0.18192395	3.0846754	20	6 21.4	19.7
184785	2005	TP ₄₇	16.4	X	207.09867	272.09538	20.87454	2.25812	0.1840499	0.22600828	2.6692329	20	1 11.0	20.9
184786	2005	TE ₅₃	16.7	X	351.85780	9.81718	350.74550	1.24780	0.1297394	0.19736060	2.9216560	20	10 19.1	19.9
184787	2005	TH ₅₄	15.9	X	327.17916	300.51097	177.72967	5.59592	0.0173190	0.21334084	2.7738739	20	—	—
184788	2005	TL ₅₅	15.4	X	240.49309	289.35395	48.52861	5.96571	0.1795711	0.17194157	3.2029399	20	4 6.2	20.5
184789	2005	TY ₅₆	15.6	X	304.78776	214.74631	74.46305	2.12518	0.1234464	0.17726448	3.1384959	20	4 24.8	19.7
184790	2005	TD ₅₇	16.8	X	131.10542	204.14632	338.69496	1						

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184801 2005 <i>TE</i> ₁₀₁	16.2	X	73.48021	227.19011	109.95762	1.78850	0.1150834	0.20841160	2.8174408	20	—	—
184802 2005 <i>TH</i> ₁₀₁	15.2	X	269.07796	213.91138	178.29852	9.56984	0.1487902	0.18497184	3.0506963	20	7 13.4	19.6
184803 2005 <i>TB</i> ₁₁₀	15.7	X	0.48412	248.57053	319.34406	3.35678	0.0182675	0.17124432	3.2116282	20	4 7.3	20.2
184804 2005 <i>TF</i> ₁₁₂	15.6	X	0.10443	219.17719	350.11834	4.48422	0.0736976	0.17113313	3.2130192	20	4 7.5	19.8
184805 2005 <i>TX</i> ₁₁₅	15.9	X	51.36860	22.75348	262.10028	1.07603	0.0917415	0.19676123	2.9275863	20	10 4.1	19.9
184806 2005 <i>TH</i> ₁₂₁	15.7	X	343.22280	164.68532	72.84064	2.36557	0.1377262	0.17391317	3.1786868	20	4 15.6	19.4
184807 2005 <i>TK</i> ₁₂₂	16.6	X	171.13009	117.59438	26.71303	1.19347	0.0816751	0.18869359	3.0104491	20	8 23.7	21.1
184808 2005 <i>TX</i> ₁₂₂	16.1	X	354.50601	108.64458	146.64679	1.09791	0.1218256	0.18006600	3.1058578	20	5 29.2	19.8
184809 2005 <i>TQ</i> ₁₂₄	16.3	X	7.34773	33.06882	323.19389	1.23881	0.0774091	0.19893385	2.9062318	20	11 2.3	20.0
184810 2005 <i>TG</i> ₁₂₆	15.9	X	57.24344	44.13385	177.78291	2.18091	0.0914001	0.18221298	3.0814125	20	7 20.6	19.9
184811 2005 <i>TX</i> ₁₂₇	16.0	X	126.69080	102.39794	9.23066	4.64999	0.1131245	0.17206232	3.2014412	20	5 27.7	20.9
184812 2005 <i>TK</i> ₁₂₉	16.3	X	26.84213	142.77990	223.97440	1.21146	0.0778185	0.20360965	2.8615663	20	12 14.1	20.1
184813 2005 <i>TU</i> ₁₂₉	16.1	X	148.11895	86.20650	29.57661	10.62609	0.0360587	0.17725521	3.1386053	20	6 19.9	20.9
184814 2005 <i>TF</i> ₁₃₅	16.3	X	98.99635	267.52696	53.74778	3.18429	0.0623308	0.21119924	2.7925941	20	—	—
184815 2005 <i>TP</i> ₁₃₆	16.6	X	309.86474	120.64262	77.49174	3.37598	0.0432096	0.22720276	2.6598694	20	1 12.7	20.0
184816 2005 <i>TS</i> ₁₃₆	16.3	X	234.36891	97.88639	144.32745	4.32336	0.1582313	0.22382109	2.6865941	20	—	—
184817 2005 <i>TJ</i> ₁₄₀	16.2	X	36.06499	281.97370	88.95104	3.06448	0.0466580	0.20689727	2.8311717	20	12 27.4	19.8
184818 2005 <i>TX</i> ₁₄₀	16.5	X	260.37982	346.84721	116.33818	2.92169	0.0268143	0.19805206	2.9148518	20	10 23.9	20.5
184819 2005 <i>TU</i> ₁₆₀	16.0	X	34.01743	87.17702	224.47437	8.98946	0.0446113	0.19548811	2.9402831	20	10 6.9	20.1
184820 2005 <i>TR</i> ₁₆₂	15.8	X	95.20657	24.52404	249.75223	2.94265	0.0809716	0.20039963	2.8920432	20	11 11.2	20.0
184821 2005 <i>TY</i> ₁₆₂	16.1	X	336.61478	355.63739	322.80838	2.16078	0.1638502	0.18793742	3.0185187	20	7 22.2	19.2
184822 2005 <i>TK</i> ₁₆₇	15.9	X	172.15834	169.72789	29.81762	5.07090	0.0591877	0.19839732	2.9114691	20	11 1.9	20.2
184823 2005 <i>TX</i> ₁₇₀	15.3	X	10.31039	172.61526	28.15186	7.15966	0.0484777	0.16761757	3.2577896	20	4 13.4	19.5
184824 2005 <i>TA</i> ₁₇₈	15.2	X	224.35348	260.01094	153.21074	10.15659	0.0897644	0.18451185	3.0557645	20	6 26.8	19.9
184825 2005 <i>TZ</i> ₁₇₈	15.5	X	113.02987	240.88234	217.53721	6.17014	0.1000874	0.17030109	3.2234759	20	4 26.0	20.2
184826 2005 <i>TE</i> ₁₉₀	16.1	X	256.33460	289.76488	347.10149	12.25024	0.1574620	0.23369505	2.6103758	20	2 6.7	20.2
184827 2005 <i>TP</i> ₁₉₀	16.4	X	240.88937	81.39195	173.21255	2.51127	0.0637545	0.22502915	2.6769702	20	—	—
184828 2005 <i>TX</i> ₁₉₁	15.7	X	339.57775	161.47219	139.63270	5.18417	0.1453650	0.18651702	3.0338242	20	7 3.6	19.1
184829 2005 <i>UJ</i>	13.1	X	0.05916	143.95943	79.38236	4.67488	0.0469261	0.08375734	5.1733558	20	5 1.9	19.7
184830 2005 <i>UQ</i> ₆	16.3	X	56.20108	273.68788	55.20354	5.40118	0.1351159	0.27240118	2.3568398	20	—	—
184831 2005 <i>UY</i> ₈	15.1	X	321.51175	36.64678	183.29200	14.69795	0.1138137	0.23350321	2.6118054	20	2 10.5	18.7
184832 2005 <i>UV</i> ₉	16.0	X	274.08133	242.95428	129.46430	2.37820	0.1600317	0.18356795	3.0662306	20	6 23.8	20.2
184833 2005 <i>UA</i> ₁₀	15.6	X	224.13005	202.02407	181.30718	10.70629	0.2278427	0.17602062	3.1532642	20	5 12.5	21.0
184834 2005 <i>UP</i> ₁₄	15.7	X	357.01407	167.63539	61.47890	3.00484	0.0691200	0.17079438	3.2172662	20	4 30.2	19.9
184835 2005 <i>UG</i> ₂₁	15.7	X	66.64525	195.24577	0.54738	4.34807	0.0676134	0.17663600	3.1459362	20	6 26.2	20.0
184836 2005 <i>UV</i> ₂₂	15.8	X	341.73097	353.92642	313.13900	1.96827	0.0711297	0.18340688	3.0680256	20	7 18.9	19.8
184837 2005 <i>UD</i> ₂₆	15.9	X	314.50270	130.57921	203.23492	1.35002	0.0827193	0.18286701	3.0740609	20	7 11.5	19.7
184838 2005 <i>UX</i> ₃₃	15.0	X	31.99330	5.18753	228.79141	17.69135	0.2089739	0.17629047	3.1500455	20	7 10.4	19.0
184839 2005 <i>UT</i> ₃₆	15.7	X	256.86696	117.68574	228.14436	4.57622	0.0970257	0.17392491	3.1785438	20	5 9.1	20.4
184840 2005 <i>UP</i> ₃₇	15.1	X	287.64104	296.83926	60.15209	11.05955	0.0586168	0.17889823	3.1193589	20	7 7.3	19.5
184841 2005 <i>US</i> ₃₈	15.7	X	6.36183	142.96640	157.37517	1.33345	0.1775169	0.18605145	3.0388832	20	8 25.5	19.0
184842 2005 <i>UY</i> ₃₈	15.2	X	3.74096	204.94527	67.64739	6.44992	0.1058924	0.17802229	3.1295829	20	7 7.9	19.1
184843 2005 <i>UO</i> ₄₂	15.3	X	234.33911	328.48286	39.61653	2.08317	0.1179465	0.17470375	3.1690899	20	5 9.5	20.2
184844 2005 <i>UB</i> ₄₅	16.4	X	174.69575	111.62804	158.28530	3.66681	0.0707998	0.21156131	2.7894070	20	—	—
184845 2005 <i>UP</i> ₄₅	15.5	X	136.79474	120.27167	201.02967	6.46162	0.0431108	0.21572615	2.7533887	20	—	—
184846 2005 <i>UT</i> ₄₅	16.3	X	202.06246	284.50229	47.14977	4.25558	0.1311961	0.23166837	2.6255778	20	2 22.1	20.4
184847 2005 <i>UR</i> ₄₆	15.9	X	37.47674	175.02360	142.70131	2.58567	0.0694096	0.19853159	2.9101563	20	10 26.3	19.8
184848 2005 <i>UH</i> ₄₉	14.7	X	359.32799	30.98608	238.28724	14.63123	0.0494044	0.17965810	3.1105572	20	6 23.5	18.9
184849 2005 <i>UE</i> ₅₁	15.9	X	39.34069	27.56508	308.32300	3.69445	0.1286573	0.20078534	2.8883382	20	11 27.8	19.7
184850 2005 <i>UG</i> ₅₃	15.5	X	203.13494	340.33152	67.89932	6.04555	0.1584212	0.17427044	3.1743409	20	5 25.8	20.6
184851 2005 <i>UT</i> ₅₃	16.1	X	165.44054	173.08031	177.23451	5.99977	0.1153561	0.22674331	2.6634613	20	2 5.9	20.2
184852 2005 <i>UV</i> ₅₃	16.0	X	261.11560	257.92251	131.92464	1.78937	0.1761529	0.18257310	3.0773592	20	6 28.1	20.6
184853 2005 <i>UM</i> ₅₆	15.2	X	57.42247	60.40208	220.75977	11.87765	0.0928665	0.19343190	2.9610835	20	10 5.1	19.4
184854 2005 <i>UP</i> ₅₇	15.4	X	244.28939	47.89799	220.19827	12.46840	0.0943046	0.22651491	2.6652514	20	1 14.4	19.6
184855 2005 <i>UK</i> ₅₈	15.7	X	18.74604	341.80516	277.94503	0.82634	0.0726179	0.17960492	3.1111711	20	7 12.2	19.6
184856 2005 <i>UW</i> ₆₁	15.6	X	40.66509	195.96148	61.06301	3.91959	0.0318262	0.18141419	3.0904511	20	8 6.2	19.8
184857 2005 <i>UF</i> ₆₆	14.4	X	340.47821	43.49807	292.80323	4.20045	0.2035100	0.12332665	3.9972818	20	8 11.9	18.8
184858 2005 <i>UJ</i> ₆₇	15.7	X	220.00743	75.08832	195.17318	9.28899	0.0293458	0.22148382	2.7054616	20	—	—
184859 2005 <i>UU</i> ₇₂	15.2	X	311.10216	281.71624	60.89940	4.47308	0.1515239	0.18399954	3.0614339	20	7 10.3	18.8
184860 2005 <i>UD</i> ₈₂	16.7	X	36.21222	14.73659	350.94064	1.25005	0.0715366	0.20546074	2.8443529	20	12 24.3	20.6
184861 2005 <i>UY</i> ₈₆	15.6	X	23.57519	79.65438	206.06144	8.33731	0.0562316	0.18732380	3.0251071	20	8 19.1	19.7
184862 2005 <i>UU</i> ₈₇	15.7	X	312.62598	195.70210	124.32370	0.95143	0.1002785	0.18150716	3.0893957	20	6 18.3	19.7
184863 2005 <i>UQ</i> ₈₉	15.2	X	2.98419	282.06011	12.59542	10.15818	0.0510919	0.18386839	3.0628895	20	8 7.3	19.4
184864 2005 <i>UM</i> ₉₅	16.0	X	156.99077	190.53803	106.71447	3.37777	0.0734503	0.21364533	2.7712377	20	—	—
184865 2005 <i>UA</i> ₉₆	15.9	X	352.89878	138.28322	119.08111	2.97801	0.0678346	0.17450181	3.1715344	20	5 30.8	20.1
184866 2005 <i>UC</i> ₉₇	15.2	X	356.78281	207.59790	64.37133	10.87255	0.0606641	0.17779051	3.1323022	20	6 24.2	19.3
184867 2005 <i>UD</i> ₁₀₉	15.3	X	261.14275	219.72705	167.82971	13.11762	0.1822291	0.18282259	3.0745588	20	6 24.6	20.1
184868 2005 <i>UJ</i> ₁₁₃	16.6	X	116.59370	290.56181	345.29119	1.21054	0.0103050	0.19887907	2.9067655	20	12 1.5	20.6
184869 2005 <i>UA</i> ₁₁₅	15.7	X	97.23454	187.33331	187.01248	14.41062	0.2151381	0.21782668	2.7356593	20	1 3.7	19.5
184870 2005 <i>UB</i> ₁₁₆	16.4	X	134.83516	315.05625	18.07891	2.32304	0.0957245	0.21676144	2.7446146	20	—	—
184871 2005 <i>UP</i> ₁₂₇	15.5	X	145.70525	178.61554	43.51839	10.38936	0.0427836	0.19569124	2.9382480	20	10 31.9	19.7

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
184881	2005	UR ₂₁₁	16.2 ^m	X	68.91107	104.48557	139.61152	1.98982	0.1286651	0.18535801	3.0464576	20	9 9.3	20.3
184882	2005	UZ ₂₁₂	15.0	X	242.69524	319.25004	60.69525	10.94307	0.0839424	0.17324920	3.1868031	20	6 5.3	19.7
184883	2005	UL ₂₁₃	16.2	X	216.21689	171.17638	139.36371	6.83852	0.2228383	0.23324054	2.6137659	20	2 6.3	20.7
184884	2005	UF ₂₁₄	15.9	X	342.15336	195.97405	126.45328	12.01125	0.2298600	0.18885101	3.0087759	20	8 6.8	18.7
184885	2005	UY ₂₁₄	16.4	X	82.18901	206.28338	89.46364	6.65910	0.2710859	0.27369225	2.3494221	20	12 21.9	20.3
184886	2005	UT ₂₂₁	15.7	X	29.99303	244.29666	5.63472	5.09020	0.1237788	0.18164204	3.0878661	20	7 23.7	19.5
184887	2005	UO ₂₂₆	15.9	X	297.01181	264.57337	60.24044	2.08655	0.1699250	0.17928230	3.1149024	20	5 22.2	19.8
184888	2005	UW ₂₂₆	15.8	X	69.42641	82.75689	209.24975	3.61815	0.0367304	0.19535329	2.9416358	20	10 28.3	19.7
184889	2005	UY ₂₃₄	15.1	X	57.96307	149.27210	71.07811	10.14319	0.0925332	0.17754217	3.1352225	20	7 21.3	19.4
184890	2005	UZ ₂₃₆	16.0	X	357.86165	284.96633	83.46643	7.74044	0.1528687	0.19652792	2.9299028	20	11 13.2	19.4
184891	2005	UM ₂₃₇	15.9	X	348.83114	248.81481	104.97248	5.55176	0.0807915	0.19129471	2.9830973	20	10 4.5	19.7
184892	2005	UB ₂₄₄	16.0	X	297.47501	45.99848	297.99048	4.40110	0.1611628	0.17945533	3.1128998	20	6 18.5	20.1
184893	2005	UN ₂₅₃	15.5	X	138.67119	12.55496	177.79104	8.87543	0.0228948	0.18948755	3.0020339	20	9 11.8	19.7
184894	2005	UO ₂₅₄	16.1	X	44.32992	143.42225	140.09473	2.20584	0.0894889	0.18928427	3.0041829	20	9 22.8	20.0
184895	2005	UO ₂₅₅	15.4	X	101.46793	324.55627	154.03841	2.06020	0.1015009	0.16872740	3.2434881	20	5 8.5	20.1
184896	2005	UO ₂₅₆	16.3	X	49.62541	254.68822	68.91809	3.02177	0.0654503	0.20153618	2.8811599	20	11 17.5	20.1
184897	2005	UV ₂₆₀	16.3	X	162.60235	150.13074	74.37291	5.74329	0.1123869	0.21862283	2.7290137	20	1 5.3	20.3
184898	2005	UA ₂₆₃	16.4	X	6.33311	231.38352	149.75332	2.48594	0.0781734	0.20347991	2.8627825	20	12 4.7	20.1
184899	2005	UF ₂₆₇	16.3	X	73.95779	133.62094	147.95452	2.58237	0.1459049	0.19534559	2.9417131	20	11 4.6	20.7
184900	2005	UZ ₂₆₉	15.6	X	250.78879	212.07088	32.68723	13.26901	0.1310943	0.22426736	2.6830288	20	—	—
184901	2005	UK ₂₈₀	15.9	X	37.90697	126.00039	177.34252	1.71421	0.0768820	0.19288772	2.9666501	20	10 7.8	19.9
184902	2005	US ₂₉₆	15.0	X	183.19730	29.10231	49.53126	9.68313	0.0616571	0.17360534	3.1824432	20	6 13.8	19.8
184903	2005	UW ₃₁₁	15.6	X	101.96437	19.13066	187.86725	5.00315	0.1362100	0.18637512	3.0353639	20	8 30.9	20.2
184904	2005	UK ₃₂₁	15.9	X	303.38839	206.13611	126.69256	2.90369	0.0654331	0.17880574	3.1204346	20	6 26.1	20.1
184905	2005	UX ₃₂₅	15.8	X	128.99267	44.70423	89.84651	2.36677	0.1193197	0.17561036	3.1581734	20	6 29.1	20.7
184906	2005	UZ ₃₂₇	16.7	X	196.02195	252.21265	71.54309	2.86990	0.1488933	0.23078252	2.6322923	20	2 6.3	20.9
184907	2005	UR ₃₃₄	16.1	X	121.41013	217.58087	114.86734	2.69117	0.1624657	0.21247177	2.7814327	20	—	—
184908	2005	UL ₃₄₉	15.4	X	309.01945	194.71459	184.05571	9.35859	0.1971958	0.18748259	3.0233986	20	8 17.1	19.0
184909	2005	UQ ₃₅₃	15.2	X	305.87689	315.08264	10.36093	10.79621	0.0877221	0.17923339	3.1154691	20	6 16.2	19.5
184910	2005	UM ₃₆₃	16.1	X	161.03349	214.29874	93.68558	3.19846	0.0671927	0.21628352	2.7486563	20	—	—
184911	2005	UP ₃₆₅	15.8	X	352.58847	222.88821	99.83372	4.08424	0.1415763	0.18832474	3.0143786	20	8 30.3	19.1
184912	2005	UR ₃₈₂	15.7	X	320.17165	207.73680	163.47027	8.24817	0.1009086	0.19297114	2.9657951	20	9 8.9	19.1
184913	2005	UQ ₃₈₂	14.8	X	168.75151	204.82059	133.35962	9.34968	0.1261206	0.16022904	3.3571847	20	2 4.3	20.0
184914	2005	UF ₃₈₉	16.5	X	213.11174	128.11074	51.46545	2.81473	0.0296080	0.20538477	2.8450543	20	11 28.8	20.3
184915	2005	UO ₄₀₂	16.0	X	118.98514	233.86009	63.88342	4.62503	0.0737004	0.20896403	2.8124730	20	—	—
184916	2005	UW ₄₀₇	16.3	X	318.44009	322.23627	76.55890	3.14519	0.0405359	0.19783176	2.9170153	20	10 18.0	20.0
184917	2005	UY ₄₆₈	15.6	X	270.45859	48.52458	286.80639	4.45161	0.1949795	0.17596434	3.1539365	20	4 27.3	20.4
184918	2005	UO ₄₇₂	16.1	X	351.81142	246.28448	52.26009	3.15283	0.0536910	0.18035528	3.1025359	20	7 23.5	20.1
184919	2005	UH ₄₈₅	16.1	X	153.75364	184.79062	123.67797	6.09309	0.0224499	0.21604486	2.7506801	20	—	—
184920	2005	UQ ₄₉₂	15.5	X	287.35495	334.00571	54.84121	11.45314	0.1127301	0.19120838	2.9839950	20	8 15.7	19.6
184921	2005	UV ₄₉₄	15.2	X	292.60622	247.27753	102.71109	10.91628	0.0788646	0.18039981	3.1020252	20	7 1.7	19.2
184922	2005	UP ₄₉₇	15.2	X	312.03790	157.91483	159.54484	13.30243	0.1494284	0.18227120	3.0807563	20	6 9.1	19.3
184923	2005	UN ₅₀₂	15.0	X	46.12468	134.31696	101.49468	17.67725	0.0731440	0.17884034	3.1200320	20	7 21.2	19.2
184924	2005	UX ₅₀₈	15.6	X	275.06657	199.58066	174.96873	5.43081	0.1672117	0.18020743	3.1043236	20	6 26.5	20.0
184925	2005	UF ₅₁₁	15.6	X	350.25176	146.67482	186.47839	9.04297	0.0535682	0.18865264	3.0108847	20	9 3.4	19.6
184926	2005	UA ₅₁₈	15.5	X	300.02886	165.48602	120.99873	9.25983	0.1502432	0.17449263	3.1716457	20	4 14.8	19.9
184927	2005	UZ ₅₂₃	15.6	X	41.89833	40.34462	184.73811	17.40573	0.1572881	0.18146272	3.0899001	20	7 10.1	19.8
184928	2005	UL ₅₂₄	15.9	X	28.70365	71.65534	161.09069	13.21050	0.1337359	0.17691962	3.1425731	20	6 27.7	20.0
184929	2005	VN ₂	13.1	X	267.97113	181.20043	146.90792	7.32391	0.0432730	0.08699052	5.0445384	20	5 11.9	19.9
184930	Gobbi	hilda	14.6	X	260.76942	133.44126	344.41874	6.01558	0.1390482	0.12543916	3.9522762	20	10 10.9	20.2
184931	2005	VZ ₄	16.0	X	210.63565	186.44198	126.62393	2.31668	0.1225639	0.22787100	2.6546667	20	2 6.4	20.1
184932	2005	UU ₁₆	15.0	X	215.27708	333.83665	84.97632	11.47455	0.0735727	0.17757865	3.1347931	20	6 24.7	19.6
184933	2005	VK ₃₃	15.2	X	16.95623	93.83755	220.96586	8.10829	0.0887804	0.19161886	2.9797321	20	9 21.2	19.0
184934	2005	VD ₄₂	15.4	X	37.57031	244.93364	104.15695	10.41565	0.0961605	0.19958002	2.8999556	20	12 8.7	19.3
184935	2005	VY ₄₃	16.5	X	351.16065	51.48046	106.19732	3.01792	0.0243588	0.22761022	2.6566941	20	1 17.4	19.9
184936	2005	VZ ₄₄	15.6	X	27.79232	249.47889	0.52768	6.35974	0.0619875	0.18410032	3.0603165	20	7 13.5	19.6
184937	2005	VA ₈₇	13.3	X	13.36711	92.06532	124.43948	10.59784	0.0569005	0.08384163	5.1700680	20	5 13.4	20.0
184938	2005	VA ₉₄	16.3	X	171.02280	238.85937	29.58362	3.61163	0.1087627	0.21064780	2.7974657	20	—	—
184939	2005	VP ₁₀₉	15.8	X	118.29951	289.64557	51.83703	6.02269	0.0498081	0.21407383	2.7675384	20	—	—
184940	2005	VB ₁₁₀	15.3	X	127.90907	116.92536	51.86644	11.24242	0.0620850	0.18125618	3.0922470	20	8 9.6	20.1
184941	2005	VM ₁₁₁	15.5	X	142.85606	275.24806	34.34845	5.57287	0.1452415	0.21111450	2.7933413	20	—	—
184942	2005	VP ₁₁₂	15.0	X	0.72327	303.62909	46.94872	10.00623	0.0847289	0.19180435	2.9778107	20	10 18.3	18.7
184943	2005	VX ₁₂₃	15.3	X	164.97115	302.40393	222.09010	9.03708	0.0206139	0.18853358	3.0121521	20	9 7.9	19.8
184944	2005	WR ₆	16.1	X	187.05488	296.85961	58.64317	8.46665	0.2073618	0.23017560	2.6369174	20	3 11.9	20.7
184945	2005	WK ₁₂	15.7	X	337.15242	209.31715	102.57307	2.44711	0.0247041	0.17947761	3.1126422	20	7 19.9	20.0
184946	2005	WU ₄₄	16.1	X	109.07009	11.05794	296.69302	0.92396	0.1190147	0.20474530	2.8509751	20	—	—
184947	2005	WS ₅₀	15.7	X	46.20447	73.59281	259.03753	1.66601	0.1188638	0.19790816	2.9162645	20	11 30.9	19.6
184948	2005	WM ₅₉	15.1	X	337.12181	286.51682	82.88394	10.62846	0.1167603	0.18867673	3.0106284	20	10 9.5	18.8
184949	2005	WG ₇₆	15.3	X	101.22267	203.83532	54.89996	4.52441	0.2335297	0.19102201	2.9859356	20	11 9.8	20.2
184950														

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
184961 2005 WY ₁₄₅	15.5	X	297.91053	32.03156	42.01177	3.52607	0.2162094	0.12507752	3.9598908	20	9 29.5	20.3
184962 2005 WY ₁₅₁	15.4	X	331.56698	283.31623	44.46887	11.00695	0.1943739	0.18362060	3.0656444	20	7 25.7	18.9
184963 2005 WK ₁₅₆	14.2	X	270.85012	315.51487	158.69634	10.98069	0.1712078	0.12431134	3.9761451	20	10 18.7	19.7
184964 2005 WA ₁₆₀	15.3	X	228.69903	241.82288	176.07291	11.12913	0.1061595	0.17796359	3.1302711	20	7 4.7	20.2
184965 2005 WX ₁₆₇	15.7	X	339.90801	228.67388	82.30094	6.37117	0.1626622	0.17953861	3.1119371	20	7 17.7	19.2
184966 2005 WM ₁₈₀	15.0	X	86.42419	147.82427	83.85584	13.08357	0.0332372	0.18297013	3.0729058	20	9 7.5	19.6
184967 2005 WA ₁₈₂	15.4	X	323.43267	203.67215	187.46406	10.08526	0.0129586	0.19104953	2.9856489	20	10 14.2	19.5
184968 2005 WG ₁₈₂	15.0	X	328.31073	196.87655	101.65059	10.22235	0.0728212	0.17453264	3.1711609	20	6 16.7	19.1
184969 2005 WV ₁₉₁	15.4	X	200.30607	262.21521	147.15803	8.28134	0.1373045	0.17324697	3.1868304	20	5 27.1	20.6
184970 2005 XF ₃₆	17.0	X	143.48021	89.62723	357.56497	0.70687	0.1212063	0.23110921	2.6298111	20	5 15.6	20.9
184971 2005 XJ ₉₂	14.8	X	350.37252	224.30191	83.06360	11.22954	0.0724572	0.17986423	3.1081801	20	8 3.7	18.9
184972 2005 YE ₁	15.6	X	266.19147	106.49129	221.69570	4.40036	0.0101368	0.17779838	3.1322098	20	5 10.1	20.1
184973 2005 YN ₈	14.7	X	216.48618	340.68017	53.10551	23.69450	0.0966662	0.17143352	3.2092648	20	5 22.3	19.6
184974 2005 YH ₇₆	14.1	X	296.35129	47.57421	106.15492	3.87301	0.0597563	0.12357213	3.9919861	20	11 18.6	19.4
184975 2006 BZ ₃₀	13.2	X	264.64202	212.99494	102.44177	4.73391	0.0054967	0.08399419	5.1638056	20	4 28.4	20.1
184976 2006 BN ₇₀	13.5	X	250.79818	310.48948	5.57530	9.46927	0.0701331	0.08198333	5.2479014	20	4 3.9	20.5
184977 2006 WY ₁₁₀	12.8	X	298.62378	170.94276	122.12733	11.59155	0.1601817	0.08442249	5.1463258	20	4 25.0	19.5
184978 2006 BM ₁₂₁	13.5	X	332.22876	275.22664	333.50800	4.45680	0.0373551	0.08404616	5.1616768	20	4 24.1	20.2
184979 2006 BG ₁₆₂	13.1	X	260.53970	187.92903	135.17840	8.87260	0.0734849	0.08430071	5.1512807	20	4 25.6	20.1
184980 2006 BM ₂₁₃	12.3	X	279.17998	179.84316	108.50156	29.90087	0.0993970	0.08228235	5.2351796	20	4 14.1	19.6
184981 2006 BK ₂₂₂	13.6	X	267.65679	59.52358	247.22376	0.94719	0.1033106	0.08166783	5.2614085	20	4 7.9	20.7
184982 2006 BV ₂₅₂	13.3	X	341.33682	69.54419	177.96918	2.69532	0.0896994	0.08213851	5.2412897	20	5 3.3	19.7
184983 2006 CS ₁₉	13.2	X	251.73792	169.93814	144.60395	11.84976	0.0669484	0.08275083	5.2154024	20	4 7.9	20.3
184984 2006 CQ ₃₁	13.0	X	297.72729	106.07121	186.03074	7.17902	0.0805040	0.08259287	5.2220497	20	4 29.8	19.8
184985 2006 CC ₅₁	13.7	X	281.31696	163.52928	145.19582	4.76687	0.0943727	0.08675987	5.0534751	20	4 27.9	20.4
184986 2006 DW ₁₄₃	13.6	X	216.62458	5.40018	9.09720	2.67542	0.0972090	0.08256442	5.2232496	20	5 2.8	20.8
184987 2006 DY ₁₅₇	16.7	X	173.48407	306.31063	21.13570	3.94211	0.2141551	0.26902477	2.3765185	20	1 20.9	20.6
184988 2006 FF ₁₂	12.6	X	328.84512	93.81054	172.99658	13.85504	0.0686959	0.08079883	5.2990663	20	5 12.5	19.4
184989 2006 KA ₅₆	15.9	X	197.35184	211.48090	144.73781	1.17211	0.1231839	0.19060291	2.9903110	20	3 19.7	20.7
184990 2006 KE ₈₉	16.4	X	297.72644	299.20701	88.62287	45.10406	0.7990830	0.91179402	1.0532664	20	5 28.8	17.7
184991 2006 LZ ₆	16.5	X	224.81949	97.82417	237.86454	1.56849	0.1968927	0.26113075	2.4241754	20	3 11.9	20.6
184992 2006 ML ₆	15.9	X	234.58683	204.62675	128.83783	8.82050	0.1753622	0.26156085	2.4215172	20	3 22.9	19.8
184993 2006 MA ₇	16.9	X	262.86446	210.60808	131.82378	5.85677	0.1575615	0.27170730	2.3608506	20	5 1.2	20.2
184994 2006 MD ₁₁	16.3	X	71.70768	217.53469	95.05441	4.71827	0.2227737	0.23409211	2.6074233	20	12 23.3	20.4
184995 2006 MT ₁₂	15.8	X	157.29029	208.50247	91.73651	12.19137	0.1375203	0.24378865	2.5378176	20	—	—
184996 2006 OP ₆	15.8	X	225.66644	149.85049	157.51779	1.44703	0.1871343	0.17860812	3.1227358	20	2 15.7	21.0
184997 2006 OQ ₆	17.5	X	47.76227	311.17471	163.87330	1.16869	0.0203175	0.31568416	2.1361620	20	1 23.1	19.5
184998 2006 OU ₁₁	16.1	X	174.72630	69.05735	305.41930	10.81351	0.3148232	0.25534900	2.4606316	20	3 17.0	20.8
184999 2006 PD	17.4	X	159.90446	202.72831	213.82808	2.00418	0.1742101	0.25893875	2.4378371	20	4 25.5	21.2
185000 2006 PY ₅	15.1	X	187.80363	273.97478	122.08344	16.13917	0.1819353	0.19198208	2.9759726	20	5 3.5	20.4
185001 2006 PT ₆	16.0	X	258.37367	313.03062	56.89629	2.90868	0.0827553	0.20285385	2.8686697	20	6 12.3	19.9
185002 2006 PB ₇	16.9	X	203.21412	9.89724	348.14150	6.52522	0.1284482	0.26085015	2.4259135	20	3 21.5	20.7
185003 2006 PC ₉	17.1	X	349.00055	178.55169	138.82803	6.10518	0.2079678	0.28288904	2.2982220	20	9 6.9	18.5
185004 2006 PD ₉	17.4	X	319.60595	8.00667	317.82173	5.11212	0.1364142	0.27803070	2.3249175	20	7 10.2	19.3
185005 2006 PJ ₉	15.4	X	235.56897	91.58150	319.68733	13.96724	0.1470813	0.20315483	2.8658357	20	7 3.4	19.9
185006 2006 PD ₁₂	15.9	X	353.41943	343.85377	312.11578	1.57582	0.0325563	0.20658053	2.8340649	20	7 23.5	19.5
185007 2006 PV ₁₆	17.1	X	337.83230	57.15074	324.44885	3.88761	0.1521193	0.28840104	2.2688451	20	11 20.5	19.0
185008 2006 PE ₂₇	17.0	X	81.95020	320.79088	324.58159	3.93022	0.1429882	0.29346598	2.2426640	20	12 3.5	20.3
185009 2006 PO ₃₀	15.1	X	188.60167	266.79251	87.87688	10.33040	0.1629961	0.18633308	3.0358204	20	3 15.3	20.2
185010 2006 PR ₃₁	16.9	X	203.62979	268.50911	156.80664	6.98633	0.0799656	0.27427927	2.3460687	20	6 22.2	20.2
185011 2006 PM ₃₈	17.2	X	297.53789	311.93068	356.73527	1.15767	0.1875210	0.27263764	2.3554768	20	4 24.5	19.8
185012 2006 QJ ₃	16.7	X	83.77930	334.85257	344.21117	18.92197	0.0586119	0.36956052	1.9231464	20	—	—
185013 2006 QQ ₈	17.3	X	214.79072	148.56798	223.30458	1.58633	0.2018494	0.26221593	2.4174825	20	4 17.5	21.3
185014 2006 QT ₁₇	16.8	X	205.82746	288.73233	150.53016	7.98312	0.1345742	0.27414822	2.3468163	20	7 8.8	20.4
185015 2006 QS ₂₁	17.6	X	26.51518	344.62331	320.27478	5.67762	0.1365309	0.28867962	2.2673852	20	10 18.2	20.1
185016 2006 QN ₂₅	17.3	X	22.61006	214.56881	147.53397	2.99445	0.2379286	0.29365561	2.2416984	20	—	—
185017 2006 QU ₂₇	17.2	X	351.18813	202.00085	129.18884	7.72626	0.1534167	0.28375069	2.2935670	20	10 2.9	19.2
185018 2006 QY ₂₈	16.8	X	214.84333	46.90254	353.58987	3.85106	0.1391653	0.26731986	2.3866125	20	5 26.9	20.4
185019 2006 QP ₂₉	15.6	X	240.59505	320.61618	47.67071	2.51203	0.1164482	0.19750424	2.9202392	20	5 16.1	20.0
185020 Pratte	16.2	X	316.75497	103.30952	336.16189	8.45698	0.2170496	0.21706015	2.7420959	20	12 7.7	18.7
185021 2006 QB ₃₈	16.3	X	246.51517	242.27376	104.85711	7.79439	0.1400341	0.26605383	2.3941777	20	4 24.6	19.8
185022 2006 QY ₃₈	17.0	X	13.56808	74.74411	258.28380	3.68425	0.1708275	0.28726564	2.2748194	20	11 15.8	19.4
185023 2006 QV ₅₆	16.4	X	296.20087	48.45176	317.27841	3.03066	0.2277679	0.27436990	2.3455520	20	7 11.4	18.4
185024 2006 QT ₅₉	16.0	X	166.86267	111.21528	210.77970	4.32021	0.1669891	0.17469008	3.1692552	20	1 14.9	21.1
185025 2006 QF ₆₁	15.8	X	18.34561	223.01771	185.10239	13.60312	0.1897160	0.22354286	2.6888228	20	—	—
185026 2006 QV ₆₃	17.2	X	274.74351	217.97773	173.72410	3.19156	0.1943727	0.27568810	2.3380693	20	7 19.9	20.1
185027 2006 QP ₆₄	16.1	X	24.82789	76.09373	389.73503	1.70474	0.0178731	0.20606920	2.8387512	20	7 25.8	19.9
185028 2006 QL ₆₈	17.3	X	139.85723	73.90290	346.33677	2.72356	0.1845826	0.25503890	2.4626259	20	4 11.0	20.9
185029 2006 QG ₇₈	17.3	X	324.86389	220.99680	139.69887	2.91570	0.1789306	0.28185969	2.3038139	20	9 18.2	18.7
185030 2006 QW ₈₃	17.1	X	219.69011	272.82091	141.85111	2.87816	0.1674378	0.27042741	2.3682938	20	6 18.9	20.8
185031 2006 QE ₈₇	17.3	X	167.10743	195.04678	331.33532	6.78263	0.0595851	0.28554560	2.2839455	20	9 26.0	20.4
185032 2006 QX ₉₃	15.9	X	312.74287	91.87145	243.03560	4.84821	0.0805701	0.20618191	2.8377166	20	7 11.5	19.4
185033 2006 QZ ₁₁₅	16.6	X	287.77365	33.67110	288.25728	5.19564	0.2334797	0.27013254	2			

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185041 2006 QR ₁₄₄	15.9	X	88.36432	3.80384	42.36617	5.97148	0.2801946	0.23489505	2.6014779	20	2 12.9	19.1
185042 2006 QF ₁₄₇	17.0	X	18.98886	101.60810	20.31958	2.08574	0.0751352	0.24333294	2.5409851	20	1 3.3	19.8
185043 2006 QA ₁₅₃	15.9	X	109.21259	344.09785	144.17584	2.75637	0.0445010	0.19495583	2.9456325	20	5 21.9	20.0
185044 2006 QW ₁₅₆	17.0	X	217.46118	269.44524	166.57786	5.82547	0.1712154	0.27288441	2.3540566	20	7 14.2	20.6
185045 2006 QT ₁₆₈	17.3	X	293.07036	5.88957	46.06238	5.10695	0.2334722	0.28248617	2.3004065	20	9 22.4	18.9
185046 2006 RH ₄	17.5	X	35.07876	168.75070	181.67741	6.01240	0.1326963	0.29328020	2.2436110	20	—	—
185047 2006 RQ ₄	16.9	X	235.67706	8.57695	9.81069	3.10404	0.2020872	0.26504273	2.4002628	20	5 14.2	20.6
185048 2006 RS ₄	16.8	X	56.93831	249.22393	3.56132	19.90269	0.0542699	0.35004347	1.9939828	20	9 19.4	18.6
185049 2006 RT ₄	17.4	X	16.69667	250.28671	96.96915	1.23780	0.2251851	0.28939232	2.2636610	20	12 20.5	19.9
185050 2006 RL ₆	16.8	X	265.70283	351.55525	8.39051	1.98826	0.2128526	0.26792603	2.3830113	20	5 20.5	20.2
185051 2006 RV ₇	17.5	X	226.15505	229.41327	173.82394	2.05957	0.1904315	0.26836775	2.3803958	20	6 8.5	21.2
185052 2006 RH ₉	16.6	X	45.56107	247.96683	163.32410	5.67341	0.2495549	0.23112789	2.6296693	20	—	—
185053 2006 RU ₁₇	14.8	X	169.97618	64.96217	334.97810	21.26799	0.1834329	0.18247513	3.0784606	20	4 6.5	20.3
185054 2006 RA ₁₉	17.2	X	291.27094	80.19672	263.04545	0.32766	0.2009912	0.27046445	2.3680776	20	6 2.7	19.7
185055 2006 RP ₁₉	15.8	X	51.72062	220.94443	185.27592	11.47907	0.2634733	0.22883145	2.6472335	20	—	—
185056 2006 RA ₂₂	16.8	X	73.82686	36.52377	11.61133	4.14721	0.2831886	0.23362099	2.6109275	20	1 22.0	19.3
185057 2006 RH ₂₂	15.8	X	65.80141	110.99947	172.80476	13.24237	0.2735486	0.22975282	2.6401513	20	—	—
185058 2006 RL ₂₃	16.6	X	336.25401	46.39873	358.61331	7.21401	0.0994520	0.29046209	2.2580995	20	12 18.6	18.9
185059 2006 RY ₂₄	15.2	X	84.33993	254.64624	173.48726	16.23491	0.1186280	0.17627509	3.1502287	20	2 14.7	19.6
185060 2006 RP ₂₇	15.7	X	22.60357	223.75947	104.69383	10.27577	0.1794838	0.21602946	2.7508108	20	11 11.1	19.2
185061 2006 RB ₂₈	16.1	X	307.51841	263.64070	180.35965	9.09177	0.1695343	0.21571180	2.7535108	20	11 28.2	19.0
185062 2006 RL ₃₀	16.7	X	147.21287	205.03816	286.95412	9.26674	0.1521968	0.27338485	2.3511829	20	7 19.7	20.4
185063 2006 RF ₃₁	16.5	X	317.18351	59.75402	344.65603	1.84005	0.1879686	0.21324053	2.7747437	20	10 17.9	19.3
185064 2006 RJ ₃₂	16.4	X	270.43107	243.47806	300.12982	2.37423	0.0493444	0.23229165	2.6208791	20	—	—
185065 2006 RO ₃₇	16.6	X	86.95781	202.63293	151.90631	4.61830	0.1918283	0.23180551	2.6245421	20	—	—
185066 2006 RT ₄₃	17.8	X	313.23530	356.35225	114.80891	0.65418	0.0740545	0.29715389	2.2240699	20	—	—
185067 2006 RW ₄₃	16.0	X	106.87964	323.04762	141.42104	1.67728	0.1445409	0.18021140	3.1041870	20	5 2.4	20.5
185068 2006 RJ ₄₄	17.3	X	216.14188	282.40473	153.28937	1.38504	0.1573112	0.26876836	2.3780298	20	7 14.0	20.7
185069 2006 RQ ₄₅	17.5	X	277.46096	351.94116	168.42938	5.70691	0.0669457	0.30073187	2.2063941	20	—	—
185070 2006 RR ₅₀	16.4	X	174.86001	92.54384	15.30172	2.26232	0.0695608	0.19489550	2.9462404	20	7 13.3	20.7
185071 2006 RM ₅₅	16.8	X	210.67543	266.29670	182.40245	6.75018	0.0691735	0.27125709	2.3634622	20	8 1.7	20.0
185072 2006 RV ₅₇	16.8	X	249.69207	39.27585	7.89580	8.84918	0.1525631	0.27253757	2.3560534	20	7 17.2	20.1
185073 2006 RG ₅₉	17.8	X	205.73069	114.16430	305.07089	0.55074	0.1682775	0.26396542	2.7748790	20	6 10.7	21.3
185074 2006 RE ₆₀	17.0	X	261.15099	31.49178	359.14799	0.97259	0.1893353	0.27027769	2.3691683	20	6 30.6	19.9
185075 2006 RB ₆₂	16.3	X	10.66985	242.03938	308.90926	5.41199	0.0737881	0.25763596	2.4460485	20	3 20.3	19.1
185076 2006 RZ ₆₉	17.3	X	212.48587	67.63793	337.75957	0.72035	0.1679708	0.26473131	2.4021448	20	5 30.1	21.1
185077 2006 RL ₇₁	17.2	X	209.68567	157.67864	284.67859	0.29038	0.0314224	0.27285952	2.3541997	20	7 28.3	20.2
185078 2006 RH ₇₂	16.7	X	237.28043	325.79313	131.27347	0.60279	0.0301460	0.20934911	2.8090230	20	9 16.6	20.6
185079 2006 RM ₇₂	16.9	X	112.18309	295.86431	48.69551	0.47539	0.0729341	0.23504786	2.6003502	20	—	—
185080 2006 RJ ₇₃	16.3	X	163.77218	85.61519	5.06975	1.40133	0.1298358	0.19050908	2.9912929	20	6 10.1	20.9
185081 2006 RT ₇₃	17.0	X	176.66470	310.31206	182.94714	5.90017	0.1250876	0.27457186	2.3444018	20	8 19.8	20.4
185082 2006 RN ₇₄	16.6	X	321.42114	163.50053	8.58337	7.96887	0.0647531	0.24119747	2.5559610	20	—	—
185083 2006 RU ₇₈	15.9	X	260.70319	276.62267	165.82528	2.93794	0.0648624	0.21046207	2.7991113	20	9 23.2	19.6
185084 2006 RR ₈₇	17.4	X	276.87746	288.32859	168.59427	2.29792	0.0608867	0.28804828	2.2706970	20	11 23.1	19.8
185085 2006 RG ₉₂	16.3	X	214.96349	47.73353	356.82247	0.81876	0.1497527	0.19166367	2.9792676	20	6 1.5	20.9
185086 2006 RP ₉₂	16.0	X	193.34870	64.49239	300.17044	1.14993	0.0709517	0.18178971	3.0861937	20	3 25.8	20.6
185087 2006 RA ₉₃	17.3	X	34.87908	307.28801	353.88564	5.60289	0.1329385	0.28419708	2.2911647	20	10 24.8	20.0
185088 2006 RE ₉₃	17.3	X	193.98386	311.24635	193.98310	3.74322	0.0895734	0.28049240	2.3112947	20	9 28.8	20.2
185089 2006 RF ₉₃	15.0	X	117.48382	7.83500	328.35943	1.34141	0.0452212	0.16103291	3.3460027	20	—	—
185090 2006 RQ ₉₇	17.6	X	269.23980	166.88854	339.35098	2.15797	0.0911114	0.29494522	2.2351593	20	—	—
185091 2006 RG ₉₉	16.8	X	197.15456	42.78407	23.38361	3.26599	0.0639923	0.26724199	2.3870760	20	6 15.9	20.1
185092 2006 RS ₉₉	17.4	X	230.60946	63.80192	345.73324	1.95038	0.2032291	0.26814642	2.3817054	20	6 19.9	21.2
185093 2006 RV ₁₀₄	17.4	X	303.67537	55.50266	11.57558	7.29845	0.0801741	0.28607609	2.2811211	20	11 19.6	19.7
185094 2006 RD ₁₀₅	15.9	X	88.25100	188.10772	82.24509	6.29645	0.0458196	0.21365731	2.7711341	20	10 30.6	19.8
185095 2006 SS ₅	16.7	X	356.48448	291.56838	118.02525	3.04742	0.1016670	0.29339866	2.2430070	20	—	—
185096 2006 ST ₅	15.9	X	181.55845	35.07267	23.64338	13.43907	0.3203861	0.18481911	3.0523767	20	5 16.2	21.7
185097 2006 SB ₁₁	16.0	X	45.63521	163.12065	301.83707	12.60414	0.2223228	0.24122450	2.5557700	20	1 31.1	18.1
185098 2006 SJ ₁₃	17.0	X	264.24536	200.80068	169.48057	5.49270	0.1748215	0.26955606	2.3733948	20	6 8.6	20.3
185099 2006 SK ₁₃	16.4	X	62.64750	20.51312	8.53510	12.31471	0.2006653	0.23161321	2.6259946	20	—	—
185100 2006 SY ₁₆	16.9	X	161.58041	184.36876	250.28708	3.86605	0.1754185	0.25766814	2.4458448	20	5 20.2	20.9
185101 2006 SX ₁₉	16.3	X	78.18222	320.14671	10.67889	1.10540	0.0878456	0.22301882	2.6930332	20	—	—
185102 2006 SE ₂₀	15.8	X	193.03782	103.20805	295.14124	9.48642	0.1348063	0.18885144	3.0087714	20	5 1.6	20.8
185103 2006 SV ₂₀	17.6	X	57.00926	108.18566	324.77525	4.27179	0.0832454	0.31286570	2.1489719	20	—	—
185104 2006 SJ ₂₁	17.5	X	329.62483	36.95939	18.70598	5.07548	0.1723456	0.29048807	2.2579649	20	—	—
185105 2006 SV ₂₃	15.5	X	356.01387	338.93763	21.94905	12.95590	0.1500722	0.21412618	2.7670874	20	10 31.0	18.5
185106 2006 SN ₂₇	17.0	X	13.82341	173.36878	154.74275	3.20045	0.2326980	0.28487513	2.2875277	20	11 20.7	19.3
185107 2006 SA ₃₄	16.6	X	3.24000	203.87739	336.92755	5.93744	0.0620461	0.25288140	2.4766129	20	2 26.9	19.4
185108 2006 SM ₃₇	17.5	X	171.46488	223.62940	341.00596	2.94777	0.0939075	0.28915356	2.2649069	20	11 21.4	20.6
185109 2006 SS ₄₅	16.8	X	157.17936	230.63906	103.21624	2.61191	0.0687978	0.24199860	2.5503169	20	1 2.5	20.1
185110 2006 SV ₄₆	17.0	X	4.35691	257.32873	188.65239	13.90040	0.3074486	0.22792111	2.6542776	20	—	—
185111 2006 SK ₄₇	17.1	X	164.32325	2.17033	42.11855	2.84479	0.2228498	0.25419514	2.4680724	20	4 16.7	21.2
185112 2006 SK ₄₈	16.3	X	213.00445	40.31761	23.41153	25.68224	0.0904063	0.26628884	2.3927688	20	6 30.4	20.3
185113 2006 SP ₄₈	16.6	X	270.35552	200.97624	199.90848	3.79663	0.2377615	0.27061289	2.3672115	20	7 18.9	19.7
185114 2006 SB ₄₉	16.2	X	51.08292	129.98041	199.84236	4.41032	0.1147011					

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185121 2006 SK ₆₃	15.9	X	81.50561	147.02008	133.75348	7.19112	0.0202378	0.21443780	2.7644059	20	11 2.3	19.8
185122 2006 SB ₆₉	17.1	X	219.25448	274.50920	158.64313	1.06742	0.0618971	0.27241676	2.3567499	20	7 24.3	20.1
185123 2006 SQ ₇₀	17.3	X	162.95841	318.89092	173.33654	3.79768	0.1162100	0.26859313	2.3790639	20	8 4.1	20.8
185124 2006 SZ ₇₀	16.8	X	257.49452	238.22255	186.49528	6.47343	0.0837687	0.27548994	2.3391903	20	8 29.8	19.5
185125 2006 ST ₇₃	17.4	X	78.78588	192.78246	82.50852	3.10399	0.0968587	0.28485251	2.2876488	20	11 12.3	20.4
185126 2006 SZ ₇₄	16.9	X	2.33089	212.10067	176.85730	6.49196	0.1028399	0.29059346	2.2574189	20	—	—
185127 2006 SY ₈₈	17.1	X	161.23497	257.50974	176.71044	2.19865	0.1736595	0.25733678	2.4479440	20	5 19.9	21.1
185128 2006 SB ₉₃	16.3	X	40.83895	200.19064	4.70296	0.96483	0.0209101	0.18809308	3.0168532	20	5 27.7	20.4
185129 2006 SF ₉₄	16.7	X	73.02134	187.09603	163.99560	1.82437	0.1280125	0.22585057	2.6704754	20	—	—
185130 2006 SH ₉₆	16.6	X	64.47668	283.82996	195.08938	10.76712	0.1975309	0.24382964	2.5375331	20	3 27.6	19.3
185131 2006 SM ₁₀₁	15.9	X	187.10368	122.19739	196.18650	0.55005	0.0473950	0.17671186	3.1450358	20	1 27.8	21.0
185132 2006 SV ₁₀₄	16.5	X	145.50244	312.47322	164.95955	1.03294	0.1746253	0.19256256	2.9699888	20	6 22.5	20.8
185133 2006 SY ₁₁₀	17.2	X	25.82242	17.25503	16.94553	5.32725	0.1608451	0.29581835	2.2307589	20	—	—
185134 2006 SF ₁₁₂	16.6	X	280.88163	19.74680	8.67588	11.61646	0.2547480	0.27265169	2.3553959	20	7 17.9	19.6
185135 2006 SP ₁₂₀	15.5	X	171.81770	262.62627	131.94438	10.26715	0.1257337	0.18161546	3.0881674	20	4 14.9	20.5
185136 2006 ST ₁₂₀	16.5	X	157.18651	326.47646	99.03473	5.62359	0.1880170	0.25493569	2.4632905	20	5 7.1	20.5
185137 2006 SG ₁₂₁	15.4	X	149.86066	257.30222	176.92182	14.74823	0.1438089	0.18180787	2.5859882	20	5 11.2	20.5
185138 2006 SE ₁₂₃	16.4	X	348.10650	275.30722	89.65849	6.40555	0.1685198	0.21402750	2.7679378	20	10 29.0	19.3
185139 2006 SS ₁₂₇	16.5	X	69.79322	27.69429	0.16118	2.43066	0.0929753	0.23093810	2.6311099	20	—	—
185140 2006 SE ₁₂₉	15.1	X	58.56919	79.88030	30.91789	28.87603	0.3744170	0.16246868	3.3262606	20	4 16.5	19.1
185141 2006 SS ₁₃₀	17.4	X	154.99337	254.70851	195.83942	1.72672	0.0918479	0.25926290	2.4358047	20	5 31.0	20.7
185142 2006 SE ₁₃₂	15.7	X	344.55697	78.84099	276.40653	7.59742	0.1110790	0.21062198	2.7976943	20	9 26.9	19.2
185143 2006 SJ ₁₃₈	16.0	X	345.52031	230.47650	189.56656	8.89470	0.1736804	0.21855816	2.7295520	20	—	—
185144 2006 SY ₁₄₉	16.5	X	1.19417	87.73879	342.63678	2.04305	0.1064624	0.22500342	2.6771743	20	—	—
185145 2006 SS ₁₅₅	16.7	X	355.47000	200.80300	85.49974	3.46478	0.2505342	0.27536503	2.3398976	20	7 26.7	18.1
185146 2006 SS ₁₅₇	17.2	X	79.05732	44.18375	21.90805	3.36566	0.1673974	0.24092786	2.5578674	20	2 4.7	20.0
185147 2006 SN ₁₅₉	17.0	X	119.31121	135.31544	32.35566	4.18876	0.1505998	0.26735891	2.3863801	20	8 9.7	20.5
185148 2006 SJ ₁₆₀	16.7	X	216.90004	132.65623	43.87973	7.09993	0.0455923	0.29064028	2.2571765	20	12 18.1	19.3
185149 2006 SX ₁₆₀	17.5	X	318.47593	311.78388	119.58432	2.22625	0.1103571	0.28883999	2.2665458	20	12 26.8	19.6
185150 2006 Panevezys	17.4	X	83.38397	176.57453	233.36815	1.43538	0.1503454	0.23816436	2.5774758	20	1 16.9	20.3
185151 2006 SC ₁₈₉	15.8	X	327.11438	69.80418	119.42045	3.37336	0.0462094	0.17352226	3.1834589	20	1 31.9	20.3
185152 2006 SK ₁₉₂	16.8	X	127.67616	213.08112	153.26501	4.46110	0.1059837	0.24139842	2.5545423	20	1 13.0	20.2
185153 2006 SP ₁₉₂	18.0	X	288.97673	118.45922	35.89688	6.30468	0.0849130	0.30211070	2.1996756	20	—	—
185154 2006 SJ ₁₉₅	16.5	X	84.96722	220.62177	320.56249	1.90756	0.1645681	0.26530164	2.3987009	20	7 19.9	19.8
185155 2006 SA ₁₉₈	17.6	X	40.85352	335.34684	44.60964	3.07700	0.1772850	0.29641593	2.2277597	20	—	—
185156 2006 SN ₂₀₀	16.2	X	304.93284	67.62156	254.92340	0.92166	0.0720152	0.19457893	2.9494351	20	6 14.2	20.0
185157 2006 SY ₂₀₃	17.3	X	332.45431	234.43074	176.45134	6.52596	0.0790129	0.28970755	2.2620186	20	12 18.8	19.7
185158 2006 SC ₂₀₆	15.9	X	150.90248	102.15398	5.36493	5.15664	0.1294598	0.18918542	3.0052292	20	6 18.4	20.7
185159 2006 SC ₂₁₂	16.5	X	329.64811	236.72305	184.14641	4.89503	0.1533961	0.21596427	2.7513644	20	12 8.3	19.3
185160 2006 SY ₂₁₂	16.7	X	359.01013	324.00325	340.62883	5.05159	0.1921403	0.27648212	2.3335907	20	9 4.8	18.4
185161 2006 SY ₂₁₄	16.7	X	143.82457	94.78247	275.07650	2.47395	0.1074699	0.24435495	2.5338950	20	2 4.9	20.2
185162 2006 SD ₂₁₅	16.4	X	20.36645	71.90616	23.50940	17.43489	0.1559443	0.23268320	2.6179381	20	—	—
185163 2006 SG ₂₁₆	17.3	X	330.55036	126.59211	103.23676	2.65385	0.0634906	0.25452234	2.4659567	20	3 17.1	20.2
185164 2006 Ingeburgherz	16.4	X	25.54891	129.50563	202.36986	4.61630	0.1681432	0.21414154	2.7669550	20	11 14.5	19.8
185165 2006 SK ₂₁₉	16.7	X	46.54880	323.15284	185.74718	5.82618	0.0768552	0.25555929	2.4592816	20	3 22.7	19.2
185166 2006 SA ₂₂₄	17.2	X	195.50576	339.35901	188.44040	1.93748	0.0901196	0.28169043	2.3047367	20	10 31.9	20.1
185167 2006 SP ₂₄₆	17.2	X	127.72508	344.59700	157.28492	2.49938	0.1612089	0.26684147	2.3894640	20	7 13.6	20.7
185168 2006 SB ₂₅₂	16.6	X	283.05679	338.78380	204.87837	3.39413	0.0955320	0.23453648	2.6041287	20	—	—
185169 2006 SG ₂₆₄	15.7	X	150.77160	121.61140	4.60914	14.46981	0.1384717	0.19053215	2.9910514	20	7 15.8	20.7
185170 2006 SY ₂₇₉	15.6	X	60.83592	248.05676	142.51836	13.34598	0.2911140	0.22877740	2.6476504	20	—	—
185171 2006 SK ₂₈₀	16.3	X	331.45982	306.69735	152.65217	5.62358	0.1424969	0.22196572	2.7015444	20	—	—
185172 2006 SP ₂₈₂	15.5	X	160.69387	257.61334	171.78878	9.77315	0.0825325	0.18551752	3.0447111	20	5 12.8	20.2
185173 2006 SY ₂₈₃	17.2	X	216.96206	356.05296	86.31316	6.42784	0.0745626	0.27103475	2.3647545	20	8 3.5	20.3
185174 2006 SG ₂₈₄	15.8	X	11.77296	83.41108	308.03025	5.07698	0.0336491	0.22203951	2.7009459	20	12 24.4	19.4
185175 2006 SB ₂₈₅	16.1	X	86.23826	262.20541	126.05336	7.76943	0.2253360	0.23390848	2.6087877	20	1 4.9	18.9
185176 2006 SX ₂₉₁	15.5	X	145.90364	253.04708	156.55384	21.74010	0.1916149	0.17517902	3.1633554	20	4 13.2	20.9
185177 2006 SK ₃₀₃	16.1	X	302.40369	169.55415	243.27530	3.52253	0.0635905	0.21374179	2.7704039	20	10 12.4	19.6
185178 2006 SP ₃₂₈	16.8	X	49.23619	272.69690	167.03571	3.44488	0.1552596	0.23532980	2.5982729	20	—	—
185179 2006 SG ₃₃₂	16.0	X	95.05938	132.82199	348.40974	2.72723	0.1276417	0.17758014	3.1347756	20	5 5.9	20.5
185180 2006 SQ ₃₄₁	16.5	X	85.93259	181.16629	45.53719	7.33398	0.0907972	0.27087327	2.3656942	20	9 16.5	19.7
185181 2006 SD ₃₄₄	15.9	X	94.12030	169.36603	350.28065	4.15049	0.0596585	0.18901019	3.0070864	20	6 13.7	20.1
185182 2006 SY ₃₄₄	16.4	X	235.78439	138.35000	2.99061	9.10701	0.1836266	0.21165963	2.7885431	20	10 18.1	20.4
185183 2006 SP ₃₄₅	16.6	X	97.27958	221.67073	225.79056	5.04266	0.1376110	0.24663244	2.5182717	20	3 22.5	19.8
185184 2006 SQ ₃₅₃	16.9	X	1.92010	231.16960	168.65923	6.28696	0.0884568	0.29239993	2.2481116	20	—	—
185185 2006 SF ₃₅₇	16.9	X	194.22908	356.78773	54.17391	7.35647	0.1420965	0.25870738	2.4392904	20	5 20.3	20.8
185186 2006 SV ₃₅₉	15.8	X	48.60368	235.54065	173.82416	4.90110	0.1353139	0.22852545	2.6495961	20	—	—
185187 2006 SN ₃₉₁	16.0	X	64.62032	263.26370	183.57439	13.60128	0.1559924	0.23667506	2.5884178	20	2 3.7	19.0
185188 2006 SM ₃₉₂	16.3	X	213.56683	286.34895	71.14147	4.97468	0.1566691	0.24666216	2.5180694	20	4 3.3	20.3
185189 2006 SA ₃₉₃	15.6	X	242.21786	313.07764	52.52938	0.84048	0.0683696	0.18330480	3.0691644	20	5 20.1	20.1
185190 2006 SA ₃₉₅	17.1	X	233.14301	326.21488	83.07209	5.59486	0.0414729	0.26970466	2.3725229	20	7 11.9	20.0
185191 2006 TB ₁	16.6	X	63.13737	285.24401	127.74973	1.78881	0.1596184	0.23201195	2.6229851	20	—	—
185192 2006 TV ₁	17.0	X	180.36255	154.18956	36.24685	6.79105	0.0779151	0.28785813	2.2716969	20	11 14.3	20.0
185193 2006 TW ₃	17.4	X	226.21901	28.40111	34.18460	2.58685	0.1964937	0.26716203	2.3875523	20	7 3.8	21.0
185194 2006 TY ₄	16.1</											

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185201 2006 TX ₃₆	16.7	X	311.45346	124.72079	243.64091	1.72403	0.0774369	0.20167537	2.8798342	20	8 24.3	20.3
185202 2006 TD ₃₉	15.9	X	243.33397	202.12597	35.78978	7.96137	0.1500187	0.23507385	2.6001586	20	—	—
185203 2006 TN ₃₉	16.9	X	329.65173	122.62520	28.52475	3.80999	0.2274903	0.22864712	2.6486560	20	—	—
185204 2006 TM ₄₂	15.3	X	122.29800	69.80247	41.12605	16.46557	0.2038773	0.17854321	3.1234927	20	5 28.9	20.4
185205 2006 TZ ₄₃	16.8	X	91.46692	12.55356	222.66187	6.33787	0.1637257	0.27493599	2.3423313	20	10 7.5	20.4
185206 2006 TU ₄₄	16.4	X	194.74320	46.49481	44.74515	7.71346	0.0487330	0.26492429	2.4009781	20	7 20.9	19.7
185207 2006 TP ₄₇	16.8	X	351.64644	334.51732	71.10781	1.35014	0.1068795	0.21623314	2.7490832	20	12 21.1	20.0
185208 2006 TU ₄₇	17.2	X	84.68181	178.90569	53.07433	2.33758	0.0574832	0.27318422	2.3523340	20	9 15.4	20.2
185209 2006 TA ₄₈	16.4	X	315.51649	5.44777	67.73463	1.36385	0.0472256	0.21433423	2.7652964	20	11 29.3	19.8
185210 2006 TN ₅₀	16.7	X	110.50789	195.52743	215.05064	0.69688	0.1103702	0.24055824	2.5604869	20	2 18.3	20.1
185211 2006 TQ ₅₀	16.4	X	90.09904	161.47742	191.17187	1.51493	0.0969893	0.22641985	2.6659974	20	—	—
185212 2006 TB ₅₃	16.9	X	108.18939	77.51985	164.76000	2.81999	0.1286279	0.27923586	2.3182232	20	11 3.1	20.3
185213 2006 TN ₅₃	17.0	X	157.64397	334.65388	136.03337	1.64758	0.1432328	0.25930169	2.4355618	20	7 1.5	20.6
185214 2006 TZ ₅₄	16.6	X	248.99535	287.63434	121.42195	4.86766	0.1616939	0.26883852	2.3776160	20	7 14.8	19.7
185215 2006 TP ₅₅	16.8	X	153.34907	210.80993	154.61059	8.19914	0.1867175	0.24391586	2.5369351	20	2 17.3	20.8
185216 Gueiren	16.3	X	66.96974	289.22350	118.84638	3.09606	0.1879691	0.23241881	2.6199230	20	—	—
185217 2006 TS ₅₇	16.4	X	93.31006	127.26885	24.90442	5.55856	0.0551413	0.26153274	2.4216907	20	6 1.9	19.4
185218 2006 TO ₅₉	15.7	X	297.66566	341.54607	289.99611	3.91485	0.1037720	0.18025508	3.1036855	20	3 23.9	20.0
185219 2006 TO ₆₁	16.3	X	101.14125	76.45619	228.98913	1.96175	0.0670899	0.22120796	2.7077104	20	12 28.7	20.1
185220 2006 TK ₆₂	16.5	X	163.12379	218.88956	130.70266	12.30866	0.1020599	0.24593620	2.5230223	20	1 31.6	20.2
185221 2006 TK ₆₆	16.2	X	334.98847	258.43640	103.19615	4.61549	0.1034930	0.20971136	2.8057873	20	9 26.2	19.5
185222 2006 TU ₆₆	15.8	X	246.90120	160.91752	339.39350	7.74392	0.1009181	0.21674855	2.7442734	20	11 11.3	19.6
185223 2006 TS ₆₈	17.3	X	319.30349	331.38437	111.46723	4.11073	0.0863238	0.29218458	2.2492161	20	—	—
185224 2006 TG ₇₀	15.2	X	78.91925	90.47299	24.56597	14.54438	0.1828616	0.17258095	3.1950241	20	4 16.7	19.5
185225 2006 TV ₇₄	15.9	X	125.76730	24.27092	20.19539	7.02122	0.1544821	0.17222080	3.1994769	20	3 12.2	20.6
185226 2006 TH ₇₆	16.7	X	182.72491	181.32764	44.77271	7.57414	0.0535956	0.29387322	2.2405916	20	—	—
185227 2006 TN ₇₆	15.5	X	138.23445	74.51825	1.33158	15.07459	0.2731377	0.17706732	3.1408253	20	5 3.1	21.1
185228 2006 TT ₇₇	17.0	X	174.86334	348.72548	200.44430	4.28790	0.1318270	0.28270291	2.2992306	20	11 2.3	20.3
185229 2006 TS ₇₈	15.5	X	150.10387	76.27504	321.31210	4.17028	0.1466406	0.17585792	3.1552087	20	3 24.8	20.5
185230 2006 TZ ₉₀	17.0	X	241.10403	23.81417	227.30213	4.17554	0.0562847	0.30808041	2.1711675	20	—	—
185231 2006 TM ₉₁	16.6	X	263.03775	105.26633	337.94263	1.34368	0.0616201	0.20471093	2.8512942	20	9 26.2	20.5
185232 2006 TX ₁₀₃	17.2	X	10.58371	176.47313	67.78572	2.40077	0.0737449	0.26163999	2.4210289	20	6 10.3	19.5
185233 2006 TY ₁₀₉	16.2	X	0.21420	332.25643	197.20588	3.29016	0.2717177	0.23696837	2.5862815	20	1 15.1	18.3
185234 2006 TH ₁₁₀	16.0	X	134.33122	95.17256	334.20645	3.44413	0.0439416	0.17739286	3.1369815	20	4 6.7	20.6
185235 2006 TA ₁₁₅	15.2	X	81.34615	304.10200	163.59255	15.31030	0.1787976	0.17167256	3.2062850	20	4 13.9	19.7
185236 2006 TP ₁₂₀	15.4	X	98.60017	332.60595	124.19766	10.62845	0.0400264	0.17608015	3.1525534	20	4 3.1	20.0
185237 2006 TP ₁₂₁	16.4	X	307.81038	186.11144	229.56073	1.49535	0.0527980	0.20861614	2.8155988	20	10 24.8	20.0
185238 2006 UK ₃	17.4	X	270.34253	255.30696	142.46915	2.79459	0.2094592	0.27112749	2.3642153	20	7 19.8	20.4
185239 2006 UZ ₆	16.5	X	319.38219	343.27440	108.74100	3.65958	0.0844282	0.21860838	2.7291339	20	12 30.8	19.6
185240 2006 UF ₁₂	16.4	X	301.75235	62.07757	53.72106	7.42179	0.1611267	0.21790502	2.7350036	20	12 31.3	19.4
185241 2006 UR ₁₅	15.4	X	229.91296	278.03340	63.44828	11.10740	0.0951270	0.17975706	3.1094154	20	4 9.2	20.3
185242 2006 UQ ₃₁	16.1	X	38.80702	1.67108	224.80587	1.93796	0.0400068	0.19086518	2.9875710	20	6 24.5	20.0
185243 2006 UJ ₃₇	16.4	X	127.63508	8.05929	230.20442	5.77465	0.0826208	0.28357187	2.2945311	20	11 17.0	19.3
185244 2006 UK ₃₈	15.9	X	97.10492	258.98826	221.88385	4.11172	0.1475509	0.17690224	3.1427789	20	5 11.7	20.3
185245 2006 UM ₄₅	16.8	X	265.63438	300.85682	68.27868	5.03642	0.1470685	0.26510342	2.3998964	20	6 12.1	19.7
185246 2006 UU ₅₄	16.6	X	198.64879	343.50455	298.61410	4.07934	0.2063589	0.24061090	2.5601133	20	—	—
185247 2006 UW ₅₇	17.5	X	261.18296	293.64729	158.72187	3.05895	0.1309840	0.27847410	2.3224490	20	10 9.9	19.9
185248 2006 UZ ₅₉	16.7	X	302.42333	25.10981	2.40331	7.79937	0.1177386	0.27735509	2.3286915	20	9 16.1	18.9
185249 2006 UE ₆₂	16.6	X	111.46110	357.14205	44.99949	5.21097	0.2312556	0.23930588	2.5694123	20	2 28.7	20.2
185250 Korostyshiv	15.3	X	150.83606	64.44773	333.84677	9.22050	0.0895846	0.17711849	3.1402203	20	3 21.0	20.2
185251 2006 UZ ₆₃	16.7	X	108.70060	166.98766	32.07318	5.75193	0.0614976	0.19915917	2.9040394	20	8 25.6	20.9
185252 2006 UT ₆₄	17.1	X	281.38592	75.86375	290.63056	0.31242	0.2034593	0.26856179	2.3792490	20	6 21.4	19.7
185253 2006 UR ₆₅	15.5	X	268.44230	25.34469	44.68160	10.31458	0.0775214	0.20842286	2.8173393	20	9 20.0	19.3
185254 2006 UM ₇₀	15.9	X	154.47483	272.84814	188.60294	15.19726	0.2986564	0.18286818	3.0740478	20	6 19.9	21.7
185255 2006 UW ₇₇	16.6	X	258.76042	169.23084	327.76893	2.29562	0.0381748	0.21673886	2.7448052	20	12 4.1	20.3
185256 2006 UX ₇₈	16.4	X	2.44134	18.01516	340.98532	3.05588	0.1050348	0.21238690	2.7821736	20	11 3.9	19.8
185257 2006 UW ₈₈	16.0	X	188.74670	108.61497	14.13044	1.96867	0.0707638	0.19641389	2.9310366	20	8 17.0	20.4
185258 2006 US ₉₂	17.2	X	30.57063	67.59389	74.57690	2.34582	0.0861591	0.24327998	2.5413538	20	2 19.5	20.1
185259 2006 UW ₉₂	17.5	X	145.18195	323.19286	142.94862	2.01963	0.1439142	0.25786915	2.4445736	20	6 13.1	21.1
185260 2006 UU ₁₀₀	17.0	X	87.76779	189.38552	109.82672	4.74547	0.1590755	0.29108622	2.2548705	20	12 27.9	20.2
185261 2006 UQ ₁₂₀	17.0	X	34.98762	284.13516	202.46359	4.83994	0.0898351	0.24138244	2.5546550	20	2 2.8	19.8
185262 2006 UD ₁₂₄	17.8	X	210.40447	336.88939	190.10122	5.20794	0.0934123	0.28607242	2.2811406	20	11 19.4	20.6
185263 2006 UK ₁₂₇	16.4	X	284.95495	221.92947	11.50560	5.46270	0.1541518	0.24300294	2.5432850	20	1 10.4	20.2
185264 2006 UQ ₁₂₈	15.9	X	220.40572	52.76144	338.86920	2.37020	0.0984347	0.18806401	3.0171640	20	5 24.9	20.5
185265 2006 UE ₁₂₈	17.2	X	226.80904	60.01196	31.37124	4.33757	0.0870293	0.27538537	2.3397824	20	8 28.4	20.3
185266 2006 UZ ₁₂₈	17.0	X	332.89978	108.99088	225.84689	1.49906	0.2156443	0.27608624	2.3358209	20	8 19.3	18.1
185267 2006 UZ ₁₃₄	16.5	X	308.71450	270.34159	72.42267	3.04431	0.0531395	0.19643798	2.9307970	20	7 19.9	20.4
185268 2006 UP ₁₃₈	17.1	X	106.24081	166.23332	358.69622	5.47951	0.0184960	0.26238799	2.4164255	20	7 4.5	20.2
185269 2006 UC ₁₄₂	16.5	X	63.44515	320.55330	264.19832	4.59920	0.1045951	0.26589582	2.3951261	20	8 10.3	19.4
185270 2006 UX ₁₄₃	16.5	X	101.50876	160.91444	265.11513	2.94876	0.0492989	0.24038919	2.5616871	20	2 16.5	19.8
185271 2006 UA ₁₅₄	17.3	X	205.58828	317.69851	261.15879	2.49577	0.0655058	0.30185785	2.2009039	20	—	—
185272 2006 UL ₁₅₉	16.9	X	306.12868	249.06614	103.08492	3.21706	0.0824438	0.19980084	2.8978185	20	7 25.4	20.5
185273 2006 UO ₁₇₀	16.5	X	31.16844	283.56553	156.60069	3.34639	0.0825754	0.23160412	2.6260633	20	—	—
185274 2006 UR ₁₇₄	1											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185281 2006 UA ₁₉₆	16.4	X	91.29983	13.58279	29.89642	2.93944	0.1041758	0.23631555	2.5910424	20	1 14.7	19.5
185282 2006 US ₁₉₈	16.5	X	160.52866	257.45826	220.32004	2.07270	0.1253725	0.18876284	3.0097128	20	7 10.3	21.2
185283 2006 UG ₁₉₉	16.9	X	118.43616	331.09709	212.62161	2.07991	0.1237948	0.26638969	2.3921649	20	8 25.4	20.4
185284 2006 UJ ₂₀₁	16.8	X	250.10445	209.98162	232.52365	1.56112	0.0918918	0.20065161	2.8896214	20	9 2.9	20.8
185285 2006 UX ₂₀₂	15.5	X	117.68984	270.91846	144.73868	6.70814	0.1558289	0.17325855	3.1866884	20	3 18.6	20.3
185286 2006 UH ₂₀₃	16.7	X	284.45086	294.56631	84.16307	6.22473	0.1484647	0.27290101	2.3539611	20	7 25.9	19.2
185287 2006 UV ₂₀₄	15.6	X	332.38836	191.39626	244.42594	15.01344	0.1626848	0.21611329	2.7500995	20	12 31.9	18.6
185288 2006 UW ₂₀₇	16.4	X	207.99386	80.95920	196.69633	0.55538	0.1446698	0.23803021	2.5785842	20	—	—
185289 2006 UM ₂₁₅	16.3	X	79.86028	250.89903	123.17369	3.71345	0.1199652	0.22897003	2.6461652	20	—	—
185290 2006 UB ₂₁₉	13.8	X	94.90429	42.43752	84.27708	7.13293	0.1338918	0.11096622	4.2888632	20	5 16.8	19.9
185291 2006 UT ₂₁₉	16.1	X	80.57805	170.03084	126.49682	4.72740	0.0936410	0.21720714	2.7408587	20	11 28.1	20.0
185292 2006 UJ ₂₂₆	16.1	X	288.24589	197.23160	197.13751	1.60135	0.0708899	0.20313091	2.8660606	20	8 26.0	19.9
185293 2006 UY ₂₂₇	16.0	X	233.46425	353.01629	99.09109	3.23519	0.0236765	0.20378647	2.8599108	20	9 6.7	20.0
185294 2006 UW ₂₃₇	16.6	X	276.21671	290.80328	181.18458	3.40093	0.1683079	0.21311831	2.7758045	20	11 8.9	19.8
185295 2006 UN ₂₃₉	17.0	X	323.83782	225.38373	296.05247	0.79791	0.1094618	0.23302146	2.6154039	20	—	—
185296 2006 UO ₂₃₉	16.3	X	136.56670	178.30034	347.22711	1.32466	0.0558952	0.19690965	2.9261149	20	8 12.2	20.5
185297 2006 UQ ₂₅₂	16.5	X	116.57294	143.75472	37.28420	2.03376	0.1195740	0.19536710	2.9414972	20	8 15.1	21.0
185298 2006 US ₂₅₆	17.1	X	255.79706	332.39107	190.17004	3.36170	0.1062328	0.29524942	2.2336237	20	—	—
185299 2006 UT ₂₅₇	17.3	X	122.92391	161.87020	18.84982	2.26666	0.1536227	0.27050190	2.3678590	20	8 30.2	20.7
185300 2006 UQ ₂₆₁	14.7	X	132.59789	239.73964	234.58741	11.01235	0.1685749	0.17910638	3.1169417	20	6 11.5	19.7
185301 2006 UY ₂₆₆	14.8	X	151.89636	23.66202	27.50092	15.70665	0.0604712	0.17616261	3.1515695	20	4 8.9	19.5
185302 2006 UQ ₂₇₀	17.0	X	308.89967	84.60466	347.81730	3.87576	0.0427945	0.21201281	2.7854454	20	11 17.4	20.5
185303 2006 UB ₂₇₁	17.1	X	110.07015	349.93045	228.24057	4.27218	0.0950209	0.27333589	2.3514637	20	9 29.1	20.3
185304 2006 UG ₂₇₁	16.9	X	342.65257	105.69512	296.24863	3.63686	0.0672656	0.21348683	2.7726092	20	11 27.9	20.2
185305 2006 UA ₂₇₅	17.2	X	136.29722	143.41569	342.50078	3.13605	0.0757559	0.26233961	2.4167226	20	6 25.2	20.5
185306 2006 UP ₂₇₆	16.4	X	181.50161	3.95667	235.36148	1.94037	0.0438521	0.22488730	2.6780957	20	—	—
185307 2006 UA ₂₇₈	17.4	X	204.15616	159.07902	351.83264	1.42344	0.0762906	0.28004876	2.3137350	20	10 20.3	20.2
185308 2006 UR ₂₈₆	16.9	X	101.09664	180.95891	192.51073	2.01727	0.0766771	0.23288746	2.6164071	20	—	—
185309 2006 UO ₂₉₁	16.4	X	228.67947	342.20213	75.33648	6.14498	0.1515809	0.26564606	2.3966271	20	7 3.9	19.8
185310 2006 UE ₃₂₁	17.1	X	261.27494	121.44488	96.77643	2.61594	0.2192101	0.22732985	2.6588780	20	—	—
185311 2006 UO ₃₂₄	16.4	X	165.39462	267.89840	75.11325	4.49090	0.0187662	0.23728887	2.5839521	20	1 20.1	19.9
185312 2006 UV ₃₂₅	16.8	X	328.46375	324.26392	212.84230	3.11023	0.0708496	0.23374937	2.6099714	20	1 4.2	20.1
185313 2006 UA ₃₂₈	16.9	X	121.29319	208.24850	6.08113	6.77557	0.0569254	0.27779964	2.3262065	20	10 6.3	20.1
185314 2006 UO ₃₂₈	17.1	X	304.06894	72.50209	326.36446	6.86671	0.0965368	0.27899868	2.3195369	20	10 4.6	19.5
185315 2006 UV ₃₂₈	16.6	X	131.74386	268.25305	54.97324	3.36287	0.0103528	0.22453361	2.6809074	20	—	—
185316 2006 UE ₃₂₉	16.7	X	74.84575	357.13151	271.59819	0.93165	0.0225565	0.20479963	2.8504709	20	10 4.7	20.7
185317 2006 UL ₃₂₉	15.6	X	211.69899	46.22219	358.59386	11.49014	0.1387204	0.18664802	3.0320444	20	5 27.6	20.6
185318 2006 UY ₃₃₀	15.8	X	203.62731	249.29049	120.06863	10.51040	0.0862332	0.18136757	3.0909807	20	4 16.3	20.7
185319 2006 UG ₃₃₁	16.2	X	256.01910	256.76525	147.50304	8.62298	0.1550472	0.19730210	2.9222335	20	7 13.5	20.5
185320 2006 UH ₃₃₁	15.6	X	181.47216	248.80711	177.04614	8.72675	0.0225136	0.18590322	3.0404984	20	5 29.3	20.1
185321 Kammerlander	16.2	X	44.44015	166.21498	304.12300	7.06602	0.1147635	0.23728979	2.5839455	20	1 30.5	19.0
185322 2006 VF ₅	16.5	X	264.39780	90.06099	316.61381	0.87717	0.0988300	0.19975858	2.8982271	20	8 5.2	20.5
185323 2006 VD ₆	15.2	X	81.43816	237.90302	233.22745	16.33399	0.0947208	0.17120901	3.2120698	20	3 29.6	19.9
185324 2006 VE ₁₁	16.5	X	305.54018	19.26313	59.28719	5.28869	0.0385933	0.21208559	2.7848081	20	11 21.9	20.0
185325 Anupabhwat	15.3	X	333.71770	287.02216	323.01598	8.45261	0.0338690	0.18090310	3.0962692	20	4 21.0	19.6
185326 2006 VC ₁₇	16.7	X	81.26674	189.37885	36.76679	4.35266	0.1270993	0.26962505	2.3729899	20	9 12.6	19.8
185327 2006 VP ₂₁	16.2	X	269.73626	260.23382	52.26493	3.47427	0.0657777	0.18466804	3.0540412	20	4 17.3	20.5
185328 2006 VS ₂₅	16.2	X	148.79846	169.74875	31.50082	3.09071	0.0554934	0.20418611	2.8561779	20	10 11.1	20.3
185329 2006 VK ₂₆	16.3	X	148.17432	73.90994	355.36708	0.86439	0.1599905	0.17680923	3.1438809	20	5 1.7	21.2
185330 2006 VU ₂₆	16.2	X	27.45424	250.90408	59.47045	2.92101	0.0551528	0.20322954	2.8651332	20	10 2.4	19.9
185331 2006 VG ₃₁	15.9	X	122.51994	343.44749	54.70692	15.03259	0.0408755	0.23801333	2.5787062	20	2 14.9	19.7
185332 2006 VO ₃₂	16.9	X	228.68979	207.07544	39.96787	1.44851	0.0521051	0.23386390	2.6091192	20	—	—
185333 2006 VG ₃₄	16.8	X	3.19870	208.55360	214.22957	3.17779	0.1104216	0.22037946	2.7144924	20	—	—
185334 2006 VU ₃₄	16.3	X	78.85526	52.76831	35.02671	4.63036	0.1158817	0.23882777	2.5728403	20	2 27.3	19.4
185335 2006 VO ₃₅	17.7	X	151.06532	187.26598	123.28351	0.24083	0.1177774	0.30349719	2.1929712	20	—	—
185336 2006 VR ₃₅	17.3	X	155.20635	334.20755	236.28911	1.83061	0.1580665	0.27986120	2.3147686	20	11 7.5	20.6
185337 2006 VH ₃₇	16.9	X	124.04554	358.05917	338.81539	4.71407	0.1786238	0.30482408	2.1866026	20	—	—
185338 2006 VQ ₃₇	16.1	X	145.80709	342.63561	349.08099	3.38055	0.1576200	0.23481500	2.6020691	20	—	—
185339 2006 VR ₃₇	16.2	X	171.72794	320.62985	84.56608	7.61831	0.1318615	0.25238652	2.4798492	20	4 23.9	20.0
185340 2006 VT ₃₇	15.9	X	241.76108	330.53116	100.66481	7.79981	0.2012633	0.19666268	2.9285642	20	7 27.6	20.4
185341 2006 VF ₃₈	17.1	X	176.23948	328.50924	223.83966	4.01876	0.0853213	0.28101146	2.3084476	20	11 10.9	20.1
185342 2006 VF ₄₄	16.0	X	102.72889	255.07162	109.83150	5.26647	0.2121920	0.23205626	2.6226511	20	—	—
185343 2006 VK ₄₆	15.9	X	231.40283	314.15086	349.95998	1.72398	0.0593793	0.17150790	3.2083369	20	2 24.9	20.6
185344 2006 VS ₄₈	16.9	X	31.68707	102.16305	278.71022	5.94485	0.1498785	0.28843683	2.2686573	20	—	—
185345 2006 VW ₅₃	15.7	X	328.22994	341.35622	257.75233	6.04798	0.0834356	0.18083836	3.0970082	20	4 21.8	19.7
185346 2006 VH ₅₄	16.1	X	113.19099	319.68727	153.72182	0.90589	0.0679782	0.17830933	3.1262234	20	5 10.9	20.7
185347 2006 VW ₅₅	17.0	X	232.49911	176.19068	143.67214	0.97429	0.0813271	0.24738562	2.5131577	20	3 7.5	20.6
185348 2006 VM ₅₇	16.4	X	289.82199	218.41986	195.52121	1.65421	0.0592831	0.20298873	2.8673988	20	9 25.1	20.2
185349 2006 VW ₅₇	16.5	X	68.30728	302.61342	99.92258	3.77154	0.0929198	0.22945342	2.6424474	20	—	—
185350 2006 VQ ₆₁	16.2	X	56.71424	308.58831	289.02800	1.07337	0.0202863	0.19207465	2.9750163	20	7 31.2	20.1
185351 2006 VV ₆₈	16.2	X	316.60556	137.32071	229.16193	1.54965	0.0590069	0.19813628	2.9140257	20	8 30.8	19.8
185352 2006 VJ ₇₀	17.3	X	124.45323	155.80615	125.91122	1.38893	0.1306943	0.28893978	2.2660239	20	—	—
185353 2006 VZ ₇₁	16.4	X	38.23351	207.09253	144.97537	6.97934	0.0441211	0.21350017	2.7724937	20	12 9.0	20.2
185354 2006 VC ₇₄	16.5											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185361 2006 VX ₉₄	16.4	X	156.35324	207.16748	77.72994	7.70368	0.0425159	0.22220801	2.6995803	20	—	—
185362 2006 VG ₉₆	16.5	X	109.88133	46.80174	328.60552	1.96059	0.1150988	0.23157619	2.6262745	20	1 5.9	19.8
185363 2006 VK ₉₆	16.8	X	168.02325	147.26414	216.98363	1.07590	0.1045240	0.24075497	2.5590919	20	2 24.3	20.5
185364 2006 Sunweihsin	16.8	X	315.61562	127.18750	184.23008	4.88175	0.1545474	0.26223159	2.4173863	20	6 5.5	19.3
185365 2006 VW ₁₀₇	16.5	X	86.94329	98.24777	316.43078	2.31579	0.1904651	0.23532500	2.5983082	20	2 4.9	19.4
185366 2006 VM ₁₁₀	15.7	X	194.67956	345.46719	264.04879	13.53118	0.0586218	0.22275321	2.6951735	20	—	—
185367 2006 VW ₁₁₄	16.2	X	208.80247	305.31234	339.77497	3.66256	0.1757071	0.23959324	2.5673575	20	1 1.5	20.5
185368 2006 VL ₁₁₆	17.3	X	326.13100	193.98664	179.89020	2.07973	0.2287949	0.27884793	3.2303728	20	10 13.9	18.4
185369 2006 VJ ₁₁₇	16.3	X	115.57364	168.11409	23.13570	2.09599	0.0545108	0.19476181	2.9475884	20	8 20.7	20.4
185370 2006 VJ ₁₂₀	16.5	X	173.03163	323.78051	251.90302	6.22914	0.0541537	0.28664752	2.2780885	20	12 12.0	19.4
185371 2006 VA ₁₂₁	16.4	X	182.80158	327.28340	65.35840	2.40193	0.1788504	0.17909360	3.1170900	20	4 19.9	21.7
185372 2006 VG ₁₂₉	14.7	X	68.66620	258.86283	254.66793	17.85370	0.0603605	0.17709896	3.1404512	20	5 1.9	19.1
185373 2006 VM ₁₂₉	15.0	X	8.35926	320.36382	266.18440	8.45814	0.0501960	0.18313341	3.0710791	20	5 11.3	19.0
185374 2006 VP ₁₂₉	16.7	X	334.37754	27.68227	1.32547	3.77989	0.1706755	0.28182334	2.3040120	20	11 24.9	18.6
185375 2006 VY ₁₃₀	16.8	X	342.74301	217.14985	205.81200	7.74716	0.2118167	0.215557800	2.7546500	20	—	—
185376 2006 VS ₁₃₅	17.1	X	27.74675	228.14338	45.30579	2.00074	0.1717364	0.26918367	2.3755832	20	9 10.0	19.4
185377 2006 VJ ₁₃₇	16.1	X	110.29709	184.68159	252.05123	3.16572	0.0528378	0.16997167	3.2276395	20	3 19.8	20.8
185378 2006 VS ₁₃₈	15.9	X	121.87071	16.24462	87.59225	2.55204	0.0826615	0.17719764	3.1392851	20	5 11.1	20.4
185379 2006 VF ₁₃₉	16.1	X	258.38735	50.38404	251.09611	0.22840	0.1505345	0.17572906	3.1567510	20	3 11.9	21.1
185380 2006 VW ₁₄₂	16.1	X	67.37401	6.78105	29.26429	13.60468	0.2880048	0.22942139	2.6426934	20	—	—
185381 2006 VC ₁₄₃	16.0	X	117.30118	242.98015	164.98956	4.69275	0.1294347	0.23931260	2.5693642	20	2 26.2	19.5
185382 2006 VY ₁₅₄	16.0	X	15.12180	249.78600	122.99412	6.65062	0.0839400	0.21535233	2.7565740	20	12 10.6	19.5
185383 2006 WE ₂	15.7	X	257.89985	294.99223	231.11200	7.15686	0.1414561	0.21358683	2.7717437	20	12 24.7	19.3
185384 2006 WL ₆	16.1	X	134.63330	5.20661	124.30969	10.35363	0.0714127	0.20429056	2.8552042	20	10 17.5	20.5
185385 2006 WR ₇	16.4	X	71.16223	155.70116	215.22092	4.40128	0.0640472	0.21435590	2.7651100	20	12 12.8	20.3
185386 2006 WA ₁₃	17.0	X	155.00594	149.94911	205.63895	4.85483	0.1364367	0.23809795	2.5780952	20	2 1.9	20.9
185387 2006 WK ₂₄	16.0	X	65.80468	19.79691	150.87024	4.14822	0.1128909	0.17602850	3.1531700	20	5 30.7	20.3
185388 2006 WX ₃₇	17.3	X	92.36976	47.01238	202.80290	6.96410	0.0816069	0.27634066	2.3343870	20	10 21.9	20.3
185389 2006 WJ ₄₂	15.8	X	107.68943	33.69149	85.24655	9.32609	0.0748514	0.17832768	3.1260089	20	5 13.9	20.3
185390 2006 WG ₄₆	16.2	X	22.61966	319.63676	48.54711	6.97922	0.0769468	0.21293321	2.774129	20	12 11.9	19.8
185391 2006 WR ₄₆	16.3	X	214.26759	9.12979	19.71946	2.61031	0.0394763	0.18174193	3.0867346	20	5 19.0	20.8
185392 2006 WV ₅₅	16.3	X	192.60909	175.44639	295.87559	1.30919	0.0494781	0.19162438	2.9796748	20	8 6.8	20.7
185393 2006 WA ₅₈	16.5	X	167.20499	39.64676	304.38373	3.71580	0.0765506	0.23894631	2.5719893	20	1 27.8	20.2
185394 2006 WU ₆₀	15.7	X	130.82596	273.86870	168.83844	15.64486	0.2239927	0.17698166	3.1418387	20	5 10.4	21.1
185395 2006 WZ ₇₀	16.8	X	37.43582	106.60191	14.73499	1.95582	0.0901208	0.23753231	2.5821864	20	2 2.8	19.5
185396 2006 WX ₇₉	16.5	X	46.78256	284.31272	17.12870	2.01788	0.0452836	0.20387837	2.8590513	20	10 14.2	20.4
185397 2006 WN ₈₅	16.2	X	54.91144	269.60928	92.24560	7.54840	0.0790104	0.21727054	2.7403255	20	—	—
185398 2006 WF ₉₂	16.7	X	35.82495	119.17851	146.53388	1.59386	0.1659462	0.26948448	2.3738151	20	9 10.3	19.1
185399 2006 WL ₉₂	15.8	X	208.91473	298.58202	87.17138	3.03966	0.1199865	0.18246186	3.0786098	20	5 6.1	20.6
185400 2006 WK ₉₄	16.3	X	231.94006	336.64687	162.94859	2.30960	0.0154204	0.20862719	2.8154994	20	11 5.8	20.2
185401 2006 WG ₉₆	16.6	X	183.70490	43.12525	97.82352	6.99992	0.0489926	0.27434515	2.3456931	20	9 16.9	19.8
185402 2006 WW ₁₀₈	16.7	X	157.04333	34.74726	235.05950	3.50086	0.0319052	0.21776336	2.7361896	20	—	—
185403 2006 WV ₁₁₇	16.5	X	178.06823	133.16218	251.85337	2.57360	0.2031217	0.24254445	2.5464891	20	4 2.8	20.7
185404 2006 WJ ₁₂₀	16.1	X	30.63458	339.80911	230.80004	10.53287	0.0651292	0.25464406	2.4651708	20	5 24.8	18.8
185405 2006 WQ ₁₂₈	16.3	X	82.33654	188.66623	110.72224	0.45383	0.0499688	0.21031715	2.8003969	20	11 26.4	20.3
185406 2006 WJ ₁₂₉	15.6	X	261.02250	241.57786	56.44940	1.91103	0.1572022	0.17545437	3.1600450	20	3 10.8	20.5
185407 2006 WN ₁₂₉	16.4	X	114.04332	200.13225	178.07694	6.03698	0.0148293	0.30518339	2.1848860	20	—	—
185408 2006 WT ₁₃₁	16.3	X	72.97415	63.38222	216.67695	6.65098	0.0937610	0.27794217	3.2354112	20	11 9.7	19.2
185409 2006 WY ₁₄₀	15.9	X	345.96131	236.78929	37.02397	1.97021	0.0287583	0.18694295	3.0292143	20	6 11.9	19.8
185410 2006 WD ₁₄₇	16.0	X	72.69791	230.06056	39.34668	2.49922	0.0486545	0.20186051	2.8780730	20	10 7.2	20.1
185411 2006 WY ₁₅₈	16.7	X	111.33842	300.72204	41.70215	5.78293	0.2179021	0.30081230	2.2060008	20	—	—
185412 2006 WN ₁₆₁	16.1	X	150.38027	179.88088	65.12970	5.64915	0.0229150	0.21395528	2.7685606	20	12 7.4	19.8
185413 2006 WP ₁₆₃	16.9	X	146.51378	142.81109	200.95003	3.03667	0.1334616	0.23543927	2.5974674	20	1 10.7	20.8
185414 2006 WS ₁₆₃	16.3	X	343.72824	60.19712	217.02002	4.60469	0.0677973	0.26035527	2.4289867	20	6 13.1	18.8
185415 2006 WL ₁₇₁	16.6	X	19.59382	12.01301	143.83908	1.60857	0.0839883	0.23856017	2.5747640	20	2 20.1	19.6
185416 2006 WU ₁₇₁	16.5	X	161.83541	39.97772	215.44051	2.96107	0.0439980	0.21689131	2.7435189	20	—	—
185417 2006 WJ ₁₇₂	16.7	X	211.66389	302.27983	73.75491	2.57611	0.0669345	0.25178487	2.4837982	20	4 26.9	20.2
185418 2006 WH ₁₈₂	16.7	X	258.69477	11.20998	230.84543	1.95059	0.1643284	0.23257149	2.6187762	20	—	—
185419 2006 WU ₁₈₅	16.4	X	37.81099	356.49369	102.69222	7.64066	0.1082421	0.23580659	2.5947693	20	1 4.0	19.0
185420 2006 WC ₁₉₁	17.1	X	238.12414	186.17981	176.62006	3.16008	0.1062088	0.25755703	2.4465482	20	5 6.9	20.5
185421 2006 WL ₁₉₁	16.4	X	328.41731	251.66951	264.79565	1.68177	0.1121273	0.22873884	2.6479479	20	—	—
185422 2006 WS ₁₉₂	16.4	X	231.30257	26.60451	222.39951	1.28892	0.0254896	0.22849075	2.6498643	20	—	—
185423 2006 XM	15.6	X	104.60776	213.97287	211.44267	12.80518	0.1606106	0.23947214	2.5682230	20	3 4.9	19.2
185424 2006 XJ ₅	15.7	X	123.02665	352.90484	48.03850	13.44657	0.2404396	0.23816854	2.5775857	20	3 15.9	19.8
185425 2006 XR ₇	16.3	X	190.39649	263.39301	64.58588	5.12765	0.2313197	0.23946245	2.5682922	20	2 8.5	20.8
185426 2006 XW ₇	16.2	X	175.17819	263.38359	103.03494	3.59784	0.1130463	0.24359230	2.5391811	20	3 7.7	20.0
185427 2006 XX ₇	15.4	X	215.69068	285.60580	142.69598	10.51463	0.0910328	0.18857600	3.0117004	20	7 5.9	20.0
185428 2006 XX ₁₀	14.9	X	127.31474	3.98854	89.78710	13.71781	0.0623511	0.17184703	3.2041145	20	5 6.9	19.7
185429 2006 XS ₁₆	16.4	X	336.46142	93.33016	81.60161	4.77546	0.0284798	0.22922761	2.6441826	20	1 19.8	19.9
185430 2006 XE ₂₂	16.0	X	226.03610	312.50352	83.92451	6.38186	0.1620426	0.18519433	3.0482524	20	6 1.7	20.7
185431 2006 XX ₂₅	16.2	X	24.64275	56.80753	80.64753	4.39820	0.0595358	0.23621202	2.5917994	20	2 4.9	19.2
185432 2006 XO ₂₆	15.1	X	55.41452	308.62261	234.71656	10.35277	0.0343849	0.17805825	3.1291616	20	5 21.3	19.2
185433 2006 XJ ₂₇	16.5	X	234.11595	246.30160	57.17337	2.79585	0.0842457	0.31309592	2.1479184	20	2 10.6	19.4
185434 2006 XK ₃₁	1											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185441 2006 XE ₅₄	15.8	X	59.41875	74.68743	37.14216	7.26697	0.0873079	0.23655805	2.5892713	20	2 28.1	18.9
185442 2006 XQ ₅₄	16.3	X	129.55257	33.41724	346.43799	3.87921	0.2302951	0.23696452	2.5863095	20	2 18.0	20.2
185443 2006 XG ₅₇	15.3	X	254.13439	159.49710	305.74304	9.70604	0.0953526	0.20449875	2.8532661	20	10 2.8	19.4
185444 2006 XB ₅₉	16.1	X	328.56371	141.60499	305.76373	3.35183	0.0325070	0.21110168	2.7934544	20	—	—
185445 2006 YA ₂	14.4	X	304.47283	23.45227	279.81448	22.81372	0.0671171	0.17645994	3.1480283	20	5 18.2	19.0
185446 2006 YN ₆	16.7	X	342.87721	206.91226	249.91444	1.03326	0.0330120	0.21843453	2.7305818	20	—	—
185447 2006 YT ₁₁	16.8	X	325.25985	271.89464	69.72073	2.50151	0.1957134	0.26560879	2.3968513	20	8 11.7	18.4
185448 Nomentum	15.0	X	6.82885	181.34941	102.31144	11.65330	0.0680171	0.18138616	3.0907695	20	7 26.7	19.0
185449 2006 YG ₂₆	16.6	X	208.83473	124.96327	80.48569	6.26473	0.0553975	0.20881880	2.8137769	20	12 23.0	20.6
185450 2006 YG ₃₀	15.3	X	9.08697	169.55034	92.78114	10.49969	0.0359796	0.17949389	3.1124540	20	6 29.3	19.5
185451 2006 YS ₃₀	16.5	X	345.53521	344.97833	30.94389	2.33210	0.0871342	0.20052650	2.8908232	20	10 27.7	20.1
185452 2006 YZ ₃₉	16.5	X	249.07421	217.29264	226.21470	0.83949	0.0932234	0.19582894	2.9368705	20	9 2.5	20.6
185453 2006 YK ₄₁	16.7	X	226.80643	124.50241	205.63749	2.23036	0.0339279	0.24208401	2.5497170	20	3 16.9	20.2
185454 2006 YW ₄₅	16.4	X	159.46085	357.79233	89.46089	2.33062	0.1626797	0.18013767	3.1050339	20	6 3.1	21.4
185455 2006 YX ₄₆	16.2	X	157.80616	292.56578	122.51453	1.92215	0.2091767	0.17504161	3.1650107	20	4 26.8	21.5
185456 2007 AT	16.2	X	189.67283	35.76141	124.34254	2.89415	0.0452987	0.19500011	2.9451000	20	10 6.1	20.5
185457 2007 AN ₂	15.2	X	334.44892	134.68971	66.81804	28.28117	0.0194823	0.23354657	2.6114821	20	3 7.9	19.4
185458 2007 AO ₆	15.0	X	135.37049	29.72775	116.72075	19.00321	0.0784686	0.17724136	3.1387688	20	7 17.6	19.7
185459 2007 AD ₈	15.1	X	42.43638	93.56536	122.28542	9.81414	0.0304096	0.17411082	3.1762806	20	6 15.0	19.5
185460 2007 AG ₁₄	15.1	X	177.85509	324.18214	121.28311	12.68634	0.0596410	0.17802699	3.1295279	20	6 18.3	19.9
185461 2007 BK ₁	15.2	X	143.86828	42.50033	88.28534	8.26464	0.0932053	0.17787726	3.1312838	20	7 8.3	20.0
185462 2007 BH ₄	15.3	X	109.93464	113.64998	89.50106	11.03279	0.0407813	0.18588386	3.0407095	20	8 30.5	19.8
185463 2007 BQ ₄	14.5	X	41.94150	147.55118	127.00209	28.54292	0.1373832	0.18059533	3.0997860	20	9 19.5	19.0
185464 2007 BS ₅	14.8	X	14.40586	89.71727	77.04533	13.13587	0.0728357	0.15882137	3.3769925	20	3 15.7	19.4
185465 2007 BC ₁₈	16.4	X	317.63704	248.57574	117.65305	6.28570	0.2243493	0.26656892	2.3910925	20	9 2.7	18.0
185466 2007 BT ₃₅	15.7	X	340.30630	224.03344	118.58166	10.29159	0.0559296	0.19020693	2.9944598	20	9 6.4	19.6
185467 2007 BN ₃₇	16.1	X	50.74541	174.07708	134.99640	2.55317	0.0977405	0.19633517	2.9318201	20	11 5.1	20.2
185468 2007 BR ₄₂	15.2	X	295.29487	238.40034	137.78755	11.97553	0.0874155	0.18566780	3.0430680	20	8 8.2	19.3
185469 2007 BQ ₄₅	15.9	X	278.71696	188.22866	141.54680	4.50329	0.0858845	0.17317950	3.1876581	20	5 18.3	20.4
185470 2007 BT ₄₅	15.7	X	183.42093	9.40027	116.69704	6.30466	0.0455847	0.18355471	3.0663780	20	8 15.5	20.2
185471 2007 BV ₄₅	15.2	X	47.01473	156.74322	120.36355	10.34896	0.0752404	0.18292617	3.0733981	20	9 18.4	19.5
185472 2007 BZ ₆₂	16.3	X	102.83625	89.38343	211.45218	1.51673	0.0525548	0.20215125	2.8753127	20	12 19.8	20.4
185473 2007 BE ₆₇	15.7	X	313.54577	229.88508	145.71014	3.21958	0.1117993	0.18643951	3.0346650	20	9 2.3	19.3
185474 2007 BR ₇₄	15.3	X	22.77841	154.26058	138.03723	5.41965	0.1311139	0.18090435	3.0962549	20	9 7.6	19.2
185475 2007 BA ₇₅	15.9	X	219.93726	16.51941	86.72096	2.53405	0.0581821	0.18658449	3.0330927	20	8 28.6	20.4
185476 2007 CL ₄	16.2	X	330.58885	335.64685	1.98475	1.89552	0.0693173	0.18363713	3.0654604	20	8 12.3	20.0
185477 2007 CK ₆	16.8	X	210.16418	304.41278	54.55756	1.78992	0.1951813	0.24449554	2.5329236	20	3 30.5	21.1
185478 2007 CD ₇	15.4	X	204.04142	7.52446	72.90534	10.28769	0.1150237	0.18264483	3.0765535	20	7 7.5	20.3
185479 2007 CN ₁₀	16.6	X	20.82243	230.45185	133.04562	6.87347	0.2095051	0.27766739	2.3269451	20	—	—
185480 2007 CX ₂₇	15.3	X	129.54597	18.53892	139.96310	11.72769	0.0259793	0.17781988	3.1319573	20	7 21.2	19.8
185481 2007 CF ₃₄	16.4	X	26.62462	283.61212	145.46225	4.56499	0.0821857	0.21498918	2.7596774	20	—	—
185482 2007 CK ₃₈	15.6	X	266.19162	208.43245	146.22565	5.84716	0.1859101	0.17674017	3.1446999	20	5 20.9	20.4
185483 2007 DX ₅	14.8	X	317.90648	156.79085	138.20023	21.65898	0.0574544	0.16839821	3.2477137	20	6 3.4	19.6
185484 2007 DB ₈₅	14.8	X	248.93177	172.66837	83.76548	11.03562	0.0335921	0.15221871	3.4739538	20	1 25.2	19.9
185485 2007 EL ₆₈	13.6	X	225.62094	69.92866	23.23730	4.18627	0.0280152	0.08275426	5.2125283	20	4 22.1	20.5
185486 2007 EP ₇₅	12.9	X	334.15406	69.52554	191.81703	14.83418	0.0701520	0.08206904	5.2442473	20	5 12.0	19.6
185487 2007 ED ₁₃₉	13.2	X	288.20159	239.45692	49.82803	5.32135	0.0603328	0.08252791	5.2247897	20	4 17.8	20.1
185488 2007 EF ₁₅₉	16.1	X	36.24088	207.37130	143.92050	2.81919	0.0468399	0.19848911	2.9105714	20	12 1.9	20.0
185489 2007 FK ₃₃	13.6	X	119.52170	295.36488	168.57200	2.20936	0.0150844	0.08466866	5.1363457	20	5 3.5	20.4
185490 2007 GR ₁	12.9	X	281.79819	278.20143	26.01128	30.24601	0.0166899	0.08526814	5.1122435	20	4 26.6	19.8
185491 2007 GP ₃	17.3	X	215.37742	48.45758	167.46554	1.18406	0.1339332	0.27036481	2.3686594	20	—	—
185492 2007 HA ₈	12.6	X	80.53053	313.56120	196.02411	19.07350	0.0417319	0.08138023	5.2737974	20	5 15.6	19.6
185493 2007 PO ₄₂	16.6	X	301.31257	155.92998	216.01687	2.59226	0.2673641	0.29762639	2.2217154	20	7 25.8	18.2
185494 2007 RB ₃₃	15.8	X	218.44456	165.31197	204.36690	11.06469	0.1116132	0.20454508	2.8528352	20	4 25.5	20.1
185495 2007 RV ₁₄₁	16.8	X	136.91851	19.34614	350.06080	1.03031	0.2018444	0.26253850	2.4155019	20	2 6.2	20.2
185496 2007 RR ₂₄₁	15.7	X	75.95213	230.01636	127.54833	0.33315	0.1707595	0.17359361	3.1825865	20	—	—
185497 2007 RJ ₂₆₀	17.4	X	74.25720	235.34462	222.01160	2.32127	0.1423999	0.25939086	2.4350036	20	3 1.9	20.1
185498 2007 SN	16.1	X	146.90949	137.76342	248.02821	7.64653	0.2549115	0.26723976	2.3870893	20	3 7.5	20.1
185499 2007 TV ₄₀	16.1	X	192.72572	204.79835	183.25020	1.83947	0.1173468	0.19609189	2.9342445	20	4 22.4	20.6
185500 2007 TA ₅₄	16.3	X	284.43818	288.17506	71.89250	1.40923	0.0893865	0.21159852	2.7890800	20	7 3.5	19.8
185501 2007 TR ₅₇	16.4	X	189.65218	246.76435	212.17347	3.68855	0.0707768	0.20867389	2.8150793	20	7 17.8	20.7
185502 2007 TF ₁₂₆	15.4	X	16.76271	341.62807	152.35431	0.98801	0.1304983	0.17770415	3.1333170	20	1 27.7	19.1
185503 2007 TK ₁₆₅	16.0	X	144.87209	251.14314	136.94612	1.81557	0.2090983	0.18642472	3.0348254	20	3 14.8	20.9
185504 2007 TQ ₂₃₀	15.8	X	351.33622	276.58962	79.92394	3.61495	0.0919645	0.22454724	2.6807989	20	10 18.4	18.8
185505 2007 TU ₂₅₁	15.8	X	35.42329	342.88518	320.27228	8.75482	0.1600970	0.22698964	2.6615341	20	10 18.2	19.3
185506 2007 TJ ₃₁₅	15.7	X	158.85578	315.18440	68.56459	1.15963	0.1203243	0.18839874	3.0135892	20	3 16.3	20.3
185507 2007 TE ₃₃₅	17.7	X	75.65711	189.95259	244.00674	0.64811	0.1710350	0.25557285	2.4591947	20	2 6.0	20.2
185508 2007 TO ₃₃₅	16.0	X	251.06747	298.50374	29.90795	1.98033	0.1134346	0.19643935	2.9307834	20	4 8.4	20.4
185509 2007 TJ ₃₆₁	16.1	X	232.81793	267.42499	95.34223	1.71312	0.1776941	0.19951783	2.9005581	20	4 26.8	20.7
185510 2007 TA ₃₆₄	15.8	X	242.55797	317.93016	109.48051	3.91172	0.0831116	0.20226818	2.8742045	20	8 7.7	19.9
185511 2007 TR ₄₁₄	16.6	X	261.10439	198.90988	153.53323	2.95849	0.1783552	0.28291901	2.2980596	20	5 10.7	19.8
185512 2007 UL	17.0	X	184.58875	138.85213	266.08857	3.14320	0.1830894	0.27804006	2.3248653	20	5 2.1	20.6
185513 2007 UY ₄₆	15.7	X	255.85149	222.13847	107.98909	3.65734	0.1040182	0.19755710	2.9197184	20	4 18.4	20.0
185514 2007 UE ₇₉												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
185521	2007	VA ₆₇	16.1	X	43.20254	215.35401	292.65346	1.14257	0.1462845	0.18022622	3.1040169	20	3 30.7	19.9
185522	2007	VH ₇₅	16.6	X	244.12194	323.25119	177.70478	1.53505	0.0949051	0.22825310	2.6517033	20	11 15.2	20.1
185523	2007	VZ ₁₄₅	16.7	X	71.94505	215.43736	277.09397	5.47705	0.0804586	0.26489081	2.4011804	20	4 5.3	19.6
185524	2007	VK ₁₆₂	16.4	X	267.37563	164.61090	288.76553	1.75430	0.0612341	0.22229472	2.6988782	20	10 18.0	19.7
185525	2007	VJ ₁₆₄	17.1	X	303.56905	74.95093	136.87303	1.90011	0.1333106	0.25751010	2.4468454	20	1 3.4	20.2
185526	2007	VT ₁₉₀	15.7	X	58.63674	335.25634	115.22500	3.04207	0.1057167	0.17556704	3.1586928	20	2 7.6	19.7
185527	2007	VE ₂₃₈	17.0	X	9.42959	143.42401	236.50808	0.92844	0.2372261	0.23272502	2.6176244	20	—	—
185528	2007	VR ₂₄₃	15.7	X	316.18873	19.26200	223.13319	1.96041	0.1103634	0.18752163	3.0229791	20	3 11.7	19.8
185529	2007	WE ₁₂	15.1	X	107.82390	269.66610	110.24614	10.47186	0.0957744	0.17446377	3.1719954	20	1 16.1	19.5
185530	2007	WT ₁₂	15.2	X	135.95855	101.68557	5.70900	10.02637	0.0791152	0.18091542	3.0961286	20	5 27.9	20.0
185531	2007	WR ₂₃	16.2	X	237.67630	233.38548	118.30940	3.20886	0.0809695	0.19782262	2.9171051	20	4 27.1	20.5
185532	2007	WR ₄₂	14.8	X	153.37868	164.30544	126.23481	11.13035	0.0556451	0.14726142	3.5514856	20	—	—
185533	2007	WG ₅₃	15.9	X	358.47363	198.80553	129.05210	1.14360	0.0726319	0.21398790	2.7682793	20	9 15.7	19.3
185534	2007	WF ₅₄	15.3	X	190.53856	271.89474	141.62610	9.31869	0.0276348	0.18408243	3.0605148	20	5 25.4	19.8
185535		Gangda	15.5	X	56.95269	243.68777	117.16600	6.46331	0.2515528	0.23907005	2.5711018	20	—	—
185536	2007	XS ₃	15.8	X	254.68768	262.72614	97.17712	3.39861	0.0710935	0.20186575	2.8780232	20	5 27.8	19.9
185537	2007	XK ₁₂	16.3	X	248.34516	273.83092	215.64119	4.04124	0.1729050	0.22395941	2.6854877	20	10 23.7	19.9
185538		Fangcheng	16.0	X	13.09518	322.79313	61.63774	6.95849	0.1423620	0.22679353	2.6630682	20	—	—
185539	2007	XS ₂₈	16.6	X	329.32499	121.63647	287.85446	1.09673	0.0857741	0.22486069	2.6783070	20	11 21.7	19.7
185540	2007	XQ ₃₂	15.8	X	145.41430	143.29387	84.44760	4.86780	0.0385389	0.20955643	2.8071700	20	11 10.6	19.8
185541	2007	XE ₃₃	15.7	X	195.09491	263.64965	185.19415	9.22752	0.1054500	0.18899659	3.0072306	20	7 8.1	20.6
185542	2007	XM ₃₉	16.7	X	102.78748	190.06488	303.57486	8.38247	0.1121142	0.26642137	2.3919752	20	5 27.9	20.0
185543	2007	XY ₃₉	16.3	X	33.64064	221.53764	308.19723	8.19568	0.1461018	0.25633953	2.4542888	20	3 31.1	18.9
185544	2007	YN ₂₈	16.7	X	328.48468	242.28432	148.02986	23.29211	0.0993953	0.36825036	1.9277051	20	12 14.6	18.9
185545	2007	YH ₃₁	16.3	X	330.72661	319.82460	90.43857	3.12658	0.0733951	0.22133135	2.7067040	20	11 24.3	19.6
185546		Yushan	17.4	X	148.13604	290.05356	154.22697	1.34480	0.1476230	0.26721186	2.3872555	20	5 18.6	21.0
185547	2007	YS ₃₃	16.1	X	329.65853	191.31867	95.48084	5.20775	0.1129969	0.19853331	2.9101394	20	5 30.6	19.7
185548	2007	YG ₄₅	18.0	X	228.20268	114.70242	157.61550	0.89753	0.0764360	0.32141283	2.1107036	20	—	—
185549	2007	YX ₅₂	16.5	X	308.27430	242.25165	109.55702	7.44105	0.0372558	0.28109143	2.3080098	20	8 11.7	19.0
185550	2007	YF ₅₇	15.7	X	285.73180	192.86716	84.82132	4.87656	0.1098565	0.18555317	3.0443211	20	3 20.1	20.1
185551	2007	YT ₅₈	17.2	X	205.35620	162.38586	342.14853	6.25173	0.0832008	0.28923988	2.2644562	20	10 11.8	20.1
185552	2007	YY ₅₈	16.2	X	121.60492	301.88062	156.48926	6.10572	0.2691167	0.18341319	3.0679551	20	5 22.9	21.3
185553	2008	AX ₄	17.6	X	106.68849	319.89362	192.69162	1.02645	0.1304864	0.26736286	2.3863566	20	7 1.9	20.7
185554		Bikushev	15.4	X	30.77676	123.04103	132.63608	9.46568	0.0417860	0.19274523	2.9681120	20	7 22.1	19.3
185555	2008	AP ₈	17.3	X	163.47333	208.75707	299.56252	1.50643	0.1480792	0.27905645	2.3192168	20	8 27.1	20.9
185556	2008	AY ₈	16.0	X	28.56379	152.49618	121.61092	3.17282	0.0505665	0.19707101	2.9245175	20	8 14.8	19.8
185557	2008	AF ₁₆	16.9	X	61.87904	124.02565	144.76650	6.89490	0.1213782	0.28348435	2.2950034	20	10 19.1	19.9
185558	2008	AG ₁₉	15.6	X	54.04519	241.77195	351.05530	2.66752	0.1427304	0.19011342	2.9954416	20	8 9.1	19.4
185559	2008	AO ₂₂	16.9	X	153.95546	37.54731	79.83159	2.89231	0.2010485	0.18982878	2.9984352	20	7 6.3	22.0
185560		Harrykroto	17.1	X	167.02284	190.35550	341.42264	2.89663	0.0859642	0.28459285	2.2890400	20	10 3.4	20.2
185561	2008	AV ₃₁	15.6	X	102.95464	336.61788	119.66221	10.30509	0.1744797	0.17934361	3.1141924	20	4 25.7	20.3
185562	2008	AU ₃₂	17.0	X	125.52718	26.85540	128.17124	5.76946	0.0460166	0.27508362	2.3414932	20	7 19.9	20.1
185563	2008	AL ₃₄	17.2	X	340.89993	292.54485	105.69346	3.68535	0.0647351	0.29770899	2.2213044	20	12 15.1	19.5
185564	2008	AO ₄₂	16.7	X	57.43482	358.27968	157.98451	4.45395	0.0823042	0.25784031	2.4447559	20	4 22.4	19.4
185565	2008	AR ₄₂	15.1	X	84.47366	233.06524	282.25050	8.93452	0.1016301	0.18459662	3.0548289	20	6 1.8	19.4
185566	2008	AY ₄₃	17.6	X	83.69555	66.26310	318.70886	3.90237	0.0991351	0.31540109	2.1374399	20	—	—
185567	2008	AQ ₅₉	17.6	X	86.24912	24.23506	148.59359	2.30262	0.1065716	0.26723759	2.3871022	20	6 30.8	20.5
185568	2008	AE ₇₁	17.0	X	153.26523	276.80022	161.59744	1.49251	0.1565102	0.26390007	2.4071863	20	5 16.7	20.7
185569	2008	AS ₇₇	15.6	X	334.91531	332.31853	318.08534	8.29124	0.0646466	0.19075300	2.9887422	20	6 16.5	19.5
185570	2008	AA ₇₈	15.8	X	79.11182	103.12113	4.29122	1.96015	0.0620484	0.17376627	3.1804780	20	3 21.5	20.2
185571	2008	AT ₉₈	17.1	X	72.76027	133.03484	43.77070	2.86017	0.1183935	0.26416092	2.4056014	20	6 19.3	20.1
185572	2008	AV ₁₀₃	15.4	X	141.53283	328.83483	303.00841	13.61934	0.1289782	0.22497985	2.6773612	20	—	—
185573	2008	AE ₁₀₆	17.2	X	122.76167	219.96628	319.45361	5.58216	0.1436891	0.27799553	2.3251136	20	8 26.8	20.7
185574	2008	BV ₄	17.2	X	342.81006	137.78230	89.89305	5.83639	0.1064077	0.25537948	2.4604359	20	3 30.3	19.9
185575	2008	BF ₁₅	16.5	X	233.74911	1.83507	138.35516	1.43929	0.2123158	0.21121457	2.7924590	20	10 13.6	20.6
185576		Covichi	17.2	X	94.04118	336.31691	127.28921	2.26173	0.1397498	0.25674591	2.4516983	20	4 11.6	20.1
185577		Hhaihao	16.6	X	185.86466	282.28259	148.55600	2.14503	0.2389605	0.19238942	2.9717704	20	6 6.0	21.8
185578	2008	BJ ₁₆	16.6	X	46.87047	318.26133	106.33979	0.99759	0.1456275	0.23908264	2.5710115	20	—	—
185579	2008	BS ₁₆	16.7	X	119.78116	19.99282	146.15846	6.58473	0.0475052	0.27397629	2.3477980	20	7 27.9	19.8
185580		Andratx	17.0	X	32.53914	273.08662	257.00000	2.38657	0.0705499	0.25536051	2.4605577	20	3 28.4	19.8
185581	2008	BM ₂₀	17.1	X	159.34027	165.34204	324.35459	4.26789	0.0611430	0.27449693	2.3448283	20	7 29.1	20.3
185582	2008	BZ ₂₀	16.2	X	183.31727	277.18434	310.07300	1.13120	0.1678173	0.21412313	2.7671136	20	12 12.4	20.6
185583	2008	BG ₂₂	17.1	X	57.55903	29.28608	191.32995	0.99430	0.1279516	0.26579600	2.3957257	20	8 1.1	19.8
185584	2008	BW ₂₂	15.9	X	29.11823	254.61917	356.38703	2.61329	0.1042680	0.18582092	3.0413960	20	7 20.9	19.6
185585	2008	BF ₂₃	16.1	X	60.05542	182.27052	150.56372	6.97815	0.0577750	0.21313709	2.7756414	20	12 13.5	20.1
185586	2008	BJ ₂₄	17.3	X	134.91078	207.24213	321.44871	1.77954	0.1364558	0.27579048	2.3374906	20	8 25.2	20.8
185587	2008	BR ₂₄	16.2	X	48.42445	246.17448	143.29882	15.51188	0.0950356	0.23030059	2.6359633	20	—	—
185588	2008	BH ₂₆	15.0	X	267.12485	219.43080	96.20043	12.09271	0.1127797	0.18175579	3.0865777	20	4 17.2	19.7
185589	2008	BS ₃₁	17.4	X	179.10586	27.41874	140.76592	4.21571	0.0781361	0.28459558	2.2890254	20	10 16.0	20.5
185590	2008	BJ ₃₃	16.8	X	60.23301	80.04709	148.14908	4.98518	0.1240016	0.26667970	2			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185601 2008 CC ₁₆	16.3	X	34.92459	113.08291	90.90456	6.21532	0.0886949	0.26126974	2.4233156	20	5 25.3	18.8
185602 2008 CF ₂₃	17.6	X	185.08170	210.48172	300.61066	1.82297	0.1368981	0.28246122	2.3005420	20	9 22.2	20.9
185603 2008 CQ ₂₃	16.6	X	300.96801	144.72654	145.80958	7.55803	0.0938042	0.25634122	2.4542780	20	4 23.9	19.6
185604 2008 CX ₂₃	15.7	X	117.01286	348.71310	155.52809	5.44026	0.0781558	0.18433742	3.0576918	20	6 24.3	20.2
185605 2008 CW ₂₅	14.9	X	89.19902	136.66242	71.87710	14.09036	0.3320215	0.18610939	3.0382525	20	9 17.2	20.2
185606 2008 CH ₂₉	16.9	X	290.66791	56.36003	357.48535	3.36303	0.0891431	0.20841801	2.8173830	20	9 23.5	20.4
185607 2008 CK ₃₅	16.2	X	95.14630	49.74608	144.30852	4.49408	0.0974581	0.18976843	2.9990709	20	8 3.6	20.5
185608 2008 CA ₃₈	15.1	X	66.39877	255.17232	312.28324	7.81807	0.2725354	0.18332381	3.0689522	20	8 10.2	19.3
185609 2008 CT ₄₂	16.7	X	200.05338	308.68770	304.90386	5.96426	0.1612177	0.30248327	2.1978690	20	—	—
185610 2008 CZ ₄₄	16.5	X	228.09438	141.13823	99.75265	3.72248	0.0738422	0.22684732	2.6626471	20	—	—
185611 2008 CK ₄₆	15.8	X	164.90214	61.98298	183.50423	9.44567	0.1959755	0.21038873	2.7997617	20	12 16.1	20.7
185612 2008 CT ₄₉	14.9	X	35.69761	186.34257	339.12063	7.88093	0.0242115	0.17266246	3.1940185	20	3 30.2	19.4
185613 2008 CE ₅₀	15.3	X	203.24903	51.27102	340.12365	9.05801	0.0655743	0.18157559	3.0886194	20	5 5.2	20.1
185614 2008 CD ₆₁	16.0	X	281.38436	269.80743	91.59888	3.96177	0.0898123	0.18870308	3.0103481	20	6 29.9	20.2
185615 2008 CZ ₆₆	15.6	X	276.65732	220.46551	335.00540	12.16085	0.1274425	0.22747058	2.6577812	20	—	—
185616 2008 CC ₇₂	15.5	X	257.10977	349.92432	167.63741	14.48096	0.1539876	0.21616076	2.7496968	20	12 13.3	19.3
185617 2008 CS ₈₅	16.8	X	351.36053	256.73908	50.17879	3.11247	0.2249550	0.26854582	2.3793434	20	8 23.8	18.2
185618 2008 CR ₉₃	16.7	X	293.72908	271.14504	182.63202	3.34671	0.0603114	0.21370944	2.7706835	20	11 24.6	20.2
185619 2008 CH ₉₇	16.1	X	48.68056	214.46400	135.06860	7.44159	0.0417074	0.21626123	2.7488451	20	12 18.7	19.9
185620 2008 CL ₁₂₀	15.3	X	149.92059	199.02730	11.59105	8.15678	0.2412045	0.20441605	2.8540356	20	10 22.3	20.3
185621 2008 CA ₁₂₁	15.9	X	299.29941	3.26772	139.60194	13.12389	0.1391155	0.22145960	2.7056589	20	—	—
185622 2008 CH ₁₂₇	16.7	X	193.85600	321.21230	324.73947	5.02092	0.1143929	0.23169898	2.6253465	20	—	—
185623 2008 CJ ₁₃₅	17.3	X	100.49788	36.87395	158.88790	3.76894	0.1444882	0.27189376	2.3597711	20	8 24.9	20.6
185624 2008 CU ₁₆₃	15.5	X	171.62257	284.99558	146.61974	9.65638	0.0688490	0.18417897	3.0594453	20	5 26.5	20.2
185625 2008 CD ₁₆₇	15.3	X	326.95513	191.04974	110.31712	12.05746	0.2683688	0.18463940	3.0543570	20	5 28.2	18.6
185626 2008 CU ₁₇₅	15.3	X	205.31405	316.82651	359.33067	13.20869	0.1728415	0.24134789	2.5548989	20	2 8.2	19.6
185627 2008 CS ₁₇₈	15.1	X	330.48182	196.36469	18.31192	9.55571	0.0299698	0.17011856	3.2257813	20	3 14.1	19.5
185628 2008 CD ₁₇₉	15.8	X	180.78303	166.46418	58.59235	9.29452	0.1675079	0.21239767	2.7820796	20	12 6.8	20.4
185629 2008 CY ₁₈₀	16.3	X	315.49289	289.93967	171.13182	12.87858	0.2310885	0.22297098	2.6934184	20	—	—
185630 2008 CZ ₁₈₀	16.8	X	124.56711	339.16781	223.72545	4.37216	0.1951675	0.27560210	2.3385556	20	9 29.7	20.5
185631 2008 CZ ₁₈₁	16.3	X	44.27549	167.41481	92.81235	7.13011	0.0860211	0.27052322	2.3677346	20	9 5.5	19.1
185632 2008 CS ₁₈₃	15.2	X	150.76318	42.08022	16.06621	10.73947	0.0551371	0.17412181	3.1761471	20	4 13.2	19.8
185633 Rainbach	16.9	X	175.10870	263.43003	174.26058	9.61830	0.0442914	0.26533100	2.3985239	20	6 6.1	20.3
185634 2008 DR ₁₁	17.1	X	233.89532	305.07552	183.20000	5.50243	0.0610293	0.28810363	2.2704062	20	11 3.5	19.7
185635 2008 DL ₂₇	16.4	X	274.63747	311.64521	182.66836	9.22858	0.2306122	0.21791308	2.7349361	20	11 28.7	19.5
185636 Shiao Lin	15.5	X	226.83983	283.35702	145.28316	11.04793	0.0991186	0.19244995	2.9711473	20	7 17.8	20.1
185637 2008 DH ₅₄	15.2	X	322.21557	259.09829	10.44694	10.38313	0.0368487	0.17916741	3.1162338	20	5 1.4	19.5
185638 Erwinschwab	17.4	X	120.25042	134.44513	33.55039	2.88341	0.1581547	0.26809539	2.3820076	20	8 11.2	20.9
185639 Rainerkling	17.5	X	218.87315	231.06264	319.97437	2.10516	0.0973906	0.29436765	2.2380820	20	—	—
185640 Sunyisui	14.5	X	226.12105	264.89848	222.99231	7.60911	0.1954586	0.12529407	3.9553269	20	9 10.2	20.7
185641 Judd	16.5	X	338.96454	339.90059	164.25852	2.76928	0.0169894	0.23123146	2.6288841	20	—	—
185642 2008 EV ₈₈	15.0	X	204.43750	273.92029	279.86307	12.01999	0.1727625	0.21560971	2.7543799	20	11 21.2	19.4
185643 2040 P-L	16.8	X	141.67868	343.25420	0.82220	4.81186	0.2437643	0.30312533	2.1947643	20	1 10.1	19.8
185644 4890 P-L	17.7	X	267.18647	13.41316	2.69958	2.24592	0.2290916	0.27680395	2.3317816	20	6 11.7	20.7
185645 6733 P-L	16.7	X	342.07909	156.62524	167.95933	7.22830	0.2313529	0.26223990	2.4173352	20	8 24.2	18.1
185646 3217 T-2	15.7	X	271.39659	208.25979	171.14964	6.82190	0.1949000	0.18535224	3.0465209	20	6 23.8	20.1
185647 4226 T-2	16.6	X	35.25943	185.41437	115.47502	3.79745	0.1731813	0.27381727	2.3487069	20	11 2.0	19.4
185648 1067 T-3	15.1	X	201.39150	26.33076	359.52460	16.80780	0.2299936	0.17539312	3.1607806	20	4 20.1	20.8
185649 1802 T-3	15.1	X	175.39901	234.81224	214.26166	26.09214	0.2001793	0.17528263	3.1621087	20	6 16.6	20.8
185650 2608 T-3	16.6	X	65.23736	46.47496	252.27818	5.08543	0.2307420	0.27801423	2.3250093	20	12 9.4	20.0
185651 3043 T-3	17.5	X	209.50896	259.15295	145.02360	2.72353	0.2030225	0.26883458	2.3776393	20	5 24.7	21.3
185652 3199 T-3	16.0	X	76.08251	177.90528	182.07027	5.98961	0.0876198	0.21184355	2.7869288	20	—	—
185653 3442 T-3	15.7	X	154.78394	22.10302	24.15539	6.77383	0.1764083	0.17329451	3.1862475	20	4 11.8	20.7
185654 3980 T-3	15.7	X	252.46157	159.99251	197.15377	1.42614	0.0658466	0.19987520	2.8970997	20	5 21.9	19.6
185655 4368 T-3	16.9	X	226.22916	261.55185	122.05878	3.28259	0.2006788	0.26905295	2.3763526	20	5 13.9	20.6
185656 1981 ET ₃₅	15.3	X	112.67890	8.13152	229.31072	9.51698	0.0687533	0.18778006	3.0202048	20	10 11.8	19.8
185657 1992 WL ₆	15.6	X	207.38085	256.29540	58.72134	15.47183	0.1062279	0.22707481	2.6608685	20	2 11.5	20.0
185658 1993 FG ₃	17.7	X	179.91008	262.28760	225.32791	1.70418	0.1624492	0.26801535	2.3824818	20	8 14.4	21.4
185659 1993 FT ₄₅	15.3	X	186.07805	39.17050	178.38260	12.78195	0.0362403	0.20312520	2.8661143	20	12 13.1	19.6
185660 1993 RE ₄	15.6	X	241.88418	7.46766	344.69569	5.02629	0.1760629	0.17193367	3.2030380	20	4 21.1	20.6
185661 1993 TY ₂₃	16.3	X	222.10401	179.67651	182.77454	5.05231	0.2216881	0.24396496	2.5365947	20	4 12.9	20.4
185662 1994 AG ₁₃	15.8	X	218.25503	265.79737	78.88269	4.52620	0.1391245	0.23331976	2.6131743	20	3 24.3	19.9
185663 1994 EE	17.0	X	12.69659	256.00340	144.69970	4.82605	0.1216408	0.28981253	2.2614723	20	—	—
185664 1995 AW ₁	16.6	X	283.57933	209.96259	108.93824	5.32697	0.0425619	0.24730898	2.5136769	20	5 15.7	19.8
185665 1995 CS ₂	16.5	X	32.23313	139.05708	291.96454	3.46051	0.1587660	0.23170614	2.6252925	20	—	—
185666 1995 FT ₉	12.9	X	341.26854	87.23307	169.17907	14.23103	0.0974404	0.08124972	5.2794435	20	5 15.2	19.5
185667 1995 FY ₁₁	16.3	X	216.14927	309.75920	15.59961	3.63208	0.1867715	0.23234637	2.6204676	20	2 25.5	20.6
185668 1995 MF ₄	17.6	X	181.64592	69.82816	211.18233	4.57433	0.1723897	0.29544823	2.2326216	20	—	—
185669 1995 MN ₆	15.5	X	250.83303	219.92503	92.23685	19.43774	0.2791260	0.22934908	2.6432488	20	3 11.7	20.4
185670 1995 RS	17.1	X	141.92943	230.86178	91.86991	6.56875	0.2188152	0.29353517	2.2423115	20	—	—
185671 1995 SC ₂₀	17.2	X	279.78017	217.89189	178.19785	1.02852	0.1849122	0.27216701	2.3581915	20	8 5.5	19.7
185672 1995 SZ ₂₅	16.3	X	56.85406	42.18376	276.85510	0.86343	0.0748892	0.20068595	2.8892918	20	11 21.5	20.3
185673 1995 SD ₃₂	18.0	X	162.06820	110.68174	173.80755	4.41024	0.2122648	0.29263659	2.2468994	20	—	—
185674 1995 SM ₆₈	17.5	X	81.36923	342.07718	358.51183	2.49629	0.1634435	0.28783365	2.2718257	20	—	—
185675 1995 SN _{79</}												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185681 1996 AB ₁₃	15.4	X	77.14985	357.60180	240.64975	6.58309	0.1141336	0.18137230	3.0909270	20	9 5.8	20.0
185682 1996 JR ₁₆	17.1	X	30.86378	298.21623	208.62783	13.80017	0.0695508	0.24149203	2.5538821	20	2 20.4	20.5
185683 1996 ML ₁	16.3	X	272.24009	206.43550	102.28820	10.89628	0.0812740	0.24337481	2.5406936	20	4 14.9	19.9
185684 1996 RX ₅	15.8	X	219.69850	161.62242	176.14066	8.28790	0.1676497	0.23221839	2.6214303	20	3 13.6	19.9
185685 1996 TP ₂₇	16.4	X	296.15176	1.21815	127.12229	4.76468	0.0468350	0.21297314	2.7770657	20	—	—
185686 1996 VY ₁₇	16.3	X	353.75431	352.18881	62.67399	4.18939	0.0825623	0.20912250	2.8110520	20	12 31.5	19.8
185687 1996 XP ₁₆	16.9	X	230.21755	104.61092	62.41505	8.03854	0.0553868	0.28998194	2.2605915	20	12 22.1	19.5
185688 1997 CC ₆	16.2	X	144.04301	3.34263	125.61694	8.03839	0.3189800	0.18382863	3.0633312	20	7 15.9	21.8
185689 1997 GR ₇	15.0	X	56.75707	121.57542	39.12332	27.51250	0.1628085	0.17201699	3.2020037	20	5 7.8	19.2
185690 1997 GB ₉	16.8	X	149.21158	293.24627	267.05893	1.37464	0.1076956	0.27376608	2.3489997	20	10 19.5	20.1
185691 1997 GT ₁₀	17.2	X	126.77330	53.64080	182.25740	1.97381	0.1723597	0.27394098	2.3479997	20	11 12.9	20.9
185692 1997 GY ₃₁	16.8	X	35.05574	263.62298	53.80511	22.95055	0.0878628	0.35687841	1.9684416	20	11 26.5	18.9
185693 1997 HV ₃	12.8	X	257.44430	114.58204	217.42743	16.18132	0.1246740	0.08338804	5.1887994	20	4 22.9	19.8
185694 1997 TF ₁₆	16.6	X	70.14890	278.04244	171.79144	4.43819	0.2077739	0.23430108	2.6058727	20	2 28.3	19.4
185695 1997 US ₁₂	16.9	X	36.96086	60.61905	24.34606	2.41526	0.0655717	0.22806811	2.6531370	20	—	—
185696 1997 WJ ₄	15.7	X	351.03040	147.00636	45.04886	12.71913	0.1150653	0.23497914	2.6008572	20	2 28.5	18.9
185697 1997 WO ₉	16.5	X	315.18814	63.49578	82.69590	4.73416	0.1552007	0.22234240	2.6984924	20	—	—
185698 1998 BT ₂₇	16.6	X	62.77390	265.36777	109.89954	3.08270	0.0844779	0.21664179	2.7456251	20	—	—
185699 1998 BF ₃₉	16.7	X	75.86816	87.67131	334.44533	1.22402	0.0633523	0.22338082	2.6901230	20	1 13.7	19.9
185700 1998 DT ₆	16.0	X	103.89121	149.78857	217.72754	5.64213	0.0246918	0.218235303	2.7322456	20	—	—
185701 1998 FB ₇₃	16.7	X	275.57630	154.99857	25.31107	6.00877	0.1476791	0.29886150	2.2155900	20	—	—
185702 1998 HK ₃	17.9	X	278.61374	267.62731	27.11403	24.69979	0.2999803	0.39873223	1.8281640	20	3 4.6	21.0
185703 1998 KW	15.2	X	97.45096	242.54852	78.08072	14.69709	0.3309488	0.19610192	2.9341444	20	—	—
185704 1998 OD ₈	16.3	X	5.06039	83.80958	277.75705	3.54593	0.2609086	0.27486081	2.3427584	20	12 25.3	18.8
185705 1998 QD ₂₄	16.6	X	67.41921	97.51416	249.82297	3.66373	0.1945350	0.28123549	2.3072216	20	—	—
185706 1998 QX ₆₉	16.1	X	28.37451	58.25924	257.67482	5.04399	0.1919870	0.27378996	2.3488631	20	11 13.8	18.9
185707 1998 QR ₇₇	16.6	X	18.33323	120.58792	218.23562	5.87468	0.2496766	0.27362527	2.3498055	20	12 11.1	19.3
185708 1998 QU ₉₅	14.7	X	0.67212	126.35353	203.70442	26.30840	0.1796536	0.17978925	3.1090442	20	9 20.8	18.4
185709 1998 RM ₁₄	14.9	X	226.64010	221.01343	160.12968	5.12698	0.0825701	0.16860714	3.2450302	20	5 21.9	19.8
185710 1998 RQ ₂₅	16.5	X	283.88997	11.89365	3.90115	4.53901	0.1726605	0.26539177	2.3981578	20	7 15.7	19.2
185711 1998 RB ₇₀	16.7	X	333.97026	317.80801	39.34443	3.71242	0.1905037	0.26905664	2.3763309	20	10 2.0	18.3
185712 1998 RH ₇₀	16.2	X	248.31244	315.78923	91.22046	3.78540	0.1904780	0.26238204	2.4164621	20	7 7.1	19.6
185713 1998 SC ₃	16.6	X	46.45082	195.00752	158.10957	10.19456	0.1988420	0.27776573	2.3263958	20	—	—
185714 1998 SU ₆	14.5	X	5.63743	125.15573	183.79127	26.08626	0.2863317	0.17748327	3.1359161	20	9 14.9	17.6
185715 1998 SJ ₁₁	16.7	X	44.54725	220.00315	114.82634	5.61099	0.1516006	0.27556129	2.3387865	20	12 24.4	19.9
185716 1998 SF ₃₅	17.8	X	254.30755	253.77792	218.59452	35.18472	0.2738675	0.45051381	1.6852486	20	12 3.8	18.2
185717 1998 SB ₅₂	17.0	X	111.25600	270.02129	353.29259	2.90472	0.1822503	0.27704921	2.3304052	20	12 2.7	20.7
185718 1998 SY ₆₄	16.4	X	220.57952	251.39896	147.23623	3.23528	0.1916249	0.25685255	2.4510197	20	5 28.5	20.3
185719 1998 SV ₈₀	17.0	X	66.89806	60.81455	252.58718	3.45626	0.2536713	0.27747914	2.3279974	20	12 30.3	20.7
185720 1998 SG ₈₉	17.3	X	51.92703	34.87287	290.21340	1.89423	0.1795518	0.27627131	2.3347776	20	12 23.6	20.6
185721 1998 SS ₀₂	16.3	X	252.89020	36.56282	3.07053	6.27653	0.1262865	0.26218746	2.4176575	20	7 13.0	19.5
185722 1998 SF ₀₃	16.9	X	252.44300	180.44029	190.46827	4.31713	0.1426056	0.25971883	2.4329532	20	5 30.3	20.4
185723 1998 SB ₉₉	16.7	X	319.93031	130.43807	197.13677	1.53309	0.1968072	0.26595233	2.3947868	20	8 6.3	18.6
185724 1998 SN ₁₀₁	16.4	X	285.51582	147.41166	196.77267	8.11691	0.2267363	0.26156002	2.4215223	20	5 23.4	19.4
185725 1998 SZ ₁₁₉	17.0	X	230.42928	221.13194	180.02091	2.29727	0.2067143	0.25915701	2.4364682	20	6 8.6	20.9
185726 1998 SR ₁₄₀	16.8	X	94.80888	110.78225	206.14602	7.45092	0.3345415	0.28098664	2.3085836	20	—	—
185727 1998 SN ₁₅₈	16.6	X	241.89148	353.17079	8.87749	6.83845	0.1859214	0.25710511	2.4494143	20	4 29.7	20.5
185728 1998 UZ ₃	16.7	X	261.20327	20.35915	1.94120	3.72975	0.1205647	0.26040972	2.4286481	20	6 29.3	19.9
185729 1998 UN ₂₅	16.8	X	46.86156	264.75518	75.53223	4.78415	0.1932599	0.27477607	2.3432400	20	—	—
185730 1998 UR ₃₅	16.9	X	355.92782	256.23030	101.77281	4.53986	0.2223264	0.27112070	2.3642547	20	11 27.2	18.9
185731 1998 VO ₅	16.1	X	352.87034	292.67866	49.69664	8.61612	0.3248398	0.26860582	2.3789890	20	11 13.6	17.6
185732 1998 WV ₁₁	16.6	X	276.29629	194.70360	173.06835	2.98890	0.2265776	0.26004400	2.4309246	20	6 12.3	19.6
185733 Luigicolzani	15.9	X	340.47340	246.99856	137.94604	7.82341	0.2292322	0.22355502	2.6887253	20	11 19.7	18.3
185734 1998 WQ ₃₂	16.3	X	21.21452	276.82928	57.70575	12.17727	0.2983728	0.27128416	2.3633049	20	12 14.8	19.3
185735 1998 XD ₁₀	16.4	X	329.21777	246.58892	75.05858	7.34587	0.1227308	0.26022143	2.4298195	20	7 23.7	18.8
185736 1998 XA ₂₇	15.8	X	2.25372	271.32076	86.58959	23.49671	0.2840007	0.26768406	2.3844472	20	12 17.5	17.9
185737 1998 YA ₁₇	16.6	X	354.19486	233.53605	276.54996	3.00405	0.0913610	0.23300329	2.6155399	20	1 3.4	19.5
185738 1999 CQ ₆₅	15.5	X	66.52167	236.50162	193.93391	5.10555	0.2529799	0.23414838	2.6070055	20	1 31.4	18.1
185739 1999 CW ₈₀	15.7	X	15.21289	214.87497	205.37099	7.91133	0.2387053	0.22508553	2.6765231	20	—	—
185740 1999 CB ₁₀₇	16.0	X	283.37593	288.08910	272.50151	8.06996	0.2051161	0.22702265	2.6612760	20	—	—
185741 1999 CA ₁₄₅	16.6	X	146.30287	55.21602	311.11604	3.58589	0.0900505	0.23425331	2.6062269	20	2 3.2	20.2
185742 1999 EE ₁₃	17.0	X	288.57683	82.07667	143.25999	2.97973	0.1390355	0.23020156	2.6367191	20	1 6.9	20.8
185743 1999 FP ₇₄	16.0	X	172.10678	144.47383	176.33950	13.78885	0.1047413	0.22462815	2.6801551	20	1 7.6	20.3
185744 Hogan	15.8	X	195.63000	68.67908	14.38661	13.49297	0.2423339	0.20114317	2.8849117	20	6 28.6	21.1
185745 1999 HM ₁₁	16.4	X	210.23919	224.17104	21.16303	16.32395	0.2677004	0.21705506	2.7421388	20	—	—
185746 1999 LO ₁	17.2	X	116.17894	305.93786	68.50600	3.97031	0.3306863	0.30969726	2.1636042	20	2 1.8	19.8
185747 1999 LZ ₂₉	16.8	X	153.57717	107.46178	167.61251	6.63949	0.0107293	0.21135105	2.7912567	20	—	—
185748 1999 NX ₄	15.3	X	77.96407	206.49051	153.93811	16.13855	0.2812859	0.20202682	2.8764933	20	—	—
185749 1999 RT ₅₃	15.6	X	43.11906	197.54101	164.16708	9.07268	0.2004375	0.19815179	2.9138737	20	—	—
185750 1999 RT ₇₄	15.9	X	344.25372	273.99709	94.38900	3.70069	0.2110519	0.18953724	3.0015092	20	10 20.6	18.8
185751 1999 RE ₁₀₉	16.4	X	317.23147	135.09845	270.69882	4.73331	0.1262534	0.28581464	2.2825120	20	11 13.6	18.4
185752 1999 RC ₁₆₅	16.0	X	140.36954	162.98000	205.33395	3.81530	0.1026603	0.30608546	2.1805912	20	1 19.5	19.3
185753 1999 RM ₁₉₃	17.0	X	237.70879	215.19143	174.57994	5.80430	0.2114331	0.27183893	2.3600884	20	6 1.1	20.6
185754 1999 RU ₂₃₃	15.1	X	32.50007	290.67717	45.70478	11.36750	0.0994413	0.1				

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185761 1999 <i>TN</i> ₇₃	15.3	X	69.78991	204.80105	353.93143	9.41461	0.0638621	0.17898935	3.1183002	20	7 4.9	19.7
185762 1999 <i>TP</i> ₇₈	15.6	X	297.88226	303.59917	22.86047	4.96684	0.1358539	0.17801772	3.1296364	20	5 29.9	19.9
185763 1999 <i>TK</i> ₈₃	16.2	X	104.32458	62.49438	87.10699	2.14062	0.0295386	0.17427018	3.1743440	20	6 9.5	20.8
185764 1999 <i>TL</i> ₉₂	14.9	X	252.24014	186.73135	178.53247	16.90059	0.1862868	0.17592607	3.1543939	20	5 20.2	20.0
185765 1999 <i>TV</i> ₁₀₆	15.5	X	327.35989	170.29603	205.28464	13.26746	0.2280772	0.18795739	3.0183050	20	9 16.1	18.6
185766 1999 <i>TK</i> ₁₁₄	15.2	X	300.60236	194.56357	189.20647	8.47342	0.1779859	0.18351123	3.0668623	20	8 11.3	19.0
185767 1999 <i>TF</i> ₁₃₆	15.6	X	246.28008	126.34905	223.74285	3.78315	0.1681373	0.17309754	3.1886642	20	4 25.1	20.5
185768 1999 <i>TZ</i> ₁₃₇	16.6	X	285.91145	53.26019	15.45108	6.79331	0.1686593	0.28121478	2.3073348	20	10 11.4	18.5
185769 1999 <i>TG</i> ₁₆₄	14.8	X	311.60677	276.84094	88.23438	10.29497	0.1581747	0.18085668	3.0967990	20	8 12.3	18.6
185770 1999 <i>TE</i> ₁₆₆	17.3	X	317.28035	165.96184	242.65622	3.56367	0.1175919	0.28448204	2.2896344	20	11 18.4	19.1
185771 1999 <i>TT</i> ₁₇₀	16.9	X	259.63038	197.33179	196.98042	5.95111	0.1955661	0.27407103	2.3472569	20	7 2.3	20.0
185772 1999 <i>TH</i> ₁₇₆	17.1	X	120.53883	301.92422	30.70518	2.68864	0.1986642	0.29733396	2.2231719	20	—	—
185773 1999 <i>TO</i> ₂₃₂	15.1	X	290.03586	339.13610	43.96504	19.06426	0.2121514	0.18112181	3.0937766	20	7 26.5	19.5
185774 1999 <i>TK</i> ₂₃₆	16.8	X	16.34939	300.24492	114.62546	6.95257	0.1647702	0.29125496	2.2539992	20	—	—
185775 1999 <i>TE</i> ₂₄₁	15.6	X	289.47872	296.27290	79.03768	10.35505	0.2022127	0.17969684	3.1101100	20	7 12.2	19.7
185776 1999 <i>TW</i> ₂₆₉	15.1	X	28.95289	80.14716	257.78353	7.68838	0.1116193	0.19057555	2.9905973	20	11 11.5	19.0
185777 1999 <i>TY</i> ₂₉₀	16.5	X	11.08942	227.33655	170.71737	8.12703	0.1795801	0.28762598	2.2729191	20	—	—
185778 1999 <i>TL</i> ₂₉₁	15.2	X	248.11641	274.68093	95.85668	6.85740	0.1774351	0.17308075	3.1888704	20	5 22.2	20.1
185779 1999 <i>UO</i> ₂₀	17.6	X	238.55019	296.51760	176.94970	3.40564	0.2081693	0.28021350	2.3128280	20	9 24.3	20.6
185780 1999 <i>UA</i> ₃₄	15.5	X	54.62996	65.04995	214.04087	9.85745	0.1219768	0.18536862	3.0463414	20	10 2.4	19.7
185781 1999 <i>US</i> ₄₀	16.1	X	62.94785	189.42911	66.15772	2.99346	0.0205704	0.18365499	3.0652617	20	9 1.5	20.3
185782 1999 <i>UG</i> ₄₃	14.8	X	310.52180	126.07195	236.63743	14.47774	0.0973230	0.18122084	3.0926489	20	8 5.4	19.1
185783 1999 <i>UP</i> ₄₈	17.3	X	175.29551	287.95590	41.68644	7.15074	0.1967193	0.30357443	2.1925992	20	1 20.7	20.7
185784 1999 <i>UK</i> ₅₄	15.8	X	341.67069	102.76838	189.45249	16.57416	0.1221671	0.18120995	3.0927728	20	6 25.2	19.9
185785 1999 <i>UY</i> ₁₈	15.5	X	306.31085	94.97520	224.79566	8.05212	0.0346341	0.17480822	3.1678272	20	6 16.7	19.9
185786 1999 <i>VU</i> ₂₄	15.8	X	301.46492	4.34765	67.76633	26.23999	0.2196503	0.28060031	2.3107020	20	11 21.0	17.2
185787 1999 <i>VH</i> ₃₂	14.8	X	320.95582	114.96853	234.43983	11.62161	0.1087079	0.17890811	3.1192441	20	8 4.2	18.9
185788 1999 <i>VL</i> ₅₇	16.9	X	214.04075	60.91173	244.67016	4.71233	0.1808422	0.30606564	2.1806853	20	1 21.3	20.4
185789 1999 <i>VH</i> ₆₉	15.4	X	328.03102	108.08461	210.77604	4.69846	0.1383435	0.17811448	3.1285029	20	7 6.8	19.2
185790 1999 <i>VR</i> ₇₀	17.1	X	213.79755	52.01875	49.93548	9.25214	0.1461012	0.27343656	2.3508865	20	8 22.4	20.6
185791 1999 <i>VT</i> ₁₀₂	17.5	X	258.92776	217.51699	232.06033	2.41976	0.1413430	0.27850536	2.3222752	20	9 28.4	19.9
185792 1999 <i>VH</i> ₁₀₅	17.0	X	340.94489	2.38848	54.52083	4.05019	0.1343699	0.28566945	2.2832853	20	—	—
185793 1999 <i>VT</i> ₁₁₇	15.6	X	324.90565	294.68804	30.86331	4.28046	0.1029623	0.18047339	3.1011821	20	7 15.8	19.5
185794 1999 <i>VB</i> ₁₂₇	16.2	X	19.13954	256.80576	49.97620	3.85653	0.1020907	0.18550981	3.0447955	20	9 18.9	20.0
185795 1999 <i>VJ</i> ₁₄₃	17.4	X	167.75040	123.85521	214.01401	4.65005	0.2156733	0.30276366	2.1965119	20	1 22.5	20.7
185796 1999 <i>VA</i> ₁₅₁	15.1	X	337.07796	297.60526	37.83714	11.62070	0.0830974	0.17920260	3.1158258	20	8 23.9	19.2
185797 1999 <i>VL</i> ₁₅₂	15.4	X	238.76018	17.34015	352.46211	6.71012	0.1829212	0.17568093	3.1573276	20	5 7.7	20.6
185798 1999 <i>VU</i> ₁₅₅	16.9	X	209.16388	65.79315	58.12532	3.39434	0.1805075	0.27415831	2.3467587	20	9 9.6	20.3
185799 1999 <i>VW</i> ₁₅₅	16.4	X	305.40269	1.11814	59.37118	11.80911	0.1870333	0.28056505	2.3108957	20	11 10.9	17.9
185800 1999 <i>VF</i> ₁₆₄	14.8	X	331.46273	92.19474	240.69900	8.60810	0.0803749	0.17869999	3.1216655	20	8 2.3	18.9
185801 1999 <i>VF</i> ₁₆₄	16.7	X	250.13042	49.30594	47.27016	12.96910	0.1235076	0.27797966	2.3252021	20	10 5.3	19.6
185802 1999 <i>VA</i> ₁₆₆	15.2	X	331.05345	110.06588	224.92610	13.55087	0.1011752	0.18034416	3.1026634	20	8 1.6	19.3
185803 1999 <i>VR</i> ₁₇₄	15.7	X	81.48701	152.81313	128.12141	15.45832	0.1096711	0.17531573	3.1617107	20	7 3.2	20.4
185804 1999 <i>VR</i> ₁₇₅	17.1	X	18.05542	115.49599	280.34464	1.82866	0.0494057	0.28983382	2.2613616	20	—	—
185805 1999 <i>VS</i> ₁₉₅	17.2	X	88.83367	157.02706	208.00122	6.47484	0.1581789	0.29603418	2.2296745	20	—	—
185806 1999 <i>VF</i> ₁₉₇	15.2	X	318.23166	254.99202	96.22927	7.68832	0.2295061	0.18206747	3.0830541	20	7 24.8	18.5
185807 1999 <i>VL</i> ₂₀₆	17.2	X	43.18003	338.45191	27.71582	2.39470	0.2343673	0.28985011	2.2612769	20	—	—
185808 1999 <i>VF</i> ₂₁₃	16.1	X	303.50581	264.49922	68.95609	3.21925	0.1676248	0.17551765	3.1592853	20	6 12.4	20.0
185809 1999 <i>VU</i> ₂₁₈	15.6	X	112.28376	243.74320	197.85170	14.26375	0.2707385	0.16464468	3.2968884	20	4 25.2	20.9
185810 1999 <i>VH</i> ₂₂₀	15.6	X	214.27768	240.37077	202.72437	9.68981	0.0981226	0.18033206	3.1028022	20	7 20.0	20.4
185811 1999 <i>VA</i> ₂₃₀	16.9	X	83.49925	108.92998	240.43703	5.16343	0.0557281	0.29117613	2.2544064	20	—	—
185812 1999 <i>XJ</i> ₅	15.2	X	282.87787	287.60306	85.75834	6.40967	0.1710475	0.17654181	3.1470550	20	7 4.8	19.4
185813 1999 <i>XX</i> ₆₀	17.0	X	235.99722	328.04968	95.28723	3.26962	0.1780152	0.27103741	2.3647391	20	7 17.4	20.4
185814 1999 <i>XH</i> ₆₂	16.3	X	130.10841	73.38798	241.47766	4.47978	0.1359951	0.29312346	2.2444107	20	—	—
185815 1999 <i>XH</i> ₁₃₉	15.2	X	75.08544	290.22363	25.98410	8.38434	0.1729106	0.19499214	2.9452669	20	12 18.2	19.8
185816 1999 <i>XD</i> ₁₄₆	15.4	X	213.52332	176.33649	234.80104	4.41053	0.1482033	0.17116715	3.2125934	20	6 8.4	20.6
185817 1999 <i>XP</i> ₁₉₇	15.2	X	17.01005	82.48821	34.89762	9.35158	0.1763320	0.24512826	2.5285631	20	—	—
185818 1999 <i>XY</i> ₂₁₆	17.6	X	245.70068	115.44861	298.10749	0.51389	0.1641872	0.26875911	2.3780843	20	7 16.8	20.8
185819 1999 <i>XU</i> ₂₂₁	16.8	X	254.71831	5.99132	58.14472	8.27283	0.2556051	0.27347857	2.3506457	20	8 1.7	20.1
185820 1999 <i>XW</i> ₂₅₅	17.0	X	128.78103	233.41926	328.43524	0.82931	0.1322165	0.26941140	2.3742443	20	9 30.5	20.4
185821 1999 <i>YL</i> ₁₅	15.7	X	320.69280	241.70108	101.23649	4.99200	0.0892536	0.17709848	3.1404568	20	8 2.2	19.6
185822 2000 <i>AU</i> ₄	16.5	X	205.64016	11.86242	69.58729	8.45806	0.1693192	0.26713146	2.3877344	20	7 10.7	20.2
185823 2000 <i>AA</i> ₂₈	16.8	X	241.89182	338.07060	93.65032	3.40959	0.1742504	0.27053011	2.3676944	20	8 6.0	20.0
185824 2000 <i>AW</i> ₃₇	16.7	X	271.35782	333.50030	100.96278	8.95576	0.2225933	0.27493291	2.3423488	20	9 17.4	19.3
185825 2000 <i>AN</i> ₈₆	17.0	X	325.79126	287.22808	136.68558	2.44365	0.2492831	0.28138295	2.3064154	20	—	—
185826 2000 <i>AO</i> ₁₀₄	16.1	X	10.66400	249.00546	159.87973	5.13576	0.1123654	0.28714793	2.2754411	20	—	—
185827 2000 <i>AA</i> ₁₃₄	16.7	X	41.28802	287.17377	94.22887	9.90967	0.2537947	0.28842646	2.2687117	20	—	—
185828 2000 <i>AW</i> ₁₅₃	15.0	X	243.58814	329.78632	68.25138	12.30153	0.2037759	0.17223251	3.1993319	20	6 15.7	20.1
185829 2000 <i>AZ</i> ₁₇₀	16.8	X	5.95274	259.51535	156.36897	6.29614	0.1638562	0.28753270	2.2734106	20	—	—
185830 2000 <i>AB</i> ₁₈₁	16.3	X	327.05871	186.58591	224.77153	7.84250	0.1903949	0.27990090	2.3145498	20	12 16.9	18.1
185831 2000 <i>AO</i> ₂₁₉	16.6	X	105.79840	154.36323	104.98447	7.67427	0.0890386	0.27458405	2.3443323	20	11 20.7	19.9
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ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185841 2000 <i>CJ</i> ₈₁	15.9	X	291.51471	210.59065	322.21975	12.01722	0.1694620	0.23626738	2.5913945	20	—	—
185842 2000 <i>CH</i> ₉₈	17.4	X	109.85005	261.72142	250.15575	0.56011	0.1281470	0.25755979	2.4465307	20	7 4.2	20.8
185843 2000 <i>CW</i> ₁₁₃	16.9	X	148.39126	190.50927	307.72213	1.92515	0.1313507	0.26361546	2.4089187	20	7 28.6	20.6
185844 2000 <i>CY</i> ₁₃₆	17.1	X	220.93661	243.38032	148.19261	2.91561	0.1869016	0.25890153	2.4380708	20	5 20.1	21.0
185845 2000 <i>DT</i> ₄	16.3	X	90.01953	149.60355	61.85704	4.85249	0.1771057	0.26148758	2.4219695	20	9 8.7	19.8
185846 2000 <i>DB</i> ₃₀	16.9	X	166.24501	280.79805	159.89082	9.61043	0.2838419	0.25959843	2.4337054	20	6 5.1	21.4
185847 2000 <i>DG</i> ₄₈	16.6	X	236.33535	78.77599	352.86228	2.33364	0.0739325	0.26446093	2.4037818	20	8 12.4	19.6
185848 2000 <i>DQ</i> ₅₀	17.1	X	75.59098	46.32030	173.89343	2.36649	0.1656711	0.25965274	2.4333660	20	8 30.3	20.2
185849 2000 <i>DK</i> ₆₆	16.6	X	60.10738	253.83979	342.07747	6.42853	0.0792243	0.26033897	2.4290881	20	8 19.7	19.4
185850 2000 <i>DZ</i> ₈₅	16.5	X	163.90032	39.18357	101.00260	7.12941	0.0700390	0.26402871	2.4064044	20	8 18.9	19.9
185851 2000 <i>DP</i> ₁₀₇	18.2	X	153.59250	289.76467	358.68110	8.67126	0.3766456	0.61780086	1.3653282	20	—	—
185852 2000 <i>EV</i> ₁	16.5	X	237.14054	244.39851	177.62716	6.40817	0.1139424	0.26412760	2.4058037	20	7 23.1	19.8
185853 2000 <i>ER</i> ₇₀	16.9	X	8.91374	338.66246	111.60692	36.92269	0.3111653	0.38942046	1.8571923	20	—	—
185854 2000 <i>EU</i> ₁₀₆	15.3	X	121.87703	100.35337	198.38727	21.32541	0.3736299	0.27361543	2.3498618	20	—	—
185855 2000 <i>EX</i> ₁₁₄	16.9	X	188.07023	119.43812	302.17263	1.73984	0.1878337	0.25764231	2.4460083	20	5 27.5	20.9
185856 2000 <i>ER</i> ₁₂₉	15.6	X	326.78201	66.86725	3.74721	14.61104	0.1139443	0.22712071	2.6605100	20	12 17.0	18.9
185857 2000 <i>EZ</i> ₁₆₈	16.2	X	309.25527	100.27223	45.45051	11.28537	0.2386136	0.23535489	2.5980882	20	—	—
185858 2000 <i>GB</i>	16.8	X	28.21071	225.04819	19.81769	3.63634	0.1376464	0.25363185	2.4717252	20	7 21.3	19.3
185859 2000 <i>GH</i> ₂₆	16.4	X	325.81938	150.16553	190.57094	6.04519	0.1313865	0.25825323	2.4421493	20	8 11.8	18.7
185860 2000 <i>GT</i> ₂₉	16.4	X	202.58431	124.15283	197.76253	13.01569	0.0832724	0.23900365	2.5715780	20	2 4.2	20.5
185861 2000 <i>GU</i> ₁₅₀	14.5	X	240.64806	301.52441	195.55441	12.47956	0.1482271	0.12422294	3.9780311	20	10 12.0	20.3
185862 2000 <i>GO</i> ₁₆₃	16.0	X	73.73269	98.57910	122.79865	14.15080	0.1360412	0.25706404	2.4496751	20	8 28.2	19.3
185863 2000 <i>GK</i> ₁₆₉	17.3	X	145.26365	82.50052	198.82643	21.28263	0.0478610	0.37305266	1.9111259	20	—	—
185864 2000 <i>HJ</i> ₉	16.5	X	277.05851	52.05113	215.35390	12.86562	0.1935533	0.23828529	2.5767437	20	2 3.9	20.7
185865 2000 <i>HG</i> ₃₉	16.1	X	131.46415	190.28814	203.48985	13.91753	0.0819575	0.23912189	2.5707301	20	2 14.8	19.9
185866 2000 <i>HL</i> ₉₂	15.4	X	201.77451	83.14652	131.88619	13.17923	0.1267880	0.22435805	2.6823057	20	12 22.7	19.5
185867 2000 <i>HL</i> ₉₅	16.4	X	256.52052	316.12898	52.58881	7.13409	0.0996537	0.25207538	2.4818894	20	6 5.9	19.7
185868 2000 <i>JG</i> ₃	17.0	X	313.15726	32.65399	77.41812	23.42572	0.0827834	0.37242131	1.9132851	20	—	—
185869 2000 <i>JL</i> ₈	16.3	X	321.81499	85.78293	182.20593	14.56657	0.1126946	0.24463006	2.5319949	20	4 21.2	19.3
185870 2000 <i>JL</i> ₁₀	17.3	X	268.96036	300.71148	222.96142	20.88163	0.0212441	0.37285256	1.9118096	20	—	—
185871 2000 <i>JY</i> ₂₇	15.9	X	256.37116	107.61964	46.61708	10.77264	0.2240223	0.22492581	2.6777900	20	11 26.9	19.4
185872 2000 <i>KZ</i>	17.0	X	265.94423	213.10660	63.21429	0.67047	0.1319260	0.23759567	2.5817273	20	2 14.7	20.7
185873 2000 <i>KH</i> ₃	16.4	X	161.48212	129.67115	157.95523	24.33021	0.0588100	0.37281617	1.9119340	20	—	—
185874 2000 <i>KW</i> ₄	16.6	X	172.38294	126.45755	72.42801	24.30898	0.0309058	0.36214428	1.9493132	20	12 8.9	18.3
185875 2000 <i>LR</i> ₂₃	14.9	X	26.95703	116.18243	247.83377	22.24697	0.2799035	0.26071924	2.4267256	20	—	—
185876 2000 <i>NF</i> ₁₈	16.1	X	266.11483	238.82071	76.58643	4.71883	0.2860025	0.23578245	2.5949465	20	3 20.9	20.4
185877 2000 <i>OB</i> ₈	15.0	X	200.05802	150.96254	206.39290	13.43117	0.2758697	0.22824914	2.6517339	20	3 17.6	19.9
185878 2000 <i>OD</i> ₂₂	15.1	X	230.24109	204.77445	147.94584	27.24617	0.2424731	0.23488993	2.6015157	20	4 12.6	20.0
185879 2000 <i>OP</i> ₃₈	15.7	X	220.02033	156.43227	178.25612	14.24650	0.2725529	0.23090222	2.6313825	20	3 6.3	20.4
185880 2000 <i>OQ</i> ₄₁	15.6	X	274.65314	106.31809	176.52406	15.51948	0.1446429	0.23282679	2.6168616	20	2 29.6	19.6
185881 2000 <i>OQ</i> ₄₄	15.6	X	220.67265	115.03558	229.23142	4.18894	0.3424688	0.23054362	2.6341104	20	3 15.4	20.6
185882 2000 <i>QC</i> ₁₅	15.6	X	292.93303	134.14431	144.70708	14.23892	0.1567070	0.23504452	2.6003749	20	3 19.8	19.2
185883 2000 <i>QC</i> ₄₃	16.3	X	272.10871	91.12167	177.07865	2.81067	0.2582626	0.23158582	2.6262016	20	1 29.5	20.7
185884 2000 <i>QX</i> ₄₈	16.0	X	84.93056	206.71128	159.80692	6.61208	0.1196558	0.21436604	2.7650228	20	—	—
185885 2000 <i>QN</i> ₆₂	15.9	X	150.86162	289.17938	28.57651	8.11177	0.2397786	0.21803073	2.7339522	20	—	—
185886 2000 <i>QW</i> ₁₅₆	16.1	X	261.40784	51.84231	245.45606	6.45648	0.2270356	0.23359495	2.6111215	20	2 23.9	20.4
185887 2000 <i>QR</i> ₁₅₈	15.5	X	223.77890	85.51752	225.31654	8.26451	0.1146762	0.22771925	2.6558460	20	2 13.0	19.7
185888 2000 <i>QR</i> ₁₇₆	15.9	X	131.70804	202.20557	170.04418	16.60249	0.2044085	0.22107505	2.7087955	20	2 7.3	20.2
185889 2000 <i>QD</i> ₁₉₂	15.7	X	177.31803	306.84283	13.85277	12.61100	0.1803246	0.22234879	2.6984406	20	1 22.2	20.3
185890 2000 <i>QY</i> ₂₀₈	16.2	X	110.43850	196.85590	179.71908	3.31935	0.2053055	0.21855826	2.7295511	20	1 22.4	19.9
185891 2000 <i>QP</i> ₂₂₄	15.6	X	158.81928	145.19595	199.00369	12.07243	0.2834972	0.22268246	2.6957444	20	2 2.6	20.5
185892 2000 <i>QT</i> ₂₂₉	16.0	X	167.61042	158.97425	165.57370	9.78082	0.1181341	0.22024704	2.7155804	20	1 9.8	20.3
185893 2000 <i>QE</i> ₂₃₂	16.2	X	70.93124	131.61277	215.81313	3.52568	0.1123265	0.20908572	2.8113816	20	—	—
185894 2000 <i>QF</i> ₂₃₂	15.9	X	157.41699	128.30448	197.77104	5.66862	0.0697038	0.21848285	2.7301792	20	—	—
185895 2000 <i>RC</i> ₁	15.4	X	213.88863	139.92555	177.09611	7.94066	0.2835246	0.22622473	2.6675301	20	2 10.5	20.4
185896 2000 <i>RD</i> ₁₃	15.4	X	144.12585	91.73117	236.34017	8.22481	0.1255247	0.21829393	2.7317541	20	—	—
185897 2000 <i>RS</i> ₁₆	15.8	X	66.76794	113.68257	195.95803	14.42073	0.1592282	0.20524092	2.8463835	20	12 4.0	20.2
185898 2000 <i>RE</i> ₄₈	14.8	X	90.42742	145.50656	226.21379	15.49928	0.2476856	0.21169356	2.7882452	20	—	—
185899 2000 <i>RC</i> ₈₀	15.7	X	191.11630	101.50091	209.44520	12.03718	0.1822119	0.22277622	2.6949879	20	1 16.1	20.4
185900 2000 <i>SV</i> ₁	15.8	X	174.22982	231.58534	77.57107	7.31714	0.0450235	0.21877575	2.7277418	20	—	—
185901 2000 <i>SU</i> ₁₀	15.6	X	23.33317	153.07068	203.17514	12.29487	0.0617583	0.20156131	2.8809204	20	11 24.7	19.5
185902 2000 <i>SH</i> ₃₄	15.8	X	130.70461	186.06789	168.49786	9.64765	0.1278837	0.21736682	2.7395163	20	1 8.4	19.9
185903 2000 <i>SH</i> ₆₁	16.2	X	79.02646	276.14169	82.50238	2.90747	0.1894816	0.21021736	2.8012831	20	—	—
185904 2000 <i>SP</i> ₇₁	15.9	X	294.29468	355.22246	37.33875	8.43931	0.2591646	0.19173576	2.9785208	20	8 6.6	19.6
185905 2000 <i>SM</i> ₉₀	15.2	X	108.45468	151.79925	226.49251	12.51932	0.1816490	0.21836950	2.7311239	20	1 16.3	19.1
185906 2000 <i>SF</i> ₉₄	12.6	X	299.03029	51.28216	235.39583	8.55151	0.0784254	0.08312116	5.1998998	20	4 23.2	19.3
185907 2000 <i>SZ</i> ₉₇	15.7	X	78.92063	127.89273	235.19675	4.38856	0.2152209	0.21092540	2.7950106	20	—	—
185908 2000 <i>SZ</i> ₁₁₇	16.0	X	80.44367	184.80182	184.97013	5.05888	0.1690306	0.21047178	2.7990251	20	—	—
185909 2000 <i>SG</i> ₁₂₉	16.0	X	192.49018	67.77515	227.42554	3.29154	0.2117877	0.22019093	2.7160417	20	1 2.5	20.5
185910 2000 <i>SR</i> ₁₈₁	16.2	X	79.51206	14.64617	333.51083	1.87410	0.1575873	0.21057685	2.7980940	20	—	—
185911 2000 <i>SC</i> ₁₈₃	16.2	X	112.14647	309.51512	8.06246	5.31935	0.0989950	0.20981478	2.8048652	20	—	—
185912 2000 <i>SN</i> ₁₈₃	15.3	X	205.34337	58.23274	23							

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
185921 2000 SN ₂₉₈	16.0	X	258.20531	193.19389	214.45190	12.77130	0.2288356	0.18837584	3.0138335	20	7 8.4	20.8
185922 2000 SR ₃₂₂	15.9	X	14.39479	249.28326	182.40491	8.67644	0.0635902	0.21151291	2.7898325	20	—	—
185923 2000 SG ₃₂₅	15.4	X	188.79401	255.96450	339.13159	8.30010	0.0701697	0.21072134	2.7968148	20	—	—
185924 2000 SX ₃₄₄	15.1	X	81.63458	279.98595	94.57916	13.88671	0.1597248	0.21315089	2.7755217	20	—	—
185925 2000 TN ₁₁	15.9	X	277.01508	203.13488	192.32311	12.56348	0.1619237	0.18993032	2.9973665	20	7 24.9	20.2
185926 2000 TE ₄₁	15.5	X	217.49829	43.57713	7.94920	14.52937	0.1276236	0.18589875	3.0405472	20	6 12.5	20.5
185927 2000 TU ₄₁	16.0	X	154.54858	237.68008	92.65829	6.26878	0.1670248	0.21879014	2.7276222	20	1 9.1	20.2
185928 2000 TJ ₄₃	15.6	X	336.80319	316.59367	76.68607	9.42951	0.1068046	0.20016458	2.8943068	20	11 8.8	19.0
185929 2000 TH ₅₉	15.4	X	237.29635	189.81066	110.14067	12.78996	0.2309417	0.22544509	2.6736765	20	2 12.5	20.0
185930 2000 TL ₆₇	15.6	X	248.92804	206.72843	210.24539	9.77588	0.0824610	0.18870518	3.0103258	20	7 28.4	20.1
185931 2000 UK ₂₇	15.7	X	113.85651	245.44086	110.13110	6.71737	0.2414772	0.21215736	2.7841800	20	1 7.2	19.6
185932 2000 UL ₄₉	14.8	X	144.51567	97.22579	230.17363	19.19680	0.1718702	0.21185407	2.7868366	20	—	—
185933 2000 UV ₅₉	15.4	X	201.48402	43.15030	5.09621	10.39368	0.1383419	0.18018273	3.1045162	20	5 22.1	20.5
185934 2000 UO ₈₂	15.4	X	135.91734	291.30471	41.68778	13.27551	0.2005509	0.21552736	2.7550814	20	—	—
185935 2000 UK ₁₀₈	15.5	X	134.38637	290.84474	76.40148	13.98322	0.2210376	0.21694701	2.7430493	20	2 12.3	20.0
185936 2000 VJ ₇	15.5	X	18.27423	108.94236	216.36340	5.34622	0.0922720	0.19487151	2.9464822	20	10 9.7	19.1
185937 2000 WM ₁₆	15.8	X	286.84031	0.82620	56.67427	3.81024	0.1936088	0.19087076	2.9875128	20	9 6.7	19.6
185938 2000 WF ₃₁	14.6	X	155.20629	237.57312	224.62431	16.72328	0.1658520	0.17630754	3.1498422	20	6 16.4	19.9
185939 2000 WA ₄₃	15.4	X	115.77005	268.20687	83.34943	9.87142	0.1658452	0.21077266	2.7963607	20	—	—
185940 2000 WU ₁₄₂	15.5	X	227.03724	235.39087	201.34273	20.83178	0.2696735	0.18353242	3.0666263	20	7 9.7	21.1
185941 2000 WD ₁₄₈	15.6	X	226.46251	330.17051	92.41872	8.35765	0.1263577	0.17933959	3.1142390	20	7 7.2	20.4
185942 2000 YO ₈₂	15.1	X	241.22825	328.68750	99.79590	11.40697	0.0875776	0.18312581	3.0711640	20	8 6.4	19.6
185943 2000 YB ₉₈	16.8	X	313.14398	57.22161	102.23838	3.42709	0.1411531	0.20367767	2.1969278	20	—	—
185944 2000 YA ₁₂₂	15.7	X	195.01167	270.17566	169.51352	14.67581	0.2756164	0.17598048	3.1537436	20	6 22.4	21.5
185945 2000 YD ₁₃₁	15.1	X	184.26428	350.68576	97.07806	11.83074	0.1900246	0.17494705	3.1661510	20	6 25.2	20.4
185946 2001 AT ₃₅	15.1	X	269.88631	345.61454	62.62910	7.63702	0.2107600	0.18347406	3.0672766	20	7 29.3	19.5
185947 2001 BU ₁₇	15.5	X	184.76565	2.40197	93.26038	6.74889	0.0940249	0.17566506	3.1575177	20	7 7.1	20.4
185948 2001 BE ₃₉	15.1	X	182.95170	344.95708	127.53178	14.63578	0.0786295	0.17623699	3.1506827	20	7 26.2	19.9
185949 2001 BN ₆₈	16.6	X	316.19832	351.36826	111.61974	5.29560	0.1601177	0.29522712	2.2337362	20	—	—
185950 2001 CH ₇	16.9	X	236.54590	200.77876	0.86237	2.92907	0.1133389	0.29536272	2.2330525	20	—	—
185951 2001 DE ₈	16.7	X	229.26924	125.94031	148.79257	8.31724	0.1586543	0.30330338	2.1939053	20	—	—
185952 2001 DJ ₃₃	16.0	X	111.31040	22.83351	97.55974	3.68412	0.1286031	0.26709406	2.3879573	20	5 24.5	19.1
185953 2001 DE ₄₂	16.5	X	243.51171	209.12643	335.25556	7.07512	0.0844720	0.29448351	2.2374949	20	—	—
185954 2001 DK ₄₄	16.8	X	297.64463	353.89481	144.66037	6.07555	0.1228502	0.29631133	2.2282840	20	—	—
185955 2001 DX ₅₅	17.4	X	180.22371	266.84774	336.01226	1.31171	0.1506966	0.29167654	2.2518271	20	—	—
185956 2001 DN ₆₆	16.6	X	300.64134	148.75429	323.48964	4.87932	0.0904212	0.29336181	2.2431949	20	—	—
185957 2001 DH ₆₇	16.4	X	323.90533	125.23201	329.23520	4.24016	0.1502533	0.29510550	2.2343499	20	—	—
185958 2001 EB ₁₉	16.5	X	146.17908	154.18419	165.50648	6.58049	0.1154901	0.29623628	2.2286603	20	—	—
185959 2001 FL ₇	17.0	X	283.37499	284.75007	148.90664	7.17550	0.1642761	0.28428845	2.2906738	20	10 19.2	19.1
185960 2001 FW ₇₀	16.9	X	70.84862	90.34758	124.99940	2.99642	0.1588736	0.26953105	2.3735416	20	8 18.5	20.0
185961 2001 FQ ₇₄	16.9	X	219.43900	86.47576	61.79322	4.70392	0.1112405	0.28406486	2.2918756	20	11 2.4	19.7
185962 2001 FH ₇₅	16.3	X	330.93001	57.70783	43.38442	7.59975	0.1285438	0.29371183	2.2414123	20	—	—
185963 2001 FO ₁₀₂	16.5	X	171.24451	94.33305	182.28772	4.56016	0.1565524	0.29076856	2.2565126	20	—	—
185964 2001 FS ₁₂₅	17.4	X	221.97190	1.39905	155.39731	0.51426	0.1108825	0.28604424	2.2812905	20	11 17.1	19.9
185965 2001 FK ₁₄₂	16.9	X	212.91664	314.65205	216.60028	5.79822	0.0626480	0.28533997	2.2850226	20	12 2.3	19.7
185966 2001 HC ₁₃	17.1	X	106.12520	212.09132	46.90891	2.97612	0.1944304	0.27760427	2.3272978	20	11 23.8	20.8
185967 2001 HR ₁₅	15.7	X	148.20123	285.54615	219.89850	20.26817	0.2829207	0.27436065	2.3456047	20	8 3.9	20.4
185968 2001 HT ₅₁	17.2	X	158.97021	159.72932	55.63593	5.91108	0.1628383	0.28071285	2.3100844	20	11 17.2	20.5
185969 2001 HG ₆₃	16.1	X	137.40035	66.58746	229.05667	22.73785	0.1749063	0.28539022	2.2847744	20	—	—
185970 2001 HP ₆₆	16.7	X	83.22740	36.06997	178.46012	7.62198	0.2270403	0.26981496	2.3718763	20	9 8.5	20.1
185971 2001 JX ₇	16.9	X	154.32519	177.16507	71.51207	6.54882	0.1319496	0.28322129	2.2964242	20	12 26.6	20.4
185972 2001 KL ₈	16.5	X	12.56200	79.32684	206.81192	5.12380	0.1183384	0.26620764	2.3932554	20	8 20.4	18.9
185973 2001 KH ₂₁	16.1	X	53.48689	247.96843	71.64080	22.67179	0.2723885	0.27502187	2.3418437	20	12 25.9	19.9
185974 2001 KP ₂₂	16.1	X	73.44439	283.22399	57.11071	6.81726	0.2107577	0.28058318	2.3107961	20	—	—
185975 2001 KE ₄₀	16.6	X	149.37664	79.58750	159.24860	8.04876	0.1901592	0.27985069	2.3148266	20	12 7.5	20.4
185976 2001 KY ₄₁	16.8	X	96.22109	198.02509	85.58505	7.28476	0.1092870	0.28030822	2.3123070	20	12 11.9	20.0
185977 2001 MU ₇	16.6	X	337.99842	201.81356	92.95341	3.52673	0.2080074	0.25755356	2.4465702	20	6 19.9	18.5
185978 2001 MO ₉	16.0	X	89.05302	110.57569	186.65196	5.37039	0.3035237	0.27235458	2.3571086	20	12 29.6	20.2
185979 2001 MO ₁₆	16.4	X	80.54590	184.23561	69.63269	4.90162	0.1050797	0.26761129	2.3848795	20	10 16.2	19.7
185980 2001 MC ₂₅	15.7	X	53.73889	71.17453	218.44898	11.44673	0.2041331	0.26711876	2.3878101	20	11 11.9	18.9
185981 2001 MN ₃₀	16.5	X	330.30445	149.02348	148.86746	5.87576	0.1270289	0.25602436	2.4563025	20	6 16.4	19.0
185982 2001 NW	16.6	X	26.42604	243.72397	67.94143	5.76375	0.2192781	0.26643271	2.3919073	20	11 9.5	19.3
185983 2001 NT ₁	16.0	X	304.48624	189.96035	167.44526	12.44798	0.2820800	0.25776247	2.4452481	20	7 1.7	18.6
185984 2001 NP ₃	16.8	X	300.24089	91.84889	250.85022	0.33113	0.1894591	0.25699092	2.4501398	20	6 18.7	19.5
185985 2001 NG ₁₀	16.4	X	339.04859	347.86714	343.20888	3.94698	0.2075613	0.26092754	2.4254339	20	8 27.9	18.1
185986 2001 NA ₁₁	17.3	X	51.65150	248.42595	44.99071	1.80498	0.1806456	0.26803680	2.3823547	20	11 10.9	20.4
185987 2001 OD ₁	17.0	X	69.18224	280.86878	338.05998	3.73652	0.1962603	0.26737834	2.3862644	20	10 17.2	20.5
185988 2001 OL ₄	16.2	X	320.76421	263.86116	84.16852	7.51266	0.1788194	0.25972807	2.4328955	20	8 14.1	18.3
185989 2001 OR ₄	15.9	X	75.85581	3.52902	21.85968	9.90892	0.2964323	0.22399966	2.6851660	20	—	—
185990 2001 OS ₁₂	16.2	X	359.39445	33.22338	287.39574	4.77581	0.1677202	0.26278557	2.4139877	20	9 22.3	18.4
185991 2001 OV ₁₉	16.9	X	321.27834	161.65658	142.85677	5.39976	0.1977668	0.25593883	2.4568498	20	5 30.5	19.3
185992 2001 OA ₃₂	15.5	X	89.18070	244.12936	211.76919	23.95232	0.0825144	0.23750814	2.5823616	20	3 11.9	19.3
185993 2001 OB ₇₆	16.2	X	36.34496	28.72105	259.64424	9.32430	0.2387301	0.26421689	2.4052617	20	10 20.9	19.3
185994 2001 OB ₇₇	16.3	X	199.37717	288.69590	92.13710	8.69720	0.1876598	0.24493741</				

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186001	2001	QM ₁₇	16.1	X	110.52773	8.27555	24.04103	5.19703	0.2457850	0.23238020	2.6202132	20	2 17.6	19.8
186002	2001	QO ₄₄	17.0	X	66.86347	263.84876	5.70909	2.27100	0.1951024	0.26690146	2.3891060	20	10 29.1	20.3
186003	2001	QD ₄₉	17.1	X	319.82000	313.05191	343.74798	0.83923	0.2088789	0.25363473	2.4717065	20	5 11.8	19.3
186004	2001	QM ₅₃	16.7	X	327.41558	315.54159	12.46160	2.77912	0.2149349	0.25752146	2.4467735	20	7 20.7	18.4
186005	2001	QW ₅₄	16.3	X	166.90931	350.40337	19.45318	6.52791	0.2676873	0.23771293	2.5808782	20	3 12.3	20.8
186006	2001	QF ₆₀	16.9	X	25.67450	259.30029	47.93008	2.65677	0.2036012	0.26443224	2.4039556	20	10 29.5	19.4
186007	2001	Guilleminet	17.4	X	336.06314	338.27595	331.09258	0.46719	0.1885879	0.25718787	2.4488888	20	7 12.2	19.1
186008	2001	QG ₁₀₂	16.9	X	18.30054	198.99629	135.71530	9.72680	0.2764678	0.26700081	2.3885133	20	12 9.4	19.9
186009	2001	QB ₁₁₂	16.2	X	165.53530	62.64764	299.56077	1.16990	0.2555026	0.23321824	2.6139325	20	2 28.9	20.8
186010	2001	QR ₁₁₂	16.1	X	205.09757	116.38624	224.15056	7.77807	0.1816491	0.23945660	2.5683341	20	2 29.6	20.6
186011	2001	QE ₁₁₈	16.7	X	212.95602	140.82191	182.46417	13.96749	0.1961527	0.23903356	2.5713634	20	2 16.2	21.2
186012	2001	QE ₁₂₁	16.7	X	13.61566	238.76202	82.67630	3.60581	0.1500464	0.26453121	2.4033560	20	10 22.9	19.2
186013	2001	QN ₁₂₂	16.2	X	210.87507	12.22678	3.87327	6.42144	0.0734229	0.24697696	2.5159293	20	4 23.5	19.8
186014	2001	QO ₁₂₇	16.0	X	314.86254	155.26141	206.77622	6.01823	0.1937826	0.25928077	2.4356928	20	8 15.8	18.2
186015	2001	QF ₁₃₁	16.4	X	186.93598	139.08385	203.40948	7.24108	0.2038405	0.23802883	2.5785942	20	2 18.2	20.9
186016	2001	QG ₁₄₈	16.1	X	167.48894	287.57979	101.16126	15.73861	0.1526946	0.23585719	2.5943982	20	4 5.9	20.5
186017	2001	QV ₁₅₀	15.4	X	92.28087	172.50375	220.15591	28.63306	0.0442975	0.23097835	2.6308043	20	—	—
186018	2001	QZ ₁₅₇	17.3	X	23.61624	101.98347	210.15152	1.47441	0.2085931	0.26405733	2.4062305	20	11 2.9	19.9
186019	2001	QK ₁₆₃	16.8	X	356.60865	290.11806	44.54860	2.55212	0.2076957	0.26204403	2.4185396	20	10 17.9	18.9
186020	2001	QL ₁₈₀	16.4	X	194.23332	331.58141	52.95273	3.44819	0.2768103	0.24184513	2.5513957	20	4 17.1	21.0
186021	2001	QD ₁₈₄	17.7	X	10.07806	113.45525	174.53597	1.26085	0.1818110	0.25965848	2.4333302	20	8 28.1	19.9
186022	2001	QE ₁₉₆	16.9	X	28.96724	190.57516	123.84087	3.44176	0.2157959	0.26584239	2.3954470	20	11 16.3	19.8
186023	2001	QO ₂₀₁	15.4	X	56.13005	267.59415	178.95809	21.37129	0.1518581	0.22975366	2.6401449	20	1 20.4	18.8
186024	2001	QG ₂₀₇	14.5	X	20.58270	233.58815	133.63117	3.23817	0.2510382	0.11147131	4.2758977	20	12 5.3	19.7
186025	2001	QI ₂₁₅	16.9	X	212.52326	209.48669	145.23518	4.04509	0.2163798	0.24229273	2.5482525	20	3 27.5	21.2
186026	2001	QZ ₂₂₉	15.8	X	91.56761	251.47392	189.01644	12.79840	0.1713643	0.23414854	2.6070043	20	3 12.3	19.1
186027	2001	QN ₂₄₅	16.7	X	236.81945	175.17880	179.38668	9.43790	0.2483375	0.24474810	2.5311808	20	4 14.6	20.9
186028	2001	QK ₂₅₄	16.8	X	58.11019	215.88950	74.89937	5.60484	0.2650838	0.267771155	2.3842840	20	11 24.8	20.4
186029	2001	QO ₂₇₃	16.5	X	358.33511	300.43806	25.90517	6.48957	0.1558134	0.26176755	2.4202423	20	10 2.0	18.6
186030	2001	QL ₂₈₅	16.1	X	350.51405	166.39010	187.05937	13.25905	0.0987701	0.26550193	2.3974943	20	10 23.2	18.6
186031	2001	QO ₃₂₈	15.1	X	194.96565	322.79725	120.46323	10.08082	0.0178793	0.19784058	2.9169286	20	7 6.5	19.2
186032	2001	RA ₃₄	15.5	X	102.31599	147.40211	317.66953	14.61639	0.0634376	0.24341872	2.5403881	20	4 4.0	19.2
186033	2001	RZ ₄₄	16.0	X	339.51560	72.63018	334.09139	4.61279	0.3150840	0.21180696	2.7872498	20	12 23.2	18.1
186034	2001	RB ₅₀	15.9	X	170.83338	169.22775	195.10143	14.30111	0.1249935	0.23753739	2.5821495	20	2 26.2	20.0
186035	2001	RX ₈₀	16.1	X	150.98187	197.04515	176.35862	8.03330	0.2032939	0.23277976	2.6172141	20	2 26.4	20.3
186036	2001	RA ₈₄	16.9	X	324.44353	149.46468	185.97607	2.64007	0.2267311	0.25661481	2.4525333	20	7 22.4	18.6
186037	2001	RO ₉₉	17.0	X	299.97391	216.03034	128.16253	3.08130	0.1735695	0.25490300	2.4635010	20	6 23.3	19.5
186038	2001	RM ₁₁₅	17.2	X	14.03706	177.01388	136.90846	2.86545	0.1986450	0.26193785	2.4191932	20	10 19.9	19.5
186039	2001	RA ₁₁₆	16.0	X	291.57371	351.08849	8.20788	6.60403	0.1157251	0.20142330	2.8822363	20	7 9.4	19.9
186040	2001	RB ₁₂₃	15.8	X	175.89151	223.44381	359.59033	7.93066	0.1675920	0.21982213	2.7190787	20	11 30.2	20.3
186041	2001	RU ₁₂₆	16.5	X	123.44011	336.95914	75.72719	4.50873	0.1677060	0.23534186	2.5981842	20	3 18.4	20.3
186042	2001	RJ ₁₅₅	17.1	X	242.90323	291.92210	45.28519	11.14817	0.2624103	0.24411024	2.5355882	20	3 31.2	21.5
186043	2001	SA ₁	16.5	X	317.38122	117.64050	201.37165	5.62339	0.2325959	0.25319751	2.4745511	20	6 7.5	18.9
186044	2001	SZ ₁	15.6	X	118.19175	180.77444	192.11873	13.50267	0.1916782	0.22882229	2.6473041	20	1 21.4	19.6
186045	2001	SK ₁₃	16.1	X	190.11668	223.07732	176.66364	15.03282	0.1146702	0.24387414	2.5372245	20	5 5.5	20.1
186046	2001	SK ₁₇	16.5	X	113.53919	333.66049	25.17622	1.06079	0.1192663	0.22712615	2.6604675	20	—	—
186047	2001	SA ₁₈	17.0	X	318.43752	258.22024	81.21397	2.33266	0.1938539	0.25544379	2.4600229	20	7 20.0	18.9
186048	2001	SV ₂₃	15.5	X	47.24741	278.86151	9.22712	7.47896	0.1521438	0.20934442	2.8090650	20	10 13.6	19.2
186049	2001	SP ₃₂	16.9	X	322.66408	182.91000	156.02810	2.38991	0.2105282	0.25542412	2.4601492	20	7 26.2	18.8
186050	2001	SA ₄₀	15.6	X	340.55755	15.85716	40.57086	8.63745	0.2191988	0.21234947	2.7825006	20	12 27.2	18.4
186051	2001	SO ₅₀	15.7	X	98.16348	339.22770	64.09294	6.06082	0.2761349	0.22810424	2.6528568	20	2 22.6	19.3
186052	2001	SX ₅₁	16.2	X	303.95337	246.53020	99.82478	4.11891	0.1926713	0.25309918	2.4751920	20	6 30.4	18.4
186053	2001	ST ₅₂	16.9	X	220.63228	229.83712	101.11297	2.08685	0.2021786	0.23908391	2.5710024	20	3 5.7	21.1
186054	2001	SC ₅₄	16.3	X	207.89695	331.46189	28.08281	13.18385	0.2511269	0.24045254	2.5612372	20	3 30.7	20.9
186055	2001	ST ₆₄	16.0	X	113.51412	190.08580	196.51903	14.01777	0.2779527	0.22830507	2.6513008	20	2 12.5	20.1
186056	2001	ST ₆₇	16.2	X	90.13962	238.02457	188.11665	12.91186	0.2496039	0.22760601	2.6567268	20	3 3.8	19.6
186057	2001	SF ₆₈	16.1	X	43.29793	264.52048	197.99846	12.78018	0.0860754	0.22619580	2.6677576	20	1 16.4	19.5
186058	2001	SP ₁₀₂	15.8	X	19.23853	153.28585	264.30251	2.34169	0.2241640	0.21927739	2.7235800	20	—	—
186059	2001	SA ₁₂₅	16.7	X	296.89458	184.53971	183.52178	4.64572	0.2088663	0.25565599	2.4586614	20	7 16.9	19.3
186060	2001	SJ ₁₃₄	16.7	X	353.41279	249.72558	190.79054	11.81774	0.1833672	0.21831943	2.7315414	20	—	—
186061	2001	SG ₁₃₅	16.1	X	164.74976	100.03264	185.48907	14.33977	0.0552521	0.22452355	2.6809875	20	—	—
186062	2001	SQ ₁₅₀	15.5	X	18.19477	281.05920	196.81626	13.46622	0.1663274	0.22643828	2.6658527	20	—	—
186063	2001	SC ₁₆₆	17.0	X	347.44164	133.99764	159.71251	2.67918	0.1706380	0.25499996	2.4628765	20	7 13.6	18.9
186064	2001	SS ₁₆₆	15.6	X	139.19482	83.41211	0.59744	12.72334	0.1687747	0.18779369	3.0200588	20	5 7.4	20.6
186065	2001	SK ₁₆₇	15.7	X	32.91920	337.74022	191.90502	3.54090	0.1073524	0.23931340	2.5693585	20	4 2.8	18.3
186066	2001	SA ₁₇₃	16.8	X	178.99737	342.78155	22.56591	2.67036	0.0648638	0.23656189	2.5892433	20	3 8.0	20.5
186067	2001	SQ ₁₇₃	15.3	X	38.30366	284.26167	176.98151	11.38927	0.1510366	0.22658920	2.6646688	20	1 9.5	18.3
186068	2001	SU ₁₇₆	16.3	X	334.18194	270.28166	43.94404	7.83221	0.2277619	0.25388966	2.4700517	20	7 13.6	18.2
186069	2001	SP ₁₇₇	16.6	X	178.79039	167.96667	180.49653	13.36844	0.1817191	0.23416633	2.6068722	20		

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186081	2001	SV ₂₃₅	15.7 ^m	X	0.15154	45.67635	33.99691	13.50777	0.1466256	0.21882224	2.7273554	20	—	—
186082	2001	SQ ₂₃₈	15.8	X	105.42406	332.82363	35.98535	14.26475	0.0919536	0.22519628	2.6756455	20	—	—
186083	2001	SU ₂₃₉	15.5	X	71.64737	239.49574	128.84654	4.91177	0.1549622	0.21999339	2.7176673	20	—	—
186084	2001	SD ₂₄₅	17.2	X	254.79130	154.55859	169.42055	3.94694	0.2148186	0.24361287	2.5390382	20	3 25.3	21.1
186085	2001	SZ ₂₄₇	16.3	X	45.11271	352.06158	43.98642	6.85275	0.1507924	0.21935956	2.7228998	20	—	—
186086	2001	SW ₂₅₈	16.8	X	154.12560	156.92599	230.84420	3.99703	0.0177551	0.23780308	2.5802259	20	2 29.6	20.4
186087	2001	SP ₂₅₉	16.9	X	14.97891	78.61654	192.60113	0.90823	0.1675291	0.25548764	2.4597414	20	8 8.6	19.2
186088	2001	SV ₂₇₆	15.6	X	92.18695	370.92795	19.94926	14.21781	0.2068964	0.22044135	2.7139844	20	—	—
186089	2001	SM ₂₈₈	15.6	X	26.49214	276.68331	211.17300	16.36809	0.1320759	0.23029429	2.6360113	20	1 20.2	18.9
186090	2001	SS ₂₉₃	16.0	X	184.04514	243.35088	182.76369	6.66820	0.1332634	0.19256069	2.9700081	20	5 31.3	20.8
186091	2001	SD ₂₉₅	16.5	X	339.67040	182.05330	272.32125	1.21705	0.2196246	0.21957395	2.7211272	20	—	—
186092	2001	SK ₃₀₃	16.6	X	131.88567	227.57959	191.23507	5.58644	0.0757513	0.23722728	2.5843994	20	3 21.6	20.3
186093	2001	SD ₃₁₃	16.4	X	214.95324	214.17545	114.52770	6.41693	0.1342705	0.23821707	2.5772357	20	3 1.0	20.5
186094	2001	SG ₃₃₆	16.4	X	177.18093	181.98407	184.81458	4.39391	0.0660780	0.23841004	2.5758448	20	3 6.2	20.1
186095	2001	SV ₃₄₅	15.9	X	10.46011	214.74626	104.26003	16.36484	0.2928883	0.26154925	2.4215888	20	11 12.5	18.7
186096	2001	SQ ₃₅₃	15.6	X	12.43327	325.03331	229.16897	12.49023	0.0844078	0.23994826	2.5648220	20	3 28.8	18.7
186097	2001	SK ₃₅₄	16.6	X	130.83768	288.84429	285.62521	5.53681	0.1592042	0.23111250	2.6296892	20	2 6.2	20.4
186098	2001	TR ₂	16.1	X	345.44065	265.56953	191.06121	12.53694	0.1133871	0.21997677	2.7178042	20	—	—
186099	2001	TY ₁₈	16.8	X	241.94660	160.46585	208.56407	2.91670	0.2040182	0.24606055	2.5221721	20	5 9.5	20.8
186100	2001	TN ₂₅	16.6	X	236.48185	55.69326	286.99126	4.88297	0.1826750	0.24235750	2.5477985	20	3 31.0	20.8
186101	2001	TU ₃₁	16.1	X	82.65204	15.21992	24.48085	15.39864	0.1921345	0.22348460	2.6892901	20	1 15.5	19.6
186102	2001	TB ₃₇	15.4	X	58.61048	339.76936	41.63308	14.46743	0.1690157	0.21631424	2.7483960	20	—	—
186103	2001	TP ₃₈	15.3	X	161.22674	315.79814	54.62197	33.41088	0.2794459	0.23106261	2.6301646	20	3 29.6	20.6
186104	2001	TZ ₄₈	16.4	X	30.05727	138.15305	230.53762	19.53897	0.0566059	0.37240212	1.9133509	20	—	—
186105	2001	TF ₅₂	15.8	X	5.39768	1.12176	67.03401	9.25842	0.2024219	0.21600481	2.7510202	20	—	—
186106	2001	TW ₅₆	13.2	X	151.82527	238.64623	200.56304	7.51765	0.0329108	0.08253114	5.2246536	20	5 12.7	20.2
186107	2001	TG ₇₁	16.6	X	149.53807	177.14401	183.90692	5.21593	0.2552065	0.23111901	2.6297368	20	2 14.3	21.0
186108	2001	TR ₇₂	15.8	X	355.61162	345.04389	66.08967	9.33908	0.2196734	0.21272080	2.7792615	20	—	—
186109	2001	TH ₈₀	14.8	X	19.37913	299.07322	102.43110	8.66737	0.2858585	0.21301619	2.7766916	20	—	—
186110	2001	TR ₈₂	15.8	X	121.56863	160.43194	221.78210	10.80264	0.2256628	0.23036831	2.6354466	20	2 8.4	19.9
186111	2001	TV ₉₂	16.0	X	81.95982	336.43819	341.32430	5.14801	0.0550604	0.21496681	2.7598688	20	12 20.0	19.9
186112	2001	TR ₉₅	17.0	X	239.16765	19.43774	328.66058	3.73505	0.1986135	0.24323121	2.5416935	20	4 9.1	21.2
186113	2001	TP ₁₀₀	15.8	X	325.60719	3.60769	213.61089	4.88094	0.1335266	0.23518226	2.5993594	20	2 10.6	19.2
186114	2001	TC ₁₀₉	15.0	X	143.19822	48.62215	2.36570	13.65227	0.0556228	0.18265075	3.0764869	20	3 26.7	19.5
186115	2001	TL ₁₁₃	15.6	X	345.72407	23.11782	221.15533	12.82218	0.1414186	0.24224084	2.5486164	20	4 22.4	18.0
186116	2001	TV ₁₂₆	16.2	X	312.93980	195.22140	33.92427	4.27927	0.1015936	0.23392802	2.6086424	20	2 17.5	19.6
186117	2001	TC ₁₂₈	16.0	X	155.22758	288.88138	85.56975	5.60243	0.1665941	0.23427892	2.6060370	20	3 3.3	20.1
186118	2001	TG ₁₃₈	15.0	X	91.08647	125.03866	11.65652	12.10814	0.0848834	0.24558148	2.5245111	20	5 9.9	18.5
186119	2001	TG ₁₃₉	16.7	X	351.43690	213.47449	108.23595	5.53417	0.2062337	0.25931709	2.4354653	20	9 16.3	18.6
186120	2001	TM ₁₄₀	16.8	X	149.63179	310.01422	85.60089	4.71857	0.2013370	0.23675393	2.5878429	20	3 26.2	20.9
186121	2001	TU ₁₄₃	16.4	X	348.65444	9.85023	56.24719	8.82330	0.2089981	0.21490753	2.7603763	20	—	—
186122	2001	TH ₁₄₅	16.3	X	256.11872	150.83336	165.08828	9.13738	0.1163971	0.24167207	2.5526136	20	3 27.3	19.9
186123	2001	TM ₁₄₆	16.4	X	280.31806	138.48710	144.25106	5.48917	0.2037418	0.24168517	2.5525213	20	2 29.7	20.2
186124	2001	TF ₁₄₈	16.2	X	133.66503	350.76102	48.19500	9.02786	0.1018540	0.23318682	2.6141673	20	3 7.1	20.0
186125	2001	TM ₁₅₀	12.8	X	209.47652	322.86068	67.62583	13.15888	0.0529703	0.08353035	5.1829043	20	5 17.8	19.9
186126	2001	TT ₁₅₀	16.2	X	87.49891	267.61437	109.33362	4.16013	0.1171290	0.22323378	2.6913041	20	—	—
186127	2001	TM ₁₅₂	16.3	X	275.71704	279.74577	54.29785	12.40442	0.1880123	0.24674414	2.5175116	20	5 3.3	19.6
186128	2001	TP ₁₅₄	12.8	X	127.58489	21.34181	78.55529	12.24262	0.0137856	0.08372711	5.1747809	20	5 9.8	19.8
186129	2001	TO ₁₅₉	16.6	X	170.90599	171.24340	188.48229	2.47165	0.1703813	0.23413655	2.6070933	20	2 25.9	20.8
186130	2001	TL ₁₆₂	16.6	X	268.30148	70.63429	3.69677	7.24510	0.1966043	0.20395603	2.8583255	20	9 3.2	20.4
186131	2001	TJ ₁₆₄	16.3	X	88.85378	222.20865	202.24102	13.16314	0.1356432	0.22867075	2.6484735	20	2 9.0	19.9
186132	2001	TC ₁₆₅	15.5	X	269.95795	327.15535	212.64082	12.60275	0.1167358	0.22213157	2.7001996	20	—	—
186133	2001	TF ₁₆₅	15.7	X	45.20642	1.68708	75.05818	12.82084	0.1542251	0.22290136	2.6939792	20	—	—
186134	2001	TM ₁₇₁	16.2	X	176.98531	253.09599	114.02730	8.47719	0.2146891	0.23543199	2.5975210	20	3 16.6	20.7
186135	2001	TN ₁₉₂	15.1	X	45.56179	148.28961	245.49047	12.33290	0.0329237	0.21723241	2.7406462	20	—	—
186136	2001	TG ₁₉₆	15.9	X	255.22501	280.05792	76.22996	12.49230	0.1579059	0.24715230	2.5147392	20	5 13.9	19.5
186137	2001	TZ ₂₀₄	16.0	X	68.45181	342.29864	79.64193	9.30192	0.0658858	0.22773456	2.6557269	20	1 2.1	19.2
186138	2001	TK ₂₀₆	13.2	X	142.98450	224.31471	203.84284	5.11033	0.0047399	0.08289061	5.2095373	20	4 17.9	20.1
186139	2001	TE ₂₀₇	16.8	X	103.73416	8.89955	12.81682	1.84472	0.0837464	0.22737592	2.6585188	20	1 2.0	20.1
186140	2001	TX ₂₁₄	15.4	X	275.92494	282.80662	354.62005	14.07426	0.0809887	0.23678887	2.5875884	20	3 6.0	18.9
186141	2001	TO ₂₁₇	15.8	X	13.57131	286.92487	251.10161	4.82916	0.0740992	0.23784315	2.5799361	20	3 9.3	18.9
186142	2001	Gillespie	16.7	X	288.26203	282.29834	189.24095	8.77872	0.2561041	0.21212817	2.7844354	20	11 16.8	19.6
186143	2001	TB ₂₅₇	16.7	X	160.41309	137.53026	202.32182	1.14558	0.0741893	0.22859403	2.6490661	20	1 16.2	20.4
186144	2001	UN ₉	15.8	X	13.77270	14.21014	61.65122	10.01270	0.1345730	0.21829324	2.7317599	20	—	—
186145	2001	US ₁₀	15.8	X	197.78276	272.47730	83.18826	9.97835	0.0979991	0.23310861	2.6147520	20	3 21.7	19.9
186146	2001	US ₁₉	17.2	X	242.77662	135.32356	190.40776	3.71973	0.1380498	0.24201990	2.5501673	20	3 21.6	21.2
186147	2001	UL ₂₀	16.6	X	102.50850	359.17788	40.77615	2.88836	0.0918457	0.22858720	2.6491189	20	1 25.4	20.0
186148	2001	UA ₂₉	15.9	X	8.71297	59.36161	48.86872	8.61047	0.1257821	0.22286091	2.6943052	20	—	—
186149	2001	UE ₃₇	15.4	X	352.74750	44.91720	67.52252	14.04930	0.1611542	0.22002575	2.7174008	20	—	—
186150	2001	UP ₃₈	16.5	X	138.97152	137.10900	192.79833	1.65616	0.0834740	0.22519277				

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ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
186161 2001 <i>UW</i> ₁₂₀	16.7	X	176.14137	321.62793	53.01350	9.89969	0.1464893	0.23493363	2.6011931	20	3 23.9	20.9
186162 2001 <i>UT</i> ₁₃₀	16.4	X	76.72336	339.02434	44.09348	7.03651	0.0669548	0.22145393	2.7057051	20	—	—
186163 2001 <i>UP</i> ₁₃₃	16.1	X	204.10928	29.31733	210.34705	9.30885	0.0618005	0.22081584	2.7109150	20	—	—
186164 2001 <i>UT</i> ₁₃₃	16.8	X	47.26471	162.49996	262.44029	0.55577	0.0732687	0.22346205	2.6894710	20	—	—
186165 2001 <i>UG</i> ₁₃₄	16.0	X	64.64415	243.47864	211.33444	21.38676	0.0111312	0.23059124	2.6337477	20	1 27.3	20.1
186166 2001 <i>UK</i> ₁₃₇	16.5	X	267.86008	15.71217	72.08174	3.46244	0.2280950	0.20487889	2.8497357	20	9 15.6	20.3
186167 2001 <i>US</i> ₁₃₇	16.9	X	114.37810	210.72354	146.43579	1.09579	0.0919140	0.22512063	2.6762449	20	—	—
186168 2001 <i>UO</i> ₁₃₉	16.3	X	323.82937	231.29285	37.95162	7.84371	0.1247839	0.24363984	2.5388508	20	4 22.7	18.9
186169 2001 <i>UQ</i> ₁₄₃	16.2	X	290.91130	81.75312	204.93016	3.22674	0.0418449	0.23887738	2.5724841	20	4 10.3	19.6
186170 2001 <i>UY</i> ₁₄₃	15.9	X	287.99659	11.71139	60.90114	5.96838	0.1703554	0.20488891	2.8496427	20	10 5.8	19.3
186171 2001 <i>UY</i> ₁₄₈	16.5	X	221.78847	272.95021	76.36230	4.14564	0.2323841	0.23956868	2.5675330	20	3 28.8	20.9
186172 2001 <i>UR</i> ₁₅₀	16.3	X	230.59604	127.17063	222.37642	6.50711	0.2520959	0.24066831	2.5597061	20	3 31.5	20.8
186173 2001 <i>UZ</i> ₁₅₅	15.7	X	263.76528	230.85633	56.39067	9.15360	0.0570173	0.23396905	2.6083375	20	3 10.6	19.4
186174 2001 <i>UL</i> ₁₆₅	16.5	X	219.72877	258.04602	88.71643	9.89508	0.0788890	0.24031627	2.5622054	20	4 2.8	20.4
186175 2001 <i>UY</i> ₁₆₆	16.7	X	119.47711	304.65027	64.54361	3.74485	0.0882555	0.22589604	2.6701170	20	1 7.5	20.3
186176 2001 <i>UL</i> ₁₇₂	16.4	X	68.50177	271.58669	183.26390	3.52680	0.0481027	0.23040457	2.6351701	20	2 10.7	19.9
186177 2001 <i>UH</i> ₁₇₅	16.2	X	239.61788	148.60187	189.82035	10.80316	0.1653726	0.24124720	2.5556097	20	4 1.8	19.9
186178 2001 <i>UT</i> ₁₈₄	17.0	X	182.19752	208.19410	163.23515	8.53003	0.1885983	0.23724528	2.5842687	20	3 22.9	21.2
186179 2001 <i>UA</i> ₁₉₇	15.6	X	351.68804	2.19734	49.21077	10.14166	0.2260051	0.21438385	2.7648697	20	—	—
186180 2001 <i>UZ</i> ₂₀₃	15.9	X	261.15692	249.81958	22.00299	5.99109	0.0805488	0.23338576	2.6126815	20	2 11.8	19.6
186181 2001 <i>UK</i> ₂₀₄	16.3	X	200.34544	283.24117	14.65992	5.63410	0.0167075	0.22718965	2.6599717	20	1 7.7	20.0
186182 2001 <i>UU</i> ₂₀₈	16.3	X	236.16591	153.08075	98.62103	3.29121	0.0378447	0.22726757	2.6593637	20	—	—
186183 2001 <i>UZ</i> ₂₂₇	16.8	X	327.71636	243.73285	221.06381	5.70957	0.0387637	0.21788261	2.7351911	20	—	—
186184 2001 <i>VT</i>	16.1	X	131.90391	342.21364	52.28780	16.03929	0.2918085	0.23428532	2.6059895	20	3 22.8	20.7
186185 2001 <i>VH</i> ₈	15.4	X	280.85428	101.11852	45.70666	14.89094	0.0760623	0.21323550	2.7747873	20	—	—
186186 2001 <i>VV</i> ₈	16.4	X	130.48211	13.96419	3.83425	2.01081	0.2219755	0.22789701	2.6544648	20	2 16.4	20.4
186187 2001 <i>VX</i> ₃₁	15.6	X	6.59230	5.54245	58.89798	16.90341	0.2135463	0.21359687	2.7716569	20	—	—
186188 2001 <i>VU</i> ₄₈	15.2	X	109.51324	315.00457	83.04918	14.52350	0.2557420	0.22463250	2.6801205	20	3 1.0	19.3
186189 2001 <i>VM</i> ₅₄	16.0	X	44.53273	27.35063	6.22475	8.44441	0.1756345	0.21788384	2.7351808	20	—	—
186190 2001 <i>VX</i> ₇₅	16.9	X	93.15097	179.22384	216.07344	2.56600	0.0946713	0.22531642	2.6746943	20	1 6.5	20.2
186191 2001 <i>VX</i> ₈₆	15.8	X	10.63953	327.34107	122.58206	12.24438	0.1168699	0.21815865	2.7328833	20	—	—
186192 2001 <i>VD</i> ₈₉	16.0	X	75.40497	21.98948	357.75046	11.26509	0.1895381	0.22133408	2.7066817	20	—	—
186193 2001 <i>VF</i> ₉₀	15.8	X	137.52352	295.73545	90.72066	12.45055	0.2700778	0.23109012	2.6299559	20	3 13.9	20.4
186194 2001 <i>VH</i> ₉₁	15.9	X	143.56600	189.52445	186.07446	14.82560	0.1199638	0.22938643	2.6429619	20	2 12.6	20.0
186195 2001 <i>VB</i> ₉₄	16.2	X	141.16194	186.03033	173.26070	11.69696	0.2563588	0.22749437	2.6575959	20	2 5.0	20.6
186196 2001 <i>VU</i> ₉₆	15.7	X	74.90956	274.88671	142.46082	12.00459	0.1892068	0.22245967	2.6975439	20	1 21.9	18.9
186197 2001 <i>VQ</i> ₁₀₄	15.7	X	50.00016	357.61759	48.78730	16.94775	0.0806769	0.21864356	2.7288412	20	—	—
186198 2001 <i>VP</i> ₁₁₁	16.2	X	34.95248	124.72847	262.82341	3.55292	0.0776633	0.21348462	2.7726283	20	—	—
186199 2001 <i>VT</i> ₁₂₁	15.7	X	207.87555	135.65580	208.75363	11.84836	0.1846090	0.23580772	2.5947611	20	3 7.9	20.2
186200 2001 <i>VJ</i> ₁₂₄	16.6	X	186.57755	306.43467	49.80781	4.62801	0.1336378	0.23361315	2.6109859	20	3 8.5	20.7
186201 2001 <i>VP</i> ₁₂₄	16.2	X	329.00397	21.96749	73.01367	4.95585	0.0646466	0.21318049	2.7752647	20	—	—
186202 2001 <i>VZ</i> ₁₂₄	15.9	X	285.76584	223.34372	65.43985	12.48468	0.1706013	0.23792399	2.5793517	20	3 25.5	19.7
186203 2001 <i>WL</i> ₈	15.6	X	182.25550	123.00318	221.91245	11.37741	0.2023078	0.23178094	2.6247276	20	2 15.7	20.2
186204 2001 <i>WT</i> ₁₄	15.2	X	234.61860	213.62589	63.09982	13.87166	0.1456296	0.22651108	2.6652815	20	1 17.2	19.6
186205 2001 <i>WF</i> ₂₅	15.7	X	35.57126	259.14140	219.20352	13.66346	0.0529676	0.22848495	2.6499091	20	1 22.6	19.3
186206 2001 <i>WL</i> ₂₅	16.6	X	106.72275	342.85969	45.34741	2.56391	0.1019337	0.22639838	2.6661659	20	1 17.5	20.1
186207 2001 <i>WQ</i> ₂₆	16.4	X	240.25195	93.07635	221.96281	9.20133	0.1034063	0.23544186	2.5974484	20	3 5.7	20.4
186208 2001 <i>WX</i> ₂₆	16.3	X	101.29637	287.07849	101.32771	2.96118	0.0661749	0.22432673	2.6825554	20	1 5.2	19.7
186209 2001 <i>WT</i> ₃₄	16.9	X	269.29927	145.32843	193.17730	3.75945	0.2847084	0.24524919	2.5277318	20	4 18.9	20.9
186210 2001 <i>WH</i> ₃₅	15.6	X	262.16998	82.59746	75.34642	13.59899	0.0918221	0.21104192	2.7939817	20	12 26.6	19.3
186211 2001 <i>WJ</i> ₃₇	16.7	X	191.75347	276.11743	89.88064	4.83324	0.1970107	0.23657821	2.5891242	20	3 25.9	21.0
186212 2001 <i>WU</i> ₃₇	15.6	X	28.17448	5.44286	65.84002	15.29295	0.0294193	0.21904489	2.7255070	20	—	—
186213 2001 <i>WA</i> ₄₃	16.2	X	116.35896	354.82801	53.90709	9.46606	0.1344638	0.23153633	2.6265759	20	3 4.0	20.0
186214 2001 <i>WW</i> ₄₇	15.5	X	43.38571	249.79175	214.62344	21.38571	0.0671201	0.22582279	2.6706944	20	1 15.3	19.3
186215 2001 <i>WE</i> ₄₈	16.0	X	28.20788	241.16767	164.81845	8.44080	0.0950852	0.21575642	2.7531311	20	—	—
186216 2001 <i>WM</i> ₄₈	15.4	X	215.03626	232.62899	137.04770	13.42647	0.1473542	0.18619984	3.0372685	20	4 25.5	20.5
186217 2001 <i>WN</i> ₄₈	15.5	X	50.33280	267.55901	201.80837	21.58139	0.0439800	0.22717413	2.6600928	20	1 30.6	19.5
186218 2001 <i>WP</i> ₆₀	16.5	X	219.03457	343.83055	341.74540	0.64158	0.0934501	0.23352899	2.6116132	20	2 29.8	20.5
186219 2001 <i>WQ</i> ₆₃	16.2	X	95.20215	297.83752	43.87392	3.00441	0.1917890	0.21792830	2.7348087	20	—	—
186220 2001 <i>WS</i> ₇₇	16.2	X	187.24019	204.85050	75.38122	6.04940	0.1024646	0.22158488	2.7046390	20	—	—
186221 2001 <i>WC</i> ₇₉	16.6	X	329.79605	34.11653	59.26863	3.17830	0.0148442	0.21322250	2.7749002	20	—	—
186222 2001 <i>WA</i> ₈₁	16.8	X	135.93499	291.20967	72.16457	7.06494	0.0713267	0.22503529	2.6769215	20	1 18.7	20.6
186223 2001 <i>WN</i> ₈₃	16.0	X	245.35257	189.43199	62.72944	15.33054	0.1304512	0.22444483	2.6816143	20	—	—
186224 2001 <i>WF</i> ₈₇	16.2	X	225.86854	46.02269	297.97911	2.17453	0.1707394	0.23931694	2.5693332	20	3 25.3	20.3
186225 2001 <i>WP</i> ₈₇	16.0	X	132.45870	281.76807	30.52038	6.44191	0.0366856	0.21793259	2.7347729	20	—	—
186226 2001 <i>WC</i> ₁₀₂	16.2	X	326.06285	29.96047	75.88208	5.75976	0.0711118	0.21371699	2.7706			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
186241 2001 XZ ₁₄₆	15.5	X	231.61399	157.47731	83.14854	24.41074	0.0825467	0.21724370	2.7405512	20	—	—
186242 2001 XB ₁₅₆	15.9	X	166.69050	97.14607	114.26329	3.15791	0.0102764	0.20331922	2.8642907	20	11 14.8	19.9
186243 2001 XZ ₁₅₇	15.7	X	153.45546	264.78030	97.58976	12.95043	0.1922018	0.22676006	2.6633302	20	2 19.7	20.1
186244 2001 XQ ₁₆₃	15.6	X	344.88777	318.35956	103.27597	8.69179	0.0490376	0.20833237	2.8181550	20	12 24.2	19.3
186245 2001 XA ₁₆₅	16.1	X	279.96340	207.10937	222.92423	1.73046	0.1496472	0.20012525	2.8946860	20	9 18.4	19.6
186246 2001 XD ₁₇₀	15.7	X	116.74365	39.49052	95.82534	4.26906	0.0302809	0.18478005	3.0528068	20	6 7.1	20.0
186247 2001 XY ₁₉₁	15.5	X	153.09270	242.12132	116.53488	15.69929	0.2027934	0.22319314	2.6916308	20	2 14.4	19.9
186248 2001 XS ₂₀₃	15.8	X	334.65898	344.90879	112.11781	5.85830	0.1235347	0.21318834	2.7751965	20	—	—
186249 2001 XV ₂₀₈	16.3	X	56.64227	287.53483	107.55088	7.98784	0.2665254	0.21804025	2.7338726	20	—	—
186250 2001 XJ ₂₁₃	15.8	X	87.65700	277.92911	131.65286	10.81460	0.2365656	0.22171420	2.7035872	20	2 9.2	19.1
186251 2001 XH ₂₁₉	16.1	X	317.07635	12.52429	47.54201	2.70224	0.0556829	0.20689510	2.8311915	20	11 12.5	19.7
186252 2001 XF ₂₂₂	16.6	X	224.77848	287.89306	53.94768	3.89250	0.2424532	0.23847280	2.5753928	20	3 21.5	21.1
186253 2001 XN ₂₃₄	15.9	X	296.12091	120.71744	23.36799	4.20234	0.0423953	0.21314318	2.7755886	20	—	—
186254 2001 XK ₂₄₁	16.3	X	232.99868	283.62658	62.33279	14.22165	0.1636513	0.23981390	2.5657824	20	4 11.2	20.5
186255 2001 XV ₂₄₉	15.9	X	264.57339	345.16030	233.17937	4.64557	0.0144230	0.22034107	2.7148078	20	—	—
186256 2001 XV ₂₅₀	15.8	X	69.28595	313.96557	97.03476	10.06339	0.1838870	0.21960872	2.7208400	20	1 4.3	18.5
186257 2001 YR ₄	15.5	X	229.52043	153.51308	205.57187	23.20886	0.1654286	0.23836766	2.5761501	20	4 18.1	19.6
186258 2001 YE ₉	15.7	X	81.30350	310.02604	71.23703	12.29838	0.1098968	0.21734552	2.7396953	20	—	—
186259 2001 YV ₁₂	16.4	X	142.20977	290.35773	66.46925	2.49983	0.1428029	0.22570417	2.6716301	20	1 25.7	20.3
186260 2001 YZ ₁₈	15.7	X	114.72320	296.94217	81.21856	9.66501	0.3224500	0.22309635	2.6924093	20	2 16.2	19.9
186261 2001 YD ₂₂	15.7	X	272.63745	219.87585	274.25719	7.93893	0.1011154	0.20882594	2.8137127	20	12 9.6	19.1
186262 2001 YA ₃₆	16.2	X	255.11575	158.85461	52.29811	5.50790	0.0629260	0.21680210	2.7442714	20	—	—
186263 2001 YL ₄₄	15.0	X	264.65963	49.13895	276.97682	13.44459	0.2797785	0.24016292	2.5632959	20	3 23.4	19.4
186264 2001 YT ₆₅	15.5	X	123.20482	45.60195	83.18357	9.49313	0.3108224	0.17971633	3.1098852	20	6 30.9	20.8
186265 2001 YS ₆₇	15.8	X	126.72483	301.10765	86.56048	6.91809	0.2590770	0.22619461	2.6677669	20	3 2.4	20.1
186266 2001 YF ₉₇	15.7	X	161.24156	269.47429	85.97959	14.62447	0.1317949	0.22813581	2.6526121	20	2 14.5	20.0
186267 2001 YB ₁₀₁	15.8	X	101.22286	283.66328	101.94675	14.16342	0.1066985	0.22076874	2.7113005	20	1 8.1	19.3
186268 2001 YU ₁₁₄	15.7	X	51.84992	3.44973	13.74114	8.59954	0.2849851	0.21278459	2.7787060	20	—	—
186269 2001 YC ₁₃₂	15.6	X	59.88548	346.24759	83.90401	27.08158	0.1298809	0.22025438	2.7155200	20	1 5.9	18.8
186270 2001 YR ₁₃₇	15.5	X	180.21468	91.24700	61.36349	12.64444	0.0395238	0.19259416	2.9696640	20	9 21.5	20.0
186271 2001 YU ₁₃₈	16.5	X	202.51136	112.86062	76.45564	6.22092	0.0325730	0.20163393	2.8802287	20	11 27.5	20.4
186272 2001 YZ ₁₄₀	12.9	X	304.76940	214.20414	82.29998	8.18387	0.1235963	0.08302455	5.2039328	20	5 8.6	19.6
186273 2001 YE ₁₅₄	15.6	X	268.52467	73.11088	338.20436	8.30081	0.0417075	0.19282453	2.9672982	20	8 25.2	19.6
186274 2002 AY ₄	15.5	X	344.52574	354.60142	89.07991	14.67228	0.1017293	0.21620566	2.7493161	20	—	—
186275 2002 AK ₃₁	14.7	X	79.31813	78.41359	144.34445	19.61938	0.2460291	0.18205460	3.0831994	20	9 11.2	19.5
186276 2002 AW ₄₈	15.9	X	285.01585	274.66472	149.43978	5.84011	0.0955551	0.19726654	2.9225846	20	9 27.8	19.7
186277 2002 AR ₅₇	15.0	X	142.23166	56.03697	150.21870	6.26163	0.1793453	0.19151452	2.9808143	20	10 12.7	20.0
186278 2002 AY ₉₆	16.0	X	138.16282	263.47276	108.71656	12.28909	0.2064239	0.22318992	2.6916567	20	2 17.9	20.3
186279 2002 AN ₁₀₃	15.6	X	105.38845	182.69660	353.29039	3.48672	0.2249399	0.18230690	3.0803541	20	8 6.5	20.6
186280 2002 AW ₁₀₈	15.8	X	321.49629	337.44836	105.95822	8.48626	0.0545676	0.20373755	2.8603686	20	12 18.2	19.4
186281 2002 AZ ₁₂₉	17.0	X	271.12791	40.90032	56.42015	22.68714	0.0577249	0.36034302	1.9558039	20	12 2.6	18.6
186282 2002 AQ ₁₄₈	14.9	X	133.16324	354.21952	149.42828	11.53740	0.2178228	0.17917738	3.1161183	20	7 20.1	20.1
186283 2002 AT ₁₅₅	15.1	X	135.64505	48.69711	145.01989	17.23097	0.1442002	0.18651426	3.0338540	20	9 21.6	20.1
186284 2002 AT ₁₅₈	16.0	X	134.83417	298.24258	224.14871	3.34399	0.1401167	0.18478411	3.0527622	20	8 8.9	21.0
186285 2002 AP ₁₆₅	15.6	X	142.17481	328.25778	150.84011	8.37532	0.1199358	0.17949998	3.1123836	20	6 23.7	20.5
186286 2002 AA ₁₇₇	15.4	X	105.17231	233.93499	131.37841	6.76443	0.1930652	0.18301038	3.0724553	20	8 13.3	20.2
186287 2002 AU ₁₈₇	15.4	X	158.98396	359.65301	130.43327	13.19177	0.2150739	0.18124959	3.0923219	20	7 25.4	20.7
186288 2002 BS ₃	15.3	X	174.55649	49.48140	26.16504	14.57134	0.2454886	0.18237989	3.0795322	20	5 30.9	20.9
186289 2002 BB ₁₉	14.7	X	75.81854	182.93582	357.72211	11.12339	0.1552556	0.17820071	3.1274936	20	7 3.1	19.3
186290 2002 BZ ₂₄	16.0	X	12.50003	333.82492	98.42726	5.18986	0.0829335	0.20923833	2.8100144	20	—	—
186291 2002 BT ₂₈	15.8	X	4.21990	331.50333	53.81740	10.65046	0.1228509	0.20334668	2.8640328	20	12 10.9	19.3
186292 2002 CN ₄₁	15.3	X	99.29598	353.10625	214.80032	10.35398	0.1057588	0.18405852	3.0607799	20	8 22.9	20.0
186293 2002 CL ₄₇	16.0	X	141.15417	254.96971	133.48185	4.76539	0.2596465	0.22564354	2.6721087	20	3 14.2	20.4
186294 2002 CP ₆₂	15.6	X	186.40979	76.54274	54.02884	9.91895	0.0978320	0.18820875	3.0156170	20	8 26.6	20.4
186295 2002 CM ₇₄	15.9	X	184.55653	37.84550	54.24273	1.54727	0.1316905	0.18266482	3.0763290	20	7 1.9	20.7
186296 2002 CV ₈₀	15.8	X	145.91472	134.96961	31.67741	1.98735	0.1652389	0.18625049	3.0367178	20	8 27.6	20.8
186297 2002 CV ₈₉	16.2	X	156.79147	297.36248	137.86097	2.48518	0.2359527	0.17744525	3.1363640	20	5 20.5	21.7
186298 2002 CG ₉₃	15.1	X	276.59203	18.70268	341.17430	9.79223	0.1352785	0.18201483	3.0836485	20	6 14.0	19.6
186299 2002 CA ₁₀₀	15.4	X	83.07732	95.25513	117.52230	3.36947	0.0736882	0.18142103	3.0903735	20	8 9.7	19.6
186300 2002 CV ₁₀₀	15.7	X	137.14508	58.68300	121.38649	2.50968	0.1181279	0.18529423	3.0471567	20	9 2.8	20.4
186301 2002 CG ₁₀₃	15.0	X	94.22335	108.04552	136.17001	6.12821	0.1250934	0.18615454	3.0377612	20	10 9.7	19.6
186302 2002 CC ₁₁₇	15.4	X	29.55114	241.77350	315.92043	4.08398	0.0439381	0.17359516	3.1825677	20	5 3.7	19.7
186303 2002 CV ₁₂₄	15.6	X	135.60972	28.73908	160.76209	7.48635	0.1174942	0.18777753	3.0202320	20	9 12.8	20.3
186304 2002 CQ ₁₂₅	15.2	X	89.05936	46.98149	158.04723	17.31940	0.1865841	0.18162854	3.0880191	20	8 20.4	19.8
186305 2002 CQ ₁₂₈	16.0	X	19.00498	251.22432	148.30684	2.62431	0.0682871	0.20448810	2.8533651	20	—	—
186306 2002 CH ₁₃₆	15.5	X	177.13457	190.99979	244.94550	6.69145	0.2087257	0.18241941	3.0790874	20	6 5.2	20.7
186307 2002 CQ ₁₆₁	15.2	X	136.93248	105.26496	112.24028	10.67710	0.1751600	0.19173051	2.9785752	20	10 24.1	20.3
186308 2002 CL ₁₈₄	16.4	X	175.77392	321.21840	144.38709	0.94098	0.1809420	0.18316690	3.0707047	20	7 9.7	21.6
186309 2002 CJ ₁₉₀	15.9	X	104.21995	13.28045	138.67071	2.45320	0.1120603	0.17877908	3.1207448	20	6 23.2	20.4
186310 2002 CX ₁₉₀	15.6	X	65.82055	233.27911	22.78388	3.10986	0.1347386	0.18767802	3.0212995	20	9 22.1	19.8
186311 2002 CD ₂₀₄	15.4	X	200.30805	69.73432	344.38219	9.29578	0.0907741	0.17892768	3.1190167	20	5 30.9	20.4
186312 2002 CZ ₂₀₄	15.4	X	64.50093	153.63945	136.22570	12.12113	0.0895139	0.19148074	2.9811648	20	10 30.9	19.8
186313 2002 CY ₂₁₆	15.9	X	226.43788	3.66393	72.00314	3.30081	0.2544629	0.18592574	3.0402528	2		

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186321	2002	CZ ₂₇₄	15.0	X	111.89899	17.77719	148.36902	17.69986	0.1537464	0.17724576	3.1387169	20	7 23.0	20.0
186322	2002	CG ₂₈₉	15.5	X	166.12001	77.13294	85.43601	15.22348	0.1026191	0.19095720	2.9866112	20	9 17.5	20.4
186323	2002	DH ₃	15.6	X	100.68014	69.20264	67.95800	19.03753	0.2296083	0.17461782	3.1701295	20	6 13.3	20.5
186324	2002	DF ₄	16.4	X	98.71224	174.36226	107.40146	24.48718	0.0419074	0.35784674	1.9648889	20	12 29.0	18.5
186325	2002	DC ₉	15.5	X	63.41288	84.91631	73.21780	14.09452	0.2324468	0.17203830	3.2017392	20	5 29.2	19.7
186326	2002	DO ₁₂	15.2	X	110.49729	113.59044	68.99893	6.70967	0.1033382	0.18310394	3.0714085	20	8 9.4	19.8
186327	2002	DO ₁₆	14.8	X	35.87237	299.50422	342.32592	18.11294	0.1965030	0.18310376	3.0714106	20	9 18.9	18.7
186328	2002	DN ₁₇	16.2	X	130.85215	81.96275	96.26498	2.03203	0.0612083	0.18464226	3.0543255	20	8 21.4	20.6
186329	2002	DO ₁₈	15.3	X	86.19171	69.72117	110.02404	17.43078	0.1761889	0.17668466	3.1453585	20	7 24.7	19.9
186330	2002	EX ₁₅	14.9	X	166.65057	251.75612	207.43749	10.95997	0.0226415	0.17785443	3.1315517	20	6 20.7	19.5
186331	2002	EU ₂₀	14.5	X	49.99593	247.69748	12.98220	10.65768	0.1616092	0.17883247	3.1201237	20	9 12.6	18.7
186332	2002	EL ₂₁	14.9	X	31.85627	226.32772	64.89050	11.62864	0.0927096	0.18278248	3.0750086	20	9 20.7	19.1
186333	2002	EN ₂₃	16.3	X	10.84191	119.17704	123.57645	1.92434	0.1198507	0.17466006	3.1696184	20	6 9.5	20.2
186334	2002	EE ₃₁	16.3	X	106.55667	109.98408	59.45634	2.13501	0.1094994	0.17944656	3.1130012	20	7 18.0	21.0
186335	2002	EJ ₃₃	15.1	X	65.08160	255.93288	12.54763	9.36566	0.0555196	0.18780029	3.0199880	20	9 25.8	19.3
186336	2002	EC ₃₆	15.5	X	185.00234	330.01429	152.37280	9.74518	0.0882692	0.18364036	3.0654245	20	8 9.3	20.1
186337	2002	ED ₃₇	15.8	X	279.29808	234.52213	154.07120	10.69357	0.0953247	0.18350526	3.0669289	20	7 30.6	19.9
186338	2002	EO ₄₂	15.7	X	79.32399	358.81571	154.95546	1.39531	0.1172208	0.17246302	3.1964805	20	5 27.2	20.1
186339	2002	EC ₅₃	15.4	X	166.39670	343.39851	158.39032	10.69395	0.0295373	0.18388022	3.0627582	20	8 13.8	19.8
186340	2002	EO ₅₈	15.3	X	0.30917	106.22420	175.79522	10.19444	0.0814577	0.17934009	3.1142332	20	7 12.5	19.4
186341	2002	EC ₇₅	14.8	X	8.28112	237.59636	0.69267	26.34626	0.1638117	0.17028226	3.2237136	20	5 20.2	19.1
186342	2002	EA ₇₉	14.8	X	49.25267	34.77996	208.43544	11.55780	0.1902398	0.17773498	3.1329547	20	8 17.3	19.2
186343	2002	EA ₈₀	15.8	X	100.08763	38.26341	144.05652	7.38436	0.0925393	0.17988678	3.1079203	20	7 23.9	20.3
186344	2002	ER ₁₀₁	15.3	X	123.96198	122.12634	39.20099	10.36958	0.0455179	0.18057092	3.1000653	20	7 23.3	19.9
186345	2002	EM ₁₁₀	15.0	X	30.69511	80.06964	135.64762	8.21822	0.1443678	0.17193643	3.2030037	20	6 10.1	18.9
186346	2002	EK ₁₁₂	15.8	X	55.68801	165.35203	161.55164	10.53399	0.1024257	0.19339151	2.9614957	20	12 3.7	20.2
186347	2002	EY ₁₄₁	15.8	X	239.02161	63.31702	6.84568	4.99069	0.0215528	0.18402707	3.0611286	20	8 14.8	20.1
186348	2002	ED ₁₄₃	15.0	X	352.21001	128.01357	163.43819	10.40074	0.0774601	0.17753474	3.1353100	20	7 12.6	19.1
186349	2002	EQ ₁₅₀	15.4	X	160.88046	326.85238	113.15514	3.09736	0.1123734	0.17345441	3.1842891	20	5 25.3	20.3
186350	2002	EL ₁₆₁	15.1	X	350.99129	89.80906	197.77493	9.60405	0.0633870	0.18023802	3.1038813	20	7 4.8	19.3
186351	2002	FB ₄	15.0	X	71.17868	185.88638	49.62322	11.71041	0.1457869	0.18016112	3.1047645	20	9 8.9	19.6
186352	2002	FJ ₁₅	14.9	X	44.28200	138.13962	95.05189	8.53915	0.1281625	0.17609703	3.1523519	20	7 22.9	18.9
186353	2002	FQ ₂₀	15.2	X	78.43651	78.48221	147.87296	19.11202	0.1804219	0.17944573	3.1130108	20	9 5.6	19.8
186354	2002	FX ₂₅	15.6	X	87.97668	97.88685	97.42943	16.63515	0.1580646	0.17784446	3.1316687	20	8 6.3	20.4
186355	2002	FM ₃₀	15.1	X	323.43413	333.25799	47.58060	14.03055	0.0237133	0.18992847	2.9973860	20	10 5.7	19.3
186356	2002	GX ₂	15.0	X	131.33865	263.19301	206.16526	24.72216	0.2475812	0.17454854	3.1709683	20	6 8.9	20.7
186357	2002	GW ₁₂	15.0	X	352.26910	90.26996	197.97301	8.91497	0.0721334	0.17457682	3.1706258	20	7 7.8	19.3
186358	2002	GT ₄₅	15.0	X	359.25374	131.51725	134.11148	4.04918	0.2821818	0.16893969	3.2407703	20	6 22.7	17.7
186359	2002	GU ₄₈	15.3	X	18.58108	85.73146	208.05606	7.63837	0.1679478	0.17667076	3.1455235	20	9 2.7	19.1
186360	2002	GU ₅₄	15.7	X	330.66818	204.42473	156.84878	1.75344	0.0363520	0.18308126	3.0716622	20	9 13.2	19.8
186361	2002	GK ₅₅	14.7	X	56.54770	42.84606	224.92000	9.91175	0.2079194	0.18000607	3.1065472	20	10 1.4	19.1
186362	2002	GR ₇₂	15.4	X	84.64484	347.65044	162.03595	6.09047	0.1020151	0.17007674	3.2263100	20	5 27.6	20.0
186363	2002	GE ₇₇	14.6	X	359.10217	229.47858	28.52009	20.71196	0.0615638	0.17195584	3.2027627	20	6 4.5	19.1
186364	2002	GQ ₉₇	14.8	X	320.25215	121.65625	203.36819	8.84604	0.0908623	0.17482477	3.1676273	20	7 6.1	19.0
186365	2002	GN ₁₀₃	15.1	X	16.55967	171.86702	78.17593	10.70014	0.1216460	0.17095686	3.2152274	20	6 28.9	19.1
186366	2002	GA ₁₀₇	15.0	X	27.32103	151.95808	105.51297	6.06189	0.1342611	0.17537522	3.1609957	20	7 29.4	18.9
186367	2002	GX ₁₀₇	14.8	X	25.29503	99.33221	181.25493	26.64398	0.0684361	0.17816128	3.1279550	20	8 14.9	19.3
186368	2002	GW ₁₀₈	14.8	X	340.75418	235.57177	61.87055	17.75580	0.0906847	0.17318784	3.1875557	20	7 2.3	19.0
186369	2002	GG ₁₁₃	14.9	X	107.54995	28.87583	112.68943	5.76147	0.0804753	0.17291004	3.1905690	20	6 10.4	19.5
186370	2002	GX ₁₂₁	14.8	X	8.96741	253.55735	36.17942	8.66721	0.0527493	0.17776843	3.1325616	20	8 8.6	19.1
186371	2002	GN ₁₂₅	15.5	X	160.19366	235.18401	198.59596	7.14003	0.1056939	0.17181438	3.2045204	20	5 17.2	20.5
186372	2002	GF ₁₄₅	15.2	X	160.74390	286.86318	208.75784	7.85179	0.1129886	0.17992567	3.1074725	20	7 29.8	20.3
186373	2002	GF ₁₄₈	15.7	X	191.33375	240.65467	211.79181	4.81636	0.1429457	0.17927576	3.1149782	20	7 7.5	20.8
186374	2002	GR ₁₅₉	14.8	X	13.52283	11.07568	196.18544	27.13247	0.1013489	0.16832397	3.2486686	20	4 28.3	19.0
186375	2002	GV ₁₆₂	17.0	X	267.06863	338.17538	150.67597	3.95353	0.0707543	0.30265957	2.1970154	20	12 26.6	19.3
186376	2002	GT ₁₆₃	15.0	X	336.65142	125.75839	189.52027	11.29296	0.0801405	0.17526895	3.1622733	20	7 18.6	19.3
186377	2002	GD ₁₆₄	15.5	X	201.05219	258.54627	197.89529	10.62675	0.0580893	0.17788888	3.1311474	20	7 24.7	20.3
186378	2002	GW ₁₇₀	14.5	X	287.06095	165.28178	205.98751	22.17062	0.1180829	0.17622961	3.1507707	20	7 11.1	19.2
186379	2002	GE ₁₇₆	15.2	X	37.93959	105.38077	194.43726	12.20232	0.2712113	0.18131858	3.0915374	20	10 31.1	19.3
186380	2002	HN ₅	14.5	X	49.77035	197.19453	55.61901	19.02808	0.1875652	0.17634601	3.1493841	20	9 14.4	19.1
186381	2002	HG ₁₅	15.5	X	76.99279	137.64739	111.56794	2.97588	0.0510924	0.18233280	3.0800624	20	9 15.3	19.8
186382	2002	JZ ₃	15.2	X	49.32152	86.60834	144.78646	26.19930	0.1721721	0.17351439	3.1835551	20	8 2.3	19.4
186383	2002	JX ₄₀	14.9	X	58.77074	337.23434	209.49085	10.56112	0.1682433	0.17182511	3.2043870	20	6 17.9	19.3
186384	2002	JD ₈₂	14.8	X	42.24718	33.28676	212.63205	9.13816	0.0573983	0.17421883	3.1749678	20	7 23.5	19.2
186385	2002	JX ₉₈	14.9	X	1.13995	173.35341	135.55234	17.91179	0.0916070	0.17837660	3.1254373	20	8 21.8	18.7
186386	2002	JG ₁₀₈	14.7	X	269.15838	242.21110	96.55208	20.20640	0.0107082	0.16985254	3.2291485	20	5 31.0	19.4
186387	2002	JP ₁₀₈	14.8	X	15.68038	147.24445	164.40860	23.45467	0.1222838	0.17861933	3.1226052	20	9 20.7	18.6
186388	2002	JB ₁₁₆	14.9	X	81.45184	222.21484	63.82057	22.00108	0.3893245	0.18165540	3.0877148	20	12 4.0	20.4
186389	2002	JL ₁₁₇	14.9	X	96.16486	51.63753	89.66538	19.84130	0.0985273	0.16998327	3.2274927	20	6 1.1</	

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186401	2002	PR ₅₉	16.9	X	109.68939	219.13221	138.06645	6.15631	0.1958858	0.29578119	2.2309458	20	—	—
186402	2002	PS ₆₁	16.7	X	180.17232	309.79127	1.61489	7.64644	0.1688793	0.30069594	2.2065698	20	—	—
186403	2002	PQ ₆₂	17.2	X	86.84825	224.27045	137.13896	4.42163	0.1480373	0.29520746	2.2338354	20	—	—
186404	2002	PU ₆₇	16.8	X	293.19496	223.26990	169.41804	5.22085	0.2368444	0.27389134	2.3482834	20	8 14.8	18.9
186405	2002	PE ₇₀	16.7	X	309.96718	168.40058	212.01369	9.04574	0.2145985	0.27455464	2.3444997	20	9 3.5	18.6
186406	2002	PO ₈₃	17.4	X	128.30811	185.19813	140.07943	4.90402	0.2258128	0.29639419	2.2278687	20	—	—
186407	2002	PM ₁₁₅	16.1	X	52.29467	170.89654	188.23553	6.62808	0.2106477	0.28746001	2.2737939	20	—	—
186408	2002	PD ₁₂₆	17.2	X	354.17390	100.30414	273.18612	1.08109	0.2506069	0.28046475	2.3114466	20	12 24.5	19.3
186409	2002	PO ₁₂₉	17.0	X	16.43612	252.64478	138.48936	6.88478	0.0987398	0.28843867	2.2686477	20	—	—
186410	2002	PG ₁₃₅	16.4	X	75.40475	323.13771	22.07619	7.18477	0.1533038	0.28965278	2.2623038	20	—	—
186411	2002	Margaretsimon	17.4	X	213.64543	131.49143	109.88726	4.14927	0.1048080	0.29985375	2.2106996	20	—	—
186412	2002	PE ₁₆₀	17.5	X	230.92972	168.78336	98.69702	3.20441	0.1375845	0.30626963	2.1797169	20	—	—
186413	2002	QU ₄₈	17.3	X	191.17176	137.33187	126.98701	3.91439	0.1597512	0.29783218	2.2206919	20	—	—
186414	2002	QH ₅₇	17.3	X	173.50526	52.79242	242.92062	0.72234	0.1221471	0.29964788	2.2117120	20	—	—
186415	2002	QB ₉₁	17.0	X	350.39267	157.61688	41.48334	6.77907	0.1411788	0.28031473	2.3122712	20	12 2.1	19.2
186416	2002	QQ ₉₉	17.0	X	284.22337	356.64207	80.65747	3.77939	0.1239536	0.27938458	2.3174005	20	10 29.0	19.1
186417	2002	QM ₁₁₇	17.0	X	217.35866	97.10130	176.24724	6.55259	0.1209286	0.30424204	2.1893905	20	—	—
186418	2002	RA	16.5	X	67.10980	44.53271	318.50276	4.53077	0.2878657	0.29092064	2.2557261	20	—	—
186419	2002	RR ₂	16.9	X	75.16492	184.65923	161.43525	6.90510	0.1539711	0.28919581	2.2646863	20	—	—
186420	2002	RG ₆	17.3	X	131.11917	157.61668	167.86516	5.28782	0.1871584	0.29655335	2.2270715	20	—	—
186421	2002	RZ ₆	16.3	X	319.67966	190.15686	191.38990	3.05489	0.2716929	0.27300103	2.3533862	20	10 3.7	17.1
186422	2002	RD ₁₄	17.0	X	108.40015	192.66561	152.77344	1.72354	0.1646765	0.29400912	2.2399011	20	—	—
186423	2002	RJ ₁₉	16.9	X	28.70205	242.60930	130.20150	3.37334	0.1840041	0.28445581	2.2897752	20	—	—
186424	2002	RA ₂₄	17.0	X	346.11193	57.29696	304.69720	1.37586	0.2337125	0.27746947	2.3280515	20	11 15.6	18.7
186425	2002	RX ₃₄	17.5	X	98.00868	98.98039	213.55196	2.34832	0.1824249	0.28965035	2.2623164	20	—	—
186426	2002	RE ₅₁	16.8	X	90.65261	198.60617	152.34878	7.50341	0.1687964	0.29137454	2.2533828	20	—	—
186427	2002	RB ₇₇	16.8	X	323.32579	235.58307	189.70780	3.62882	0.0886617	0.28293209	2.2979888	20	12 22.6	19.1
186428	2002	RE ₈₆	16.2	X	219.97746	26.31049	7.09164	5.53965	0.1665697	0.26017834	2.4300877	20	5 20.5	20.1
186429	2002	RK ₉₁	17.0	X	352.48020	149.33917	191.93162	5.77758	0.1210790	0.27479178	2.3431507	20	10 11.6	19.1
186430	2002	RK ₉₂	16.7	X	317.04440	44.57750	325.52355	1.46576	0.2187435	0.27259100	2.3557455	20	9 7.2	18.3
186431	2002	RG ₉₈	16.6	X	304.18555	241.06443	175.62078	6.36358	0.1922342	0.27481184	2.3430367	20	10 30.4	18.2
186432	2002	RJ ₁₀₄	16.6	X	356.51904	353.40902	4.54315	2.62698	0.2436591	0.27619233	2.3352227	20	12 2.4	18.6
186433	2002	RA ₁₁₅	16.5	X	217.69991	183.89518	213.77588	5.27924	0.1570320	0.26220107	2.4175738	20	5 26.4	20.2
186434	2002	RS ₁₁₉	16.2	X	30.34853	336.80766	37.81379	6.78224	0.1217014	0.28466218	2.2886684	20	—	—
186435	2002	RU ₁₂₄	16.7	X	223.82118	203.52010	96.64885	8.06982	0.2091214	0.30799920	2.1715491	20	1 24.7	20.1
186436	2002	RG ₁₃₇	16.7	X	47.66345	192.00176	187.71555	6.02101	0.1487248	0.28833795	2.2691760	20	—	—
186437	2002	RE ₁₃₉	16.3	X	99.03454	291.64726	83.56124	7.07144	0.2088950	0.29547024	2.2325107	20	—	—
186438	2002	RN ₂₀₀	16.7	X	2.65375	346.70513	52.50550	4.04212	0.2151900	0.28488556	2.2874719	20	—	—
186439	2002	RF ₂₁₇	17.3	X	173.75324	54.01952	218.74201	1.50429	0.1463184	0.29646083	2.2275348	20	—	—
186440	2002	RE ₂₄₅	17.0	X	334.15288	24.73204	7.10451	1.06401	0.2262152	0.27973127	2.3154854	20	12 6.3	18.6
186441	2002	RY ₂₆₃	16.9	X	94.71871	186.04601	125.15329	5.73604	0.0633877	0.28597537	2.2816567	20	—	—
186442	2002	SK ₁₁	17.0	X	121.34794	186.46947	160.83171	1.56621	0.2020903	0.29522452	2.2337493	20	—	—
186443	2002	SC ₁₂	16.3	X	167.39015	100.89878	64.89482	3.70510	0.1143509	0.27192290	2.3596026	20	9 25.8	19.8
186444	2002	SP ₁₈	16.5	X	241.77682	353.03859	168.47613	6.48502	0.0413837	0.28474009	2.2882509	20	12 31.4	19.2
186445	2002	SP ₂₂	17.0	X	305.42877	304.19550	76.68257	2.46944	0.1980779	0.27166491	2.3610962	20	8 31.7	18.7
186446	2002	SM ₃₀	16.0	X	285.20182	320.99222	61.58314	6.10753	0.2306106	0.26862635	2.3788678	20	7 17.8	18.7
186447	2002	SP ₃₄	16.4	X	70.65976	322.45500	50.14539	4.83155	0.1504365	0.29092754	2.2556904	20	—	—
186448	2002	SK ₄₀	14.4	X	73.01003	228.99833	137.20755	4.21748	0.2353812	0.12242836	4.0168106	20	—	—
186449	2002	SA ₄₃	16.8	X	325.12506	25.75267	320.86541	1.48704	0.2224603	0.27114871	2.3640919	20	8 17.7	18.3
186450	2002	SO ₄₃	16.6	X	264.44337	170.14569	216.48058	1.40053	0.1621853	0.26534470	2.3984413	20	7 3.0	19.5
186451	2002	SJ ₄₅	16.2	X	283.84094	214.94741	200.01833	6.29769	0.0983195	0.27186955	2.3599112	20	9 23.7	18.7
186452	2002	SP ₄₉	17.2	X	238.97022	281.11922	118.15837	2.87855	0.2054228	0.26320443	2.4114259	20	6 14.7	20.8
186453	2002	SU ₅₁	16.5	X	309.93716	353.83701	66.99663	7.95262	0.0786958	0.27929425	2.3179002	20	11 21.8	18.7
186454	2002	SS ₅₅	16.4	X	53.44070	219.47148	127.93112	4.50858	0.1540117	0.28433872	2.2904038	20	—	—
186455	2002	SS ₅₆	16.1	X	334.30209	254.52776	128.85397	6.69327	0.1288754	0.27582436	2.3372991	20	11 13.8	18.3
186456	2002	SE ₅₇	16.5	X	230.01338	344.57518	85.58927	6.83972	0.1762769	0.26414977	2.4056691	20	7 20.4	19.9
186457	2002	SU ₅₇	16.6	X	326.07947	307.96946	113.63976	7.22233	0.0894386	0.28119399	2.3074486	20	12 21.7	18.9
186458	2002	SQ ₅₉	16.5	X	326.88333	325.71480	71.62625	8.19248	0.0993230	0.27878813	2.3207046	20	11 18.1	18.6
186459	2002	SF ₆₀	17.3	X	109.38379	281.63892	88.95152	5.55407	0.1509215	0.29770136	2.2213424	20	—	—
186460	2002	SX ₇₁	15.8	X	62.47484	225.16211	106.50674	7.31674	0.2053999	0.28398151	2.2923240	20	—	—
186461	2002	TZ ₂	16.5	X	331.72506	227.67304	188.24325	3.12602	0.2037053	0.27889416	2.3201164	20	—	—
186462	2002	TE ₅	16.6	X	337.75711	211.68070	168.74133	5.57362	0.2446211	0.27565022	2.3382834	20	11 28.8	18.2
186463	2002	TD ₁₀	16.6	X	323.69993	297.10485	80.79951	7.17424	0.2026142	0.27270062	2.3551142	20	10 15.8	18.3
186464	2002	TB ₁₄	16.3	X	48.46634	289.27889	53.58939	7.11806	0.1357187	0.28198240	2.3031455	20	—	—
186465	2002	TG ₂₂	16.8	X	251.03465	20.46244	15.95041	3.09319	0.2113486	0.26413583	2.4057538	20	6 23.1	20.2
186466	2002	TE ₃₁	16.5	X	309.33727	198.24880	178.04728	2.43235	0.1105456	0.27029961	2.3690402	20	9 9.8	18.6
186467	2002	TX ₄₀	16.4	X	143.70847	269.08997	63.40400	6.41818	0.1802184	0.29520573	2.2338441	20	—	—
186468	2002	TO ₄₂	16.6	X	304.32492	343.94114	27.29100	5.98575	0.2260217	0.26909747	2.3760905	20	8 9.2	18.6
186469	2002	TP ₄₅	16.4	X	252.31217	246.03159	161.83206	6.03569	0.1432312	0.26362003	2.4088908	20	7 19.0	19.7
186470	2002	TQ ₄₅	16.5	X	266.35150	235.62738	207.41069	5.17708	0.1208049	0.27136287	2.3628479	20	10 2.9	19.1
186471	2002	TN ₄₉	16.4	X	177.77456	104.07533	209.92002							

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
186481 2002 TY ₈₇	16.9	X	194.00389	252.79933	182.74480	6.33132	0.1082621	0.26064907	2.4271610	20	6 22.9	20.5
186482 2002 TX ₁₀₇	16.9	X	339.21222	283.86443	111.14978	7.02765	0.1515048	0.27892662	2.3199364	20	12 12.4	19.0
186483 2002 TX ₁₀₈	16.6	X	140.01902	220.54920	88.45034	7.21463	0.1007285	0.29303241	2.2448756	20	—	—
186484 2002 TE ₁₀₉	16.3	X	343.19283	103.04981	249.06712	5.65535	0.1327288	0.27393712	2.3480218	20	10 8.1	18.4
186485 2002 TQ ₁₂₄	16.4	X	56.76067	292.19974	68.47159	3.67313	0.1842648	0.28816510	2.2700833	20	—	—
186486 2002 TQ ₁₂₉	15.7	X	296.75835	104.86468	354.68787	21.82237	0.0524941	0.22614000	2.6681964	20	12 5.1	19.6
186487 2002 TZ ₁₈₁	16.4	X	74.03525	319.69094	35.81312	6.17196	0.1873597	0.28648526	2.2789486	20	—	—
186488 2002 TH ₁₉₅	16.7	X	328.99007	323.83826	33.07914	4.38615	0.1616201	0.27109448	2.3644072	20	9 20.0	18.4
186489 2002 TP ₂₀₈	16.7	X	329.11351	269.12168	116.77869	5.56034	0.2403259	0.27295896	2.3536279	20	11 14.0	18.1
186490 2002 TB ₂₂₂	16.9	X	172.58654	74.12489	234.62920	1.98972	0.1783977	0.29816404	2.2190438	20	—	—
186491 2002 TE ₂₂₆	16.5	X	329.99628	271.08072	118.99822	6.20847	0.2473636	0.27337005	2.3512678	20	11 24.5	17.9
186492 2002 TZ ₂₄₅	16.5	X	308.15483	258.07208	84.57619	6.13351	0.1347442	0.26630004	2.3927017	20	7 13.6	18.8
186493 2002 TL ₂₆₅	16.8	X	324.59320	342.19636	32.79022	7.26402	0.1564315	0.27104476	2.3646963	20	10 9.5	18.5
186494 2002 TO ₂₇₇	17.1	X	57.69492	12.88451	295.89756	2.09596	0.1720411	0.27948594	2.3168402	20	12 8.7	20.2
186495 2002 TB ₂₈₇	15.8	X	335.91552	100.38633	262.77848	5.99605	0.1349897	0.27156244	2.3616901	20	10 9.5	18.0
186496 2002 TY ₂₉₉	17.0	X	18.63040	224.28047	104.22231	6.10178	0.1847532	0.27719370	2.3295953	20	11 19.2	19.6
186497 2002 TZ ₃₀₀	16.8	X	225.82264	54.15495	56.80139	7.04941	0.0783092	0.27167746	2.3610235	20	9 25.9	19.9
186498 2002 TE ₃₀₃	16.8	X	353.33766	245.28723	89.82944	3.68632	0.1527988	0.27254925	2.3559861	20	10 8.9	18.8
186499 2002 TD ₃₄₃	16.9	X	170.10743	46.22493	76.74005	6.88591	0.1177289	0.26373056	2.4082177	20	8 1.6	20.5
186500 2002 TR ₃₅₇	17.7	X	131.41279	338.41792	216.60623	1.89231	0.1308011	0.27383685	2.3485950	20	9 24.5	21.2
186501 2002 UY	16.2	X	130.66639	214.93999	109.18017	8.96484	0.1785433	0.29431404	2.2383538	20	—	—
186502 2002 UL ₆	16.6	X	269.61896	297.98510	113.93115	6.84568	0.0962466	0.26880379	2.3778208	20	8 30.4	19.3
186503 2002 UH ₁₅	16.9	X	95.11586	243.02679	107.69813	6.01613	0.1560523	0.28933864	2.2639409	20	—	—
186504 2002 UX ₁₅	16.6	X	281.02184	339.87576	67.22881	6.64696	0.0933162	0.26957059	2.3733095	20	9 13.0	19.3
186505 2002 UB ₁₉	16.8	X	23.54930	280.21192	88.21105	3.86460	0.2661963	0.28080640	2.3095713	20	—	—
186506 2002 UK ₂₈	16.2	X	349.82590	199.25279	170.56366	7.29034	0.1377591	0.27466382	2.3438784	20	11 22.4	18.6
186507 2002 UE ₅₉	17.4	X	166.71138	73.89910	100.64909	7.62646	0.0576344	0.27162627	2.3613202	20	10 11.4	20.7
186508 2002 UO ₅₉	17.0	X	196.64185	192.31770	101.09620	7.08168	0.1962334	0.29875032	2.2161397	20	—	—
186509 2002 VG ₂	16.6	X	296.99898	317.84755	51.60569	6.87547	0.1173174	0.26628221	2.3928085	20	8 9.3	19.2
186510 2002 VA ₈	16.5	X	186.50704	185.55155	299.19691	4.12389	0.0767900	0.26575232	2.3959882	20	8 21.3	19.7
186511 2002 VE ₁₂	16.3	X	358.10094	298.27503	77.89852	3.40560	0.2248150	0.27641759	2.3339539	20	12 29.1	18.5
186512 2002 VA ₂₃	17.1	X	27.01648	343.70473	11.29032	2.30618	0.2355077	0.27931676	2.3177756	20	—	—
186513 2002 VZ ₂₃	16.6	X	75.48365	30.57246	46.52306	6.08940	0.2126406	0.23856810	2.5747070	20	2 23.5	19.5
186514 2002 VC ₂₄	16.9	X	343.24216	320.64939	42.35735	3.14970	0.2009935	0.27267919	2.3552376	20	11 4.4	18.7
186515 2002 VN ₂₆	17.1	X	307.03614	106.98424	259.72666	1.52932	0.1990006	0.26734482	2.3864639	20	8 8.3	19.2
186516 2002 VH ₃₁	16.6	X	279.58525	189.62749	215.90191	4.35057	0.0762343	0.26649541	2.3915321	20	9 4.3	19.4
186517 2002 VM ₃₂	16.7	X	138.43917	244.27145	172.74373	0.74158	0.1799798	0.24593182	2.5230522	20	4 6.6	20.5
186518 2002 VZ ₃₄	16.7	X	200.14353	202.56225	221.11854	1.39148	0.1541130	0.25730194	2.4481649	20	6 11.8	20.3
186519 2002 VZ ₃₇	16.2	X	284.59224	320.16631	95.01226	6.93120	0.0937003	0.27115349	2.3640641	20	10 1.4	18.8
186520 2002 VU ₃₈	16.3	X	310.51875	267.90924	109.36086	5.88676	0.1358591	0.26926103	2.3751281	20	9 14.7	18.5
186521 2002 VV ₄₃	16.9	X	310.52130	219.92591	167.30106	2.96440	0.0993957	0.27040664	2.3684151	20	9 30.7	19.0
186522 2002 VG ₄₅	16.1	X	19.42368	262.52805	236.59081	11.63830	0.2006271	0.23739554	2.5831781	20	1 18.9	18.7
186523 2002 VZ ₄₈	16.6	X	163.19296	228.82848	208.92601	7.23583	0.1806265	0.25254006	2.4788440	20	5 26.7	20.6
186524 2002 VU ₅₀	16.8	X	146.02437	100.75638	198.47257	9.61600	0.2164837	0.29152885	2.2525876	20	—	—
186525 2002 VG ₅₆	16.2	X	178.67402	335.84216	89.73977	7.26619	0.1070616	0.25469911	2.4648156	20	5 25.1	19.8
186526 2002 VK ₅₆	16.1	X	103.77187	48.74434	202.61164	12.21284	0.0791154	0.27303609	2.3531847	20	11 6.3	19.4
186527 2002 VL ₅₉	16.4	X	84.55485	209.75060	118.83897	6.64610	0.2003606	0.28502599	2.2867204	20	—	—
186528 2002 VN ₆₅	16.6	X	154.63297	216.69398	93.68544	3.41377	0.1936994	0.29306770	2.2446954	20	—	—
186529 2002 VO ₆₇	16.6	X	256.22104	277.34765	101.58405	2.40279	0.2016227	0.26124476	2.4234700	20	6 6.5	20.0
186530 2002 VX ₇₈	16.4	X	290.87683	233.63258	143.29033	3.76076	0.1365935	0.26511446	2.3998298	20	8 3.1	18.9
186531 2002 VD ₈₀	16.7	X	290.57809	316.38203	73.10686	7.85718	0.1223392	0.26631019	2.3926409	20	8 29.1	19.4
186532 2002 VR ₈₄	16.1	X	75.78574	255.30481	199.40322	3.76469	0.2345036	0.23763941	2.5814105	20	3 19.2	19.1
186533 2002 VR ₈₆	16.5	X	35.08442	237.89015	266.82999	3.50404	0.2056753	0.24176171	2.5519826	20	3 5.4	18.6
186534 2002 YX ₈₈	16.1	X	350.62646	21.93339	290.30206	4.62934	0.1886894	0.26705624	2.3881828	20	8 23.5	17.9
186535 2002 VM ₁₀₁	16.6	X	122.49757	299.40466	100.87215	4.81191	0.1843384	0.24139473	2.5545684	20	3 2.8	20.2
186536 2002 VQ ₁₀₅	16.4	X	275.27469	7.22420	355.63427	5.10451	0.1257442	0.26052730	2.4279173	20	6 20.0	19.4
186537 2002 VZ ₁₀₈	16.2	X	71.02200	78.99228	342.95959	2.58999	0.1519408	0.23538229	2.5978866	20	1 14.7	18.9
186538 2002 VP ₁₀₉	16.4	X	276.67196	342.30697	26.39444	5.28138	0.1671614	0.26164085	2.4210235	20	6 23.6	19.4
186539 2002 VR ₁₁₄	16.8	X	303.03005	21.05255	67.16977	3.47197	0.1399206	0.27551724	2.3390358	20	12 17.7	18.5
186540 2002 VO ₁₂₇	16.7	X	288.85657	155.23623	212.91784	2.35745	0.1945878	0.26501842	2.4004095	20	7 6.8	19.4
186541 2002 WJ ₁	16.4	X	81.23114	279.13539	19.21479	6.11712	0.1141912	0.27807321	2.3246805	20	12 13.9	19.8
186542 2002 WA ₁₁	16.1	X	145.93679	344.16909	137.51290	6.60562	0.0712440	0.25548520	2.4597571	20	6 30.2	19.5
186543 2002 WU ₁₅	16.6	X	16.01902	189.35662	177.73095	7.19192	0.1291317	0.27706203	2.3303333	20	12 27.5	19.4
186544 2002 WT ₂₃	12.9	X	325.47277	203.28038	66.94929	9.71837	0.0920297	0.08420076	5.1553565	20	5 8.6	19.4
186545 2002 XY ₃	17.3	X	62.83198	260.65216	178.40727	1.69423	0.1802536	0.23655713	2.5892781	20	1 26.4	19.8
186546 2002 XL ₆	16.7	X	281.33056	299.92224	91.89722	2.37940	0.1874651	0.26650764	2.3914590	20	8 1.4	19.1
186547 2002 XM ₈	16.9	X	245.00278	327.61741	86.65772	3.12439	0.1819859	0.26218370	2.4176806	20	7 14.5	20.2
186548 2002 XQ ₈	16.8	X	174.18186	243.06211	209.97723	0.81553	0.1403714	0.25558003	2.4591486	20	6 24.8	20.6
186549 2002 XM ₉	16.5	X	240.63231	14.76387	62.88644	4.40006	0.0988834	0.26535167	2.3983994	20	8 24.7	19.6
186550 2002 XP ₁₀	16.2	X	21.89976	6.04542	118.87788	5.46145	0.1803015	0.23494226	2.6011294	20	1 8.8	18.6
186551 2002 XQ ₁₁	15.8	X	41.77670	209.06395	282.86029	11.64700	0.2048748	0.23957896	2.5674595	20	2 25.8	18.3
186552 2002 XJ ₁₃	16.1	X	118.48330	289.25545	234.87603	5.65413	0.0879730	0.25731596	2.4480760	20	7 25.1	19.6
186553 2002 XA ₂₆	17.1	X	347.94939	54.84295	298.41043	0.47442	0.1986484	0.27039273	2.3684963	20	10 28.9	18.7
186554 2002 XW _{28</}												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
186561 2002 YA ₇	16.4	X	18.35482	50.12612	85.72400	3.63203	0.0399002	0.23243874	2.6197733	20	1 25.1	19.6
186562 2002 YZ ₁₀	16.4	X	39.46070	5.57974	88.37889	5.88305	0.2445594	0.23159036	2.6261674	20	1 4.0	18.1
186563 2002 YY ₁₂	15.9	X	40.77957	359.34125	119.48022	4.73253	0.1520223	0.23642060	2.5902748	20	2 8.1	18.4
186564 2002 YX ₁₃	16.9	X	90.67276	315.09222	114.34842	2.55841	0.1547875	0.23676246	2.5877808	20	2 24.9	20.0
186565 2002 YQ ₁₆	16.1	X	63.58263	36.68439	87.94185	4.30532	0.1501739	0.24152389	2.5536575	20	3 30.2	19.0
186566 2002 YL ₁₉	16.2	X	341.30987	210.20714	274.05034	2.52637	0.2363486	0.22643020	2.6659161	20	—	—
186567 2002 YG ₂₅	15.9	X	25.20136	77.69068	94.09581	6.07564	0.1487408	0.23917618	2.5703411	20	3 28.6	18.4
186568 2002 YP ₂₇	16.3	X	70.23229	28.83516	94.59702	5.26699	0.1061386	0.23982033	2.5657365	20	4 2.2	19.4
186569 2002 YR ₂₇	16.2	X	98.30659	311.17571	91.79010	4.85011	0.1831453	0.23468512	2.6030291	20	2 5.8	19.4
186570 2002 YX ₂₇	15.8	X	119.22468	119.22983	276.52372	5.02169	0.1739403	0.23676629	2.5877529	20	2 17.5	19.5
186571 2003 AM ₇	15.8	X	48.80967	27.30037	127.32915	5.68847	0.1226365	0.24070053	2.5594777	20	4 13.5	18.6
186572 2003 AW ₁₁	15.9	X	41.17321	344.15487	146.42078	14.18531	0.1021619	0.23531107	2.5984108	20	2 22.5	18.6
186573 2003 AG ₂₂	16.4	X	247.21037	341.46682	54.12939	6.38259	0.1096439	0.25536694	2.4605164	20	6 30.8	19.7
186574 2003 AY ₄₁	15.9	X	289.55881	342.27893	145.90029	17.55074	0.1750113	0.21463764	2.7626898	20	12 24.0	19.2
186575 2003 AA ₄₆	15.9	X	232.55674	354.93844	19.72800	3.27113	0.1947545	0.25260053	2.4784484	20	5 7.4	19.8
186576 2003 AL ₄₆	16.5	X	37.27486	103.54649	20.85223	5.02533	0.1471757	0.23481987	2.6202331	20	2 11.1	19.1
186577 2003 AE ₅₂	16.3	X	147.05453	340.73285	92.28300	6.64130	0.1582498	0.24511794	2.5083340	20	5 5.8	20.2
186578 2003 AN ₅₆	16.4	X	9.98431	60.60312	59.12058	3.99116	0.1291890	0.22899459	2.6459760	20	—	—
186579 2003 AL ₅₇	15.3	X	252.40206	253.67004	328.51138	11.18993	0.1920136	0.22208359	2.7005884	20	—	—
186580 2003 AE ₆₂	15.8	X	337.25610	86.15120	91.74452	3.93550	0.2189638	0.23347442	2.6120201	20	—	—
186581 2003 AS ₆₈	16.0	X	33.50532	75.87293	77.16500	5.12061	0.1300753	0.23839846	2.5759282	20	3 15.6	18.6
186582 2003 AK ₆₉	16.2	X	33.68505	184.02221	238.56282	5.14658	0.2067027	0.22720953	2.6598166	20	—	—
186583 2003 AO ₆₉	15.3	X	235.32246	268.91540	295.62055	6.58830	0.2539520	0.21352775	2.7722550	20	12 27.6	19.1
186584 2003 AS ₆₉	16.6	X	334.39755	271.63769	248.46183	1.20935	0.1463297	0.22873866	2.6479493	20	—	—
186585 2003 AE ₇₅	15.6	X	294.87526	62.54313	88.22104	14.82571	0.1241822	0.22092579	2.7100155	20	—	—
186586 2003 AK ₇₈	15.5	X	356.32764	118.23183	41.01050	12.70944	0.1086334	0.23143787	2.6273208	20	1 20.6	18.8
186587 2003 AZ ₇₉	15.8	X	212.74198	171.47741	0.35551	13.83453	0.1838753	0.20928902	2.8095607	20	10 28.4	20.3
186588 2003 AE ₈₅	16.1	X	164.48890	327.26124	133.69636	14.98820	0.0430251	0.25376101	2.4708864	20	6 24.5	19.7
186589 2003 BJ ₂	15.9	X	8.95071	274.64239	175.61825	8.11460	0.2778602	0.22390989	2.6858836	20	—	—
186590 2003 BJ ₂₀	15.7	X	316.06568	159.27858	6.22855	7.05585	0.0853340	0.22452797	2.6809523	20	—	—
186591 2003 BZ ₂₃	16.2	X	348.86810	295.77029	188.82513	11.96908	0.1338914	0.22484580	2.6784253	20	—	—
186592 2003 BH ₂₅	16.6	X	199.38159	10.03447	151.72508	23.52899	0.0504595	0.37578055	1.9018657	20	11 30.6	19.2
186593 2003 BB ₂₆	16.7	X	25.05936	276.65152	207.22041	12.73758	0.2371406	0.23345624	2.6121557	20	1 9.3	19.1
186594 2003 BP ₃₅	15.5	X	286.39786	139.57299	79.08715	9.60633	0.0693143	0.22800067	2.6536601	20	1 5.6	19.2
186595 2003 BS ₅₇	15.8	X	291.74834	48.76207	136.29470	15.24409	0.0410770	0.22472792	2.6793618	20	—	—
186596 2003 BX ₅₇	15.7	X	282.94265	269.88479	297.12740	7.05645	0.1949741	0.22404067	2.6848383	20	—	—
186597 2003 BJ ₆₂	15.8	X	280.35709	91.41313	102.73066	12.78239	0.1077995	0.22287087	2.6942249	20	—	—
186598 2003 BD ₇₀	16.4	X	338.52786	126.83810	75.40963	4.33512	0.0832553	0.23400070	2.6081022	20	2 21.2	19.5
186599 2003 BO ₇₁	15.9	X	286.10576	162.83306	228.89716	11.25974	0.2670344	0.26188248	2.4195341	20	7 20.8	18.8
186600 2003 BN ₈₂	15.6	X	297.57145	266.68027	337.25974	11.81192	0.0639091	0.23535089	2.5981177	20	2 20.7	19.1
186601 2003 BN ₈₆	16.3	X	111.00407	13.65584	79.58904	14.74584	0.1118274	0.24105765	2.5569493	20	4 22.2	20.1
186602 2003 BY ₈₉	15.4	X	307.52948	187.76690	307.25662	13.12355	0.1028327	0.21714651	2.7413689	20	—	—
186603 2003 BF ₉₀	15.7	X	236.66440	308.44791	264.77073	5.12390	0.2186931	0.21443859	2.7643991	20	—	—
186604 2003 BP ₉₂	16.3	X	251.72950	116.40057	29.42443	8.05896	0.1557825	0.20976848	2.8052779	20	11 16.4	20.2
186605 2003 CN ₁	15.6	X	297.02410	2.59444	87.76748	12.45013	0.2840117	0.21201632	2.7854147	20	11 4.2	18.3
186606 2003 CB ₁₅	16.4	X	12.99585	118.91580	351.53169	5.07079	0.1048406	0.22642221	2.6659789	20	—	—
186607 2003 CZ ₁₅	15.4	X	302.96089	188.27326	285.70434	13.04224	0.0369981	0.21532588	2.7567998	20	—	—
186608 2003 CK ₁₈	14.8	X	174.52902	36.90972	325.18351	14.64128	0.1304193	0.17893049	3.1189841	20	3 3.2	19.8
186609 2003 DA ₂₂	15.7	X	318.78505	69.21470	75.63000	8.89611	0.1450576	0.21941699	2.7224247	20	—	—
186610 2003 EF ₇	15.8	X	157.38780	0.84131	310.27926	4.10418	0.0362636	0.22017077	2.7162075	20	—	—
186611 2003 EH ₁₄	15.8	X	287.62215	139.89426	123.78901	12.48509	0.0494771	0.23379497	2.6096320	20	3 9.8	19.4
186612 2003 EJ ₂₁	15.6	X	230.50950	256.59588	351.77262	8.69291	0.2222152	0.21838897	2.7309615	20	—	—
186613 2003 EM ₂₅	15.8	X	219.79283	200.27616	16.32353	9.71247	0.1543179	0.21190256	2.7864114	20	—	—
186614 2003 EY ₃₁	15.7	X	282.36980	73.24423	170.62856	12.12045	0.1195881	0.22813793	2.6525956	20	1 23.9	19.6
186615 2003 EF ₃₄	15.2	X	219.77910	263.68117	322.54279	11.89645	0.1494929	0.21308856	2.7760628	20	—	—
186616 2003 EL ₃₉	15.5	X	49.50305	16.73730	122.04029	16.23320	0.2227357	0.17549596	3.1595457	20	4 17.3	19.5
186617 2003 EZ ₅₁	16.5	X	230.34845	93.64021	108.83406	3.61175	0.1264460	0.21192465	2.7862178	20	—	—
186618 2003 EC ₅₆	16.1	X	164.20626	180.65468	101.68682	9.54940	0.1896541	0.20887880	2.8132380	20	—	—
186619 2003 FU ₃₃	16.3	X	129.40139	268.87852	41.44029	4.93592	0.0599566	0.21138747	2.7909361	20	—	—
186620 2003 FY ₃₇	17.3	X	138.72942	221.62317	187.19854	22.98704	0.0795306	0.40272189	1.8160699	20	2 24.4	19.3
186621 2003 FD ₄₁	16.0	X	29.07186	296.48248	140.17215	9.43897	0.1144855	0.22124802	2.7073836	20	—	—
186622 2003 FQ ₄₅	16.0	X	322.70579	228.10674	195.19476	5.53623	0.0503771	0.20498674	2.8487360	20	11 25.2	19.7
186623 2003 FG ₅₂	16.0	X	325.69545	348.78836	134.04057	10.39091	0.2302832	0.21797700	2.7344014	20	—	—
186624 2003 FL ₉₆	15.9	X	2.59594	353.18381	323.21209	1.16886	0.1769983	0.19150314	2.9809324	20	9 10.5	19.0
186625 2003 FQ ₁₀₃	15.5	X	161.92867	45.69072	188.13199	14.89620	0.0937018	0.20400378	2.8578795	20	12 3.5	20.1
186626 2003 FA ₁₀₅	15.6	X	18.10589	33.62310	48.59112	6.46190	0.0242812	0.21631822	2.7483623	20	—	—
186627 2003 FY ₁₀₇	15.1	X	350.14782	76.76787	181.28130	16.30724	0.0552740	0.17915270	3.1164044	20	5 29.5	19.5
186628 2003 FO ₁₁₂	15.3	X	111.83998	86.88209	209.86112	13.42408	0.1626247	0.20416478	2.8563768	20	12 28.8	20.2
186629 2003 FN ₁₃₀	16.0	X	357.60049	263.59881	201.86461	9.23506	0.1048622	0.21757707	2.7377511	20	—	—
186630 2003 GB ₃₇	16.3	X	270.03042	55.33906	85.28379	10.61831	0.1977752	0.21152095	2.7897618	20	12 2.2	19.6
186631 2003 GA ₄₁	15.6	X	276.92182	291.88276	179.15047	14.86152	0.1068346	0.20422171	2.8558459	20	11 16.9	19.5
186632 2003 GF ₄₁	15.5	X	105.34886	264.54160	93.84242	6.91879	0.0937756	0.21335637	2.7737393	20	—	—
186633 2003 GP ₄₄	15.8	X	32.40978	13.06655	94.82433	15.50843	0.1090790	0.22444097	2.6816451	20	1 9.6	18.8
186634 2003 GA ₄₅	15.2	X	289.92005	119.63621	163.46799	9.68995	0.0473281	0.17495920	3.1660045	20	4 10.4	19.7
186635 2003 GW<												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
186641 2003 LL ₄	15.1	X	74.88974	151.48308	113.06783	16.96224	0.2049466	0.18638619	3.0352436	20	10 28.3	20.1
186642 2003 MK ₇	14.7	X	43.95290	81.85289	193.94382	15.60179	0.1537580	0.18292267	3.0734373	20	9 18.4	18.7
186643 2003 MS ₇	15.5	X	45.23317	23.30234	258.20631	2.08259	0.2129128	0.18157617	3.0886129	20	10 6.8	19.7
186644 2003 ML ₈	14.9	X	41.42268	169.66013	134.17629	17.20561	0.1982076	0.18250710	3.0781011	20	11 4.2	19.4
186645 2003 NW ₈	15.6	X	71.98178	257.26766	18.88651	4.60804	0.2665210	0.18514799	3.0487611	20	11 6.2	20.5
186646 2003 QW ₆₄	14.1	X	55.67059	297.57598	78.18530	10.23263	0.3112762	0.12531737	3.9548365	20	—	—
186647 2003 RB ₁₁	15.6	X	24.19279	107.64714	194.18889	8.92974	0.3197855	0.17770145	3.1333487	20	10 20.1	19.1
186648 2003 SN ₁₁₅	17.0	X	81.96580	297.85870	15.48894	20.67150	0.0930424	0.36305732	1.9460437	20	—	—
186649 2003 TK ₁₅	14.4	X	45.59471	238.82479	125.71974	5.36301	0.2938812	0.12515748	3.9582040	20	—	—
186650 2003 UN ₇₄	17.1	X	348.85037	105.28307	335.73345	6.44390	0.0998890	0.30217831	2.1993475	20	—	—
186651 2003 UX ₈₅	17.2	X	31.92282	14.44946	339.61982	3.58214	0.1666779	0.29608380	2.2294254	20	—	—
186652 2003 UY ₁₀₆	17.0	X	298.26819	56.13718	343.10880	5.95323	0.0965633	0.28642346	2.2792764	20	9 28.1	19.0
186653 2003 UP ₁₆₄	16.3	X	123.97956	338.44359	81.40645	2.60326	0.1781055	0.26002766	2.4310264	20	3 26.4	19.7
186654 2003 WZ ₆₅	17.8	X	276.29298	283.83562	173.67542	1.92724	0.2059171	0.28856495	2.2679858	20	11 3.7	19.6
186655 2003 WY ₈₆	17.3	X	29.86090	352.76806	59.30958	7.25297	0.1506973	0.30144776	2.2028995	20	—	—
186656 2003 WA ₁₀₄	16.8	X	68.51982	326.17391	68.60162	7.11360	0.1306773	0.30554615	2.1831564	20	—	—
186657 2003 WN ₁₃₈	16.9	X	303.07610	174.66281	247.20602	5.49971	0.1159517	0.28774165	2.2723099	20	11 11.6	18.8
186658 2003 WD ₁₉₃	17.1	X	249.38898	105.92965	15.18103	3.70001	0.1340501	0.28292838	2.2980089	20	10 31.7	19.6
186659 2003 XF ₁₂	16.3	X	293.14026	273.89929	196.14385	3.83138	0.1728567	0.29228641	2.2486937	20	—	—
186660 2003 XH ₁₅	17.3	X	278.15261	129.19472	58.00781	5.02857	0.0460510	0.30348410	2.1930343	20	—	—
186661 2003 XY ₃₈	17.1	X	24.84337	24.29968	48.37904	6.61104	0.1265712	0.30173466	2.2015028	20	—	—
186662 2003 YF ₉	17.4	X	249.29095	97.27417	346.46955	2.06108	0.1840208	0.27915902	2.3186486	20	8 31.2	20.1
186663 2003 YH ₉	16.6	X	36.12295	347.12795	54.98766	5.53294	0.1399533	0.29760128	2.2218404	20	—	—
186664 2003 YA ₃₀	16.7	X	300.23776	149.80728	278.94755	4.21709	0.1317361	0.28790946	2.2714269	20	11 15.5	18.7
186665 2003 YJ ₃₇	17.8	X	342.39953	2.15263	82.27601	3.49182	0.1162637	0.29403878	2.2397505	20	—	—
186666 2003 YH ₅₉	16.8	X	219.39612	279.74610	230.02868	2.81340	0.1907962	0.28358932	2.2944370	20	10 22.8	19.9
186667 2003 YK ₆₄	17.2	X	46.89560	288.79378	108.12776	4.33199	0.1891301	0.29962997	2.2118001	20	—	—
186668 2003 YL ₆₄	17.0	X	28.48454	334.74353	89.16814	4.37946	0.0849673	0.29896637	2.2150719	20	—	—
186669 2003 YY ₇₆	16.8	X	77.63495	37.25295	12.40912	1.86275	0.1206604	0.30674833	2.1774486	20	—	—
186670 2003 YJ ₇₇	16.7	X	80.04251	122.52193	23.83267	2.47538	0.1482350	0.25968402	2.4331706	20	5 21.5	19.5
186671 2003 YK ₈₂	17.1	X	343.50170	117.34064	339.50155	3.23069	0.0877684	0.29610183	2.2293349	20	—	—
186672 2003 YX ₉₈	16.8	X	59.16755	283.59756	117.43590	4.59938	0.1099097	0.30191937	2.2006049	20	—	—
186673 2003 YE ₁₀₁	17.3	X	348.42507	174.25832	232.57812	3.33899	0.1557976	0.29145871	2.2529490	20	—	—
186674 2003 YL ₁₁₂	16.8	X	16.05820	18.33543	31.38860	4.8676	0.1132207	0.29649187	2.2273794	20	—	—
186675 2003 YM ₁₁₂	17.1	X	3.30154	68.71502	25.46558	5.22950	0.1099624	0.30029270	2.2085447	20	—	—
186676 2003 YD ₁₁₆	16.9	X	289.20494	350.35524	91.12843	3.62632	0.0601040	0.28451199	2.2894738	20	11 19.8	19.2
186677 2003 YT ₁₂₇	16.5	X	162.18099	109.08688	62.50718	10.24317	0.1936395	0.27502302	2.3418371	20	9 29.6	20.4
186678 2003 YJ ₁₂₉	16.6	X	187.82749	124.06375	69.10558	8.27031	0.0551507	0.28322104	2.2964256	20	11 29.6	19.4
186679 2003 YQ ₁₂₉	16.7	X	50.32544	23.09263	357.78021	6.72289	0.1160221	0.29623878	2.2286478	20	—	—
186680 2003 YH ₁₃₇	17.4	X	278.12115	69.46957	20.12092	1.88224	0.1424188	0.28465034	2.2887318	20	11 2.5	19.5
186681 2003 YC ₁₄₀	15.6	X	297.66296	146.11858	58.80564	6.97546	0.1340646	0.24490187	2.5301212	20	—	—
186682 2003 YT ₁₄₁	16.5	X	280.55678	198.20021	41.95502	5.85425	0.1358175	0.30948871	2.1645760	20	1 5.4	19.4
186683 2003 YU ₁₄₅	16.5	X	267.08495	61.43156	44.41962	8.78600	0.1789290	0.28317726	2.2966622	20	11 1.4	18.6
186684 2003 YE ₁₅₅	17.1	X	342.82607	242.48170	188.30361	6.00570	0.2476051	0.29561394	2.2317872	20	—	—
186685 2003 YB ₁₆₉	16.3	X	329.08577	177.03924	0.90263	4.61478	0.1427939	0.24550528	2.5259737	20	—	—
186686 2004 AZ ₅	16.8	X	229.55594	77.87152	79.30300	4.95447	0.1224755	0.28339631	2.2954786	20	11 25.8	19.6
186687 2004 AW ₉	17.5	X	80.34520	284.34371	128.81806	2.70382	0.1187983	0.30589162	2.1815123	20	—	—
186688 2004 BJ ₂	17.3	X	351.85780	318.93854	135.96293	2.26542	0.0808541	0.29584217	2.2306392	20	—	—
186689 2004 BF ₆	18.0	X	168.49403	218.99576	267.33795	1.96930	0.1797518	0.26947018	2.3738990	20	8 1.9	21.7
186690 2004 BB ₁₂	16.4	X	332.72386	255.32600	350.77879	1.26409	0.1707417	0.25375361	2.4709345	20	3 26.8	18.9
186691 2004 BT ₁₅	17.0	X	30.19975	313.11161	111.93943	4.64820	0.1020057	0.29832339	2.2182535	20	—	—
186692 2004 BD ₁₇	16.7	X	198.21529	130.32438	25.82372	6.32644	0.1947170	0.27820691	2.3239357	20	10 8.7	20.0
186693 2004 BF ₂₂	16.8	X	234.66617	201.14445	135.69416	0.65510	0.1892283	0.31855335	2.1233158	20	3 19.7	20.0
186694 2004 BD ₂₉	16.8	X	344.89771	315.49313	99.88815	5.24497	0.1480599	0.28871214	2.2672149	20	—	—
186695 2004 BK ₂₉	17.6	X	263.43504	76.17998	11.60404	2.69729	0.1694247	0.27991496	2.3144722	20	9 29.6	19.8
186696 2004 BM ₃₁	16.7	X	141.74773	97.53827	347.38922	3.43327	0.1211181	0.26013991	2.4303271	20	5 9.2	20.3
186697 2004 BK ₃₈	16.7	X	147.39701	82.29683	117.26905	6.48006	0.1778181	0.27329503	2.3516981	20	10 19.6	20.5
186698 2004 BU ₄₁	16.5	X	104.38549	100.86110	98.94228	6.73656	0.1266509	0.26712205	2.3877905	20	9 4.7	20.0
186699 2004 BD ₄₃	16.3	X	318.91403	193.24079	320.51795	6.98259	0.1452038	0.23644396	2.5901042	20	—	—
186700 2004 BM ₄₃	16.7	X	119.71443	75.85101	114.87736	3.15421	0.1422233	0.26804739	2.3822920	20	9 8.7	20.2
186701 2004 BT ₄₅	16.8	X	323.43620	335.60950	109.64059	6.42444	0.1182378	0.29157547	2.2523475	20	—	—
186702 2004 BZ ₅₃	17.1	X	191.71737	141.71891	92.55117	4.16171	0.1684923	0.28802242	2.2708329	20	—	—
186703 2004 BO ₅₄	16.5	X	204.18262	162.50646	345.99089	2.12874	0.1598074	0.27775419	2.3264603	20	10 6.9	19.9
186704 2004 BO ₅₉	17.2	X	234.29481	274.67165	167.37362	3.80411	0.1899418	0.27483200	2.3429221	20	8 7.9	20.6
186705 2004 BG ₆₇	17.4	X	112.77646	4.63161	121.15296	3.27928	0.1264486	0.26050351	2.4280651	20	6 2.3	20.7
186706 2004 BF ₇₂	16.2	X	44.51497	68.76226	164.95131	7.17190	0.0668203	0.26470289	2.4023167	20	7 19.9	19.2
186707 2004 BR ₇₂	17.3	X	197.73760	304.43642	168.08550	6.29561	0.0974504	0.27117336	2.3639486	20	8 17.0	20.7
186708 2004 BU ₇₂	17.3	X	210.56713	302.79966	172.13854	5.15315	0.1719210	0.27416155	2.3467402	20	8 28.4	20.9
186709 2004 BV ₇₄	17.0	X	53.52509	214.50296	196.41545	2.72079	0.1697248	0.30049631	2.2075470	20	—	—
186710 2004 BD ₇₅	17.2	X	176.47895	52.74866	104.74681	3.04484	0.1548010	0.27453599	2.3446059	20	9 22.4	20.7
186711 2004 BU ₈₇	16.7	X	196.15432	17.63482	105.21042	4.94892	0.1874126	0.27174588	2.3606272	20	8 25.2	20.4
186712 2004 BF ₈₈	17.2	X	196.87849	220.52983	240.04492	3.37522	0.1782973	0.27086217	2.3657589	20	7 25.5	20.9
186713 2004 BT ₈₈	16.5	X	104.31681	322.42446	263.99377	6.23532	0.1706485	0.27122400	2.3636544	20	10 7.5	20.3
186714 2004 BV ₈₈	17.0	X	166.32958	256.78580	192.79596	4.70470	0.2036191	0.26416816	2.4055575	20	6 13.8	21.0
186715 2004 BW ₉₁	17											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
186721 2004 BE ₁₀₈	16.7	X	261.32911	350.65111	90.10898	5.35349	0.1197017	0.27785615	2.3258911	20	9 27.3	19.4
186722 2004 BT ₁₀₈	17.2	X	195.35459	107.54833	33.73169	5.19812	0.1683307	0.27454736	2.3445412	20	9 19.5	20.6
186723 2004 BA ₁₁₉	16.3	X	314.47630	134.92721	323.49397	6.46917	0.0543089	0.28843706	2.2686562	20	—	—
186724 2004 BT ₁₂₀	16.7	X	226.72987	55.92239	70.02943	10.68502	0.1417254	0.27802336	2.3249584	20	10 11.4	19.9
186725 2004 BV ₁₃₄	17.7	X	229.97482	67.07236	15.62495	3.69983	0.2088449	0.27421774	2.3464196	20	8 3.9	21.1
186726 2004 BY ₁₄₆	16.8	X	164.83748	125.75242	130.98966	7.76701	0.1373295	0.28752692	2.2734411	20	—	—
186727 2004 CR	16.6	X	140.23372	127.34677	38.63915	5.55028	0.1691834	0.26919191	2.3755347	20	8 30.3	20.3
186728 2004 CH ₂	16.6	X	146.15034	66.57202	147.35622	9.62714	0.1619765	0.27477467	2.3432480	20	11 6.1	20.4
186729 2004 CE ₄	17.5	X	197.71631	49.88047	92.38723	1.68315	0.1590106	0.27583520	2.3372379	20	9 23.2	20.9
186730 2004 CH ₄	17.4	X	259.43246	340.44739	91.27160	3.97112	0.2208985	0.27781186	2.3261383	20	8 23.3	20.2
186731 2004 CP ₅	16.7	X	57.53769	356.03727	46.03077	6.96500	0.1562777	0.29859080	2.2169289	20	—	—
186732 2004 CR ₁₀	17.2	X	172.02504	71.00295	149.14835	3.12984	0.1146472	0.28195118	2.3033155	20	12 10.2	20.4
186733 2004 CB ₁₁	17.0	X	161.68801	263.22127	308.22523	2.87513	0.1275444	0.27878837	2.3207032	20	11 15.5	20.5
186734 2004 CU ₁₆	16.7	X	197.76049	22.22903	102.33311	3.33727	0.1156533	0.27121644	2.3636983	20	9 3.4	20.0
186735 2004 CK ₁₈	16.5	X	117.01209	283.27688	353.50186	6.23308	0.0984073	0.28277878	2.2988193	20	12 25.3	19.9
186736 2004 CB ₂₁	17.3	X	167.37845	69.28822	90.78987	3.03272	0.1559026	0.27316793	2.3524275	20	9 16.7	21.0
186737 2004 CR ₂₆	16.2	X	149.56881	242.49427	141.03831	8.01286	0.2832047	0.31108599	2.1571603	20	3 11.5	19.7
186738 2004 CN ₃₇	16.2	X	115.84342	318.33306	303.81370	9.20615	0.1078690	0.27707988	2.3302332	20	12 3.4	19.7
186739 2004 CL ₃₉	17.3	X	158.54852	33.52815	93.20780	7.48594	0.1942367	0.26559499	2.3969343	20	7 25.5	21.2
186740 2004 CR ₃₉	17.5	X	206.83442	260.11830	206.52719	4.73511	0.1843886	0.27264396	2.3554404	20	8 11.2	21.1
186741 2004 CE ₄₂	16.3	X	61.82772	124.34988	84.22756	7.32437	0.0907383	0.26212250	2.4180569	20	7 15.2	19.2
186742 2004 CZ ₄₂	16.6	X	106.14222	82.94498	145.56266	7.54859	0.0623007	0.27103739	2.3647392	20	10 9.8	19.8
186743 2004 CW ₄₉	17.0	X	23.26149	357.79850	41.19026	4.87024	0.0974887	0.29161320	2.2521532	20	—	—
186744 2004 CY ₅₃	17.8	X	221.77335	27.38801	25.25164	1.52793	0.1759504	0.26555970	2.3971466	20	6 17.5	21.5
186745 2004 CG ₅₆	16.9	X	110.55687	49.78123	148.70288	1.85115	0.1212594	0.26670890	2.3902558	20	9 6.5	20.4
186746 2004 CX ₅₈	17.2	X	347.86475	25.45777	53.26434	3.74566	0.1910724	0.29319642	2.2440384	20	—	—
186747 2004 CM ₆₁	16.8	X	77.19007	294.14704	87.75669	6.10468	0.1795603	0.29918802	2.2139778	20	—	—
186748 2004 CV ₆₅	17.1	X	275.21694	357.55365	71.18610	4.95052	0.1496993	0.28006260	2.3136588	20	9 27.4	19.5
186749 2004 CQ ₆₇	17.3	X	172.29923	66.37937	58.82300	3.10238	0.1612541	0.26856995	2.3792008	20	8 5.9	21.0
186750 2004 CQ ₆₇	16.6	X	111.35767	100.24170	91.63586	4.77423	0.1426699	0.26676705	2.3899084	20	9 2.3	20.1
186751 2004 CZ ₆₉	16.7	X	219.28528	26.49000	69.87510	6.84649	0.0572350	0.26987470	2.3715262	20	8 30.6	19.8
186752 2004 CB ₇₁	16.8	X	185.22811	66.88453	4.72160	3.44620	0.0310562	0.26126320	2.4233560	20	6 9.1	20.1
186753 2004 CK ₇₂	16.7	X	84.42865	142.04325	85.79799	3.89675	0.1438613	0.26765877	2.3845974	20	9 20.8	20.0
186754 2004 CP ₇₄	16.9	X	242.61323	309.26463	148.82391	2.55472	0.1297072	0.27591473	2.3367888	20	9 20.1	19.6
186755 2004 CJ ₇₆	16.6	X	105.42643	307.08033	296.51661	4.08221	0.1889629	0.27270347	2.3550978	20	11 1.8	20.4
186756 2004 CA ₇₈	16.5	X	93.18229	259.22027	337.25354	7.01368	0.0837427	0.27106893	2.3645557	20	10 1.5	19.7
186757 2004 CG ₇₈	17.4	X	135.09440	347.35299	155.78214	1.32803	0.1203357	0.26377532	2.4079453	20	7 20.3	20.7
186758 2004 CX ₉₄	17.4	X	276.78473	272.45147	187.95653	2.70915	0.1933468	0.28257552	2.2999216	20	11 9.4	19.1
186759 2004 CN ₉₅	16.6	X	107.64418	117.96581	159.04344	23.35263	0.1596037	0.27735705	2.3286805	20	12 18.6	20.8
186760 2004 CS ₉₈	16.4	X	121.80896	170.40631	356.05324	4.57966	0.1156869	0.26309786	2.4120771	20	8 7.3	19.9
186761 2004 CS ₉₉	16.5	X	229.66903	35.78111	75.63649	3.17816	0.1501166	0.27459446	2.3442731	20	9 19.7	19.5
186762 2004 CB ₁₀₈	16.6	X	166.69988	292.12752	227.00507	4.33363	0.0808288	0.27044818	2.3681725	20	9 13.3	20.0
186763 2004 CC ₁₀₈	16.7	X	81.35770	322.89286	222.07136	3.99618	0.1510589	0.25913133	2.4366292	20	7 16.9	20.0
186764 2004 CC ₁₂₀	16.8	X	104.81204	140.21456	92.52333	3.37801	0.1907525	0.27173478	2.3606915	20	10 21.8	20.5
186765 2004 CS ₁₂₂	17.0	X	352.12640	261.24681	151.87747	3.62283	0.1095321	0.28746189	2.2737839	20	—	—
186766 2004 DG	16.2	X	174.14666	223.44231	279.37157	7.72084	0.1220892	0.26912334	2.3759382	20	8 27.3	19.9
186767 2004 DY ₈	17.2	X	215.80165	269.87231	201.71848	1.72310	0.1721182	0.27330285	2.3516532	20	8 29.5	20.4
186768 2004 DS ₁₁	17.0	X	201.68690	107.67304	324.39306	4.02605	0.2236572	0.26605430	2.3941748	20	6 21.3	20.9
186769 2004 DT ₁₅	16.0	X	78.21290	274.29179	355.95746	9.82972	0.1081490	0.27208070	2.3586901	20	10 30.4	19.3
186770 2004 DE ₁₈	16.8	X	200.29362	357.19581	108.68262	2.44228	0.1373742	0.26875089	2.3781329	20	8 9.0	20.1
186771 2004 DQ ₁₈	16.1	X	108.00673	106.02764	149.25254	7.29348	0.0840416	0.27311603	2.3527255	20	11 17.6	19.5
186772 2004 DQ ₂₀	16.4	X	1.80559	295.95075	113.53821	6.36537	0.0787922	0.28605662	2.2812246	20	—	—
186773 2004 DJ ₂₁	16.7	X	188.27971	332.27876	176.63941	6.12925	0.1243087	0.27223955	2.3577725	20	9 23.6	20.1
186774 2004 DC ₂₂	16.9	X	179.66628	338.21012	134.45663	5.99201	0.1930506	0.26619087	2.3933559	20	7 25.1	20.8
186775 2004 DL ₂₄	16.5	X	86.64333	26.87386	184.52697	4.06980	0.0882998	0.26371042	2.4083403	20	8 20.9	19.6
186776 2004 DH ₃₂	16.0	X	174.40251	212.55162	304.30734	12.89201	0.0675795	0.27285690	2.3542148	20	9 15.1	19.5
186777 2004 DY ₃₂	16.5	X	58.46286	241.31401	23.60948	4.38699	0.1200838	0.26710977	2.3878637	20	10 4.1	19.5
186778 2004 DW ₃₃	17.0	X	147.56823	79.73289	27.22301	2.64653	0.1397646	0.25962302	2.4335517	20	6 16.1	20.7
186779 2004 DB ₃₅	16.6	X	58.77369	42.06074	215.88933	6.46510	0.0952281	0.26886200	2.3774776	20	9 18.5	19.5
186780 2004 DQ ₄₀	16.8	X	102.56581	52.92803	205.49432	5.53903	0.0851014	0.27613579	2.3355415	20	11 14.7	20.1
186781 2004 DE ₄₃	16.8	X	177.09050	141.36253	3.76559	4.00612	0.0947097	0.27086401	2.3657482	20	9 8.5	20.0
186782 2004 DT ₄₇	16.5	X	76.69902	351.65157	188.12083	8.18366	0.1857868	0.25678327	2.4514605	20	7 8.5	19.9
186783 2004 DT ₄₈	16.6	X	159.23775	174.34862	353.64073	0.86394	0.1298652	0.26997086	2.3709631	20	9 17.6	20.3
186784 2004 DB ₅₃	16.4	X	131.58446	26.32220	212.70172	2.73621	0.1233071	0.27546739	2.3393180	20	11 21.0	19.8
186785 2004 DG ₆₂	17.2	X	145.00532	34.13254	138.25013	2.84756	0.1286859	0.26867278	2.3785937	20	9 9.4	20.6
186786 2004 DX ₆₂	16.9	X	213.87180	290.18802	115.87832	3.72552	0.2417302	0.26478293	2.4018326	20	5 29.1	21.0
186787 2004 DS ₆₃	17.5	X	128.07918	165.19974	356.53386	3.23565	0.0699880	0.26556249	2.3971299	20	8 4.3	20.7
186788 2004 EP ₁	17.2	X	114.07485	81.19676	139.65229	1.86779	0.1382412	0.26922844	2.3753198	20	10 11.5	20.6
186789 2004 EF ₈	16.5	X	135.84379	335.97403	228.51701	1.32800	0.0858491	0.26972712	2.3723912	20	10 10.2	19.7
186790 2004 EK ₁₂	15.6	X	81.21689	229.15071	149.63027	13.02204	0.0634233	0.23234331	2.6204906	20	—	—
186791 2004 ER ₁₃	16.4	X	61.79833	261.14717	28.11052	6.42592	0.1495222	0.27041266	2.3683799	20	11 12.6	19.7
186792 2004 EK ₁₇	16.3	X	274.77757	0.53894	70.85179	7.85516	0.0896328	0.27234603	2.3571579	20	10 9.8	19.0
186793 2004 ES ₃₁	16.2	X	94.69382	6.88098	230.01240	6.71184	0.0842780	0.26694238	2.3888618	20	10 3.7	19.5
186794 2004 EO ₃₃	17.0	X	60.									

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186801	2004	EF ₅₄	16.7	X	337.09047	265.20480	250.18050	1.92474	0.0731933	0.23743305	2.5829060	20	—	—
186802	2004	EA ₅₈	16.3	X	151.28539	34.26240	111.47870	7.07270	0.0362531	0.26420253	2.4053488	20	8 9.6	19.4
186803	2004	EH ₅₉	16.6	X	83.65631	190.79239	86.43028	3.15217	0.1463380	0.27175497	2.3605745	20	11 22.1	20.0
186804	2004	EU ₅₉	16.3	X	40.42812	351.32784	255.81710	6.20241	0.1114717	0.25758400	2.4463775	20	8 7.3	19.2
186805	2004	EW ₆₁	17.3	X	229.67232	272.83597	181.60733	5.70103	0.1234234	0.27073764	2.3664843	20	8 27.4	20.6
186806	2004	EE ₇₆	16.5	X	52.26341	123.26418	138.30409	3.35001	0.1727041	0.26403355	2.4063750	20	9 29.7	19.4
186807	2004	EF ₇₆	16.3	X	80.98832	350.40305	250.76358	3.71155	0.1291484	0.26867268	2.3785943	20	9 28.9	19.5
186808	2004	EQ ₇₆	17.3	X	141.61953	6.62000	132.36042	1.69520	0.1329188	0.26226226	2.4171977	20	7 22.4	20.8
186809	2004	EJ ₈₂	16.6	X	256.61379	347.71478	117.13132	6.61110	0.0807421	0.27575953	2.3376654	20	10 30.6	19.3
186810	2004	EB ₈₆	16.9	X	93.46907	112.05763	65.95299	6.03744	0.1478449	0.25817029	2.4426723	20	7 24.3	20.3
186811	2004	EG ₉₄	17.1	X	79.55487	170.75787	55.95692	2.49267	0.1465423	0.26244183	2.4160950	20	9 12.3	20.3
186812	2004	EE ₁₁₅	17.3	X	268.47820	250.76023	168.26996	1.87958	0.1980770	0.27441032	2.3453217	20	8 19.5	19.7
186813	2004	FT ₇	16.9	X	89.24278	138.64782	39.58981	1.76964	0.1236498	0.25791222	2.4443014	20	7 15.1	20.1
186814	2004	FB ₁₀	16.2	X	179.97013	214.65642	45.83986	4.09299	0.0332914	0.22629362	2.6669887	20	—	—
186815	2004	FJ ₁₂	16.2	X	101.98685	14.68098	234.79818	6.57479	0.0800910	0.27217794	2.3581283	20	10 30.8	19.4
186816	2004	FR ₁₇	15.8	X	324.03938	222.20183	214.42218	23.04638	0.1951395	0.28255818	2.3000157	20	—	—
186817	2004	FM ₁₉	16.5	X	66.63955	30.69036	222.95190	3.24587	0.1162476	0.26700538	2.3884861	20	9 26.9	19.7
186818	2004	FN ₂₃	16.4	X	21.36774	118.13807	183.17119	6.07706	0.1034053	0.26587309	2.3952625	20	9 27.8	19.1
186819	2004	FQ ₂₃	17.1	X	56.66599	72.05124	177.49167	2.69808	0.1309850	0.26251083	2.4156717	20	9 10.5	20.0
186820	2004	FA ₂₆	16.6	X	56.80671	9.04150	205.89693	3.49704	0.1293763	0.25620992	2.4551164	20	7 21.4	19.5
186821	2004	FH ₂₆	16.4	X	46.52931	234.80459	164.12342	6.11552	0.0400047	0.22754240	2.6572219	20	—	—
186822	2004	FE ₃₁	17.9	X	295.59298	150.31089	200.77247	13.06354	0.4524340	0.49944643	1.5732948	20	5 4.5	19.0
186823	2004	FN ₃₂	19.1	X	354.56742	161.12678	190.07390	21.95966	0.6767952	0.74512651	1.2049880	20	—	—
186824	2004	FC ₃₅	16.5	X	332.44924	33.31249	241.91246	3.48524	0.0805014	0.25345878	2.4728503	20	5 20.9	19.3
186825	2004	FD ₃₇	17.1	X	54.27951	220.15678	23.28983	2.68904	0.1549224	0.26077751	2.4263641	20	9 3.6	20.0
186826	2004	FH ₃₇	16.9	X	288.06321	28.28548	50.57370	2.16284	0.1446228	0.27830471	2.3233912	20	11 3.6	18.9
186827	2004	FA ₄₃	16.5	X	280.70460	328.19523	138.56796	7.64418	0.0452002	0.28073258	2.3099762	20	12 12.7	19.2
186828	2004	FY ₅₁	16.8	X	26.19429	194.79533	67.48517	3.04308	0.1490308	0.25918711	2.4362795	20	8 16.2	19.3
186829	2004	FJ ₅₉	16.5	X	255.98725	332.08058	101.88299	6.55028	0.2089236	0.27361303	2.3498755	20	8 23.8	19.4
186830	2004	FM ₆₁	15.8	X	300.47687	177.83101	151.46377	6.68137	0.1366866	0.25637377	2.4540703	20	6 9.1	18.7
186831	2004	FS ₆₂	16.6	X	59.27697	102.83171	32.59135	3.88214	0.0764317	0.24600420	2.5225573	20	3 26.3	19.5
186832	Mosser		16.9	X	18.82368	279.11976	6.96539	2.22095	0.2007570	0.26093084	2.4254134	20	9 15.8	19.2
186833	2004	FF ₈₅	16.8	X	161.33610	51.25711	83.56160	6.26586	0.1219209	0.26324092	2.4112031	20	8 8.2	20.5
186834	2004	FJ ₈₆	16.6	X	172.61516	116.45619	58.99815	5.79670	0.0668529	0.27331421	2.3515881	20	10 17.2	19.9
186835	Normanspinrad		16.7	X	51.36539	202.42167	107.05226	7.46892	0.1246916	0.27243060	2.3566701	20	11 26.6	19.9
186836	2004	FU ₉₃	16.9	X	44.23849	91.02512	166.80547	6.66443	0.1437778	0.25996333	2.4314275	20	9 6.1	19.8
186837	2004	FY ₁₀₈	16.5	X	259.26258	66.75732	196.92053	8.31674	0.1541401	0.23528434	2.5986075	20	1 19.6	20.7
186838	2004	FG ₁₀₉	16.6	X	57.47469	250.84198	33.02928	1.79911	0.1565401	0.26679732	2.3897276	20	11 1.8	19.7
186839	2004	FY ₁₂₇	16.2	X	353.36790	98.54971	216.40251	5.02692	0.1525315	0.26079303	2.4262678	20	8 29.8	18.3
186840	2004	FZ ₁₂₉	16.1	X	25.92812	134.20424	127.73706	8.31056	0.1014978	0.25573611	2.4581479	20	8 6.3	18.8
186841	2004	FK ₁₃₃	16.5	X	222.54132	319.29534	108.89600	7.09315	0.0865814	0.26370721	2.4083599	20	7 18.4	19.8
186842	2004	FU ₁₄₀	16.9	X	224.19847	87.58287	3.44853	1.11563	0.1395791	0.26913325	2.3758799	20	8 15.4	20.2
186843	2004	GV	17.3	X	106.63060	64.83345	117.54241	3.34068	0.1321937	0.26015227	2.4302501	20	8 12.1	20.7
186844	2004	GA ₁	17.4	X	59.05264	54.56548	261.56211	7.77682	0.6726180	0.25996845	2.4313955	20	—	—
186845	2004	GV ₂	15.2	X	208.12135	186.74958	117.98224	34.72563	0.1883402	0.23110797	2.6298205	20	1 24.4	19.5
186846	2004	GP ₈	17.7	X	229.95532	293.72364	15.46990	3.24292	0.1528439	0.23726392	2.5841333	20	2 18.9	21.8
186847	2004	GN ₂₁	16.2	X	355.52591	93.78411	76.65850	14.38350	0.0789320	0.23746230	2.5826939	20	2 6.1	19.5
186848	2004	GF ₂₂	17.1	X	63.55014	59.00738	158.69566	1.63229	0.1332466	0.25657822	2.4527664	20	8 5.7	20.1
186849	2004	GK ₂₂	16.2	X	358.27257	311.42813	200.24562	16.99180	0.0957868	0.23622908	2.5916746	20	1 7.7	19.7
186850	2004	GT ₃₄	17.1	X	307.83595	221.67983	12.81753	7.28648	0.1720996	0.23917463	2.5703522	20	2 7.1	20.6
186851	2004	GF ₃₈	15.9	X	29.37097	254.99703	87.08874	6.15501	0.2013926	0.27082290	2.3659876	20	12 21.4	18.8
186852	2004	GH ₃₈	16.2	X	98.47379	188.68899	326.50176	6.44746	0.0274931	0.25443902	2.4664950	20	6 9.4	19.5
186853	2004	GY ₄₀	15.7	X	0.06060	224.35505	93.55893	15.27224	0.3192369	0.25588926	2.4571670	20	10 25.9	18.0
186854	2004	GE ₄₂	16.8	X	14.90552	153.13746	146.69733	7.35150	0.2159925	0.25866426	2.4395615	20	10 3.9	19.2
186855	2004	GL ₄₃	16.7	X	1.72970	114.94927	175.29327	6.32037	0.0777705	0.25996698	2.4314047	20	8 2.7	19.3
186856	2004	GE ₄₄	17.5	X	24.62519	57.32054	208.54220	2.34570	0.1701549	0.25622954	2.4549911	20	8 19.1	19.8
186857	2004	GF ₄₅	16.5	X	0.82299	109.55254	217.45414	5.65264	0.1371755	0.26547147	2.3976777	20	10 3.4	18.8
186858	2004	GA ₅₄	16.5	X	284.48863	212.04418	204.46764	11.59828	0.0914539	0.26883165	2.3776565	20	9 26.7	19.3
186859	2004	GW ₅₆	16.2	X	298.58009	332.49263	17.66903	7.43030	0.1123860	0.25998774	2.4312753	20	7 12.1	19.0
186860	2004	GV ₆₀	17.0	X	323.74360	59.49737	188.69814	7.19390	0.1490799	0.24354570	2.5395050	20	3 18.7	19.9
186861	2004	GD ₈₆	16.0	X	99.39560	355.55593	53.74550	8.43692	0.1332425	0.23568426	2.5956671	20	2 10.1	19.4
186862	2004	HG ₄	16.7	X	257.33045	144.31672	60.40293	3.80151	0.0557914	0.22651907	2.6652188	20	—	—
186863	2004	HH ₁₈	15.5	X	281.86088	238.87046	53.29180	12.51720	0.2551398	0.23793529	2.5792700	20	3 14.5	19.6
186864	2004	HN ₂₃	16.6	X	342.08078	204.37418	1.92952	2.26378	0.0787533	0.24117169	2.5561431	20	2 29.9	19.7
186865	2004	HO ₂₄	15.6	X	237.50057	83.31035	223.45549	16.23772	0.2480727	0.23249856	2.6193239	20	2 11.5	20.4
186866	2004	HE ₂₆	16.3	X	252.74416	236.92303	57.54451	9.95598	0.1946334	0.23546981	2.5972429	20	2 22.9	20.6
186867	2004	HS ₂₆	16.3	X	226.27691	109.45307	182.80109	11.63411	0.1914499	0.23210839	2.6222584	20	1 22.6	20.8
186868	2004	HW ₃₀	16.4	X	215.76892	93.32755	204.12696	15.28322	0.2326520	0.22812378	2.6527054	20	1 18.9	21.4
186869	2004	HX ₃₁	17.1	X	85.28226	31.14481	171.14689	5.17526	0.0851388	0.25802418	2.4435943	20	8 5.4	20.3
186870	2004	HM ₃₃	16.4	X	296.24012	163.46355	115.05160	5.61733	0.					

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186881	2004	<i>JV</i> ₁₄	16.4	X	290.95698	34.57533	215.02995	7.26706	0.1405604	0.23555938	2.5965844	20	2 5.3	20.2
186882	2004	<i>JA</i> ₁₆	16.1	X	321.04837	50.77270	211.53881	7.20305	0.1608757	0.24144852	2.5541889	20	3 31.9	19.2
186883	2004	<i>JV</i> ₁₉	15.8	X	258.44521	243.65851	94.16962	4.98782	0.2788288	0.23956159	2.5675836	20	4 11.1	20.0
186884	2004	<i>JD</i> ₂₇	16.3	X	305.94683	140.21744	68.66612	14.26994	0.1705515	0.23237674	2.6202393	20	1 1.7	20.1
186885	2004	<i>JY</i> ₂₇	15.5	X	141.56385	279.58812	42.96520	9.65087	0.1888849	0.21913096	2.7247933	20	—	—
186886	2004	<i>JH</i> ₂₉	16.1	X	23.10315	88.50440	119.40125	3.10778	0.0546841	0.24569492	2.5246737	20	5 8.9	19.1
186887	2004	<i>JM</i> ₂₉	16.3	X	255.44278	81.21637	214.60068	11.21828	0.1808515	0.23616258	2.5921611	20	2 19.4	20.7
186888	2004	<i>JL</i> ₃₃	16.6	X	268.73711	133.87918	138.57103	4.02115	0.1339377	0.23499234	2.6007598	20	2 12.7	20.2
186889	2004	<i>JH</i> ₃₆	16.2	X	307.78204	98.25422	91.61326	13.45492	0.0869186	0.23037650	2.6353841	20	—	—
186890	2004	<i>JG</i> ₃₈	16.0	X	43.83904	310.45727	192.63903	17.00990	0.1274988	0.24056650	2.5604283	20	3 14.5	18.8
186891	2004	<i>JX</i> ₄₁	16.1	X	304.62856	73.75206	79.90010	12.13791	0.1320222	0.22475616	2.6791374	20	—	—
186892	2004	<i>JT</i> ₄₂	16.5	X	47.09727	77.31201	84.23538	4.18294	0.1236171	0.24495833	2.5297323	20	4 19.4	19.2
186893	2004	<i>JD</i> ₄₆	16.4	X	170.48288	289.57107	45.97558	5.57640	0.0790345	0.23225491	2.6211555	20	1 23.6	20.2
186894	2004	<i>KS</i> ₂	17.4	X	256.66772	255.77895	48.78674	5.99736	0.1850503	0.23760468	2.5816621	20	3 8.7	21.5
186895	2004	<i>KK</i> ₃	16.5	X	275.93963	217.17882	45.71737	1.33960	0.1265508	0.23464539	2.6033229	20	2 9.3	20.3
186896	2004	<i>KX</i> ₄	15.8	X	248.67347	217.33067	80.65110	14.93395	0.1619531	0.23431279	2.6057859	20	2 27.7	20.1
186897	2004	<i>KG</i> ₈	16.1	X	290.64345	257.53365	57.29222	6.22284	0.2204850	0.24213567	2.5493543	20	4 21.7	19.3
186898	2004	<i>KW</i> ₁₄	16.5	X	228.72960	77.15711	204.09451	14.56326	0.1064778	0.22885248	2.6470713	20	1 13.7	20.9
186899	2004	<i>KN</i> ₁₇	15.5	X	206.90199	340.84585	302.74419	10.23378	0.3309619	0.21804709	2.7338154	20	1 2.4	20.6
186900	2004	<i>LR</i> ₁	15.9	X	251.23211	282.28933	40.16922	11.04251	0.3065846	0.23605987	2.5929130	20	3 18.2	20.5
186901	2004	<i>LS</i> ₆	16.3	X	282.86513	293.31070	23.80948	2.91834	0.2224364	0.24234899	2.5478581	20	4 13.3	19.7
186902	2004	<i>LV</i> ₆	16.1	X	232.18211	256.19341	63.91072	13.66781	0.2676548	0.23196704	2.6233236	20	3 6.1	20.9
186903	2004	<i>LH</i> ₁₅	15.8	X	216.07987	207.56681	83.20752	10.88767	0.2309459	0.22333917	2.6904574	20	1 15.9	20.5
186904	2004	<i>LQ</i> ₁₅	16.5	X	330.12823	142.56367	127.64684	5.39888	0.1807094	0.24336058	2.5407927	20	4 29.5	19.1
186905	2004	<i>LR</i> ₁₅	15.8	X	226.54798	177.80631	115.94674	14.37763	0.1698794	0.22837714	2.6507430	20	1 28.1	20.1
186906	2004	<i>LC</i> ₂₀	15.2	X	213.86159	264.90781	77.97527	17.47612	0.2618824	0.23160250	2.6260756	20	3 22.2	20.2
186907	2004	<i>LO</i> ₂₀	16.0	X	329.66619	20.77087	218.93261	8.18414	0.1132164	0.23944949	2.5683849	20	3 20.2	19.2
186908	2004	<i>LO</i> ₂₁	15.6	X	247.80198	116.98445	223.80115	11.94651	0.2769411	0.23648037	2.5898383	20	4 1.3	20.0
186909	2004	<i>LC</i> ₂₄	16.4	X	294.02387	28.44900	193.30988	4.37132	0.1217592	0.23129989	2.6283656	20	1 10.1	20.2
186910	2004	<i>LV</i> ₂₅	15.4	X	118.31770	261.28954	118.48963	17.48162	0.2306579	0.21718646	2.7410327	20	2 9.6	19.5
186911	2004	<i>LS</i> ₂₇	16.0	X	311.50208	135.73228	108.05070	14.86720	0.1359810	0.23785798	2.5798288	20	3 3.0	19.5
186912	2004	<i>ME</i> ₂	15.8	X	115.44730	139.67230	202.93691	12.59335	0.2125299	0.21628021	2.7486843	20	—	—
186913	2004	<i>MS</i> ₂	16.3	X	328.22574	61.27734	215.37169	12.69731	0.1431933	0.24407923	2.5358030	20	5 8.9	19.0
186914	2004	<i>NS</i> ₇	15.4	X	150.23486	189.48767	156.20280	17.07544	0.2285845	0.21482103	2.7611172	20	1 27.5	20.1
186915	2004	<i>NP</i> ₈	16.2	X	114.62012	227.19180	97.27917	4.80421	0.0917296	0.20922824	2.8101047	20	—	—
186916	2004	<i>NB</i> ₁₉	15.7	X	176.71478	103.67962	148.19762	9.33657	0.1045725	0.21045782	2.7991489	20	—	—
186917	2004	<i>NC</i> ₂₁	15.8	X	97.30195	183.10717	165.74185	7.35292	0.1162048	0.20928310	2.8096136	20	—	—
186918	2004	<i>NT</i> ₁₃	15.6	X	78.79058	190.56823	128.75328	9.33228	0.1152266	0.19990010	2.8968591	20	12 21.4	20.0
186919	2004	<i>PU</i> ₂₂	16.1	X	240.55562	115.71870	141.74132	5.75632	0.1171815	0.22023537	2.7156763	20	—	—
186920	2004	<i>PM</i> ₂₇	16.1	X	178.30171	248.23729	25.44940	5.80845	0.2960492	0.21341240	2.7732538	20	—	—
186921	2004	<i>PM</i> ₃₆	16.1	X	182.91474	129.32781	192.82366	7.11121	0.2028511	0.21905466	2.7254260	20	1 24.5	20.8
186922	2004	<i>PL</i> ₄₅	15.8	X	42.02803	235.84017	118.28868	6.00019	0.1141558	0.19667948	2.9283974	20	12 21.3	19.8
186923	2004	<i>PS</i> ₄₅	15.7	X	136.04813	217.71622	122.43455	9.01637	0.2279584	0.21173594	2.7878731	20	1 9.7	20.1
186924	2004	<i>PD</i> ₆₀	15.2	X	254.99732	193.79803	196.38045	5.42450	0.1566250	0.17604058	3.1530257	20	6 23.7	19.9
186925	2004	<i>PC</i> ₆₁	15.9	X	15.85051	140.97534	169.14441	10.94091	0.2667600	0.18698703	3.0287382	20	10 11.4	19.2
186926	2004	<i>PG</i> ₆₇	14.9	X	67.10330	320.86422	260.55854	12.34629	0.0832155	0.18150532	3.0894167	20	7 28.6	19.4
186927	2004	<i>PJ</i> ₇₂	15.9	X	351.91405	220.37044	114.28520	2.66091	0.1751220	0.18691244	3.0295439	20	9 15.6	19.1
186928	2004	<i>PV</i> ₇₂	15.9	X	292.91138	315.00295	87.92984	3.44452	0.2054925	0.18531409	3.0469389	20	8 24.5	19.6
186929	2004	<i>PG</i> ₇₇	15.4	X	308.54006	220.84998	151.77652	15.78559	0.2354035	0.18344388	3.0676130	20	8 2.4	18.9
186930	2004	<i>PX</i> ₇₉	16.4	X	102.87463	175.41691	145.94979	2.44504	0.1623567	0.20232307	2.8736847	20	—	—
186931	2004	<i>PQ</i> ₈₂	15.2	X	258.84121	267.55471	101.97387	2.66151	0.1884462	0.17297289	3.1901960	20	5 29.8	20.1
186932	2004	<i>PC</i> ₈₅	15.8	X	16.72574	190.77408	133.22981	2.45723	0.3383783	0.18689986	3.0296798	20	11 11.3	19.1
186933	2004	<i>PO</i> ₉₄	15.6	X	163.66880	105.73582	204.59769	8.29419	0.1561245	0.21384563	2.7695070	20	—	—
186934	2004	<i>PS</i> ₁₀₃	15.4	X	344.86446	167.52554	204.02284	15.78007	0.3282527	0.18387388	3.0628286	20	11 2.1	17.6
186935	2004	<i>PV</i> ₁₀₄	15.2	X	1.68857	337.66147	47.52363	10.94838	0.1101986	0.19632935	2.9318780	20	12 3.1	18.9
186936	2004	<i>PA</i> ₁₀₆	15.1	X	7.17295	291.10782	22.28915	12.69417	0.1195854	0.18234740	3.0798980	20	9 13.2	18.9
186937	2004	<i>PF</i> ₁₀₇	15.1	X	342.02493	252.80623	67.23015	13.05536	0.0986968	0.18117680	3.0931501	20	8 9.3	19.1
186938	2004	<i>QS</i>	16.4	X	174.64998	155.68197	151.22489	14.30522	0.1809871	0.21489205	2.7605089	20	1 1.1	21.1
186939	2004	<i>QK</i> ₁	15.7	X	95.21985	106.66844	181.85230	1.74621	0.0853284	0.19673198	2.9278764	20	11 28.7	19.9
186940	2004	<i>QZ</i> ₈	14.8	X	332.30925	289.26479	20.37381	17.52253	0.1346678	0.17516474	3.1635273	20	7 4.2	19.0
186941	2004	<i>QH</i> ₁₁	15.1	X	106.49555	236.13761	19.58027	11.63177	0.0369325	0.19312582	2.9642113	20	10 25.6	19.4
186942	2004	<i>QQ</i> ₁₂	14.9	X	343.45603	277.93762	55.91141	10.72558	0.0889327	0.18393531	3.0621466	20	9 1.4	18.9
186943	2004	<i>QT</i> ₁₂	15.8	X	178.10081	207.63695	61.07725	8.67032	0.2827819	0.21142517	2.7906043	20	—	—
186944	2004	<i>QW</i> ₂₇	15.9	X	253.34972	159.02250	236.08822	3.12996	0.0587626	0.17644686	3.1481839	20	7 10.8	20.3
186945	2004	<i>RX</i> ₄	15.4	X	321.10665	287.70329	76.43090	9.02025	0.2031938	0.18212334	3.0824235	20	8 25.3	18.8
186946	2004	<i>RB</i> ₁₂	15.5	X	176.42912	335.91255	142.66325	9.76612	0.0348935	0.17769624	3.1334100	20	7 27.1	20.1
186947	2004	<i>RE</i> ₃₁	15.8	X	327.99699	295.74965	62.25473	4.37175	0.2071662	0.18472143	3.0534527	20	8 29.3	18.9
186948	2004	<i>RF</i> ₄₅	16.0	X	113.54084	311.44918	332.66083	2.91930	0.2000808	0.20003748	2.8955327	20	12 17.8	20

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
186961	2004	<i>RN</i> ₁₀₇	16.0 ^m	X	335.66001	170.54790	171.12554	4.62193	0.1481538	0.18133154	3.0913902	20	8 21.1	19.4
186962	2004	<i>RK</i> ₁₀₈	15.2	X	174.55271	257.80909	203.70355	10.02340	0.0519003	0.17422789	3.1748577	20	7 2.4	20.1
186963	2004	<i>RV</i> ₁₄₀	15.1	X	317.78107	352.07418	335.71344	3.68095	0.1335279	0.17723346	3.1388621	20	7 3.1	18.9
186964	2004	<i>RV</i> ₁₄₁	15.3	X	341.43473	112.44648	172.38946	6.50347	0.0525417	0.17432177	3.1737177	20	6 19.2	19.6
186965	2004	<i>RX</i> ₁₄₃	14.9	X	7.36739	169.79304	145.82937	9.97838	0.0929122	0.18151071	3.0893555	20	9 10.6	18.7
186966	2004	<i>RA</i> ₁₄₄	15.2	X	34.34305	161.54963	161.54399	9.00189	0.1800071	0.18797155	3.0181533	20	11 13.2	19.3
186967	2004	<i>RY</i> ₁₅₀	15.3	X	302.45559	264.67577	68.08133	3.55748	0.1994720	0.17346754	3.1841284	20	6 4.9	19.3
186968	2004	<i>RX</i> ₁₅₄	15.9	X	351.63976	70.79436	203.10924	9.76465	0.2104121	0.17750386	3.1356736	20	6 16.3	19.2
186969	2004	<i>RN</i> ₁₆₁	16.0	X	9.46698	179.24814	132.60636	1.85531	0.2268834	0.18399681	3.0614642	20	9 23.1	19.1
186970	2004	<i>RR</i> ₁₇₆	14.8	X	280.70278	58.19846	268.79100	8.21264	0.0256820	0.17073220	3.2180473	20	5 24.1	19.3
186971	2004	<i>RW</i> ₁₇₆	14.9	X	294.14761	150.46593	199.58434	9.95394	0.2314104	0.17641064	3.1486148	20	6 10.8	19.2
186972	2004	<i>RB</i> ₁₇₇	15.0	X	328.99766	95.04862	244.10870	8.40695	0.0692042	0.18062338	3.0994650	20	8 7.4	19.2
186973	2004	<i>RY</i> ₁₈₄	15.3	X	55.92882	27.91512	241.73103	9.75272	0.0674902	0.18411218	3.0601851	20	9 11.1	19.7
186974	2004	<i>RR</i> ₁₈₈	14.5	X	323.21983	109.10681	220.91243	10.29177	0.1467229	0.17685373	3.1433536	20	7 11.2	18.4
186975	2004	<i>RY</i> ₂₀₉	14.7	X	76.22635	354.01397	233.16349	15.36702	0.0452647	0.18086429	3.0967121	20	8 8.6	19.4
186976	2004	<i>RX</i> ₂₂₁	15.5	X	146.88466	21.34885	236.05471	10.18900	0.2246225	0.20124254	2.8839619	20	12 13.3	20.6
186977	2004	<i>RT</i> ₂₂₆	14.7	X	271.99306	195.87296	183.97071	11.26401	0.1380807	0.17244634	3.1966867	20	7 7.3	19.4
186978	2004	<i>RL</i> ₂₅₇	16.0	X	4.84034	231.08757	70.23770	2.29170	0.1284517	0.18199172	3.0839095	20	8 20.5	19.5
186979	2004	<i>RT</i> ₂₅₇	15.1	X	267.94995	188.61926	192.78413	7.20740	0.1723141	0.17361804	3.1822880	20	6 25.3	19.8
186980	2004	<i>RW</i> ₂₉₂	15.9	X	302.23799	125.98382	227.31168	0.73540	0.2135594	0.17533425	3.1614880	20	6 29.8	19.9
186981	2004	<i>RD</i> ₃₂₉	15.2	X	309.26374	134.93429	217.91988	9.49649	0.1036830	0.17671279	3.1450247	20	7 23.4	19.4
186982	2004	<i>RS</i> ₃₄₀	14.8	X	264.74038	240.72568	108.09112	19.61439	0.0466576	0.16911816	3.2384900	20	6 2.4	19.6
186983	2004	<i>RW</i> ₃₄₀	15.0	X	347.13970	215.47790	80.95728	17.94856	0.1879790	0.17700500	3.1415625	20	7 9.8	18.5
186984	2004	<i>SV</i> ₁₆	15.2	X	56.64972	230.24610	69.02702	10.93877	0.0925541	0.18948172	3.0020955	20	10 31.4	19.4
186985	2004	<i>SN</i> ₄₇	14.9	X	157.18547	248.85445	225.89429	7.50219	0.0138471	0.17096011	3.2151866	20	6 28.2	19.6
186986	2004	<i>SQ</i> ₄₈	15.3	X	140.43175	228.21741	107.80734	14.82381	0.3522199	0.21012522	2.8021020	20	1 20.3	20.2
186987	2004	<i>SD</i> ₅₈	15.4	X	324.60993	167.55069	182.61418	6.19053	0.1346750	0.17764513	3.1340110	20	8 12.2	19.1
186988	2004	<i>TM</i> ₆	14.9	X	37.90130	235.21279	57.18322	13.77566	0.0884921	0.18529787	3.0471168	20	10 1.1	19.2
186989	2004	<i>TX</i> ₆	15.1	X	21.15292	235.29989	67.25146	10.48789	0.0867991	0.18209935	3.0826942	20	9 18.3	19.3
186990	2004	<i>TD</i> ₇	14.7	X	353.78923	245.31919	70.92939	16.16168	0.1663664	0.17989220	3.1078579	20	8 29.9	18.5
186991	2004	<i>TS</i> ₈	14.3	X	345.44987	225.29307	130.56776	28.48736	0.2289091	0.18010379	3.1054234	20	10 12.3	18.1
186992	2004	<i>TZ</i> ₈	14.5	X	271.18621	171.43454	233.60870	15.68929	0.3308830	0.17354509	3.1831797	20	7 4.9	19.5
186993	2004	<i>TB</i> ₁₃	15.3	X	199.45822	291.03801	24.53895	14.17084	0.3111553	0.21958214	2.7210595	20	2 7.0	20.6
186994	2004	<i>TC</i> ₁₄	15.9	X	328.56029	185.46651	174.90073	7.97498	0.1648543	0.18098312	3.0953565	20	9 1.6	19.3
186995	2004	<i>TE</i> ₆₆	15.6	X	276.73240	232.21001	131.16973	4.64633	0.1951208	0.17165336	3.2065241	20	6 10.7	20.1
186996	2004	<i>TK</i> ₆₈	14.8	X	309.91508	301.65406	41.36541	18.29694	0.1472666	0.17495502	3.1660549	20	7 9.9	19.1
186997	2004	<i>TX</i> ₇₇	15.5	X	132.21417	246.25944	79.75891	10.56764	0.1299589	0.20878307	2.8140951	20	—	—
186998	2004	<i>TW</i> ₈₇	15.7	X	11.62241	128.72569	147.01705	1.92426	0.0733091	0.17475042	3.1685257	20	7 22.2	19.6
186999	2004	<i>TN</i> ₉₇	14.8	X	19.41523	238.49654	31.61295	10.51274	0.2093648	0.17614804	3.1517433	20	8 16.0	18.5
187000	2004	<i>TQ</i> ₁₀₆	15.2	X	107.42445	280.55198	32.96307	14.68502	0.2598767	0.20135151	2.8829213	20	—	—
187001	2004	<i>TB</i> ₁₀₇	15.3	X	268.53129	168.83485	179.91275	5.19315	0.0679166	0.16872015	3.2435811	20	5 31.6	19.9
187002	2004	<i>TO</i> ₁₁₀	17.2	X	343.19069	27.96178	49.08252	21.91251	0.1123747	0.38181698	1.8817672	20	—	—
187003	2004	<i>TY</i> ₁₂₀	14.6	X	352.79583	356.59068	53.71443	4.25875	0.1853146	0.12636138	3.9330229	20	12 6.6	19.3
187004	2004	<i>TY</i> ₁₂₁	15.3	X	335.01288	106.22945	206.80461	6.54662	0.1702362	0.17574680	3.1565386	20	7 8.3	19.0
187005	2004	<i>TC</i> ₁₂₇	15.7	X	27.40924	180.27468	133.25345	2.79768	0.2357671	0.18679081	3.0308579	20	10 29.2	19.4
187006	2004	<i>TK</i> ₁₂₇	15.1	X	342.20818	288.12641	52.28634	10.38538	0.2102724	0.18147382	3.0897741	20	9 7.9	18.4
187007	2004	<i>TG</i> ₁₂₈	15.6	X	332.46799	282.41748	92.30110	6.64702	0.1554120	0.18361280	3.0657313	20	10 4.8	19.1
187008	2004	<i>TM</i> ₁₂₉	14.4	X	32.29709	224.37216	45.12162	18.13121	0.2125216	0.17962151	3.1109796	20	9 13.9	18.6
187009	2004	<i>TG</i> ₁₃₇	15.8	X	345.02557	307.71951	29.64647	5.60384	0.2079148	0.18012760	3.1051497	20	9 5.8	18.9
187010	2004	<i>TB</i> ₁₇₀	15.3	X	310.54530	206.50827	161.27892	6.15370	0.1639053	0.17729381	3.1381498	20	8 9.1	18.9
187011	2004	<i>TT</i> ₂₂₄	15.4	X	298.83418	105.43680	349.91795	2.08274	0.1861521	0.12614170	3.9375879	20	10 28.9	20.2
187012	2004	<i>TV</i> ₂₃₂	14.9	X	322.34426	40.77476	27.22150	5.06054	0.1173995	0.12450387	3.9720449	20	11 7.2	19.8
187013	2004	<i>TO</i> ₂₈₂	15.7	X	357.63281	223.60850	103.79553	3.03924	0.1876248	0.18163516	3.0879441	20	9 16.9	19.0
187014	2004	<i>TA</i> ₂₉₇	15.1	X	11.18239	64.80632	206.75349	4.88482	0.1519197	0.17113609	3.2129822	20	7 19.9	19.0
187015	2004	<i>UM</i> ₂	15.0	X	1.85728	254.35878	66.25861	10.83671	0.0755923	0.18105005	3.0945936	20	9 12.0	19.1
187016	2004	<i>UT</i> ₂	14.7	X	316.07934	176.18161	156.18102	13.46248	0.0932463	0.17388112	3.1790774	20	7 9.8	19.1
187017	2004	<i>VO</i> ₇	14.2	X	1.88841	308.40686	97.54333	5.03808	0.2347609	0.12641164	3.9319803	20	12 22.1	18.6
187018	2004	<i>YC</i> ₂₅	13.5	X	283.53240	188.57181	124.26428	10.48537	0.0543411	0.08436335	5.1487305	20	5 12.2	20.4
187019	2004	<i>YU</i> ₃₆	12.8	X	187.52187	272.15187	135.51196	12.16526	0.0544001	0.08189619	5.2516234	20	5 17.2	20.1
187020	2005	<i>AZ</i> ₆₃	13.2	X	277.92964	192.70290	128.22097	9.39007	0.0630423	0.08554168	5.1013391	20	5 13.3	20.0
187021	2005	<i>AU</i> ₆₆	12.7	X	301.30982	161.11878	128.19118	10.11469	0.1390789	0.08297083	5.2061788	20	4 26.2	19.4
187022	2005	<i>BJ</i> ₁	16.4	X	46.14082	256.87766	48.70386	22.20278	0.0628133	0.35715543	1.9674236	20	11 20.7	18.4
187023	2005	<i>BQ</i> ₂	16.7	X	230.38992	114.44942	27.02921	21.18451	0.0554752	0.36226467	1.9488813	20	11 29.8	18.9
187024	2005	<i>BN</i> ₁₃	12.8	X	241.41235	231.30411	135.92786	13.73483	0.0290862	0.08361744	5.1793049	20	5 29.5	19.9
187025	2005	<i>DB</i> ₂	16.9	X	160.77937	162.84636	48.68733	22.55832	0.0401277	0.36219500	1.9491312	20	12 6.3	19.2
187026	2005	<i>EK</i> ₇₀	17.3	X	211.05838	347.05244	329.80406	30.00245	0.1354310	0.04859100	0.9595449	20	—	—
187027	2005	<i>EZ</i> ₁₁₉	16.8	X	207.48047	335.30578	194.76070	4.96452	0.0763928	0.29776204	2.2210406	20	11 24.7	19.5
187028	2005	<i>EY</i> ₁₅₀	16.9	X										

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187041 2005 JS ₁₂₇	17.2	X	271.33464	113.53455	186.42130	4.30706	0.2455586	0.31875941	2.1224007	20	2 29.6	20.5
187042 2005 KZ ₂	17.0	X	91.33070	179.31583	130.09330	2.35231	0.2196288	0.28212561	2.3023661	20	—	—
187043 2005 KE ₁₂	16.9	X	191.91089	214.62652	94.31646	6.95074	0.2760473	0.30061082	2.2069863	20	1 12.2	20.5
187044 2005 LF ₁₅	17.8	X	134.38425	127.58947	189.95358	7.10281	0.3431072	0.29097059	2.2554679	20	—	—
187045 2005 LO ₂₁	16.8	X	116.62169	105.50926	259.47966	3.16736	0.0752891	0.30548558	2.1834449	20	—	—
187046 2005 LT ₂₃	16.6	X	34.98337	126.43470	215.89792	6.27610	0.1655381	0.27350889	2.3504720	20	12 23.8	19.7
187047 2005 LZ ₂₉	16.7	X	95.24788	239.09112	123.94580	7.20744	0.2224123	0.29779591	2.2208722	20	—	—
187048 2005 LV ₃₈	17.1	X	52.57117	215.01027	166.60597	4.92763	0.1444271	0.29443063	2.2377629	20	—	—
187049 2005 LK ₄₁	16.1	X	152.33718	272.02109	129.23165	2.07444	0.1214804	0.24413471	2.5354188	20	3 27.7	19.8
187050 2005 LQ ₄₈	17.3	X	112.80744	203.95680	128.40045	2.27795	0.2307024	0.28942991	2.2634649	20	—	—
187051 2005 LY ₅₁	16.9	X	105.96758	223.01486	113.90613	6.58181	0.1960190	0.28951362	2.2630286	20	—	—
187052 2005 MY	16.8	X	14.67079	27.58905	291.96387	1.74136	0.1848929	0.26774760	2.3840699	20	10 25.9	19.3
187053 2005 MX ₄	16.6	X	92.89799	195.43170	124.92876	7.40995	0.1965354	0.28452768	2.2893896	20	—	—
187054 2005 MP ₆	16.9	X	54.10702	197.28322	105.91546	2.78932	0.2134255	0.27612925	2.3355783	20	12 2.3	20.2
187055 2005 MR ₈	16.9	X	117.07753	108.82476	194.91788	2.22437	0.1890569	0.28768422	2.2726123	20	—	—
187056 2005 MG ₁₀	17.3	X	85.21022	52.43966	177.44743	6.54310	0.0711527	0.27562205	2.3384428	20	9 13.8	20.3
187057 2005 MV ₁₁	16.9	X	13.68470	10.30030	302.93848	7.28044	0.1597297	0.26950652	2.3736856	20	10 10.3	19.2
187058 2005 MB ₁₇	16.3	X	35.60968	174.15638	253.69587	2.65455	0.0620277	0.22656376	2.6648683	20	—	—
187059 2005 ML ₁₈	17.0	X	144.52295	190.43025	132.80396	5.54795	0.1750515	0.29448116	2.2375069	20	—	—
187060 2005 MU ₂₆	16.9	X	130.26095	204.34179	130.99472	8.06776	0.1608343	0.29378547	2.2410378	20	—	—
187061 2005 MJ ₂₇	16.7	X	17.62678	136.53914	122.79933	7.98576	0.0709792	0.26163330	2.4210701	20	7 15.3	19.3
187062 2005 MR ₃₁	16.7	X	118.62823	95.50769	208.23479	6.70780	0.1916225	0.28695954	2.2764369	20	—	—
187063 2005 MT ₃₁	17.0	X	33.78603	217.66374	187.07660	5.84728	0.2063327	0.27824374	2.3237306	20	—	—
187064 2005 MN ₃₇	17.2	X	294.67839	193.00708	169.33064	1.05098	0.1862681	0.26036783	2.4289086	20	7 9.5	19.9
187065 2005 MU ₄₀	16.8	X	83.71395	138.04879	223.57152	3.70764	0.3086475	0.28685791	2.2769745	20	—	—
187066 2005 MH ₄₁	17.2	X	16.62850	9.63322	316.35149	1.34484	0.2347751	0.27035774	2.3687006	20	11 17.0	19.6
187067 2005 MX ₄₁	16.5	X	86.59487	314.51984	128.58897	0.54726	0.1036897	0.23838129	2.5760519	20	2 28.5	19.7
187068 2005 MM ₄₂	17.3	X	216.85457	55.50851	188.87161	5.00937	0.1583424	0.29649629	2.2273572	20	—	—
187069 2005 MG ₅₀	17.0	X	195.79936	301.57796	327.52046	4.68446	0.1416972	0.29675972	2.2260389	20	—	—
187070 2005 MG ₅₂	16.7	X	85.04777	206.90579	97.77223	7.60206	0.1261408	0.28066930	2.3103234	20	12 22.9	20.0
187071 2005 MK ₅₃	17.0	X	27.02199	308.69238	36.63731	3.57266	0.1902633	0.27557492	2.3387094	20	12 22.3	19.9
187072 2005 NM ₉	17.7	X	95.17985	40.39023	219.76263	1.37961	0.1755794	0.27669326	2.3324034	20	11 14.6	21.3
187073 2005 NS ₂₃	15.2	X	292.46189	117.30649	162.45520	11.76185	0.0071757	0.18155979	3.0887986	20	4 15.3	19.6
187074 2005 NH ₂₈	17.4	X	316.46603	184.38300	158.90472	5.06308	0.2066874	0.26160288	2.4212578	20	7 19.3	19.6
187075 2005 NA ₃₁	16.7	X	272.53806	217.80111	146.11570	2.67053	0.2226195	0.25711854	2.4493290	20	6 2.9	19.9
187076 2005 NH ₄₂	16.7	X	262.89298	152.10315	208.64493	2.35850	0.1195321	0.25605052	2.4561352	20	6 1.2	19.8
187077 2005 NR ₄₈	17.3	X	178.44345	145.38802	159.20309	4.93863	0.1908337	0.29776499	2.2210259	20	—	—
187078 2005 NA ₅₄	16.7	X	291.74381	182.31382	167.96631	2.79714	0.2116908	0.25814724	2.4428177	20	6 12.1	19.4
187079 2005 NR ₅₄	17.3	X	185.13864	343.73630	220.90494	2.69500	0.0738004	0.28244809	2.3006133	20	12 9.2	20.1
187080 2005 NO ₆₀	16.8	X	34.21617	110.92442	232.02660	2.17627	0.2291430	0.27346039	2.3507499	20	—	—
187081 2005 NX ₆₅	16.6	X	189.34046	188.22017	153.63862	4.23912	0.0752638	0.23893121	2.5720977	20	2 18.0	20.4
187082 2005 NR ₆₈	16.6	X	89.64877	298.09012	17.30171	5.76351	0.1876254	0.28283859	2.2984953	20	—	—
187083 2005 NZ ₈₂	16.7	X	58.89843	191.95186	79.99907	6.77079	0.1926170	0.27259661	2.3557132	20	10 27.3	20.0
187084 2005 NK ₈₅	16.5	X	234.15029	265.03250	134.84751	2.12641	0.1819524	0.25719727	2.4488291	20	6 12.8	20.1
187085 2005 NU ₁₂₂	16.4	X	110.35632	57.65735	300.27352	5.09742	0.0537014	0.22398064	2.6853180	20	—	—
187086 2005 OP ₁	16.7	X	68.67524	238.10016	106.17666	6.77480	0.1477783	0.28232080	2.3013047	20	—	—
187087 2005 OA ₁₄	16.5	X	14.76434	176.84333	170.50295	6.64532	0.1273801	0.27155269	2.3617467	20	11 28.4	19.2
187088 2005 OF ₁₄	16.6	X	269.48302	340.34038	49.03952	6.61211	0.1462421	0.25896736	2.4376576	20	7 17.9	19.7
187089 2005 PE ₅	17.0	X	75.60008	282.11404	54.44630	6.12848	0.1896571	0.28263010	2.2996254	20	—	—
187090 2005 PK ₉	17.1	X	240.72669	346.24718	358.85376	1.42261	0.0741654	0.24765353	2.5113449	20	4 18.8	20.6
187091 2005 PC ₂₀	16.9	X	118.31604	14.94333	254.17646	2.08336	0.1860607	0.28130160	2.3068600	20	12 17.1	20.4
187092 2005 QJ ₂	16.6	X	234.25989	168.20245	213.76917	3.69074	0.1803049	0.25142146	2.4861910	20	5 20.7	20.5
187093 2005 QA ₃	16.6	X	287.98702	210.46908	161.06285	5.03301	0.1183134	0.25959826	2.4337065	20	7 22.9	19.3
187094 2005 QS ₃	17.4	X	71.28814	304.10886	17.36085	0.40741	0.1422559	0.27784039	2.3259790	20	—	—
187095 2005 QL ₅	16.2	X	268.28993	206.93096	155.61394	6.93569	0.1212438	0.25553263	2.4594527	20	6 11.2	19.4
187096 2005 QZ ₁₂	17.1	X	308.27506	112.08329	207.75803	1.67174	0.1747824	0.25544361	2.4600241	20	6 1.0	19.5
187097 2005 QV ₁₅	16.6	X	330.39566	23.94185	200.12559	2.88316	0.0543008	0.24104617	2.5570304	20	3 9.4	19.8
187098 2005 QS ₂₀	16.0	X	41.48343	244.34646	129.16155	5.88405	0.1818815	0.21137712	2.7910272	20	—	—
187099 2005 QD ₂₁	17.3	X	43.56047	172.99258	146.11404	8.38900	0.2079062	0.27278205	2.3546455	20	12 10.7	20.6
187100 2005 QS ₂₄	16.7	X	28.54652	228.12452	85.62396	2.29728	0.1972620	0.26782806	2.3835924	20	11 11.7	19.4
187101 2005 QW ₂₅	16.2	X	268.05218	167.36077	61.22250	3.53843	0.0689371	0.22741939	2.6581800	20	—	—
187102 2005 QC ₃₀	16.8	X	35.92618	7.31280	314.11580	1.58791	0.2359586	0.27141406	2.3625508	20	12 7.2	19.8
187103 2005 QX ₃₂	16.8	X	322.63573	211.03565	171.37821	2.50858	0.2087654	0.26732893	2.3865584	20	10 14.9	18.3
187104 2005 QU ₃₇	16.3	X	124.11094	199.35172	185.43829	14.58049	0.1051396	0.22813297	2.6526341	20	1 31.4	20.3
187105 2005 QZ ₃₇	16.4	X	99.34530	58.98593	205.01236	3.60117	0.1982385	0.27322959	2.3520735	20	11 24.2	20.2
187106 2005 QW ₄₂	15.6	X	318.74322	201.84112	355.76504	21.97199	0.0520967	0.23223181	2.6213293	20	1 30.1	19.4
187107 2005 QV ₄₄	16.8	X	26.57246	282.08589	45.31216	1.90333	0.2044679	0.27066477	2.3669090	20	11 28.6	19.5
187108 2005 QT ₄₈	16.8	X	41.59836	230.44954	86.04596	3.06336	0.1920055	0.27144857	2.3623505	20	12 1.8	19.8
187109 2005 QP ₄₉	16.5	X	50.83953	280.60555	60.99194	3.99234	0.2486017	0.27620279	2.3351638	20	—	—
187110 2005 QC ₅₅	16.7	X	342.43224	263.99082	82.18637	2.30617	0.2059020	0.26478726	2.4018063	20	10 4.7	18.3
187111 2005 QG ₅₆	16.6	X	79.33573	183.14169	140.98620	3.03825	0.1779494	0.27835045	2.3231367	20	—	—
187112 2005 QN ₆₀	16.9	X	41.79144	67.52970	226.21353	3.46988	0.2040146	0.26910840	2.3760261	20	11 2.9	19.9
187113 2005 QO ₆₂	16.5	X	12.06291	108.25167	74.21960	2.42043	0.0675863	0.24051332	2.5608057	20	3 17.1	19.4
187114 2005 QK ₆₉	16.5	X	76.65650	207.13848	93.83196	7.84515	0.1169655	0.27591524	2.3367859	20	12 13.0	19.8
18711												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187121 2005 QQ ₈₂	15.3	X	257.13905	202.34391	182.76578	15.29767	0.2302304	0.18242437	3.0790316	20	6 11.9	20.3
187122 2005 QP ₈₃	17.4	X	106.94244	105.36035	214.65931	4.84247	0.2404822	0.28359247	2.2944200	20	—	—
187123 Schorderet	16.6	X	171.94488	325.81241	3.76344	2.38871	0.1070900	0.22789573	2.6544747	20	1 19.6	20.6
187124 2005 QX ₈₄	16.8	X	44.83795	114.77289	182.46981	4.76571	0.1838265	0.26867106	2.3786039	20	11 9.6	19.8
187125 Marxgyörgy	15.8	X	141.57235	259.81119	142.41838	15.61034	0.0826563	0.23146696	2.6271006	20	3 16.7	19.6
187126 2005 QN ₉₁	16.6	X	340.98869	314.78222	20.36446	2.67073	0.1975556	0.26357612	2.4091583	20	9 10.5	18.1
187127 2005 QG ₉₆	16.5	X	268.62051	264.73748	108.87827	2.30952	0.1455092	0.25529791	2.4609599	20	6 22.7	19.5
187128 2005 QY ₉₉	16.5	X	129.95159	134.00635	201.83933	4.72147	0.1402118	0.22355734	2.6887067	20	—	—
187129 2005 QV ₁₀₄	16.4	X	220.77006	289.03649	273.97535	1.41719	0.0322403	0.21534736	2.7566165	20	—	—
187130 2005 QV ₁₁₀	16.1	X	252.86046	222.32539	173.44542	5.23094	0.1822527	0.18579930	3.0416319	20	6 25.6	20.7
187131 2005 QF ₁₁₄	16.2	X	25.68510	51.16676	143.32941	3.08889	0.0831661	0.24218472	2.5490101	20	4 25.8	19.0
187132 2005 QM ₁₁₅	16.3	X	98.79130	320.66354	9.30621	4.34291	0.0745914	0.21398719	2.7682854	20	—	—
187133 2005 QO ₁₁₅	15.8	X	7.26842	262.73513	165.55983	3.86958	0.0581506	0.21332293	2.7740292	20	—	—
187134 2005 QG ₁₂₇	17.4	X	57.87017	105.40951	131.59705	0.54462	0.1737209	0.26202374	2.4186645	20	9 1.7	20.3
187135 2005 QX ₁₃₃	16.2	X	281.00409	70.58781	168.53741	14.78686	0.0388824	0.23243777	2.6197805	20	1 25.9	20.0
187136 2005 QU ₁₃₄	16.7	X	229.05885	164.06555	6.47922	3.57379	0.0348782	0.20897202	2.8124013	20	12 6.8	20.7
187137 2005 QM ₁₃₇	16.5	X	114.69989	210.09802	148.68135	5.33604	0.1085181	0.22276040	2.6951155	20	—	—
187138 2005 QW ₁₃₇	16.1	X	296.02463	9.98436	49.59524	2.69538	0.0584246	0.19990231	2.8968378	20	10 11.8	19.8
187139 2005 QX ₁₄₀	16.9	X	32.29434	310.99601	14.96250	4.81604	0.2568245	0.27141969	2.3625181	20	12 11.3	20.0
187140 2005 QV ₁₄₅	16.5	X	322.68398	248.53502	86.93300	7.52450	0.1209157	0.25817047	2.4426712	20	8 1.8	18.9
187141 2005 QG ₁₄₆	16.5	X	9.64590	200.79606	123.87862	6.11545	0.2184744	0.26672342	2.3901690	20	11 3.1	18.9
187142 2005 QN ₁₄₈	16.8	X	90.91529	204.08451	93.50601	7.72887	0.1252798	0.27802138	2.3249694	20	12 24.4	20.2
187143 2005 QV ₁₆₁	16.9	X	177.97443	328.38150	29.78318	6.51419	0.1219188	0.23651269	2.5896024	20	3 2.4	20.9
187144 2005 QM ₁₆₂	16.6	X	36.50804	211.71127	57.00692	4.95663	0.2169610	0.26556496	2.3971150	20	9 26.2	19.3
187145 2005 QG ₁₆₅	16.0	X	49.41627	244.44674	112.91962	5.04659	0.1134683	0.20936858	2.8088489	20	—	—
187146 2005 QB ₁₆₆	16.6	X	154.09376	276.06244	108.62292	6.06371	0.1229372	0.23181148	2.6244971	20	3 11.5	20.6
187147 2005 QK ₁₆₉	16.2	X	68.02202	222.04892	94.57835	7.24714	0.1582462	0.27587194	2.3370304	20	12 27.3	19.3
187148 2005 QZ ₁₇₁	16.0	X	128.87543	350.26656	299.18576	5.00229	0.0298343	0.21207518	2.7848992	20	—	—
187149 2005 QF ₁₇₅	16.8	X	120.99241	324.22547	286.43478	2.33909	0.2170574	0.27633526	2.3344174	20	11 26.2	20.8
187150 2005 QP ₁₇₅	16.4	X	55.78898	241.02903	145.32735	6.02939	0.0690695	0.21598651	2.7511755	20	—	—
187151 2005 QN ₁₇₈	16.0	X	112.67294	281.21144	76.30614	7.38799	0.0361456	0.22291775	2.6938471	20	—	—
187152 2005 QT ₁₇₈	16.8	X	135.25014	56.86108	274.08361	2.82895	0.0818903	0.22300839	2.6931172	20	—	—
187153 2005 QS ₁₈₂	15.9	X	351.76415	221.60889	323.95933	4.22104	0.1725257	0.23562351	2.5961132	20	2 6.5	18.5
187154 2005 QV ₁₈₂	16.6	X	5.65526	100.65128	46.71814	3.98317	0.0432262	0.23048564	2.6345522	20	1 22.8	19.8
187155 2005 RH ₃	16.7	X	332.27168	93.15200	204.85891	1.78568	0.2002351	0.25858374	2.4400679	20	6 12.0	18.5
187156 2005 RX ₅	17.1	X	92.24183	102.87116	182.24748	6.42228	0.1190655	0.27559779	2.3385800	20	12 9.8	20.5
187157 2005 RT ₉	16.7	X	150.25451	132.05030	194.69245	11.24225	0.1909018	0.22536057	2.6743449	20	—	—
187158 2005 RE ₁₀	16.2	X	8.14944	43.02390	20.66318	9.21662	0.0649042	0.21330179	2.7742124	20	—	—
187159 2005 RG ₁₀	16.8	X	81.47146	118.22920	166.87349	5.89312	0.1276062	0.27449804	2.3448220	20	11 29.5	20.2
187160 2005 RG ₂₂	17.1	X	65.22743	264.11824	59.17448	1.68311	0.2175872	0.27583093	2.3372621	20	—	—
187161 2005 RS ₂₂	16.4	X	56.29475	281.28350	37.46955	6.91964	0.1283723	0.27499257	2.3420100	20	12 13.3	19.6
187162 2005 RE ₂₉	16.7	X	33.62367	306.19407	43.72125	4.96274	0.2749481	0.27375202	2.3490801	20	—	—
187163 2005 RY ₃₃	16.0	X	93.08803	87.68882	231.05536	22.01150	0.2157014	0.27870175	2.3211841	20	—	—
187164 2005 RF ₄₂	16.7	X	173.01614	117.98245	194.48010	3.04145	0.0964452	0.22633023	2.6667011	20	—	—
187165 2005 RB ₄₄	17.2	X	342.42396	53.19156	182.52375	2.29084	0.1200592	0.24319167	2.5419690	20	4 6.8	19.9
187166 2005 RD ₄₆	16.0	X	164.11920	156.14010	144.26199	9.91023	0.0740965	0.21888394	2.7268429	20	—	—
187167 2005 SJ ₅	16.0	X	196.26977	98.72605	190.01212	27.92497	0.0405818	0.22440696	2.6819160	20	—	—
187168 2005 SR ₈	15.7	X	54.88627	173.47645	20.46294	4.44860	0.0365648	0.17650440	3.1474997	20	6 2.7	20.0
187169 2005 SB ₁₃	16.6	X	20.67547	125.27687	235.34088	1.06100	0.0765183	0.20394361	2.8584416	20	11 28.1	20.1
187170 2005 SH ₁₃	17.0	X	45.59530	12.89364	305.68505	0.53618	0.2024635	0.27094258	2.3652908	20	12 10.0	20.1
187171 2005 SN ₁₃	16.0	X	74.80195	158.51632	196.05663	4.95127	0.0640324	0.21258128	2.7804774	20	—	—
187172 2005 SM ₁₈	16.2	X	254.86758	226.89907	226.92126	1.22088	0.0342407	0.19704834	2.9247418	20	10 1.9	20.2
187173 2005 SR ₂₆	16.1	X	70.15792	350.23208	36.81553	4.04627	0.2034467	0.21721979	2.7407523	20	—	—
187174 2005 SF ₃₀	16.6	X	185.32637	177.52317	156.46829	2.48152	0.2102114	0.23094165	2.6310829	20	2 9.7	21.1
187175 2005 SN ₃₅	16.5	X	234.31603	202.16093	80.51416	3.51017	0.0579939	0.22885767	2.6470313	20	1 27.1	20.3
187176 2005 SP ₃₆	17.3	X	46.88212	160.40438	155.04485	1.38844	0.1993275	0.27092706	2.3653811	20	12 7.3	20.4
187177 2005 SZ ₃₇	16.1	X	186.52396	37.78263	48.43956	1.49976	0.1476315	0.17935022	3.1141159	20	6 26.1	21.1
187178 2005 SH ₃₉	16.5	X	103.32421	190.99083	180.07706	2.59931	0.0911256	0.22070218	2.7118456	20	—	—
187179 2005 SV ₄₄	15.9	X	191.79920	239.20454	213.91513	8.94611	0.1412604	0.17985906	3.1082397	20	7 8.1	21.1
187180 2005 SY ₄₉	15.3	X	239.38540	191.74933	200.40898	10.28108	0.1047485	0.18015237	3.1048650	20	6 15.3	20.1
187181 2005 SD ₅₁	15.8	X	218.80726	29.00677	2.71868	4.78218	0.1888566	0.17653412	3.1471464	20	5 17.1	21.0
187182 2005 SJ ₅₁	17.0	X	277.30728	271.51531	37.05223	1.26351	0.1643367	0.24276679	2.5449340	20	4 3.8	20.4
187183 2005 SH ₆₀	15.9	X	45.05799	330.60679	23.15149	11.25258	0.1452397	0.20646361	2.8351347	20	12 31.7	20.1
187184 2005 SO ₆₀	16.7	X	131.85504	154.77529	177.68600	3.48201	0.1298471	0.22133807	2.7066492	20	—	—
187185 2005 ST ₆₁	16.7	X	114.25633	178.11091	183.65544	2.63582	0.0968349	0.22042978	2.7140793	20	—	—
187186 2005 SK ₆₂	16.6	X	14.26396	221.77155	187.52694	5.53765	0.0507568	0.20977413	2.8052275	20	—	—
187187 2005 SY ₆₅	15.9	X	121.12980	191.05778	162.60941	8.96105	0.1596902	0.22093403	2.7099481	20	—	—
187188 2005 SR ₆₆	15.4	X	165.68681	254.07015	200.04450	9.02115	0.0837060	0.17858231	3.1230367	20	6 15.3	20.3
187189 2005 SB ₆₇	16.5	X	17.16690	253.43283	188.46463	3.95854	0.0227491	0.21757226	2.7377914	20	—	—
187190 2005 SS ₆₈	15.8	X	82.28240	159.95204	214.60498	4.68908	0.0856285	0.21687008	2.7436979	20	—	—
187191 2005 SU ₆₈	16.7	X	78.91696	103.16349	205.88646	1.57900	0.2233789	0.27559142	2.3386160	20	—	—
187192 2005 SE ₇₀	15.8	X	98.60116	294.19697	63.39283	6.47324	0.0900520	0.21642964	2.7474190	20	—	—
187193 2005 SF ₇₂	15.4	X	197.07972	36.89202	19.18431	11.27753	0.0700268	0.17852415	3.1237150	20	5 30.1	20.3
187194 2005 SW ₇₄	16.3	X	330.50514	151.00142	188.32217	6.67990	0.0563729	0.19119260	2.9841593	20	8 13.4	20.2
187195												

ELEMENTS AND OPPOSITION DATES IN 2020

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187201 2005 <i>SG</i> ₉₃	16.5	X	259.43838	40.08630	206.44434	2.57792	0.0338203	0.22731814	2.6589693	20	1 12.0	20.1
187202 2005 <i>SW</i> ₈₄	15.8	X	3.64477	226.35466	34.38508	1.05417	0.1399285	0.18414745	3.0597943	20	6 22.4	19.1
187203 2005 <i>SB</i> ₈₅	16.0	X	216.79572	230.29785	206.19113	1.00659	0.1673877	0.18234860	3.0798844	20	7 11.2	20.8
187204 2005 <i>SL</i> ₈₉	16.1	X	228.80934	228.68914	12.11723	4.60070	0.1118366	0.21924502	2.7238482	20	—	—
187205 2005 <i>ST</i> ₉₂	16.3	X	221.75422	69.53729	228.16065	2.21827	0.0869015	0.22949404	2.6421356	20	1 29.3	20.3
187206 2005 <i>SG</i> ₉₅	16.4	X	50.72355	12.86957	26.19442	4.44004	0.0658868	0.21569337	2.7536676	20	—	—
187207 2005 <i>SR</i> ₉₅	16.2	X	98.43156	336.88204	23.51425	5.89751	0.0501408	0.21809712	2.7333973	20	—	—
187208 2005 <i>SD</i> ₉₆	16.9	X	193.47705	274.70592	54.12175	2.31321	0.1726589	0.23196430	2.6233443	20	2 10.4	21.3
187209 2005 <i>SH</i> ₁₀₄	16.4	X	68.52578	351.79312	22.35276	5.05976	0.0570161	0.21327906	2.7744096	20	—	—
187210 2005 <i>SO</i> ₁₀₅	16.2	X	223.52133	190.27825	140.84064	4.46027	0.2235651	0.23689047	2.5868485	20	3 7.7	20.6
187211 2005 <i>SS</i> ₁₀₅	15.1	X	252.67682	315.75186	60.48994	6.92715	0.2935796	0.17931062	3.1145744	20	5 20.6	20.3
187212 2005 <i>SY</i> ₁₀₅	16.1	X	174.64031	147.82165	192.12635	8.79144	0.1710998	0.22836588	2.6508302	20	2 4.5	20.5
187213 2005 <i>SL</i> ₁₁₀	16.8	X	267.21113	61.05611	14.25376	2.51140	0.0459208	0.19449042	2.9503298	20	9 22.9	20.8
187214 2005 <i>SD</i> ₁₁₁	15.6	X	146.04289	69.94548	12.26594	4.32240	0.1438282	0.17088036	3.2161869	20	5 13.7	20.7
187215 2005 <i>SL</i> ₁₁₁	16.0	X	78.84608	165.11963	224.06434	14.72079	0.1494966	0.21932582	2.7231791	20	—	—
187216 2005 <i>SV</i> ₁₁₁	16.2	X	228.38511	55.21884	209.32270	14.40223	0.1138407	0.22449781	2.6811924	20	—	—
187217 2005 <i>SV</i> ₁₁₈	15.6	X	359.43318	271.36954	165.40330	13.13198	0.1738849	0.21083640	2.7957972	20	—	—
187218 2005 <i>SY</i> ₁₁₉	17.7	X	49.65784	75.46554	196.64354	1.82825	0.1890309	0.26435926	2.4043980	20	10 11.8	20.7
187219 2005 <i>SM</i> ₁₂₅	16.6	X	326.81550	317.02020	185.05048	4.79019	0.0608767	0.21922263	2.7240336	20	—	—
187220 2005 <i>SX</i> ₁₂₉	16.0	X	43.02755	69.94901	332.70548	3.28835	0.1040776	0.21388690	2.7691507	20	—	—
187221 2005 <i>SP</i> ₁₃₃	16.5	X	295.38379	341.10330	215.96748	4.85087	0.0523376	0.22126231	2.7072670	20	—	—
187222 2005 <i>SZ</i> ₁₃₅	16.7	X	226.21598	296.14191	142.06613	2.27470	0.0850362	0.18742209	3.0240493	20	7 30.9	21.0
187223 2005 <i>SY</i> ₁₃₉	16.6	X	120.29641	109.53236	145.63200	2.66485	0.0200980	0.20275269	2.8696238	20	11 13.1	20.6
187224 2005 <i>SS</i> ₁₄₀	16.5	X	221.26816	307.79587	102.85368	2.07789	0.0417448	0.18166611	3.0875934	20	6 24.4	20.9
187225 2005 <i>SG</i> ₁₄₁	16.2	X	22.69386	258.89812	115.74911	2.97144	0.0951933	0.20613456	2.8381511	20	12 21.6	19.9
187226 2005 <i>SH</i> ₁₄₁	16.5	X	21.88605	302.57813	144.92282	3.58375	0.0398298	0.21875584	2.7279073	20	—	—
187227 2005 <i>SJ</i> ₁₄₃	16.9	X	316.37116	8.19336	73.23737	3.06586	0.0383580	0.20586355	2.8406414	20	12 8.9	20.4
187228 2005 <i>SC</i> ₁₄₄	16.2	X	319.25360	348.91303	78.72724	3.66425	0.1548355	0.20422729	2.8557939	20	11 25.5	20.1
187229 2005 <i>SB</i> ₁₄₅	17.0	X	41.50662	274.16594	66.18108	2.78826	0.0683908	0.20444051	2.8538079	20	11 28.9	20.7
187230 2005 <i>SG</i> ₁₅₂	15.6	X	125.40594	300.02076	44.91426	17.87599	0.1753739	0.21811885	2.7332158	20	—	—
187231 2005 <i>SR</i> ₁₅₂	15.6	X	106.99416	327.30223	50.29817	14.41663	0.1707173	0.21959305	2.7209694	20	1 17.5	19.5
187232 2005 <i>SR</i> ₁₅₃	16.6	X	302.31650	299.46161	21.63426	4.95409	0.2098816	0.25442982	2.4665545	20	5 16.0	19.4
187233 2005 <i>SC</i> ₁₅₄	17.1	X	254.45178	354.65604	302.33654	2.43396	0.1818981	0.23935671	2.5690486	20	2 22.9	21.0
187234 2005 <i>SW</i> ₁₅₄	16.3	X	157.36641	29.38190	217.53109	2.54480	0.0248243	0.20848966	2.8167374	20	12 16.9	20.4
187235 2005 <i>SE</i> ₁₅₇	16.0	X	90.27622	355.78879	25.49238	6.40515	0.0545471	0.21884252	2.7271869	20	—	—
187236 2005 <i>SD</i> ₁₆₀	16.2	X	132.97718	280.47634	232.18092	3.25011	0.1107107	0.18394250	3.0620668	20	7 24.5	20.9
187237 2005 <i>SJ</i> ₁₆₀	16.5	X	209.88960	243.83393	337.98610	2.99497	0.1131217	0.21453087	2.7636063	20	—	—
187238 2005 <i>SH</i> ₁₆₇	16.2	X	101.18812	248.15370	141.18019	12.77102	0.2101492	0.22238197	2.6981722	20	1 27.3	19.8
187239 2005 <i>SR</i> ₁₆₉	17.0	X	213.72896	38.76812	286.96755	2.97230	0.1422380	0.23510817	2.5999055	20	2 22.3	21.0
187240 2005 <i>SK</i> ₁₈₀	16.7	X	1.61620	172.78557	166.31805	3.40604	0.2007877	0.26637206	2.3922704	20	11 4.9	18.9
187241 2005 <i>SO</i> ₁₈₀	17.6	X	43.17721	293.83043	9.37816	1.38923	0.1848095	0.26912248	2.3759433	20	11 14.2	20.7
187242 2005 <i>SR</i> ₁₈₀	17.3	X	343.92744	126.20893	175.76817	2.14391	0.1780928	0.25752296	2.4467640	20	7 19.2	19.3
187243 2005 <i>SA</i> ₁₈₄	16.0	X	218.14063	293.66543	334.03353	3.08744	0.0511577	0.22277100	2.6950301	20	—	—
187244 2005 <i>SO</i> ₁₉₀	15.8	X	23.66611	252.09833	178.23896	8.49671	0.1163897	0.21413068	2.7670486	20	—	—
187245 2005 <i>SV</i> ₁₉₀	15.8	X	214.51312	329.39634	83.80175	2.47302	0.1371290	0.17918777	3.1159977	20	6 12.5	20.6
187246 2005 <i>SU</i> ₁₉₂	15.4	X	161.67783	318.73182	53.23711	15.09134	0.2579220	0.22815722	2.6524461	20	3 17.2	20.2
187247 2005 <i>SA</i> ₁₉₅	16.6	X	76.04514	29.33646	355.70135	3.23065	0.1052787	0.22049451	2.7135481	20	—	—
187248 2005 <i>SS</i> ₂₁₀	15.3	X	199.24285	212.19274	207.63321	9.98322	0.0464822	0.17950148	3.1123662	20	6 9.9	20.0
187249 2005 <i>SS</i> ₂₁₉	15.5	X	251.54763	189.11334	196.50698	18.56127	0.2438652	0.17898564	3.1183433	20	6 5.3	20.7
187250 2005 <i>SQ</i> ₂₂₁	14.7	X	250.91612	340.61085	16.16121	23.39284	0.1815087	0.17660676	3.1462833	20	4 29.4	19.9
187251 2005 <i>ST</i> ₂₂₅	16.5	X	183.73751	219.35757	195.41846	2.14466	0.0956196	0.17614311	3.1518021	20	5 16.8	21.4
187252 2005 <i>SA</i> ₂₂₉	16.6	X	327.58255	30.88476	352.67421	1.45695	0.1060775	0.19836316	2.9118033	20	10 8.2	19.8
187253 2005 <i>SG</i> ₂₃₅	16.3	X	298.90358	83.01831	63.95623	0.25499	0.0993837	0.21284615	2.7781702	20	—	—
187254 2005 <i>SL</i> ₂₃₇	15.2	X	357.29890	299.14415	22.29836	14.38686	0.0329333	0.18906499	3.0065053	20	9 5.8	19.4
187255 2005 <i>SD</i> ₂₄₈	16.4	X	155.61992	201.62706	4.28304	1.53627	0.0158737	0.19827437	2.9126726	20	10 23.2	20.5
187256 2005 <i>SG</i> ₂₄₈	16.0	X	91.95994	325.56707	20.35170	4.91503	0.0731202	0.21317716	2.7752936	20	—	—
187257 2005 <i>SX</i> ₂₅₀	15.9	X	77.11400	213.21002	151.28171	6.01184	0.0972637	0.21365692	2.7711375	20	—	—
187258 2005 <i>SF</i> ₂₅₉	16.6	X	43.70394	211.07381	118.94052	7.47298	0.1843360	0.27270689	2.3550781	20	12 20.9	19.8
187259 2005 <i>SK</i> ₂₇₈	16.2	X	152.16536	39.25049	101.48022	3.06263	0.0736336	0.18246994	3.0785189	20	7 29.2	20.9
187260 2005 <i>SH</i> ₂₇₉	16.7	X	300.64979	232.29643	212.96420	1.41999	0.0511470	0.19984861	2.8973567	20	11 20.2	20.3
187261 2005 <i>SM</i> ₂₇₉	16.1	X	183.87774	50.09835	45.42810	3.53811	0.1057723	0.18208715	3.0828320	20	7 6.2	20.9
187262 2005 <i>SW</i> ₂₈₁	16.2	X	259.09869	225.32558	281.80654	0.92662	0.0242041	0.20672191	2.8327725	20	12 16.9	20.1
187263 2005 <i>TH</i> ₁	16.1	X	85.57384	203.86957	193.33096	10.67868	0.1981156	0.22241378	2.6979150	20	1 12.3	19.5
187264 2005 <i>TQ</i> ₃	16.1	X	63.40191	221.00276	172.06050	9.32384	0.1743491	0.21556167	2.7547891	20	—	—
187265 2005 <i>TS</i> ₉	16.1	X	254.64972	229.33304	167.10329	2.77962	0.1249143	0.18343827	3.0676755	20	7 5.6	20.6
187266 2005 <i>TO</i> ₂₁	16.3	X	71.38692	321.10733	50.05878	3.84551	0.0867555	0.21426372	2.7659031	20	—	—
187267 2005 <i>TA</i> ₃₂	17.7	X	13.06068	219.60022	86.89582	2.58007	0.1811570	0.26231318	2.4168849	20	10 4.3	20.0
187268 2005 <i>TH</i> ₃₂	17.2	X	28.73260	164.94469	126.95824	2.06397	0.1521024	0.26348588	2.4097083	20	10 4.4	19.8
187269 2005 <i>TN</i> ₃₃	16.1	X	177.48575	60.87503	64.30794	4.54263	0.1057854	0.18605761	3.0388161	20	8 6.9	20.9
187270 2005 <i>TT</i> ₃₄	16.7	X	160.07323	191.57869	146.53403	2.49610	0.0849911	0.22652164	2.6651986	20	1 15.0	20.5
187271 2005 <i>TU</i> ₄₀	15.7	X	22.52127	336.16962	10.45338	5.72236	0.0758156	0.19884696	2.9070784	20	11 10.1	19.5
187272 2005 <i>TV</i> ₄₃	16.5	X	86.00181	18								

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187281 2005 TK ₅₉	16.1	X	207.52984	228.71904	62.74419	2.79465	0.0396938	0.22322490	2.6913755	20	1 8.7	19.9
187282 2005 TH ₆₂	16.3	X	96.58327	266.68366	80.16413	2.28435	0.0761757	0.21302888	2.7765813	20	—	—
187283 Jeffh Hopkins	16.3	X	32.67022	287.52608	118.70783	4.72383	0.0989054	0.21231244	2.7828241	20	—	—
187284 2005 TT ₆₈	15.8	X	146.45208	284.89465	178.28514	9.08235	0.2152326	0.17431017	3.1738586	20	6 13.6	21.2
187285 2005 TS ₇₂	16.2	X	296.60811	139.91258	166.75427	12.10292	0.1948331	0.24655926	2.5187699	20	4 24.3	19.5
187286 2005 TU ₇₂	15.8	X	119.91537	317.42884	54.86632	14.53453	0.1841070	0.22274217	2.6952626	20	1 29.2	19.9
187287 2005 TZ ₇₃	15.1	X	212.59076	2.84767	51.22999	18.89263	0.1192215	0.17716632	3.1396551	20	6 10.2	20.1
187288 2005 TY ₈₈	17.2	X	233.99682	231.54987	117.71349	2.99324	0.0391411	0.24231376	2.5481051	20	4 21.8	20.6
187289 2005 TO ₉₁	16.5	X	20.48444	29.80484	50.88846	2.97282	0.0503196	0.21820519	2.7324947	20	—	—
187290 2005 TW ₉₉	16.0	X	186.57180	121.52861	211.49289	11.56504	0.1519760	0.22888820	2.6467959	20	2 4.5	20.5
187291 2005 TY ₉₉	15.5	X	277.40678	265.49903	18.65027	10.24300	0.1731018	0.23734580	2.5835390	20	3 6.4	19.3
187292 2005 TC ₁₀₁	17.3	X	337.01859	260.96757	89.11211	2.52752	0.2013867	0.26232220	2.4168295	20	9 26.5	19.0
187293 2005 TV ₁₂₁	15.4	X	303.19691	146.38247	195.28222	9.00363	0.0528422	0.18439577	3.0570467	20	7 7.9	19.7
187294 2005 TJ ₁₂₆	16.6	X	240.31254	167.97047	30.26118	4.11792	0.0381919	0.21171862	2.7880251	20	—	—
187295 2005 TF ₁₃₂	16.2	X	225.84960	251.54315	200.42276	7.57778	0.0867116	0.18729487	3.0254186	20	8 14.5	20.8
187296 2005 TV ₁₃₉	16.7	X	211.98392	76.90046	94.39383	3.26728	0.0066265	0.20236937	2.8732464	20	11 20.3	20.6
187297 2005 TE ₁₄₂	15.6	X	175.54272	98.88270	39.95919	11.56191	0.0527771	0.18805797	3.0172287	20	8 27.7	20.2
187298 2005 TV ₁₄₂	15.9	X	294.74896	179.72551	64.74849	4.88792	0.1691536	0.23370249	2.6103205	20	2 4.0	19.5
187299 2005 TY ₁₅₁	16.1	X	139.61736	52.34999	88.26730	2.38484	0.1331989	0.17861214	3.1226890	20	7 18.6	21.1
187300 2005 TX ₁₅₆	15.5	X	225.13157	245.57916	219.65735	9.61708	0.0765277	0.19111190	2.9849993	20	8 30.7	20.0
187301 2005 TU ₁₈₀	16.4	X	356.11031	67.06003	39.98254	3.19239	0.0381807	0.21625104	2.7489315	20	—	—
187302 2005 TP ₁₉₁	15.7	X	205.76946	262.65537	157.82750	9.91143	0.1064883	0.17637771	3.1490067	20	6 15.3	20.7
187303 2005 TQ ₁₉₃	15.5	X	282.55573	257.00940	212.11357	2.61320	0.1676701	0.12656648	3.9287729	20	10 25.5	20.8
187304 2005 UV	16.2	X	217.84222	269.50683	41.93806	3.72508	0.1394659	0.22918550	2.6445064	20	2 12.1	20.3
187305 2005 UO ₂	15.5	X	152.04266	306.02907	63.82826	6.00864	0.1046577	0.22603102	2.6690540	20	2 22.4	19.6
187306 2005 UG ₄	15.8	X	173.42717	135.22334	203.51149	5.67082	0.1181281	0.22648024	2.6655234	20	1 30.7	20.0
187307 2005 UM ₉	15.5	X	295.85716	54.15854	195.46700	12.86917	0.1442833	0.23407567	2.6075453	20	2 10.1	19.4
187308 2005 UJ ₁₂	16.1	X	332.17851	266.31641	145.46280	2.76051	0.0638960	0.20168459	2.8797464	20	11 23.3	19.7
187309 2005 UW ₁₅	16.1	X	125.31125	130.20027	58.55791	3.76877	0.0364913	0.18632038	3.0359583	20	8 27.7	20.5
187310 2005 UK ₁₉	16.2	X	281.01398	132.99348	37.16377	4.05762	0.0334334	0.21416624	2.7667423	20	—	—
187311 2005 UR ₂₆	16.2	X	152.50289	335.67610	3.20464	3.95587	0.2278086	0.22412652	2.6841527	20	1 22.6	20.5
187312 2005 UZ ₂₇	16.0	X	176.18587	103.67235	358.14395	0.69135	0.0166435	0.17875441	3.1210319	20	7 6.4	20.4
187313 2005 UY ₃₅	15.7	X	33.49792	190.55002	50.96116	5.56723	0.0825322	0.17796896	3.1302080	20	7 11.9	19.7
187314 2005 UY ₃₇	15.8	X	154.08464	238.74005	216.98250	3.44240	0.1144376	0.16971040	3.2309513	20	6 6.5	20.9
187315 2005 UZ ₃₇	16.2	X	98.27040	234.65998	82.12645	3.30120	0.0654814	0.20411353	2.8568549	20	—	—
187316 2005 UG ₄₀	16.1	X	118.89328	10.22498	202.86079	1.47458	0.0724249	0.18653129	3.0336695	20	9 20.5	20.5
187317 2005 UP ₄₀	16.2	X	49.75543	260.73200	71.27225	3.18239	0.0647692	0.19770877	2.9182249	20	11 26.9	20.3
187318 2005 UJ ₄₁	15.4	X	117.05332	326.28105	224.54337	12.66800	0.0811100	0.18327630	3.0694826	20	8 17.4	20.3
187319 2005 US ₄₃	15.1	X	278.81596	313.96798	28.41155	16.62141	0.0158959	0.17622510	3.1508244	20	6 9.4	19.8
187320 2005 UC ₄₉	16.2	X	132.84461	75.74735	248.41903	3.96586	0.1624004	0.21738819	2.7393367	20	—	—
187321 2005 UK ₅₅	15.3	X	252.27068	139.40703	247.93807	4.27779	0.1684910	0.17965136	3.1106349	20	6 16.0	20.0
187322 2005 UT ₅₇	16.8	X	284.77974	150.50655	165.72997	1.63451	0.1589951	0.24360024	2.5391260	20	4 24.3	20.0
187323 2005 UY ₅₉	15.5	X	301.30677	55.08529	225.83734	12.33166	0.1756228	0.23815635	2.5776737	20	3 23.4	19.0
187324 2005 UH ₆₈	16.2	X	106.23658	241.94185	81.57998	6.02614	0.1572944	0.21157510	2.7892858	20	—	—
187325 2005 UL ₇₃	15.6	X	60.74025	235.14447	52.72706	13.52120	0.0381714	0.19271883	2.9683831	20	10 16.6	19.8
187326 2005 UH ₇₈	16.0	X	140.34930	314.97980	216.34046	2.10925	0.0115585	0.18695854	3.0290458	20	8 19.3	20.2
187327 2005 UX ₇₈	14.9	X	183.99573	12.28016	68.14372	10.49653	0.0513093	0.17442433	3.1724735	20	6 17.4	19.7
187328 2005 UA ₈₀	16.0	X	71.79025	271.35710	96.82186	5.44093	0.0802242	0.20961782	2.8066219	20	—	—
187329 2005 UK ₈₀	15.2	X	262.71668	246.99830	195.16820	9.52619	0.0880569	0.18977910	2.9989586	20	9 17.2	19.4
187330 2005 UN ₈₄	16.5	X	128.06925	74.00020	184.81205	1.73108	0.1216400	0.20261111	2.8709605	20	11 29.3	20.9
187331 2005 UR ₈₅	15.8	X	112.76431	352.15907	202.94893	9.56191	0.1040714	0.18507796	3.0495300	20	8 22.5	20.5
187332 2005 UR ₈₇	16.2	X	85.76938	150.89144	178.05001	2.05217	0.0326464	0.20708507	3.8294598	20	—	—
187333 2005 UQ ₉₆	15.4	X	132.35982	94.37343	62.67108	10.86718	0.0876884	0.17893327	3.1189518	20	7 31.1	20.3
187334 2005 UO ₁₀₀	15.8	X	157.66095	198.24676	101.90199	5.77410	0.0463414	0.21330373	2.7741956	20	—	—
187335 2005 UO ₁₀₄	15.8	X	300.32032	206.36966	66.62114	6.50067	0.2469321	0.23688729	2.5868716	20	3 8.4	19.4
187336 2005 UP ₁₀₇	16.0	X	163.81427	162.04128	174.24586	12.67198	0.1405685	0.22592858	2.6698607	20	1 19.9	20.4
187337 2005 UW ₁₀₈	16.8	X	197.52512	221.48158	144.61041	5.74862	0.2200351	0.23710723	2.5852717	20	3 30.0	21.3
187338 2005 UY ₁₁₆	15.8	X	206.79502	41.71469	2.08659	1.63417	0.1888942	0.17386746	3.1792439	20	5 22.1	21.0
187339 2005 UR ₁₂₇	15.8	X	80.32472	32.40174	267.12204	1.05897	0.0190748	0.19834486	2.9119824	20	11 17.7	19.7
187340 2005 UV ₁₃₁	15.5	X	198.33394	328.52054	112.39253	11.22765	0.1337307	0.17604310	3.1529956	20	7 1.1	20.4
187341 2005 UT ₁₄₁	16.1	X	191.37595	234.20107	120.98461	5.36242	0.2087056	0.23275095	2.6174300	20	3 12.4	20.5
187342 2005 UH ₁₄₂	15.4	X	273.98910	213.63621	174.62862	11.68042	0.1569802	0.18360890	3.0657746	20	7 13.2	19.8
187343 2005 UL ₁₅₈	15.8	X	104.16135	290.95132	57.64823	7.11917	0.1055160	0.21421189	2.7663492	20	—	—
187344 2005 UW ₁₅₉	16.1	X	146.90499	193.88003	145.35934	4.09165	0.1185003	0.22217786	2.6998245	20	1 6.3	20.0
187345 2005 UY ₁₅₉	16.2	X	59.74052	280.91014	112.14647	1.73840	0.0787253	0.21396611	2.7684673	20	—	—
187346 2005 UB ₁₈₀	16.4	X	86.06070	212.24870	107.84128	3.22087	0.0616064	0.20255083	2.8715301	20	12 25.2	20.6
187347 2005 UJ ₁₈₈	16.2	X	160.30108	217.58071	358.58459	2.32027	0.1196222	0.19912939	2.9043289	20	11 7.6	20.6
187348 2005 UH ₁₉₅	15.2	X	68.07238	110.81006	59.25400	12.14559	0.0659962	0.16875451	3.2431406	20	5 25.0	19.6
187349 2005 UT ₂₀₀	16.1	X	236.89280	66.99161	207.82119	4.39482	0.1222167	0.22424532	2.6832046	20	1 15.9	20.3
187350 2005 UM ₂₀₁	15.8	X	61.17738	25.91818	219.96625	9.61083	0.0638629	0.18403381	3.0610539	20	8 18.7	20.3
187351 2005 UK ₂₁₃	16.3	X	184.79255	220.99513	121.46687	6.37690	0.1465222	0.23011282	2.6373970	20	2 18.7	20.5
187352 2005 UH ₂₁₄	15.3	X	212.55050	311.60245	116.23175	13.07498	0.0902810	0.17768620	3.1335281	20	7 2.0	20.0
187353 2005 UW ₂₁₅	15.0	X	110.04185	348.68740	209.67986	11.72162	0.0991814	0.18425791	3.0585714	20	8 22.1	19.8
187354 2005 UM ₂₂₉												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
187361	2005	UP ₂₅₉	15.7	X	10.37427	153.87878	63.46685	5.59889	0.0896468	0.17051987	3.2207181	20	5 5.6	19.7
187362	2005	UH ₂₆₂	16.2	X	188.91882	212.92711	65.63123	3.91137	0.1280386	0.21865263	2.7287657	20	—	—
187363	2005	UK ₂₆₂	17.0	X	197.32315	134.07953	181.14963	4.04064	0.1697784	0.22807966	2.6530474	20	1 27.2	21.4
187364	2005	UR ₂₆₆	15.2	X	162.61830	274.24321	215.08490	9.32949	0.0568671	0.17847818	3.1242513	20	7 22.8	20.0
187365	2005	UO ₂₇₂	15.9	X	138.07488	106.48686	130.49097	2.69983	0.0600620	0.19573803	2.9377798	20	11 11.3	20.2
187366	2005	UK ₂₇₃	16.5	X	0.96244	297.22782	36.56426	1.54828	0.1130590	0.18785503	3.0194013	20	9 26.1	20.2
187367	2005	UB ₂₇₈	15.3	X	85.32091	271.98033	231.55641	3.39191	0.0105930	0.16966454	3.2315335	20	5 6.1	19.8
187368	2005	UE ₂₇₈	16.6	X	150.23504	94.19247	208.61182	1.99018	0.0633003	0.21345140	2.7729160	20	—	—
187369	2005	UT ₂₈₁	16.3	X	239.66180	210.95717	138.24726	4.83912	0.1889752	0.23943560	2.5684842	20	4 15.5	20.3
187370	2005	UU ₃₀₈	15.6	X	212.10822	173.09146	204.24730	3.44064	0.1396551	0.17141825	3.2094554	20	4 27.9	20.7
187371	2005	UO ₃₁₈	15.7	X	227.20904	161.72923	269.23789	1.92531	0.0608228	0.18182081	3.0858418	20	7 25.1	20.2
187372	2005	UT ₃₁₉	15.1	X	70.17257	181.53229	33.88080	12.12680	0.0997929	0.18026961	3.1035187	20	8 4.9	19.6
187373	2005	UC ₃₃₀	15.3	X	126.54799	124.80904	65.15736	12.15662	0.0549589	0.18380819	3.0635583	20	9 5.5	20.0
187374	2005	UN ₃₃₅	15.1	X	233.87078	28.61743	28.16095	11.08270	0.0211164	0.18045064	3.1014427	20	7 23.3	19.7
187375	2005	UQ ₃₅₂	16.0	X	88.76269	30.53790	288.04192	4.85308	0.0565266	0.20575474	2.8416428	20	12 26.8	20.2
187376	2005	US ₃₅₉	15.9	X	58.88483	173.62250	39.21537	18.19960	0.2588829	0.17903867	3.1177276	20	8 14.5	20.6
187377	2005	UC ₃₆₁	16.5	X	96.69380	87.99244	182.97673	1.66791	0.0420647	0.19805696	2.9148037	20	11 5.3	20.7
187378	2005	UJ ₃₆₁	15.0	X	252.31294	260.32846	215.44105	8.79292	0.2347669	0.12497087	3.9621433	20	9 16.9	21.1
187379	2005	UB ₃₆₈	15.7	X	124.94999	151.24147	72.25479	6.01556	0.1319214	0.19095564	2.9866274	20	10 16.4	20.5
187380	2005	UQ ₃₈₆	15.9	X	198.86126	225.53216	121.43055	15.47074	0.1248323	0.23218197	2.6217044	20	3 11.1	20.2
187381	2005	UZ ₃₉₅	16.5	X	273.66895	23.29042	97.89657	3.21619	0.0191223	0.20315537	2.8658306	20	12 3.3	20.4
187382	2005	UT ₄₀₁	15.5	X	75.19406	202.60391	59.41665	24.69714	0.1948674	0.19159791	2.9799492	20	10 26.5	20.3
187383	2005	UF ₄₀₄	15.9	X	173.04651	344.12076	118.48041	2.45100	0.1324595	0.17704481	3.1410914	20	7 3.5	20.9
187384	2005	UN ₄₀₇	16.7	X	263.69100	352.79130	140.17780	2.54471	0.0361723	0.20321899	2.8652324	20	12 3.3	20.6
187385	2005	UJ ₄₁₂	15.3	X	344.63260	233.86511	76.50468	10.42410	0.0680295	0.18046493	3.1012790	20	7 29.6	19.4
187386	2005	UD ₄₅₅	16.3	X	169.30347	197.05798	82.03655	5.01882	0.0636638	0.21458482	2.7631431	20	—	—
187387	2005	UW ₄₅₆	15.6	X	212.69833	185.23979	199.96004	12.64278	0.1360619	0.17065873	3.2189709	20	5 9.2	20.8
187388	2005	UM ₄₆₁	15.3	X	359.95547	224.78235	56.38619	10.16417	0.0699687	0.17653118	3.1471813	20	7 12.9	19.4
187389	2005	UF ₄₇₂	15.5	X	127.45389	150.70264	49.39718	9.96447	0.0412738	0.18661923	3.0327163	20	9 17.2	20.0
187390	2005	UB ₄₈₃	16.2	X	104.61697	254.84439	84.02352	3.59430	0.0560423	0.21335048	2.7737904	20	—	—
187391	2005	UF ₄₈₅	16.3	X	144.76175	240.60285	105.41917	6.03570	0.0490712	0.22174338	2.7033500	20	1 4.3	19.9
187392	2005	UA ₄₉₂	15.1	X	320.10347	212.84758	85.11293	17.89613	0.0846579	0.17751536	3.1355382	20	6 3.6	19.1
187393	2005	UL ₄₉₄	15.4	X	293.77451	68.53302	200.79914	12.57458	0.2322871	0.23541838	2.5976211	20	2 20.3	19.4
187394	2005	UG ₅₀₁	15.6	X	115.01221	283.50541	87.35183	15.67461	0.0849016	0.21846919	2.7302930	20	1 4.4	19.2
187395	2005	UE ₅₁₁	15.2	X	175.67699	40.93935	64.66790	18.50996	0.1203400	0.17660137	3.1463473	20	7 10.0	20.4
187396	2005	UU ₅₁₆	16.7	X	55.27479	318.83022	106.06354	2.66565	0.0837772	0.22017409	2.7161802	20	—	—
187397	2005	UR ₅₂₂	16.9	X	283.06388	142.13468	159.94901	3.69862	0.0660229	0.24310169	2.5425962	20	4 17.9	20.2
187398	2005	VN ₁₀	16.4	X	137.83474	175.60050	143.70221	3.07739	0.0905122	0.21303612	2.7765184	20	—	—
187399	2005	VB ₃₁	16.2	X	132.22623	268.22797	66.00491	6.23445	0.1222654	0.21425803	2.7659521	20	—	—
187400	2005	VA ₃₄	15.3	X	72.80960	88.07884	91.29358	5.99221	0.0707074	0.17000670	3.2271961	20	6 13.4	19.7
187401	2005	VB ₃₄	15.8	X	267.00212	264.17005	104.26386	4.16157	0.0781093	0.17668135	3.1453978	20	6 21.6	20.1
187402	2005	VA ₃₈	15.3	X	332.79857	89.53826	208.64035	8.66938	0.0606677	0.17621864	3.1509014	20	6 23.0	19.5
187403	2005	VB ₃₈	15.5	X	197.51636	245.85254	188.92227	4.91102	0.1615237	0.17397441	3.1779408	20	6 21.6	20.7
187404	2005	VK ₄₃	15.5	X	246.26915	204.77427	66.76920	18.50917	0.1451184	0.22706417	2.6609516	20	1 22.5	20.0
187405	2005	VL ₄₆	15.3	X	130.07561	235.54953	82.66369	13.15409	0.1220667	0.21029950	2.8005536	20	—	—
187406	2005	VJ ₄₉	14.9	X	283.21455	328.15529	52.00210	17.18812	0.1717172	0.18164165	3.0878706	20	7 15.1	19.3
187407	2005	VG ₅₃	15.1	X	356.20766	248.34863	97.78011	11.13672	0.1037630	0.18913487	3.0057647	20	10 10.1	19.0
187408	2005	VE ₅₆	15.9	X	209.05637	204.16116	146.40373	4.30104	0.2040098	0.23396777	2.6083470	20	3 20.2	20.3
187409	2005	VS ₅₈	15.4	X	177.66772	279.16209	153.72985	4.57009	0.1300249	0.16934941	3.2355411	20	6 2.4	20.6
187410	2005	VT ₆₀	15.1	X	317.52308	281.76985	75.74891	11.15482	0.1029424	0.18500678	3.0503121	20	8 20.2	19.1
187411	2005	VD ₆₅	15.8	X	80.21426	183.67312	136.77026	2.81948	0.0691911	0.20445279	2.8536937	20	12 20.5	19.9
187412	2005	VM ₇₀	16.6	X	208.78677	185.00972	134.35162	3.23401	0.1591688	0.22697179	2.6616736	20	2 12.0	20.7
187413	2005	VM ₇₂	15.8	X	45.93686	68.30350	183.42279	2.88613	0.2000151	0.18075127	3.0980028	20	8 28.9	19.9
187414	2005	VA ₇₈	15.6	X	261.51103	331.81941	344.04999	8.55577	0.1958791	0.23863981	2.5741911	20	3 21.6	19.7
187415	2005	VB ₇₈	16.6	X	278.31973	284.08365	43.56043	13.05615	0.2090523	0.24448571	2.5329915	20	4 24.9	20.0
187416	2005	VV ₇₈	14.9	X	256.52626	352.80427	52.19109	14.10770	0.1121318	0.18004455	3.1061045	20	7 23.5	19.6
187417	2005	VJ ₇₉	16.3	X	7.59978	22.55885	276.69908	1.64416	0.0938374	0.18787281	3.0192107	20	8 18.8	20.1
187418	2005	VN ₈₀	16.1	X	299.79377	252.26202	152.47437	2.46965	0.1047739	0.19218120	2.9739165	20	9 21.3	19.7
187419	2005	VD ₈₇	16.3	X	102.54448	119.60313	198.07421	1.56359	0.0608633	0.20645786	2.8351874	20	—	—
187420	2005	VY ₁₀₃	16.0	X	50.75229	199.54808	147.28253	2.62806	0.0827152	0.20423984	2.8556769	20	12 20.3	19.9
187421	2005	VF ₁₁₁	15.3	X	169.58949	63.41977	54.81541	12.08635	0.0437589	0.17925172	3.1152567	20	7 21.5	20.0
187422	2005	VA ₁₁₂	15.7	X	76.26838	312.25561	41.45316	5.43604	0.1082285	0.20601401	2.8392582	20	—	—
187423	2005	VR ₁₁₄	15.4	X	288.44517	79.26600	8.00575	2.64146	0.1880115	0.12549403	3.9511241	20	10 4.5	20.6
187424	2005	VL ₁₁₉	15.8	X	314.22716	291.59188	58.78813	16.51642	0.2267752	0.25756416	2.4465030	20	7 27.9	18.3
187425	2005	VR ₁₂₃	15.1	X	148.80549	2.74460	268.94639	15.90726	0.0441250	0.20678770	2.8321717	20	—	—
187426	2005	WJ ₅	15.4	X	163.04896	237.56678	94.73973	15.82799	0.2013769	0.22137318	2.7063630	20	1 22.0	19.9
187427	2005	WH ₆	14.9	X	8.35396	93.97803	242.20017	11.03407	0.1462063	0.19164130	2.9794994	20	10 11.8	18.6
187428	2005	WK ₆	16.1	X	214.67360	125.70621	227.19574	1.73751	0.2161132	0.23503006	2.6004815	20	3 25.5	20.5
187429	2005	WH ₁₁	15.7	X	26.78347	185.87923	81.46618	1.94615	0.1362237	0.18178850	3.0862075	20	8 11.9	19.4
187430	2005	WO ₂₇												

ELEMENTS AND OPPOSITION DATES IN 2020

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187441 2005 WM ₈₄	16.2	X	311.45823	47.50945	296.19145	1.201016	0.0625825	0.18055582	3.1002381	20	7 22.4	20.1
187442 2005 WF ₉₆	15.0	X	315.69350	263.75286	82.50436	11.04337	0.1550065	0.18086593	3.0966934	20	7 23.3	18.7
187443 2005 WO ₉₇	15.6	X	353.32018	255.29244	67.31056	9.86586	0.0903466	0.18409452	3.0603808	20	9 1.6	19.6
187444 2005 WQ ₁₀₂	15.8	X	353.27312	221.41794	174.74182	9.70305	0.1270973	0.19800927	2.9152717	20	12 8.9	19.4
187445 2005 WY ₁₀₇	16.7	X	195.32732	199.98744	64.95897	6.86272	0.0393020	0.21528774	2.7571254	20	—	—
187446 2005 WV ₁₁₅	15.1	X	71.09219	327.52604	129.11693	10.06941	0.1134678	0.15424925	3.4433989	20	3 9.5	19.8
187447 2005 WD ₁₁₇	15.6	X	170.29582	231.68102	87.98789	15.02487	0.2167953	0.22075291	2.7114302	20	1 13.9	20.2
187448 2005 WL ₁₂₀	15.4	X	298.97679	315.49847	73.69422	5.65332	0.2162502	0.18489553	3.0515357	20	8 14.9	19.1
187449 2005 WH ₁₃₂	16.1	X	78.56137	37.90522	213.92506	0.90699	0.1130928	0.18529960	3.0470978	20	9 27.8	20.6
187450 2005 WK ₁₅₅	15.1	X	50.37321	104.36253	132.37374	10.08988	0.0590475	0.17805306	3.1292223	20	7 25.7	19.3
187451 2005 WO ₁₆₅	15.5	X	338.44278	172.60464	91.15216	3.00303	0.1557163	0.17131573	3.2107356	20	5 10.7	19.3
187452 2005 WN ₁₇₉	16.1	X	131.67782	208.12768	153.30576	5.49834	0.1239325	0.21930136	2.7233816	20	1 17.4	20.0
187453 2005 WP ₁₉₁	15.8	X	214.10168	198.80867	132.03250	14.68252	0.1763577	0.22955113	2.6416976	20	3 3.1	20.2
187454 2005 WB ₁₉₂	14.8	X	9.18226	92.32801	85.42988	9.95254	0.1115984	0.15702061	3.4027623	20	3 19.8	19.2
187455 2005 WD ₁₉₃	15.9	X	190.67500	185.76646	169.16317	13.53273	0.1668452	0.23033607	2.6356926	20	3 9.2	20.2
187456 2005 XK ₅	13.1	X	313.71992	136.46990	165.88327	7.73270	0.0939123	0.08345427	5.1860536	20	5 29.9	19.8
187457 2005 XA ₁₇	15.5	X	18.58532	170.24381	132.73034	3.20558	0.1065983	0.18125355	3.0922768	20	9 12.0	19.3
187458 2005 XT ₂₃	15.5	X	240.93985	296.46727	41.58541	5.17478	0.2287336	0.23636900	2.5906518	20	3 30.7	19.8
187459 2005 XO ₂₈	15.3	X	278.69499	316.26362	109.14842	11.40837	0.0682477	0.18891852	3.0080590	20	9 26.8	19.5
187460 2005 XE ₅₃	16.2	X	84.28876	102.64575	60.94491	2.29866	0.1035639	0.17097238	3.2150328	20	6 12.6	20.6
187461 2005 XM ₆₅	15.2	X	54.54460	169.99061	77.85510	7.63761	0.0997735	0.17805422	3.1292087	20	8 24.3	19.5
187462 2005 XV ₇₀	15.1	X	272.73145	330.78865	74.21420	15.17241	0.1145224	0.18126374	3.0921609	20	8 15.2	19.6
187463 2005 XX ₁₀₆	12.9	X	1.83155	84.30588	155.66273	5.87843	0.0270761	0.08376619	5.1731714	20	5 23.3	19.6
187464 2005 YC ₁₀	16.2	X	353.37577	292.10437	115.27948	2.63349	0.1170343	0.19848146	2.9106462	20	12 21.6	19.7
187465 2005 YZ ₁₃₉	15.0	X	356.14430	209.94536	97.84259	23.99432	0.1451444	0.17643712	3.1482998	20	8 17.3	19.0
187466 2005 YR ₁₇₁	16.0	X	252.14744	185.56604	154.07172	5.73629	0.3410507	0.24154611	2.5535009	20	4 2.4	20.4
187467 2005 YS ₂₅₀	15.7	X	340.94464	189.81817	144.12533	1.97430	0.1790344	0.17761795	3.1343307	20	8 20.0	18.8
187468 2006 AE ₂₄	15.4	X	292.22356	313.76919	82.07873	10.95236	0.0884740	0.18376280	3.0640627	20	9 3.8	19.6
187469 2006 BL ₅₃	12.7	X	318.02391	137.38320	151.65294	18.40981	0.1092923	0.08421083	5.1549455	20	5 21.5	19.4
187470 2006 BH ₅₉	13.4	X	286.47331	148.52127	151.10286	10.85093	0.0636323	0.08272407	5.2165271	20	4 29.4	20.3
187471 2006 BV ₇₂	13.4	X	242.45427	217.89601	105.08971	8.34391	0.0672471	0.08144514	5.2709951	20	4 7.9	20.6
187472 2006 BP ₇₃	13.2	X	313.17376	257.71544	15.11186	5.94105	0.1886971	0.08213961	5.2412430	20	4 12.1	19.5
187473 2006 BJ ₁₀₃	14.0	X	189.43314	246.67481	149.55933	9.81234	0.0064541	0.08490274	5.1269009	20	5 6.5	20.9
187474 2006 BM ₁₁₆	13.5	X	230.58487	188.31062	176.90610	3.73953	0.0627551	0.08536370	5.1084276	20	5 10.1	20.5
187475 2006 BV ₁₁₉	12.5	X	329.90789	100.85410	162.84377	11.21143	0.0999356	0.08209619	5.2430910	20	5 7.8	19.1
187476 2006 BB ₂₁₃	12.6	X	175.78896	252.30056	148.26287	17.89927	0.0646887	0.08187241	5.2526403	20	4 29.3	20.0
187477 2006 BW ₂₃₂	14.9	X	33.68556	310.71318	62.87928	4.32067	0.1728161	0.12441309	3.9739768	20	12 23.4	20.2
187478 2006 CY ₂₉	13.3	X	304.59688	92.26340	190.15995	4.41143	0.0353406	0.08444498	5.1454122	20	5 1.9	20.0
187479 2006 DA ₁₅	12.7	X	324.16033	147.09063	119.45809	6.79438	0.0915560	0.08264113	5.2200168	20	5 3.8	19.3
187480 2006 QX ₃₉	16.5	X	4.17245	247.85765	27.11515	7.44242	0.0972732	0.27539761	2.3397131	20	7 21.4	18.9
187481 2006 QQ ₁₁₆	17.1	X	205.48220	218.21328	213.27059	5.44187	0.2325275	0.26802673	2.3824144	20	6 23.1	21.1
187482 2006 RY ₃₂	17.7	X	350.81154	209.79421	234.65131	2.28347	0.0673117	0.29923080	2.2137667	20	—	—
187483 2006 RO ₃₉	17.2	X	245.66969	200.16592	207.77424	4.48049	0.2158507	0.27125878	2.3634523	20	7 1.9	20.6
187484 2006 RK ₉₇	17.1	X	187.73513	252.84038	202.32733	4.57825	0.1976512	0.26502267	2.4003839	20	7 8.9	21.1
187485 2006 SL ₁₈	15.9	X	332.66891	238.86970	163.14270	6.94153	0.0889140	0.21517617	2.7580783	20	11 16.7	19.3
187486 2006 SE ₅₄	17.2	X	318.47455	260.42041	196.89857	21.31936	0.0855045	0.36945173	1.9235239	20	—	—
187487 2006 SM ₅₄	16.9	X	228.93889	345.25684	64.40534	3.40078	0.1803470	0.26693186	2.3889246	20	6 20.5	20.3
187488 2006 SZ ₁₈₅	17.3	X	128.81384	179.48609	26.15647	5.10483	0.0863668	0.27753420	2.3276895	20	10 6.1	20.6
187489 2006 SN ₂₀₆	17.0	X	267.79870	227.97612	196.92386	6.22205	0.0799744	0.27794278	2.3254078	20	9 16.0	19.7
187490 2006 SJ ₂₁₂	17.1	X	144.93785	84.00547	209.17311	20.50402	0.0828399	0.37416689	1.9073299	20	—	—
187491 2006 SU ₂₂₃	17.6	X	129.35703	162.40665	192.93085	2.35998	0.0964438	0.30915686	2.1661247	20	—	—
187492 2006 SP ₂₆₉	16.9	X	335.92364	294.98657	205.90706	12.03532	0.1036046	0.23064176	2.6333632	20	—	—
187493 2006 SQ ₂₇₅	16.1	X	357.22698	243.44509	201.77121	8.72671	0.0540751	0.22417810	2.6837409	20	—	—
187494 2006 SP ₂₉₀	16.8	X	235.59311	275.98604	218.41759	4.78922	0.1030022	0.28379664	2.2933194	20	11 5.6	19.6
187495 2006 SN ₂₉₃	17.8	X	289.13046	258.44101	222.48387	3.00601	0.1036899	0.29509684	2.2343936	20	—	—
187496 2006 SP ₃₀₈	16.6	X	354.54045	132.73567	341.92262	4.80584	0.1227638	0.23206174	2.6226099	20	—	—
187497 2006 SK ₃₂₀	17.3	X	198.25507	11.77016	70.32622	2.98788	0.1733278	0.26562037	2.3967816	20	7 3.6	21.0
187498 2006 SQ ₃₂₆	16.9	X	214.22196	37.36010	53.53814	3.37676	0.1562221	0.26984953	2.3716737	20	8 3.1	20.3
187499 2006 SZ ₃₄₈	17.3	X	27.79714	110.39884	21.42980	4.25850	0.2028552	0.23948187	2.5681533	20	2 1.4	19.4
187500 2006 SX ₃₅₂	17.4	X	255.33920	133.75740	310.39520	2.91016	0.1915176	0.27715426	2.3298163	20	9 6.5	20.3
187501 2006 SY ₃₅₂	16.7	X	334.01384	185.17897	233.15158	6.24377	0.0923091	0.28980502	2.2615114	20	—	—
187502 2006 SG ₃₅₇	16.0	X	345.17837	341.11744	65.79853	4.02391	0.1631675	0.21610334	2.7501839	20	12 18.0	18.8
187503 2006 SQ ₃₆₄	15.8	X	31.40555	125.11318	28.37350	5.31824	0.2149048	0.23840574	2.5758758	20	3 16.3	17.8
187504 2006 SO ₃₆₅	16.9	X	92.07407	310.80507	140.52929	6.26640	0.2372315	0.24430043	2.5342720	20	4 9.8	20.3
187505 2006 SX ₃₉₄	16.8	X	149.77584	198.87287	45.25052	7.31655	0.1314233	0.28620056	2.2804597	20	12 16.4	20.3
187506 2006 TB ₁₇	16.5	X	328.28912	81.58358	39.46244	4.18573	0.1638857	0.22525122	2.6752104	20	—	—
187507 2006 TJ ₃₀	16.7	X	296.81897	223.30787	203.51262	5.39099	0.0457264	0.28341833	2.2953597	20	11 11.4	19.1
187508 2006 TB ₄₃	16.4	X	320.71004	304.06392	218.21202	3.63066	0.2037639	0.22886069	2.6470080	20	—	—
187509 2006 TT ₄₆	17.1	X	217.66549	172.43758	44.99599	6.00993	0.1076284	0.29634149	2.2281328	20	—	—
187510 2006 TU ₄₈	17.0	X	263.14314	356.23047	47.46209	2.12225	0.1855790	0.27059865	2.3672945	20	7 23.0	19.8
187511 2006 TE ₆₃	16.2	X	325.73233	251.00122	155.66560	4.70435	0.0887957	0.21488853	2.7605390	20	11 11.4	19.4
187512 2006 TF ₇₇	17.3	X	11.90669	288.68953	108.90899	6.94971	0.1469839	0.29326142	2.2437068	20	—	—
187513 2006 TG ₉₁	16.9	X	258.63095	41.24175	350.50774	0.98432	0.1862733	0.26783934	2.3835255	20	6 29.3	20.2
1875												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
187521	2006	UL ₁₁	17.2	X	185.79761	316.59693	196.55744	4.64580	0.0620683	0.27755262	2.3275865	20	10 1.8	20.2
187522	2006	UB ₁₂	17.1	X	241.59771	97.46728	52.84882	6.64427	0.1025763	0.28686354	2.2769447	20	12 6.8	19.7
187523	2006	UC ₁₂	16.8	X	307.36515	196.02707	200.30731	9.06697	0.0024934	0.27925761	2.3181029	20	10 15.2	19.6
187524	2006	UD ₃₄	17.4	X	83.63249	77.96988	61.91630	2.50268	0.1156332	0.25264307	2.4781702	20	5 12.9	20.3
187525	2006	UU ₃₆	18.1	X	347.24827	265.12606	242.60822	2.95802	0.0312836	0.30854534	2.1689858	20	—	—
187526	2006	UP ₄₀	17.3	X	63.67495	251.92399	225.40292	1.58386	0.1196227	0.24285922	2.5442883	20	3 12.1	20.0
187527	2006	US ₄₅	17.1	X	233.25599	7.54736	87.65264	3.24793	0.1824701	0.27122084	2.3636727	20	8 27.7	20.4
187528	2006	UM ₆₁	17.3	X	353.84473	346.54749	39.01597	4.33533	0.1664814	0.28483226	2.2877572	20	12 28.7	19.5
187529	2006	UQ ₆₁	16.2	X	28.85162	60.17390	41.94542	14.09141	0.1135594	0.23085984	2.6317045	20	—	—
187530	2006	UG ₆₂	16.5	X	315.95539	140.33086	50.69801	3.68145	0.1652425	0.23368926	2.6104190	20	—	—
187531	2006	Omorichugakkou	17.2	X	299.01420	44.62109	12.07105	5.64811	0.1061218	0.28077049	2.3097683	20	10 24.6	19.4
187532	2006	UX ₆₄	15.5	X	42.84134	252.52307	196.96750	12.44005	0.1470783	0.23110219	2.6298643	20	—	—
187533	2006	UQ ₈₀	17.0	X	292.54153	76.01461	46.02840	7.04132	0.0374457	0.29309456	2.2445582	20	—	—
187534	2006	UU ₈₆	16.8	X	189.72329	140.11369	38.21039	6.61306	0.1016946	0.28018004	2.3130122	20	11 5.8	20.0
187535	2006	UH ₈₇	16.2	X	316.09145	33.73561	46.10120	3.35298	0.0620292	0.21399893	2.7681842	20	12 8.1	19.5
187536	2006	UH ₈₉	16.1	X	175.64000	285.87202	11.61465	3.77095	0.0865456	0.23321454	2.6139602	20	—	—
187537	2006	UV ₉₃	16.9	X	199.99158	98.69290	65.95975	4.61034	0.0902352	0.28198521	2.3031302	20	11 2.8	19.9
187538	2006	UA ₉₈	17.5	X	26.88365	314.85660	72.76200	3.71035	0.1575553	0.29397628	2.2400679	20	—	—
187539	2006	UC ₉₈	17.4	X	179.32288	75.02117	103.50857	3.12761	0.1662310	0.27912077	2.3188604	20	10 22.1	20.8
187540	2006	UQ ₁₁₅	16.9	X	77.32647	329.36499	202.04621	5.53867	0.1059093	0.26028596	2.4294179	20	6 16.1	19.9
187541	2006	UX ₁₄₉	15.3	X	94.19736	295.08615	182.52953	26.96713	0.2067039	0.17492253	3.1664469	20	5 14.6	20.4
187542	2006	UQ ₁₈₃	17.3	X	16.18321	11.52621	73.22249	6.11372	0.1330872	0.30398405	2.1906291	20	—	—
187543	2006	UV ₁₉₁	14.9	X	337.11845	301.04186	271.22495	8.85756	0.0208601	0.17596725	3.1539017	20	3 10.0	19.5
187544	2006	UP ₂₀₀	17.4	X	329.27444	66.35544	2.98015	4.16239	0.0498332	0.28898747	2.2657746	20	—	—
187545	2006	UA ₂₁₈	16.9	X	346.61198	316.21599	93.37356	7.52074	0.0879361	0.28686762	2.2769231	20	—	—
187546	2006	UV ₂₂₁	16.8	X	80.17671	51.61642	41.34233	10.30933	0.1050493	0.24359800	2.5391415	20	3 8.4	20.0
187547	2006	UG ₂₃₀	15.6	X	97.81721	283.47434	199.10224	20.20638	0.3490872	0.17674052	3.1446958	20	6 7.0	21.0
187548	2006	UJ ₂₄₀	17.3	X	34.59407	249.30278	324.81148	1.53185	0.1540156	0.26040263	2.4286922	20	6 17.1	19.6
187549	2006	UJ ₂₄₀	16.2	X	53.04552	171.34267	192.42480	6.14665	0.0608791	0.21854242	2.7296830	20	—	—
187550	2006	UX ₂₄₈	17.0	X	175.86357	319.44002	212.5108	5.54348	0.1660741	0.27783783	2.3259933	20	10 7.4	20.7
187551	2006	UX ₂₅₅	16.3	X	136.11800	26.39420	245.39419	2.44585	0.0693119	0.21656365	2.7462855	20	12 24.3	20.4
187552	2006	UV ₂₇₃	16.9	X	118.47915	171.25146	21.78779	7.19543	0.0509924	0.26924788	2.3752055	20	9 5.6	20.1
187553	2006	VG ₁₂	16.9	X	200.49626	355.89168	85.08095	3.80953	0.0664912	0.26230393	2.4169417	20	7 10.7	20.0
187554	2006	VT ₁₂	17.1	X	9.50151	318.61670	73.62505	7.20969	0.1173819	0.29012406	2.2598531	20	—	—
187555	2006	VJ ₁₅	17.4	X	209.29876	67.10519	351.70992	2.07909	0.1605784	0.26137131	2.4226877	20	6 14.0	21.1
187556	2006	VZ ₂₂	17.1	X	182.56917	46.89728	60.09221	5.82621	0.1951050	0.26219190	2.4176302	20	7 21.6	21.0
187557	2006	VO ₂₄	16.9	X	131.93067	250.27149	214.35600	5.54442	0.1007166	0.25339518	2.4732640	20	5 24.4	20.3
187558	2006	VK ₅₀	17.3	X	89.84192	317.98050	43.31095	3.82216	0.1524706	0.29966493	2.2116281	20	—	—
187559	2006	VV ₅₁	17.1	X	341.19218	141.28783	305.42110	1.46216	0.1128303	0.29516273	2.2340610	20	—	—
187560	2006	VO ₆₀	17.7	X	188.11597	302.87255	202.00857	1.61885	0.1104190	0.27569796	2.3380135	20	9 18.9	20.8
187561	2006	VO ₆₀	17.4	X	210.49604	57.14371	50.31085	3.44478	0.0931622	0.26905633	2.3763327	20	8 28.4	20.7
187562	2006	VR ₆₇	17.2	X	138.95931	218.38949	58.93823	2.29917	0.1096595	0.29074899	2.2566138	20	—	—
187563	2006	VJ ₇₃	16.0	X	126.39588	70.42908	73.01569	6.74675	0.1475010	0.18158213	3.0885453	20	7 10.4	20.8
187564	2006	VL ₇₉	17.6	X	206.78539	165.70644	103.89944	3.95318	0.0440658	0.30359907	2.1924806	20	—	—
187565	2006	VT ₇₉	17.2	X	68.52096	154.55226	206.26284	5.20245	0.1157623	0.29565801	2.2315654	20	—	—
187566	2006	VD ₈₉	16.4	X	36.21225	346.28343	40.77693	7.53870	0.1078023	0.29302583	2.2449092	20	—	—
187567	2006	VE ₉₄	16.2	X	14.66918	185.87619	253.26854	4.06191	0.2806144	0.22283812	2.6944889	20	—	—
187568	2006	VU ₉₉	16.5	X	225.74951	116.56783	55.27097	7.10269	0.0426930	0.28513717	2.2861260	20	12 23.1	19.2
187569	2006	VL ₁₀₇	16.7	X	15.68906	146.38787	316.43018	2.43168	0.1378450	0.22824557	2.6517616	20	—	—
187570	2006	VS ₁₂₃	17.0	X	136.27174	20.86918	11.03004	2.23759	0.0789632	0.24051127	2.5608203	20	2 22.5	20.4
187571	2006	VV ₁₂₃	16.3	X	270.01405	240.12497	321.51200	1.25718	0.2169775	0.22418494	2.6836863	20	—	—
187572	2006	VP ₁₄₂	15.5	X	39.97013	100.73507	8.00750	16.42366	0.1734176	0.23485147	2.6017997	20	1 31.3	18.4
187573	2006	VN ₁₄₇	16.1	X	74.29886	12.13665	59.67055	2.44175	0.0937698	0.23369137	2.6104032	20	1 26.3	19.1
187574	2006	VC ₁₅₃	17.8	X	98.44284	151.95445	198.23549	20.84630	0.0717445	0.37409835	1.9075628	20	—	—
187575	2006	VW ₁₅₃	17.1	X	309.25228	312.95242	158.65253	4.89903	0.0394296	0.29329634	2.2435286	20	—	—
187576	2006	WK ₉	17.0	X	195.11882	141.72355	102.63010	6.27852	0.1821906	0.29402802	2.2398051	20	—	—
187577	2006	WR ₂₀	16.1	X	248.62527	340.73398	208.56458	6.31150	0.1376405	0.21810977	2.7332916	20	—	—
187578	2006	WQ ₂₆	16.7	X	84.58615	35.28072	69.33125	4.16992	0.0757768	0.24373917	2.5381610	20	3 22.8	19.8
187579	2006	WA ₂₇	16.6	X	82.18964	340.75772	71.59072	5.64448	0.1750498	0.23321313	2.6139707	20	1 24.6	19.6
187580	2006	WJ ₃₅	16.5	X	347.83024	19.70090	146.57837	4.90065	0.1333011	0.23422953	2.6064033	20	1 9.2	19.6
187581	2006	WP ₃₉	17.4	X	238.65327	224.06780	202.62859	2.48291	0.1518240	0.26689158	2.3891649	20	7 27.2	20.7
187582	2006	WN ₄₆	16.2	X	219.98151	191.57931	347.29205	1.81137	0.0145828	0.21274491	2.7790515	20	12 10.0	19.9
187583	2006	WM ₅₁	16.7	X	125.55239	151.26495	55.48515	5.31929	0.0886830	0.27096163	2.3651799	20	10 4.6	20.0
187584	2006	WM ₆₄	17.3	X	171.11780	273.50365	7.44442	6.34290	0.1365002	0.29997136	2.2101217	20	—	—
187585	2006	WC ₈₂	16.4	X	67.19469	320.92276	110.27932	3.53971	0.0972324	0.23284678	2.6167118	20	1 14.5	19.3
187586	2006	WD ₈₈	16.6	X	330.67206	19.74786	148.88235	4.58742	0.1439079	0.23072188	2.6327535	20	—	—
187587	2006	WJ ₈₈	16.9	X	237.18992	345.02033	80.86840	4.62497	0.2152215	0.26523871	2.3990803	20	7 17.9	20.5
187588	2006	WV ₈₈	16.2	X	265.11484	128.65162	28.50471	5.05198	0.1015080	0.21296283	2.7771554	20	12 29.7	19.7
187589	2006	WH ₉₈	16.2	X	299.94025	32.00738	67.55104	5.66173	0.1201192	0.21206253	2.7850100	20	12 5.9	19.5
187590	2006	WY ₁₀₄	17.2	X	258.21126	323.43517	76.72446	4.55932	0.1433272	0.26650602	2.3914687	20	7 17.7	20.3
187591	2006	WA ₁₀₆												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
187601	2006	XQ ₂₅	16.5	X	344.47656	343.53768	163.71710	0.60448	0.0808493	0.22407774	2.6845422	20	—	—
187602	2006	XY ₂₇	17.2	X	146.25936	103.08088	180.86906	5.64776	0.0693706	0.29275273	2.2463051	20	—	—
187603	2006	XK ₃₈	16.4	X	1.84072	243.87128	98.12322	8.09771	0.1458522	0.27142281	2.3625000	20	11 4.7	18.9
187604	2006	XN ₆₃	15.8	X	60.65793	97.63554	17.80896	11.85358	0.0876469	0.24005891	2.5640363	20	3 6.5	18.9
187605	2006	XR ₆₅	16.8	X	260.71667	238.71083	217.19381	5.59120	0.0687789	0.27545323	2.3393981	20	10 22.3	19.4
187606	2006	XB ₆₉	16.5	X	55.18467	352.36332	113.14556	3.76342	0.0503159	0.23023224	2.6364849	20	2 7.6	19.8
187607	2006	YB ₁₃	12.5	X	300.09754	114.87189	170.10730	17.83554	0.0528795	0.08141738	5.2721928	20	4 30.2	19.5
187608	2006	YZ ₁₄	14.7	X	357.19077	136.91433	141.94930	23.34102	0.0285849	0.17323823	3.1869376	20	7 5.1	19.3
187609	2006	YX ₃₀	16.4	X	356.75594	353.53539	39.32644	2.59009	0.0575858	0.20598917	2.8394864	20	12 3.9	20.1
187610	2006	YK ₃₇	16.5	X	262.69678	342.80624	14.50016	3.09883	0.1946446	0.25386611	2.4702044	20	5 15.8	20.0
187611	2007	AJ ₁	16.2	X	110.13711	243.62650	121.59532	6.72497	0.0964089	0.22207649	2.7006460	20	—	—
187612	2007	AN ₆	15.0	X	132.93706	35.44588	114.19078	15.73731	0.1461381	0.17739566	3.1369485	20	7 23.9	19.9
187613	2007	AU ₁₃	16.7	X	336.91305	334.93925	127.44853	4.98174	0.0255090	0.21426857	2.7658613	20	—	—
187614	2007	AX ₁₄	16.9	X	126.81856	37.60791	112.42960	2.27710	0.1179395	0.25814699	2.4428193	20	8 1.4	20.3
187615	2007	AG ₁₆	15.5	X	119.38314	63.13505	121.80991	18.33409	0.1748400	0.17952691	3.1120723	20	8 16.3	20.6
187616	2007	AK ₁₇	15.6	X	110.32106	39.01932	118.37146	11.53868	0.1687517	0.17464274	3.1698820	20	7 12.7	20.4
187617	2007	AE ₁₈	15.3	X	99.79058	97.42538	82.86690	11.20261	0.0996067	0.17936551	3.1139389	20	7 23.7	19.9
187618	2007	AM ₂₂	15.7	X	198.56008	357.57985	74.88950	8.82689	0.1277459	0.17863513	3.1224211	20	6 20.9	20.5
187619	2007	AA ₂₃	15.8	X	227.18916	121.37851	124.55906	13.36465	0.0863957	0.21887962	2.7268788	20	—	—
187620	2007	AF ₂₆	15.6	X	204.67666	298.69845	146.76920	11.29591	0.1603718	0.18167157	3.0875315	20	7 10.9	20.6
187621	2007	AY ₂₆	15.6	X	142.37759	255.87595	199.78079	21.36338	0.3300388	0.17749626	3.1357631	20	6 6.4	21.5
187622	2007	BL ₉	16.4	X	177.00085	359.76409	31.35583	3.49823	0.1125600	0.24255888	2.5463881	20	4 8.5	20.3
187623	2007	BM ₁₀	15.8	X	142.42865	306.61609	279.48955	0.86325	0.1024729	0.19666671	2.9285242	20	11 2.4	20.3
187624	2007	BH ₁₇	16.6	X	100.70593	310.69939	114.73986	3.85209	0.0336468	0.23112536	2.6296885	20	2 15.8	20.0
187625	2007	BF ₁₉	15.7	X	168.22294	39.11208	119.30726	13.87721	0.0847150	0.18994199	2.9972437	20	9 10.9	20.4
187626	2007	BB ₂₂	15.9	X	283.62770	318.67731	313.47403	8.09896	0.1654118	0.23539845	2.5977677	20	2 23.0	19.6
187627	2007	BE ₃₀	15.8	X	248.79916	312.43912	123.80763	11.47142	0.0931545	0.18868464	3.1015443	20	8 25.5	20.1
187628	2007	BX ₃₆	16.6	X	287.44835	280.19737	112.20963	7.31191	0.0803820	0.26377326	2.4079578	20	9 1.3	19.3
187629	2007	BY ₄₃	16.7	X	265.88308	241.47780	155.92197	2.34495	0.2107133	0.26017674	2.4300977	20	7 12.2	19.7
187630	2007	BD ₅₀	15.3	X	162.25147	326.22575	145.79688	11.56890	0.1740643	0.17554970	3.1589008	20	7 5.4	20.6
187631	2007	BS ₆₃	16.3	X	161.41680	175.71833	153.14262	6.97833	0.0462856	0.22234104	2.6985033	20	1 1.9	20.3
187632	2007	BA ₆₆	15.9	X	147.87031	158.72726	152.14665	2.71970	0.0563449	0.21111289	2.7933555	20	—	—
187633	2007	BG ₆₆	15.3	X	112.88081	45.42480	151.33274	10.20974	0.0347118	0.18057996	3.0996118	20	8 19.9	19.6
187634	2007	CE	15.9	X	201.33251	294.07904	145.56346	9.86927	0.1994250	0.18000504	3.1065590	20	6 29.5	21.3
187635	2007	CH ₂	16.3	X	148.91958	189.01332	146.53911	8.97581	0.0912625	0.21887434	2.7269227	20	1 1.6	20.4
187636	2007	Chungyuan	15.7	X	230.91518	314.81170	121.59884	5.80407	0.1004068	0.18409852	3.0603366	20	8 1.5	20.1
187637	2007	CC ₂₅	15.4	X	193.73760	328.81408	154.16322	16.12465	0.0822778	0.18496137	3.0508114	20	8 19.9	19.9
187638	2007	Greenewalt	16.9	X	315.75882	218.36473	109.10021	7.03357	0.1155738	0.25210507	2.4816946	20	7 5.3	19.5
187639	2007	CV ₂₈	16.0	X	94.90760	297.18369	290.97315	0.79540	0.1925392	0.18485591	3.0519717	20	9 24.8	20.8
187640	2007	CF ₃₁	16.3	X	258.79937	180.50729	137.97125	6.33722	0.2485556	0.23909489	2.5709237	20	3 20.9	20.5
187641	2007	CV ₃₆	16.1	X	190.98637	150.74623	137.17302	9.58078	0.1316422	0.21642865	2.7474274	20	—	—
187642	2007	CP ₄₀	16.5	X	108.99915	118.39070	168.65320	1.51890	0.0538258	0.19941682	2.9015375	20	12 9.7	20.6
187643	2007	CU ₄₅	15.4	X	150.47313	332.78158	156.47829	10.86117	0.0341432	0.17674946	3.1445897	20	7 9.7	20.2
187644	2007	DA ₁	15.4	X	342.25187	23.75731	285.89598	4.43556	0.1432932	0.17580594	3.1558306	20	7 19.9	19.1
187645	2007	DB ₁	16.1	X	39.11578	174.08896	182.44229	5.67105	0.1629158	0.20052235	2.8908631	20	12 27.9	20.1
187646	2007	DD ₃	14.8	X	278.03513	353.96148	108.93244	9.51713	0.2002100	0.12436164	3.9750727	20	10 11.9	20.3
187647	2007	DN ₁₆	15.2	X	345.72331	190.60346	112.80269	6.20863	0.1111632	0.17541340	3.1605370	20	7 18.7	19.1
187648	2007	DC ₂₄	15.5	X	241.83107	201.06323	168.18175	4.25347	0.0600007	0.16825375	3.2495724	20	5 26.3	20.2
187649	2007	DG ₇₇	14.5	X	26.14143	158.25651	141.83467	15.14603	0.1082460	0.18074531	3.0980710	20	9 22.5	18.6
187650	2007	DA ₇₈	15.8	X	166.53599	237.57463	189.25049	16.28956	0.1589435	0.24593338	2.5230415	20	5 16.6	20.0
187651	2007	DU ₉₁	15.9	X	130.71297	192.45578	149.84365	10.82747	0.1982421	0.21429777	2.7656101	20	1 3.3	20.1
187652	2007	EP ₁₉	15.9	X	241.74326	284.82497	142.75075	3.45570	0.0699538	0.18440664	3.0569267	20	8 6.4	20.3
187653	2007	EN ₃₁	15.4	X	202.59064	297.77209	107.78626	3.97727	0.0491912	0.16974917	3.2304593	20	5 27.1	20.2
187654	2007	EQ ₆₁	15.0	X	3.92778	163.30400	156.96316	12.71320	0.1334049	0.17893280	3.1189572	20	9 13.6	18.6
187655	2007	EZ ₁₀₃	13.0	X	253.64035	156.06043	170.30030	17.00052	0.0966556	0.08285900	5.2108624	20	4 19.0	20.2
187656	2007	EM ₁₀₇	13.5	X	351.12671	85.70407	150.66421	9.27457	0.0516368	0.08082090	5.2981012	20	5 7.2	20.3
187657	2007	ER ₁₄₈	13.4	X	321.53391	105.60130	150.19006	9.52342	0.0322736	0.08195556	5.2490871	20	4 24.5	20.3
187658	2007	EV ₁₆₁	16.0	X	153.47457	183.15343	166.41136	9.74472	0.0469860	0.22252836	2.6969888	20	1 17.4	19.9
187659	2007	EN ₁₈₆	13.2	X	269.71245	181.38225	129.79451	8.09197	0.0743336	0.08450211	5.1430925	20	4 21.9	20.1
187660	2007	JE ₈	15.4	X	133.88609	2.75712	223.81290	4.51793	0.0879605	0.17830347	3.1262919	20	10 22.2	20.2
187661	2007	JG ₄₃	9.3	X	39.55818	174.52219	62.48030	33.10602	0.0469444	0.00830267	24.1540942	20	8 26.0	22.3
187662	2007	JU ₄₄	15.9	X	53.38632	174.73329	148.02943	2.08722	0.0672910	0.17762858	3.1342056	20	11 16.7	20.4
187663	2007	WM ₂₀	16.9	X	200.94498	234.02382	296.10287	5.67497	0.0598577	0.29178640	2.2512619	20	11 14.7	19.8
187664	2007	WQ ₅₂	15.7	X	136.57339	308.56935	321.82444	4.92298	0.0334438	0.21098218	2.7945091	20	12 22.0	19.7
187665	2008	AY ₄₉	15.8	X	30.55103	267.06057	322.90346	3.93657	0.1108749	0.18896019	3.0076168	20	6 24.9	19.5
187666	2008	BM ₁₈	16.3	X	177.14192	13.59115	156.76807	4.24568	0.1082858	0.19934701	2.9022149	20	10 2.0	20.7
187667	2008	BZ ₃₈	17.0	X	93.34401	229.31573	353.68484	1.85986	0.1743560	0.26823399	2.3811870	20	9 24.9	20.5
187668	2008	BB ₃₉	17.4	X	200.60905	345.93184	200.92574	3.08513	0.1134102	0.29404333	2.2397274	20	12 2.2	20.2
187669	2008	CK ₅	15.8	X	124.69949	290.10018	166.33787	12.28327	0.1870065	0.18025032	3.1037402	20	5 17.6	20.9
187670	2008	CL ₁₈	1											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
187681	2008	DP ₁₁	15.0	X	228.93489	204.12672	140.14558	16.19531	0.0177513	0.17681081	3.1438622	20	4 19.1	19.7
187682	2008	DV ₁₂	16.4	X	59.74326	230.01874	127.74956	6.28564	0.0867507	0.22306925	2.6926273	20	—	—
187683	2008	DE ₁₅	16.4	X	300.58793	24.84218	153.58612	2.90689	0.1409834	0.22907109	2.6453869	20	—	—
187684	2008	DW ₁₆	17.0	X	122.04815	327.35839	190.21177	6.73055	0.0899440	0.26792821	2.3829984	20	7 21.4	20.4
187685	2008	DO ₂₁	17.7	X	254.72600	336.85259	160.82757	3.21761	0.0926786	0.29302720	2.2449022	20	12 13.6	20.0
187686	2008	DJ ₂₆	17.2	X	25.92422	332.11967	252.23074	0.41316	0.1414063	0.25719217	2.4488615	20	6 14.2	19.4
187687	2008	DV ₃₁	16.2	X	183.46863	239.72715	72.51127	3.64140	0.0793257	0.23307044	2.6150375	20	1 7.6	20.0
187688	2008	DR ₃₃	16.7	X	328.27188	93.78621	217.69567	0.42731	0.1896047	0.26129860	2.4231371	20	6 26.7	18.7
187689	2008	DS ₄₀	16.7	X	227.69815	81.99322	224.31184	1.46671	0.0887294	0.23590249	2.5940661	20	2 14.3	20.5
187690	2008	DT ₄₆	17.0	X	47.84881	161.71211	77.91033	2.65174	0.1526493	0.26223711	2.4173523	20	8 19.5	19.7
187691	2008	DT ₄₇	16.1	X	79.94431	166.87504	64.62708	2.12402	0.2195415	0.18721932	3.0262324	20	9 18.7	20.6
187692	2008	DM ₅₆	12.8	X	306.60517	240.39309	15.18915	27.29276	0.0201738	0.08243522	5.2287056	20	4 5.1	19.6
187693	2008	DG ₅₈	15.8	X	178.23632	112.54316	358.93602	9.84770	0.0598140	0.19000573	2.9965734	20	7 24.1	20.4
187694	2008	DN ₅₉	16.0	X	187.69643	174.94175	174.41800	12.88607	0.1849161	0.24473172	2.5312937	20	2 27.0	20.2
187695	2008	DP ₆₈	16.6	X	318.91778	21.30054	145.02132	3.34313	0.0336903	0.22813493	2.6526189	20	—	—
187696	2008	DU ₆₉	16.4	X	226.14778	150.52325	87.29192	3.93992	0.0336038	0.22481303	2.6786855	20	—	—
187697	2008	DZ ₇₃	16.0	X	307.13720	151.13590	174.81331	0.85814	0.0871177	0.18104555	3.0946449	20	6 20.8	19.9
187698	2008	DM ₇₉	15.8	X	77.95490	149.09530	313.96776	11.86555	0.0411415	0.24264122	2.5458120	20	2 29.4	19.2
187699	2008	EF ₁	16.6	X	56.24270	161.53290	47.41351	3.31744	0.1270425	0.26049063	2.4281452	20	7 13.3	19.3
187700	2008	Zagreb	16.4	X	224.43598	34.61281	203.38333	4.15144	0.0965302	0.22409493	2.6844049	20	—	—
187701	2008	EU ₁₆	16.7	X	142.95935	103.02076	180.94639	1.26882	0.0373637	0.21397797	2.7683649	20	—	—
187702	2008	EM ₁₉	16.6	X	21.20677	76.07318	184.27342	9.36023	0.0928716	0.26228256	2.4170731	20	7 23.5	19.4
187703	2008	EC ₂₀	16.2	X	36.95348	78.85829	294.69343	2.46915	0.1072805	0.21323314	2.7748078	20	—	—
187704	2008	EC ₂₅	16.6	X	245.99489	23.23442	112.05445	11.09990	0.0712758	0.28820016	2.2698992	20	11 30.6	19.3
187705	2008	EU ₂₈	17.5	X	345.89957	357.34452	98.41146	3.11800	0.0703908	0.29949380	2.2124705	20	—	—
187706	2008	EU ₃₄	17.0	X	126.31582	346.70923	189.62751	4.64172	0.1530734	0.26953588	2.3735133	20	8 25.7	20.7
187707	2008	Nandaxianlin	16.7	X	80.60095	238.31304	16.81604	7.60857	0.1543711	0.27255016	2.3559808	20	10 21.2	20.0
187708	2008	EU ₃₆	17.3	X	126.49978	110.84148	87.15127	3.12814	0.1451749	0.27322867	2.3520788	20	9 26.2	20.9
187709	2008	Fengduan	15.8	X	166.18042	87.79419	88.98893	3.03407	0.0409746	0.19670869	2.9281075	20	9 30.6	20.0
187710	2008	EM ₄₇	16.8	X	285.02881	214.94607	95.78083	4.86926	0.1814222	0.24668176	2.5179360	20	4 15.6	20.2
187711	2008	EU ₄₇	16.2	X	117.38679	51.71035	168.32061	2.96198	0.1712709	0.19245816	2.9710628	20	10 5.9	21.0
187712	2008	ET ₅₄	17.3	X	101.20382	87.93996	83.99613	3.32728	0.1594956	0.26144129	2.4222554	20	7 25.9	20.7
187713	2008	ES ₅₆	16.2	X	221.01479	114.45457	121.74180	4.46679	0.0277755	0.22347562	2.6893622	20	—	—
187714	2008	EU ₇₆	17.0	X	2.17784	20.07921	134.93880	3.19921	0.1062068	0.23752007	2.5822751	20	1 19.9	19.9
187715	2008	EZ ₇₇	16.4	X	333.93902	229.87354	146.95694	3.06123	0.0535711	0.19856694	2.9098109	20	10 11.4	20.0
187716	2008	ED ₈₁	17.4	X	30.81824	272.35844	358.42977	5.49522	0.2257002	0.26319111	2.4115073	20	9 18.8	19.7
187717	2008	ED ₈₂	17.2	X	121.79634	60.93729	139.13776	2.70528	0.1496243	0.27405097	2.3473713	20	9 23.7	20.7
187718	2008	EB ₈₃	15.4	X	180.55845	244.59474	202.00240	13.61294	0.0953476	0.18255778	3.0775313	20	6 20.9	20.4
187719	2008	EG ₈₃	15.1	X	152.40860	248.03428	214.20389	9.31148	0.0579269	0.17990490	3.1077117	20	6 9.9	19.8
187720	2008	EX ₈₅	15.6	X	315.25069	5.08123	27.66883	9.24528	0.0741523	0.20051663	2.8909181	20	10 4.8	19.2
187721	2008	EJ ₁₂₃	15.9	X	44.34765	62.74155	184.78292	2.34927	0.1254020	0.18071847	3.0983776	20	8 9.6	19.8
187722	2008	EN ₁₃₆	17.5	X	312.41274	96.66415	56.32789	4.93436	0.0716228	0.30584275	2.1817447	20	—	—
187723	2008	EN ₁₄₆	16.9	X	341.95916	69.79483	87.37772	4.72758	0.1374869	0.23171397	2.6252333	20	—	—
187724	2008	FC ₃₈	13.0	X	313.53658	208.93890	57.11131	8.25778	0.1325746	0.08263556	5.2202512	20	4 14.7	19.5
187725	2008	FV ₄₀	16.5	X	295.26966	214.46525	44.10798	8.03842	0.1188155	0.23927326	2.5696458	20	3 2.5	20.0
187726	2008	FX ₅₂	17.4	X	106.17209	181.75401	50.81956	3.15433	0.1866578	0.27252764	2.3561106	20	10 21.8	21.0
187727	2008	FW ₅₅	17.6	X	262.59735	248.39985	20.52690	5.55548	0.0553303	0.31667341	2.1317109	20	1 31.4	20.3
187728	2008	FR ₅₈	16.2	X	108.67571	40.42726	142.46775	3.43713	0.1138235	0.18119003	3.0929995	20	8 6.3	20.9
187729	2008	FO ₆₁	14.8	X	338.99511	132.83883	149.81857	17.28712	0.1287926	0.17182148	3.2044322	20	6 10.6	19.0
187730	2008	FX ₆₆	16.0	X	92.35308	330.01978	175.11434	0.75400	0.1133570	0.17039046	3.2223487	20	5 31.8	20.4
187731	2008	FH ₇₆	15.6	X	255.12194	142.28286	80.72371	15.64124	0.1100815	0.22391103	2.6858746	20	—	—
187732	2008	FM ₈₀	15.3	X	248.46204	166.51425	196.20555	16.62750	0.1103616	0.17465873	3.1696344	20	5 20.5	20.2
187733	2008	FM ₈₀	15.9	X	175.67069	275.91504	198.13600	4.71841	0.1184682	0.18621692	3.0370827	20	7 19.6	20.8
187734	2008	FF ₁₀₄	16.5	X	312.97247	158.28292	87.12362	6.61520	0.0771979	0.23878629	2.5731383	20	3 14.8	19.8
187735	2008	FD ₁₀₆	16.5	X	344.35049	37.39007	141.34865	4.43754	0.1652241	0.23634794	2.5908057	20	1 15.4	19.3
187736	2008	FA ₁₁₄	17.0	X	121.19237	85.94323	191.35847	9.55604	0.1629220	0.28330580	2.2959675	20	12 29.2	20.7
187737	2008	P-L	17.8	X	180.99714	39.86955	296.07793	1.27799	0.2606079	0.30476054	2.1869066	20	2 4.1	21.3
187738	5031	P-L	16.7	X	8.33102	145.32688	217.67205	3.60350	0.1711314	0.28102448	2.3083763	20	12 19.0	19.1
187739	1168	T-1	15.8	X	161.30809	300.74209	200.89226	9.24237	0.3152109	0.18697868	3.0288284	20	8 8.6	21.6
187740	1224	T-2	16.7	X	20.38009	304.14569	3.62945	6.07790	0.1973327	0.27344773	2.3508225	20	10 21.1	19.1
187741	2100	T-3	16.1	X	84.10597	239.66536	210.40747	20.88246	0.1535434	0.24016959	2.5632485	20	3 7.5	19.6
187742	2351	T-3	16.6	X	84.38468	83.19030	223.89695	6.18415	0.1315504	0.27904291	2.3192918	20	12 29.8	20.0
187743	3562	T-3	16.1	X	102.17254	299.43858	57.19086	5.07786	0.0792230	0.21326689	2.7745151	20	—	—
187744	4085	T-3	17.0	X	109.68828	215.66911	81.35835	4.02539	0.1877343	0.28053021	2.3110870	20	—	—
187745	5137	T-3	15.8	X	121.19087	259.82969	75.30493	9.56356	0.1180254	0.21340769	2.7732946	20	—	—
187746	1976	DC	16.4	X	196.29756	223.97029	317.40704	22.46674	0.3442997	0.27998033	2.3141120	20	10 13.5	21.0
187747	1993	FS ₂₁	16.8	X	104.71798	26.64999	191.49634	5.58290	0.2041060	0.26632516	2.3925513	20	10 1.9	20.5
187748	1993	FW ₃₃	16.8	X	123.83067	144.40289	62.66599	3.42843	0.1318772	0.26771937	2.3842375	20	10 3.9	20.3
187749	1993	FC ₆₁	17.0	X	189.33094	41.08572	93.10132	2.20854	0.1315031	0.26877358	2.3779990	20	9 5.2	20.5
187750	1994	WB ₇	16.9	X	20.31619	130.26185	157.88861	6.86083	0.0979098	0.25917416	2.4363607	20	9 4.8	19.5
187751	1995	GG<												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187761 1997 NX ₄	14.8	X	28.04046	202.56471	117.36692	14.58035	0.3046213	0.17903162	3.1178094	20	11 19.7	19.0
187762 1997 WQ ₅	17.2	X	221.07565	225.04489	126.41298	1.48246	0.1861585	0.24028802	2.5624062	20	3 31.2	21.5
187763 1998 BS ₁₇	17.6	X	265.16288	127.36432	118.12286	3.22207	0.1533271	0.30755348	2.1736467	20	—	—
187764 1998 BF ₂₀	16.1	X	334.54357	298.52903	119.53782	5.35367	0.0571618	0.21067621	2.7972142	20	12 6.9	19.7
187765 1998 BX ₃₈	16.1	X	219.49361	9.93983	303.00129	3.98708	0.2822629	0.22803299	2.6534094	20	2 10.4	21.0
187766 1998 DV ₁₇	16.6	X	31.94360	281.62757	135.92345	4.67585	0.0926662	0.21225023	2.7833678	20	—	—
187767 1998 QP ₄	15.2	X	2.27788	148.70114	184.54526	8.18419	0.2438052	0.18104337	3.0946697	20	10 9.6	18.2
187768 1998 QM ₇₂	14.9	X	329.43815	134.42998	218.48262	12.06374	0.1660631	0.17769055	3.1334769	20	8 19.1	18.6
187769 1998 RX ₂₉	15.3	X	345.16639	188.49711	157.68119	9.28943	0.1862153	0.17905292	3.1175620	20	9 16.6	18.6
187770 1998 RU ₄₁	16.2	X	330.75233	200.52696	182.65446	9.88646	0.2101570	0.27119856	2.3638022	20	11 10.3	17.9
187771 1998 RP ₅₂	17.2	X	43.20590	238.12103	117.42286	3.59346	0.2190443	0.27793559	2.3254479	20	—	—
187772 1998 RG ₇₀	17.0	X	88.02369	211.67426	122.04079	3.63039	0.1796232	0.28140770	2.3062802	20	—	—
187773 1998 RQ ₇₁	16.7	X	58.23399	300.89339	42.10681	3.02076	0.2259175	0.27855924	2.3219757	20	—	—
187774 1998 SR ₆	15.2	X	23.00074	150.03572	165.37924	11.15794	0.0877248	0.18149867	3.0894920	20	10 3.5	19.2
187775 1998 SQ ₂₁	16.6	X	70.21656	319.18387	0.77058	4.34389	0.1835309	0.27632654	2.3344665	20	—	—
187776 1998 SH ₅₅	16.7	X	114.84112	331.23552	353.71910	5.04605	0.2976887	0.28485500	2.2876354	20	—	—
187777 1998 SJ ₇₀	15.1	X	9.83531	297.60752	26.46454	15.86952	0.2817161	0.17882688	3.1201887	20	10 17.3	18.4
187778 1998 SJ ₈₈	17.2	X	106.01543	179.73867	154.08323	6.12341	0.2546509	0.28442483	2.2899414	20	—	—
187779 1998 SO ₈₈	16.5	X	85.65569	88.80008	226.95839	5.92570	0.1311405	0.27925188	2.3181346	20	—	—
187780 1998 SC ₁₀₉	17.1	X	34.69877	136.94847	218.31356	5.11938	0.2635834	0.27612429	2.3356063	20	—	—
187781 1998 SM ₁₁₂	16.4	X	326.42586	228.46540	155.84539	6.55938	0.1963573	0.26998652	2.3708714	20	10 31.1	18.1
187782 1998 SB ₁₂₀	16.4	X	189.42484	66.05916	191.34514	7.47225	0.1456943	0.28457120	2.2891561	20	—	—
187783 1998 SF ₁₂₀	14.8	X	2.27197	288.09011	7.30575	12.47238	0.1596191	0.17445027	3.1721590	20	8 12.9	18.6
187784 1998 SL ₁₄₈	16.6	X	323.63877	331.73572	49.48305	3.63018	0.1770554	0.27017817	2.3697501	20	10 16.7	18.4
187785 1998 SM ₁₅₉	16.5	X	267.85800	345.04447	25.60968	6.89494	0.1423572	0.26090581	2.4255685	20	6 17.6	19.8
187786 1998 SB ₁₆₅	16.6	X	16.14514	235.10564	115.34308	7.17005	0.2223987	0.27414759	2.3468199	20	12 19.8	19.3
187787 1998 SR ₁₆₈	15.4	X	11.38017	224.62988	116.08637	7.08614	0.2851739	0.18213839	3.0822537	20	11 15.1	18.9
187788 1998 SA ₁₆₉	16.3	X	7.21515	171.45775	159.00545	7.07794	0.1445513	0.26937861	2.3744369	20	10 26.5	18.8
187789 1998 UN ₃₁	17.2	X	119.39866	108.20065	222.11838	20.14381	0.0921353	0.37403029	1.9077942	20	—	—
187790 1998 UR ₃₆	15.0	X	316.40618	102.77421	245.35151	3.97543	0.1969510	0.17274602	3.1929885	20	7 18.7	18.8
187791 1998 VO ₁	16.6	X	11.81037	175.32401	233.38130	18.89741	0.1105605	0.36706425	1.9318556	20	—	—
187792 1999 AV ₃	15.8	X	62.40309	37.31681	84.36537	5.55320	0.1910629	0.23810482	2.5780456	20	3 31.6	19.6
187793 1999 BL ₁₀	16.1	X	83.57347	351.63232	119.60441	5.12429	0.1970873	0.23971368	2.5664975	20	4 19.3	18.4
187794 1999 CM ₂₈	15.9	X	32.48510	78.09698	66.71208	4.35865	0.1847488	0.23621457	2.5917808	20	3 4.4	18.2
187795 1999 CB ₉₇	15.9	X	23.24258	0.15178	151.06513	5.64459	0.1147080	0.23480510	2.6021423	20	2 20.1	18.7
187796 1999 CS ₁₃₂	16.4	X	277.03878	144.38766	131.89838	3.77042	0.0638703	0.23753124	2.5821942	20	3 7.5	19.8
187797 1999 CS ₁₃₃	16.6	X	26.67858	101.54427	249.72234	10.63263	0.1727810	0.18015289	3.1048591	20	12 2.2	18.6
187798 1999 FW ₁₅	14.0	X	309.13254	33.80615	152.40055	9.23304	0.2275466	0.22437059	2.6822058	20	—	—
187799 1999 FK ₁₆	14.2	X	163.90414	4.49232	195.49505	17.39247	0.2838746	0.11147768	4.2757348	20	10 12.8	21.3
187800 1999 GZ ₁₃	16.5	X	241.96471	79.90377	176.62715	2.15868	0.1494889	0.22450768	2.6811138	20	—	—
187801 1999 HZ ₅	15.9	X	230.53058	298.92136	4.83213	11.78198	0.2763410	0.22724232	2.6595607	20	2 12.2	20.7
187802 1999 JU ₂	16.1	X	269.54881	118.25178	115.96209	13.80688	0.2233802	0.22268514	2.6957228	20	—	—
187803 1999 JN ₈	15.5	X	284.04062	203.35845	50.69877	35.59114	0.2613737	0.22737280	2.6585431	20	2 2.8	20.4
187804 1999 OB ₂	14.5	X	125.29692	79.28147	236.09482	14.17429	0.2607767	0.20279116	2.8692608	20	—	—
187805 1999 RR ₃₂	17.5	X	180.22494	203.43172	143.67927	1.55702	0.1775369	0.30890883	2.1672841	20	2 12.8	20.5
187806 1999 RB ₅₁	15.9	X	211.53766	108.52146	145.26730	11.05474	0.3207949	0.21774944	2.7363062	20	2 20.9	21.1
187807 1999 RM ₁₈₉	15.6	X	339.43346	185.91919	169.82749	10.30473	0.1752747	0.18730945	3.0252615	20	9 19.3	18.6
187808 1999 RA ₂₁₄	17.1	X	189.22837	208.04884	154.87971	4.70133	0.1080076	0.31389838	2.1442562	20	3 10.5	20.1
187809 1999 TS ₁₆	16.7	X	36.41323	201.54964	211.17703	5.35440	0.1479724	0.29347985	2.2425933	20	—	—
187810 1999 TC ₁₈	15.7	X	310.09053	175.00117	186.84136	13.00493	0.1999182	0.18173043	3.0868649	20	7 24.7	19.6
187811 1999 TX ₇₇	15.8	X	355.94068	107.52972	206.17840	7.48749	0.2189166	0.18139092	3.0907155	20	8 22.1	19.0
187812 1999 TU ₁₃₁	16.0	X	319.58831	192.63297	198.25414	3.87593	0.1786114	0.18718074	3.0266482	20	9 27.4	19.4
187813 1999 TR ₁₅₄	15.9	X	356.40318	233.66652	128.39981	1.51444	0.2300707	0.18787851	3.0191497	20	11 6.7	19.0
187814 1999 TL ₁₅₉	17.0	X	89.87924	181.19323	208.14776	4.62951	0.1324030	0.30049740	2.2075417	20	—	—
187815 1999 TH ₁₆₄	15.0	X	74.21818	85.34854	219.63626	10.08450	0.1051918	0.19213909	2.9743510	20	11 27.2	19.3
187816 1999 TL ₁₇₇	15.3	X	325.43845	132.76518	209.96378	10.82362	0.0610801	0.18053262	3.1005037	20	8 7.0	19.6
187817 1999 TP ₂₂₅	17.5	X	259.23136	228.51843	206.43930	3.06212	0.1422224	0.28086424	2.3092542	20	9 7.6	20.3
187818 1999 TA ₂₂₉	17.1	X	105.74877	244.05229	136.27420	3.91784	0.2264014	0.30067242	2.2066849	20	1 9.8	19.3
187819 1999 TD ₂₄₄	18.0	X	162.88290	175.32257	194.71967	2.71362	0.1509274	0.30819380	2.1706349	20	2 22.6	20.9
187820 1999 TP ₂₅₃	15.4	X	6.41044	100.56775	225.86559	14.40865	0.0332120	0.18626313	3.0365805	20	9 12.7	19.8
187821 1999 TS ₂₆₀	15.3	X	154.39287	239.38967	233.48929	5.28678	0.1197809	0.17256256	3.1952512	20	6 27.5	20.4
187822 1999 UH ₇	15.0	X	187.21220	102.62977	355.87660	21.90244	0.2868629	0.26683417	2.3895077	20	7 18.2	19.7
187823 1999 UK ₁₆	16.8	X	189.71975	311.52764	29.99449	5.05839	0.2049552	0.30755997	2.1736161	20	2 17.9	20.3
187824 1999 UH ₃₂	15.3	X	23.32351	228.18214	38.68682	13.45645	0.0873265	0.17851728	3.1237951	20	8 4.3	19.6
187825 1999 UP ₃₂	16.1	X	305.31606	319.95067	46.18438	5.93922	0.1516813	0.18062999	3.0993894	20	8 3.2	19.9
187826 1999 US ₃₂	15.7	X	43.64844	43.91117	269.57574	0.60782	0.0910242	0.18818415	3.0158798	20	10 28.8	19.6
187827 1999 UW ₃₃	17.1	X	137.44223	145.60137	215.34200	5.69169	0.1051930	0.30192636	2.2005709	20	1 6.8	19.8
187828 1999 VX ₂₁	17.1	X	157.97088	161.61640	208.93130	3.56353	0.2475796	0.30541125	2.1837992	20	2 26.0	20.5
187829 1999 VT ₅₈	15.4	X	6.58259	311.00662	55.83825	4.09118	0.3407207	0.18887022	3.0085719	20	12 19.8	18.6
187830 1999 VG ₆₁	17.4	X	217.36873	108.68504	208.93451	3.13080	0.2017260	0.30824354	2.1704014	20	2 8.0	20.9
187831 1999 VC ₉₅	15.9	X	324.18106	152.45747	209.87920	4.95999	0.1458489	0.18360203	3.0658511	20	8 27.7	19.6
187832 1999 VO ₉₅	15.1	X	315.83214	162.83518	211.41186	8.40627	0.0611711	0.18363465	3.0654881	20	9 4.6	19.3
187833 1999 VU ₁₀₅	14.9	X	338.96196	77.25706	237.25886	9.82139	0.0453784	0.17586388	3.1551374	20	7 21.9	19.2
187834 1999 VM ₁₂₁	15.7	X	268.28747	339.45025	3							

ELEMENTS AND OPPOSITION DATES IN 2020

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
187841 1999 VF ₂₀₈	16.2	X	17.37352	229.52110	132.86039	1.93142	0.2065230	0.18928301	3.0041962	20	12 10.4	19.8
187842 1999 VJ ₂₂₅	15.5	X	229.87693	231.72439	190.30493	11.49950	0.2459548	0.17348755	3.1838835	20	6 28.5	21.0
187843 1999 XN ₅₀	14.9	X	308.13402	132.75189	234.40882	9.47498	0.0645544	0.17834404	3.1258177	20	8 12.9	19.2
187844 1999 XP ₅₃	17.1	X	21.35028	320.77631	83.63708	4.40399	0.1137159	0.28904721	2.2654624	20	—	—
187845 1999 XW ₁₀₉	15.6	X	304.74592	304.02193	90.39039	6.79996	0.2199154	0.18234979	3.0798710	20	9 1.4	19.1
187846 1999 XK ₁₃₅	16.4	X	128.59515	258.82414	111.03352	4.71129	0.2355831	0.29965182	2.2116926	20	1 28.3	19.2
187847 1999 XM ₁₃₈	14.7	X	88.97433	317.00949	230.30848	26.42945	0.1764073	0.17269345	3.1936364	20	7 19.3	20.0
187848 1999 XC ₂₄₆	16.5	X	29.59610	170.79628	208.24430	9.50825	0.2114350	0.28730904	2.2745903	20	—	—
187849 1999 XM ₂₄₈	16.7	X	350.23686	218.72472	203.14777	6.70393	0.2003185	0.28632042	2.2798232	20	—	—
187850 2000 AB ₄₈	16.6	X	217.32923	20.82007	102.26618	10.55611	0.1539544	0.27336360	2.3513047	20	9 23.9	20.1
187851 2000 AG ₁₅₁	16.9	X	353.75129	276.72257	122.57470	6.22010	0.1542288	0.28047176	2.3114081	20	—	—
187852 2000 AA ₁₇₀	17.2	X	63.00174	253.85184	138.27754	7.87088	0.2874151	0.29426112	2.2386221	20	—	—
187853 2000 AA ₂₂₅	14.7	X	304.60230	252.94173	110.04860	13.38061	0.2037997	0.17291173	3.1909481	20	7 18.3	18.6
187854 2000 AS ₂₅₃	17.8	X	218.50993	356.04680	115.31921	1.98518	0.1446790	0.27078167	2.3662277	20	9 5.4	21.1
187855 2000 GP ₄	17.1	X	200.58806	187.28633	33.30350	21.28737	0.0539235	0.37198491	1.9147813	20	—	—
187856 2000 GL ₁₅₅	16.7	X	358.30864	317.51436	199.14059	8.43232	0.1040510	0.24019114	2.5630951	20	1 13.8	19.8
187857 2000 HA ₅	17.3	X	307.61323	276.26414	215.33964	20.04267	0.0837316	0.37488051	1.9049086	20	—	—
187858 2000 HA ₃₁	15.7	X	54.14401	111.14690	102.13121	14.81630	0.1273962	0.25198614	2.4824754	20	7 15.4	18.6
187859 2000 HL ₆₉	17.2	X	155.97066	76.37565	222.76720	20.46252	0.0826354	0.37503168	1.9043967	20	—	—
187860 2000 JM ₁₀	16.7	X	170.14022	324.86467	237.69807	19.10622	0.0632127	0.36432565	1.9415245	20	12 7.8	18.7
187861 2000 KG ₁₇	16.6	X	251.68764	75.61910	237.02174	3.62225	0.2017060	0.23833382	2.5763939	20	3 7.8	20.8
187862 2000 LW ₁₄	15.2	X	241.88512	247.48062	94.81436	29.03148	0.2275463	0.23599943	2.5933557	20	4 20.5	20.1
187863 2000 LW ₂₅	14.7	X	241.57065	65.78406	252.61983	29.21642	0.3085386	0.23165032	2.6257142	20	2 16.9	20.1
187864 2000 NE ₆	17.0	X	287.00606	76.27815	186.52657	3.46116	0.1663914	0.23432774	2.6056750	20	2 15.9	20.7
187865 2000 OG ₅₆	16.2	X	303.02807	356.82816	331.17477	13.06416	0.2522992	0.24190145	2.5509997	20	5 11.7	19.5
187866 2000 OV ₅₉	16.2	X	211.85046	84.41361	254.19984	2.53451	0.2271447	0.23012664	2.6372914	20	3 5.7	20.7
187867 2000 OJ ₆₀	16.3	X	225.82557	207.60348	139.45742	5.32810	0.2997531	0.23249889	2.6193214	20	3 26.6	21.0
187868 2000 PA ₁₀	16.4	X	324.99877	223.14200	110.08924	10.07048	0.2751107	0.24421368	2.5348721	20	7 11.9	17.9
187869 2000 QH ₅₁	15.6	X	140.42758	212.45163	160.48559	14.64516	0.1235949	0.22262571	2.6962025	20	2 8.8	19.7
187870 2000 QH ₆₂	15.9	X	233.52704	196.02343	131.94180	10.53554	0.2240676	0.23063734	2.6333968	20	3 14.3	20.4
187871 2000 QC ₆₄	15.4	X	81.71099	296.04948	101.08655	8.44097	0.2860095	0.21504250	2.7592212	20	1 24.6	18.5
187872 2000 QB ₇₀	15.7	X	312.72885	353.80386	338.20379	12.54097	0.2885284	0.24238964	2.5475733	20	6 5.0	18.6
187873 2000 QN ₇₈	15.9	X	187.40279	139.39325	214.01042	1.43241	0.2197797	0.22652836	2.6651460	20	3 5.3	20.4
187874 2000 QH ₉₁	16.4	X	256.65124	59.63516	250.35319	2.66142	0.2858005	0.23259222	2.6186207	20	3 3.2	20.8
187875 2000 QX ₉₁	16.3	X	132.29853	202.14159	164.80461	7.09580	0.1788283	0.22041166	2.7142281	20	1 30.6	20.5
187876 2000 QT ₁₀₄	15.7	X	168.49322	197.86712	157.04300	15.05654	0.2693683	0.22295326	2.6935611	20	2 24.1	20.4
187877 2000 QG ₁₁₇	15.3	X	260.11913	132.21222	187.68159	31.64069	0.2722707	0.23225924	2.6211229	20	3 19.5	19.8
187878 2000 QL ₁₂₀	15.7	X	223.21869	138.44159	195.93701	6.12356	0.1971217	0.22909882	2.6451734	20	3 10.8	20.2
187879 2000 QQ ₁₆₉	16.2	X	256.21914	71.63718	223.28681	4.49488	0.1926181	0.23035541	2.6355450	20	2 20.7	20.6
187880 2000 QK ₁₇₆	15.8	X	50.69208	181.51370	185.87908	8.93206	0.1498430	0.20866031	2.8152015	20	—	—
187881 2000 QY ₂₁₁	16.4	X	113.54537	166.51940	189.35476	3.18079	0.2040937	0.21649269	2.7468855	20	1 1.2	20.3
187882 2000 QW ₂₃₀	16.5	X	288.91217	178.62502	157.21467	3.75669	0.2593348	0.23817379	2.5775478	20	5 11.8	19.8
187883 2000 RW	16.7	X	259.39045	142.27806	176.52087	14.13318	0.2906976	0.23318216	2.6142022	20	3 16.7	21.0
187884 2000 RS ₄₂	15.4	X	319.13080	28.76571	272.90013	5.63692	0.3082544	0.23935732	2.5690442	20	4 28.3	18.2
187885 2000 RS ₅₃	15.0	X	292.48076	100.79011	217.66542	11.72714	0.1829928	0.23709552	2.5853568	20	5 4.1	18.2
187886 2000 RV ₅₃	14.9	X	203.74467	124.53157	278.36298	10.72838	0.2965828	0.22924798	2.6440259	20	5 13.2	19.8
187887 2000 RW ₆₄	15.8	X	241.38173	330.47416	317.76392	12.53093	0.2483489	0.22766893	2.6562373	20	1 30.9	20.5
187888 2000 RV ₇₃	15.6	X	91.45922	174.29535	193.27806	14.39715	0.2003651	0.21147656	2.7901522	20	—	—
187889 2000 SV ₅	16.1	X	269.85916	59.93678	282.07152	9.55433	0.1569291	0.23590698	2.5940331	20	5 7.6	19.9
187890 2000 SW ₄₁	16.0	X	148.38299	180.18099	163.09887	9.87160	0.1795991	0.21812329	2.7331787	20	1 18.5	20.4
187891 2000 ST ₄₆	15.4	X	147.97753	149.34550	214.85395	13.66125	0.1374890	0.22331698	2.6906356	20	2 4.2	19.7
187892 2000 SD ₅₉	15.7	X	86.46579	172.42524	190.60089	8.19099	0.1770236	0.21217533	2.7840228	20	—	—
187893 2000 SF ₈₅	15.6	X	326.66762	275.48832	41.30877	12.31256	0.2747810	0.24095942	2.5576441	20	6 15.7	17.8
187894 2000 SJ ₁₄₂	15.5	X	73.25837	188.09557	211.58174	9.29718	0.1611295	0.21291983	2.7775292	20	—	—
187895 2000 SJ ₁₆₅	15.2	X	125.50885	141.13648	228.29533	13.36393	0.1702691	0.21811819	2.7332213	20	1 22.7	19.4
187896 2000 SJ ₁₈₉	15.4	X	116.41142	154.74421	222.47718	13.72526	0.1161058	0.21779639	2.7359129	20	1 15.3	19.4
187897 2000 SM ₁₉₈	15.7	X	187.41567	294.32605	1.54136	13.02381	0.1220122	0.21869385	2.7284228	20	—	—
187898 2000 ST ₂₁₃	15.9	X	80.30848	248.25102	142.96727	10.12371	0.2276574	0.21255129	2.7807389	20	1 4.7	19.1
187899 2000 SU ₂₆₁	16.1	X	243.40234	141.15610	183.66671	13.74624	0.2870208	0.22944234	2.6425325	20	3 10.9	20.9
187900 2000 SR ₂₆₅	16.1	X	91.41952	262.89343	116.72535	5.91813	0.1859376	0.21338628	2.7734801	20	—	—
187901 2000 SB ₃₁₇	15.6	X	211.03857	21.87985	279.09276	11.53829	0.1614202	0.22339734	2.6899903	20	1 21.8	20.2
187902 2000 SJ ₃₃₉	15.0	X	98.58946	269.16219	124.01891	14.70558	0.2795877	0.21404253	2.7678083	20	2 10.8	18.8
187903 2000 SN ₃₄₁	16.2	X	124.18332	206.11594	161.33251	13.60702	0.1693252	0.21921447	2.7241012	20	1 21.3	20.3
187904 2000 SM ₃₆₃	15.4	X	86.63545	212.80717	192.88853	11.28714	0.0867625	0.21913117	2.7247915	20	1 9.5	19.1
187905 2000 TR ₂₃	16.1	X	63.41339	211.40299	161.16766	10.39653	0.2110965	0.20843646	2.8172167	20	—	—
187906 2000 TZ ₄₉	15.6	X	289.85914	238.96200	47.50407	14.69807	0.2645457	0.23218074	2.6217137	20	3 16.1	19.6
187907 2000 UH ₃₇	16.5	X	220.90216	174.79672	167.51141	2.71414	0.3397274	0.22827562	2.6515289	20	3 15.2	21.4
187908 2000 UD ₆₂	15.5	X	289.11969	198.93042	230.85629	12.18601	0.1629752	0.19486469	2.9465509	20	9 25.9	19.4
187909 2000 UG ₆₅	15.6	X	150.12595	95.62601	240.63040	7.35956	0.1252709	0.21596999	2.7513158	20	1 6.9	19.8
187910 2000 UN ₇₀	16.4	X	280.78831	76.07730	267.71582	2.88019	0.3027554	0.23640668	2.5903765	20	5 4.4	20.1
187911 2000 UU ₈₄	15.1	X	219.74076	319.43999	56.67222	11.40458	0.1125796	0.17950878	3.1122819	20	5 5.9	19.9
187912 2000 VS ₃₈	15.3	X	152.13441	264.88253	223.32259	13.53467	0.2487990	0.17862392	3.1225517	20	7 15.5	21.0
187913 2000 VM ₃₉	15.6	X	357.09753	171.08351	222.93341	9.93161	0.1401251	0.20122933	2.8840881	20	12 13.5	19.1

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
187921	2000	YT ₃	16.1	X	275.64815	327.90535	73.44904	3.43523	0.1041900	0.18559024	3.0439157	20	8 12.5	20.2
187922	2000	YD ₅₇	15.5	X	212.14732	326.96101	89.22858	3.44202	0.1613634	0.17709783	3.1404645	20	6 12.5	20.5
187923	2000	YF ₉₇	15.1	X	242.29607	317.79795	113.67812	14.25231	0.1497771	0.18107698	3.0942867	20	8 2.6	19.7
187924	2000	YA ₁₀₀	17.2	X	24.81577	17.87585	105.30182	3.26324	0.1023761	0.30929909	2.1654606	20	—	—
187925	2001	AN ₅₁	15.6	X	259.85027	297.16851	116.43071	7.60456	0.1890667	0.18192557	3.0846570	20	7 25.2	20.1
187926	2001	BH ₃₁	16.6	X	348.78909	347.86170	153.35942	4.17322	0.0955008	0.30487153	2.1863757	20	—	—
187927	2001	BK ₃₉	15.9	X	170.39704	127.54806	226.91772	4.91899	0.0272486	0.21775668	2.7362455	20	2 10.4	19.9
187928	2001	CT ₁₅	16.9	X	313.65967	151.89093	27.16890	2.57931	0.0764512	0.30473874	2.1870108	20	—	—
187929	2001	CD ₂₄	15.0	X	277.17074	270.85828	140.40765	12.14579	0.1169470	0.18283247	3.0744481	20	8 24.8	19.1
187930	2001	DY ₄₃	14.7	X	288.95000	217.56547	158.08538	17.52269	0.0984376	0.17542874	3.1603527	20	7 25.6	19.1
187931	2001	DN ₁₀₇	16.7	X	248.81966	90.38011	118.55754	7.02451	0.0230535	0.29938913	2.2129862	20	—	—
187932	2001	EX ₂₃	16.8	X	231.91289	64.36309	160.96259	5.11058	0.1346600	0.29556451	2.2320360	20	—	—
187933	2001	ES ₂₇	16.9	X	2.28361	297.74266	190.79551	3.64245	0.0342433	0.30229735	2.1987701	20	—	—
187934	2001	FU ₁₇	16.7	X	263.48004	357.70750	199.37298	6.61674	0.0646062	0.29534119	2.2331610	20	—	—
187935	2001	FO ₈₈	17.4	X	8.74772	284.29715	170.34963	3.50476	0.0502353	0.29661999	2.2267379	20	—	—
187936	2001	FL ₁₂₄	16.5	X	16.96690	10.46207	73.72287	4.17649	0.0961878	0.29968007	2.2115536	20	—	—
187937	2001	FX ₁₃₁	17.7	X	235.27028	68.14072	119.23385	1.74373	0.1370597	0.29106439	2.2549833	20	—	—
187938	2001	FM ₁₄₉	16.8	X	172.66565	70.20631	152.25876	6.37349	0.1003909	0.28479191	2.2879733	20	12 15.9	20.1
187939	2001	FP ₁₅₆	16.8	X	244.61596	41.14774	132.11384	7.59544	0.1723010	0.29075634	2.2565758	20	—	—
187940	2001	GG ₁	17.4	X	289.90501	70.85257	21.03294	3.07149	0.1338258	0.28754225	2.2733603	20	11 30.9	19.2
187941	2001	GU ₃	16.7	X	131.18973	151.73170	131.97969	6.10722	0.1666077	0.28500618	2.2868264	20	—	—
187942	2001	KF ₃	17.0	X	107.88478	51.73229	217.03106	3.34438	0.1342742	0.27832965	2.3232524	20	12 5.8	20.5
187943	2001	KO ₃₃	16.9	X	138.13495	127.55335	139.98523	2.50328	0.2024467	0.28210341	2.3024868	20	12 31.7	20.6
187944	2001	KU ₃₇	16.3	X	127.92439	157.69989	112.33335	11.02017	0.1549318	0.28073199	2.3099794	20	12 26.9	20.0
187945	2001	KJ ₄₃	16.6	X	164.33382	91.67557	156.19745	6.30487	0.1084463	0.28420707	2.2911110	20	—	—
187946	2001	KC ₆₆	17.2	X	159.56699	133.04828	139.54679	7.59539	0.2175435	0.28576842	2.2827581	20	—	—
187947	2001	KM ₆₇	16.6	X	187.51549	322.73336	223.56368	9.82135	0.0295527	0.27886228	2.3202932	20	11 22.5	19.5
187948	2001	KV ₇₀	16.5	X	123.71095	17.61278	247.92012	6.20289	0.1075730	0.28022406	2.3127699	20	12 17.1	19.7
187949	2001	KX ₇₄	17.1	X	158.42424	38.67297	194.56261	5.20626	0.1409994	0.28415015	2.2914170	20	—	—
187950	2001	MO ₁₁	15.9	X	99.85070	127.24678	217.82447	7.68567	0.2374276	0.27522597	2.3408657	20	—	—
187951	2001	NL	16.4	X	90.15820	334.33066	302.20314	8.15871	0.2366541	0.27520569	2.3408007	20	12 2.9	20.4
187952	2001	OL ₂	16.5	X	48.80772	136.35427	181.18026	14.06439	0.2079661	0.26939234	2.3743563	20	12 13.3	20.2
187953	2001	OB ₈	16.5	X	40.46400	127.57384	262.99290	3.84077	0.2269892	0.27416425	2.3467248	20	—	—
187954	2001	OV ₉	17.1	X	20.45365	265.43033	74.51040	2.26649	0.1998473	0.26861584	2.3789299	20	12 6.1	19.9
187955	2001	OV ₃₃	16.7	X	60.60999	200.47388	82.00763	5.88028	0.2241404	0.26781620	2.3836628	20	11 13.3	20.2
187956	2001	OA ₄₉	15.6	X	40.85573	328.13091	313.40022	10.94984	0.2027727	0.26264709	2.4148361	20	10 8.5	18.8
187957	2001	OA ₅₇	16.5	X	44.87536	210.13409	116.04709	3.55602	0.2081974	0.26942002	2.3741936	20	12 19.4	19.7
187958	2001	OR ₆₆	15.4	X	161.02330	148.52442	258.26537	21.22105	0.0348099	0.24135964	2.5548159	20	3 28.3	19.5
187959	2001	OW ₆₆	16.9	X	314.80656	216.53342	144.00446	1.77950	0.1906077	0.25936423	2.4351702	20	8 16.4	18.9
187960	2001	PM	17.1	X	159.24958	95.33990	176.68104	1.40114	0.2153798	0.28210091	2.3025004	20	—	—
187961	2001	PL ₂	16.2	X	7.76828	52.32894	270.45975	5.20263	0.1403794	0.26305790	2.4123213	20	10 8.2	18.7
187962	2001	PB ₃₆	17.4	X	6.68670	135.78705	206.39597	8.94520	0.2434337	0.26441504	2.4040599	20	11 25.2	19.9
187963	2001	PK ₃₆	15.8	X	127.96036	5.87262	252.44827	10.29141	0.2360654	0.27272389	2.3549802	20	12 10.7	19.8
187964	2001	PM ₅₁	16.7	X	69.25242	127.94353	151.44746	4.17839	0.1346705	0.26739271	2.3861789	20	11 8.5	20.0
187965	2001	QQ ₃₆	16.5	X	83.89707	105.73665	279.34529	2.26200	0.2467120	0.28082528	2.3094678	20	—	—
187966	2001	QQ ₃₇	17.0	X	76.38886	126.15806	158.71642	2.66373	0.1786182	0.26999242	2.3708368	20	11 27.2	20.4
187967	2001	QA ₄₁	17.5	X	335.72360	245.06862	110.59264	2.40307	0.2044309	0.26255628	2.4153928	20	10 2.8	19.1
187968	2001	QC ₄₂	17.1	X	324.22089	223.14665	147.49686	3.43796	0.2298588	0.26185101	2.4197280	20	9 26.7	18.6
187969	2001	QS ₅₉	16.6	X	4.43523	207.11078	120.56285	7.28849	0.1578297	0.26325192	2.4111359	20	10 19.2	19.1
187970	2001	QP ₆₆	16.5	X	21.85684	46.44301	243.36198	4.18634	0.1988643	0.26082884	2.4260457	20	9 23.9	19.0
187971	2001	QB ₈₅	16.6	X	149.43154	160.00429	101.44558	4.70181	0.1843498	0.27757375	2.3274684	20	—	—
187972	2001	QK ₁₀₃	16.6	X	15.43153	343.12481	334.25645	7.72165	0.1650906	0.26383328	2.4075926	20	10 16.8	19.3
187973	2001	QP ₁₁₂	16.9	X	315.55804	99.44278	195.31957	11.22805	0.1881073	0.25200354	2.4823611	20	5 6.5	19.6
187974	2001	QJ ₁₁₈	16.3	X	239.30196	178.64097	203.26765	12.59283	0.1765793	0.24690549	2.1641417	20	5 26.8	20.2
187975	2001	QQ ₁₅₅	16.6	X	17.12082	64.55393	273.74631	3.26784	0.1990598	0.26526541	2.3989193	20	11 27.7	19.1
187976	2001	QK ₁₆₉	16.5	X	188.96243	319.26778	39.68621	4.89611	0.1256548	0.24194615	2.5506854	20	3 13.1	20.4
187977	2001	QX ₂₀₅	17.3	X	130.42159	348.34717	295.33551	1.80274	0.1545755	0.27582884	2.3372739	20	—	—
187978	2001	QT ₂₁₈	16.4	X	305.64629	200.71035	159.10455	15.03997	0.1427150	0.25685484	2.4510051	20	7 31.4	19.0
187979	2001	QK ₂₃₄	16.9	X	33.01844	151.60640	165.69411	4.05841	0.2134715	0.26487624	2.4012685	20	11 24.8	20.0
187980	2001	QP ₂₈₈	15.4	X	76.75194	233.21068	242.18494	12.47343	0.1440410	0.23755985	2.5819868	20	3 30.4	18.8
187981	Soluri		16.9	X	77.41304	65.81582	32.50404	0.82494	0.1086514	0.23640939	2.5903567	20	3 7.7	20.0
187982	2001	QR ₃₃₃	15.9	X	169.00259	285.44476	110.09872	13.71461	0.1933884	0.23657893	2.5891190	20	4 15.8	20.4
187983	2001	RM ₄	16.5	X	269.22706	193.02161	190.91916	6.28142	0.1207678	0.25467404	2.4649773	20	7 11.1	19.6
187984	2001	RO ₈	16.7	X	174.42104	208.21726	183.06071	3.89703	0.1856154	0.24043629	2.5613526	20	4 8.6	20.9
187985	2001	RT ₃₇	17.8	X	9.38788	85.15525	241.98090	2.87110	0.2588464	0.26375458	2.4080715	20	11 9.4	20.0
187986	2001	RC ₃₉	16.5	X	7.26913	53.51569	225.05520	6.46956	0.1221762	0.25741023	2.4474783	20	7 28.2	19.1
187987	2001	RJ ₄₃	17.3	X	18.64282	174.46738	128.68765	3.22952	0.1777879	0.26090653	2.4255641	20	10 8.6	19.7
187988	2001	RM ₇₉	16.4	X	333.27315	149.68346	201.62117	12.25081	0.2543343	0.25713421	2.4492295	20	9 11.7	18.0
187989	2001	RF ₁₀₁	17.2	X	306.97871	258.36637	96.35072	3.51836	0.1953619	0.25638806	2.4539790	20	7 19.7	19.6
187990	2001	RT ₁₂₃	15.7	X	33.88316	195.24747	3.22117	8.41072	0.0740571	0.24615974	2.5214946	20	5 10.0	