

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
252001	2000	EO <sub>149</sub>	17.0	X	241.82026	55.54393	48.84525	3.23546	0.1808978	0.25662882	2.4524440	21	9 7.7	20.4
252002	2000	EU <sub>170</sub>	14.2	X	196.60254	123.18626	41.59285	11.55370	0.2171123	0.16475025	3.2954799	21	10 2.4	19.8
252003	2000	EM <sub>199</sub>	16.9	X	134.30261	318.54724	171.03743	5.55241	0.0534601	0.24388302	2.5371628	21	6 14.9	20.5
252004	2000	FR <sub>2</sub>	15.4	X	328.61820	88.67260	355.88218	22.30590	0.2792552	0.27107690	2.3645094	21	—	—
252005	2000	FN <sub>9</sub>	16.3	X	282.45339	340.03371	12.13836	6.25373	0.0122040	0.24252362	2.5466349	21	6 21.3	19.7
252006	2000	FC <sub>10</sub>	16.8	X	18.61156	342.30086	186.44021	7.77386	0.1424308	0.23190126	2.6238196	21	2 18.6	19.5
252007	2000	FU <sub>54</sub>	16.7	X	353.90574	60.66106	197.18187	8.64475	0.0719132	0.23818605	2.5774594	21	5 20.2	19.7
252008	2000	GZ <sub>14</sub>	15.9	X	252.22202	238.67213	7.49209	13.00878	0.1461033	0.22356514	2.6886441	21	—	—
252009	2000	GS <sub>19</sub>	16.4	X	49.93240	334.63192	195.33072	12.66955	0.1087067	0.23608464	2.5927316	21	4 20.5	19.2
252010	2000	GY <sub>34</sub>	15.9	X	5.21884	186.25781	18.73593	8.15184	0.1356934	0.23342749	2.6123701	21	3 21.5	18.5
252011	2000	GY <sub>44</sub>	16.0	X	338.70146	28.32279	192.89377	13.50097	0.1966062	0.23131516	2.6282499	21	2 12.2	19.4
252012	2000	GC <sub>63</sub>	16.3	X	323.27714	43.73089	213.81095	8.17398	0.0451542	0.23350512	2.6117911	21	4 3.6	19.7
252013	2000	GP <sub>114</sub>	16.3	X	274.99852	55.04818	212.95724	13.99169	0.2756812	0.22613847	2.6682084	21	1 20.7	21.1
252014	2000	GN <sub>160</sub>	16.2	X	36.74240	149.73392	26.24593	13.46931	0.1155669	0.23467695	2.6030894	21	4 7.2	18.8
252015	2000	HG <sub>18</sub>	16.0	X	208.76944	204.91657	219.54107	11.54061	0.1686255	0.24062154	2.5600378	21	6 12.4	20.2
252016	2000	HD <sub>60</sub>	17.0	X	47.31203	165.13858	39.07563	8.09894	0.1539180	0.23753180	2.5821901	21	6 8.9	19.8
252017	2000	HA <sub>67</sub>	16.5	X	20.43219	181.90910	36.77650	8.37631	0.1398454	0.23668478	2.5883470	21	5 7.6	18.9
252018	2000	HP <sub>67</sub>	16.1	X	58.28595	158.55649	48.57894	13.41137	0.1563734	0.23951223	2.5679363	21	7 4.2	19.3
252019	2000	HV <sub>71</sub>	16.0	X	280.67150	54.19488	224.38005	14.05530	0.1627681	0.22815667	2.6524504	21	2 15.7	20.2
252020	2000	HD <sub>83</sub>	16.2	X	32.98809	157.42385	49.60045	8.28108	0.0924221	0.23538052	2.5978997	21	5 12.2	19.1
252021	2000	HJ <sub>87</sub>	16.0	X	61.19367	121.69990	106.52148	6.13144	0.1638012	0.24105534	2.5569655	21	8 10.4	19.1
252022	2000	HQ <sub>9</sub>	16.3	X	101.31956	320.39527	231.39684	9.92523	0.0732380	0.24225990	2.5484827	21	7 26.7	19.9
252023	2000	JK <sub>90</sub>	16.2	X	235.74238	277.37990	38.11081	13.26421	0.2562154	0.22792229	2.6542685	21	2 25.9	21.1
252024	2000	KS	15.8	X	233.05462	70.57943	238.43742	12.04461	0.2668546	0.22200543	2.7012222	21	2 5.9	20.8
252025	2000	KW <sub>15</sub>	16.3	X	173.63531	51.04222	240.30732	12.17547	0.2336835	0.213346917	2.7277621	21	—	—
252026	2000	KC <sub>19</sub>	16.1	X	210.27234	249.30625	62.18588	10.55852	0.2549260	0.21947775	2.7219223	21	1 31.7	21.1
252027	2000	KW <sub>37</sub>	16.1	X	161.65772	294.38100	76.03046	12.41275	0.2065280	0.22223945	2.6993256	21	3 4.8	20.7
252028	2000	KG <sub>82</sub>	16.2	X	220.99080	86.61707	233.41983	8.02883	0.0965440	0.22480729	2.6787311	21	2 13.6	20.5
252029	2000	NG <sub>7</sub>	16.3	X	124.91902	239.45191	142.06703	8.60661	0.2373907	0.21122696	2.7923498	21	2 10.3	20.4
252030	2000	OM <sub>57</sub>	17.1	X	167.86479	232.58270	108.97135	2.72112	0.1876368	0.30717755	2.1754198	21	1 14.4	20.1
252031	2000	OM <sub>58</sub>	15.8	X	190.15957	328.12468	320.41816	8.18559	0.1273939	0.21025280	2.8009683	21	—	—
252032	2000	OU <sub>63</sub>	16.8	X	97.40891	254.28638	201.21552	4.23941	0.1453693	0.21813918	2.7330459	21	3 28.5	20.3
252033	2000	QM <sub>19</sub>	17.5	X	170.48314	293.84001	351.18881	3.61618	0.1854256	0.30130658	2.2035875	21	—	—
252034	2000	QZ <sub>39</sub>	16.4	X	145.99851	190.21589	142.57001	3.74100	0.1699868	0.20840058	2.8175401	21	—	—
252035	2000	QC <sub>54</sub>	15.9	X	110.51262	1.60091	351.86810	8.77934	0.3256221	0.20414716	2.8565412	21	1 6.4	20.0
252036	2000	QX <sub>72</sub>	17.8	X	170.16907	80.55402	250.59289	1.28267	0.2048749	0.30533586	2.1841586	21	1 5.3	21.0
252037	2000	QW <sub>109</sub>	16.3	X	5.83295	120.66819	163.09845	1.59135	0.2736076	0.19083486	2.9878876	21	12 5.5	19.2
252038	2000	QR <sub>117</sub>	18.2	X	77.87228	39.47292	329.85425	19.70411	0.1387540	0.39122793	1.8514677	21	—	—
252039	2000	QA <sub>120</sub>	17.1	X	132.37908	25.11295	309.05825	3.93693	0.2388847	0.29991652	2.2103911	21	—	—
252040	2000	QG <sub>125</sub>	16.8	X	178.29956	22.05949	272.46697	5.15331	0.1592727	0.30299852	2.1953767	21	—	—
252041	2000	QP <sub>175</sub>	16.1	X	287.58675	29.00750	280.43897	5.92758	0.1371457	0.22352118	2.6889966	21	4 9.9	19.9
252042	2000	QA <sub>217</sub>	16.9	X	99.03039	278.58017	26.43844	7.69935	0.1329798	0.29206479	2.2498311	21	—	—
252043	2000	QB <sub>223</sub>	17.3	X	148.09394	333.08984	20.54257	5.30529	0.2075609	0.30469863	2.1872028	21	1 12.6	20.1
252044	2000	QM <sub>240</sub>	16.5	X	90.60468	77.29706	343.73205	5.06240	0.0048712	0.21000878	2.8031376	21	1 17.8	20.3
252045	2000	RM <sub>15</sub>	15.1	X	184.53319	69.65828	227.98073	7.18446	0.2197065	0.20929737	2.8094860	21	—	—
252046	2000	RP <sub>24</sub>	16.8	X	139.38633	62.80821	247.76335	5.28816	0.1321802	0.29837279	2.2180087	21	—	—
252047	2000	RU <sub>89</sub>	16.6	X	148.03462	66.81530	282.97757	3.64322	0.1751013	0.20867367	2.8150814	21	1 19.7	20.8
252048	2000	RU <sub>90</sub>	17.4	X	133.99609	66.24782	266.83892	4.07279	0.2261660	0.29944955	2.2126885	21	—	—
252049	2000	SS <sub>10</sub>	17.5	X	46.95259	65.23320	341.10410	4.01333	0.1619764	0.29438417	2.2379983	21	—	—
252050	2000	SZ <sub>10</sub>	17.7	X	64.51211	158.82034	198.72067	22.73260	0.2875438	0.29345315	2.2427294	21	—	—
252051	2000	SA <sub>13</sub>	17.5	X	140.29478	350.08931	341.16580	5.70419	0.2115712	0.30146426	2.2028191	21	—	—
252052	2000	SF <sub>17</sub>	15.8	X	114.58143	71.99075	276.47102	5.22264	0.0762049	0.20315681	2.8658170	21	—	—
252053	2000	SN <sub>17</sub>	16.9	X	46.20062	76.51917	340.76135	5.91446	0.1448604	0.29622447	2.2287196	21	—	—
252054	2000	SV <sub>18</sub>	16.9	X	90.55015	96.58684	281.24949	6.70906	0.1381097	0.29800835	2.2198166	21	—	—
252055	2000	SD <sub>29</sub>	16.0	X	105.10422	64.31530	288.62297	9.36955	0.1386756	0.20244738	2.8725082	21	—	—
252056	2000	SL <sub>36</sub>	16.1	X	111.47436	276.24455	35.43989	7.98735	0.3088002	0.20089733	2.8872648	21	—	—
252057	2000	SR <sub>41</sub>	17.2	X	59.65764	311.87105	64.08583	4.91961	0.1683647	0.29324745	2.2437780	21	—	—
252058	2000	SE <sub>51</sub>	16.9	X	60.50426	78.11706	336.29869	5.07603	0.1576036	0.29760910	2.2218014	21	—	—
252059	2000	SD <sub>53</sub>	16.7	X	59.21513	82.77708	336.03397	5.84993	0.3257997	0.20213968	2.8754225	21	1 4.4	19.0
252060	2000	SP <sub>54</sub>	16.4	X	131.07521	146.37819	256.55244	0.98546	0.2307890	0.21074636	2.7965934	21	3 12.9	20.8
252061	2000	SV <sub>81</sub>	17.2	X	88.68205	312.50616	33.97562	6.51939	0.1403011	0.29383563	2.2407827	21	—	—
252062	2000	SX <sub>93</sub>	17.1	X	177.57833	87.01467	294.68220	4.75369	0.1270809	0.31035803	2.1605321	21	3 9.9	20.1
252063	2000	SC <sub>96</sub>	17.1	X	187.69742	359.43855	290.36418	3.22664	0.1713375	0.30201767	2.2001273	21	—	—
252064	2000	SX <sub>127</sub>	17.3	X	98.41124	348.81726	40.13465	4.43388	0.1755348	0.29864769	2.2166474	21	—	—
252065	2000	SY <sub>128</sub>	16.1	X	237.83452	58.37241	278.45447	4.89440	0.0759412	0.21837472	2.7310803	21	3 26.6	20.3
252066	2000	ST <sub>139</sub>	16.8	X	44.88747	70.75975	334.74427	6.19847	0.0999703	0.29410720	2.2394031	21	—	—
252067	2000	SD <sub>141</sub>	16.9	X	353.81717	69.89810	322.84735	4.08638	0.1501780	0.28576800	2.2827604	21	12 19.7	19.1
252068	2000	SW <sub>149</sub>	17.0	X	150.00908	115.01178	198.49102	7.17441	0.2665607	0.29923211	2.2137602	21	—	—
252069	2000	SR <sub>164</sub>	16.7	X	9.55271	189.52990	192.07558	22.74674	0.1477097	0.28736191	2.2743114	21	12 28.1	19.8
252070	2000	SN <sub>196</sub>	17.4	X	16.64424	238.64150	187.37523	2.96021	0.1191247	0.29403116	2.2397892	21	—	—
252071	2000	SM <sub>208</sub>	16.9	X	84.60699									

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252081 2000 <i>SD</i> <sub>342</sub>	17.6	X	12.15546	234.51536	176.99804	2.77225	0.1789073	0.29117469	2.2544138	21	—	—
252082 2000 <i>SH</i> <sub>370</sub>	15.6	X	134.81649	17.87394	50.97274	8.73216	0.2063235	0.21427474	2.7658082	21	4 16.9	19.9
252083 2000 <i>TV</i> <sub>8</sub>	18.3	X	87.34802	335.32638	6.36386	3.06962	0.2288934	0.29393789	2.2402630	21	—	—
252084 2000 <i>TR</i> <sub>17</sub>	17.1	X	79.90263	28.61299	32.34256	8.26208	0.0630533	0.29965264	2.2116886	21	—	—
252085 2000 <i>TZ</i> <sub>37</sub>	16.0	X	179.10213	280.52830	39.19240	7.95507	0.2171561	0.21049034	2.7988606	21	1 16.9	20.8
252086 2000 <i>TZ</i> <sub>51</sub>	16.3	X	128.67218	147.41326	211.53022	1.34274	0.1011894	0.20452874	2.8529872	21	1 1.8	20.3
252087 2000 <i>UK</i> <sub>3</sub>	16.6	X	125.89248	268.12717	56.65684	9.43556	0.2867654	0.29631429	2.2282692	21	—	—
252088 2000 <i>UG</i> <sub>28</sub>	17.0	X	11.76658	49.31009	45.87149	6.05621	0.0884174	0.29438894	2.2379741	21	—	—
252089 2000 <i>UQ</i> <sub>29</sub>	16.3	X	342.08563	248.17190	223.83558	22.70425	0.2723189	0.28824511	2.2696632	21	—	—
252090 2000 <i>UZ</i> <sub>29</sub>	16.9	X	135.61697	104.51939	238.53103	6.12438	0.2435710	0.29889337	2.2154325	21	—	—
252091 2000 <i>UP</i> <sub>30</sub>	17.1	X	65.10338	118.93330	194.90859	9.36811	0.7617886	0.29183251	2.2510248	21	—	—
252092 2000 <i>UL</i> <sub>34</sub>	17.6	X	25.97683	186.35088	209.03931	3.11260	0.1736200	0.28933692	2.2639499	21	—	—
252093 2000 <i>UN</i> <sub>36</sub>	17.4	X	82.70833	217.20317	114.41884	0.80298	0.2501087	0.29121599	2.2542007	21	—	—
252094 2000 <i>UB</i> <sub>51</sub>	17.1	X	47.53731	15.03814	34.30406	5.48740	0.1419476	0.29267737	2.2466907	21	—	—
252095 2000 <i>UX</i> <sub>58</sub>	16.7	X	97.17299	139.00193	230.95044	5.40973	0.1436985	0.29689020	2.2253866	21	—	—
252096 2000 <i>UK</i> <sub>67</sub>	17.6	X	24.15995	55.20834	2.63123	3.81806	0.1240435	0.29132429	2.2536419	21	—	—
252097 2000 <i>UW</i> <sub>71</sub>	16.8	X	54.94623	175.75693	248.17239	4.57683	0.1160461	0.29542706	2.2327283	21	—	—
252098 2000 <i>UT</i> <sub>91</sub>	15.9	X	117.05069	81.38518	287.01399	4.73148	0.0821274	0.20300349	2.8672598	21	—	—
252099 2000 <i>UP</i> <sub>92</sub>	17.3	X	83.44510	27.93716	338.12698	4.65315	0.1292836	0.29452724	2.2372735	21	—	—
252100 2000 <i>UQ</i> <sub>95</sub>	15.6	X	329.50079	180.27604	248.50986	9.74088	0.0970808	0.18934115	3.0035812	21	11 27.5	19.2
252101 2000 <i>VV</i> <sub>5</sub>	16.0	X	52.07583	191.47197	224.61451	10.27785	0.1128315	0.19935096	2.9021765	21	—	—
252102 2000 <i>VF</i> <sub>10</sub>	17.5	X	57.74333	340.19391	60.29340	4.24153	0.1610477	0.29354026	2.2422856	21	—	—
252103 2000 <i>VN</i> <sub>40</sub>	16.6	X	51.68248	37.71852	340.00385	5.38732	0.2413561	0.19561803	2.9389811	21	—	—
252104 2000 <i>VD</i> <sub>53</sub>	17.1	X	97.38541	99.49196	273.36408	6.14353	0.1155424	0.29529305	2.2334037	21	—	—
252105 2000 <i>VU</i> <sub>55</sub>	15.5	X	288.86960	173.26579	245.91149	13.89029	0.2314918	0.18050693	3.1007979	21	8 17.5	19.9
252106 2000 <i>WC</i> <sub>8</sub>	17.0	X	16.07203	326.78435	106.13924	6.13519	0.2208973	0.28912059	2.2650791	21	—	—
252107 2000 <i>WC</i> <sub>11</sub>	15.7	X	329.65618	172.61463	256.15673	7.92308	0.1072366	0.18810408	3.0167355	21	11 27.1	19.3
252108 2000 <i>WU</i> <sub>17</sub>	15.4	X	29.54764	161.77886	250.42018	10.56873	0.0910654	0.19337552	2.9616590	21	—	—
252109 2000 <i>WB</i> <sub>19</sub>	16.5	X	14.04168	331.40598	71.19935	7.68451	0.1454584	0.28592364	2.2819319	21	—	—
252110 2000 <i>WR</i> <sub>20</sub>	15.7	X	97.34767	89.96554	232.96228	10.95243	0.0611102	0.19320241	2.9634278	21	12 30.5	20.2
252111 2000 <i>WB</i> <sub>24</sub>	15.6	X	40.38410	328.83593	47.72522	4.33423	0.1709257	0.19149883	2.9809770	21	—	—
252112 2000 <i>WU</i> <sub>26</sub>	16.9	X	290.41620	257.83602	201.86772	4.97404	0.1167491	0.28155597	2.3054705	21	11 26.2	19.0
252113 2000 <i>WT</i> <sub>35</sub>	16.5	X	20.38575	247.87280	150.71538	5.48492	0.2537025	0.19071540	2.9891351	21	—	—
252114 2000 <i>WQ</i> <sub>37</sub>	17.0	X	7.74933	339.81623	99.58758	6.74715	0.1320180	0.28974179	2.2618404	21	—	—
252115 2000 <i>WG</i> <sub>45</sub>	17.2	X	121.49405	273.70225	77.13540	7.77435	0.1698874	0.29618988	2.2288931	21	—	—
252116 2000 <i>WD</i> <sub>46</sub>	16.9	X	98.81641	178.87383	211.94321	4.68709	0.0945879	0.29660420	2.2268170	21	—	—
252117 2000 <i>WA</i> <sub>55</sub>	16.0	X	316.58437	169.42706	289.27252	22.62975	0.2013762	0.28102200	2.3083899	21	—	—
252118 2000 <i>WU</i> <sub>65</sub>	16.4	X	59.87628	85.82903	248.07662	1.47743	0.0476030	0.18817242	3.0160051	21	11 29.3	20.6
252119 2000 <i>WS</i> <sub>74</sub>	15.6	X	344.42325	52.42905	42.67181	9.76328	0.0539515	0.19399295	2.9553715	21	—	—
252120 2000 <i>WM</i> <sub>76</sub>	17.3	X	103.26811	183.18268	279.19927	2.79875	0.0545010	0.30590406	2.1814531	21	3 17.7	19.6
252121 2000 <i>WR</i> <sub>94</sub>	16.0	X	313.44852	54.95067	35.15457	2.90584	0.2111300	0.18693148	3.0293382	21	11 20.3	19.2
252122 2000 <i>WB</i> <sub>107</sub>	15.9	X	300.39588	103.18053	65.85901	23.92593	0.2170238	0.28989216	2.2610582	21	—	—
252123 2000 <i>WU</i> <sub>118</sub>	15.4	X	16.10607	22.46159	42.34651	11.04675	0.1058997	0.19278732	2.9676800	21	—	—
252124 2000 <i>WG</i> <sub>127</sub>	16.4	X	45.60398	328.84823	60.79685	16.63151	0.2700393	0.19443051	2.9509358	21	—	—
252125 2000 <i>WK</i> <sub>147</sub>	17.0	X	164.26999	260.43801	49.88897	4.97028	0.2067388	0.29804168	2.2196511	21	—	—
252126 2000 <i>WX</i> <sub>155</sub>	16.3	X	74.99523	342.74821	24.36954	11.21192	0.3341813	0.19699692	2.9252507	21	—	—
252127 2000 <i>WN</i> <sub>173</sub>	15.4	X	326.89497	227.90518	261.75876	24.15314	0.2191164	0.28413522	2.2914972	21	—	—
252128 2000 <i>XC</i> <sub>14</sub>	17.0	X	328.56241	203.36954	250.83629	5.61092	0.0745949	0.28518940	2.2858469	21	—	—
252129 2000 <i>XZ</i> <sub>29</sub>	15.1	X	257.36607	124.66085	325.66597	11.70610	0.2260451	0.17596210	3.1539632	21	8 24.6	19.7
252130 2000 <i>XG</i> <sub>52</sub>	15.8	X	324.97217	13.93254	55.34988	11.74961	0.2021096	0.18514250	3.0488213	21	11 16.3	18.8
252131 2000 <i>XD</i> <sub>54</sub>	15.0	X	195.77496	253.92135	246.37958	15.11594	0.0352464	0.17781108	3.1320607	21	9 1.4	19.9
252132 2000 <i>YU</i> <sub>8</sub>	15.8	X	8.31062	319.56100	108.30084	11.61776	0.2298072	0.19051518	2.9912289	21	—	—
252133 2000 <i>YZ</i> <sub>8</sub>	17.1	X	5.82665	188.05617	258.90875	19.20006	0.0603909	0.38557397	1.8695234	21	—	—
252134 2000 <i>YR</i> <sub>13</sub>	15.8	X	86.20128	135.87719	276.50158	9.22985	0.0887372	0.20018646	2.8940959	21	1 11.9	19.5
252135 2000 <i>YE</i> <sub>19</sub>	16.6	X	349.90971	50.38726	9.03360	1.99552	0.0975183	0.18810548	3.0167206	21	12 16.8	20.3
252136 2000 <i>YG</i> <sub>33</sub>	17.7	X	60.86577	138.01152	211.35253	1.93875	0.2357305	0.28450883	2.2894907	21	—	—
252137 2000 <i>YA</i> <sub>37</sub>	15.4	X	274.78798	13.00017	113.62611	12.94548	0.1485869	0.18417879	3.0594473	21	11 16.1	19.6
252138 2000 <i>YU</i> <sub>43</sub>	15.2	X	315.45867	178.73564	287.91241	9.34835	0.1738305	0.18736820	3.0246291	21	12 20.1	18.6
252139 2000 <i>YX</i> <sub>47</sub>	14.9	X	351.46746	304.93388	126.29667	10.92565	0.0470574	0.18654712	3.0334978	21	12 30.2	19.0
252140 2000 <i>YK</i> <sub>101</sub>	15.0	X	30.94777	323.90782	111.80930	17.95151	0.2763339	0.19565279	2.9386330	21	—	—
252141 2000 <i>YW</i> <sub>106</sub>	15.1	X	311.00869	129.32332	251.92873	15.46815	0.2395657	0.17909609	3.1170611	21	8 1.2	19.1
252142 2000 <i>YA</i> <sub>127</sub>	15.2	X	303.08956	34.87495	71.12226	11.89126	0.1318270	0.18348406	3.0671651	21	11 30.1	19.0
252143 2000 <i>YK</i> <sub>141</sub>	16.5	X	45.88165	125.92191	300.57816	5.17828	0.0843819	0.20133765	2.8830536	21	—	—
252144 2001 <i>AR</i> <sub>33</sub>	16.8	X	301.22340	44.66062	61.43424	4.63300	0.1109902	0.28043553	2.3116071	21	12 25.1	18.8
252145 2001 <i>AV</i> <sub>46</sub>	17.6	X	351.81844	67.12202	359.97726	19.66283	0.1009839	0.37908769	1.8907884	21	—	—
252146 2001 <i>AE</i> <sub>50</sub>	17.3	X	45.36749	75.03451	346.64032	20.00173	0.0898512	0.38369086	1.8756354	21	—	—
252147 2001 <i>BP</i>	15.1	X	223.04859	80.84919	81.90622	6.02642	0.1159625	0.17813246	3.1282924	21	10 30.8	19.9
252148 2001 <i>BQ</i> <sub>1</sub>	17.5	X	54.73235	185.02536	222.30763	1.55418	0.1651800	0.28910048	2.2651841	21	—	—
252149 2001 <i>BQ</i> <sub>7</sub>	15.5	X	307.14945	16.23581	74.08955	4.64271	0.2020130	0.18344349	3.0676174	21	11 9.7	18.9
252150 2001 <i>BT</i> <sub>10</sub>	16.5	X	107.11703	73.10533	298.61564	2.68932	0.2520365	0.29270083	2.2465707	21	—	—
252151 2001 <i>BZ</i> <sub>14</sub>	15.5	X	309.19315	308.99932	133.82739	12.01365	0.2461679	0.18155599	3.0888418	21	11 1.8	19.0
252152 2001 <i>BJ</i> <sub>17</sub>	15.7	X	270.89178	217.24503	246.20553	7.03888	0.2560414	0.18027405	3.1034677	21	9 18.8	20.2
252153 2001 <i>BT</i> <sub>17</sub>	17.4	X	211.85785	140.02303	357.16706	2.46917	0.1183337	0.27				

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
252161 2001 CQ <sub>22</sub>	15.1	X	295.82083	322.93866	125.36483	22.22632	0.1123875	0.18004840	3.1060603	21	11 7.0	19.6
252162 2001 CN <sub>23</sub>	17.5	X	266.71185	152.52761	325.27379	1.68464	0.1832816	0.27570259	2.3379873	21	10 29.3	20.0
252163 2001 CM <sub>31</sub>	17.7	X	53.00795	311.90460	269.09504	0.48555	0.1277394	0.25775389	2.4453023	21	7 10.9	20.3
252164 2001 CU <sub>31</sub>	16.0	X	150.30849	183.74307	24.99859	24.41403	0.1872077	0.26811925	2.3818663	21	10 20.9	19.9
252165 2001 CS <sub>34</sub>	15.4	X	315.49534	38.40321	62.37699	14.20587	0.3183063	0.18476236	3.0530017	21	11 28.2	17.8
252166 2001 CP <sub>35</sub>	17.0	X	300.87548	75.23038	49.52558	20.45464	0.1346853	0.37430165	1.9068721	21	—	—
252167 2001 CF <sub>37</sub>	17.4	X	190.26029	47.05098	129.00079	2.71762	0.1209776	0.27006969	2.3703846	21	10 22.4	20.9
252168 2001 CC <sub>42</sub>	14.8	X	213.52131	51.44195	80.29457	15.86700	0.1704493	0.17151645	3.2082303	21	9 15.2	20.2
252169 2001 DH <sub>2</sub>	15.4	X	237.41172	2.43094	148.20666	6.13089	0.1054185	0.17783051	3.1318326	21	11 2.3	20.0
252170 2001 DN <sub>3</sub>	15.9	X	271.90836	146.48996	350.17947	8.82732	0.2455115	0.18354812	3.0664515	21	11 2.4	20.0
252171 2001 DD <sub>9</sub>	17.6	X	301.38756	114.32421	341.33657	20.11196	0.0740365	0.37198191	1.9147916	21	—	—
252172 2001 DG <sub>10</sub>	16.9	X	245.01377	118.81014	21.88748	5.65350	0.0682448	0.27617648	2.3353121	21	11 16.7	19.7
252173 2001 DL <sub>10</sub>	12.4	X	309.24210	307.65458	129.57995	13.90783	0.1224750	0.08309115	5.2011519	21	10 23.4	19.0
252174 2001 DM <sub>15</sub>	16.9	X	287.67854	12.13664	89.92725	4.98481	0.1760084	0.27581239	2.3373668	21	11 15.9	18.9
252175 2001 DH <sub>21</sub>	15.3	X	229.17524	121.54014	54.13468	9.76972	0.1661754	0.17767452	3.1336653	21	11 14.1	19.9
252176 2001 DA <sub>22</sub>	14.8	X	222.97091	113.26823	64.70334	10.84559	0.1783737	0.17694618	3.1422585	21	11 10.6	19.8
252177 2001 DE <sub>29</sub>	16.9	X	137.92178	174.18966	22.43846	2.26570	0.1544888	0.26449186	2.4035944	21	9 24.9	20.5
252178 2001 DM <sub>59</sub>	15.2	X	231.58339	175.38020	338.42244	14.71351	0.1882849	0.17772750	3.1330425	21	10 12.9	20.4
252179 2001 DN <sub>60</sub>	13.1	X	317.69077	119.91889	151.75655	4.48584	0.1102490	0.08364770	5.1780557	21	10 27.1	19.6
252180 2001 DH <sub>76</sub>	17.1	X	263.46002	286.29963	380.79754	4.85032	0.1349440	0.27210712	2.3585375	21	10 18.2	19.7
252181 2001 DW <sub>80</sub>	15.9	X	266.45192	71.27777	15.39998	4.57160	0.1172825	0.17394838	3.1782578	21	9 16.2	20.2
252182 2001 DU <sub>81</sub>	16.0	X	241.68132	191.87073	332.75213	5.62298	0.0838783	0.18080263	3.0974161	21	11 23.6	20.4
252183 2001 DS <sub>90</sub>	15.4	X	259.86389	20.14976	125.32923	1.94738	0.1287985	0.18140133	3.0905972	21	11 18.2	19.7
252184 2001 DD <sub>91</sub>	17.0	X	312.57921	301.56792	148.51736	7.09087	0.0714568	0.27758543	2.3274031	21	12 21.9	19.6
252185 2001 DD <sub>92</sub>	16.7	X	185.47041	332.19872	196.48249	10.38438	0.1368069	0.26831415	2.3807127	21	10 5.1	20.1
252186 2001 DG <sub>106</sub>	15.6	X	293.21031	264.39783	142.46971	8.82460	0.0980402	0.17216417	3.2001785	21	9 4.2	19.8
252187 2001 ER <sub>1</sub>	17.0	X	276.62982	125.08479	57.48274	7.22550	0.2363733	0.28161658	2.3051287	21	—	—
252188 2001 EJ <sub>4</sub>	16.0	X	284.81725	94.51652	51.45646	3.24069	0.2421378	0.18326571	3.0696009	21	12 6.5	19.6
252189 2001 EJ <sub>14</sub>	15.0	X	240.87991	116.32948	106.79024	11.88464	0.1080148	0.18341594	3.0679245	21	—	—
252190 2001 EM <sub>17</sub>	15.9	X	233.43097	121.85339	63.23346	23.92302	0.1804651	0.27377071	2.3489732	21	12 11.6	19.1
252191 2001 EY <sub>20</sub>	17.0	X	340.95636	263.74613	261.37101	3.79105	0.1252435	0.28827000	2.2695325	21	—	—
252192 2001 FJ <sub>1</sub>	15.9	X	312.27119	264.27491	186.26697	20.62657	0.3660459	0.27761318	2.3272480	21	12 19.6	17.2
252193 2001 FB <sub>9</sub>	17.3	X	275.45410	85.73231	345.98238	18.89836	0.0758161	0.36297360	1.9463429	21	9 29.9	19.2
252194 2001 FX <sub>18</sub>	16.8	X	70.77231	285.93176	307.78770	1.61192	0.1553469	0.25725183	2.4484828	21	8 29.7	19.9
252195 2001 FP <sub>31</sub>	15.6	X	172.81261	150.88374	48.24892	6.44992	0.0951480	0.17155615	3.2077353	21	10 23.3	20.5
252196 2001 FA <sub>52</sub>	16.8	X	263.80339	295.03005	229.70238	5.58355	0.1374804	0.27657147	2.3330881	21	—	—
252197 2001 FW <sub>59</sub>	15.3	X	307.76776	280.54578	166.12240	25.85170	0.2340156	0.17926658	3.1150845	21	11 5.2	19.2
252198 2001 FK <sub>65</sub>	16.8	X	168.55675	65.51550	95.92898	3.44174	0.1382476	0.26331059	2.4107777	21	9 10.4	20.5
252199 2001 FK <sub>73</sub>	15.4	X	254.19813	58.97262	97.78389	4.54767	0.1962695	0.17812596	3.1283685	21	11 15.7	19.8
252200 2001 FP <sub>83</sub>	17.6	X	204.55334	188.44508	348.93459	1.63096	0.1799404	0.27100932	2.3649025	21	11 1.1	21.2
252201 2001 FJ <sub>84</sub>	17.6	X	216.72534	28.12591	165.40143	4.15686	0.1667458	0.27386327	2.3484439	21	12 7.8	20.8
252202 2001 FM <sub>95</sub>	16.4	X	118.72922	163.52493	46.79003	7.61370	0.1682689	0.26154401	2.4216211	21	9 27.3	20.1
252203 2001 FG <sub>107</sub>	15.1	X	218.57117	83.99478	43.33768	6.32821	0.1073146	0.17026183	3.2239714	21	9 14.6	20.0
252204 2001 FN <sub>111</sub>	17.0	X	134.10258	260.46845	276.61714	2.38417	0.1150249	0.26019733	2.4299695	21	8 22.8	20.6
252205 2001 FX <sub>118</sub>	16.6	X	127.10401	245.20322	279.28847	8.39173	0.1075032	0.25911099	2.4367567	21	7 27.7	20.0
252206 2001 FE <sub>133</sub>	16.5	X	179.65198	156.85444	45.75515	5.74328	0.1429740	0.26810425	2.3819552	21	11 8.8	20.1
252207 2001 FK <sub>137</sub>	15.3	X	258.09309	108.00034	49.18630	16.95606	0.1992181	0.17735240	3.1374586	21	11 18.1	19.7
252208 2001 FP <sub>168</sub>	17.7	X	240.83111	96.46039	69.12324	2.97407	0.1565856	0.27366757	2.3495633	21	12 1.7	20.7
252209 2001 FU <sub>168</sub>	14.7	X	265.31811	302.55630	201.14726	15.75172	0.2120742	0.17908763	3.1171593	21	11 11.4	19.1
252210 2001 FC <sub>180</sub>	16.3	X	296.58510	10.25899	162.61855	24.16503	0.1824611	0.28228066	2.3015229	21	—	—
252211 2001 FF <sub>191</sub>	16.6	X	114.37996	186.51127	61.24016	3.21438	0.1824033	0.26367369	2.4085640	21	11 7.4	20.4
252212 2001 HM <sub>18</sub>	16.6	X	282.30677	82.77833	41.82998	20.74031	0.2831312	0.27625403	2.3348750	21	11 16.9	18.5
252213 2001 HE <sub>31</sub>	17.0	X	140.97437	266.58529	271.57337	1.25603	0.1537745	0.25946264	2.4345544	21	9 2.7	20.9
252214 2001 HR <sub>46</sub>	16.8	X	346.78623	191.86699	35.12799	7.70789	0.0773555	0.29203089	2.2500521	21	3 18.4	19.1
252215 2001 HH <sub>61</sub>	17.0	X	103.44843	341.82732	230.22137	1.72020	0.1742385	0.25691121	2.4506465	21	9 10.2	20.7
252216 2001 KH	17.3	X	242.64221	279.65487	229.90011	18.71888	0.0942236	0.36577497	1.9363925	21	12 12.6	19.1
252217 2001 KK <sub>23</sub>	16.8	X	262.00000	106.68894	217.36205	3.81851	0.3131382	0.23804797	2.5784560	21	3 15.7	21.4
252218 2001 KO <sub>25</sub>	17.1	X	51.83346	170.44831	81.06502	1.60571	0.1415792	0.25308676	2.4752730	21	8 26.1	19.8
252219 2001 KF <sub>74</sub>	15.3	X	251.37996	103.97727	107.29619	10.90371	0.1766049	0.17802336	3.1295704	21	—	—
252220 2001 MQ <sub>11</sub>	15.5	X	275.13492	34.73526	272.29459	12.14423	0.2681730	0.23309903	2.6148236	21	3 4.9	20.1
252221 2001 ME <sub>16</sub>	15.8	X	276.73626	50.10168	305.26453	12.28602	0.0798622	0.24223971	2.5486243	21	6 6.5	19.3
252222 2001 NE <sub>5</sub>	16.6	X	188.20309	302.70481	51.13305	2.60168	0.2463590	0.22781142	2.6551296	21	3 2.9	21.2
252223 2001 NX <sub>5</sub>	16.7	X	240.85640	280.73723	39.33610	4.14912	0.3107343	0.23177937	2.6247394	21	2 27.9	21.4
252224 2001 NX <sub>16</sub>	14.6	X	152.50585	352.50785	0.89744	6.20465	0.2399046	0.12338353	3.9960530	21	2 14.6	21.1
252225 2001 ON <sub>2</sub>	16.5	X	179.51213	104.08297	238.04729	10.21711	0.2913158	0.22445066	2.6815678	21	2 8.0	21.5
252226 2001 OJ <sub>20</sub>	16.3	X	162.80047	130.16831	228.77596	12.02518	0.2715561	0.22241504	2.6979047	21	2 13.8	21.2
252227 2001 OV <sub>27</sub>	16.3	X	249.66587	338.98039	40.30276	6.83820	0.2565936	0.23858562	2.5745809	21	5 16.8	20.4
252228 2001 ON <sub>63</sub>	16.3	X	200.56899	64.94884	293.94027	11.19055	0.2712419	0.22930826	2.6435625	21	3 11.3	21.3
252229 2001 OK <sub>75</sub>	16.2	X	247.52747	213.64583	103.10823	14.95800	0.2135104	0.23229610	2.6208456	21	3 9.4	20.8
252230 2001 OB <sub>113</sub>	15.8	X	192.98597	327.56675	176.13371	8.70565	0.2009214	0.23282947	2.6168415	21	5 5.3	20.3
252231 2001 OY <sub>113</sub>	16.9	X	200.75035	326.85536	28.03200	4.95760	0.1811124	0.22942656	2.6426537	21	3 13.1	21.3
252232 2001 PX <sub>2</sub>	15.8	X	240.36360	181.33849	180.78675	8.10626	0.1844493	0.23489988	2.6014422	21	4 24.9	20.0
252233 2001 PN <sub>11</sub>	16.3	X	261.82722	191.08813	123.51430	14.64280	0.1871582	0.23388901	2.6089325	21		

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
252241 2001 PD <sub>65</sub>	16.1	X	240.23202	322.66070	18.99422	5.25545	0.1379066	0.23308412	2.6149352	21	4 1.4	20.1
252242 2001 QC <sub>3</sub>	16.2	X	293.32336	127.42369	150.85986	7.80900	0.1814036	0.23469831	2.6029315	21	3 4.2	19.9
252243 2001 QL <sub>56</sub>	16.1	X	200.73677	20.02016	353.75826	6.09149	0.1883863	0.23059778	2.6336979	21	4 1.9	20.5
252244 2001 QZ <sub>60</sub>	16.2	X	211.86577	331.77873	358.70762	8.67899	0.3878562	0.22738716	2.6584312	21	2 21.8	21.5
252245 2001 QJ <sub>62</sub>	14.8	X	174.38750	46.19578	297.90003	3.79493	0.2470984	0.12314661	4.0011767	21	2 17.9	21.4
252246 2001 QB <sub>82</sub>	15.9	X	169.84090	80.22570	304.32063	11.58893	0.2842286	0.22466213	2.6798849	21	3 20.1	20.8
252247 2001 QO <sub>88</sub>	17.5	X	311.22827	358.89977	308.28570	1.06028	0.1075330	0.23905028	2.5712435	21	5 15.6	20.7
252248 2001 QQ <sub>89</sub>	16.0	X	125.77357	354.66664	51.56352	12.37686	0.1730970	0.22394983	2.6855643	21	3 10.5	20.1
252249 2001 QU <sub>103</sub>	15.9	X	216.38805	259.80111	121.33354	9.51293	0.2587295	0.23214579	2.6219768	21	4 27.4	20.7
252250 2001 QG <sub>107</sub>	15.3	X	243.02870	131.53640	268.56823	28.83877	0.1861977	0.23814744	2.5777380	21	6 13.9	19.4
252251 2001 QY <sub>109</sub>	16.1	X	233.80968	273.95255	73.35545	4.44812	0.1304197	0.23224475	2.6212319	21	4 4.3	20.2
252252 2001 QE <sub>114</sub>	16.3	X	228.88923	129.76770	245.50575	4.46493	0.2764124	0.23319946	2.6140729	21	4 23.9	21.0
252253 2001 QX <sub>125</sub>	16.1	X	233.90934	305.99796	357.18802	12.64136	0.1672626	0.22706638	2.6609343	21	2 10.8	20.5
252254 2001 QY <sub>130</sub>	16.1	X	195.12417	86.00446	264.92694	5.23838	0.2884240	0.22646188	2.6656675	21	3 1.8	21.0
252255 2001 QF <sub>135</sub>	16.0	X	102.34852	80.94137	319.89929	11.94994	0.1805658	0.21581528	2.7526305	21	1 31.0	19.5
252256 2001 QQ <sub>150</sub>	16.1	X	224.77270	109.26282	207.44864	27.83994	0.3598192	0.22941383	2.6427515	21	2 5.2	21.7
252257 2001 QO <sub>151</sub>	15.2	X	229.01668	19.02597	302.71461	29.79266	0.1628671	0.22487841	2.6781663	21	2 14.2	20.0
252258 2001 QB <sub>153</sub>	16.8	X	214.16622	160.74995	152.48451	4.20216	0.2037311	0.22513603	2.6761229	21	2 1.6	21.4
252259 2001 QG <sub>158</sub>	16.2	X	212.55302	191.58410	162.43483	12.76415	0.1864114	0.22956973	2.6415548	21	3 21.8	20.6
252260 2001 QY <sub>161</sub>	16.8	X	271.16545	235.63691	84.18618	3.30766	0.1935258	0.23461750	2.6035291	21	4 1.2	20.7
252261 2001 QG <sub>162</sub>	16.0	X	157.30017	222.57336	142.08969	8.60704	0.0685216	0.22431158	2.6826762	21	2 2.7	19.9
252262 2001 QO <sub>169</sub>	16.8	X	115.87420	27.00982	327.17830	9.52370	0.1759448	0.21554552	2.7549267	21	—	—
252263 2001 QU <sub>180</sub>	15.8	X	226.01730	317.64882	56.66887	12.89892	0.1936727	0.23354670	2.6114811	21	4 27.7	20.1
252264 2001 QQ <sub>187</sub>	15.5	X	209.93640	140.28505	284.82018	15.79821	0.2409549	0.23459359	2.6037061	21	6 12.1	20.1
252265 2001 QF <sub>189</sub>	16.1	X	103.43361	193.34316	216.86199	16.48000	0.3198094	0.21779047	2.7359625	21	2 19.6	20.2
252266 2001 QS <sub>190</sub>	15.7	X	221.20226	1.09521	275.71001	12.82600	0.1356200	0.22122092	2.7076046	21	—	—
252267 2001 QD <sub>191</sub>	15.8	X	116.78620	239.71917	221.38725	21.23037	0.0829023	0.22895201	2.6463040	21	4 18.6	19.4
252268 2001 QF <sub>192</sub>	16.2	X	252.14367	84.78579	223.11688	13.84791	0.1501867	0.22893324	2.6464487	21	2 24.5	20.7
252269 2001 QQ <sub>192</sub>	16.6	X	197.36884	141.68556	198.56768	16.79236	0.2336032	0.22493143	2.6777455	21	2 16.9	21.5
252270 2001 QR <sub>195</sub>	16.0	X	120.19902	143.71601	249.27335	14.77284	0.2164018	0.21892517	2.7265006	21	2 8.9	20.2
252271 2001 QK <sub>200</sub>	16.2	X	208.16840	124.33980	262.75831	11.97219	0.2714799	0.22905784	2.6454889	21	4 21.1	21.1
252272 2001 QW <sub>220</sub>	16.0	X	226.70817	85.38600	263.69711	7.42638	0.1283950	0.23269442	2.6178539	21	3 24.7	20.3
252273 2001 QK <sub>221</sub>	16.1	X	200.67058	64.09438	278.21651	6.63259	0.2401893	0.22753066	2.6573133	21	2 22.7	20.9
252274 2001 QR <sub>226</sub>	14.4	X	183.91521	130.87753	216.66914	8.93785	0.1509246	0.12387212	3.9855385	21	2 24.4	20.8
252275 2001 QA <sub>230</sub>	16.0	X	225.51001	341.05312	328.06724	12.62921	0.1572191	0.22560452	2.6724167	21	2 8.0	20.2
252276 2001 QD <sub>234</sub>	17.0	X	203.58063	209.30340	169.84990	2.68142	0.2039589	0.22967159	2.6407738	21	4 12.7	21.5
252277 2001 QD <sub>235</sub>	16.0	X	121.47812	72.87563	356.08336	12.57598	0.2039095	0.22316981	2.6918173	21	3 29.3	19.9
252278 2001 QN <sub>237</sub>	16.1	X	91.70005	22.37643	0.03181	7.95502	0.2279956	0.21374023	2.7704174	21	—	—
252279 2001 QO <sub>242</sub>	16.5	X	178.29524	187.05377	172.45350	13.87341	0.1860513	0.22354225	2.6888277	21	2 25.6	20.9
252280 2001 QG <sub>251</sub>	16.3	X	142.05915	111.88470	158.03754	15.88791	0.2599654	0.21452557	2.7636519	21	12 21.7	21.5
252281 2001 QF <sub>254</sub>	15.9	X	337.95933	259.33558	10.00033	12.51995	0.2267865	0.23955400	2.5676378	21	4 14.8	18.6
252282 2001 QR <sub>274</sub>	16.4	X	159.29513	19.59916	352.74466	13.84806	0.2625324	0.22409949	2.6843685	21	3 4.2	21.0
252283 2001 QK <sub>275</sub>	15.5	X	252.20346	71.35307	254.05040	12.29043	0.2673448	0.23155524	2.6264329	21	3 8.7	20.3
252284 2001 QM <sub>278</sub>	16.6	X	209.39503	192.92131	151.75503	5.02030	0.1311639	0.22852943	2.6495653	21	3 7.4	20.6
252285 2001 QO <sub>279</sub>	16.6	X	160.59292	263.30429	123.33763	12.92000	0.2933024	0.22428936	2.6828533	21	3 27.0	21.5
252286 2001 QW <sub>286</sub>	16.5	X	201.98774	51.60503	313.68284	1.53626	0.1164482	0.22982123	2.6396273	21	3 24.2	20.6
252287 2001 QD <sub>292</sub>	16.5	X	169.46375	5.32888	0.18243	14.74205	0.1100412	0.22566258	2.6719584	21	2 25.1	20.6
252288 2001 QQ <sub>292</sub>	16.0	X	212.35144	80.56717	234.97188	12.68317	0.2358560	0.22524854	2.6752317	21	1 29.9	20.9
252289 2001 QJ <sub>293</sub>	16.6	X	205.97149	100.39902	234.23938	6.04107	0.3683376	0.22647499	2.6655646	21	2 18.7	21.8
252290 2001 QZ <sub>309</sub>	16.3	X	170.17624	42.98423	82.17757	3.07966	0.1664241	0.23947061	2.5682339	21	7 24.9	20.5
252291 2001 QR <sub>330</sub>	16.4	X	151.79248	272.44834	156.42524	13.05642	0.2507918	0.22577427	2.6710771	21	5 6.2	21.2
252292 2001 RR <sub>4</sub>	15.9	X	212.00841	323.71056	328.18322	11.97823	0.1565511	0.22297014	2.6934251	21	1 8.3	20.3
252293 2001 RO <sub>5</sub>	17.0	X	296.62476	61.70141	234.48255	2.76723	0.1962368	0.23468799	2.6030078	21	3 27.1	20.4
252294 2001 RB <sub>11</sub>	16.4	X	201.13511	331.97113	357.93565	4.30431	0.2343290	0.22367011	2.6878029	21	2 12.8	21.1
252295 2001 RT <sub>12</sub>	16.5	X	141.92841	171.89242	188.59686	9.34036	0.2220468	0.21906009	2.7253809	21	1 27.9	20.8
252296 2001 RO <sub>13</sub>	16.1	X	119.85877	205.29567	183.60828	14.34754	0.1504140	0.21917608	2.7244193	21	1 29.3	20.1
252297 2001 RM <sub>15</sub>	16.2	X	74.13756	180.09287	224.76747	11.96064	0.1682045	0.21395154	2.7685930	21	—	—
252298 2001 RN <sub>23</sub>	16.7	X	220.13623	157.80313	151.40914	3.63039	0.1894416	0.22608024	2.6686665	21	2 1.6	21.2
252299 2001 RV <sub>25</sub>	16.2	X	191.09134	38.38895	348.53567	14.33821	0.1324663	0.22997684	2.6384365	21	4 5.4	20.6
252300 2001 RP <sub>29</sub>	16.3	X	211.35428	35.51766	358.59033	3.65187	0.1532140	0.23322133	2.6139095	21	5 6.9	20.4
252301 2001 RY <sub>32</sub>	16.3	X	282.68996	75.34809	208.00026	4.36120	0.1704664	0.23333846	2.6130346	21	2 26.1	20.1
252302 2001 RS <sub>40</sub>	16.1	X	186.09887	31.17568	19.62336	13.15885	0.2618850	0.23031487	2.6358543	21	5 3.9	20.9
252303 2001 RW <sub>50</sub>	16.6	X	189.25023	110.34523	288.56235	3.34645	0.1360578	0.23012877	2.6372751	21	4 21.9	20.8
252304 2001 RQ <sub>59</sub>	16.1	X	106.66783	260.55477	157.87481	13.64442	0.2014224	0.21977435	2.7194728	21	3 1.5	19.7
252305 2001 RS <sub>59</sub>	16.3	X	161.36065	349.96287	42.46352	6.21989	0.0840341	0.22567494	2.6718608	21	3 18.2	20.2
252306 2001 RZ <sub>82</sub>	15.8	X	117.82713	116.76537	328.36627	12.29577	0.2315814	0.22460300	2.6803552	21	4 13.9	20.1
252307 2001 RR <sub>83</sub>	16.8	X	244.43387	6.11762	330.36427	1.75155	0.2050672	0.23133739	2.6280815	21	3 24.8	21.2
252308 2001 RT <sub>86</sub>	16.0	X	156.65560	29.15926	359.37978	14.01699	0.0942609	0.22364646	2.6879924	21	3 8.7	19.9
252309 2001 RC <sub>90</sub>	15.9	X	179.10154	327.54787	25.66284	8.22609	0.2148473	0.22326524	2.6910513	21	2 24.7	20.5
252310 2001 RJ <sub>97</sub>	16.7	X	96.08832	50.88525	342.71764	5.57394	0.0494489	0.21833201	2.7314365	21	—	—
252311 2001 RP <sub>97</sub>	16.1	X	175.15605	187.04457	180.77464	14.84965	0.1188700	0.22427273	2.6829859	21	2 28.5	20.3
252312 2001 RO <sub>104</sub>	14.9	X	201.48174	298.66435	2.15985	2.47742	0.1805531	0.12345672	3.9944736	21	1 22.4	21.3
252313 2001 RC <sub>108</sub>	16.4	X	172.56743	77.22								

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
252321	2001	RN <sub>142</sub>	16.4	X	108.73113	217.00721	211.39290	7.21021	0.2156093	0.22069029	2.7119431	21	3 16.3	20.3
252322	2001	RK <sub>146</sub>	16.2	X	185.74791	19.53382	318.27889	13.42891	0.1099047	0.22501928	2.6770484	21	2 4.2	20.4
252323	2001	RL <sub>149</sub>	15.8	X	91.93085	336.57453	77.13801	7.45004	0.1895698	0.21673068	2.7448742	21	2 4.4	19.2
252324	2001	SX <sub>1</sub>	15.7	X	227.50701	285.45188	2.48499	9.53957	0.1762674	0.22225921	2.6991656	21	1 17.3	20.3
252325	2001	SX <sub>16</sub>	16.9	X	146.36031	338.35713	18.37194	3.93520	0.2207513	0.21899773	2.7258982	21	1 30.9	21.2
252326	2001	SC <sub>28</sub>	16.4	X	157.52083	67.55660	37.86596	3.85354	0.0438728	0.23406888	2.6075958	21	6 10.0	20.0
252327	2001	SM <sub>35</sub>	15.7	X	225.24636	302.72198	19.56363	13.47659	0.2139446	0.22602670	2.6690880	21	2 26.5	20.4
252328	2001	SE <sub>44</sub>	16.1	X	144.30649	208.94212	164.10845	9.72352	0.1315885	0.21991347	2.7183257	21	2 5.4	20.1
252329	2001	SX <sub>56</sub>	16.0	X	149.65837	199.97418	181.51623	12.89651	0.1382947	0.22012591	2.7165765	21	2 21.2	20.2
252330	2001	SW <sub>74</sub>	16.4	X	209.25333	122.90719	269.38605	3.39952	0.2036689	0.23006153	2.6377889	21	5 1.8	20.9
252331	2001	SA <sub>90</sub>	15.7	X	241.35053	147.48444	177.08741	14.05518	0.1065083	0.22952985	2.6418608	21	3 14.0	19.7
252332	2001	SR <sub>95</sub>	15.9	X	126.93679	257.16859	189.90644	31.21449	0.1351738	0.22681114	2.6629303	21	4 22.2	19.9
252333	2001	SC <sub>97</sub>	16.1	X	145.91811	228.05186	252.97939	3.41931	0.2035008	0.23338281	2.6127036	21	6 28.2	20.3
252334	2001	SX <sub>97</sub>	16.5	X	124.10740	260.18591	194.54596	5.41076	0.1330088	0.22775441	2.6555726	21	4 27.9	20.2
252335	2001	SZ <sub>97</sub>	16.9	X	158.38795	149.87750	215.49103	2.01056	0.1320151	0.22186590	2.7023547	21	2 10.9	21.0
252336	2001	SH <sub>99</sub>	16.6	X	230.57308	351.13427	332.05429	2.03298	0.0810418	0.22687919	2.6623977	21	3 2.9	20.5
252337	2001	SM <sub>114</sub>	16.4	X	128.65103	77.97538	341.24839	4.33160	0.1393106	0.22243453	2.6977471	21	3 18.5	20.2
252338	2001	SH <sub>117</sub>	16.6	X	226.55591	109.81784	193.95441	11.04241	0.2014367	0.22607370	2.6687181	21	1 29.0	21.3
252339	2001	SP <sub>118</sub>	16.4	X	179.17654	32.83915	284.65093	3.81271	0.1531203	0.22012590	2.7165766	21	1 7.5	20.5
252340	2001	SJ <sub>127</sub>	16.7	X	166.63046	221.98674	195.38237	3.32185	0.1791964	0.22846316	2.6500776	21	4 27.3	20.8
252341	2001	SF <sub>128</sub>	16.4	X	123.35729	34.14109	0.05652	10.34638	0.1136107	0.21999108	2.7176864	21	2 10.2	20.2
252342	2001	SE <sub>134</sub>	16.2	X	134.17148	106.24773	352.43248	10.47060	0.2776089	0.22649348	2.6654196	21	5 23.5	20.9
252343	2001	SJ <sub>135</sub>	16.3	X	143.74399	234.80008	185.29099	9.05386	0.3150836	0.22363233	2.6881056	21	4 21.1	21.0
252344	2001	ST <sub>135</sub>	16.8	X	121.07308	96.77888	344.69380	1.26928	0.3003355	0.22240910	2.6979528	21	4 25.8	21.2
252345	2001	SO <sub>143</sub>	16.1	X	117.11811	96.89926	335.92969	5.90906	0.0251592	0.22524067	2.6752940	21	3 5.7	19.8
252346	2001	SQ <sub>144</sub>	16.3	X	44.71967	240.92921	194.47070	7.31732	0.2141522	0.21287665	2.7779048	21	—	—
252347	2001	SD <sub>149</sub>	15.3	X	201.26809	174.62605	337.82968	6.69518	0.0511238	0.24687506	2.5166215	21	10 3.8	18.7
252348	2001	SD <sub>152</sub>	16.1	X	75.36610	56.02460	2.29536	11.77062	0.3081727	0.21338296	2.7735089	21	2 5.9	19.1
252349	2001	SR <sub>159</sub>	16.6	X	81.86098	213.14002	217.95243	3.74677	0.2502739	0.21610977	2.7501293	21	2 17.7	19.7
252350	2001	SY <sub>159</sub>	15.6	X	71.73972	109.34677	357.68049	6.75070	0.1024999	0.22094575	2.7098523	21	3 1.6	18.8
252351	2001	SG <sub>160</sub>	16.2	X	151.97913	178.57044	204.03358	8.93523	0.1430383	0.22163578	2.7042249	21	2 24.6	20.5
252352	2001	SM <sub>162</sub>	16.5	X	187.23381	335.23948	357.79430	4.72411	0.1647409	0.22085579	2.7105881	21	2 3.9	21.0
252353	2001	SL <sub>163</sub>	16.5	X	172.00629	353.57060	101.03198	7.95726	0.2784442	0.22226413	2.6991258	21	3 5.0	21.3
252354	2001	ST <sub>173</sub>	16.2	X	124.27320	195.84348	184.72737	25.30869	0.1314515	0.21688003	2.7436139	21	1 21.6	20.6
252355	2001	SM <sub>187</sub>	16.8	X	210.32168	332.91194	1.66317	1.86350	0.1297204	0.22734100	2.6587910	21	2 24.0	21.1
252356	2001	SU <sub>194</sub>	16.6	X	152.49651	271.32038	154.47498	3.39293	0.1736536	0.22772560	2.6557966	21	4 25.2	20.9
252357	2001	SA <sub>207</sub>	16.9	X	203.32975	325.59668	66.03704	1.08076	0.1159785	0.23092021	2.6312458	21	4 28.3	20.8
252358	2001	SY <sub>208</sub>	16.9	X	220.22560	315.18893	43.21686	2.98830	0.1156708	0.22955497	2.6416681	21	4 4.2	21.0
252359	2001	SG <sub>217</sub>	16.4	X	48.73877	104.62799	3.02358	8.42717	0.1077652	0.21884422	2.7271728	21	1 27.3	19.6
252360	2001	SU <sub>218</sub>	16.7	X	309.71761	258.25790	12.86176	7.35872	0.1953004	0.23237139	2.6202794	21	3 14.1	20.2
252361	2001	SC <sub>222</sub>	16.4	X	140.34160	206.77669	142.87376	3.38311	0.1321350	0.21687136	2.7436871	21	1 5.3	20.4
252362	2001	SF <sub>222</sub>	16.7	X	97.94070	255.87299	163.81099	5.25608	0.1181219	0.21872182	2.7281901	21	2 6.3	20.1
252363	2001	SR <sub>227</sub>	16.7	X	185.92227	182.32858	187.32698	1.07322	0.1850432	0.22495838	2.6775316	21	3 17.0	20.9
252364	2001	SX <sub>230</sub>	16.4	X	151.92696	200.90993	161.71998	3.44321	0.1187270	0.21896211	2.7261939	21	1 31.4	20.4
252365	2001	SY <sub>232</sub>	16.3	X	187.49129	292.81739	23.16228	13.73851	0.2157628	0.21959646	2.7209412	21	1 19.9	21.1
252366	2001	SX <sub>244</sub>	15.7	X	25.96090	168.56015	19.88334	11.86819	0.1203522	0.22663079	2.6643429	21	4 5.9	18.6
252367	2001	SP <sub>246</sub>	16.6	X	160.94770	239.74880	163.10606	3.05890	0.1055207	0.22427189	2.6829926	21	3 30.7	20.5
252368	2001	SC <sub>248</sub>	16.7	X	183.05722	161.30652	185.79456	9.02026	0.2305687	0.22184662	2.7025112	21	2 16.2	21.4
252369	2001	SE <sub>255</sub>	16.7	X	158.80459	152.42430	194.42160	8.86593	0.1779879	0.21786790	2.7353142	21	1 23.6	21.2
252370	2001	SD <sub>256</sub>	15.8	X	1.02721	190.11104	44.48927	9.66932	0.0611172	0.22933656	2.6433450	21	4 29.3	18.8
252371	2001	SU <sub>259</sub>	16.9	X	197.42298	171.68985	185.37618	5.45800	0.0630487	0.22603878	2.6689928	21	3 8.9	20.7
252372	2001	SF <sub>267</sub>	16.2	X	141.78569	311.33434	47.30871	9.45597	0.2186503	0.21574425	2.7532347	21	1 30.9	20.6
252373	2001	SA <sub>270</sub>	18.0	X	142.43387	15.61141	210.02058	38.52302	0.7354635	0.66323975	1.3022340	21	11 19.4	20.9
252374	2001	SS <sub>271</sub>	16.1	X	198.55241	114.85592	217.96341	11.56437	0.1427385	0.22212324	2.7026270	21	2 7.5	20.6
252375	2001	SA <sub>279</sub>	15.7	X	193.99991	37.37313	21.33040	14.85735	0.2336252	0.22904270	2.6456055	21	5 18.6	20.4
252376	2001	SE <sub>290</sub>	15.9	X	179.07032	82.31815	258.29209	12.57831	0.1564894	0.22177557	2.7030884	21	1 30.5	20.4
252377	2001	SZ <sub>292</sub>	16.5	X	156.57680	150.77726	239.47185	3.66733	0.1832267	0.22394726	2.6855848	21	3 14.5	20.9
252378	2001	SV <sub>306</sub>	16.8	X	172.09137	310.96919	12.57638	2.73333	0.0935090	0.21744181	2.7388864	21	1 4.1	20.9
252379	2001	SY <sub>306</sub>	16.1	X	41.78059	173.86920	296.78006	8.26083	0.1353999	0.21871541	2.7282435	21	1 17.3	18.8
252380	2001	SF <sub>307</sub>	16.2	X	8.93143	359.47629	170.60753	4.30147	0.0438012	0.22375114	2.6871539	21	2 13.5	19.7
252381	2001	ST <sub>319</sub>	16.9	X	95.41556	66.11663	18.96736	7.13525	0.2656010	0.21951140	2.7216441	21	3 31.5	20.5
252382	2001	SW <sub>321</sub>	16.4	X	160.81553	205.87842	213.04055	12.68709	0.1860261	0.22719477	2.6599317	21	4 24.0	20.8
252383	2001	SX <sub>324</sub>	16.0	X	143.87770	296.69249	119.75894	14.50114	0.1831019	0.22594992	2.6696926	21	4 11.7	20.4
252384	2001	SC <sub>327</sub>	16.6	X	259.10803	256.73434	7.55825	11.30762	0.1578897	0.22404385	2.6848129	21	1 18.1	21.0
252385	2001	SV <sub>331</sub>	16.2	X	94.42760	66.89980	14.63115	12.82751	0.1560968	0.22084897	2.7106439	21	3 11.9	19.7
252386	2001	SW <sub>342</sub>	16.8	X	0.91039	110.71716	130.58100	0.35403	0.0764262	0.23301531	2.6154500	21	5 7.1	19.6
252387	2001	SB <sub>352</sub>	16.4	X	145.16693	84.48346	79.73840	13.37370	0.1220988	0.23722294	2.5844309	21	8 23.1	20.6
252388	2001	SE <sub>353</sub>	16.2	X	251.86236	281.64406	56.77735	10.53295	0.1060622	0.23140975	2.6275336	21	4 15.5	20.2
252389	2001	TT	15.0	X	174.38637	60.80858	47.99627	30.74484	0.2774626	0.22775130	2.655			

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
252401 2001 TH <sub>48</sub>	16.9	X	125.08934	201.97907	201.14207	4.99159	0.0521943	0.21744647	2.7388472	21	2 10.1	20.7
252402 2001 TK <sub>58</sub>	16.4	X	123.31808	347.13539	21.25462	7.03457	0.1142490	0.21556339	2.7547744	21	1 7.6	20.2
252403 2001 TV <sub>72</sub>	16.2	X	195.34048	132.78835	200.81614	9.47356	0.1967810	0.22117139	2.7080088	21	2 8.4	20.9
252404 2001 TT <sub>76</sub>	16.5	X	209.03942	349.92404	37.32471	3.23431	0.2202336	0.22831093	2.6512555	21	4 26.2	20.8
252405 2001 TE <sub>81</sub>	16.8	X	93.44901	140.29174	269.78662	3.87149	0.2054866	0.21649986	2.7468248	21	2 1.1	20.2
252406 2001 TK <sub>81</sub>	16.2	X	127.06924	176.15182	217.11763	12.48166	0.1125967	0.21995889	2.7179515	21	2 5.4	20.2
252407 2001 TC <sub>83</sub>	16.4	X	202.80701	45.01827	289.06733	4.77807	0.1626862	0.22368480	2.6876852	21	2 15.5	20.7
252408 2001 TV <sub>89</sub>	16.5	X	240.09141	74.63283	217.57995	11.37615	0.2567546	0.22486477	2.6782746	21	1 24.1	21.5
252409 2001 TH <sub>93</sub>	15.8	X	153.12483	198.31596	225.27446	13.08278	0.0886888	0.22583362	2.6760691	21	4 13.5	19.8
252410 2001 TA <sub>97</sub>	15.8	X	70.72766	181.05814	235.79356	5.87379	0.0762221	0.21274575	2.7790442	21	—	—
252411 2001 TZ <sub>105</sub>	15.5	X	170.41976	314.67267	48.80680	10.85493	0.3090609	0.21972611	2.7198708	21	3 8.6	20.6
252412 2001 TO <sub>109</sub>	16.2	X	141.48008	355.11516	16.06807	14.01050	0.1603515	0.21746012	2.7387326	21	2 11.0	20.5
252413 2001 TE <sub>112</sub>	16.1	X	185.00997	149.58655	259.35150	5.49338	0.2327602	0.22690396	2.6622040	21	5 2.5	20.8
252414 2001 TM <sub>112</sub>	15.8	X	180.71854	138.12301	237.78660	11.13930	0.1974036	0.22315191	2.6919623	21	3 16.4	20.6
252415 2001 TX <sub>113</sub>	16.0	X	134.02461	21.86924	27.77054	13.87909	0.1895447	0.21954457	2.7213699	21	3 23.5	20.2
252416 2001 TC <sub>115</sub>	16.3	X	91.10702	34.87421	27.74385	11.82253	0.3367599	0.21436266	2.7650519	21	3 12.9	20.0
252417 2001 TO <sub>119</sub>	15.7	X	187.60160	37.55338	279.99532	13.14357	0.0937383	0.21787808	2.7352290	21	1 11.7	19.8
252418 2001 TG <sub>121</sub>	16.5	X	155.51622	98.18628	273.73894	11.18103	0.1550585	0.21953214	2.7214727	21	2 14.6	20.9
252419 2001 TJ <sub>121</sub>	15.7	X	167.13145	58.92813	245.13353	17.19032	0.3122522	0.21582861	2.7525172	21	—	—
252420 2001 TH <sub>122</sub>	15.8	X	206.90757	97.06121	257.09826	11.64219	0.1138355	0.22428715	2.6828710	21	3 10.6	20.2
252421 2001 TB <sub>123</sub>	16.3	X	181.21691	351.36427	29.09293	5.57578	0.2024850	0.22401168	2.6850700	21	3 27.9	20.7
252422 2001 TZ <sub>123</sub>	16.1	X	219.07321	8.03821	323.14314	8.72026	0.1592482	0.22554920	2.6728537	21	2 26.1	20.4
252423 2001 TH <sub>125</sub>	16.1	X	137.10229	77.06318	277.48953	6.45644	0.1263186	0.21565471	2.7539967	21	1 7.1	19.9
252424 2001 TO <sub>125</sub>	15.9	X	217.21312	354.64729	326.91899	7.51192	0.1618471	0.22335728	2.6903120	21	2 14.7	20.4
252425 2001 TD <sub>135</sub>	16.0	X	195.99557	76.91503	273.87398	8.12321	0.0799470	0.22404246	2.6848240	21	2 25.1	20.1
252426 2001 TQ <sub>135</sub>	15.8	X	98.98331	73.81840	341.60175	13.19898	0.1492563	0.21728603	2.7401953	21	2 10.9	19.3
252427 2001 TR <sub>137</sub>	15.9	X	190.10784	293.44123	54.67877	15.94870	0.2499707	0.22363211	2.6881073	21	3 5.3	20.9
252428 2001 TZ <sub>138</sub>	15.8	X	152.58244	18.03184	10.68785	21.87303	0.0879601	0.22478739	2.6788892	21	3 9.2	19.9
252429 2001 TF <sub>140</sub>	16.1	X	154.64427	355.90981	22.72516	15.26549	0.1434023	0.22298358	2.6933169	21	3 3.7	20.4
252430 2001 TP <sub>140</sub>	16.5	X	171.63524	283.86486	141.49672	6.59555	0.1847694	0.22983356	2.6395329	21	5 13.6	20.9
252431 2001 TB <sub>148</sub>	15.7	X	115.04859	49.39533	51.77125	13.14789	0.2552583	0.22304720	2.6928048	21	5 10.6	19.8
252432 2001 TT <sub>148</sub>	16.4	X	165.28828	218.16056	139.45398	4.92099	0.0681432	0.21944782	2.7221697	21	2 4.1	20.4
252433 2001 TU <sub>148</sub>	16.4	X	114.74488	348.34419	67.39503	8.04041	0.1747787	0.21898420	2.7260105	21	3 8.3	20.3
252434 2001 TQ <sub>152</sub>	16.8	X	235.99718	268.96572	109.46420	5.36883	0.2825491	0.23232291	2.6206440	21	5 5.7	21.5
252435 2001 TS <sub>155</sub>	16.6	X	103.91167	263.43247	197.06840	4.10853	0.0571642	0.22574564	2.6713029	21	3 29.5	20.0
252436 2001 TA <sub>163</sub>	16.7	X	107.83868	93.94164	8.59773	8.16773	0.2531734	0.22270805	2.6955379	21	5 2.2	20.8
252437 2001 TM <sub>163</sub>	16.6	X	158.78615	159.39306	201.55383	8.76351	0.1898689	0.22012647	2.7165719	21	2 9.4	21.1
252438 2001 TE <sub>167</sub>	15.8	X	119.23490	134.87590	318.84755	7.38726	0.1860538	0.22178308	2.7030274	21	4 23.8	20.0
252439 2001 TP <sub>169</sub>	16.1	X	43.16273	180.44241	283.30567	8.01041	0.2490748	0.21152575	2.7897196	21	1 15.8	18.4
252440 2001 TB <sub>171</sub>	16.6	X	69.93364	128.16899	282.34848	8.41581	0.2122899	0.21219446	2.7838555	21	—	—
252441 2001 TL <sub>177</sub>	16.3	X	75.77226	94.59929	345.16730	5.05733	0.0385045	0.21793616	2.7347430	21	1 24.3	19.9
252442 2001 TK <sub>189</sub>	15.4	X	187.32105	79.36528	249.46338	11.46962	0.1904322	0.21839016	2.7309516	21	1 26.6	20.1
252443 2001 TM <sub>190</sub>	15.8	X	86.75052	237.67909	233.74955	12.38629	0.1528661	0.21950460	2.7217003	21	4 1.7	19.4
252444 2001 TB <sub>192</sub>	15.7	X	137.66226	103.00282	262.21737	7.72235	0.1791260	0.21465569	2.7625349	21	1 25.5	20.0
252445 2001 TS <sub>193</sub>	16.6	X	178.30087	84.56232	295.04122	1.66754	0.1162999	0.22513795	2.6761077	21	3 18.7	20.6
252446 2001 TY <sub>194</sub>	16.6	X	101.85396	43.33035	352.51930	2.31405	0.0720860	0.21629464	2.7485620	21	1 7.4	20.1
252447 2001 TC <sub>197</sub>	16.6	X	107.99545	274.89202	101.73655	8.57735	0.2384367	0.21305432	2.7763602	21	1 16.5	20.2
252448 2001 TX <sub>201</sub>	15.9	X	117.98876	241.10633	157.60401	12.68316	0.1845639	0.21800056	2.7342044	21	2 15.3	19.6
252449 2001 TZ <sub>201</sub>	16.3	X	152.87143	217.30417	134.45612	10.13451	0.2020600	0.21844538	2.7304913	21	1 27.8	20.5
252450 2001 TQ <sub>205</sub>	15.9	X	103.26222	42.07975	22.70526	13.58195	0.1837069	0.22041492	2.7142013	21	3 8.1	19.7
252451 2001 TF <sub>206</sub>	16.4	X	114.96454	218.35083	221.15447	2.37791	0.0659892	0.22420403	2.6835340	21	3 17.4	19.9
252452 2001 TK <sub>209</sub>	16.0	X	298.58075	29.22038	253.20203	10.88520	0.1613476	0.23309679	2.6148404	21	3 12.2	19.9
252453 2001 TE <sub>212</sub>	16.7	X	239.41840	104.69011	195.96882	0.95274	0.2926158	0.22632577	2.6667361	21	2 3.9	21.6
252454 2001 TM <sub>213</sub>	16.2	X	184.29619	119.20957	268.50680	8.00391	0.1515942	0.22612360	2.6683254	21	4 1.7	20.7
252455 2001 TO <sub>215</sub>	16.4	X	130.20721	64.42884	339.98396	9.66371	0.1526165	0.21915532	2.7245913	21	3 4.1	20.4
252456 2001 TF <sub>220</sub>	16.5	X	172.22181	122.25930	286.47460	5.30095	0.1234264	0.22697412	2.6616554	21	4 16.4	20.6
252457 2001 TH <sub>224</sub>	15.7	X	108.95437	244.56700	249.62390	11.35058	0.2046584	0.22524648	2.6752480	21	6 9.3	19.6
252458 2001 TH <sub>227</sub>	16.6	X	167.91900	355.09519	44.23524	14.61021	0.3014056	0.22636204	2.6664513	21	4 14.8	20.5
252459 2001 TS <sub>228</sub>	16.0	X	188.25706	88.66406	288.26844	12.47638	0.1672092	0.22521818	2.6754720	21	3 20.6	20.6
252460 2001 TZ <sub>231</sub>	16.7	X	72.63298	236.65853	224.27980	4.21374	0.0721674	0.21913582	2.7247530	21	2 16.5	20.1
252461 2001 TS <sub>233</sub>	16.1	X	162.80966	262.49497	93.44805	9.79378	0.2007216	0.21995633	2.7179726	21	2 13.1	20.6
252462 2001 TS <sub>235</sub>	15.7	X	181.62506	233.46583	102.68628	8.27568	0.1243533	0.21876957	2.7277931	21	1 31.5	19.9
252463 2001 TE <sub>241</sub>	16.7	X	121.85658	300.08144	91.45572	8.66994	0.2368775	0.21716081	2.7412486	21	2 21.5	20.8
252464 2001 TO <sub>241</sub>	16.2	X	22.38561	265.52966	159.80219	2.41910	0.0212214	0.20668276	2.8331303	21	—	—
252465 2001 TB <sub>244</sub>	16.9	X	200.79009	124.94296	209.02195	4.78945	0.0387641	0.22407843	2.6845367	21	2 10.7	20.8
252466 2001 TC <sub>255</sub>	14.6	X	33.71487	109.69995	58.50496	11.93782	0.1603705	0.12368052	3.9896534	21	4 14.3	19.5
252467 2001 TZ <sub>257</sub>	16.3	X	216.97927	164.47008	150.56726	6.06463	0.1627026	0.22253553	2.6969308	21	2 6.4	20.6
252468 2001 US <sub>3</sub>	16.1	X	114.40089	1.95178	77.19979	10.38916	0.1896385	0.22114891	2.7081924	21	4 9.2	20.1
252469 2001 UR <sub>5</sub>	15.4	X	156.85701	312.21297	72.51518	18.65273	0.1677690	0.21852184	2.7298544	21	3 19.7	20.1
252470 Puigmarti	15.5	X	211.04174	98.16226	246.35522	10.59943	0.2112126	0.22578260	2.6710114	21	3 3.0	20.3
252471 2001 UC <sub>16</sub>	16.3	X	160.30081	209.19018	219.29872	12.71914	0.3010305	0.22404349	2.6848158	21	5 11.4	21.1
252472 2001 UV <sub>19</sub>	17.0	X	174.86894	297.91210	78.52476	3.31840	0.2188010	0.22528979	2.6749051	21	3 18.9	21.5
252473 2001 UH <sub>21</sub>	15.6	X	211.03225	119.09027	237.61002	11.70258	0.19					

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
252481 2001 UL <sub>63</sub>	16.9	X	142.86757	31.13639	1.48345	1.53708	0.2351737	0.21974631	2.7197041	21	3 11.5	21.2
252482 2001 UB <sub>68</sub>	16.4	X	232.80900	129.45847	154.63783	2.67956	0.0592341	0.21887821	2.7268905	21	1 18.3	20.3
252483 2001 UE <sub>68</sub>	15.6	X	350.28171	168.69671	43.18703	12.40672	0.1255727	0.22457999	2.6805383	21	3 12.8	18.9
252484 2001 UV <sub>73</sub>	16.1	X	133.20759	340.24918	48.31846	14.42855	0.1821399	0.21820865	2.7324659	21	2 27.5	20.5
252485 2001 UE <sub>75</sub>	15.9	X	172.76481	358.45046	84.77991	7.94333	0.1710530	0.22850393	2.6497624	21	6 3.9	20.3
252486 2001 UR <sub>76</sub>	16.2	X	163.90531	316.86958	38.29987	10.16833	0.2391121	0.21920348	2.7241922	21	2 17.8	20.9
252487 2001 UY <sub>76</sub>	15.7	X	237.30502	231.94580	47.47655	14.13951	0.1843637	0.21919349	2.7242750	21	1 15.4	20.5
252488 2001 UF <sub>79</sub>	16.1	X	77.74359	243.47840	194.55648	4.28275	0.0792826	0.21591344	2.7517962	21	1 27.3	19.5
252489 2001 US <sub>84</sub>	15.8	X	127.99985	177.71204	227.11064	8.43110	0.1753570	0.21852930	2.7297922	21	3 1.9	20.0
252490 2001 UK <sub>87</sub>	16.7	X	171.27085	296.59830	40.69824	9.25174	0.1877573	0.21737365	2.7394588	21	1 29.4	21.3
252491 2001 UV <sub>94</sub>	15.8	X	186.82074	255.00307	93.22815	11.35473	0.1890271	0.22069831	2.7118773	21	2 25.1	20.5
252492 2001 UF <sub>98</sub>	16.4	X	161.91414	335.79071	42.67469	12.03508	0.0773948	0.22051013	2.7134200	21	3 5.1	20.5
252493 2001 UJ <sub>100</sub>	16.5	X	124.67677	267.02942	174.14448	4.70227	0.1123857	0.22274292	2.6952565	21	4 9.0	20.2
252494 2001 UT <sub>103</sub>	15.9	X	108.33548	80.97635	53.50784	7.86886	0.2549670	0.22593355	2.6698215	21	6 14.4	20.1
252495 2001 UA <sub>104</sub>	16.2	X	357.77336	129.94021	39.97271	8.08542	0.0647963	0.21860586	2.7291548	21	1 31.6	19.7
252496 2001 UB <sub>108</sub>	15.9	X	40.34309	314.16405	198.15309	4.82311	0.1033361	0.21928615	2.7235076	21	3 10.3	19.0
252497 2001 UN <sub>112</sub>	15.7	X	319.52969	166.75233	36.21948	14.83488	0.1022352	0.21761287	2.7374509	21	1 16.6	19.7
252498 2001 UN <sub>122</sub>	16.4	X	112.53478	356.61081	50.01267	12.42527	0.2740618	0.21587780	2.7520990	21	3 10.4	20.6
252499 2001 UL <sub>124</sub>	16.2	X	130.89254	254.12160	132.39590	10.83172	0.1146301	0.21777723	2.7360734	21	2 6.9	19.9
252500 2001 UA <sub>130</sub>	15.5	X	46.71264	55.82221	186.42013	10.30625	0.0622272	0.18745627	3.0236817	21	7 18.3	19.7
252501 2001 UK <sub>131</sub>	16.2	X	215.98622	286.28562	63.74651	6.82594	0.0619236	0.22400399	2.6851314	21	3 25.2	20.2
252502 2001 UN <sub>131</sub>	16.7	X	99.42960	233.71199	186.86342	4.31890	0.1072540	0.21618394	2.7495003	21	2 8.0	20.2
252503 2001 UX <sub>132</sub>	16.3	X	175.14519	85.61804	263.70860	1.04556	0.0604579	0.22036061	2.7146473	21	2 3.9	20.3
252504 2001 UD <sub>136</sub>	16.8	X	142.12283	336.90816	62.76555	2.78442	0.2209210	0.21951384	2.7216239	21	3 19.2	21.0
252505 2001 UQ <sub>138</sub>	15.7	X	349.94989	144.06624	34.23609	14.24261	0.0678785	0.21807167	2.7336099	21	1 24.9	19.3
252506 2001 UC <sub>145</sub>	16.3	X	112.60268	352.38594	45.62834	6.25318	0.0663977	0.21514070	2.7583815	21	1 25.1	20.1
252507 2001 UB <sub>155</sub>	15.8	X	143.58248	322.90702	68.52244	10.42467	0.1593533	0.21762844	2.7373202	21	3 9.2	20.1
252508 2001 UV <sub>169</sub>	16.5	X	88.73994	148.23932	247.50920	3.87450	0.0975619	0.21286899	2.7779714	21	—	—
252509 2001 UG <sub>173</sub>	16.3	X	213.90418	111.25730	202.02355	4.62997	0.1105981	0.21977324	2.7194820	21	2 1.1	20.6
252510 2001 UE <sub>175</sub>	16.2	X	166.44283	186.51151	194.60849	11.95463	0.1675034	0.22205501	2.7008202	21	3 11.4	20.6
252511 2001 UR <sub>179</sub>	15.7	X	202.12933	306.94828	82.91582	13.40300	0.2716518	0.22851894	2.6496464	21	4 28.5	20.6
252512 2001 US <sub>183</sub>	16.1	X	159.64854	305.55322	46.96965	9.47924	0.1368843	0.21943976	2.7222364	21	2 1.6	20.4
252513 2001 UY <sub>183</sub>	16.4	X	110.26520	184.81206	164.85965	8.11351	0.1883503	0.21779062	2.7359612	21	2 15.2	20.0
252514 2001 UH <sub>187</sub>	15.7	X	293.81737	205.97264	21.30082	13.60312	0.1384158	0.22179073	2.7029652	21	1 9.7	19.9
252515 2001 UY <sub>188</sub>	16.4	X	234.67056	105.05215	185.05261	5.97955	0.0355827	0.22077568	2.7112437	21	1 27.3	20.2
252516 2001 UF <sub>190</sub>	17.2	X	163.89517	60.37027	256.56312	2.30173	0.1903166	0.21707766	2.7419485	21	—	—
252517 2001 UC <sub>199</sub>	16.5	X	130.13529	9.64619	345.73173	5.95901	0.1034806	0.21434714	2.7651854	21	—	—
252518 2001 UR <sub>201</sub>	16.6	X	210.03092	269.78921	15.88935	8.38388	0.2781224	0.21941586	2.7224341	21	—	—
252519 2001 UN <sub>202</sub>	16.1	X	146.61408	56.54955	2.03507	6.76794	0.0809540	0.22384849	2.6863748	21	3 31.2	19.9
252520 2001 UT <sub>202</sub>	15.9	X	260.15201	269.41848	12.49044	7.10500	0.0422623	0.22049654	2.7135315	21	2 19.4	19.7
252521 2001 UJ <sub>203</sub>	16.4	X	283.61017	62.17005	245.25191	5.41652	0.0240373	0.22678254	2.6631542	21	4 20.2	20.0
252522 2001 UY <sub>205</sub>	16.3	X	107.89645	112.76215	281.68709	2.98199	0.0938922	0.21403191	2.7678998	21	1 16.7	19.8
252523 2001 UA <sub>211</sub>	16.2	X	312.28791	261.47087	353.66524	3.47433	0.0348347	0.22535779	2.6743669	21	3 19.9	19.6
252524 2001 UV <sub>217</sub>	16.5	X	116.89263	270.21358	92.11090	3.78006	0.1889240	0.21225293	2.7833442	21	1 2.5	20.3
252525 2001 UW <sub>219</sub>	16.2	X	32.80269	92.89592	351.15921	8.98967	0.1924019	0.20944115	2.8082000	21	—	—
252526 2001 UK <sub>220</sub>	16.5	X	123.97904	151.90708	245.11546	5.62067	0.0957255	0.21722524	2.7407065	21	2 6.7	20.3
252527 2001 UX <sub>224</sub>	16.1	X	351.00580	214.86210	324.97709	1.98380	0.0767063	0.21734343	2.7397128	21	1 30.8	19.5
252528 2001 UK <sub>227</sub>	16.5	X	115.57739	244.66088	134.65773	3.85918	0.0938071	0.21566079	2.7539450	21	1 7.3	20.0
252529 2001 VK <sub>8</sub>	15.9	X	230.50557	116.87712	247.75556	8.82103	0.2074113	0.22816884	2.6523561	21	4 14.3	20.5
252530 2001 VX <sub>11</sub>	15.4	X	258.49457	63.32030	274.39374	13.09495	0.2523625	0.22971876	2.6404123	21	3 29.1	20.0
252531 2001 VR <sub>12</sub>	16.2	X	108.23917	113.19625	290.85520	11.46169	0.2050705	0.21438759	2.7648376	21	2 11.1	20.1
252532 2001 VY <sub>16</sub>	15.6	X	160.18682	52.90143	290.73851	14.52337	0.2914306	0.21841993	2.7307035	21	1 29.3	20.3
252533 2001 VB <sub>20</sub>	16.1	X	146.44292	166.14172	228.62597	12.05427	0.1847176	0.21964741	2.7250204	21	3 8.1	20.5
252534 2001 VF <sub>30</sub>	16.3	X	189.02751	322.46581	60.51995	6.93846	0.2537410	0.22395646	2.6855113	21	4 8.6	21.0
252535 2001 VV <sub>31</sub>	16.1	X	110.97686	144.46432	240.72273	8.63810	0.2239213	0.21247859	2.7813732	21	1 25.7	20.1
252536 2001 VS <sub>52</sub>	16.1	X	164.17973	343.86887	3.14587	9.33931	0.1203408	0.21712291	2.7415676	21	1 29.2	20.3
252537 2001 VJ <sub>53</sub>	15.8	X	85.42093	102.79330	25.58507	15.73457	0.1865242	0.22153166	2.7050721	21	4 28.7	19.3
252538 2001 VX <sub>53</sub>	16.0	X	116.15552	168.92084	252.04683	6.31967	0.0627121	0.21888728	2.7268152	21	2 21.3	19.8
252539 2001 VL <sub>54</sub>	16.0	X	191.00440	9.61544	1.72236	7.03516	0.1040870	0.22347359	2.6893784	21	3 21.9	20.1
252540 2001 VE <sub>57</sub>	16.1	X	130.57183	24.26829	352.64505	6.00162	0.0803159	0.21524991	2.7574484	21	1 22.7	20.0
252541 2001 VE <sub>60</sub>	15.8	X	140.55535	101.43383	254.31437	7.93573	0.1946702	0.21491694	2.7602958	21	1 19.0	20.0
252542 2001 VT <sub>60</sub>	16.2	X	120.31614	184.27017	256.30167	7.60039	0.1491652	0.22063548	2.7123921	21	4 3.9	20.3
252543 2001 VH <sub>61</sub>	16.2	X	164.44409	23.23436	350.26243	6.14982	0.0524630	0.21868494	2.7284969	21	2 22.5	20.1
252544 2001 VQ <sub>61</sub>	16.0	X	50.13878	157.94242	311.98790	4.34659	0.1161753	0.21419116	2.7665277	21	1 31.5	19.1
252545 2001 VN <sub>66</sub>	16.1	X	113.16333	190.44727	255.50052	8.43678	0.2001020	0.21900786	2.7258142	21	4 9.5	20.2
252546 2001 VJ <sub>67</sub>	15.9	X	155.71536	127.27360	253.01576	11.71381	0.1714567	0.21818695	2.7326470	21	2 25.3	20.4
252547 2001 VY <sub>67</sub>	16.2	X	30.15099	99.92409	350.68246	8.59062	0.2127431	0.20958656	2.8069010	21	—	—
252548 2001 VC <sub>72</sub>	17.0	X	226.73373	275.57575	106.58090	5.94878	0.3600716	0.23186463	2.6240959	21	4 30.7	22.0
252549 2001 VV <sub>75</sub>	15.6	X	5.55759	315.05397	222.60389	12.27202	0.0726001	0.21979706	2.7192854	21	2 12.9	19.3
252550 2001 VO <sub>80</sub>	15.9	X	150.69518	178.74082	336.50280	12.89822	0.1703097	0.22271561	2.6954769	21	4 6.1	20.2
252551 2001 VD <sub>83</sub>	16.4	X	244.78429	132.17719	259.67740	3.27186	0.1122269	0.23403275	2.6078641	21	6 12.0	20.2
252552 2001 VM <sub>89</sub>	16.3	X	179.67542	331.04990	18.58782	14.86186	0.2170245	0.22053690	2.7132004	21	2 24.3	21.1
252553 2001 VG <sub>93</sub>	15.9	X	177.80133	207.28463	157.17161	10.57923	0.2667676	0.220681				

ELEMENTS AND OPPOSITION DATES IN 2021

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
252561	2001	<i>WX</i> <sub>19</sub>	16.4	X	120.57139	138.12072	257.13276	2.48788	0.1023369	0.21576125	2.7530901	21	2 2.9	20.2
252562	2001	<i>WM</i> <sub>20</sub>	15.7	X	167.30113	271.17841	33.98833	8.41428	0.0851801	0.20964158	2.8064099	21	—	—
252563	2001	<i>WN</i> <sub>21</sub>	16.0	X	218.78395	262.13930	71.22893	15.31331	0.1694110	0.22404329	2.6848174	21	3 9.8	20.7
252564	2001	<i>WP</i> <sub>21</sub>	16.3	X	189.73536	65.18172	257.61908	3.83296	0.1793725	0.21777072	2.7361279	21	1 23.9	20.9
252565	2001	<i>WA</i> <sub>23</sub>	15.3	X	125.99135	130.19891	307.41130	33.73347	0.2338426	0.22027622	2.7153406	21	3 27.5	20.3
252566	2001	<i>WZ</i> <sub>36</sub>	16.7	X	136.52533	260.88235	105.12461	1.97857	0.0840612	0.21422090	2.7662716	21	1 15.6	20.7
252567	2001	<i>WU</i> <sub>41</sub>	15.2	X	85.03258	69.11278	22.06812	23.54851	0.3621597	0.21783852	2.7355601	21	4 10.2	18.7
252568	2001	<i>WZ</i> <sub>41</sub>	16.2	X	176.70102	166.34532	208.13357	5.82245	0.0276190	0.22093210	2.7099639	21	3 4.9	20.1
252569	2001	<i>WL</i> <sub>50</sub>	16.2	X	90.85505	223.90567	217.58070	4.52021	0.0905014	0.21848196	2.7301866	21	2 19.6	19.7
252570	2001	<i>WX</i> <sub>50</sub>	16.6	X	41.78689	14.88858	92.04587	1.79134	0.0246678	0.21381744	2.7697504	21	1 12.2	20.2
252571	2001	<i>WG</i> <sub>53</sub>	16.3	X	48.61742	218.71120	240.32225	4.41031	0.0965036	0.21363251	2.7713486	21	1 12.8	19.6
252572	2001	<i>WP</i> <sub>55</sub>	16.6	X	141.96663	164.29201	235.84686	4.12289	0.1648348	0.21968067	2.7202458	21	3 11.1	20.8
252573	2001	<i>WT</i> <sub>55</sub>	16.0	X	93.61367	352.87360	36.99762	6.04560	0.0580658	0.21131508	2.7915735	21	—	—
252574	2001	<i>WD</i> <sub>58</sub>	16.4	X	217.58264	90.45315	230.21418	9.28935	0.1753811	0.22195757	2.7016105	21	2 10.3	21.1
252575	2001	<i>WK</i> <sub>65</sub>	16.5	X	167.53404	173.14205	213.79037	6.02538	0.0780246	0.22283095	2.6945467	21	3 13.4	20.5
252576	2001	<i>WP</i> <sub>65</sub>	16.9	X	149.25512	213.60163	205.36445	4.77643	0.1387281	0.22367775	2.6877417	21	4 9.5	20.9
252577	2001	<i>WP</i> <sub>69</sub>	16.5	X	118.31407	340.20316	52.89989	6.53057	0.0676423	0.21527836	2.7572055	21	1 26.3	20.3
252578	2001	<i>WV</i> <sub>79</sub>	16.0	X	200.33077	269.78667	68.55704	7.26414	0.0841115	0.21860686	2.7291466	21	2 22.5	20.2
252579	2001	<i>WG</i> <sub>81</sub>	15.8	X	179.35250	67.00505	238.61684	17.08875	0.0880963	0.21068492	2.7971370	21	—	—
252580	2001	<i>WC</i> <sub>82</sub>	16.2	X	159.83296	118.74869	243.88229	5.18116	0.0494500	0.21500262	2.7595623	21	2 1.2	20.2
252581	2001	<i>WJ</i> <sub>83</sub>	16.8	X	94.42669	331.17256	77.53182	5.49504	0.0695774	0.21268551	2.7795689	21	1 14.4	20.5
252582	2001	<i>WN</i> <sub>87</sub>	16.1	X	55.75751	86.61119	43.35353	14.79933	0.1965501	0.21661858	2.7458211	21	3 25.4	19.2
252583	2001	<i>WE</i> <sub>93</sub>	16.6	X	127.69307	166.30659	234.66945	4.12072	0.1678671	0.21672539	2.7449190	21	2 25.8	20.6
252584	2001	<i>WY</i> <sub>97</sub>	16.3	X	146.00691	351.53065	52.45330	5.88974	0.0626575	0.21988242	2.7185816	21	3 14.1	20.2
252585	2001	<i>WY</i> <sub>99</sub>	16.3	X	209.53957	300.65865	55.98427	6.87193	0.0593924	0.22189853	2.7020897	21	3 26.4	20.3
252586	2001	<i>WB</i> <sub>100</sub>	16.1	X	170.72203	325.45387	35.70041	8.00366	0.0592788	0.21658637	2.7460934	21	2 17.9	20.1
252587	2001	<i>WM</i> <sub>101</sub>	16.0	X	80.98142	260.43235	121.73369	4.91537	0.0737358	0.20817622	2.8195641	21	—	—
252588	2001	<i>WS</i> <sub>101</sub>	16.0	X	73.94356	57.82537	58.99861	12.59487	0.1962043	0.21383631	2.7695874	21	4 6.4	19.5
252589	2001	<i>WL</i> <sub>102</sub>	16.5	X	52.42363	74.34658	69.44970	8.81674	0.1239347	0.21709899	2.7417689	21	3 27.5	19.8
252590	2001	<i>WR</i> <sub>103</sub>	16.0	X	32.27006	68.67377	73.38659	11.05522	0.1515461	0.21068796	2.7971101	21	2 19.8	19.2
252591	2001	<i>XO</i> <sub>1</sub>	15.9	X	52.53848	194.92731	281.55619	8.30553	0.2004723	0.21208005	2.7848566	21	2 17.7	18.8
252592	2001	<i>XV</i> <sub>7</sub>	15.7	X	154.14281	59.71146	310.07714	13.85728	0.1919818	0.21692323	2.7432497	21	2 16.2	20.1
252593	2001	<i>XL</i> <sub>9</sub>	15.2	X	181.49247	81.95308	277.36860	12.23661	0.1937706	0.21886795	2.7269757	21	2 24.3	20.0
252594	2001	<i>XM</i> <sub>10</sub>	16.1	X	131.35863	213.92314	275.71779	12.32624	0.1994533	0.22493902	2.6776852	21	6 25.7	20.2
252595	2001	<i>XL</i> <sub>13</sub>	16.0	X	94.56957	28.52245	51.32165	13.67585	0.1621365	0.21326570	2.7745254	21	3 15.8	19.8
252596	2001	<i>XW</i> <sub>14</sub>	16.4	X	66.44896	138.24092	333.31052	7.63298	0.1804719	0.21334418	2.7738449	21	3 8.5	19.4
252597	2001	<i>XU</i> <sub>25</sub>	15.8	X	110.42039	198.08831	289.00662	14.98458	0.2266191	0.22010073	2.7167837	21	6 4.4	20.1
252598	2001	<i>XA</i> <sub>29</sub>	14.9	X	175.80569	135.60246	239.80153	14.14920	0.2672486	0.21900850	2.7258089	21	3 13.7	20.0
252599	2001	<i>XY</i> <sub>41</sub>	15.8	X	113.12595	80.24486	314.54190	12.63652	0.1673298	0.21147549	2.7901616	21	2 4.0	19.7
252600	2001	<i>XA</i> <sub>44</sub>	16.0	X	148.78637	30.56745	43.97088	10.03919	0.1531428	0.22057651	2.7128755	21	4 30.6	20.2
252601	2001	<i>XF</i> <sub>44</sub>	16.0	X	133.65180	164.56336	335.52592	8.13414	0.1220425	0.22614426	2.6681628	21	7 6.2	20.1
252602	2001	<i>XD</i> <sub>48</sub>	15.7	X	134.01114	47.40819	38.96186	9.36213	0.1504893	0.21809903	2.7333814	21	4 29.9	19.7
252603	2001	<i>XM</i> <sub>48</sub>	16.2	X	110.76112	153.22137	275.35520	12.09525	0.1980915	0.21917512	2.7244272	21	3 11.8	20.3
252604	2001	<i>XP</i> <sub>52</sub>	15.5	X	33.54551	67.96955	81.90438	13.82750	0.1366832	0.21508232	2.7588806	21	3 5.9	18.8
252605	2001	<i>XA</i> <sub>56</sub>	16.2	X	228.15720	274.85943	93.45495	7.16476	0.1749159	0.22640754	2.6660940	21	4 24.0	20.6
252606	2001	<i>XH</i> <sub>69</sub>	15.8	X	95.97278	302.76759	73.31344	9.60149	0.1340600	0.21062191	2.7976949	21	—	—
252607	2001	<i>XD</i> <sub>74</sub>	15.9	X	145.51568	151.52302	236.08231	9.57958	0.0919609	0.21686645	2.7437285	21	2 17.6	20.0
252608	2001	<i>XX</i> <sub>78</sub>	16.3	X	157.28652	160.48325	220.38697	4.48846	0.1550982	0.21812860	2.7331343	21	3 2.1	20.6
252609	2001	<i>XP</i> <sub>83</sub>	16.4	X	161.68181	316.75925	129.43068	4.24617	0.1561271	0.22511585	2.6762828	21	5 28.4	20.6
252610	2001	<i>XV</i> <sub>89</sub>	15.8	X	71.12715	95.24585	52.12518	15.02124	0.0484209	0.22259017	2.6964895	21	4 19.5	19.3
252611	2001	<i>XK</i> <sub>92</sub>	15.8	X	292.01338	237.78835	248.28687	8.33987	0.0438442	0.20000685	2.8958283	21	12 20.7	19.7
252612	2001	<i>XB</i> <sub>96</sub>	15.6	X	143.51825	323.29910	72.13595	16.43411	0.1500786	0.21739530	2.7392770	21	3 16.8	20.1
252613	2001	<i>XE</i> <sub>100</sub>	16.4	X	127.10465	15.44190	93.19795	11.35207	0.2019293	0.22055555	2.7130474	21	5 27.9	20.7
252614	2001	<i>XD</i> <sub>106</sub>	16.8	X	115.45681	155.52037	236.24436	3.59693	0.1200898	0.21359405	2.7716813	21	1 25.9	20.7
252615	2001	<i>XR</i> <sub>106</sub>	15.7	X	53.82919	164.75357	281.64480	8.24433	0.1311846	0.21090900	2.7951555	21	1 7.8	18.6
252616	2001	<i>XQ</i> <sub>111</sub>	16.1	X	141.94616	147.34192	221.58936	5.67817	0.0558175	0.21320414	2.7750595	21	1 20.4	20.1
252617	2001	<i>XA</i> <sub>114</sub>	15.4	X	165.49212	77.17355	298.84461	7.67310	0.1739246	0.21769964	2.7367234	21	3 4.0	19.9
252618	2001	<i>XV</i> <sub>115</sub>	15.4	X	78.17836	6.14622	84.95575	14.95781	0.1614915	0.21131209	2.7915997	21	3 7.8	19.2
252619	2001	<i>XV</i> <sub>121</sub>	15.7	X	100.29588	334.10704	75.17974	9.49703	0.0480919	0.21390799	2.7689687	21	1 20.5	19.4
252620	2001	<i>XL</i> <sub>128</sub>	16.7	X	116.41921	182.62941	215.77536	3.08769	0.1000366	0.21406680	2.7675990	21	2 1.5	20.5
252621	2001	<i>XL</i> <sub>132</sub>	16.2	X	95.75426	210.80362	247.43049	13.21539	0.1057496	0.21782639	2.7356617	21	3 18.2	20.1
252622	2001	<i>XQ</i> <sub>133</sub>	16.3	X	84.46666	130.95894	239.75784	8.22800	0.1456544	0.20622334	2.8373364	21	—	—
252623	2001	<i>XG</i> <sub>140</sub>	15.7	X	3.86459	258.57158	251.56475	11.26950	0.0993453	0.21057138	2.7981425	21	1 8.5	19.2
252624	2001	<i>XM</i> <sub>149</sub>	15.7	X	126.63871	298.29111	97.49816	7.26336	0.0531403	0.21322959	2.7748386	21	2 7.0	19.5
252625	2001	<i>XC</i> <sub>165</sub>	15.7	X	346.01460	295.97506	252.69906	7.88210	0.0762384	0.21293760	2.7773747	21	2 1.9	19.4
252626	2001	<i>XY</i> <sub>170</sub>	16.3	X	105.52062	151.72564	243.97558	4.21962	0.1585717	0.21119860	2.7925997	21	1 24.2	20.1
252627	2001	<i>XA</i> <sub>186</sub>	16.1	X	111.49213	141.58484	264.00744	3.88499	0.1601427	0.21194364	2.7860514	21	2 12.9	20.0
252628	2001	<i>XV</i> <sub>191</sub>	15.5	X	119.37678	139.73797	260.16904	6.65500	0.1888688					



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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
252641	2001	<i>XS</i> <sub>233</sub>	16.4	X	92.04778	339.49909	44.19541	2.65260	0.0204999	0.20716763	2.8287080	21	—	—
252642	2001	<i>XP</i> <sub>245</sub>	16.1	X	89.81917	34.54287	64.63542	15.35946	0.0912699	0.21769607	2.7367533	21	3 24.5	20.0
252643	2001	<i>XF</i> <sub>250</sub>	16.0	X	63.28108	359.94958	101.37576	3.79733	0.1428110	0.21197190	2.7858037	21	2 15.2	19.1
252644	2001	<i>XH</i> <sub>253</sub>	16.3	X	34.41799	281.03847	204.27243	5.20773	0.0213177	0.21565354	2.7540067	21	1 23.6	20.1
252645	2001	<i>XF</i> <sub>256</sub>	15.9	X	142.04605	237.91929	132.92557	9.96333	0.1654315	0.21520666	2.7578178	21	2 6.3	19.9
252646	2001	<i>XR</i> <sub>256</sub>	15.6	X	181.82659	221.54109	125.89796	10.12270	0.2187794	0.21889606	2.7267423	21	2 18.8	20.2
252647	2001	<i>XR</i> <sub>267</sub>	15.6	X	347.61631	137.47575	43.53923	11.16000	0.0811600	0.20922840	2.8101033	21	2 1.8	19.4
252648	2001	<i>YH</i> <sub>10</sub>	16.1	X	144.67536	12.08943	109.03887	10.44804	0.2155725	0.22293881	2.6936775	21	6 28.2	20.5
252649	2001	<i>YX</i> <sub>12</sub>	16.6	X	79.92369	353.84660	77.35950	3.31709	0.0628986	0.21263643	2.7799966	21	1 22.3	20.2
252650	2001	<i>YA</i> <sub>15</sub>	16.3	X	103.19404	315.84695	83.81713	9.38213	0.1912734	0.21200653	2.7855004	21	2 3.3	20.0
252651	2001	<i>YY</i> <sub>19</sub>	15.9	X	87.77051	320.22074	104.76371	14.84048	0.1961073	0.21402419	2.7679664	21	2 15.5	19.4
252652	2001	<i>YU</i> <sub>26</sub>	16.7	X	99.90491	93.17746	287.53554	5.72031	0.2079874	0.21019068	2.8015201	21	1 6.6	20.0
252653	2001	<i>YR</i> <sub>27</sub>	15.4	X	289.12651	275.06331	263.78247	13.70935	0.0983219	0.20391609	2.8586987	21	—	—
252654	2001	<i>YH</i> <sub>58</sub>	16.0	X	45.12954	137.57534	274.94525	13.90765	0.1279511	0.20412420	2.8567553	21	—	—
252655	2001	<i>YK</i> <sub>89</sub>	16.4	X	86.70207	0.69428	81.78693	3.57852	0.1902970	0.21171757	2.7880343	21	3 7.0	19.8
252656	2001	<i>YD</i> <sub>110</sub>	15.7	X	155.02568	317.97672	109.42095	10.21663	0.1987625	0.21902843	2.7256435	21	5 4.6	20.3
252657	2001	<i>YU</i> <sub>110</sub>	15.8	X	1.78122	167.43808	133.95091	5.43433	0.0472251	0.20868397	2.8149887	21	—	—
252658	2001	<i>YR</i> <sub>118</sub>	15.5	X	161.93008	336.22727	101.70663	16.90441	0.1685521	0.22105337	2.7089727	21	5 22.7	20.1
252659	2001	<i>YQ</i> <sub>121</sub>	15.9	X	108.23418	118.03797	295.95562	8.90927	0.0998345	0.21454441	2.7634901	21	2 9.7	19.6
252660	2001	<i>YA</i> <sub>128</sub>	16.3	X	90.05302	123.56420	297.28545	6.66355	0.2198196	0.21259414	2.7803652	21	2 12.6	19.8
252661	2001	<i>YM</i> <sub>137</sub>	16.3	X	68.99506	111.41621	357.16574	7.45643	0.1837119	0.21247556	2.7813996	21	3 11.4	19.3
252662	2001	<i>YQ</i> <sub>141</sub>	16.6	X	75.11811	329.10159	101.87801	5.14165	0.0926893	0.21127712	2.7919078	21	1 18.6	19.9
252663	2001	<i>YA</i> <sub>151</sub>	15.5	X	118.78914	213.12613	168.46944	10.45691	0.1521342	0.21226486	2.7832399	21	1 21.8	19.5
252664	2002	<i>AP</i>	15.3	X	116.95731	194.98575	315.63007	11.51091	0.2133405	0.22172624	2.7034893	21	7 11.3	19.6
252665	2002	<i>AG</i> <sub>1</sub>	16.0	X	46.99890	277.40672	226.60112	14.76121	0.1677975	0.21564733	2.7540596	21	3 11.7	19.2
252666	2002	<i>AE</i> <sub>7</sub>	15.1	X	315.17827	210.29315	246.98704	10.00002	0.0521604	0.19287146	2.9668168	21	12 14.3	18.9
252667	2002	<i>AH</i> <sub>26</sub>	15.7	X	242.20052	198.56831	358.53854	2.96682	0.0213815	0.19529392	2.9422319	21	—	—
252668	2002	<i>AS</i> <sub>29</sub>	15.8	X	62.12859	158.01933	283.15030	12.00725	0.1466863	0.20900784	2.8120799	21	1 16.2	18.8
252669	2002	<i>AA</i> <sub>36</sub>	15.7	X	138.61870	287.15678	83.15929	25.14574	0.1874513	0.21500929	2.7595053	21	2 9.5	20.3
252670	2002	<i>AD</i> <sub>36</sub>	16.1	X	38.16730	5.26577	94.64241	9.87888	0.1865204	0.20929454	2.8095113	21	—	—
252671	2002	<i>AB</i> <sub>43</sub>	16.9	X	20.70787	54.44003	135.27097	5.67913	0.1364058	0.26501293	2.4004427	21	3 22.9	19.0
252672	2002	<i>AU</i> <sub>55</sub>	16.2	X	245.24287	288.91308	205.39946	1.88768	0.1762305	0.18828557	3.0147967	21	10 12.3	20.7
252673	2002	<i>AZ</i> <sub>58</sub>	16.7	X	231.35875	241.99589	291.95748	6.11277	0.1164606	0.29107126	2.2549478	21	12 9.9	19.5
252674	2002	<i>AQ</i> <sub>69</sub>	15.9	X	52.45615	161.23333	270.13883	8.47874	0.1283561	0.20938407	2.8087104	21	—	—
252675	2002	<i>AB</i> <sub>70</sub>	15.9	X	44.02351	194.47217	291.77549	8.17994	0.2264082	0.21238842	2.7821603	21	2 16.4	18.4
252676	2002	<i>AA</i> <sub>105</sub>	15.8	X	221.04482	234.15001	311.60580	3.34579	0.1754739	0.19102101	2.9859460	21	11 17.6	20.5
252677	2002	<i>AP</i> <sub>107</sub>	16.4	X	225.91943	107.87924	110.41677	5.30249	0.1912930	0.29676159	2.2260296	21	—	—
252678	2002	<i>AE</i> <sub>109</sub>	16.9	X	66.73310	167.69709	321.73364	5.09308	0.1664905	0.26334489	2.4105683	21	3 21.7	19.2
252679	2002	<i>AU</i> <sub>135</sub>	15.9	X	70.32402	339.64525	119.05777	10.73979	0.1594296	0.21157564	2.7892811	21	2 27.3	19.2
252680	2002	<i>AX</i> <sub>137</sub>	16.5	X	110.79109	243.73425	259.01269	4.92972	0.1482951	0.22199483	2.7013082	21	6 15.7	20.2
252681	2002	<i>AV</i> <sub>140</sub>	16.0	X	56.25102	186.52734	276.92951	8.50621	0.1497238	0.21043438	2.7993568	21	2 3.2	19.2
252682	2002	<i>AU</i> <sub>160</sub>	15.6	X	332.96207	261.96671	147.84175	10.63969	0.0501034	0.18797817	3.0180825	21	11 12.2	19.7
252683	2002	<i>AE</i> <sub>166</sub>	13.0	X	259.34881	203.56088	286.23469	6.02707	0.0356564	0.08489796	5.1270931	21	10 26.2	19.9
252684	2002	<i>AZ</i> <sub>169</sub>	15.8	X	28.94156	326.14277	92.16978	18.17436	0.0833029	0.20137977	2.8826516	21	—	—
252685	2002	<i>AX</i> <sub>171</sub>	15.3	X	114.48543	284.37663	314.59501	13.90049	0.1645759	0.18300647	3.0724990	21	10 10.9	20.5
252686	2002	<i>AV</i> <sub>192</sub>	16.0	X	152.07529	224.15323	101.85355	3.50862	0.0543482	0.20347831	2.8627975	21	—	—
252687	2002	<i>AA</i> <sub>204</sub>	16.0	X	52.40651	287.17577	222.82560	12.44365	0.1448117	0.21743020	2.7389839	21	3 30.1	19.2
252688	2002	<i>BV</i> <sub>13</sub>	16.3	X	11.42115	288.13833	202.52508	2.28523	0.2032611	0.20409175	2.8570582	21	—	—
252689	2002	<i>BU</i> <sub>21</sub>	15.2	X	119.28033	35.65770	93.38010	28.41203	0.2219326	0.21831620	2.7315684	21	6 16.9	19.5
252690	2002	<i>BR</i> <sub>22</sub>	14.9	X	195.09700	60.00889	323.45807	17.39731	0.2597599	0.22302036	2.6930208	21	4 2.2	20.0
252691	2002	<i>BF</i> <sub>31</sub>	16.8	X	162.78648	195.99764	163.23313	3.47758	0.1198001	0.30974979	2.1633595	21	1 23.1	19.6
252692	2002	<i>BC</i> <sub>32</sub>	16.2	X	263.64432	114.06049	34.69031	4.11530	0.1174795	0.19318429	2.9636131	21	11 29.7	20.2
252693	2002	<i>CQ</i>	16.8	X	68.75432	142.63745	213.20699	6.70370	0.0991020	0.29638158	2.2279319	21	—	—
252694	2002	<i>CO</i> <sub>9</sub>	17.7	X	107.76399	280.72579	128.13278	4.29933	0.1771679	0.30977481	2.1632430	21	1 26.3	19.4
252695	2002	<i>CL</i> <sub>27</sub>	16.8	X	122.92510	80.74205	327.35808	9.42377	0.3771730	0.21572109	2.7534317	21	3 22.9	21.5
252696	2002	<i>CL</i> <sub>33</sub>	17.2	X	354.80325	106.26217	3.56554	7.60080	0.0675279	0.30026667	2.2086724	21	—	—
252697	2002	<i>CT</i> <sub>38</sub>	16.7	X	167.78613	154.63283	132.66049	8.87071	0.2221833	0.29587527	2.2304728	21	—	—
252698	2002	<i>CL</i> <sub>54</sub>	13.0	X	216.37792	199.11378	325.55288	3.57565	0.0773457	0.08268499	5.2181707	21	10 15.9	20.1
252699	2002	<i>CD</i> <sub>57</sub>	16.5	X	209.99923	195.87864	318.47880	8.29368	0.0623727	0.28387383	2.2929037	21	10 18.6	19.7
252700	2002	<i>CP</i> <sub>68</sub>	15.4	X	236.13062	27.40776	122.29583	9.92279	0.0183425	0.18858210	3.0116355	21	11 13.9	19.8
252701	2002	<i>CD</i> <sub>88</sub>	15.8	X	22.69413	118.88883	127.60659	10.14665	0.0601432	0.22033183	2.7148836	21	6 20.3	19.2
252702	2002	<i>CB</i> <sub>91</sub>	13.0	X	311.16872	59.08033	9.00595	5.41893	0.1106787	0.08533687	5.1094983	21	10 11.5	19.5
252703	2002	<i>CS</i> <sub>97</sub>	17.2	X	58.72228	85.81146	350.75152	6.02435	0.1153022	0.30416676	2.1897517	21	—	—
252704	2002	<i>CT</i> <sub>99</sub>	16.6	X	283.17129	160.21564	352.83689	7.61407	0.0395051	0.29383226	2.2407998	21	—	—
252705	2002	<i>CL</i> <sub>101</sub>	14.9	X	26.15754	257.21745	352.29615	17.14308	0.0785306	0.16788197	3.2543681	21	7 4.2	19.5
252706	2002	<i>CK</i> <sub>123</sub>	16.6	X	292.12231	342.03562	143.86411	0.44588	0.1205157	0.19300359	2.9654627	21	12 11.6	20.3
252707	2002	<i>CK</i> <sub>124</sub>	17.3	X	250.47613	312.89263	317.13081	3.06380	0.1365434	0.30603097	2.1808500	21	1 1.5	20.4
252708	2002	<i>CU</i> <sub>125</sub>	16.9	X	140.22781	256.83155	321.81358	7.98499	0.1151406	0.28266783	2.2994208	21	10 21.9</	

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252721	2002	CV <sub>214</sub>	17.2	X	269.36462	121.78060	112.74515	3.98127	0.1010446	0.30201716	2.2001298	21	—	—
252722	2002	CL <sub>217</sub>	16.6	X	115.44014	26.44344	11.15705	4.42519	0.1369109	0.30627203	2.1797055	21	1 17.6	18.8
252723	2002	CU <sub>226</sub>	15.4	X	247.73959	213.31950	312.93303	9.42096	0.0602116	0.19024208	2.9940909	21	12 8.7	19.7
252724	2002	CN <sub>228</sub>	12.6	X	215.16529	265.83998	259.11917	7.49103	0.0327997	0.08259497	5.2219613	21	10 17.6	19.7
252725	2002	CG <sub>235</sub>	17.1	X	346.29476	96.63371	6.90324	1.43311	0.1138307	0.19856264	2.9098528	21	—	—
252726	2002	CK <sub>237</sub>	15.7	X	239.50670	154.32284	356.35226	5.99477	0.1827018	0.18572662	3.0424255	21	10 23.3	20.2
252727	2002	CC <sub>239</sub>	15.8	X	195.91200	352.49240	195.71397	4.71973	0.2419959	0.18402183	3.0611867	21	10 25.6	20.9
252728	2002	CR <sub>246</sub>	15.6	X	103.64443	279.18476	329.92014	9.87032	0.0496898	0.18042989	3.1016805	21	10 3.9	20.2
252729	2002	CB <sub>257</sub>	15.9	X	123.50309	323.32926	109.89321	7.92078	0.0490719	0.21244497	2.7816667	21	3 24.1	19.8
252730	2002	CO <sub>263</sub>	16.2	X	343.87592	161.17875	311.93907	0.82456	0.0502200	0.19700875	2.9251336	21	—	—
252731	2002	CY <sub>265</sub>	17.1	X	187.96853	307.21569	325.29119	6.12379	0.1535276	0.29828911	2.2184235	21	—	—
252732	2002	CO <sub>275</sub>	15.8	X	347.95409	56.09116	322.93767	7.26591	0.1027520	0.18623656	3.0368692	21	10 19.3	19.6
252733	2002	CB <sub>278</sub>	16.4	X	354.51793	286.75799	175.42843	3.29240	0.0908310	0.19738755	2.9213900	21	—	—
252734	2002	CM <sub>286</sub>	17.1	X	229.44313	206.67861	332.33971	3.29156	0.0642767	0.28996243	2.2606929	21	12 22.6	19.6
252735	2002	CK <sub>287</sub>	15.4	X	304.21182	89.41938	82.94496	5.52811	0.0712190	0.19823867	2.9130222	21	—	—
252736	2002	CL <sub>299</sub>	17.4	X	9.47061	102.30280	342.37657	6.16764	0.0764348	0.29779543	2.2208745	21	—	—
252737	2002	CO <sub>306</sub>	13.2	X	302.06246	122.71466	311.26008	17.60566	0.0964813	0.08562753	5.0979289	21	9 29.4	20.0
252738	2002	CV <sub>310</sub>	17.5	X	16.39532	84.88602	84.61487	5.25271	0.0930296	0.30884094	2.1676016	21	2 2.9	19.5
252739	2002	CJ <sub>314</sub>	16.1	X	178.25576	46.49155	176.48067	6.05881	0.1749452	0.18579274	3.0417035	21	11 24.0	21.1
252740	2002	CO <sub>315</sub>	12.8	X	299.27473	13.64144	68.06446	17.82288	0.1851661	0.08302777	5.2037983	21	10 10.9	19.5
252741	2002	CW <sub>315</sub>	13.6	X	302.28545	83.16150	358.32520	0.89046	0.0700129	0.08227919	5.2353139	21	10 19.4	20.3
252742	2002	DG <sub>19</sub>	13.5	X	296.67812	126.73889	319.76553	2.71539	0.0677310	0.08297484	5.2060113	21	10 17.7	20.2
252743	2002	EJ <sub>1</sub>	13.1	X	262.15812	318.37775	315.65913	9.84389	0.0935651	0.08264536	5.2198386	21	10 4.6	20.1
252744	2002	EL <sub>3</sub>	17.3	X	164.82354	258.21016	345.71415	6.58961	0.1503064	0.28710091	2.2756895	21	12 21.2	20.9
252745	2002	EV <sub>4</sub>	16.3	X	148.31088	54.74350	161.91205	3.74098	0.1476027	0.18012311	3.1052013	21	10 22.0	21.4
252746	2002	EX <sub>5</sub>	12.8	X	298.67803	289.11360	145.83397	9.36281	0.0687663	0.08089073	5.2950518	21	10 10.8	19.6
252747	2002	EQ <sub>13</sub>	15.7	X	264.92616	169.85057	328.48320	3.01330	0.0661520	0.18861207	3.0113165	21	11 24.7	19.8
252748	2002	EB <sub>17</sub>	16.2	X	66.66386	94.80610	313.01718	1.20464	0.0778926	0.19900748	2.9055149	21	—	—
252749	2002	ED <sub>27</sub>	15.1	X	147.85338	232.51107	353.53100	10.66134	0.0509757	0.18135339	3.0911419	21	10 25.9	19.8
252750	2002	EQ <sub>28</sub>	17.2	X	299.65361	31.09219	162.84143	4.85613	0.1718418	0.29954626	2.2122122	21	—	—
252751	2002	EB <sub>29</sub>	17.6	X	213.72574	28.91876	157.70532	6.57585	0.1067138	0.28715935	2.2753807	21	12 6.1	20.6
252752	2002	EH <sub>32</sub>	16.1	X	337.33706	326.95790	118.27180	2.96166	0.0686440	0.19045298	2.9918802	21	12 29.9	20.0
252753	2002	EW <sub>33</sub>	15.2	X	342.86428	22.86130	2.51756	11.50762	0.0702428	0.18288739	3.0738326	21	10 19.1	19.2
252754	2002	EV <sub>42</sub>	15.4	X	230.21212	127.09296	346.41070	22.18631	0.1279355	0.17892984	3.1189916	21	9 6.6	20.0
252755	2002	EJ <sub>43</sub>	17.0	X	254.10194	324.74224	276.18677	1.99320	0.1616685	0.29832978	2.2182218	21	—	—
252756	2002	EF <sub>45</sub>	17.2	X	150.33090	65.13646	193.14514	5.33091	0.1545652	0.28627658	2.2800559	21	12 24.8	20.7
252757	2002	EL <sub>48</sub>	16.2	X	51.29705	285.25748	334.32648	3.19418	0.1226282	0.17078621	3.2173688	21	8 26.2	20.3
252758	2002	ES <sub>48</sub>	17.2	X	172.73939	270.16772	351.40507	8.29132	0.1290400	0.28997521	2.2606264	21	—	—
252759	2002	EJ <sub>50</sub>	15.5	X	148.02614	28.21490	168.29756	15.41351	0.0848069	0.17796814	3.1302177	21	9 26.2	20.2
252760	2002	ET <sub>54</sub>	17.2	X	68.17258	287.34256	3.92309	5.18142	0.1856058	0.27462730	2.3440862	21	11 16.7	20.5
252761	2002	EM <sub>56</sub>	16.8	X	118.46231	177.99255	235.63931	1.58575	0.1262130	0.31003968	2.1620108	21	2 9.7	19.0
252762	2002	EY <sub>58</sub>	12.6	X	317.82871	81.75714	334.54211	9.58268	0.0871946	0.08316555	5.1980496	21	10 5.9	19.2
252763	2002	EJ <sub>67</sub>	15.3	X	209.02224	312.77261	249.13315	2.75381	0.2051653	0.18569415	3.0427801	21	11 22.8	20.1
252764	2002	EB <sub>69</sub>	15.0	X	147.88863	1.85384	182.49313	23.08230	0.1862720	0.17545931	3.1599856	21	9 12.1	20.4
252765	2002	EB <sub>73</sub>	15.2	X	91.89503	245.17572	354.94804	12.98501	0.1983946	0.17231149	3.1983541	21	9 28.5	20.2
252766	2002	EU <sub>78</sub>	16.4	X	28.50833	353.21389	217.85961	5.66590	0.0588497	0.26598460	2.3945931	21	5 5.9	19.1
252767	2002	EN <sub>81</sub>	17.4	X	11.99660	199.86850	324.78037	4.20027	0.0613477	0.30735473	2.1745836	21	1 22.2	19.5
252768	2002	EX <sub>87</sub>	17.4	X	313.12971	122.77494	39.13656	4.52040	0.1427625	0.29765844	2.2215559	21	—	—
252769	2002	EW <sub>89</sub>	16.6	X	240.88040	310.41830	308.80195	5.69915	0.0966862	0.30046331	2.2077086	21	—	—
252770	2002	ED <sub>91</sub>	15.7	X	271.60659	46.38345	110.95094	1.97634	0.1577987	0.19040891	2.9923419	21	12 15.4	19.4
252771	2002	EB <sub>95</sub>	16.9	X	358.52334	247.62588	17.53102	4.16387	0.2173081	0.26528045	2.3988286	21	5 27.3	18.4
252772	2002	EC <sub>103</sub>	16.8	X	121.14698	313.28983	0.85127	6.15337	0.1311888	0.29142487	2.2531234	21	—	—
252773	2002	EE <sub>107</sub>	15.0	X	136.67349	162.25320	37.67490	13.50489	0.1028925	0.17617490	3.1514229	21	9 23.8	20.0
252774	2002	EH <sub>108</sub>	17.1	X	179.05775	270.47617	356.97382	5.50939	0.1497029	0.29338351	3.2430842	21	—	—
252775	2002	EE <sub>121</sub>	15.4	X	183.94255	226.75556	356.90418	15.30204	0.0240766	0.18574403	3.0422353	21	12 4.2	20.1
252776	2002	EO <sub>122</sub>	16.0	X	71.57036	69.87124	168.26424	4.95251	0.1358940	0.17113314	3.2130190	21	8 27.4	20.4
252777	2002	EZ <sub>123</sub>	15.6	X	129.81366	277.23597	319.40984	4.69719	0.1155587	0.17974222	3.1095866	21	10 24.1	20.5
252778	2002	EY <sub>126</sub>	16.9	X	323.88221	288.23497	214.11584	5.74354	0.0677980	0.29799062	2.2199047	21	—	—
252779	2002	EB <sub>127</sub>	16.9	X	232.72193	257.04839	0.28614	6.13990	0.1308793	0.30016003	2.2091955	21	—	—
252780	2002	EN <sub>129</sub>	15.3	X	274.88273	140.97405	358.81568	10.67674	0.1705570	0.18779102	3.0200873	21	11 22.5	19.3
252781	2002	EW <sub>129</sub>	16.1	X	7.40800	346.14374	343.98713	13.24254	0.2314325	0.27798621	2.3251655	21	10 14.6	18.1
252782	2002	EO <sub>130</sub>	15.7	X	52.34476	261.85113	284.27112	10.39196	0.1022972	0.21477103	2.7615458	21	5 15.7	19.3
252783	2002	EO <sub>132</sub>	15.8	X	293.75094	146.40612	329.31290	9.65053	0.0541011	0.18920509	3.0050209	21	12 5.9	19.9
252784	2002	EH <sub>133</sub>	15.4	X	100.15849	274.73562	353.62065	6.38620	0.1508966	0.17787667	3.1312908	21	11 4.2	20.3
252785	2002	EJ <sub>134</sub>	15.9	X	191.29132	331.88281	181.32528	10.64258	0.1020078	0.17843630	3.1247402	21	9 15.6	20.7
252786	2002	EV <sub>137</sub>	16.1	X	349.69333	83.72075	30.62464	2.22786	0.0813272	0.19559725	2.9391893	21	—	—
252787	2002	EN <sub>143</sub>	17.2	X	76.38904	158.96609	99.11117	1.59023	0.1858267	0.27502773	2.3418104	21	10 15.9	20.3
252788	2002	ER <sub>143</sub>	16.7	X	29.08444	122.30807	5.31146	7.48530	0.2554738	0.20466763	2.8516963	21	1 21.5	19.1
252789	2002	EA <sub>147</sub>	15.4	X	102.34616	8.63097	191.85855	15.04323	0.1869725	0.17099035	3.2148076	21	8 19.2	20.6
252790	2002	EM <sub>154</sub>	15.5	X	14.00943	259.97147								

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
252801	2002	FH <sub>21</sub>	15.2	X	288.25358	8.34148	100.04955	16.84899	0.0376172	0.18767395	3.0213431	21	11 26.2	19.5
252802	2002	FS <sub>21</sub>	17.5	X	303.12242	354.76611	206.58778	3.35618	0.0936710	0.30056671	2.2072023	21	—	—
252803	2002	FG <sub>23</sub>	15.6	X	73.05987	258.00442	4.11071	9.38415	0.0569655	0.17373803	3.1808226	21	9 18.6	20.0
252804	2002	FH <sub>23</sub>	17.3	X	119.39274	119.27083	181.35270	2.77505	0.1833169	0.28583215	2.2824188	21	—	—
252805	2002	GC <sub>1</sub>	17.2	X	222.02780	269.99396	299.26642	3.32069	0.0823568	0.29032380	2.2588165	21	—	—
252806	2002	GH <sub>4</sub>	18.0	X	174.59868	130.95916	201.27700	23.99383	0.0638614	0.40145750	1.8198810	21	—	—
252807	2002	GV <sub>5</sub>	14.9	X	195.19988	147.60250	61.93284	14.15331	0.2141879	0.18238083	3.0795216	21	11 19.7	20.1
252808	2002	GQ <sub>12</sub>	17.3	X	109.25021	69.77300	190.67984	5.51012	0.2292331	0.27821973	2.3238643	21	11 23.0	21.1
252809	2002	GF <sub>16</sub>	15.3	X	107.35632	243.04619	21.49196	12.21592	0.1168513	0.17859314	3.1229105	21	11 3.7	20.1
252810	2002	GL <sub>16</sub>	15.1	X	286.16012	101.59587	23.53077	9.99671	0.0665244	0.18677638	3.0310149	21	12 4.9	19.2
252811	2002	GQ <sub>20</sub>	16.9	X	190.38013	230.08951	25.67381	11.88344	0.1259964	0.28826107	2.2695794	21	—	—
252812	2002	GB <sub>34</sub>	15.4	X	17.85842	341.44889	61.57306	10.23543	0.0564790	0.18943610	3.0025775	21	—	—
252813	2002	GS <sub>39</sub>	15.1	X	90.67820	262.96634	346.47282	12.45176	0.0831012	0.17476904	3.1683006	21	9 24.5	19.7
252814	2002	GA <sub>43</sub>	15.5	X	326.85533	173.84975	244.28831	9.74611	0.0323254	0.18220914	3.0814559	21	11 9.4	19.7
252815	2002	GR <sub>44</sub>	16.4	X	200.64248	263.77367	253.30097	4.25648	0.0907817	0.28058624	2.3107793	21	10 9.7	19.6
252816	2002	GL <sub>46</sub>	14.9	X	178.52934	173.52170	22.50858	28.10578	0.0931359	0.18025348	3.1037038	21	10 22.1	19.8
252817	2002	GT <sub>46</sub>	17.8	X	257.17491	153.26387	36.50020	2.15086	0.1729577	0.29220684	2.2491019	21	—	—
252818	2002	GR <sub>47</sub>	16.1	X	303.30491	276.31066	195.07958	0.36633	0.0982518	0.18565060	3.0432559	21	12 10.5	20.0
252819	2002	GE <sub>54</sub>	17.1	X	122.72813	98.69915	191.20138	4.92464	0.0693171	0.28469599	2.2884872	21	—	—
252820	2002	GU <sub>62</sub>	17.4	X	97.65161	201.52572	120.58277	2.66563	0.1886812	0.27510437	2.3413754	21	11 2.4	20.7
252821	2002	GY <sub>63</sub>	16.0	X	224.12464	7.10294	197.49848	4.33355	0.1593072	0.18548933	3.0450196	21	12 14.7	20.6
252822	2002	GF <sub>66</sub>	17.1	X	62.09085	133.91581	164.55341	2.31227	0.1884874	0.27567768	2.3381282	21	11 21.9	20.4
252823	2002	GW <sub>70</sub>	15.2	X	179.01994	174.37738	51.77389	11.52971	0.0622773	0.18147320	3.0897812	21	11 30.6	19.9
252824	2002	GH <sub>77</sub>	17.0	X	277.24189	100.36721	120.54271	4.10086	0.1068666	0.29874714	2.2161554	21	—	—
252825	2002	GW <sub>92</sub>	15.2	X	203.08284	195.95582	348.41053	9.85301	0.0507530	0.18146174	3.0899112	21	11 5.3	19.9
252826	2002	GF <sub>96</sub>	15.4	X	162.00691	180.99464	341.80957	4.54987	0.1192660	0.17157330	3.2075215	21	8 29.8	20.5
252827	2002	GJ <sub>96</sub>	15.0	X	231.59870	286.42214	210.12095	17.77755	0.1475802	0.17949514	3.1124395	21	10 1.0	19.9
252828	2002	GZ <sub>97</sub>	15.3	X	214.72585	184.53219	25.14939	16.95903	0.0511728	0.18505588	3.0497726	21	12 21.5	20.0
252829	2002	GU <sub>100</sub>	14.9	X	42.97184	296.43673	11.40670	9.31457	0.0909470	0.17487925	3.1669693	21	10 10.3	19.2
252830	2002	GP <sub>107</sub>	16.9	X	296.10354	111.97648	67.86917	7.44549	0.0893638	0.29665191	2.2625782	21	—	—
252831	2002	GJ <sub>111</sub>	15.3	X	114.07903	212.04966	58.17176	7.09852	0.1426583	0.17821639	3.1273101	21	11 20.9	20.3
252832	2002	GQ <sub>111</sub>	16.5	X	58.09272	222.97500	85.99880	7.44219	0.1253222	0.27727769	2.3291248	21	11 23.4	19.4
252833	2002	GM <sub>114</sub>	14.9	X	241.69464	90.52292	34.63229	17.66252	0.0904134	0.17990773	3.1076790	21	10 11.4	19.5
252834	2002	GP <sub>116</sub>	15.3	X	121.98232	75.70552	158.52744	9.72755	0.0389575	0.17552944	3.1591439	21	10 11.8	20.0
252835	2002	GM <sub>117</sub>	15.1	X	238.30408	115.31727	35.64185	17.86490	0.0726686	0.18294728	3.0731617	21	11 5.0	19.5
252836	2002	GC <sub>118</sub>	17.0	X	331.81238	31.65146	124.15533	5.86300	0.0542636	0.29804093	2.2196548	21	—	—
252837	2002	GT <sub>119</sub>	16.8	X	94.49562	96.72586	212.42289	3.60680	0.1381871	0.28433339	2.2904324	21	—	—
252838	2002	GO <sub>121</sub>	14.8	X	53.71903	307.56093	6.13196	10.16730	0.0748983	0.17812215	3.1284131	21	10 27.5	19.2
252839	2002	GQ <sub>121</sub>	15.6	X	175.38450	157.84352	29.95008	5.18544	0.0926328	0.17925880	3.1151746	21	10 12.7	20.5
252840	2002	GM <sub>121</sub>	16.8	X	80.05589	97.07450	232.41019	2.28046	0.1786600	0.28404367	2.2919896	21	—	—
252841	2002	GL <sub>122</sub>	17.0	X	110.06226	84.92865	176.82835	6.21585	0.1710205	0.27884131	2.3204095	21	11 22.9	20.6
252842	2002	GQ <sub>122</sub>	17.2	X	129.03635	210.36557	33.79522	5.70463	0.1300413	0.27976810	2.3152821	21	11 15.4	20.6
252843	2002	GB <sub>125</sub>	15.9	X	190.67829	176.31837	352.43082	6.13757	0.0984368	0.17897852	3.1184260	21	10 3.4	20.6
252844	2002	GL <sub>128</sub>	15.6	X	226.69653	280.68332	242.74535	3.69046	0.1041124	0.18314657	3.0709320	21	11 4.0	20.0
252845	2002	GN <sub>128</sub>	15.2	X	42.04220	341.92313	359.60814	9.41983	0.0765963	0.18014161	3.1049887	21	11 16.1	19.6
252846	2002	GD <sub>129</sub>	15.0	X	26.33766	303.64185	13.84639	12.67304	0.0963221	0.17333973	3.1856934	21	10 1.2	19.1
252847	2002	GZ <sub>129</sub>	15.6	X	212.68877	252.07036	202.11243	14.49859	0.1011023	0.17027345	2.3238247	21	7 24.1	20.9
252848	2002	GL <sub>134</sub>	17.5	X	88.35267	80.39983	221.57602	3.69436	0.1385307	0.28094193	2.3088285	21	12 19.2	20.9
252849	2002	GA <sub>139</sub>	12.6	X	289.09552	44.86998	59.03084	21.96190	0.1043078	0.08208768	5.2434532	21	10 30.3	19.4
252850	2002	GF <sub>142</sub>	15.4	X	256.26528	124.98907	55.93571	7.82256	0.0506640	0.18595039	3.0399841	21	—	—
252851	2002	GO <sub>147</sub>	17.0	X	120.20659	171.43303	129.80840	6.01377	0.1786194	0.28568390	2.2832083	21	—	—
252852	2002	GI <sub>147</sub>	15.3	X	224.56643	352.04896	173.55093	18.59045	0.1509039	0.18274973	3.0753760	21	11 2.9	20.2
252853	2002	GT <sub>148</sub>	17.0	X	94.62098	114.24790	205.03681	6.06341	0.1446562	0.28513061	2.2861610	21	—	—
252854	2002	GR <sub>149</sub>	17.9	X	242.62977	348.15350	230.29229	2.11248	0.0953072	0.29296745	2.2452074	21	—	—
252855	2002	GS <sub>151</sub>	17.0	X	244.43296	241.37631	332.97624	6.53833	0.0804690	0.29329896	2.2435153	21	—	—
252856	2002	GO <sub>157</sub>	16.8	X	65.60652	168.32792	151.45034	6.78860	0.1359277	0.28029470	2.3123814	21	12 17.7	20.0
252857	2002	GO <sub>169</sub>	15.4	X	273.56747	131.59277	8.06539	9.30800	0.1678711	0.18603298	3.0390843	21	11 21.1	19.6
252858	2002	GP <sub>178</sub>	15.4	X	208.70292	286.21661	203.97210	9.88147	0.0184513	0.17268339	3.1937605	21	9 9.9	20.1
252859	2002	GZ <sub>178</sub>	17.1	X	91.48504	97.97312	193.21577	7.70890	0.1305609	0.28031049	2.3122945	21	12 8.6	20.5
252860	2002	GB <sub>179</sub>	17.7	X	141.62951	230.70570	45.36159	3.64850	0.1573757	0.28417137	2.2913029	21	—	—
252861	2002	GE <sub>183</sub>	16.0	X	79.49927	255.19548	5.82196	10.58408	0.1341333	0.17491184	3.1665760	21	10 4.1	20.5
252862	2002	GN <sub>185</sub>	15.6	X	320.69569	225.09352	206.41980	15.24755	0.1624525	0.18210042	3.0826822	21	11 13.4	19.1
252863	2002	HS <sub>1</sub>	17.3	X	288.99804	80.01408	130.13111	3.78147	0.1330398	0.29924001	2.2137213	21	—	—
252864	2002	HS <sub>10</sub>	15.1	X	132.62791	208.16715	41.51006	28.88505	0.1517070	0.17871637	3.1214747	21	11 11.4	20.3
252865	2002	HA <sub>15</sub>	15.6	X	231.59909	145.50386	70.53611	2.88576	0.0632851	0.18892437	3.0079970	21	—	—
252866	2002	HJ <sub>17</sub>	15.6	X	241.84115	103.38247	23.43369	4.49488	0.0887241	0.18109495	3.0940820	21	10 10.1	20.1
252867	2002	JG <sub>5</sub>	16.9	X	289.74899	129.85285	45.97537	5.80708	0.0989805	0.29289041	2.2456011	21	—	—
252868	2002	JR <sub>5</sub>	15.1	X	212.41868	79.51941	122.25529	11.59150	0.0991094	0.18388103	3.0627491	21	12 7.2	19.8
252869	2002	JE <sub>21</sub>	15.4	X	235.88271	320.81475	228.07357	15.73266	0.1486410	0.18457428	3.0550754	21	12 9.3	20.0
252870	2002	JD <sub>22</sub>	16.9	X	244.32284	188.61133	45.22709	4.39258	0.158565					

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
252881 2002 JF <sub>63</sub>	17.4	X	93.57170	64.80274	225.43325	4.78861	0.2939784	0.27521774	2.3407324	21	12 18.5	21.5
252882 2002 JM <sub>68</sub>	16.6	X	50.67906	81.89064	50.12451	22.58914	0.2411645	0.30558085	2.1829911	21	3 6.8	18.6
252883 2002 JY <sub>76</sub>	17.2	X	210.60205	7.30826	216.14208	6.93431	0.1374355	0.28882089	2.2666458	21	—	—
252884 2002 JV <sub>78</sub>	17.1	X	28.83213	4.33490	266.46044	0.75917	0.2283249	0.26652679	2.3913444	21	8 29.8	19.1
252885 2002 JU <sub>80</sub>	17.0	X	208.69722	146.89953	22.83393	7.42573	0.0509273	0.28101983	2.3084018	21	11 10.8	20.0
252886 2002 JE <sub>81</sub>	15.9	X	211.43559	197.08707	355.71068	4.30938	0.2336034	0.18389041	3.0626451	21	11 10.8	21.1
252887 2002 JJ <sub>81</sub>	17.2	X	12.87475	8.59821	231.61139	1.86138	0.1845472	0.26190213	2.4194131	21	5 24.5	19.0
252888 2002 JV <sub>83</sub>	15.9	X	205.17184	341.46506	224.15224	8.69870	0.1390345	0.18235448	3.0798182	21	11 28.9	20.7
252889 2002 JM <sub>84</sub>	15.8	X	88.51182	333.13475	223.60640	4.54699	0.2073751	0.16557702	3.2845006	21	8 4.1	20.7
252890 2002 JX <sub>85</sub>	17.2	X	277.72670	194.70031	18.38637	4.22359	0.0605594	0.29531775	2.2332792	21	—	—
252891 2002 JC <sub>86</sub>	17.1	X	134.05795	202.61513	36.58960	7.20094	0.0766594	0.27807586	2.3246658	21	11 12.9	20.2
252892 2002 JB <sub>87</sub>	15.3	X	271.83707	271.33940	240.45777	10.18907	0.1738181	0.18574405	3.0422351	21	12 5.5	19.2
252893 2002 JK <sub>88</sub>	14.9	X	114.00929	161.49739	35.74048	22.47471	0.0344299	0.16836928	3.2480857	21	8 26.8	20.0
252894 2002 JA <sub>90</sub>	15.4	X	221.70812	295.04019	266.71343	3.12260	0.0185051	0.18258781	3.0771939	21	12 24.9	19.6
252895 2002 JT <sub>102</sub>	14.9	X	164.13922	292.58983	233.06934	25.30896	0.1942128	0.17027580	3.2237951	21	8 26.0	20.8
252896 2002 JG <sub>104</sub>	17.3	X	94.24601	45.46682	204.11201	3.76258	0.2051121	0.27212997	2.3584055	21	10 24.5	20.7
252897 2002 JE <sub>105</sub>	16.9	X	14.00923	248.21614	57.38136	5.20254	0.1930082	0.26684796	2.3894253	21	9 21.1	19.0
252898 2002 JO <sub>112</sub>	17.2	X	55.37704	22.85839	262.75971	5.41649	0.2365794	0.26988346	2.3714749	21	10 31.9	20.5
252899 2002 JF <sub>118</sub>	14.9	X	140.71962	355.83356	180.84194	27.62988	0.1111630	0.16938990	3.2350256	21	8 22.5	20.2
252900 2002 JD <sub>121</sub>	15.3	X	111.36820	94.23155	125.66441	14.35958	0.1464319	0.17051522	3.2207767	21	9 24.7	20.5
252901 2002 JW <sub>123</sub>	17.4	X	180.35224	67.96636	142.34625	6.13722	0.1095378	0.28152183	2.3055668	21	11 27.7	20.7
252902 2002 JX <sub>127</sub>	16.8	X	79.43708	220.51229	90.04148	7.49257	0.2884986	0.27621999	2.3350668	21	12 31.9	20.8
252903 2002 JK <sub>129</sub>	15.2	X	207.45169	307.04140	255.64332	6.87095	0.1503738	0.18235505	3.0798119	21	11 26.2	20.0
252904 2002 JN <sub>131</sub>	15.2	X	196.90573	338.23790	217.20274	8.53124	0.1205023	0.18113163	3.0936643	21	11 10.5	20.1
252905 2002 JP <sub>132</sub>	17.2	X	257.98783	309.13073	216.14494	2.46794	0.1224956	0.28816116	2.2701040	21	—	—
252906 2002 JB <sub>134</sub>	15.3	X	148.25118	12.21023	217.79106	16.18442	0.0609268	0.17728077	3.1383036	21	11 3.6	19.9
252907 2002 JE <sub>136</sub>	15.9	X	179.89839	3.07498	197.49821	0.51053	0.1127604	0.17810922	3.1285645	21	10 30.9	20.9
252908 2002 JC <sub>142</sub>	17.9	X	248.18052	22.69521	161.45884	0.14586	0.1475769	0.28863593	2.2676140	21	—	—
252909 2002 KV <sub>3</sub>	17.3	X	239.17966	27.09670	187.29754	24.99141	0.0692622	0.39187459	1.8494304	21	—	—
252910 2002 LO <sub>4</sub>	16.9	X	121.44937	48.45119	184.47761	5.12939	0.1076055	0.27333050	2.3514946	21	10 24.2	20.1
252911 2002 LE <sub>17</sub>	16.5	X	2.85463	219.61427	74.56726	12.38520	0.2622570	0.26185791	2.4196855	21	8 13.1	18.1
252912 2002 LT <sub>17</sub>	17.0	X	128.51211	185.66577	94.23019	4.49566	0.1358636	0.27975445	2.3153574	21	12 30.5	20.6
252913 2002 LO <sub>38</sub>	17.0	X	79.48949	71.01441	238.96332	5.62627	0.2424993	0.27557348	2.3387175	21	12 27.6	20.8
252914 2002 LK <sub>49</sub>	16.9	X	5.27743	54.30797	231.24236	6.36815	0.2098631	0.26230391	2.4169419	21	7 22.4	18.7
252915 2002 LW <sub>50</sub>	17.0	X	76.19461	50.88304	251.44339	6.25711	0.1286479	0.27594815	2.3366001	21	12 4.9	20.1
252916 2002 LC <sub>55</sub>	15.5	X	245.01305	90.68546	74.80843	9.96098	0.2099629	0.18299840	3.0725894	21	11 15.4	20.0
252917 2002 LL <sub>63</sub>	17.2	X	186.35897	239.28024	343.44946	6.31271	0.1235351	0.27832284	2.3232903	21	12 16.6	20.6
252918 2002 NG <sub>18</sub>	16.6	X	17.22995	192.12866	147.62006	7.29643	0.1310291	0.26715527	2.3875926	21	11 8.1	19.2
252919 2002 NY <sub>21</sub>	16.5	X	340.34971	65.06628	270.18996	5.85634	0.1373792	0.26020113	2.4299459	21	8 14.2	18.7
252920 2002 NX <sub>28</sub>	16.9	X	353.83134	221.96851	104.94061	5.81401	0.2105543	0.26117699	2.4238893	21	9 8.8	18.6
252921 2002 NU <sub>33</sub>	16.9	X	348.22487	179.08013	139.90813	5.65497	0.1986783	0.25960424	2.4336691	21	8 6.1	18.4
252922 2002 NA <sub>35</sub>	17.3	X	40.43868	70.17582	284.04972	19.96455	0.0864916	0.37591513	1.9014118	21	—	—
252923 2002 NU <sub>40</sub>	17.2	X	57.54811	188.74441	104.39085	3.54165	0.2042022	0.26706759	2.3881151	21	11 11.1	20.4
252924 2002 NZ <sub>46</sub>	16.8	X	57.89548	296.63582	339.42581	7.03892	0.0788577	0.26606593	2.3941050	21	9 27.0	19.7
252925 2002 NB <sub>49</sub>	16.6	X	214.32365	213.06167	90.17166	4.85861	0.2382000	0.23862436	2.5743022	21	1 20.5	21.1
252926 2002 NS <sub>59</sub>	17.4	X	28.22990	155.52615	113.80272	3.44091	0.1724813	0.26094745	2.4253105	21	8 17.3	19.5
252927 2002 NE <sub>62</sub>	17.1	X	123.47435	316.07577	310.04935	5.71340	0.0992420	0.27432161	2.3458273	21	12 6.2	20.5
252928 2002 NH <sub>62</sub>	17.2	X	41.98254	200.69247	86.24186	2.90394	0.1352397	0.26513216	2.3997230	21	10 2.0	20.0
252929 2002 NJ <sub>65</sub>	16.2	X	238.44892	336.70038	125.75786	13.15850	0.1098100	0.26389441	2.4072207	21	9 13.6	19.6
252930 2002 NV <sub>65</sub>	17.3	X	348.30171	140.97568	131.43934	2.07148	0.1638911	0.25587944	2.4572299	21	5 22.1	19.5
252931 2002 OV <sub>10</sub>	17.5	X	355.36978	132.51184	186.23861	5.54379	0.2253056	0.25950772	2.4342725	21	8 24.8	19.0
252932 2002 OC <sub>21</sub>	17.1	X	1.61424	165.99945	118.05328	3.04845	0.1733514	0.25756600	2.4464914	21	7 10.8	19.0
252933 2002 PJ <sub>6</sub>	16.5	X	147.43403	274.63224	298.11788	6.17602	0.0856782	0.26748495	2.3856303	21	10 20.7	20.1
252934 2002 PQ <sub>7</sub>	17.1	X	153.97123	72.54276	162.60688	2.28972	0.1944720	0.27405134	2.3473694	21	11 27.4	20.9
252935 2002 PG <sub>10</sub>	16.8	X	304.29439	127.18662	241.07029	3.35180	0.1626773	0.25776787	2.4452139	21	7 23.1	19.5
252936 2002 PD <sub>13</sub>	17.1	X	134.25930	88.67892	163.94063	4.66151	0.1103048	0.27410649	2.3470545	21	12 1.8	20.7
252937 2002 PR <sub>14</sub>	17.4	X	42.91827	30.21319	293.64351	2.17387	0.1893261	0.26850181	2.3796034	21	11 30.3	20.4
252938 2002 PQ <sub>15</sub>	16.9	X	337.18066	214.94579	134.60668	7.48362	0.1304599	0.26197353	2.4189735	21	9 4.6	19.0
252939 2002 PD <sub>21</sub>	16.8	X	138.71324	306.95921	287.74702	5.94419	0.1754503	0.27208176	2.3586840	21	11 11.1	20.7
252940 2002 PP <sub>21</sub>	16.7	X	230.94530	324.69541	308.96816	4.26250	0.2216530	0.23825113	2.5769900	21	—	—
252941 2002 PC <sub>23</sub>	17.5	X	317.39473	141.77786	199.84540	2.45411	0.2198638	0.25673570	2.4517633	21	6 27.2	19.7
252942 2002 PZ <sub>24</sub>	16.6	X	43.63392	345.90576	285.97869	5.80675	0.0952938	0.26132892	2.4229497	21	9 1.0	19.5
252943 2002 PH <sub>38</sub>	17.3	X	348.67563	151.61716	142.88109	1.93237	0.1717306	0.25721224	2.4487341	21	6 27.1	19.2
252944 2002 PA <sub>43</sub>	16.9	X	79.45385	60.89929	230.82809	4.96781	0.1325340	0.26910733	2.3760324	21	11 24.4	20.1
252945 2002 PY <sub>51</sub>	17.5	X	327.44799	265.79216	102.24367	2.52785	0.1986624	0.26114592	2.4240815	21	9 8.2	19.2
252946 2002 PE <sub>58</sub>	16.7	X	254.99922	102.59192	235.01573	5.59873	0.1815586	0.24630898	2.5204759	21	4 4.2	20.7
252947 2002 PL <sub>68</sub>	16.6	X	54.87008	322.26451	289.56549	4.93948	0.1627745	0.26085516	2.4258825	21	9 1.3	19.6
252948 2002 PC <sub>75</sub>	15.8	X	110.19602	87.34413	257.25805	9.57505	0.1024626	0.22701324	2.6613496	21	—	—
252949 2002 PB <sub>76</sub>	16.6	X	6.06315	3.13869	338.86918	6.18480	0.1342439	0.26450228	2.4035313	21	10 16.9	19.0
252950 2002 PX <sub>77</sub>	16.1	X	222.01886	265.17444	79.36672	6.45282	0.2190892	0.24237599	2.5476689	21	3 18.4	20.5
252951 2002 PW <sub>78</sub>	15.8	X	2.79748	282.97862	104.01674	6.04042	0.1245548	0.21685805	2.7437993	21	12 5.4	18.9
252952 2002 PK <sub>89</sub>	16.1	X	323.69795	164.75384	252.75892	11.64040	0.2513071	0.26414335	2.4057081	21	11 19.6	17.5
252953 2002 PB <sub>91</sub>	16.4	X	342.79450	315.11666	74.98155	5.77791	0.2301108	0.26493946	2.4008864	21	11 26.6	

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
252961 2002 PA <sub>119</sub>	17.1	X	147.86164	356.82148	258.18568	3.87889	0.1973891	0.27478240	2.3432040	21	12 15.9	20.9
252962 2002 PS <sub>127</sub>	17.4	X	333.25110	216.43513	118.90259	3.33632	0.2170808	0.25795116	2.4440554	21	7 24.5	19.3
252963 2002 PS <sub>135</sub>	17.7	X	321.37944	277.27228	35.43704	3.23694	0.2197901	0.25443064	2.4665491	21	5 20.5	20.1
252964 2002 PU <sub>137</sub>	17.2	X	329.54023	335.12776	13.23566	4.35003	0.2351475	0.25837358	2.4413908	21	8 6.2	18.9
252965 2002 PA <sub>139</sub>	17.3	X	53.31124	359.00592	321.35290	19.95958	0.0456715	0.37141481	1.9167401	21	12 7.9	19.8
252966 2002 PJ <sub>139</sub>	17.3	X	23.81327	56.70199	339.56482	19.07801	0.0882688	0.37540419	1.9031366	21	—	—
252967 2002 PR <sub>141</sub>	17.2	X	15.08943	54.91601	309.76366	17.70090	0.0773713	0.36933504	1.9239290	21	12 26.7	19.2
252968 2002 PM <sub>155</sub>	17.4	X	340.95308	0.31824	0.65779	0.81079	0.1929187	0.26217780	2.4177169	21	9 29.7	19.1
252969 2002 PM <sub>158</sub>	17.4	X	70.68044	302.92470	343.23559	2.18586	0.102811	0.26797669	2.3827110	21	11 15.6	20.8
252970 2002 PB <sub>159</sub>	17.4	X	20.05374	326.90831	48.68027	1.92009	0.2526792	0.26909571	2.3761009	21	—	—
252971 2002 PL <sub>163</sub>	17.1	X	115.48021	108.67360	135.98131	3.00578	0.1544331	0.26960556	2.3731043	21	11 4.5	20.6
252972 2002 PZ <sub>165</sub>	17.2	X	20.00312	318.15768	354.96628	3.34501	0.1540786	0.26223585	2.4173600	21	10 3.9	19.4
252973 2002 PQ <sub>177</sub>	17.1	X	31.88660	190.75524	82.45453	3.60528	0.1616858	0.26154638	2.4216065	21	8 29.9	19.5
252974 2002 PE <sub>182</sub>	16.9	X	278.23622	57.51670	341.28765	5.49881	0.1283421	0.25845227	2.4408953	21	8 3.3	19.9
252975 2002 QV <sub>21</sub>	17.5	X	320.46014	209.64427	125.60046	2.33266	0.2005543	0.25614668	2.4555205	21	6 26.9	19.6
252976 2002 QB <sub>23</sub>	17.4	X	320.71662	18.65307	354.47781	0.49185	0.1974010	0.26021582	2.4298544	21	8 29.8	19.3
252977 2002 QF <sub>23</sub>	17.6	X	332.17166	148.28211	146.87933	2.73426	0.1576143	0.25329950	2.4738868	21	5 25.9	20.2
252978 2002 QM <sub>24</sub>	17.3	X	79.07966	287.69522	333.83718	19.35808	0.0376839	0.36891146	1.9254014	21	10 3.9	19.6
252979 2002 QE <sub>29</sub>	17.3	X	342.71702	343.69787	23.77976	3.58500	0.1966461	0.26308163	2.4121762	21	10 15.7	18.8
252980 2002 QA <sub>30</sub>	17.2	X	296.56317	354.14797	38.12806	3.99437	0.1534759	0.25918921	2.4362664	21	8 19.8	19.8
252981 2002 QA <sub>35</sub>	17.6	X	300.03975	291.93241	50.90534	2.62332	0.1946091	0.25326133	2.4741354	21	6 3.1	20.6
252982 2002 QB <sub>63</sub>	17.7	X	284.84526	132.06200	260.39022	1.24982	0.1765863	0.25683409	2.4511371	21	7 25.1	20.4
252983 2002 QG <sub>72</sub>	18.6	X	356.40905	300.09927	343.60865	1.75302	0.2206313	0.25637366	2.4540709	21	6 25.9	20.0
252984 2002 QK <sub>78</sub>	17.0	X	32.49551	282.52962	348.98522	4.67971	0.0656413	0.25703564	2.4498556	21	8 13.1	19.8
252985 2002 QK <sub>80</sub>	17.1	X	261.44560	1.68468	87.34993	2.26845	0.1466405	0.26160064	2.4212717	21	9 16.9	20.0
252986 2002 QP <sub>89</sub>	17.5	X	350.37125	207.18360	207.14200	1.70175	0.1930837	0.26917561	2.3756306	21	—	—
252987 2002 QA <sub>91</sub>	16.7	X	44.13798	246.20635	45.17425	6.97493	0.1225118	0.26211888	2.4180792	21	10 9.7	19.5
252988 2002 QJ <sub>97</sub>	17.3	X	311.63005	358.82476	47.39424	2.00928	0.1580189	0.26339378	2.4102701	21	10 7.9	19.3
252989 2002 QJ <sub>99</sub>	17.3	X	145.05007	147.19657	95.98502	5.75920	0.2100585	0.27404567	2.3474017	21	11 29.8	21.3
252990 2002 QJ <sub>99</sub>	17.1	X	160.99458	203.04776	1.53084	7.40825	0.0631509	0.26669232	2.3903548	21	10 26.3	20.4
252991 2002 QN <sub>100</sub>	17.1	X	331.61481	323.30204	30.08183	6.97210	0.1368104	0.26012217	2.4304376	21	8 31.6	19.4
252992 2002 QE <sub>102</sub>	17.0	X	95.20008	197.59294	63.67844	6.70995	0.2029895	0.26749642	2.3855621	21	11 9.0	20.7
252993 2002 QJ <sub>102</sub>	17.1	X	33.92753	206.10210	93.05696	5.26821	0.1485723	0.26276681	2.4141025	21	10 10.2	19.8
252994 2002 QE <sub>105</sub>	17.4	X	251.05530	75.76452	338.89755	2.11705	0.2381435	0.25353970	2.4723241	21	7 5.1	21.0
252995 2002 QJ <sub>105</sub>	17.4	X	273.07975	222.05773	185.84026	0.73414	0.1779885	0.25656420	2.4528558	21	7 30.0	20.5
252996 2002 QK <sub>111</sub>	17.2	X	117.28994	47.96149	170.72093	5.25795	0.0708035	0.26423993	2.4051219	21	9 26.6	20.4
252997 2002 QK <sub>114</sub>	16.5	X	175.49219	230.18134	265.84226	5.39027	0.0767495	0.25732189	2.4480384	21	8 11.7	20.1
252998 2002 QJ <sub>126</sub>	17.1	X	240.91160	60.56475	41.53913	4.89786	0.1078660	0.26039515	2.4287387	21	9 14.5	20.3
252999 2002 QM <sub>134</sub>	17.4	X	11.64366	197.96680	94.84099	3.55438	0.1584776	0.25811254	2.4430366	21	8 18.6	19.5
253000 2002 RO <sub>26</sub>	16.5	X	246.07804	116.87566	194.82806	12.91973	0.1923923	0.24175394	2.5520373	21	2 21.6	20.9
253001 2002 RS <sub>38</sub>	17.5	X	287.03983	211.05233	172.90134	10.68326	0.2483351	0.25508593	2.4623231	21	7 3.4	20.9
253002 2002 RU <sub>39</sub>	16.9	X	6.42516	68.16708	250.77731	4.26450	0.2006245	0.26075330	2.4265142	21	9 19.7	19.0
253003 2002 RN <sub>40</sub>	17.1	X	300.12137	271.43529	66.20935	3.40385	0.2004664	0.25292613	2.4763209	21	5 26.0	19.7
253004 2002 RQ <sub>40</sub>	16.8	X	49.08625	154.99012	122.83169	4.64693	0.2102510	0.26254444	2.4154655	21	10 12.4	19.8
253005 2002 RA <sub>47</sub>	15.8	X	156.87763	291.05316	1.99313	13.30856	0.2026926	0.22681196	2.6629239	21	—	—
253006 2002 RH <sub>66</sub>	17.6	X	304.19394	263.49257	172.00451	21.80992	0.1354164	0.36906653	1.9248621	21	12 14.3	19.5
253007 2002 RD <sub>81</sub>	14.8	X	113.98541	231.59296	157.03104	4.17102	0.2374725	0.12343159	3.9950158	21	2 19.7	20.8
253008 2002 RE <sub>97</sub>	16.6	X	198.61523	340.32090	6.39287	5.35898	0.2602015	0.23687534	2.5869586	21	3 1.7	21.2
253009 2002 RV <sub>99</sub>	17.2	X	17.51394	236.00957	180.89327	23.54674	0.1261244	0.37502678	1.9044132	21	—	—
253010 2002 RQ <sub>108</sub>	17.1	X	326.40299	189.53558	160.25034	1.31242	0.1949400	0.25686770	2.4509233	21	8 3.7	19.2
253011 2002 RN <sub>111</sub>	17.2	X	141.82381	263.00708	354.45384	20.27310	0.0588592	0.37217803	1.9141188	21	—	—
253012 2002 RD <sub>114</sub>	14.5	X	134.61663	261.34616	107.04056	3.82208	0.2469886	0.12472693	3.9673079	21	2 16.9	20.7
253013 2002 RX <sub>120</sub>	17.2	X	344.75576	97.86268	209.19727	8.61238	0.2637827	0.25587475	2.4572599	21	6 28.8	18.9
253014 2002 RK <sub>125</sub>	16.9	X	218.34194	104.77093	253.12197	4.26610	0.2736175	0.24153532	2.5535769	21	3 25.1	21.6
253015 2002 RP <sub>129</sub>	17.4	X	338.82209	326.24885	349.24547	3.30921	0.1639390	0.25454179	2.4658311	21	7 10.8	19.6
253016 2002 RA <sub>161</sub>	17.5	X	317.48676	84.09428	253.56684	0.85627	0.1886450	0.25477183	2.4643465	21	6 26.9	19.7
253017 2002 RA <sub>175</sub>	16.6	X	210.33588	93.80056	295.72273	5.58140	0.2442308	0.24399891	2.5363594	21	4 26.3	21.0
253018 2002 RJ <sub>191</sub>	16.4	X	193.78522	326.59327	24.84989	12.98014	0.2868024	0.23772225	2.5808108	21	3 8.1	21.2
253019 2002 RC <sub>195</sub>	16.7	X	345.61181	320.15296	6.22912	7.63033	0.1159570	0.25713705	2.4492114	21	8 17.4	19.1
253020 2002 RG <sub>195</sub>	17.1	X	347.22789	156.61793	132.45976	2.71494	0.1855316	0.25381235	2.4705532	21	6 13.7	19.2
253021 2002 RH <sub>202</sub>	16.6	X	281.80701	185.46596	241.92225	6.11997	0.1789652	0.25801174	2.4436729	21	9 5.9	19.5
253022 2002 RX <sub>230</sub>	16.7	X	32.66150	281.01752	32.15018	5.04566	0.1886059	0.26296652	2.4128801	21	10 31.4	19.4
253023 2002 RO <sub>241</sub>	16.6	X	320.54053	190.11970	271.40630	3.70791	0.1829241	0.27042229	2.3683237	21	—	—
253024 2002 RU <sub>242</sub>	16.5	X	71.46711	255.18208	297.60904	5.06702	0.0559533	0.25169792	2.4843701	21	6 17.1	19.5
253025 2002 RO <sub>245</sub>	16.5	X	47.63226	309.29052	340.24807	7.85591	0.0263437	0.26195266	2.4191020	21	9 22.6	19.6
253026 2002 RZ <sub>247</sub>	14.9	X	142.57833	191.52529	157.23177	9.48952	0.1932396	0.12434374	3.9754543	21	1 26.9	21.1
253027 2002 RJ <sub>253</sub>	16.8	X	233.66702	208.77631	195.83547	5.60746	0.0254433	0.25089335	2.4896786	21	6 24.9	20.2
253028 2002 RE <sub>256</sub>	16.7	X	354.88390	134.83405	267.01098	5.94387	0.2038369	0.26752783	2.3853754	21	—	—
253029 2002 RF <sub>261</sub>	17.1	X	273.60904	143.38707	291.91492	4.32462	0.1551338	0.25861022	2.4399013	21	9 9.8	20.1
253030 2002 RV <sub>261</sub>	16.6	X	327.34601	279.69629	89.78148	8.02700	0.1485988	0.25857835	2.4401018	21	9 17.7	18.9
253031 2002 RJ <sub>262</sub>	16.8	X	211.62570	283.56792	205.86261	5.71238	0.0702388	0.25888951	2.4381462	21	9 15.8	20.1
253032 2002 RN <sub>272</sub>	17.3	X	244.57074	100.79104	329.12762	4.07660	0.1544605	0.25536867	2.4605053	21	7 28.8	20.7
253033 2002 RC <sub>275</sub>	17.3	X	55.10066	220.59532	16.86136	2.67838	0.1221066	0.258498				

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
253041	2002	SV <sub>32</sub>	14.6	X	140.72154	154.20351	207.95116	8.29816	0.2524177	0.12411115	3.9804196	21	2 11.9	21.1
253042	2002	SD <sub>35</sub>	17.3	X	59.62176	3.30792	8.94674	20.93651	0.0989285	0.37736008	1.8965549	21	—	—
253043	2002	SE <sub>37</sub>	14.8	X	138.01565	283.94795	94.58169	4.41061	0.1561361	0.12435760	3.9751589	21	2 24.0	20.9
253044	2002	SM <sub>41</sub>	17.3	X	253.13143	237.47197	130.70863	4.49415	0.1944005	0.24772317	2.5108742	21	5 13.3	21.2
253045	2002	SZ <sub>41</sub>	17.0	X	308.60100	38.82414	41.18903	2.85831	0.1781014	0.26252256	2.4155997	21	11 20.5	19.0
253046	2002	SC <sub>51</sub>	17.3	X	320.72663	221.77333	188.23207	24.67286	0.1082308	0.36853107	1.9267261	21	12 3.9	19.4
253047	2002	SG <sub>56</sub>	16.6	X	195.79305	82.35395	346.20992	13.00383	0.2649635	0.24508857	2.5288361	21	6 1.9	21.4
253048	2002	SG <sub>59</sub>	16.9	X	330.54240	315.64759	46.17020	7.10435	0.1721102	0.25963852	2.4334549	21	9 10.3	19.0
253049	2002	TD	17.4	X	221.60869	354.51072	16.44135	7.47511	0.3090797	0.24263381	2.5458638	21	4 12.5	22.1
253050	2002	TG <sub>2</sub>	16.7	X	17.92329	41.97077	276.32148	1.26311	0.1913034	0.25925960	2.4358254	21	10 13.1	18.8
253051	2002	TV <sub>14</sub>	17.5	X	352.03756	85.74552	243.93645	1.69462	0.2129131	0.25744106	2.4472829	21	9 3.6	19.0
253052	2002	TN <sub>26</sub>	16.7	X	312.13422	331.41630	29.18286	6.48802	0.1249188	0.25353208	2.4723736	21	8 4.4	19.4
253053	2002	TX <sub>26</sub>	16.2	X	25.12907	273.48904	43.95133	9.16612	0.1410290	0.25866637	2.4395482	21	10 19.2	18.8
253054	2002	TJ <sub>42</sub>	16.6	X	181.27431	54.78728	27.53384	29.78787	0.2954366	0.24144705	2.5541993	21	6 1.7	21.7
253055	2002	TG <sub>46</sub>	17.2	X	34.39824	115.83216	207.36695	20.37419	0.0862453	0.36484240	1.9396908	21	11 21.5	19.2
253056	2002	TG <sub>48</sub>	16.3	X	173.20436	216.44767	208.48622	9.63076	0.1863924	0.23890261	2.5723030	21	5 12.8	20.5
253057	2002	TL <sub>48</sub>	16.1	X	165.49080	258.33480	211.53940	14.15930	0.0358383	0.24471364	2.5314184	21	6 24.5	19.9
253058	2002	TT <sub>59</sub>	17.4	X	31.77012	227.50309	191.51091	21.53211	0.1080548	0.37934592	1.8899302	21	—	—
253059	2002	TK <sub>66</sub>	16.8	X	38.50905	81.46482	270.91845	20.07072	0.1246829	0.37153137	1.9163392	21	—	—
253060	2002	TF <sub>68</sub>	16.6	X	299.05466	238.07783	243.71734	18.58447	0.0883720	0.37254366	1.9128662	21	—	—
253061	2002	TV <sub>69</sub>	16.6	X	220.72099	260.02216	137.06132	5.41479	0.2496026	0.24258896	2.5461776	21	5 17.5	21.0
253062	2002	TC <sub>70</sub>	21.0	X	310.47724	162.13741	134.74709	2.14757	0.1964312	0.61560058	1.3685795	21	2 18.4	21.2
253063	2002	TY <sub>73</sub>	16.5	X	4.15344	102.89013	263.26224	4.92489	0.1325285	0.26171876	2.4205431	21	11 19.4	19.0
253064	2002	TO <sub>80</sub>	16.9	X	209.54078	135.12830	221.78750	3.63607	0.2755093	0.23951934	2.5678855	21	3 18.7	21.5
253065	2002	TA <sub>84</sub>	16.3	X	296.29608	355.65003	48.77127	9.94453	0.1063054	0.25694856	2.4504091	21	9 17.5	19.2
253066	2002	TJ <sub>85</sub>	17.2	X	297.40863	53.57813	36.07322	21.29073	0.1031169	0.36732047	1.9309571	21	12 16.1	19.0
253067	2002	TZ <sub>93</sub>	17.6	X	351.20264	239.62597	78.85878	1.41900	0.2312710	0.25715731	2.4490828	21	8 14.4	18.9
253068	2002	TB <sub>96</sub>	14.4	X	170.47244	10.22941	319.99273	7.99677	0.1731218	0.12440352	3.9741807	21	1 29.8	20.7
253069	2002	TG <sub>110</sub>	17.9	X	248.36154	296.97094	54.90161	10.33772	0.3515875	0.24527842	2.5275310	21	4 9.9	22.5
253070	2002	TV <sub>113</sub>	16.1	X	302.13511	31.62359	248.37213	10.36482	0.1101003	0.24289960	2.5440063	21	3 20.6	19.7
253071	2002	TG <sub>127</sub>	16.5	X	57.44771	51.29716	238.54338	6.89813	0.0947118	0.26138670	2.4225926	21	10 17.7	19.6
253072	2002	TL <sub>127</sub>	16.5	X	11.22245	41.84420	258.61702	5.65503	0.1499523	0.25672035	2.4518610	21	8 24.0	18.8
253073	2002	TL <sub>130</sub>	15.1	X	254.06714	259.68031	340.88750	15.00187	0.0307269	0.17788117	3.1312379	21	1 2.2	19.9
253074	2002	TK <sub>139</sub>	16.7	X	201.86329	25.53845	6.02189	17.29785	0.2126647	0.24032871	2.5621170	21	4 19.9	21.2
253075	2002	TD <sub>166</sub>	15.9	X	97.94899	195.20507	257.06793	12.65981	0.2894200	0.23337746	2.6127435	21	4 9.6	19.7
253076	2002	TD <sub>167</sub>	16.5	X	279.88295	129.92287	237.75128	15.58297	0.1158521	0.25136396	2.4865701	21	6 21.3	19.9
253077	2002	TJ <sub>183</sub>	16.9	X	259.38337	194.17360	214.77008	5.99181	0.1313146	0.25293102	2.4762889	21	7 18.9	20.3
253078	2002	TA <sub>184</sub>	16.3	X	226.82081	170.57230	258.08388	5.52390	0.0760709	0.25106691	2.4885311	21	7 13.3	19.8
253079	2002	TL <sub>205</sub>	16.8	X	331.70657	78.16475	302.64414	2.65073	0.2041066	0.25842558	2.4410634	21	10 6.8	18.5
253080	2002	TV <sub>206</sub>	16.8	X	235.55366	84.96462	269.87860	3.62833	0.2609815	0.24218994	2.5489735	21	4 3.7	21.3
253081	2002	TO <sub>208</sub>	17.2	X	177.43211	224.64761	187.36043	6.40503	0.3387931	0.23764350	2.5813809	21	5 4.5	22.1
253082	2002	TN <sub>210</sub>	14.7	X	152.61329	147.94920	200.37398	11.06891	0.2407332	0.12368486	3.9895601	21	2 4.8	21.3
253083	2002	TH <sub>212</sub>	15.7	X	176.57093	19.26800	57.66985	14.72901	0.1426802	0.24457610	2.5323674	21	5 27.9	19.6
253084	2002	TK <sub>222</sub>	17.2	X	317.51535	50.43109	353.57041	2.82550	0.1934374	0.25912363	2.4366774	21	10 11.6	19.2
253085	2002	TG <sub>227</sub>	16.5	X	219.70171	199.93462	197.83474	13.29177	0.1711277	0.24316764	2.5421365	21	5 20.8	20.7
253086	2002	TD <sub>237</sub>	16.4	X	112.76100	116.83784	287.76940	10.15517	0.1535209	0.22878520	2.6475902	21	2 7.9	20.0
253087	2002	TC <sub>242</sub>	16.3	X	359.71671	305.59979	65.83555	14.09984	0.1103862	0.26112961	2.4241825	21	11 18.4	18.8
253088	2002	TG <sub>247</sub>	16.9	X	342.25473	190.48894	148.30004	3.35549	0.2158352	0.25624628	2.4548841	21	8 24.5	18.2
253089	2002	TE <sub>251</sub>	17.1	X	200.94157	27.28332	11.54681	4.74725	0.2068412	0.24123525	2.5556941	21	5 2.1	21.4
253090	2002	TY <sub>251</sub>	17.2	X	281.91848	244.50119	133.69491	3.44123	0.2199140	0.25245746	2.4793847	21	6 23.6	20.5
253091	2002	TZ <sub>251</sub>	17.4	X	300.68601	323.66971	15.89133	9.78526	0.2450738	0.25208860	2.4818027	21	5 19.2	20.6
253092	2002	TW <sub>260</sub>	16.2	X	144.15063	162.34427	225.91141	13.10514	0.2665634	0.22939342	2.6429082	21	3 4.2	20.8
253093	2002	TY <sub>263</sub>	17.0	X	12.44195	189.06643	221.33283	20.18069	0.0743496	0.37316904	1.9107285	21	—	—
253094	2002	TK <sub>267</sub>	15.8	X	77.71222	110.90104	320.61626	21.34419	0.0568824	0.22666545	2.6640712	21	1 19.4	19.3
253095	2002	TH <sub>270</sub>	16.5	X	104.22664	252.88444	347.93170	5.76663	0.1037796	0.25957903	2.4338267	21	10 10.9	20.0
253096	2002	TZ <sub>271</sub>	16.0	X	9.14579	296.93116	357.87553	8.17909	0.1229496	0.25372839	2.4710982	21	8 14.6	18.5
253097	2002	TS <sub>273</sub>	16.5	X	264.40741	170.41433	265.36652	3.69917	0.1701777	0.25450846	2.4660463	21	8 25.8	19.6
253098	2002	TH <sub>286</sub>	16.7	X	175.87136	65.06566	11.27668	5.98595	0.2566720	0.23973616	2.5663370	21	5 28.8	21.2
253099	2002	TC <sub>304</sub>	17.2	X	219.21583	335.32806	49.52414	8.67194	0.1582433	0.24356788	2.5393508	21	5 3.6	21.3
253100	2002	TA <sub>339</sub>	16.8	X	271.54843	161.47326	162.58984	8.25014	0.1102302	0.24398668	2.5364442	21	4 16.7	20.3
253101	2002	TO <sub>354</sub>	17.5	X	13.01570	59.17419	209.22915	6.63521	0.1710943	0.25428928	2.4674632	21	7 10.2	19.7
253102	2002	TG <sub>377</sub>	14.8	X	181.79781	177.45917	158.55047	9.27596	0.1293678	0.12466162	3.9686934	21	2 11.6	21.0
253103	2002	TL <sub>383</sub>	16.6	X	302.71586	151.97134	140.39763	4.68565	0.1151587	0.24424457	2.5346584	21	4 13.3	19.9
253104	2002	UP	17.3	X	203.49778	87.86001	279.27096	2.14047	0.2672453	0.23981425	2.5657799	21	3 26.6	22.0
253105	2002	UW <sub>2</sub>	15.3	X	172.79925	275.46403	74.05331	27.65340	0.2634768	0.23251703	2.6191852	21	2 24.1	20.4
253106	2002	UR <sub>3</sub>	16.6	X	127.91843	141.22865	51.89601	48.60565	0.7927884	0.60874468	1.3788359	21	10 30.1	20.5
253107	2002	UK <sub>4</sub>	16.7	X	336.15712	143.80031	278.91575	17.82557	0.0985306	0.36810986	1.9281956	21	—	—
253108	2002	UO <sub>6</sub>	16.5	X	15.80058	281.02885	87.88562	7.42486	0.1579896	0.26388350	2.4072871	21	12 17.5	19.1
253109	2002	UC <sub>12</sub>	16.7	X	351.35711	146.39343	305.76607	19.12388	0.0896944	0.37623238	1.9003427	21	—	—
253110	2002</													

ELEMENTS AND OPPOSITION DATES IN 2021

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
253121	2002	VD <sub>4</sub>	16.2	X	267.56765	271.85970	44.46999	10.02541	0.1327992	0.24000296	2.5644347	21	4 1.1	20.0
253122	2002	VN <sub>8</sub>	16.8	X	195.63242	54.30831	324.30776	5.45076	0.1325120	0.23755943	2.5819899	21	4 1.2	20.9
253123	2002	VG <sub>9</sub>	16.6	X	211.18576	56.37240	22.50571	10.24585	0.2256473	0.24546865	2.5262250	21	7 1.1	21.0
253124	2002	VU <sub>11</sub>	16.1	X	250.93563	99.12587	301.62612	1.84092	0.0823729	0.24630212	2.5205227	21	7 5.3	19.3
253125	2002	VY <sub>11</sub>	16.7	X	202.58631	276.46593	69.64515	5.36837	0.3008511	0.23665582	2.5885581	21	3 5.6	21.5
253126	2002	VV <sub>13</sub>	16.8	X	42.55571	74.20771	307.43157	17.42599	0.1080027	0.37496437	1.9046246	21	—	—
253127	2002	VA <sub>14</sub>	17.2	X	79.19162	79.62244	234.94941	18.64352	0.0685347	0.36981572	1.9222615	21	—	—
253128	2002	VP <sub>14</sub>	17.3	X	355.00227	351.30776	47.47275	23.68288	0.1300963	0.36837766	1.9272610	21	—	—
253129	2002	VQ <sub>15</sub>	17.1	X	73.90213	301.01993	26.69870	21.38273	0.0700196	0.37041738	1.9201794	21	—	—
253130	2002	VU <sub>19</sub>	17.2	X	204.01935	136.57461	215.77394	11.01091	0.2086037	0.23619115	2.5919521	21	3 7.3	21.7
253131	2002	VJ <sub>20</sub>	17.0	X	179.90675	232.89911	222.28581	3.85105	0.2264925	0.24167914	2.5525638	21	6 25.0	21.3
253132	2002	VO <sub>23</sub>	16.9	X	161.86908	37.81819	44.95244	4.52443	0.2386053	0.23785688	2.5798368	21	5 26.1	21.2
253133	2002	VT <sub>25</sub>	17.2	X	246.80601	130.95589	232.99637	1.67951	0.2329229	0.24368208	2.5385574	21	4 27.2	21.2
253134	2002	VC <sub>30</sub>	16.2	X	197.68551	216.04384	225.14665	8.25487	0.0855586	0.24335840	2.5408078	21	6 25.3	20.0
253135	2002	VG <sub>40</sub>	17.0	X	197.31290	82.52948	346.55074	7.02931	0.3083570	0.24179623	2.5517396	21	6 4.4	21.9
253136	2002	VF <sub>43</sub>	16.6	X	210.31120	218.24368	204.28782	12.05527	0.0677052	0.24436708	2.5338112	21	6 16.2	20.4
253137	2002	VC <sub>46</sub>	16.9	X	205.52361	339.51390	95.24776	4.98854	0.1821016	0.24427634	2.5344387	21	6 22.1	21.0
253138	2002	VW <sub>46</sub>	16.6	X	143.35071	278.63787	206.98103	11.32029	0.2483795	0.23964178	2.5670108	21	7 2.9	21.2
253139	2002	VU <sub>47</sub>	16.7	X	255.73584	275.93174	87.91160	4.80169	0.2933818	0.24433614	2.5340251	21	5 1.7	20.9
253140	2002	VL <sub>60</sub>	16.8	X	140.98052	192.66152	257.39616	3.83305	0.2274005	0.23581237	2.5947270	21	5 16.9	20.9
253141	2002	VW <sub>60</sub>	16.5	X	165.49055	173.78675	260.58840	7.91273	0.1365607	0.23861525	2.5743677	21	5 13.7	20.6
253142	2002	VP <sub>62</sub>	16.3	X	156.63349	167.98326	271.60367	6.65022	0.1347218	0.23757626	2.5818679	21	5 10.9	20.3
253143	2002	VN <sub>63</sub>	16.4	X	91.55363	112.65446	315.90675	2.75410	0.2128535	0.22623473	2.6674515	21	2 22.3	19.6
253144	2002	VG <sub>67</sub>	16.7	X	219.25905	27.82347	48.87609	5.50385	0.1123593	0.24691594	2.5163437	21	7 13.5	20.5
253145	2002	VT <sub>71</sub>	16.8	X	317.57009	342.75750	68.91011	5.91292	0.0902793	0.25858962	2.4400309	21	11 1.5	19.4
253146	2002	VC <sub>72</sub>	17.2	X	195.52459	281.55737	111.34135	5.06799	0.2268060	0.23898791	2.5716909	21	4 23.9	21.7
253147	2002	VJ <sub>72</sub>	17.3	X	274.90464	19.19074	68.28758	5.77529	0.1616931	0.25563843	2.4587740	21	10 3.2	20.1
253148	2002	VQ <sub>76</sub>	16.5	X	341.46730	261.92288	115.34433	5.35679	0.2021267	0.25812549	2.4429549	21	10 30.8	18.4
253149	2002	VD <sub>79</sub>	16.4	X	2.19022	272.13313	93.10993	7.11547	0.1326878	0.25884107	2.4384504	21	11 16.6	18.9
253150	2002	VA <sub>80</sub>	16.3	X	122.12287	296.35972	158.73826	5.54577	0.2412446	0.23275703	2.6173844	21	5 9.3	20.4
253151	2002	VL <sub>80</sub>	17.0	X	233.11500	177.86614	193.03942	7.09794	0.2721918	0.24188825	2.5510925	21	4 23.3	21.5
253152	2002	VF <sub>84</sub>	15.0	X	259.07807	292.63069	98.17490	14.66615	0.1919015	0.24486328	2.5303870	21	6 17.8	18.6
253153	2002	VN <sub>94</sub>	16.5	X	246.04478	207.68941	282.73889	3.80908	0.1340603	0.25566394	2.4586105	21	10 20.8	19.8
253154	2002	VB <sub>103</sub>	17.2	X	228.99094	85.14450	290.64628	2.85279	0.2862619	0.24263221	2.5458750	21	4 23.5	21.8
253155	2002	VV <sub>103</sub>	16.2	X	8.10715	61.01718	288.16517	5.88823	0.1543470	0.25831762	2.4417434	21	11 2.1	18.7
253156	2002	VJ <sub>109</sub>	15.5	X	160.32090	69.88358	72.02654	12.40092	0.2124086	0.24083755	2.5585068	21	8 10.4	20.0
253157	2002	VN <sub>109</sub>	16.3	X	261.40444	111.46393	260.06602	7.39391	0.1903112	0.24497846	2.5295937	21	5 25.1	20.1
253158	2002	VU <sub>120</sub>	15.8	X	179.84011	327.09929	37.05126	15.89457	0.0774088	0.23104800	2.6302755	21	3 7.6	19.9
253159	2002	VJ <sub>121</sub>	15.4	X	345.92110	210.89125	285.34561	10.29124	0.3296319	0.21546537	2.7556099	21	—	—
253160	2002	VL <sub>121</sub>	16.2	X	150.87073	107.63099	288.30333	8.25543	0.1426955	0.23118045	2.6292707	21	3 9.1	20.3
253161	2002	VL <sub>123</sub>	17.2	X	194.63059	166.02683	224.51266	3.40397	0.1963773	0.23791926	2.5793859	21	4 17.5	21.4
253162	2002	VK <sub>136</sub>	16.8	X	345.35656	124.90612	283.21150	17.84117	0.1153539	0.36721749	1.9313181	21	—	—
253163	2002	VQ <sub>146</sub>	17.4	X	140.57246	243.55253	221.76183	4.31489	0.2147041	0.23760494	2.5816602	21	6 4.5	21.6
253164	2002	VW <sub>146</sub>	16.2	X	129.68346	67.98836	55.57713	5.30366	0.2536381	0.23281249	2.6169687	21	6 20.5	20.5
253165	2002	VW <sub>14</sub>	17.0	X	197.98588	320.36921	121.77547	5.53830	0.2448814	0.24232367	2.5480356	21	6 23.3	21.5
253166	2002	VV <sub>15</sub>	16.7	X	192.40830	248.82114	175.61675	7.46411	0.1767567	0.24043240	2.5613803	21	5 29.5	21.0
253167	2002	WY <sub>15</sub>	16.0	X	257.76533	260.57582	83.46041	12.34225	0.2608278	0.24270661	2.5453547	21	4 16.1	20.4
253168	2002	WL <sub>16</sub>	16.0	X	249.01428	149.65675	218.95111	11.59709	0.0537761	0.24029195	2.5623782	21	5 24.2	19.6
253169	2002	WS <sub>17</sub>	16.1	X	168.89110	278.33305	219.06092	27.16008	0.2536059	0.24402546	2.5361755	21	7 30.6	21.2
253170	2002	WJ <sub>19</sub>	16.8	X	174.65453	253.41064	227.87595	8.65088	0.1564183	0.24389214	2.5370996	21	7 21.2	21.0
253171	2002	WP <sub>24</sub>	16.9	X	214.62258	251.66742	91.84738	1.23962	0.1214539	0.23384179	2.6092837	21	3 10.5	20.8
253172	2002	WV <sub>25</sub>	16.6	X	311.82711	356.72821	246.38735	3.84747	0.0574945	0.23145941	2.6271578	21	2 25.6	20.0
253173	2002	WV <sub>25</sub>	16.9	X	232.01201	235.22662	108.97487	4.95270	0.1348143	0.23716585	2.5848456	21	3 29.4	20.9
253174	2002	XQ <sub>1</sub>	16.0	X	198.27210	188.49228	206.85205	13.96360	0.1068083	0.23764071	2.5814011	21	4 27.9	19.8
253175	2002	XK <sub>2</sub>	17.1	X	160.96640	242.20494	191.44361	4.95814	0.2642956	0.23620375	2.5918599	21	5 16.6	21.6
253176	2002	XD <sub>3</sub>	16.3	X	222.82887	237.09770	213.38615	9.42519	0.1512645	0.24668322	2.5179261	21	7 28.5	20.3
253177	2002	XS <sub>9</sub>	16.3	X	231.55824	30.97775	56.32227	7.81916	0.2563649	0.24464997	2.5318575	21	7 28.9	20.5
253178	2002	XY <sub>9</sub>	15.3	X	286.07513	75.45080	301.52749	3.07583	0.2095930	0.24661164	2.5184133	21	6 29.5	18.4
253179	2002	XU <sub>11</sub>	15.9	X	301.77094	322.38178	6.72007	8.98342	0.1188591	0.24478471	2.5309284	21	5 28.1	19.1
253180	2002	XK <sub>13</sub>	16.7	X	205.93926	156.77782	276.69274	1.04030	0.1749449	0.24299481	2.5433417	21	6 21.1	20.8
253181	2002	XP <sub>16</sub>	16.0	X	223.27928	82.87336	302.30134	11.32166	0.0448011	0.24003891	2.5641787	21	5 10.9	19.8
253182	2002	XX <sub>16</sub>	16.7	X	244.00507	36.43301	350.56816	9.00509	0.1708840	0.24421672	2.5348511	21	5 27.1	20.7
253183	2002	XK <sub>18</sub>	16.0	X	168.53377	336.34520	48.30223	13.00481	0.1950143	0.23195931	2.6233818	21	3 26.0	20.4
253184	2002	XT <sub>18</sub>	16.5	X	234.07909	28.56062	8.54075	7.58952	0.2443907	0.24334377	2.5409097	21	5 25.3	20.9
253185	2002	XC <sub>22</sub>	16.3	X	102.96094	112.72721	29.91654	7.51165	0.1434380	0.23560671	2.5962366	21	6 3.9	20.0
253186	2002	XH <sub>24</sub>	16.4	X	162.22788	10.25373	76.26566	14.71168	0.1464863	0.23720738	2.5845439	21	5 28.5	20.4
253187	2002	XX <sub>25</sub>	16.1	X	282.15154	52.58257	304.74310	0.47464	0.1741162	0.24469004	2.5315812	21	6 2.2	19.5
253188	2002	XW <sub>26</sub>	16.6	X	181.54842	56.35943	19.29098	13.19300	0.2442869	0.24000746	2.5644027	21	5 30.4	21.3
253189	2002	XZ <sub>29</sub>	15.7	X	85.41048	189.54310	301.79738	10.29741	0.2182677	0.22654071	2.6650491	21	5 6.1	19.3
253190	2002	XL <sub>36</sub> </												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253201 2002 <i>XP</i> <sub>70</sub>	16.1	X	256.93986	347.30428	55.23420	3.39419	0.1246885	0.24563917	2.5250557	21	7 9.9	19.5
253202 2002 <i>XY</i> <sub>73</sub>	16.6	X	234.45988	349.64281	61.04559	6.93508	0.1479279	0.24405234	2.5359892	21	6 21.3	20.4
253203 2002 <i>XO</i> <sub>74</sub>	16.1	X	202.38022	160.56806	298.82026	8.53839	0.1322174	0.24418598	2.5350639	21	7 23.1	20.0
253204 2002 <i>XL</i> <sub>75</sub>	16.3	X	247.79418	314.05144	58.22163	6.17645	0.2635191	0.24238750	2.5475883	21	5 6.9	20.4
253205 2002 <i>XT</i> <sub>77</sub>	16.3	X	92.60678	129.81551	22.49562	3.57340	0.2154448	0.23320502	2.6140313	21	6 15.5	19.8
253206 2002 <i>XL</i> <sub>80</sub>	15.9	X	131.21718	164.53564	295.06203	12.94519	0.1165711	0.23191199	2.6237387	21	5 5.1	20.0
253207 2002 <i>XU</i> <sub>80</sub>	16.0	X	48.04531	175.21505	317.87029	8.08144	0.2087762	0.22276044	2.6951152	21	3 3.6	18.5
253208 2002 <i>XP</i> <sub>82</sub>	16.3	X	139.39499	331.16066	140.82496	8.75594	0.1771983	0.23665332	2.5885763	21	6 9.9	20.5
253209 2002 <i>XX</i> <sub>85</sub>	17.4	X	226.80730	74.07315	335.78069	3.63739	0.3043794	0.24342256	2.5403613	21	6 2.2	22.0
253210 2002 <i>XQ</i> <sub>89</sub>	16.6	X	233.31466	10.02565	92.30341	4.19302	0.1483572	0.24687323	2.5166340	21	8 29.8	20.2
253211 2002 <i>XV</i> <sub>92</sub>	17.3	X	196.87162	359.65981	69.97579	7.10684	0.1912229	0.24090359	2.5580392	21	6 7.4	21.4
253212 2002 <i>XC</i> <sub>99</sub>	16.3	X	280.21080	61.51888	265.82187	4.17550	0.2606407	0.24293839	2.5437355	21	4 7.9	20.2
253213 2002 <i>XU</i> <sub>103</sub>	16.2	X	183.73748	326.78341	87.90830	7.85379	0.1561156	0.23631880	2.5910187	21	5 10.1	20.4
253214 2002 <i>XM</i> <sub>107</sub>	16.6	X	267.24758	348.57328	18.17247	2.20125	0.2235598	0.24477162	2.5310186	21	5 21.0	20.3
253215 2002 <i>XO</i> <sub>112</sub>	16.5	X	198.32828	49.18170	12.94240	4.23315	0.1780014	0.23940481	2.5687044	21	5 29.8	20.7
253216 2002 <i>XW</i> <sub>113</sub>	16.2	X	112.92488	89.53576	354.22949	14.46718	0.1348753	0.23119281	2.6291770	21	3 27.7	19.7
253217 2002 <i>XB</i> <sub>116</sub>	17.2	X	218.80015	174.46468	184.34648	4.93022	0.2478939	0.23698686	2.5861470	21	3 29.5	21.6
253218 2002 <i>XD</i> <sub>116</sub>	16.1	X	48.92168	154.03196	271.05124	7.73284	0.1980211	0.21578554	2.7528835	21	—	—
253219 2002 <i>XC</i> <sub>117</sub>	16.0	X	51.06926	348.02763	149.66885	9.68080	0.0967198	0.22206704	2.7007226	21	3 9.7	19.0
253220 2002 <i>YC</i> <sub>2</sub>	15.8	X	51.10747	113.84140	52.61052	27.01642	0.2354751	0.22644576	2.6657940	21	5 7.8	18.3
253221 2002 <i>YL</i> <sub>2</sub>	16.2	X	131.57964	164.33664	271.48594	10.75086	0.1286067	0.22818648	2.6522194	21	4 5.5	20.4
253222 2002 <i>YU</i> <sub>2</sub>	15.7	X	198.35036	96.22764	17.55567	13.20201	0.1988819	0.24466754	2.5317364	21	8 9.5	20.1
253223 2002 <i>YV</i> <sub>5</sub>	16.1	X	156.66898	94.81316	23.94682	3.02335	0.1573138	0.23670096	2.5882290	21	7 3.4	20.3
253224 2002 <i>YA</i> <sub>6</sub>	16.5	X	124.94757	357.83976	108.91255	6.64172	0.1388967	0.23327970	2.6134734	21	5 16.1	20.3
253225 2002 <i>YU</i> <sub>8</sub>	16.4	X	126.60432	210.76235	253.42281	6.88010	0.1614805	0.23276994	2.6172876	21	5 14.6	20.4
253226 2002 <i>YV</i> <sub>9</sub>	16.0	X	317.52314	104.39490	273.10338	5.37793	0.2267380	0.25113325	2.4880928	21	8 20.9	18.2
253227 2002 <i>YF</i> <sub>11</sub>	15.7	X	122.85492	359.80119	118.75542	14.38785	0.2017050	0.23069856	2.6329309	21	6 5.9	19.9
253228 2002 <i>YI</i> <sub>16</sub>	16.2	X	199.70278	127.14587	281.23106	3.89376	0.1634985	0.23891782	2.5721938	21	5 13.8	20.4
253229 2002 <i>YQ</i> <sub>19</sub>	16.3	X	100.06053	9.54082	84.50993	3.31096	0.1094581	0.22807832	2.6530578	21	3 25.7	19.8
253230 2002 <i>YI</i> <sub>19</sub>	17.1	X	173.33329	191.57351	267.68213	4.48760	0.2784210	0.23897484	2.5717846	21	6 25.6	21.5
253231 2002 <i>YE</i> <sub>21</sub>	15.7	X	70.23451	130.79090	263.72519	8.13983	0.1429064	0.21744651	2.7388469	21	—	—
253232 2002 <i>YZ</i> <sub>21</sub>	16.8	X	199.90671	163.10030	272.48541	7.07928	0.2656799	0.24077757	2.5589317	21	6 16.1	21.2
253233 2002 <i>YI</i> <sub>25</sub>	16.6	X	197.96458	359.69685	140.44150	1.08857	0.1460125	0.24638746	2.5199406	21	9 9.2	20.5
253234 2002 <i>YX</i> <sub>31</sub>	16.6	X	111.68060	349.83290	119.24794	5.28440	0.2201891	0.22885068	2.6470852	21	5 14.2	20.6
253235 2002 <i>YB</i> <sub>36</sub>	16.6	X	164.36926	230.95910	217.53338	2.13086	0.1862214	0.23511408	2.5998620	21	6 3.0	20.9
253236 2003 <i>AU</i> <sub>6</sub>	16.5	X	115.85332	347.37878	140.15707	3.86654	0.1311771	0.23483316	2.6019349	21	5 30.7	20.2
253237 2003 <i>AT</i> <sub>14</sub>	15.8	X	138.12202	170.49530	282.78379	11.82292	0.2462658	0.22963225	2.6410753	21	5 18.9	20.3
253238 2003 <i>AI</i> <sub>14</sub>	16.1	X	159.87329	296.65476	162.42978	12.55939	0.2185857	0.23453601	2.6041322	21	6 14.6	20.8
253239 2003 <i>AY</i> <sub>14</sub>	15.9	X	66.62790	207.76312	254.62933	11.09962	0.1480771	0.22021150	2.7158726	21	2 14.2	19.3
253240 2003 <i>AZ</i> <sub>17</sub>	16.1	X	106.65917	49.15774	81.02599	15.67444	0.1121713	0.23050072	2.6344372	21	5 22.4	19.8
253241 2003 <i>AB</i> <sub>18</sub>	15.4	X	246.44384	18.90057	40.65499	9.94028	0.2153148	0.24387038	2.5372505	21	7 10.2	19.4
253242 2003 <i>AX</i> <sub>21</sub>	16.4	X	134.43545	77.50866	320.91808	4.98701	0.0325857	0.22279070	2.6948712	21	2 13.6	20.1
253243 2003 <i>AP</i> <sub>22</sub>	16.5	X	211.80174	188.35300	215.19342	4.37054	0.3086269	0.23788187	2.5796562	21	5 15.9	21.3
253244 2003 <i>AJ</i> <sub>24</sub>	16.3	X	276.69344	258.84078	112.26137	3.15698	0.1184645	0.24508063	2.5288907	21	6 22.8	19.6
253245 2003 <i>AU</i> <sub>27</sub>	16.2	X	150.28967	300.48750	251.40715	2.65542	0.1510070	0.24485561	2.5304398	21	9 27.3	20.2
253246 2003 <i>AQ</i> <sub>30</sub>	15.5	X	151.59322	83.40118	301.41143	25.58807	0.2278360	0.22496694	2.6774636	21	2 24.4	20.3
253247 2003 <i>AW</i> <sub>32</sub>	16.8	X	165.03325	71.15691	24.73666	6.31446	0.2956981	0.23593286	2.5938434	21	6 15.5	21.5
253248 2003 <i>AB</i> <sub>35</sub>	16.4	X	160.46700	294.36020	193.62565	4.60814	0.2382787	0.23957090	2.5675171	21	7 19.7	20.9
253249 2003 <i>AG</i> <sub>40</sub>	16.7	X	146.31022	237.54483	209.13765	3.15946	0.2344741	0.23190766	2.6237714	21	5 18.8	21.0
253250 2003 <i>AJ</i> <sub>43</sub>	16.3	X	107.65642	81.35620	65.47595	8.26742	0.1407176	0.23459455	2.6036989	21	6 15.8	19.9
253251 2003 <i>AZ</i> <sub>46</sub>	16.4	X	93.02401	83.24563	81.26630	4.98540	0.1269087	0.23395848	2.6084160	21	6 19.7	19.8
253252 2003 <i>AW</i> <sub>47</sub>	16.8	X	186.63985	42.59164	36.08753	4.07433	0.1922626	0.23809081	2.5781467	21	6 9.7	21.1
253253 2003 <i>AN</i> <sub>53</sub>	16.1	X	177.76356	106.06328	49.56924	2.93407	0.1410987	0.24391406	2.5369476	21	9 10.4	20.1
253254 2003 <i>AB</i> <sub>54</sub>	16.8	X	156.13855	26.11797	31.02953	4.77399	0.2572433	0.23128949	2.6284443	21	4 21.6	21.3
253255 2003 <i>AW</i> <sub>55</sub>	16.1	X	179.85218	15.41705	58.26603	4.43187	0.1045959	0.23435540	2.6054700	21	5 27.4	19.9
253256 2003 <i>AR</i> <sub>56</sub>	16.0	X	158.50636	316.75182	89.68950	9.94453	0.1831152	0.22933803	2.6433337	21	4 11.2	20.4
253257 2003 <i>AZ</i> <sub>56</sub>	16.4	X	192.12987	69.82177	19.05538	3.13530	0.1629182	0.23831098	2.5765585	21	6 28.5	20.5
253258 2003 <i>AF</i> <sub>58</sub>	16.3	X	68.87265	120.02179	5.30387	4.99991	0.1965941	0.22377692	2.6869476	21	4 2.3	19.3
253259 2003 <i>AM</i> <sub>58</sub>	15.9	X	197.36243	352.70065	79.77808	5.51093	0.2019686	0.23721808	2.5844662	21	6 11.5	20.2
253260 2003 <i>AT</i> <sub>58</sub>	16.0	X	202.45535	63.33290	6.85101	4.18192	0.2636509	0.23834897	2.5762847	21	6 10.9	20.6
253261 2003 <i>AX</i> <sub>59</sub>	16.2	X	76.83813	139.79791	316.14021	12.32399	0.1650173	0.22177919	2.7030590	21	2 26.6	19.4
253262 2003 <i>AA</i> <sub>60</sub>	16.4	X	139.21851	36.63095	77.19081	5.91170	0.2668271	0.23310818	2.6147552	21	6 17.3	20.7
253263 2003 <i>AZ</i> <sub>60</sub>	17.1	X	176.99403	234.77101	217.14546	4.85685	0.2740750	0.23805454	2.5784086	21	6 19.2	21.7
253264 2003 <i>AH</i> <sub>63</sub>	16.3	X	92.59549	211.03037	302.63404	4.41681	0.1146019	0.23228446	2.6209331	21	6 1.9	19.8
253265 2003 <i>AG</i> <sub>65</sub>	16.1	X	206.20902	345.23711	70.59256	13.89886	0.1592529	0.23731835	2.5837382	21	5 30.5	20.2
253266 2003 <i>AQ</i> <sub>66</sub>	16.1	X	3.19436	148.03386	326.13649	16.51834	0.1684316	0.21433625	2.7652790	21	—	—
253267 2003 <i>AD</i> <sub>69</sub>	16.7	X	147.74474	344.54345	49.93916	8.91488	0.1735416	0.23062578	2.6334848	21	5 9.3	20.9
253268 2003 <i>AH</i> <sub>69</sub>	17.1	X	301.24332	104.84635	298.73531	17.26831	0.0943176	0.35662095	1.9693889	21	9 21.8	19.3
253269 2003 <i>AR</i> <sub>70</sub>	15.9	X	14.72192	359.08664	151.20354	8.85970	0.0592638	0.22046241	2.7138115	21	1 26.7	19.2
253270 2003 <i>AD</i> <sub>72</sub>	16.0	X	110.49055	109.95259	35.17167	11.74164	0.2337879	0.23290175	2.6163000	21	6 28.4	20.2
253271 2003 <i>AU</i> <sub>76</sub>	16.0	X	152.45879	64.64467	54.15386	13.47051	0.1230600	0.23613432	2.59236			



ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253281 2003 BF <sub>11</sub>	16.7	X	160.37306	100.88613	352.67913	4.26465	0.2025061	0.23359073	2.6111529	21	6 5.8	21.0
253282 2003 BY <sub>23</sub>	15.7	X	154.46404	161.99630	244.34885	12.97350	0.0966609	0.22565304	2.6720336	21	3 21.1	19.9
253283 2003 BW <sub>26</sub>	16.1	X	146.08771	254.48337	207.04692	2.82239	0.2472305	0.23192426	2.6236462	21	6 6.8	20.4
253284 2003 BT <sub>27</sub>	16.1	X	66.05558	138.71491	323.13139	9.64695	0.2476852	0.21969524	2.7201255	21	3 2.2	18.8
253285 2003 BS <sub>28</sub>	16.0	X	157.74870	300.30321	148.51265	13.69003	0.2211472	0.23148975	2.6269282	21	6 1.8	20.7
253286 2003 BB <sub>33</sub>	16.7	X	141.24292	114.76219	295.86639	6.01023	0.2420685	0.22705342	2.6610356	21	3 28.4	21.0
253287 2003 BZ <sub>38</sub>	16.0	X	146.52049	118.20539	299.67726	12.76858	0.0625328	0.22627096	2.6671668	21	3 21.3	20.1
253288 2003 BA <sub>39</sub>	16.6	X	269.74014	270.10570	304.92862	2.43085	0.0328572	0.21311898	2.7757987	21	—	—
253289 2003 BH <sub>41</sub>	16.7	X	40.14896	212.74534	294.20293	2.54417	0.0263838	0.22304270	2.6928410	21	2 27.1	20.1
253290 2003 BO <sub>61</sub>	16.3	X	210.76992	22.72823	63.89310	5.33922	0.1912568	0.23872078	2.5736090	21	7 12.2	20.5
253291 2003 BB <sub>62</sub>	16.0	X	98.80970	359.34467	151.56216	5.61300	0.1929224	0.22883670	2.6471929	21	6 18.6	19.8
253292 2003 BD <sub>62</sub>	16.2	X	67.58046	93.25602	33.21022	5.63289	0.1735069	0.22351161	2.6890734	21	3 31.1	19.1
253293 2003 BG <sub>62</sub>	16.4	X	72.50321	86.67839	53.02700	6.26369	0.1362117	0.22574448	2.6713120	21	4 20.5	19.5
253294 2003 BK <sub>63</sub>	15.2	X	32.26328	166.79994	338.77651	13.22943	0.1562187	0.21717779	2.7411057	21	2 19.2	17.9
253295 2003 BK <sub>68</sub>	16.8	X	152.40214	63.74952	17.73741	4.64954	0.2472812	0.23212655	2.6221216	21	5 16.9	21.2
253296 2003 BW <sub>71</sub>	15.9	X	307.85434	299.83643	243.27782	7.72361	0.0844199	0.21317211	2.7753374	21	—	—
253297 2003 BD <sub>72</sub>	16.5	X	151.54487	266.38082	187.04617	4.36082	0.2210070	0.23243369	2.6198112	21	5 31.1	20.9
253298 2003 BT <sub>72</sub>	15.9	X	160.80768	105.21022	13.82910	4.84213	0.2591881	0.23634145	2.5908531	21	7 11.3	20.5
253299 2003 BL <sub>73</sub>	17.0	X	162.75215	323.36371	108.40329	6.85517	0.2427036	0.23354669	2.6114812	21	5 15.9	21.6
253300 2003 BM <sub>74</sub>	15.7	X	187.25577	92.35986	75.84607	12.33981	0.1000329	0.24624378	2.5209208	21	10 13.1	19.6
253301 2003 BK <sub>79</sub>	15.6	X	76.83173	149.83981	330.32905	13.11502	0.1942555	0.22451077	2.6810892	21	4 1.6	19.0
253302 2003 BL <sub>85</sub>	16.1	X	175.62842	227.14100	213.20088	7.11607	0.1765547	0.23430769	2.6058236	21	6 2.9	20.4
253303 2003 CH <sub>1</sub>	15.7	X	281.29032	221.57827	347.55521	9.65544	0.1028909	0.20972293	2.6056841	21	—	—
253304 2003 CZ <sub>7</sub>	16.0	X	62.31981	124.85111	8.23384	5.06375	0.1126952	0.22112829	2.7038607	21	3 22.4	19.1
253305 2003 CS <sub>11</sub>	15.9	X	80.18549	357.35311	115.35213	13.90477	0.1133483	0.22385462	2.6863257	21	3 28.4	19.5
253306 2003 CA <sub>12</sub>	16.1	X	346.01444	202.50487	336.64713	7.75933	0.1266482	0.21763224	2.7372884	21	1 17.6	19.4
253307 2003 CZ <sub>12</sub>	16.0	X	33.08048	132.84301	12.00995	9.70406	0.1073430	0.21993538	2.7181452	21	2 21.0	19.1
253308 2003 CK <sub>17</sub>	16.5	X	358.07531	5.85771	164.16853	2.93404	0.1288486	0.21781208	2.7357815	21	1 21.7	19.7
253309 2003 CM <sub>19</sub>	16.2	X	329.59174	153.22056	0.89678	7.85621	0.1986252	0.20948289	2.8078270	21	—	—
253310 2003 CV <sub>19</sub>	15.9	X	314.77454	269.85204	307.75233	6.83614	0.0959707	0.21710087	2.7417531	21	1 26.9	19.4
253311 2003 CC <sub>20</sub>	15.9	X	105.25177	169.27524	303.73051	8.68419	0.2044455	0.22381562	2.6866378	21	5 5.5	20.0
253312 2003 CA <sub>25</sub>	16.1	X	100.32123	78.53485	8.66990	10.96681	0.1670263	0.22330883	2.6907011	21	3 25.2	19.7
253313 2003 DY <sub>1</sub>	16.0	X	19.08038	73.38227	58.72569	9.64046	0.0994501	0.21539710	2.7561921	21	1 10.2	19.3
253314 2003 DG <sub>5</sub>	16.9	X	187.27350	200.07123	221.40645	4.97269	0.3180463	0.23564629	2.5959460	21	5 21.1	21.7
253315 2003 DQ <sub>5</sub>	16.6	X	146.92870	0.55409	73.18977	5.85563	0.1830918	0.22953979	2.6417845	21	4 30.8	20.7
253316 2003 DE <sub>11</sub>	16.3	X	106.32315	93.36789	149.47019	8.13658	0.2540246	0.18713975	3.0270901	21	10 25.0	21.4
253317 2003 DG <sub>19</sub>	16.8	X	38.77187	328.10079	179.94513	3.60730	0.2018409	0.21962860	2.7206757	21	3 7.5	19.0
253318 2003 DE <sub>21</sub>	15.6	X	292.83845	137.57568	113.24766	13.32860	0.1173008	0.21900311	2.7258536	21	2 8.9	19.5
253319 2003 DB <sub>22</sub>	15.9	X	63.29284	56.89248	49.50972	10.33073	0.2126321	0.21819430	2.7325856	21	3 6.8	18.9
253320 2003 DE <sub>22</sub>	15.9	X	115.38006	357.51423	121.60997	9.30695	0.2790821	0.22782995	2.6549456	21	6 6.1	20.2
253321 2003 EO <sub>9</sub>	15.5	X	285.07285	241.15422	334.92979	9.16782	0.0561124	0.20967130	2.8061446	21	—	—
253322 2003 EK <sub>13</sub>	16.3	X	46.56101	346.42278	151.51947	5.50501	0.1046868	0.22028624	2.7152582	21	3 2.6	19.3
253323 2003 EN <sub>13</sub>	17.1	X	176.31891	239.01778	275.27363	2.50273	0.1897601	0.24104199	2.5570600	21	9 3.5	21.2
253324 2003 EP <sub>21</sub>	16.5	X	178.34190	127.00913	314.71599	2.60467	0.2808723	0.23310508	2.6147784	21	6 7.7	21.2
253325 2003 EJ <sub>29</sub>	16.1	X	142.50245	295.57813	165.73370	20.85797	0.2477743	0.22892757	2.6464924	21	6 6.1	21.0
253326 2003 EL <sub>33</sub>	15.9	X	9.91115	331.42917	152.00513	4.32282	0.0471087	0.20954778	2.8072473	21	—	—
253327 2003 EE <sub>40</sub>	16.7	X	43.39204	139.93196	2.03247	3.49780	0.1045252	0.21854537	2.7296585	21	3 3.4	19.8
253328 2003 EP <sub>43</sub>	17.0	X	201.13663	309.92679	183.87734	24.34058	0.1230053	0.34958605	1.9957217	21	9 11.5	19.7
253329 2003 EM <sub>52</sub>	15.9	X	323.17325	119.94955	24.81328	12.12286	0.0457000	0.20581542	2.8410843	21	—	—
253330 2003 ER <sub>63</sub>	13.1	X	240.86598	88.00517	56.07285	7.00015	0.0264134	0.08144567	5.2709719	21	10 26.1	20.0
253331 2003 FY <sub>2</sub>	17.2	X	213.72473	56.25838	58.38183	25.39735	0.1328274	0.34878954	1.9987589	21	9 18.4	20.5
253332 2003 FR <sub>4</sub>	15.7	X	106.27037	81.13789	67.68965	26.82049	0.2480155	0.22774527	2.6556437	21	6 28.0	20.0
253333 2003 FA <sub>7</sub>	16.3	X	53.28356	57.93375	5.02248	6.44399	0.0517090	0.20676382	2.8323898	21	—	—
253334 2003 FL <sub>9</sub>	16.4	X	328.22213	126.50699	48.18131	8.52359	0.1551694	0.21160828	2.7889942	21	—	—
253335 2003 FV <sub>17</sub>	15.8	X	98.20742	82.69736	348.98582	8.11478	0.1456066	0.21715934	2.7412609	21	2 28.2	19.2
253336 2003 FD <sub>20</sub>	16.3	X	125.02469	82.40785	24.45667	13.07371	0.2209598	0.22854413	2.6494517	21	5 20.3	20.6
253337 2003 FC <sub>33</sub>	15.5	X	101.14984	95.52211	179.36317	16.97702	0.1779986	0.18762530	3.0218654	21	11 20.8	20.6
253338 2003 FZ <sub>35</sub>	15.7	X	100.18488	35.87586	186.59816	17.10315	0.1440451	0.18112462	3.0937441	21	9 10.4	20.5
253339 2003 FX <sub>38</sub>	16.2	X	245.18493	348.90576	215.62065	4.17180	0.0464178	0.20103492	2.8859472	21	—	—
253340 2003 FF <sub>39</sub>	13.4	X	281.17409	253.71920	201.08451	5.37023	0.0685588	0.08360533	5.1798051	21	10 9.7	20.2
253341 2003 FF <sub>44</sub>	15.4	X	132.02049	257.97859	0.91522	10.94303	0.0854956	0.19146242	2.9813550	21	11 20.5	20.2
253342 2003 FW <sub>45</sub>	15.7	X	201.19653	262.44818	18.09181	7.63794	0.0927384	0.20401195	2.8578031	21	—	—
253343 2003 FC <sub>48</sub>	13.5	X	292.75827	86.26043	2.91426	6.80671	0.1384784	0.08456582	5.1405092	21	10 7.8	20.1
253344 2003 FK <sub>53</sub>	15.8	X	59.40251	3.74420	147.03764	14.60374	0.1403393	0.22068929	2.7119512	21	4 19.8	19.2
253345 2003 FZ <sub>53</sub>	15.8	X	186.34086	35.05762	178.50722	4.50884	0.1923853	0.19235950	2.9720786	21	11 19.8	20.8
253346 2003 FY <sub>61</sub>	15.7	X	289.24033	203.43831	25.35678	12.88576	0.1100606	0.21065362	2.7974142	21	1 12.2	20.0
253347 2003 FJ <sub>64</sub>	12.8	X	195.03441	91.14805	100.55427	8.56393	0.0310935	0.08374079	5.1742175	21	10 31.7	19.9
253348 2003 FP <sub>71</sub>	12.9	X	287.20576	60.79710	28.20181	11.54450	0.0740447	0.08361038	5.1795962	21	10 11.0	19.7
253349 2003 FT <sub>75</sub>	16.1	X	70.90244	229.92053	231.71908	8.83031	0.2181334	0.21879632	2.7275709	21	3 4.4	19.3
253350 2003 FG <sub>77</sub>	15.3	X	188.06719	195.74979	346.69066	8.44129	0.0089300	0.18888234	3.0084432	21	10 21.4	19.7
253351 2003 FO <sub>78</sub>	16.1	X	38.62123	131.15814	28.94452	6.22454	0.1347834	0.21813911	2.7330466	21	3 23.3	19.0
253352 2003 FX <sub>78</sub>	16.2	X	87.78000	77.18782	71.87558	3.46385	0.1903063	0.22590709	2.6700300	21	6 1.8	19.7
253353 2003 FP <sub>81</sub>	15.5	X	40.70085	267.44278	178.75345	24.11453	0.2055473	0.20969942	2.8058938	21	—	—
253354 2003 FR <sub>99</sub>	15.9	X	174.62866	191.17144	1							

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253361 2003 GZ <sub>20</sub>	16.0	X	320.35875	172.61185	42.35315	5.25435	0.0396414	0.21286780	2.7779819	21	2 10.9	19.8
253362 2003 GL <sub>24</sub>	13.1	X	53.83375	286.56705	52.22573	11.40773	0.0544835	0.08215890	5.2404225	21	11 11.8	20.0
253363 2003 GW <sub>25</sub>	16.4	X	91.29401	58.20473	17.60878	4.07579	0.0831416	0.21371973	2.7705945	21	2 16.2	19.9
253364 2003 GO <sub>27</sub>	13.5	X	266.03032	106.54027	7.41571	6.64065	0.0639238	0.08368550	5.1764961	21	10 13.8	20.3
253365 2003 GZ <sub>29</sub>	16.2	X	157.35146	304.96870	17.78477	6.03152	0.0855509	0.20312002	2.8661631	21	—	—
253366 2003 GA <sub>30</sub>	15.5	X	76.66550	265.03501	227.65086	21.14463	0.3466924	0.22217082	2.6998815	21	5 20.9	18.9
253367 2003 GL <sub>37</sub>	16.1	X	358.39284	186.48748	356.76331	5.34809	0.1676702	0.21428917	2.7656841	21	2 7.5	19.1
253368 2003 GV <sub>42</sub>	16.3	X	97.25564	103.99538	93.29628	13.90184	0.1238579	0.23208004	2.6224720	21	8 11.1	20.1
253369 2003 GN <sub>53</sub>	15.8	X	211.87600	20.68088	72.24243	13.38893	0.2366755	0.23892539	2.5721394	21	7 19.5	20.3
253370 2003 HW <sub>2</sub>	16.2	X	120.31202	182.11165	278.39897	14.53996	0.1332025	0.22565896	2.6719869	21	4 25.6	20.4
253371 2003 HK <sub>12</sub>	15.4	X	88.56746	62.95092	185.39861	15.72843	0.2341213	0.17933373	3.1143069	21	10 12.2	20.3
253372 2003 HM <sub>12</sub>	15.7	X	51.05708	97.16409	157.88437	13.36615	0.2604689	0.17449618	3.1716026	21	9 11.3	19.8
253373 2003 HV <sub>12</sub>	15.5	X	178.75222	40.40926	179.05340	13.68893	0.1065318	0.19054818	2.9908837	21	11 24.8	20.3
253374 2003 HF <sub>24</sub>	16.4	X	126.48521	40.75769	70.44281	4.23510	0.0239858	0.22045809	2.7138470	21	5 8.8	20.0
253375 2003 HF <sub>26</sub>	15.4	X	153.85376	16.15342	191.71426	9.18308	0.0239762	0.18627718	3.0364278	21	10 14.9	19.6
253376 2003 HX <sub>27</sub>	16.2	X	337.50867	329.60636	228.84341	7.06883	0.1570749	0.21144152	2.7904605	21	1 23.3	19.9
253377 2003 HM <sub>43</sub>	13.1	X	201.05777	158.95681	187.87329	8.62901	0.0495956	0.08261535	5.2211026	21	10 17.9	20.2
253378 2003 HJ <sub>55</sub>	15.9	X	27.65778	210.21749	158.51385	8.28449	0.0428974	0.18887893	3.0084794	21	12 2.5	20.1
253379 2003 HP <sub>55</sub>	15.3	X	109.62692	216.17808	354.25056	9.00585	0.2086880	0.18009970	3.1054703	21	9 13.4	20.1
253380 2003 HY <sub>58</sub>	12.8	X	273.61945	52.85378	67.99664	17.19402	0.0889133	0.08157483	5.2654070	21	11 1.0	19.8
253381 2003 JK <sub>1</sub>	15.1	X	61.85271	84.41537	212.08120	15.61151	0.2303087	0.17948855	3.1125157	21	11 10.6	19.7
253382 2003 JG <sub>8</sub>	12.5	X	240.82696	93.89537	57.06066	19.86251	0.0348605	0.08108736	5.2864884	21	11 3.6	19.5
253383 2003 KA	16.0	X	135.26745	58.69481	238.25314	9.22809	0.2823479	0.19080919	2.9881555	21	—	—
253384 2003 KQ <sub>3</sub>	17.3	X	221.15579	343.93225	297.54368	4.96952	0.1877931	0.30968819	2.1636464	21	—	—
253385 2003 KM <sub>4</sub>	15.8	X	55.39293	269.19126	89.68248	6.84846	0.1533365	0.18751651	3.0230341	21	—	—
253386 2003 KA <sub>13</sub>	15.6	X	104.28191	104.85623	194.61328	10.60232	0.0990120	0.18857787	3.0116805	21	12 14.0	20.3
253387 2003 KA <sub>14</sub>	16.8	X	182.16277	265.54120	64.82217	6.11513	0.2620127	0.30828928	2.1701867	21	1 20.9	20.3
253388 2003 KB <sub>19</sub>	17.6	X	74.65596	130.79174	201.04133	6.42883	0.2258742	0.28866351	2.2674695	21	—	—
253389 2003 KQ <sub>25</sub>	16.5	X	331.04856	310.18601	52.41285	1.08160	0.0246154	0.16824836	3.2496418	21	9 6.5	20.9
253390 2003 KL <sub>32</sub>	15.2	X	6.06190	255.95137	72.76272	13.33001	0.1410529	0.17753836	3.1352673	21	9 25.5	19.2
253391 2003 LM <sub>1</sub>	15.4	X	38.60575	76.27939	218.15425	8.25752	0.2025000	0.17394622	3.1782841	21	10 1.9	19.5
253392 2003 MY	16.7	X	130.20294	177.92130	151.08071	25.28436	0.2051335	0.29628105	2.2284358	21	—	—
253393 2003 MZ <sub>5</sub>	17.2	X	168.46807	62.01979	250.32658	5.95249	0.2280280	0.30107217	2.2047312	21	—	—
253394 2003 NZ <sub>12</sub>	17.2	X	87.27441	90.96585	287.91103	5.51428	0.1928178	0.29484583	2.2356615	21	—	—
253395 2003 NA <sub>13</sub>	17.4	X	30.54539	61.03985	297.88441	4.60301	0.2387019	0.28367357	2.2939827	21	—	—
253396 2003 OL <sub>6</sub>	15.1	X	182.17155	282.42954	273.35947	17.29595	0.1232278	0.17887894	3.1195833	21	10 26.7	20.3
253397 2003 OS <sub>8</sub>	17.1	X	84.54369	256.66208	82.18272	5.56625	0.2425929	0.29021530	2.2593795	21	—	—
253398 2003 OE <sub>20</sub>	15.3	X	116.92560	42.60849	247.27397	4.43975	0.1408308	0.18099543	3.0952161	21	12 16.3	20.2
253399 2003 OD <sub>27</sub>	17.3	X	148.80556	83.50658	246.06017	2.05781	0.1439485	0.29933924	2.2132321	21	—	—
253400 2003 OA <sub>28</sub>	17.0	X	170.39826	202.69365	108.40449	4.10958	0.1362387	0.29986131	2.2106624	21	—	—
253401 2003 PB <sub>3</sub>	17.4	X	119.99177	40.34560	308.88629	3.87689	0.2461557	0.29696137	2.2250310	21	—	—
253402 2003 PR <sub>3</sub>	16.9	X	55.84174	35.98457	328.72777	8.42338	0.1514739	0.28814608	2.2701832	21	—	—
253403 2003 PJ <sub>5</sub>	17.3	X	157.62742	44.44875	282.30927	2.47347	0.2141332	0.30046808	2.2076853	21	—	—
253404 2003 PF <sub>7</sub>	16.6	X	333.83474	175.27037	154.26960	4.92397	0.1765515	0.27347156	2.3506859	21	7 20.5	18.5
253405 2003 QE	17.5	X	248.98742	68.31819	190.67865	3.87903	0.1389941	0.30540045	2.1838506	21	—	—
253406 2003 QY <sub>3</sub>	17.4	X	99.82399	192.61554	151.55973	3.36960	0.2019805	0.29271150	2.2465160	21	—	—
253407 2003 QV <sub>9</sub>	16.8	X	111.91229	235.14597	101.55578	8.33899	0.1624942	0.29422209	2.2388201	21	—	—
253408 2003 QM <sub>14</sub>	17.3	X	91.35502	112.72656	260.91150	5.11297	0.1250215	0.29449583	2.2374326	21	—	—
253409 2003 QW <sub>15</sub>	17.1	X	49.85558	123.41326	261.35709	6.58796	0.1183680	0.28906164	2.2653870	21	—	—
253410 2003 QR <sub>19</sub>	17.0	X	60.98296	318.71619	353.27484	5.15874	0.1589325	0.28222531	2.3018238	21	12 4.0	20.1
253411 2003 QP <sub>20</sub>	16.9	X	140.97564	198.18902	104.96722	3.73410	0.1580683	0.29286322	2.2457401	21	—	—
253412 Raskaylea	17.9	X	104.70101	155.75941	172.70390	4.91218	0.1576315	0.29110070	2.2547958	21	—	—
253413 2003 QF <sub>30</sub>	17.1	X	109.05765	256.54517	101.63176	8.54095	0.2374655	0.29559872	2.2318638	21	—	—
253414 2003 QM <sub>33</sub>	17.5	X	121.55248	150.58746	214.36965	2.03280	0.1588677	0.29786747	2.2205165	21	—	—
253415 2003 QP <sub>36</sub>	17.6	X	137.82587	194.17083	132.33499	3.21542	0.1295780	0.29625898	2.2285465	21	—	—
253416 2003 QR <sub>36</sub>	17.4	X	50.97146	233.06824	122.06153	4.52662	0.1199018	0.28632348	2.2798069	21	—	—
253417 2003 QV <sub>37</sub>	17.5	X	349.63880	64.28959	300.53776	2.29814	0.2177873	0.27772410	2.3266283	21	11 2.7	18.9
253418 2003 QP <sub>39</sub>	17.3	X	219.83946	311.33280	336.71925	2.04610	0.1824522	0.30410455	2.1900504	21	—	—
253419 2003 QZ <sub>40</sub>	17.7	X	41.49847	97.25354	286.83954	1.51894	0.2224424	0.28733127	2.2744730	21	—	—
253420 2003 QV <sub>43</sub>	16.6	X	349.92688	255.61988	87.29218	7.08256	0.2547008	0.27448567	2.3448925	21	10 5.6	18.0
253421 2003 QO <sub>44</sub>	17.5	X	62.35682	22.50553	353.45970	7.94071	0.1678105	0.29029013	2.2589912	21	—	—
253422 2003 QT <sub>45</sub>	17.3	X	79.95534	302.66749	359.61572	3.08483	0.1649042	0.28464698	2.2887498	21	12 13.7	20.5
253423 2003 QY <sub>48</sub>	17.3	X	29.73245	208.11504	186.68903	3.76788	0.2392632	0.28607347	2.2811351	21	—	—
253424 2003 QR <sub>49</sub>	17.2	X	125.23424	0.91329	334.06212	5.59893	0.1299707	0.29491437	2.2353151	21	—	—
253425 2003 QA <sub>53</sub>	17.6	X	97.47913	251.17362	66.32066	3.50768	0.2426417	0.28951833	2.2630041	21	—	—
253426 2003 QD <sub>53</sub>	16.7	X	146.18854	301.03849	6.90985	7.22977	0.1958177	0.29553564	2.2321814	21	—	—
253427 2003 QM <sub>56</sub>	16.5	X	348.92009	18.91114	3.99673	7.30653	0.1157868	0.27909784	2.3189874	21	11 17.1	18.8
253428 2003 QW <sub>59</sub>	16.7	X	8.14533	278.61744	14.30467	8.03237	0.2385672	0.27202036	2.3590389	21	8 24.3	18.3
253429 2003 QH <sub>62</sub>	17.0	X	92.72946	244.84891	82.54276	4.57051	0.2582490	0.28733663	2.2744447	21	—	—
253430 2003 QL <sub>63</sub>	16.7	X	132.93234	158.53432	145.00928	7.87704	0.1942341	0.29057074	2.2575366	21	—	—
253431 2003 QN <sub>63</sub>	16.6	X	323.54457	270.23831	83.24679	6.22071	0.2574160	0.26975694	2.3722164	21	7 26.4	18.2
253432 2003 QR <sub>64</sub>	15.8	X	41.94531	356.76462	29.96722	26.51327	0.2449782	0.28272413	2.2991155	21	—	—
253433 2003 QK <sub>74</sub>	16.9	X	45.89982	68.21255	284.36625	4.36624	0.2198612	0.28499086	2.2869083	21	—	—
253434 2003 QP <sub>87</sub>	17.2	X	137.69528	163.77941	158.98239	6.25516	0.1702812	0.29522527	2.2337456	21	—	—
253435 2003 QF <sub>99</sub>	17.3	X	122.85081	303.00202	43.25622	4.60204	0.1715773	0.				

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253441 2003 QJ <sub>115</sub>	16.7	X	83.94514	254.38884	92.52134	7.84577	0.1506615	0.28913083	2.2650256	21	—	—
253442 2003 RZ	16.7	X	86.77455	268.13947	65.19034	7.01606	0.1565942	0.28697812	2.2763386	21	—	—
253443 2003 RX <sub>3</sub>	17.6	X	119.62472	230.04145	136.48198	0.78502	0.0976494	0.29810241	2.2193497	21	—	—
253444 2003 RA <sub>6</sub>	17.4	X	32.77436	162.55449	245.36956	4.54329	0.3251346	0.28511383	2.2862508	21	—	—
253445 2003 RQ <sub>6</sub>	17.4	X	74.84822	292.05613	65.37104	4.84222	0.2425212	0.28855737	2.2680255	21	—	—
253446 2003 RU <sub>10</sub>	16.2	X	133.12036	94.68448	226.03465	21.49672	0.2592350	0.29396348	2.2401330	21	—	—
253447 2003 RJ <sub>16</sub>	17.2	X	29.97983	214.44864	198.61013	5.90012	0.1440133	0.28898211	2.2658026	21	—	—
253448 2003 RU <sub>17</sub>	16.6	X	74.35118	30.26793	262.56077	5.86477	0.1404865	0.28138280	2.3064162	21	11 22.3	19.6
253449 2003 RX <sub>18</sub>	17.3	X	100.19663	298.65993	0.99459	2.93172	0.2716683	0.28711779	2.2756003	21	—	—
253450 2003 RU <sub>21</sub>	17.2	X	76.59771	114.10626	257.61378	4.05269	0.2520681	0.29056895	2.2575458	21	—	—
253451 2003 RS <sub>23</sub>	16.1	X	327.10443	151.41949	222.67115	24.60815	0.2135329	0.27310272	2.3528019	21	9 6.9	18.6
253452 2003 RY <sub>23</sub>	16.5	X	41.97666	102.77344	234.09949	6.04444	0.1380974	0.28170978	2.3046312	21	12 11.8	19.4
253453 2003 RD <sub>26</sub>	17.4	X	137.40258	46.73253	236.50742	2.21558	0.1706397	0.28651146	2.2788097	21	—	—
253454 2003 RB <sub>27</sub>	16.7	X	12.93649	281.80036	40.00495	5.88649	0.1345582	0.27454579	2.3445501	21	10 5.9	18.8
253455 2003 SK <sub>3</sub>	17.2	X	22.81915	19.13829	329.24726	2.93222	0.2335945	0.27915540	2.3186686	21	12 15.7	19.7
253456 2003 SS <sub>5</sub>	17.1	X	80.02721	319.23359	26.83261	6.95657	0.1527924	0.28842286	2.2687306	21	—	—
253457 2003 SE <sub>6</sub>	17.1	X	100.85080	291.58312	35.98653	4.22363	0.1675524	0.28774451	2.2722949	21	—	—
253458 2003 SG <sub>7</sub>	17.7	X	53.61822	136.44737	311.28307	4.56854	0.1134713	0.29890445	2.2153778	21	—	—
253459 2003 SQ <sub>8</sub>	17.6	X	64.80914	166.88845	185.72594	3.22663	0.2444807	0.28623209	2.2802922	21	—	—
253460 2003 SU <sub>8</sub>	16.9	X	299.51547	295.77356	195.42724	8.22231	0.0709967	0.28620738	2.2804235	21	—	—
253461 2003 SL <sub>9</sub>	17.5	X	110.52226	114.30025	213.89344	4.20086	0.2344029	0.29150915	2.2526891	21	—	—
253462 2003 SR <sub>13</sub>	17.3	X	192.30167	285.32357	6.30694	5.05002	0.1876760	0.29963844	2.2117585	21	—	—
253463 2003 SJ <sub>18</sub>	17.4	X	126.52453	344.61518	308.03715	4.55089	0.1517639	0.29030932	2.2588916	21	—	—
253464 2003 SA <sub>19</sub>	17.1	X	62.07251	18.98014	338.90512	6.32593	0.1283573	0.28721568	2.2750832	21	—	—
253465 2003 SC <sub>25</sub>	17.2	X	119.77953	33.21165	312.43086	3.92453	0.1348127	0.29448496	2.2374876	21	—	—
253466 2003 SS <sub>25</sub>	17.4	X	73.93593	218.29790	160.39819	2.61705	0.1901159	0.28997592	2.2606227	21	—	—
253467 2003 SW <sub>31</sub>	16.8	X	215.49006	349.85400	204.92572	5.25362	0.1230222	0.28197755	2.3031719	21	12 14.9	19.8
253468 2003 SB <sub>33</sub>	17.2	X	58.52942	281.17880	113.00614	2.22875	0.1865516	0.28927997	2.2642470	21	—	—
253469 2003 SV <sub>33</sub>	16.9	X	71.45640	308.13632	5.71364	6.88819	0.1354357	0.28264557	2.2995416	21	12 15.9	20.2
253470 2003 SD <sub>39</sub>	16.7	X	291.33514	206.65065	190.71662	2.07144	0.2052054	0.26982678	2.3718070	21	8 6.9	19.1
253471 2003 SS <sub>43</sub>	17.3	X	51.53467	43.95001	350.37892	4.74857	0.1611211	0.29000547	2.2604692	21	—	—
253472 2003 SY <sub>44</sub>	16.4	X	358.79426	222.35951	200.19947	5.81513	0.0818366	0.28483945	2.2877187	21	—	—
253473 2003 SO <sub>46</sub>	17.7	X	357.04445	17.70603	352.38180	1.91352	0.2556361	0.27757701	2.3274502	21	12 5.8	19.4
253474 2003 SG <sub>54</sub>	16.9	X	108.54004	56.98781	252.41448	5.31858	0.1365691	0.28828925	2.2694315	21	—	—
253475 2003 SJ <sub>55</sub>	17.3	X	57.45659	156.31617	222.12321	2.90909	0.2634573	0.28770666	2.2724942	21	—	—
253476 2003 ST <sub>55</sub>	17.2	X	35.33616	111.86704	297.29658	2.57360	0.1395567	0.28846285	2.2685209	21	—	—
253477 2003 SC <sub>63</sub>	15.0	X	288.72740	31.39553	306.54818	7.70932	0.0945620	0.15328935	3.4577591	21	5 31.4	19.9
253478 2003 SH <sub>66</sub>	16.6	X	55.76502	186.91220	158.03134	8.19165	0.1357148	0.28312065	2.2969684	21	—	—
253479 2003 SU <sub>67</sub>	17.6	X	84.29515	182.40915	177.93633	1.66470	0.2127250	0.28974751	2.2618106	21	—	—
253480 2003 SK <sub>71</sub>	16.9	X	51.24633	83.37928	338.33271	5.99949	0.0565920	0.29346051	2.2426919	21	—	—
253481 2003 SY <sub>73</sub>	16.6	X	282.76920	230.25206	193.64703	9.63082	0.1042468	0.27240792	2.3568009	21	9 18.6	19.2
253482 2003 SM <sub>75</sub>	16.6	X	82.05338	186.19398	180.72145	5.17207	0.1815049	0.29023960	2.2592534	21	—	—
253483 2003 SW <sub>79</sub>	17.3	X	78.18547	153.65875	216.80221	4.98463	0.1786982	0.28997134	2.2606466	21	—	—
253484 2003 SR <sub>81</sub>	16.6	X	351.39497	139.18442	243.77658	5.92439	0.1210860	0.27927383	2.3180131	21	11 24.8	18.6
253485 2003 SB <sub>83</sub>	18.2	X	70.27627	150.36954	169.58110	2.81471	0.2517499	0.28405654	2.2919204	21	—	—
253486 2003 SB <sub>84</sub>	16.8	X	59.03097	288.52297	28.17558	6.34842	0.1153768	0.27997306	2.3141521	21	12 1.6	19.9
253487 2003 SF <sub>86</sub>	17.0	X	351.18556	47.03756	275.05274	5.70523	0.1428586	0.27031550	2.3689474	21	8 17.2	19.0
253488 2003 SD <sub>87</sub>	16.6	X	348.48935	345.68047	64.74779	6.32953	0.1935906	0.28066368	2.3103542	21	—	—
253489 2003 SC <sub>91</sub>	17.0	X	295.86382	295.67851	193.20838	5.86853	0.1364892	0.28377423	2.2934402	21	—	—
253490 2003 SJ <sub>91</sub>	17.0	X	32.87860	328.05042	56.54695	6.39643	0.1573347	0.28405079	2.2919513	21	—	—
253491 2003 SL <sub>91</sub>	17.4	X	34.66195	115.38413	253.95763	0.75563	0.1041780	0.28286600	2.2983468	21	—	—
253492 2003 SM <sub>94</sub>	17.1	X	84.64926	135.04675	213.85245	5.84239	0.1277316	0.28652664	2.2787292	21	—	—
253493 2003 SG <sub>95</sub>	16.6	X	99.53484	38.70229	286.60431	4.67823	0.1981819	0.28804794	2.2706988	21	—	—
253494 2003 SE <sub>103</sub>	17.3	X	324.10001	3.70838	22.30870	2.66257	0.2187676	0.27305425	2.3531320	21	9 30.5	18.7
253495 2003 SE <sub>107</sub>	16.7	X	48.99122	147.06737	253.40092	3.67624	0.2191704	0.28748434	2.2736656	21	—	—
253496 2003 SQ <sub>107</sub>	16.7	X	112.44429	72.04038	233.50212	5.08577	0.1837485	0.28700818	2.2761797	21	—	—
253497 2003 ST <sub>107</sub>	16.7	X	284.52244	213.88448	216.97286	6.12045	0.0919267	0.27290994	2.3539098	21	10 3.7	19.2
253498 2003 SS <sub>109</sub>	16.7	X	326.98671	169.08132	253.57069	4.16560	0.1484356	0.27810869	2.3244829	21	12 9.5	18.6
253499 2003 SD <sub>112</sub>	16.9	X	318.24209	25.54780	344.55887	0.80067	0.1958415	0.27091977	2.3654236	21	8 20.3	18.7
253500 2003 SW <sub>117</sub>	17.0	X	291.94356	188.56332	196.43735	0.93696	0.1955930	0.26796429	2.3827845	21	7 22.3	19.7
253501 2003 SF <sub>118</sub>	17.7	X	46.28981	331.43714	4.50408	1.73879	0.2194242	0.28147813	2.3058955	21	12 27.1	20.8
253502 2003 SY <sub>122</sub>	17.8	X	141.08240	145.46609	162.38934	2.83439	0.2235147	0.29360871	2.2419371	21	—	—
253503 2003 SX <sub>125</sub>	17.2	X	146.18089	350.99099	308.98476	2.71362	0.1401866	0.29257731	2.2472029	21	—	—
253504 2003 SB <sub>126</sub>	17.5	X	72.58874	332.56567	14.83812	4.93890	0.1904236	0.28632120	2.2798191	21	—	—
253505 2003 SC <sub>136</sub>	17.3	X	348.56887	181.74679	205.64039	6.35171	0.1113473	0.27991195	2.3144888	21	11 26.3	19.5
253506 2003 SQ <sub>138</sub>	17.1	X	47.21605	42.59083	334.16033	5.20701	0.1577287	0.28475878	2.2881507	21	—	—
253507 2003 SP <sub>145</sub>	16.5	X	95.75265	44.15772	303.44337	7.30425	0.1488588	0.28942251	2.2635036	21	—	—
253508 2003 SH <sub>147</sub>	16.6	X	60.85839	62.32247	252.75121	3.67818	0.1957129	0.27963890	2.3159952	21	12 12.9	19.6
253509 2003 SY <sub>148</sub>	17.4	X	89.34932	324.64633	16.79254	2.04713	0.0842024	0.28664977	2.2780766	21	—	—
253510 2003 SY <sub>149</sub>	17.1	X	69.37372	322.21265	243.24405	7.21435	0.1562765	0.28970041	2.2620558	21	—	—
253511 2003 SN <sub>150</sub>	16.7	X	75.77516	229.29386	86.78833	8.68527	0.1835935	0.28408750	2.2917538	21	12 28.7	20.1
253512 2003 SY <sub>150</sub>	17.1	X	114.10562	214.10801	111.98777	6.86463	0.1873661	0.29114648	2.2545594	21	—	—
253513 2003 SE <sub>152</sub>	16.9	X	190.34808	234.16435	68.72055	4.56951	0.1900333	0.30202776	2.2000783	21	—	—
253514 2003 ST <sub>152</sub>	17.2	X	63.80662	275.41334	130.43876	7.91063	0.1120443	0.29238446	2.2481909	21	—	—
253515 2003 SO <sub>159</sub>	15.7	X	16.41270	38.04568	249.72023	11.27571	0.2985341	0.16442462	3.2998294	21	8 21.4	19.2
253516 2003 SH <sub>160</sub>	16.6											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253521 2003 SQ <sub>178</sub>	17.1	X	332.87800	136.34867	282.79954	2.22276	0.1425812	0.28049453	2.3112830	21	12 16.6	19.0
253522 2003 SS <sub>181</sub>	17.3	X	83.30751	219.13462	147.10014	3.32773	0.1101649	0.29074636	2.2566274	21	—	—
253523 2003 SH <sub>183</sub>	17.2	X	59.13791	250.74275	149.78465	6.73222	0.0897827	0.29179414	2.2512221	21	—	—
253524 2003 SF <sub>186</sub>	17.3	X	226.95115	221.38023	48.38074	4.17615	0.1375790	0.30065757	2.2067576	21	—	—
253525 2003 ST <sub>187</sub>	17.4	X	110.53698	3.79850	344.58210	5.12391	0.1893272	0.29492146	2.2352793	21	—	—
253526 2003 SP <sub>188</sub>	16.5	X	52.98182	59.89250	278.52848	4.07230	0.1633127	0.28077885	2.3097224	21	12 30.5	19.6
253527 2003 SD <sub>189</sub>	17.2	X	46.74790	197.52709	183.67186	6.07083	0.1267758	0.28625176	2.2801877	21	—	—
253528 2003 SP <sub>190</sub>	17.2	X	350.51614	129.97581	310.88240	2.49723	0.0939266	0.28563320	2.2834785	21	—	—
253529 2003 SN <sub>191</sub>	17.1	X	53.83579	174.11166	227.79236	6.45072	0.1742343	0.28993774	2.2608212	21	—	—
253530 2003 SJ <sub>193</sub>	17.3	X	58.41992	106.23196	262.85732	5.41881	0.1286036	0.28582645	2.2824491	21	—	—
253531 2003 SQ <sub>198</sub>	16.5	X	82.02167	76.24949	239.88465	6.82378	0.1427618	0.28285786	2.2983908	21	12 30.7	19.9
253532 2003 SJ <sub>202</sub>	17.7	X	45.98383	98.87029	273.83167	0.89818	0.1681163	0.28554302	2.2839593	21	—	—
253533 2003 SO <sub>206</sub>	14.6	X	290.74342	294.19859	19.42963	12.45453	0.0543089	0.14828881	3.5350628	21	5 7.8	19.6
253534 2003 SB <sub>209</sub>	16.9	X	119.31085	112.68222	213.18671	5.44948	0.1647888	0.29399873	2.2399539	21	—	—
253535 2003 SA <sub>210</sub>	16.7	X	62.63620	104.36198	243.91226	4.62309	0.2149683	0.28390482	2.2927368	21	—	—
253536 Tymchenko	17.0	X	290.43653	252.84584	260.43561	5.57580	0.0421349	0.28974948	2.2618004	21	—	—
253537 2003 SJ <sub>218</sub>	16.8	X	295.77131	263.85843	191.80449	7.18592	0.1225414	0.27545374	2.3393952	21	11 28.3	19.1
253538 2003 SX <sub>220</sub>	16.4	X	291.87083	339.09704	45.08562	6.52333	0.2488086	0.26625249	2.3929866	21	7 12.8	19.3
253539 2003 SJ <sub>223</sub>	17.2	X	26.07736	8.49954	41.65796	3.14046	0.1953286	0.28426666	2.2907908	21	—	—
253540 2003 SF <sub>227</sub>	17.3	X	338.71833	298.33460	169.89890	2.95853	0.1238521	0.28918267	2.2647549	21	—	—
253541 2003 SK <sub>229</sub>	17.3	X	121.17841	274.61634	74.25295	2.29807	0.1379199	0.29238622	2.2481819	21	—	—
253542 2003 SF <sub>233</sub>	16.6	X	77.63836	308.12179	41.79172	6.56523	0.1915698	0.28745880	2.2738003	21	—	—
253543 2003 SS <sub>233</sub>	16.8	X	32.76581	334.67419	53.16898	6.28354	0.1466812	0.28454717	2.2892850	21	—	—
253544 2003 SQ <sub>234</sub>	17.2	X	53.74914	337.39829	41.00903	4.41047	0.2026962	0.28680517	2.2772536	21	—	—
253545 2003 SL <sub>236</sub>	16.9	X	15.26436	43.43461	15.27316	3.05973	0.1348980	0.28670247	2.2777974	21	—	—
253546 2003 SZ <sub>237</sub>	17.3	X	93.98345	332.43218	18.44017	6.50769	0.2180026	0.28927880	2.2642531	21	—	—
253547 2003 SF <sub>240</sub>	17.2	X	0.91269	113.55639	273.01667	1.17046	0.2366216	0.27840706	2.3228218	21	—	—
253548 2003 SJ <sub>243</sub>	17.3	X	105.61616	170.45521	175.61883	4.44897	0.1585935	0.29014810	2.2597283	21	—	—
253549 2003 SO <sub>245</sub>	17.4	X	24.86391	46.09325	355.53405	7.02994	0.1295453	0.28568884	2.2831820	21	—	—
253550 2003 SH <sub>246</sub>	17.2	X	346.50224	44.31484	17.77206	4.32457	0.1468647	0.28180253	2.3041254	21	—	—
253551 2003 SH <sub>249</sub>	17.5	X	330.97434	350.69827	65.48925	2.10204	0.2454068	0.27662031	2.3328135	21	12 15.3	18.6
253552 2003 SN <sub>251</sub>	16.6	X	358.84534	43.11882	27.33890	5.68072	0.2129816	0.28133472	2.3066790	21	—	—
253553 2003 SJ <sub>252</sub>	18.0	X	16.51083	126.43677	268.01428	1.72251	0.2205996	0.28329907	2.2960039	21	—	—
253554 2003 SJ <sub>254</sub>	17.1	X	161.17314	262.91181	22.22489	6.67434	0.1142329	0.29108580	2.2548727	21	—	—
253555 2003 SB <sub>256</sub>	16.9	X	0.82075	339.50339	32.94626	6.59483	0.1406728	0.27680772	2.3317604	21	11 27.0	19.2
253556 2003 SH <sub>258</sub>	17.5	X	338.65657	53.23437	5.84456	3.46950	0.1483386	0.27914958	2.3187009	21	12 28.5	19.5
253557 2003 SK <sub>258</sub>	17.4	X	74.40739	196.27711	193.21279	1.66313	0.1309321	0.29035562	2.2586515	21	—	—
253558 2003 SJ <sub>259</sub>	17.0	X	243.35676	160.85464	24.49982	7.54920	0.0572020	0.28381384	2.2932268	21	—	—
253559 2003 SK <sub>259</sub>	17.5	X	110.27762	271.78208	22.68821	5.68449	0.1741693	0.28366415	2.2904035	21	—	—
253560 2003 SF <sub>261</sub>	16.8	X	59.40028	8.41246	356.51153	6.24274	0.0490936	0.28552215	2.2840706	21	—	—
253561 2003 SR <sub>266</sub>	17.2	X	66.06251	196.07098	162.51793	3.06978	0.1874971	0.28625841	2.2801524	21	—	—
253562 2003 SH <sub>268</sub>	17.6	X	136.20629	293.45483	342.92834	3.15344	0.1179424	0.28432507	2.2904771	21	—	—
253563 2003 SK <sub>269</sub>	17.1	X	317.44826	64.30165	6.73845	6.27558	0.1556966	0.27661933	2.3328189	21	11 30.1	19.1
253564 2003 SV <sub>269</sub>	16.6	X	94.55215	225.46961	115.07663	7.81209	0.1658511	0.28815858	2.2701175	21	—	—
253565 2003 SK <sub>271</sub>	17.0	X	57.76248	256.78673	92.12374	6.89280	0.2043353	0.28340233	2.2954461	21	—	—
253566 2003 ST <sub>272</sub>	17.4	X	334.57669	72.68139	336.38926	6.11751	0.1270936	0.27809297	2.3245704	21	12 1.3	19.7
253567 2003 SX <sub>275</sub>	16.7	X	355.72584	322.55799	30.51196	6.88008	0.1841286	0.27433151	2.3457708	21	10 24.5	18.3
253568 2003 SF <sub>276</sub>	17.9	X	26.59621	26.51759	357.89298	6.15795	0.1051892	0.28223725	2.3017589	21	—	—
253569 2003 SC <sub>281</sub>	17.3	X	325.77181	5.98276	348.15915	7.09358	0.1408071	0.27077022	2.3662944	21	8 19.2	19.3
253570 2003 ST <sub>288</sub>	17.5	X	15.35254	253.14314	91.16185	2.83846	0.2108678	0.27737102	2.3286023	21	11 24.5	19.6
253571 2003 SY <sub>290</sub>	16.9	X	77.29879	128.17829	196.93594	2.34961	0.1931646	0.28290146	2.2981547	21	—	—
253572 2003 SP <sub>304</sub>	16.9	X	30.81510	282.23480	41.06130	5.33337	0.2374295	0.27717524	2.3296987	21	11 22.3	19.4
253573 2003 SP <sub>306</sub>	17.1	X	72.39231	25.05879	303.77291	4.57777	0.1718940	0.28320403	2.2965175	21	—	—
253574 2003 SJ <sub>308</sub>	16.6	X	173.56302	180.54423	315.16184	6.50134	0.0457161	0.26852013	2.3794951	21	8 11.7	19.8
253575 2003 SY <sub>309</sub>	17.1	X	12.13508	222.65035	153.76999	3.47618	0.1163287	0.28021381	2.3128264	21	12 19.9	19.7
253576 2003 SH <sub>311</sub>	17.2	X	8.41568	13.32394	11.28328	6.76388	0.1354695	0.28059248	2.3107450	21	12 29.3	19.8
253577 2003 SM <sub>311</sub>	17.4	X	336.62789	60.53760	12.34722	6.02002	0.1897066	0.28059890	2.3107098	21	—	—
253578 2003 SS <sub>321</sub>	15.7	X	71.42183	132.98440	245.65108	14.58523	0.0130222	0.23296929	2.6157944	21	—	—
253579 2003 SW <sub>326</sub>	17.8	X	345.14165	89.71948	12.53693	4.53319	0.1795417	0.28705713	2.2759209	21	—	—
253580 2003 SR <sub>332</sub>	18.4	X	0.62975	153.65873	244.77058	1.61934	0.2159440	0.28101191	2.3084452	21	—	—
253581 2003 SZ <sub>333</sub>	17.1	X	311.92491	108.21725	330.60433	5.35008	0.0633899	0.28116579	2.3076028	21	12 4.5	19.6
253582 2003 SC <sub>337</sub>	17.6	X	84.15084	299.77846	357.67346	6.96831	0.1121367	0.28236482	2.3010656	21	12 5.6	20.9
253583 2003 SV <sub>337</sub>	17.5	X	156.34496	284.69017	4.34350	2.72800	0.1485414	0.29260570	2.2470576	21	—	—
253584 2003 SY <sub>342</sub>	17.5	X	113.68873	106.49071	179.70295	7.34474	0.1830850	0.28653551	2.2786821	21	12 26.3	21.2
253585 2003 SJ <sub>359</sub>	17.9	X	350.45100	141.78832	320.24004	0.66247	0.1517137	0.28763327	2.2728807	21	—	—
253586 2003 TX <sub>7</sub>	19.3	X	344.65813	270.53739	204.08798	38.74733	0.2074472	0.56554038	1.4481948	21	—	—
253587 Cloutier	17.2	X	52.28258	320.09069	49.00862	6.04431	0.1853650	0.28474408	2.2882295	21	—	—
253588 2003 TV <sub>11</sub>	16.8	X	66.61764	330.51602	29.54744	6.00850	0.1982999	0.28618862	2.2805231	21	—	—
253589 2003 TX <sub>11</sub>	16.4	X	91.62369	276.34776	36.99037	6.53998	0.1573440	0.28375742	2.2935307	21	—	—
253590 2003 TE <sub>12</sub>	17.6	X	357.97615	4.69741	31.63425	11.08458	0.2760227	0.27904343	2.3192889	21	—	—
253591 2003 TN <sub>12</sub>	17.6	X	329.54314	98.05586	319.16984	2.03089	0.1797492	0.27730472	2.3289735	21	12 7.8	19.3
253592 2003 TV <sub>12</sub>	17.0	X	297.50722	197.44605	219.73751	1.72595	0.1990320	0.27102410	2.3648165	21	9 19.8	19.3
253593 2003 TG <sub>13</sub>	17.1	X	329.61457	239.19239	203.41573	5.10208	0.1258907	0.28265670	2.2994812	21	—	—
253594 2003 TE <sub>15</sub>	16.9	X	283.46271	166.28301	250.87671	4.41508	0.2149663	0.27046626	2.3680670	21	8 20.3	19.6
253595 2003 TJ <sub>15</sub>	17.5	X	327.53593	10.82585	53.48739	6.33385	0.2095690	0.27743518	2.3282433	21	12 16.6	19.0
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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
253601	2003	UU <sub>13</sub>	16.4	X	346.75885	69.78770	271.35888	4.42465	0.0622629	0.26916218	2.3757096	21	9 6.3	19.0
253602	2003	UE <sub>20</sub>	17.4	X	127.70104	273.17782	41.06024	6.66094	0.2520641	0.29061967	2.2572832	21	—	—
253603	2003	UM <sub>23</sub>	16.9	X	77.99087	305.13596	33.72332	6.26375	0.0352545	0.28173156	2.3045124	21	—	—
253604	2003	UE <sub>24</sub>	16.7	X	348.77378	325.12589	50.92832	7.26219	0.1996679	0.27289079	2.3540199	21	11 16.4	18.4
253605	2003	UV <sub>24</sub>	16.9	X	323.55748	235.25025	298.61895	4.60015	0.0852887	0.29515082	2.2341212	21	—	—
253606	2003	UY <sub>24</sub>	17.3	X	325.32366	137.97544	254.95193	4.77530	0.1368035	0.27369685	2.3493958	21	10 16.6	19.4
253607	2003	UV <sub>25</sub>	16.8	X	62.05739	80.25431	240.05827	5.65133	0.2695947	0.28035097	2.3120719	21	12 28.1	20.4
253608	2003	UU <sub>35</sub>	17.6	X	36.87697	162.68085	249.70191	2.37972	0.1470798	0.28752085	2.2734731	21	—	—
253609	2003	UU <sub>39</sub>	17.7	X	333.29365	315.77712	139.04246	1.16675	0.2049088	0.28025291	2.3126112	21	—	—
253610	2003	UZ <sub>49</sub>	17.0	X	346.66998	294.76804	102.14555	5.55963	0.2000953	0.27640870	2.3340039	21	12 16.5	18.8
253611	2003	UL <sub>50</sub>	17.0	X	85.02634	325.95812	342.17345	7.88845	0.1887671	0.28024801	2.3126382	21	12 28.0	20.7
253612	2003	UL <sub>50</sub>	16.6	X	237.34799	205.76656	340.95077	7.26720	0.0519299	0.28603454	2.2813420	21	—	—
253613	2003	UU <sub>52</sub>	17.4	X	304.36783	192.30816	254.64906	11.05487	0.1548468	0.27645361	2.3337511	21	11 28.3	19.3
253614	2003	UM <sub>55</sub>	17.0	X	169.63470	68.37976	273.27360	4.24383	0.1764735	0.29768328	2.2214323	21	1 16.4	20.0
253615	2003	UF <sub>58</sub>	17.1	X	73.45854	332.57374	341.30243	7.29669	0.1258230	0.28137326	2.3064683	21	12 17.2	20.4
253616	2003	UA <sub>61</sub>	17.1	X	23.21104	284.94894	142.79457	5.45051	0.1685753	0.28704998	2.2759587	21	—	—
253617	2003	UG <sub>63</sub>	16.8	X	35.93843	319.67948	67.92275	7.52555	0.1187202	0.28454974	2.2892712	21	—	—
253618	2003	UN <sub>63</sub>	16.6	X	353.69959	274.19051	89.04029	7.52003	0.1372299	0.27508550	2.3414825	21	11 3.4	18.8
253619	2003	UZ <sub>66</sub>	17.1	X	31.58385	128.83354	221.47463	4.31655	0.1363631	0.27777957	2.3263185	21	12 14.9	19.8
253620	2003	UR <sub>77</sub>	17.7	X	69.17645	32.70714	301.06788	3.84191	0.2702180	0.28399999	2.2922246	21	—	—
253621	2003	UU <sub>81</sub>	16.8	X	318.37054	309.68706	97.82031	5.06361	0.2083873	0.27324145	2.3520055	21	10 26.2	18.3
253622	2003	UQ <sub>81</sub>	16.9	X	46.84936	223.42557	122.98075	6.88219	0.2578666	0.28106282	2.3081664	21	—	—
253623	2003	UD <sub>82</sub>	17.3	X	99.01614	318.37970	23.20681	5.71580	0.1982902	0.28950314	2.2630832	21	—	—
253624	2003	UA <sub>86</sub>	16.5	X	58.55539	320.46712	27.41811	25.44842	0.2151959	0.28163831	2.3050210	21	—	—
253625	2003	UB <sub>87</sub>	16.8	X	6.96762	249.78433	155.23650	6.56680	0.1177267	0.28002524	2.3138646	21	—	—
253626	2003	UV <sub>90</sub>	16.7	X	305.49488	316.89770	170.90296	6.98193	0.0430986	0.28437916	2.2901866	21	—	—
253627	2003	UT <sub>93</sub>	17.8	X	21.52476	218.65428	222.01701	1.32793	0.1991190	0.28795323	2.2711967	21	—	—
253628	2003	UO <sub>95</sub>	17.2	X	59.47458	100.39234	208.59445	5.63903	0.1580384	0.27820052	2.3239713	21	11 29.1	20.3
253629	2003	UO <sub>97</sub>	17.1	X	342.99935	261.48846	202.68180	6.15827	0.1857183	0.28403671	2.2920270	21	—	—
253630	2003	UM <sub>98</sub>	17.3	X	316.27309	237.10739	183.78383	10.13660	0.2285725	0.27334486	2.3514122	21	11 11.2	18.8
253631	2003	UN <sub>101</sub>	17.1	X	81.76016	209.17352	87.50363	3.13362	0.2112494	0.28087544	2.3091929	21	12 12.1	20.4
253632	2003	UK <sub>102</sub>	17.1	X	349.13789	300.22407	72.84654	7.47548	0.1801664	0.27450169	2.3448012	21	11 12.3	18.9
253633	2003	UU <sub>103</sub>	16.9	X	66.26501	167.78264	200.54348	6.66501	0.2061659	0.28542083	2.2846111	21	—	—
253634	2003	UE <sub>106</sub>	17.5	X	282.49921	342.49074	132.25704	2.49503	0.1547888	0.27743694	2.3282335	21	11 28.0	19.6
253635	2003	UO <sub>107</sub>	17.5	X	330.45751	127.57242	328.36715	1.50269	0.1780398	0.28121133	2.3073537	21	—	—
253636	2003	UR <sub>107</sub>	17.5	X	133.58714	93.44198	226.63678	2.19410	0.1184892	0.28993663	2.2608270	21	—	—
253637	2003	UN <sub>108</sub>	17.4	X	97.60632	18.41640	222.00931	8.36905	0.0796761	0.26946426	2.3739338	21	9 30.6	20.7
253638	2003	UB <sub>109</sub>	16.7	X	65.04181	24.04009	296.42622	6.10738	0.1368713	0.27909750	2.3189893	21	12 17.4	19.9
253639	2003	UW <sub>112</sub>	16.8	X	91.00447	254.80847	75.61207	6.62210	0.1844664	0.28576360	2.2827838	21	—	—
253640	2003	UU <sub>114</sub>	17.8	X	354.57917	34.07242	37.91185	0.49643	0.1067832	0.28193667	2.3033946	21	—	—
253641	2003	UX <sub>115</sub>	16.6	X	93.15661	65.60015	248.08920	6.26465	0.1354107	0.28252331	2.3002049	21	—	—
253642	2003	UM <sub>116</sub>	17.3	X	43.07850	264.32655	148.62603	2.51009	0.2008507	0.28716913	2.2753291	21	—	—
253643	2003	UN <sub>119</sub>	17.2	X	44.17171	44.58616	8.76222	7.48319	0.0839972	0.28880323	2.2667381	21	—	—
253644	2003	UP <sub>125</sub>	16.9	X	354.25227	334.92059	81.85834	8.55753	0.1614743	0.28040412	2.3117797	21	—	—
253645	2003	UE <sub>127</sub>	16.6	X	226.00750	347.53628	206.52903	6.03711	0.1476178	0.28140066	2.3063186	21	12 23.1	19.5
253646	2003	US <sub>127</sub>	17.0	X	298.33722	348.53522	142.93997	6.71093	0.0630208	0.28355094	2.2946440	21	—	—
253647	2003	UD <sub>129</sub>	17.3	X	316.05436	274.19068	205.00279	6.00161	0.0511146	0.28377958	2.2934113	21	—	—
253648	2003	UK <sub>133</sub>	16.7	X	111.50709	171.96428	146.51358	4.15129	0.1725330	0.28761281	2.2729885	21	—	—
253649	2003	UM <sub>139</sub>	16.3	X	101.68462	303.81783	120.69245	8.18832	0.1395469	0.24359303	2.5391761	21	2 18.6	19.4
253650	2003	UA <sub>140</sub>	17.2	X	55.58915	260.19060	122.86122	6.99146	0.1187786	0.28672796	2.2776624	21	—	—
253651	2003	UU <sub>143</sub>	16.9	X	26.72914	336.07673	6.20607	5.44171	0.1710928	0.27571169	2.3379359	21	11 30.8	19.7
253652	2003	UP <sub>148</sub>	17.4	X	8.68175	42.26243	359.84197	2.54332	0.2082756	0.28009885	2.3134592	21	—	—
253653	2003	UX <sub>149</sub>	17.1	X	329.97272	333.53837	77.05153	3.48109	0.2097747	0.27622840	2.3350194	21	11 29.9	18.6
253654	2003	UY <sub>149</sub>	17.3	X	69.53917	218.64489	110.35664	3.94897	0.1863103	0.28312762	2.2969307	21	—	—
253655	2003	UG <sub>155</sub>	17.4	X	332.61322	278.18371	147.54479	4.54455	0.1795910	0.27870047	2.3211912	21	12 29.1	19.2
253656	2003	UK <sub>159</sub>	17.5	X	82.14206	111.43502	207.34927	3.59608	0.1315947	0.28035202	2.3120662	21	—	—
253657	2003	UG <sub>161</sub>	17.3	X	44.60185	341.13175	39.86094	5.81975	0.1537804	0.28406228	2.2918895	21	—	—
253658	2003	UK <sub>161</sub>	17.2	X	305.21191	171.67607	248.90012	2.30808	0.1820937	0.27299565	2.3534170	21	10 14.5	19.0
253659	2003	UA <sub>164</sub>	16.7	X	76.43147	278.58279	94.31427	4.34408	0.1670111	0.28802773	2.2708050	21	—	—
253660	2003	UF <sub>164</sub>	17.1	X	321.89884	337.91769	94.70680	4.18654	0.1331529	0.27712517	2.3299793	21	12 13.6	18.9
253661	2003	UV <sub>165</sub>	17.7	X	319.80011	43.99663	30.86824	1.91227	0.1634768	0.27665105	2.3326406	21	12 12.9	19.3
253662	2003	UC <sub>170</sub>	17.2	X	50.03123	358.72632	302.07877	2.65904	0.2187140	0.27497358	2.3421178	21	11 13.5	20.1
253663	2003	UC <sub>176</sub>	17.5	X	11.57350	18.22864	19.68917	3.95445	0.1150249	0.28153047	2.3056096	21	—	—
253664	2003	UV <sub>178</sub>	17.3	X	17.26242	203.37894	199.85118	2.11222	0.1991288	0.28193794	2.3033877	21	—	—
253665	2003	UR <sub>179</sub>	17.2	X	305.63950	299.65283	122.70592	2.87121	0.1847272	0.27289453	2.3539984	21	10 20.8	19.1
253666	2003	UE <sub>186</sub>	16.9	X	55.49498	11.45187	353.98621	6.09102	0.1942299	0.28409993	2.2916870	21	—	—
253667	2003	UX <sub>186</sub>	17.9	X	37.75506	174.89012	243.63925	0.73059	0.1526160	0.28764821	2.2728020	21	—	—
253668	2003	UQ <sub>190</sub>	17.6	X	58.52438	301.38183	59.82205	3.37960	0.2187859	0.28411672	2.2915967	21	—	—
253669	2003	UH <sub>194</sub>	17.2	X	171.39092	297.25940	54.21149	3.84967	0.2081216	0.30157580	2.2022759	21	2 3.9	20.5
253670	2003	UL <sub>195</sub>	17.4	X	52.52384	351.56189	30.90598	2.91404	0.1647224	0.28420665	2.2911132	21	—	—
253671	2003	UB <sub>201</sub>	16.8	X	46.48206	133.83189	193.21607	5.54						

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253681 2003 UO <sub>226</sub>	16.8	X	346.01265	33.03977	18.87560	5.77255	0.2048992	0.27767781	2.3268869	21	—	—
253682 2003 UW <sub>226</sub>	16.9	X	216.02393	311.21969	275.41778	4.17510	0.0870118	0.28550846	2.2841436	21	—	—
253683 2003 UW <sub>228</sub>	17.5	X	48.26435	38.55237	348.40549	2.95177	0.1711621	0.28432343	2.2904859	21	—	—
253684 2003 UP <sub>229</sub>	16.8	X	300.70862	221.30981	257.20025	5.72035	0.0502351	0.28108134	2.3080650	21	—	—
253685 2003 UM <sub>232</sub>	17.5	X	286.28146	173.43514	295.14550	1.64995	0.1695146	0.27622654	2.3350299	21	11 22.5	19.3
253686 2003 UD <sub>234</sub>	17.0	X	309.10718	207.59107	260.24949	2.16048	0.0388890	0.27925978	2.3180908	21	—	—
253687 2003 UY <sub>236</sub>	17.1	X	3.20510	8.07644	65.58397	6.81073	0.1359070	0.28483020	2.2877682	21	—	—
253688 2003 UO <sub>238</sub>	16.6	X	214.38278	320.10626	237.98695	6.08418	0.0676866	0.28271491	2.2991655	21	12 25.6	19.4
253689 2003 UR <sub>251</sub>	16.8	X	256.63328	150.96517	304.27492	3.74824	0.1590749	0.26960561	2.3731040	21	9 14.6	19.7
253690 2003 UM <sub>252</sub>	17.2	X	308.82392	6.98745	26.52111	2.98482	0.2014997	0.26869367	2.3784705	21	9 7.1	19.1
253691 2003 UQ <sub>257</sub>	17.1	X	44.73304	173.00320	198.35951	5.99397	0.1448149	0.28179579	2.3041622	21	—	—
253692 2003 UH <sub>260</sub>	16.3	X	302.21456	326.21547	94.11517	12.69503	0.3226444	0.26836387	2.3804187	21	9 20.8	18.4
253693 2003 UY <sub>260</sub>	15.1	X	254.43872	332.15376	24.54613	10.32347	0.1016282	0.14692780	3.5568596	21	5 12.2	20.5
253694 2003 UD <sub>264</sub>	17.0	X	312.52913	345.35282	91.42415	7.53388	0.0719766	0.27591470	2.3367889	21	12 2.8	19.3
253695 2003 UF <sub>264</sub>	16.8	X	351.25524	292.79204	74.50981	7.61729	0.1462840	0.27321668	2.3521476	21	11 4.5	18.9
253696 2003 UE <sub>267</sub>	17.1	X	15.78597	163.43652	220.20218	6.40278	0.1178551	0.27876550	2.3208302	21	—	—
253697 2003 UN <sub>271</sub>	17.1	X	75.59407	45.03933	61.70405	4.20451	0.0759965	0.30019404	2.2090286	21	2 16.2	19.2
253698 2003 UP <sub>271</sub>	17.6	X	316.06924	48.98631	34.40546	5.87064	0.1931972	0.27693901	2.3310234	21	12 18.4	19.3
253699 2003 UE <sub>275</sub>	17.5	X	2.19422	45.05397	19.03163	3.73869	0.1735870	0.28183984	2.3039221	21	—	—
253700 2003 UL <sub>277</sub>	17.0	X	79.01364	190.52428	170.60202	5.57516	0.1713392	0.28836089	2.2690556	21	—	—
253701 2003 UR <sub>279</sub>	17.2	X	318.35956	90.95391	332.09327	6.93004	0.1875552	0.27519156	2.3408809	21	11 17.1	19.1
253702 2003 UE <sub>280</sub>	16.9	X	4.60881	209.99776	176.10640	6.97224	0.1378971	0.27696448	2.3308805	21	12 24.0	19.4
253703 2003 UB <sub>281</sub>	17.4	X	16.01409	327.18515	58.07788	3.79983	0.1701958	0.27899550	2.3195545	21	—	—
253704 2003 UO <sub>309</sub>	17.0	X	306.38705	221.11382	95.45310	3.50246	0.2255497	0.26351734	2.4095166	21	5 1.4	19.8
253705 2003 UK <sub>314</sub>	17.9	X	137.76707	259.46847	47.30897	4.67903	0.1707443	0.29122622	2.2541479	21	—	—
253706 2003 UQ <sub>314</sub>	16.8	X	284.18038	195.64873	330.02740	5.05753	0.0971452	0.28389046	2.2928142	21	—	—
253707 2003 UQ <sub>315</sub>	17.4	X	79.92543	87.73636	218.69110	3.85184	0.1520910	0.27913747	2.3187680	21	12 17.1	20.7
253708 2003 UL <sub>316</sub>	17.3	X	278.59128	90.47968	0.81666	1.31327	0.1483886	0.27099705	2.3649738	21	10 15.8	19.6
253709 2003 UU <sub>316</sub>	16.9	X	315.43655	31.62602	54.13369	6.17730	0.1814155	0.27336539	2.3512945	21	12 19.2	18.7
253710 2003 UD <sub>360</sub>	17.6	X	313.15442	221.69265	255.58401	1.88653	0.1640567	0.28031623	2.3122630	21	—	—
253711 2003 UR <sub>377</sub>	17.4	X	107.59870	80.99571	191.37231	5.99580	0.1417160	0.28232527	2.3012804	21	12 2.3	20.8
253712 2003 VB <sub>2</sub>	16.7	X	236.10235	106.30623	357.04600	10.26802	0.1985269	0.26526939	2.3988953	21	8 30.1	20.2
253713 2003 VS <sub>3</sub>	17.5	X	310.53379	24.54121	40.38530	0.75650	0.1774915	0.27283179	2.3543593	21	11 4.1	19.1
253714 2003 VW <sub>3</sub>	16.7	X	49.18036	63.93542	250.32695	5.79089	0.1373563	0.27485605	2.3427855	21	11 18.9	19.6
253715 2003 VM <sub>5</sub>	17.2	X	290.19283	33.56068	52.83301	3.43901	0.1652749	0.27228811	2.3574922	21	10 27.9	19.3
253716 2003 VL <sub>10</sub>	15.6	X	358.79030	157.55897	244.55418	24.42254	0.2013654	0.27766765	2.3269436	21	—	—
253717 2003 VN <sub>10</sub>	16.9	X	114.69758	38.69520	263.83735	4.61332	0.1648044	0.28298277	2.2977145	21	—	—
253718 2003 WT <sub>1</sub>	16.9	X	299.71670	352.54824	82.80690	6.44086	0.1681486	0.27221931	2.3578894	21	10 31.7	19.0
253719 2003 WP <sub>3</sub>	17.0	X	328.00424	333.45413	79.76931	6.26617	0.1359978	0.27412206	2.3469656	21	11 25.9	18.9
253720 2003 WQ <sub>5</sub>	17.4	X	21.15691	155.71044	199.57946	2.24997	0.2445958	0.27674444	2.3321158	21	12 24.1	19.9
253721 2003 WU <sub>5</sub>	17.1	X	15.41807	337.94362	86.10038	2.89789	0.2286751	0.28244822	2.3006126	21	—	—
253722 2003 WA <sub>6</sub>	16.6	X	324.49375	341.67959	51.26995	6.93913	0.1585601	0.27085873	2.3657789	21	10 18.1	18.5
253723 2003 WG <sub>6</sub>	17.3	X	34.38506	97.83595	295.42781	2.10566	0.1653039	0.28295197	2.2978812	21	—	—
253724 2003 WC <sub>8</sub>	17.5	X	32.61302	245.77154	107.55785	3.07895	0.2523879	0.28053605	2.3110549	21	—	—
253725 2003 WC <sub>9</sub>	17.0	X	302.91046	145.57225	298.45653	5.99505	0.0731679	0.27477477	2.3432474	21	11 24.9	19.5
253726 2003 WB <sub>10</sub>	16.8	X	84.64424	308.58064	7.09974	7.71461	0.1368851	0.27951163	2.3166982	21	—	—
253727 2003 WZ <sub>10</sub>	16.7	X	173.73332	347.65028	276.99310	5.91007	0.0816680	0.28635880	2.2796195	21	—	—
253728 2003 WM <sub>15</sub>	16.7	X	355.48992	108.22266	228.33137	4.92832	0.1057928	0.26923394	2.3752874	21	9 17.0	19.1
253729 2003 WN <sub>15</sub>	17.6	X	233.03135	327.76566	119.71788	4.19291	0.0906680	0.28043382	2.3116165	21	—	—
253730 2003 WT <sub>17</sub>	16.7	X	262.68614	130.85537	319.31643	9.64643	0.1729628	0.26839929	2.3802093	21	9 11.7	19.8
253731 2003 WG <sub>19</sub>	17.1	X	276.65728	99.53017	313.03886	5.09702	0.0820543	0.26571205	2.3962303	21	8 26.7	19.8
253732 2003 WW <sub>21</sub>	16.5	X	314.94375	25.43671	59.16629	25.66549	0.2195058	0.27584679	2.3371724	21	12 12.6	18.2
253733 2003 WS <sub>29</sub>	17.5	X	295.12558	143.66961	316.43110	3.43498	0.0848438	0.27543848	2.3394816	21	12 5.1	19.9
253734 2003 WF <sub>30</sub>	17.0	X	57.72136	53.60658	270.72972	5.56252	0.1450586	0.27717046	2.3297255	21	12 14.6	20.0
253735 2003 WJ <sub>30</sub>	16.9	X	22.89818	350.78756	4.59598	3.20945	0.1361895	0.27585433	2.3371299	21	12 8.4	19.5
253736 2003 WT <sub>32</sub>	17.0	X	68.66350	75.22625	254.13578	5.86021	0.1477643	0.28047477	2.3113915	21	—	—
253737 2003 WR <sub>34</sub>	16.6	X	75.54864	273.22597	47.41362	6.91798	0.0969353	0.27763483	2.3271270	21	12 24.5	19.8
253738 2003 WE <sub>36</sub>	16.9	X	30.67316	141.19129	262.57685	5.05487	0.1593610	0.28249574	2.3003546	21	—	—
253739 2003 WZ <sub>36</sub>	16.8	X	313.21269	29.06129	11.24351	7.16377	0.1162689	0.27025015	2.3693293	21	10 6.3	18.9
253740 2003 WC <sub>42</sub>	17.3	X	53.54667	245.96813	125.67174	3.42463	0.2253464	0.28265325	2.2994999	21	—	—
253741 2003 WW <sub>49</sub>	16.9	X	335.63617	171.22424	307.08844	6.11044	0.2238417	0.28290273	2.2981478	21	—	—
253742 2003 WA <sub>52</sub>	17.7	X	314.61765	51.23142	11.27801	2.34039	0.1886736	0.27247995	2.3563855	21	11 8.3	19.4
253743 2003 WA <sub>56</sub>	16.6	X	330.44213	295.43198	271.08365	6.82942	0.0515525	0.29671912	2.2262420	21	1 21.4	19.2
253744 2003 WS <sub>56</sub>	16.6	X	57.12166	278.94550	64.58048	8.46423	0.2620222	0.27995118	2.3142726	21	—	—
253745 2003 WH <sub>61</sub>	15.9	X	108.78906	231.43592	238.59658	9.00735	0.0859974	0.19142529	2.9817405	21	4 23.9	20.2
253746 2003 WX <sub>66</sub>	16.8	X	221.54561	67.17886	69.02050	1.68556	0.1435017	0.26643665	2.3918838	21	10 1.5	20.2
253747 2003 WU <sub>67</sub>	17.4	X	261.92250	171.74407	263.60728	1.75337	0.1577150	0.26545796	2.3977591	21	8 25.6	20.3
253748 2003 WQ <sub>68</sub>	17.2	X	22.36126	140.58456	234.45129	0.93729	0.2474195	0.27870267	2.3211790	21	—	—
253749 2003 WC <sub>70</sub>	17.5	X	57.79397	279.22815	50.62944	7.34431	0.1585583	0.27908761	2.3190441	21	12 23.7	20.6
253750 2003 WX <sub>73</sub>	17.2	X	323.98758	144.36089	316.60091	4.41938	0.1856317	0.27725876	2.3292308	21	—	—
253751 2003 WY <sub>75</sub>	16.7	X	84.15666	303.57129	348.93400	6.71266	0.1090531	0.27666786	2.3325462	21	11 27.5	20.0
253752 2003 WM <sub>89</sub>	17.3	X	13.93597	184.83237	227.72788	3.43890	0.0968855	0.28109901	2.3079683	21	—	—
253753 2003 WJ <sub>92</sub>	16.8	X	11.68117	190.27355	188.56473	4.46329	0.1242485	0.27648254	2.3335883	21	12 22.8	19.3
253754 2003 WU <sub>96</sub>	16.9	X	73.34786	125.92458	203.70974	4.05738	0.1932129	0.28158106	2.3053335	21	—	—
2537												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
253761	2003	WU <sub>105</sub>	16.7	X	269.09161	106.42481	262.59969	4.74300	0.1309945	0.25868211	2.4394492	21	6 8.5	19.8
253762	2003	WV <sub>105</sub>	17.0	X	206.63550	247.53980	269.39224	4.50117	0.0767505	0.26835493	2.3804716	21	10 16.5	20.2
253763	2003	WO <sub>108</sub>	17.0	X	24.20615	304.08931	17.02499	7.00895	0.1318878	0.27060014	2.3672859	21	10 20.7	19.5
253764	2003	WS <sub>109</sub>	17.7	X	328.00541	24.21771	27.21188	3.10143	0.1310649	0.27416433	2.3467244	21	11 21.7	19.9
253765	2003	WH <sub>111</sub>	16.9	X	358.41113	116.99058	264.27271	4.06649	0.0988202	0.27473257	2.3434873	21	11 30.5	19.4
253766	2003	WO <sub>112</sub>	16.7	X	334.70087	145.55359	268.58421	5.63982	0.0769097	0.27485126	2.3428126	21	12 6.2	19.1
253767	2003	WU <sub>114</sub>	17.3	X	9.87435	102.49250	261.88246	5.75985	0.1371736	0.27415714	2.3467654	21	11 30.7	19.8
253768	2003	WP <sub>117</sub>	16.5	X	92.67247	287.29654	281.03953	5.33701	0.0599944	0.25893605	2.4378540	21	8 7.9	19.6
253769	2003	WL <sub>121</sub>	15.6	X	0.70965	218.40343	264.27739	23.33270	0.2088274	0.28485810	2.2876189	21	—	—
253770	2003	WQ <sub>126</sub>	15.7	X	336.61871	249.93241	287.12372	25.69360	0.1925898	0.28539113	2.2847696	21	—	—
253771	2003	WG <sub>131</sub>	17.8	X	358.59833	65.17883	315.65832	1.82722	0.2175238	0.27521565	2.3407442	21	12 18.3	19.8
253772	2003	WF <sub>133</sub>	17.1	X	2.26373	313.23882	53.60179	3.96659	0.1960920	0.27414245	2.3468492	21	11 30.1	19.2
253773	2003	WL <sub>137</sub>	17.2	X	354.24345	339.38483	67.76433	2.99136	0.1743218	0.27639505	2.3340807	21	—	—
253774	2003	WT <sub>138</sub>	16.6	X	304.22257	49.52783	42.22337	2.90174	0.1655594	0.27349410	2.3505567	21	12 6.8	18.4
253775	2003	WC <sub>139</sub>	16.3	X	98.19018	138.28767	240.74773	4.26050	0.13719742	0.28885679	2.2664579	21	—	—
253776	2003	WG <sub>140</sub>	17.4	X	27.59230	255.40368	110.63825	1.54065	0.2296820	0.27815933	2.3242007	21	—	—
253777	2003	WU <sub>140</sub>	16.9	X	323.75281	21.18755	62.23062	4.88151	0.1865536	0.27517590	2.3409697	21	—	—
253778	2003	WK <sub>142</sub>	16.3	X	151.23185	108.97087	252.08912	7.39265	0.2307099	0.29468182	2.2364910	21	1 26.8	19.5
253779	2003	WB <sub>143</sub>	16.7	X	49.03106	234.38126	117.73947	2.06452	0.2367279	0.27965672	2.3158968	21	—	—
253780	2003	WR <sub>144</sub>	17.4	X	260.03544	79.66385	32.53980	1.94437	0.1371167	0.27088438	2.3656296	21	10 18.9	20.1
253781	2003	WV <sub>148</sub>	17.3	X	294.93101	295.99342	150.91072	2.46602	0.1581614	0.27244015	2.3566150	21	11 8.5	19.4
253782	2003	WF <sub>149</sub>	17.1	X	41.70844	337.45109	26.50538	3.56534	0.2270882	0.27938085	2.3174211	21	—	—
253783	2003	WT <sub>149</sub>	17.3	X	18.45811	240.39613	148.55634	2.89454	0.2052349	0.27940943	2.3172631	21	—	—
253784	2003	WJ <sub>155</sub>	16.6	X	48.10629	238.13160	115.20461	7.70020	0.1484135	0.27921560	2.3183354	21	—	—
253785	2003	WQ <sub>161</sub>	17.4	X	259.10655	49.44393	78.54825	1.81225	0.1645286	0.27235075	2.3571307	21	11 4.9	19.9
253786	2003	WT <sub>165</sub>	17.3	X	6.60896	234.81507	103.23629	2.24519	0.2047616	0.27076343	2.3663340	21	10 27.6	19.2
253787	2003	WB <sub>167</sub>	17.1	X	330.48751	277.19301	112.26787	7.08746	0.1259309	0.27202552	2.3590091	21	10 27.8	19.3
253788	2003	WT <sub>168</sub>	17.2	X	252.32720	314.25967	186.25879	7.74597	0.0971236	0.27489776	2.3425484	21	11 24.7	20.0
253789	2003	WQ <sub>171</sub>	17.0	X	3.08776	181.47324	195.16704	8.90123	0.1302898	0.27503433	2.3417730	21	12 7.1	19.5
253790	2003	WG <sub>173</sub>	16.8	X	306.88042	2.44546	44.25394	8.99558	0.0083424	0.27209271	2.3586206	21	10 16.4	19.6
253791	2003	WV <sub>181</sub>	16.9	X	276.44979	16.13778	71.01902	2.14050	0.1548831	0.26772875	2.3841818	21	10 6.0	19.4
253792	2003	WX <sub>184</sub>	17.1	X	264.39339	37.73849	73.74048	3.37763	0.1565270	0.27022518	2.3694752	21	10 22.4	19.9
253793	2003	WU <sub>182</sub>	17.2	X	33.51507	7.06549	41.75624	3.49771	0.1905409	0.28045963	2.3114747	21	—	—
253794	2003	WQ <sub>194</sub>	17.8	X	251.98462	349.40320	166.16026	2.62430	0.1629392	0.27485673	2.3427816	21	12 3.5	20.3
253795	2003	XN <sub>2</sub>	16.7	X	105.82201	299.01843	80.84869	10.85015	0.1011735	0.29040460	2.2583975	21	—	—
253796	2003	XP <sub>6</sub>	17.0	X	355.15814	343.03848	86.66077	4.91102	0.2146461	0.27834508	2.3231666	21	—	—
253797	2003	XQ <sub>6</sub>	17.1	X	312.84741	335.81702	105.70333	3.53272	0.2111487	0.27242510	2.3567018	21	12 5.8	18.5
253798	2003	XP <sub>17</sub>	17.0	X	311.32585	3.28644	105.83580	5.66827	0.1723682	0.27678069	2.3319122	21	—	—
253799	2003	XL <sub>21</sub>	16.3	X	175.78148	188.34685	313.10893	4.74542	0.1478448	0.25692217	2.4505768	21	8 19.7	20.1
253800	2003	XO <sub>21</sub>	16.5	X	117.92001	225.91599	155.91845	5.64393	0.0673356	0.25467477	2.4649726	21	8 6.6	19.7
253801	2003	XP <sub>23</sub>	17.4	X	54.99715	75.43366	244.01955	4.95286	0.2391507	0.27623030	2.3350087	21	12 16.8	20.7
253802	2003	XQ <sub>23</sub>	17.1	X	124.46108	237.82615	69.30492	8.70364	0.1724077	0.28362024	2.2942702	21	—	—
253803	2003	XZ <sub>25</sub>	15.7	X	161.04318	103.11378	225.52943	13.67918	0.0413417	0.23377832	2.6097559	21	—	—
253804	2003	XE <sub>38</sub>	17.1	X	300.40107	50.86970	23.73613	2.32791	0.0891322	0.27080370	2.3660994	21	11 5.8	19.4
253805	2003	XP <sub>38</sub>	17.2	X	337.85912	36.79005	355.61831	4.10234	0.2168398	0.27207274	2.3587361	21	11 16.8	18.8
253806	2003	XO <sub>43</sub>	16.6	X	172.45637	217.56531	324.50953	6.08149	0.0556526	0.26381209	2.4077215	21	10 9.3	20.0
253807	2003	YP <sub>6</sub>	16.9	X	315.10958	90.65431	352.32116	7.08268	0.0917730	0.27148945	2.3621134	21	12 13.3	19.4
253808	2003	YS <sub>6</sub>	16.9	X	240.78781	181.77781	313.97503	4.52919	0.1733370	0.26633652	2.3924832	21	10 16.4	20.1
253809	2003	YU <sub>22</sub>	16.5	X	62.55951	274.55337	89.98033	5.24420	0.2017579	0.28291378	2.2980880	21	—	—
253810	2003	YG <sub>23</sub>	16.9	X	231.95982	319.53683	130.31011	3.04635	0.1591598	0.26235536	2.4166259	21	8 9.4	20.4
253811	2003	YG <sub>26</sub>	16.3	X	283.66989	88.07327	76.90653	7.48829	0.1106057	0.27034680	2.3687646	21	12 3.9	18.5
253812	2003	YJ <sub>29</sub>	16.5	X	295.77310	96.12984	95.60769	7.13710	0.0787779	0.28347412	2.2950586	21	—	—
253813	2003	YZ <sub>30</sub>	17.4	X	318.58212	97.39043	325.86309	0.26186	0.1826569	0.27211489	2.3584925	21	11 19.9	19.1
253814	2003	YK <sub>33</sub>	16.0	X	64.16091	308.63209	219.40399	5.28582	0.1397394	0.24164765	2.5527855	21	5 15.0	18.9
253815	2003	YQ <sub>36</sub>	16.6	X	338.85522	290.91541	72.46353	7.67247	0.1555614	0.26959432	2.3731702	21	10 4.9	18.7
253816	2003	YO <sub>45</sub>	16.9	X	335.90569	292.24299	83.12515	7.36269	0.1351652	0.26984994	2.3716713	21	10 16.8	19.1
253817	2003	YF <sub>48</sub>	16.3	X	212.03431	47.98309	78.33532	7.24778	0.0792478	0.26334748	2.4105526	21	9 17.4	19.7
253818	2003	YQ <sub>48</sub>	16.7	X	352.96937	224.48448	267.73461	4.64340	0.1037219	0.28593708	2.2818604	21	—	—
253819	2003	YH <sub>53</sub>	14.8	X	95.82541	358.98644	37.48871	4.57092	0.1708666	0.12219723	4.0218741	21	2 3.8	20.5
253820	2003	YU <sub>53</sub>	16.8	X	260.13704	229.53848	255.90096	5.11766	0.1697835	0.27083588	2.3659120	21	10 30.8	19.6
253821	2003	YG <sub>55</sub>	16.9	X	222.03790	33.61438	95.73060	3.44823	0.1229680	0.26525527	2.3989804	21	9 26.3	20.2
253822	2003	YT <sub>57</sub>	15.6	X	312.35620	280.51033	88.71900	12.66715	0.3094994	0.26645001	2.3918038	21	7 14.4	17.8
253823	2003	YV <sub>60</sub>	16.7	X	313.15436	344.73216	107.60575	5.54813	0.1571225	0.27440791	2.3453354	21	12 25.2	18.4
253824	2003	YO <sub>62</sub>	17.2	X	349.81343	126.72551	293.33857	1.45517	0.1961116	0.27499448	2.3419992	21	—	—
253825	2003	YT <sub>68</sub>	16.6	X	144.46402	51.11911	125.05707	3.23121	0.1200912	0.25539987	2.4603049	21	9 3.5	20.1
253826	2003	YW <sub>72</sub>	16.8	X	301.74660	41.07386	65.58627	3.84085	0.1167836	0.27449069	2.3448695	21	12 24.8	18.8
253827	2003	YQ <sub>74</sub>	17.3	X	10.57433	1.87154	11.47867	3.04843	0.2437508	0.27559451	2.3385983	21	—	—
253828	2003	YR <sub>76</sub>	17.4	X	263.69002	43.73811	55.15764	3.03208	0.1533340	0.26638371	2.3922007	21	10 3.5	20.1
253829	2003	YG <sub>80</sub>	16.9	X	241.18464	114.39454	322.10825	3.89663	0.1560037	0.25917166	2.4363763	21	8 2.3	20.4
253830	2003	YQ <sub>80</sub>	17.2	X	16.41328	356.65886	60.20825	3.34629	0.1873758	0.2				

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253841 2003 YG <sub>118</sub>	17.1	X	348.54342	232.61745	348.19210	8.09046	0.6413229	0.28499716	2.2868747	21	—	—
253842 2003 YZ <sub>119</sub>	18.0	X	311.36180	86.83536	2.18353	3.28912	0.1417655	0.27246994	2.3564432	21	12 15.4	20.0
253843 2003 YK <sub>128</sub>	17.3	X	302.16543	103.27972	347.34488	6.58975	0.1609620	0.27029891	2.3690443	21	11 25.0	19.4
253844 2003 YS <sub>130</sub>	16.8	X	204.62930	88.44608	44.43932	5.58688	0.1149491	0.26116448	2.4239667	21	9 12.6	20.4
253845 2003 YF <sub>131</sub>	17.2	X	285.00645	73.18561	24.53901	4.54888	0.1237225	0.26908687	2.3761529	21	11 8.1	19.6
253846 2003 YG <sub>131</sub>	16.8	X	200.15791	129.14793	31.97923	5.24153	0.1454650	0.26349820	2.4096332	21	10 10.4	20.4
253847 2003 YH <sub>132</sub>	16.9	X	250.15758	39.08748	35.73643	5.27951	0.1279075	0.26049465	2.4281202	21	8 16.9	20.1
253848 2003 YN <sub>138</sub>	17.1	X	206.61418	73.89192	65.15266	2.05127	0.1281792	0.26125515	2.4234058	21	9 20.1	20.6
253849 2003 YS <sub>138</sub>	16.9	X	245.06119	151.00789	326.10864	7.26922	0.1972069	0.26170861	2.4206056	21	9 22.4	20.4
253850 2003 YJ <sub>152</sub>	16.1	X	128.38971	139.57343	39.18701	12.87500	0.1386296	0.25348774	2.4726619	21	8 28.1	20.1
253851 2003 YM <sub>152</sub>	16.0	X	289.60274	256.43300	353.66279	13.54166	0.0994956	0.23432115	2.6057238	21	2 6.8	19.8
253852 2003 YR <sub>156</sub>	17.0	X	329.02971	155.50383	234.43993	6.52130	0.0963236	0.26981241	2.3718912	21	10 19.8	19.4
253853 2003 YV <sub>159</sub>	16.3	X	215.36036	71.29103	23.23623	6.66642	0.1065103	0.25873481	2.4391180	21	8 4.7	19.8
253854 2003 YF <sub>169</sub>	16.6	X	303.71892	86.27013	32.83367	5.56713	0.1062921	0.26550877	2.3974532	21	9 29.8	19.2
253855 2003 YM <sub>169</sub>	16.6	X	40.09422	313.12593	53.88252	6.07948	0.1322926	0.27703699	2.3304737	21	—	—
253856 2003 YU <sub>169</sub>	15.5	X	149.36292	261.25213	81.68905	13.45784	0.1785661	0.23217699	2.6217419	21	1 9.8	19.4
253857 2003 YH <sub>181</sub>	16.2	X	177.14550	77.10854	87.15184	6.96124	0.0728276	0.25876693	2.4389161	21	9 26.9	19.7
253858 2003 YS <sub>181</sub>	17.1	X	163.55646	139.64607	72.28026	3.08382	0.1645724	0.26276090	2.4141387	21	11 6.9	20.9
253859 2004 AL	17.7	X	306.52255	322.63972	120.17807	1.93364	0.0881547	0.27037644	2.3685914	21	11 29.0	20.1
253860 2004 AQ <sub>3</sub>	16.9	X	268.78081	123.83973	315.48524	7.57025	0.1838458	0.26390265	2.4071706	21	9 4.0	19.8
253861 2004 AW <sub>4</sub>	17.0	X	254.34941	338.47014	127.79192	3.39440	0.1475800	0.26365928	2.4086517	21	10 1.5	20.1
253862 2004 AP <sub>7</sub>	16.9	X	170.61395	175.20077	298.45651	8.05572	0.1532458	0.25135376	2.4866374	21	7 10.3	20.8
253863 2004 AC <sub>11</sub>	16.3	X	149.33602	147.29942	68.09658	6.39258	0.1495640	0.26074777	2.4265485	21	10 30.2	20.1
253864 2004 AB <sub>18</sub>	17.9	X	279.59850	214.54414	173.18457	2.43876	0.2229300	0.25976304	2.4326771	21	7 3.2	21.1
253865 2004 AV <sub>21</sub>	17.6	X	325.66551	251.48096	112.55131	3.36772	0.1160006	0.26063711	2.4272353	21	9 4.4	19.8
253866 2004 AT <sub>25</sub>	15.9	X	272.44541	344.13899	234.33423	15.09586	0.2556857	0.22298072	2.6933400	21	—	—
253867 2004 BB <sub>3</sub>	17.4	X	175.62540	26.14264	105.88094	2.40401	0.1397457	0.25396684	2.4695512	21	8 8.3	21.1
253868 2004 BN <sub>3</sub>	16.7	X	192.44537	49.24200	103.19628	2.44813	0.1286854	0.25925801	2.4358353	21	9 22.5	20.4
253869 2004 BS <sub>3</sub>	17.3	X	216.50301	106.69288	3.39318	1.27544	0.1392515	0.25781230	2.4449330	21	8 21.6	20.9
253870 2004 BF <sub>4</sub>	17.5	X	223.36393	201.48445	311.66331	3.65729	0.1728035	0.26412730	2.4058056	21	10 19.4	21.0
253871 2004 BV <sub>5</sub>	16.9	X	310.67257	270.48248	120.11039	10.79540	0.2097442	0.26383657	2.4075726	21	9 7.1	19.0
253872 2004 BO <sub>6</sub>	16.6	X	32.72012	295.36693	101.51167	8.73492	0.2499313	0.27746708	2.3280648	21	—	—
253873 2004 BT <sub>9</sub>	17.6	X	292.58238	150.06991	312.35124	1.08258	0.2033473	0.26919995	2.3754874	21	11 19.2	19.6
253874 2004 BK <sub>10</sub>	16.9	X	163.10404	181.28390	14.91928	9.31503	0.1634882	0.26112238	2.4242272	21	10 16.3	20.7
253875 2004 BR <sub>19</sub>	15.9	X	7.98428	217.56936	359.41773	11.44587	0.0563718	0.23938389	2.5688541	21	4 10.8	19.0
253876 2004 BW <sub>20</sub>	17.0	X	208.48418	57.50183	92.63412	4.46570	0.1089109	0.26234031	2.4167183	21	10 10.0	20.4
253877 2004 BW <sub>23</sub>	17.2	X	314.55560	294.86609	124.57198	5.44698	0.2003363	0.26833194	2.3806075	21	11 4.6	18.9
253878 2004 BY <sub>24</sub>	18.0	X	237.57769	215.29316	257.80577	1.69685	0.2012968	0.26177436	2.4202003	21	9 9.7	21.5
253879 2004 BO <sub>31</sub>	17.6	X	327.10037	17.56269	24.04483	2.93771	0.2471907	0.26883586	2.3776317	21	11 3.3	18.6
253880 2004 BH <sub>34</sub>	17.0	X	319.40279	105.84236	308.99073	6.92376	0.1120739	0.26759887	2.3849532	21	11 5.8	19.5
253881 2004 BX <sub>34</sub>	17.0	X	312.83077	286.44608	101.58944	3.74022	0.1790644	0.26267498	2.4146651	21	9 10.3	19.1
253882 2004 BG <sub>37</sub>	17.5	X	287.85429	76.75140	16.52930	1.56247	0.1375967	0.26714930	2.3876281	21	11 4.8	19.7
253883 2004 BP <sub>43</sub>	16.8	X	290.78896	50.50942	117.27157	5.43036	0.1588698	0.27524316	2.3405883	21	—	—
253884 2004 BC <sub>47</sub>	17.3	X	291.36862	202.77056	288.10815	2.77360	0.1732951	0.27355455	2.3502104	21	—	—
253885 2004 BC <sub>50</sub>	16.7	X	243.82535	150.34965	295.49676	5.13176	0.0585989	0.25864385	2.4396898	21	8 29.5	19.9
253886 2004 BF <sub>51</sub>	17.2	X	3.97845	128.88256	296.76870	4.64916	0.2075744	0.27619850	2.3351879	21	—	—
253887 2004 BK <sub>54</sub>	17.4	X	316.76380	90.36817	331.30959	3.70403	0.2064179	0.26831231	2.3807236	21	11 8.8	19.1
253888 2004 BM <sub>54</sub>	16.9	X	266.95518	355.48945	118.62652	3.26793	0.1464907	0.26626777	2.3928951	21	10 31.2	19.6
253889 2004 BM <sub>57</sub>	16.0	X	93.54139	199.02721	284.22400	14.00895	0.0403219	0.24027174	2.5625219	21	4 2.8	19.7
253890 2004 BD <sub>67</sub>	16.8	X	22.84646	13.19318	122.68394	8.12405	0.0460707	0.28818766	2.2699648	21	1 3.8	19.3
253891 2004 BE <sub>75</sub>	17.3	X	317.82957	63.19443	22.07664	1.74816	0.1541189	0.27076809	2.3663069	21	12 22.9	19.1
253892 2004 BF <sub>78</sub>	16.8	X	165.93285	76.51647	108.55867	4.92419	0.0924073	0.25964337	2.4334246	21	10 9.7	20.4
253893 2004 BL <sub>92</sub>	16.1	X	26.72097	300.59521	261.15867	11.98151	0.1053542	0.24046417	2.5611546	21	4 19.4	19.1
253894 2004 BC <sub>93</sub>	16.8	X	182.75580	327.35018	222.75154	6.68803	0.1560527	0.26181566	2.4199458	21	10 27.6	20.5
253895 2004 BX <sub>93</sub>	16.1	X	61.16309	329.49720	229.21848	5.42590	0.0818341	0.24422835	2.5347706	21	6 14.2	19.2
253896 2004 BB <sub>94</sub>	16.7	X	26.69712	356.89806	168.83668	10.35964	0.1597982	0.23398784	2.6081978	21	3 2.7	19.2
253897 2004 BJ <sub>95</sub>	15.4	X	313.80039	237.16862	286.05897	13.28868	0.1565346	0.22025471	2.7155173	21	—	—
253898 2004 BY <sub>102</sub>	15.7	X	357.14344	42.97354	72.74209	24.84613	0.3487398	0.27809363	2.3245667	21	—	—
253899 2004 BP <sub>107</sub>	17.0	X	297.40022	39.72023	40.40613	5.78636	0.1999243	0.26679676	2.3897310	21	10 26.3	18.8
253900 2004 BB <sub>112</sub>	16.4	X	85.12229	170.41501	311.73110	8.14133	0.1105938	0.23789843	2.5795364	21	4 3.8	19.8
253901 2004 BY <sub>112</sub>	17.8	X	279.63655	276.72786	201.91790	1.64903	0.1344070	0.27013354	2.3700111	21	11 29.1	20.2
253902 2004 BC <sub>124</sub>	16.6	X	134.43124	115.64855	70.76045	6.68662	0.0628927	0.25544177	2.4600358	21	9 5.6	20.1
253903 2004 BN <sub>124</sub>	17.5	X	256.22184	143.89490	330.92436	1.79838	0.1390905	0.26573596	2.3960865	21	10 15.1	20.3
253904 2004 BL <sub>144</sub>	17.9	X	310.54102	56.31402	343.80786	1.60791	0.1979530	0.26432490	2.4046064	21	9 19.9	19.9
253905 2004 BB <sub>146</sub>	16.3	X	4.91468	297.53728	302.87391	10.06973	0.2154015	0.24302123	2.5431574	21	4 30.1	18.6
253906 2004 BE <sub>150</sub>	17.8	X	219.38494	106.78110	56.24248	1.92599	0.1242973	0.26559691	2.3969228	21	11 4.9	20.9
253907 2004 BU <sub>152</sub>	16.5	X	103.31673	263.37619	332.64350	4.86891	0.1164097	0.25834176	2.4415913	21	10 4.6	19.9
253908 2004 BZ <sub>158</sub>	17.3	X	255.80542	283.49464	191.33989	4.75400	0.1783903	0.26379398	2.4078317	21	10 8.9	20.3
253909 2004 CP <sub>4</sub>	17.6	X	257.27387	328.48326	144.05396	5.36677	0.1781438	0.26408200	2.4060860	21	10 9.9	20.6
253910 2004 CY <sub>8</sub>	16.2	X	81.79310	350.44342	57.45234	2.07318	0.1903616	0.17285273	3.1916743	21	1 21.8	20.2
253911 2004 CH <sub>9</sub>	15.8	X	329.01783	290.15592	291.13669	10.08554	0.1265839	0.23188757	2.6239229	21	2 9.3	19.2
253912 2004 CE <sub>13</sub>	16.7	X	279.40776	273.77886	146.03487	1.94553	0.1752515	0.25998966	2.4312634	21	8 26.5	19.3
253913 2004 CP <sub>17</sub>	16.6	X	317.98973	119.84930	127.16688	3.81441	0.0922545	0.23405718	2.6076827	21	3 8.7	19.8



ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
253921 2004 <i>CJ</i> <sub>52</sub>	17.9	X	30.02365	58.70187	331.95960	15.23615	0.0927437	0.38422744	1.8738887	21	—	—
253922 2004 <i>CL</i> <sub>55</sub>	16.4	X	205.86322	269.08637	330.49327	8.57391	0.2364479	0.21222335	2.7836029	21	—	—
253923 2004 <i>CL</i> <sub>58</sub>	16.5	X	207.83489	13.58774	87.47281	6.64196	0.1580593	0.25535466	2.4605953	21	7 30.9	20.3
253924 2004 <i>CL</i> <sub>61</sub>	16.5	X	152.44614	118.99084	84.70201	5.65052	0.0987288	0.25967130	2.4332501	21	10 19.2	20.1
253925 2004 <i>CE</i> <sub>64</sub>	17.3	X	172.56923	111.98379	53.23725	5.21202	0.1700989	0.25648637	2.4533519	21	9 18.9	21.2
253926 2004 <i>CQ</i> <sub>72</sub>	16.6	X	215.90456	63.93293	19.76635	6.46995	0.1175381	0.25266593	2.4780207	21	7 19.7	20.3
253927 2004 <i>CK</i> <sub>75</sub>	17.4	X	228.01947	334.50472	166.65169	4.53311	0.1457823	0.26262304	2.4149835	21	10 15.2	20.6
253928 2004 <i>CV</i> <sub>75</sub>	17.0	X	158.78370	340.20669	157.16369	3.66648	0.1348274	0.25126360	2.4872322	21	7 28.2	20.8
253929 2004 <i>CN</i> <sub>78</sub>	17.0	X	234.53302	129.88332	329.51419	2.39187	0.1383063	0.25730445	2.4481490	21	8 27.2	20.3
253930 2004 <i>CO</i> <sub>78</sub>	17.8	X	233.29394	149.54551	330.76318	4.83028	0.1723222	0.26019931	2.4299572	21	9 17.6	21.2
253931 2004 <i>CQ</i> <sub>78</sub>	17.1	X	214.43108	357.24397	130.34828	3.93629	0.1911331	0.25800219	2.4437332	21	9 7.6	20.8
253932 2004 <i>CL</i> <sub>80</sub>	16.5	X	270.36564	262.21695	344.23268	3.79825	0.1491401	0.22551700	2.6731082	21	1 5.4	20.7
253933 2004 <i>CM</i> <sub>80</sub>	16.9	X	79.67196	149.72038	20.42982	4.27480	0.1362899	0.24130182	2.5552241	21	6 9.9	20.1
253934 2004 <i>CH</i> <sub>82</sub>	16.6	X	165.39093	164.99838	289.46201	1.57100	0.0554561	0.24559803	2.5253377	21	6 5.5	19.9
253935 2004 <i>CX</i> <sub>91</sub>	16.7	X	222.90644	52.07489	64.55057	7.03131	0.0838628	0.25909211	2.4368750	21	9 16.5	20.1
253936 2004 <i>CP</i> <sub>93</sub>	16.7	X	230.90042	231.28378	262.23216	7.44475	0.1347514	0.26221740	2.4174734	21	10 4.9	20.1
253937 2004 <i>CQ</i> <sub>93</sub>	16.2	X	352.81254	310.80258	327.57443	6.30799	0.1452929	0.23120662	2.6290724	21	1 30.4	19.3
253938 2004 <i>CE</i> <sub>101</sub>	15.9	X	2.98480	205.01356	352.04863	13.27081	0.2038215	0.23048360	2.6345677	21	2 27.9	18.3
253939 2004 <i>CS</i> <sub>102</sub>	16.3	X	73.62450	213.34852	279.53105	7.85290	0.1336023	0.23638364	2.5905448	21	4 4.9	19.6
253940 2004 <i>CS</i> <sub>108</sub>	17.0	X	131.50443	316.83270	183.05048	10.13381	0.0800258	0.24600777	2.5225328	21	6 27.5	20.7
253941 2004 <i>CH</i> <sub>109</sub>	15.9	X	33.99181	195.99145	340.10169	11.06938	0.1046627	0.23319994	2.6140693	21	3 27.4	18.8
253942 2004 <i>CH</i> <sub>111</sub>	16.2	X	330.49845	250.33940	336.37079	9.23790	0.0485184	0.23254985	2.6189387	21	3 3.8	19.6
253943 2004 <i>CF</i> <sub>111</sub>	16.9	X	101.35843	195.34074	313.03026	5.36134	0.0767032	0.24212793	2.5494087	21	5 26.4	20.2
253944 2004 <i>CP</i> <sub>111</sub>	16.3	X	253.92652	11.66447	310.86472	2.22133	0.1730991	0.23577330	2.5950136	21	3 17.9	20.2
253945 2004 <i>CP</i> <sub>127</sub>	16.0	X	263.98374	230.14142	310.54187	12.91529	0.0781620	0.24354725	2.5394943	21	6 3.2	19.7
253946 2004 <i>DE</i> <sub>3</sub>	17.5	X	220.27209	93.92636	340.60729	6.89138	0.2013746	0.25234136	2.4801451	21	7 5.3	21.5
253947 2004 <i>DB</i> <sub>4</sub>	16.3	X	56.82726	127.59375	75.24343	7.27440	0.1381887	0.24198271	2.5504285	21	6 21.9	19.2
253948 2004 <i>DR</i> <sub>7</sub>	17.0	X	236.23261	337.91785	333.24198	0.87901	0.1204095	0.23122984	2.6288964	21	2 19.7	21.0
253949 2004 <i>DC</i> <sub>15</sub>	15.9	X	327.70786	121.64831	155.67288	8.42160	0.1371307	0.24183961	2.5514345	21	4 27.9	18.9
253950 2004 <i>DY</i> <sub>22</sub>	16.5	X	116.39525	274.19869	202.38078	11.75907	0.1849991	0.24154571	2.5535037	21	5 23.6	20.3
253951 2004 <i>DC</i> <sub>26</sub>	17.5	X	359.88144	314.48068	123.85443	5.77664	0.2079643	0.27634420	2.3343670	21	—	—
253952 2004 <i>DD</i> <sub>29</sub>	16.3	X	325.18394	280.07661	23.72592	1.33210	0.1419530	0.24370967	2.5383658	21	5 28.2	18.9
253953 2004 <i>DY</i> <sub>33</sub>	16.0	X	100.60585	251.62082	218.46173	12.49740	0.1316233	0.23719713	2.5846184	21	4 16.2	19.3
253954 2004 <i>DP</i> <sub>35</sub>	16.5	X	65.48991	308.19445	223.57604	4.01676	0.2381199	0.23935043	2.5690935	21	6 8.6	19.3
253955 2004 <i>DZ</i> <sub>35</sub>	16.6	X	345.19889	351.58319	198.40898	6.42389	0.1284592	0.22882538	2.6472802	21	1 24.1	20.0
253956 2004 <i>DB</i> <sub>38</sub>	16.9	X	287.03717	144.24577	2.26391	25.05810	0.1004651	0.38201536	1.8811157	21	—	—
253957 2004 <i>DP</i> <sub>38</sub>	16.4	X	328.89683	155.82900	32.21008	3.90766	0.0705692	0.22564959	2.6720609	21	1 10.3	19.9
253958 2004 <i>DF</i> <sub>41</sub>	16.3	X	21.18814	71.32279	109.25365	5.49898	0.1731458	0.23190683	2.6237776	21	3 17.1	18.7
253959 2004 <i>DR</i> <sub>42</sub>	16.2	X	51.71761	148.96732	19.71098	14.37873	0.1925204	0.23425305	2.6062289	21	4 28.4	18.8
253960 2004 <i>DK</i> <sub>44</sub>	17.2	X	265.72239	208.68170	313.18696	2.06240	0.1167454	0.26895543	2.3769270	21	—	—
253961 2004 <i>DN</i> <sub>45</sub>	17.5	X	349.17030	87.95619	3.09415	21.12579	0.0839601	0.38587910	1.8685378	21	—	—
253962 2004 <i>DO</i> <sub>47</sub>	16.3	X	330.92461	281.39826	318.54714	11.91690	0.1971866	0.23156744	2.6263406	21	2 25.9	19.4
253963 2004 <i>DN</i> <sub>50</sub>	16.3	X	133.68205	184.57100	287.62531	5.05427	0.1085302	0.24300868	2.5432449	21	5 26.7	19.9
253964 2004 <i>DS</i> <sub>50</sub>	16.5	X	45.05791	249.89539	347.21755	7.60412	0.1345283	0.24464469	2.5318940	21	7 24.5	19.4
253965 2004 <i>DR</i> <sub>54</sub>	17.1	X	133.43338	275.47376	151.86086	3.52452	0.0328398	0.23558320	2.5964094	21	3 20.6	20.5
253966 2004 <i>DO</i> <sub>59</sub>	14.6	X	106.66365	36.52713	84.70485	6.50233	0.1246006	0.12476480	3.9665048	21	5 19.5	20.3
253967 2004 <i>DT</i> <sub>79</sub>	17.6	X	247.01201	298.10433	157.94644	5.33314	0.1603321	0.26169145	2.4207115	21	9 4.3	20.6
253968 2004 <i>DF</i> <sub>80</sub>	16.6	X	213.77931	198.69573	282.03793	7.82077	0.1288660	0.25464554	2.4651612	21	8 29.4	20.4
253969 2004 <i>EF</i> <sub>2</sub>	17.3	X	237.36843	201.24032	14.09967	21.20268	0.0155087	0.38443020	1.8732298	21	—	—
253970 2004 <i>EX</i> <sub>4</sub>	17.1	X	251.65024	25.60775	70.46948	2.48525	0.1436440	0.25772741	2.4454698	21	9 13.6	20.2
253971 2004 <i>EM</i> <sub>10</sub>	17.0	X	50.71135	190.37444	353.89589	3.55420	0.1518432	0.23787042	2.5797389	21	5 15.8	19.8
253972 2004 <i>EJ</i> <sub>14</sub>	17.3	X	59.01651	126.98538	56.73847	3.45902	0.0751693	0.29480612	2.2358623	21	5 15.1	19.6
253973 2004 <i>EN</i> <sub>15</sub>	15.9	X	11.71770	9.20415	188.05060	12.09019	0.1365085	0.23621845	2.5917521	21	3 19.1	18.4
253974 2004 <i>EY</i> <sub>19</sub>	14.9	X	347.78622	234.68321	19.46748	21.66211	0.3496551	0.17436576	3.1731839	21	4 8.4	17.5
253975 2004 <i>EO</i> <sub>22</sub>	15.9	X	56.80311	157.86221	344.92705	21.91477	0.0173445	0.23277783	2.6172285	21	3 12.5	19.3
253976 2004 <i>EU</i> <sub>23</sub>	16.8	X	30.78568	300.92936	36.34688	21.16678	0.0889229	0.36966620	1.9227798	21	12 2.2	19.0
253977 2004 <i>ES</i> <sub>25</sub>	16.7	X	152.78789	222.30056	244.00688	4.14749	0.0992855	0.24369321	2.5384801	21	6 9.5	20.3
253978 2004 <i>ED</i> <sub>28</sub>	16.0	X	256.33973	186.89142	171.20743	5.13708	0.2950244	0.24144536	2.5542112	21	4 24.9	20.4
253979 2004 <i>EA</i> <sub>32</sub>	15.8	X	21.84890	318.71339	201.07343	14.74609	0.1383082	0.22695286	2.6618216	21	2 10.8	19.0
253980 2004 <i>EG</i> <sub>33</sub>	16.7	X	33.43815	156.27464	345.82439	4.77057	0.0426383	0.22927723	2.6438010	21	2 12.4	20.0
253981 2004 <i>ER</i> <sub>39</sub>	16.6	X	331.38974	232.11125	347.16792	11.47993	0.0356093	0.23003057	2.6380256	21	2 27.4	19.9
253982 2004 <i>EO</i> <sub>39</sub>	16.0	X	271.82612	326.66544	206.88184	6.90300	0.0662564	0.21523803	2.7575499	21	—	—
253983 2004 <i>EA</i> <sub>43</sub>	16.8	X	257.43856	74.96309	92.27851	3.55824	0.1192581	0.26689355	2.3891532	21	—	—
253984 2004 <i>EN</i> <sub>43</sub>	16.5	X	103.60727	288.17313	243.78030	8.42820	0.1421918	0.24263702	2.5458414	21	7 13.6	20.2
253985 2004 <i>EC</i> <sub>54</sub>	17.6	X	226.14821	105.78371	356.79496	0.87573	0.1449849	0.25504590	2.4625808	21	8 21.3	21.2
253986 2004 <i>EW</i> <sub>56</sub>	16.9	X	326.61812	243.76668	206.03054	21.74878	0.2584265	0.27233297	2.3572333	21	—	—
253987 2004 <i>EE</i> <sub>57</sub>	16.3	X	86.17582	314.62361	204.76619	24.65616	0.1853590	0.24040594	2.5615682	21	6 11.1	20.2
253988 2004 <i>EY</i> <sub>58</sub>	16.0	X	303.92554	324.75358	282.63621	10.36961	0.1575130	0.22666313	2.6640894	21	2 6.2	19.8
253989 2004 <i>EL</i> <sub>59</sub>	15.9	X	321.25780	228.55820	332.14669	12.26767	0.1085939	0.22365255	2.6879435	21	1 13.2	19.6
253990 2004 <i>EQ</i> <sub>61</sub>	17.1	X	163.58460	120.67745	352.46739	11.70384	0.1448935	0.24604959	2.5222470	21	7 3.9	21.3
253991 2004 <i>EZ</i> <sub>61</sub>	16.3	X	222.23904	333.90551	292.28149	2.23422	0.2095443	0.21661260	2.7458717	21	—	—

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
254001	2004	FT <sub>2</sub>	17.6	X	261.32284	166.38666	6.61058	18.01290	0.0659314	0.38200844	1.8811384	21	—	—
254002	2004	FW <sub>4</sub>	17.4	X	113.56182	325.57562	9.80974	19.16186	0.1100137	0.38319243	1.8772615	21	—	—
254003	2004	FM <sub>5</sub>	17.7	X	23.06554	32.26608	20.67582	21.62091	0.0857552	0.38269410	1.8788908	21	—	—
254004	2004	FM <sub>6</sub>	17.9	X	356.72117	274.30511	169.83954	22.41767	0.1207258	0.38474159	1.8722189	21	—	—
254005	2004	FS <sub>10</sub>	17.4	X	120.83116	74.94931	144.69047	1.87790	0.1403514	0.25763352	2.4460640	21	10 6.5	21.0
254006	2004	FO <sub>17</sub>	17.6	X	286.96388	297.60477	188.09475	20.40931	0.1014969	0.37908894	1.8907842	21	—	—
254007	2004	FN <sub>21</sub>	16.8	X	122.05949	120.04904	342.69889	8.89745	0.1323360	0.23768850	2.5810551	21	4 30.6	20.6
254008	2004	FQ <sub>21</sub>	16.8	X	36.87628	278.41192	281.78335	2.46946	0.1412047	0.23655381	2.5893023	21	5 12.7	19.5
254009	2004	FP <sub>23</sub>	17.0	X	18.44401	201.74408	357.40369	3.65857	0.1010867	0.23365915	2.6106432	21	4 5.0	19.9
254010	2004	FM <sub>24</sub>	13.9	X	36.95226	274.35298	328.01362	17.41017	0.2516328	0.12524842	3.9562877	21	8 1.5	18.7
254011	2004	FM <sub>26</sub>	16.2	X	69.81344	273.88597	179.44301	22.03652	0.0619613	0.22621359	2.6676177	21	1 29.7	19.9
254012	2004	FH <sub>33</sub>	16.5	X	117.30417	211.21365	284.08329	4.18381	0.1663630	0.24153076	2.5536091	21	6 15.0	20.1
254013	2004	FC <sub>37</sub>	17.4	X	260.10663	60.69216	43.54520	1.88825	0.1436370	0.25976616	2.4326577	21	10 5.7	20.2
254014	2004	FJ <sub>42</sub>	16.4	X	200.60080	262.59112	59.14688	3.48124	0.0607842	0.22411240	2.6842654	21	1 29.8	20.3
254015	2004	FO <sub>51</sub>	16.0	X	309.99622	190.48555	116.35482	5.60117	0.0835082	0.24159023	2.5531900	21	5 18.9	19.1
254016	2004	FQ <sub>52</sub>	17.1	X	260.43788	117.26241	25.62215	3.70355	0.1325557	0.26454247	2.4032877	21	11 30.1	19.9
254017	2004	FQ <sub>59</sub>	16.6	X	205.91663	75.02317	182.14297	1.22268	0.2124573	0.21195080	2.7859887	21	—	—
254018	2004	FB <sub>67</sub>	16.2	X	42.83075	197.15953	19.95672	15.38903	0.0659936	0.23968212	2.5667227	21	6 6.2	19.6
254019	2004	FW <sub>81</sub>	16.6	X	346.19917	2.87896	280.45476	2.11306	0.0382631	0.24144351	2.5542243	21	6 14.1	19.8
254020	2004	FU <sub>87</sub>	17.3	X	100.16591	58.13344	101.64162	2.49865	0.1210133	0.24203910	2.5500324	21	6 21.6	20.7
254021	2004	FF <sub>89</sub>	16.0	X	216.44948	264.42552	143.61086	14.79944	0.1127585	0.24580366	2.5239291	21	6 4.4	20.1
254022	2004	FZ <sub>93</sub>	16.1	X	269.22214	243.79043	32.26375	6.29401	0.2564451	0.22257792	2.6965884	21	2 2.1	20.7
254023	2004	FV <sub>106</sub>	16.8	X	234.51259	185.64269	280.47999	1.54154	0.1324923	0.25430196	2.4673812	21	9 5.1	20.1
254024	2004	FK <sub>107</sub>	16.0	X	233.10089	71.80004	203.05682	10.72927	0.1586755	0.21770177	2.7367056	21	1 4.0	20.7
254025	2004	FV <sub>109</sub>	16.1	X	290.90914	352.90560	190.15972	14.61990	0.1670512	0.21585296	2.7523102	21	—	—
254026	2004	FM <sub>118</sub>	16.4	X	20.88022	51.48176	141.60623	2.99542	0.1343115	0.23094034	2.6310929	21	4 3.1	19.1
254027	2004	FH <sub>125</sub>	16.4	X	76.47123	115.95557	4.47281	11.72259	0.1666025	0.23159363	2.6261426	21	3 29.6	19.3
254028	2004	FG <sub>126</sub>	16.2	X	47.61952	124.63928	22.00810	2.77169	0.0258128	0.22918832	2.6444847	21	3 9.8	19.5
254029	2004	FU <sub>127</sub>	16.0	X	275.24291	67.67457	194.24939	9.05999	0.0252306	0.22572452	2.6714695	21	2 8.4	19.8
254030	2004	FD <sub>131</sub>	15.6	X	275.76386	156.94361	116.88907	13.53646	0.1574787	0.22508754	2.6765072	21	2 13.2	19.7
254031	2004	FS <sub>134</sub>	16.2	X	117.32683	117.08178	359.39894	13.62062	0.0710535	0.23697653	2.5862221	21	5 3.2	20.0
254032	2004	FB <sub>139</sub>	16.4	X	3.41443	218.08993	352.89066	11.42690	0.1424420	0.23090188	2.6313851	21	3 23.2	19.2
254033	2004	FZ <sub>139</sub>	16.1	X	276.49396	197.29807	41.26448	11.59835	0.0792646	0.21862908	2.7289616	21	1 11.1	20.2
254034	2004	FD <sub>142</sub>	17.4	X	237.49551	112.32250	13.62730	1.77928	0.1362969	0.25797945	2.4438768	21	10 5.9	20.6
254035	2004	FT <sub>143</sub>	15.9	X	79.66283	127.68092	43.77637	12.20828	0.1389843	0.23687296	2.5869759	21	6 11.1	19.3
254036	2004	FJ <sub>147</sub>	17.4	X	132.97255	260.22308	56.03573	20.89644	0.0810004	0.38098438	1.8845078	21	—	—
254037	2004	GJ <sub>1</sub>	16.5	X	342.80219	186.32232	26.20874	11.28320	0.1101852	0.22722014	2.6597337	21	3 1.7	19.8
254038	2004	GB <sub>11</sub>	14.8	X	330.00095	249.89224	45.84384	26.35986	0.2951105	0.17463093	3.1699708	21	5 6.9	18.0
254039	2004	GL <sub>13</sub>	15.8	X	83.04317	154.67543	354.29098	14.60759	0.1128976	0.23428914	2.6059612	21	5 6.8	19.4
254040	2004	GU <sub>17</sub>	17.3	X	131.56345	245.99433	261.58422	1.45678	0.1285961	0.24439669	2.5336065	21	7 13.0	21.1
254041	2004	GO <sub>18</sub>	15.5	X	251.63329	209.00971	78.86294	14.72235	0.2276493	0.22204764	2.7008799	21	2 4.8	20.3
254042	2004	GF <sub>20</sub>	17.1	X	226.24171	312.80394	234.62734	21.80736	0.0297712	0.37631719	1.9000572	21	—	—
254043	2004	GO <sub>21</sub>	16.1	X	17.34652	156.32505	68.23580	15.35117	0.1337375	0.23270848	2.6177484	21	5 14.1	18.8
254044	2004	GP <sub>26</sub>	15.5	X	22.34957	89.49664	63.38339	14.34403	0.0680032	0.22406572	2.6846382	21	2 16.7	19.1
254045	2004	GB <sub>28</sub>	17.5	X	341.42974	233.86777	216.28689	21.04130	0.0985347	0.38170853	1.8821236	21	—	—
254046	2004	GF <sub>29</sub>	16.9	X	156.86411	121.50907	24.89987	12.60384	0.1181119	0.24619327	2.5121656	21	8 12.9	21.0
254047	2004	GW <sub>30</sub>	16.7	X	339.95563	181.79041	14.04759	4.06652	0.1402134	0.22522110	2.6754490	21	1 26.3	19.9
254048	2004	GN <sub>31</sub>	17.0	X	94.75321	119.13874	45.98161	4.74190	0.1440585	0.23900638	2.5715583	21	6 25.4	20.4
254049	2004	FY <sub>32</sub>	16.6	X	40.42215	338.59346	191.94149	2.73180	0.1304986	0.23094628	2.6310478	21	4 6.1	19.1
254050	2004	GD <sub>33</sub>	16.7	X	3.15745	270.90089	283.79966	2.27156	0.1295791	0.22885681	2.6470379	21	3 1.5	19.6
254051	2004	GT <sub>41</sub>	16.8	X	116.85576	204.42659	306.09606	4.03002	0.2378105	0.24117938	2.5560888	21	7 12.3	20.9
254052	2004	GH <sub>46</sub>	16.4	X	124.63507	319.04183	39.12372	6.51013	0.0361470	0.21559519	2.7545035	21	—	—
254053	2004	GO <sub>47</sub>	17.0	X	168.22479	141.30649	178.19569	2.40547	0.1800204	0.21335508	2.7737505	21	1 2.8	21.4
254054	2004	GT <sub>51</sub>	15.2	X	250.86509	197.97388	192.10517	13.09007	0.2477958	0.24223608	2.5486498	21	6 3.4	19.5
254055	2004	GA <sub>60</sub>	15.8	X	186.26589	94.07093	196.47220	13.26914	0.1163555	0.21160974	2.7889814	21	—	—
254056	2004	GU <sub>60</sub>	16.4	X	226.86739	84.99401	173.56765	4.63295	0.1208549	0.21430713	2.7655295	21	—	—
254057	2004	GG <sub>73</sub>	16.1	X	314.19326	15.11051	220.83733	12.88843	0.1509706	0.22406122	2.6846742	21	2 4.1	20.1
254058	2004	GW <sub>85</sub>	16.8	X	258.21801	156.76503	141.58860	6.04031	0.0405424	0.22652332	2.6651855	21	3 7.6	20.4
254059	2004	HN <sub>4</sub>	16.7	X	93.63396	37.51544	151.92453	3.43942	0.1273659	0.24174720	2.5520847	21	7 24.4	20.3
254060	2004	HM <sub>6</sub>	15.8	X	84.77149	120.74076	59.84077	14.78392	0.1222424	0.23642078	2.5902735	21	6 29.5	19.3
254061	2004	HP <sub>15</sub>	16.2	X	158.12281	319.38738	24.59790	7.15706	0.0148172	0.21802067	2.7340363	21	1 5.3	20.1
254062	2004	HB <sub>17</sub>	16.6	X	124.21035	149.31135	11.43380	2.61542	0.0986064	0.24221944	2.5487665	21	7 20.2	20.2
254063	2004	HU <sub>20</sub>	16.2	X	293.45626	174.26835	68.18890	3.01184	0.0369141	0.22395605	2.6855146	21	2 8.8	19.8
254064	2004	HW <sub>20</sub>	16.3	X	281.93193	175.63228	63.89156	9.30637	0.2499933	0.21897970	2.7260479	21	—	—
254065	2004	HZ <sub>26</sub>	16.4	X	39.09759	135.45120	53.11988	13.35360	0.1031968	0.23234038	2.6205126	21	4 29.6	19.3
254066	2004	HA <sub>30</sub>	15.7	X	208.70357	258.87500	60.20688	10.21380	0.1934211	0.21612306	2.7500166	21	2 9.1	20.5
254067	2004	HO <sub>32</sub>	17.3	X	44.35176	202.28711	200.19455	23.25256	0.1114500	0.38201749	1.8811087	21	—	—
254068	2004	HA <sub>35</sub>	16.6	X	259.18894	40.16464	207.48948	4.29248	0.0599502	0.22077954	2.7112121	21	1 2.3	20.6
254069	2004	HG <sub>35</sub>	17.0	X	171.66005	54.85990	41.52823	5.50990	0.0717825	0.24192474	2.5508360	21	6 16.1	20.6
254070	2004	HK <sub>42</sub>	15.8	X	66.92117	75.88301	38.79103	12.12089	0.0262914	0.224				

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
254081 2004 <i>JF</i> <sub>3</sub>	16.2	X	197.89973	250.89367	51.11788	9.52124	0.2150745	0.21285515	2.7780919	21	1 10.2	21.0
254082 2004 <i>JU</i> <sub>3</sub>	16.5	X	169.54856	215.72547	61.16524	5.48415	0.1319499	0.20644466	2.8353082	21	—	—
254083 2004 <i>JX</i> <sub>3</sub>	16.4	X	283.62417	180.26740	56.40954	8.16712	0.0702277	0.21967677	2.7202780	21	1 17.5	20.3
254084 2004 <i>JA</i> <sub>4</sub>	17.1	X	228.02096	148.39833	181.83908	3.15884	0.0806377	0.22457282	2.6805953	21	3 9.0	20.9
254085 2004 <i>JJ</i> <sub>8</sub>	15.9	X	149.28284	183.87363	123.24722	8.81630	0.1639972	0.20544051	2.8445397	21	—	—
254086 2004 <i>JX</i> <sub>8</sub>	16.3	X	200.40944	213.74840	242.26243	8.71877	0.0937810	0.24310321	2.5425857	21	7 16.5	20.1
254087 2004 <i>JJ</i> <sub>10</sub>	16.3	X	17.87783	13.78309	183.18366	12.68412	0.2024906	0.22751165	2.6574614	21	4 1.9	18.5
254088 2004 <i>JK</i> <sub>19</sub>	15.6	X	139.47469	214.98690	241.07736	21.12237	0.0654801	0.23111120	2.6297960	21	5 8.1	19.3
254089 2004 <i>JF</i> <sub>25</sub>	16.4	X	2.92466	139.70335	239.51828	10.26284	0.1379777	0.22716533	2.6601616	21	3 3.2	19.6
254090 2004 <i>JE</i> <sub>26</sub>	16.3	X	352.26534	115.20763	71.84577	2.05489	0.1429667	0.22272467	2.6954038	21	2 2.3	19.4
254091 2004 <i>JF</i> <sub>27</sub>	16.2	X	274.83100	54.10541	232.04559	4.91278	0.1097692	0.22280052	2.6947920	21	2 28.8	20.2
254092 2004 <i>JV</i> <sub>27</sub>	16.7	X	40.27149	302.64578	274.49563	2.65701	0.1942506	0.23455726	2.6039749	21	6 22.4	19.3
254093 2004 <i>JU</i> <sub>28</sub>	16.2	X	315.79226	153.98736	82.32647	7.06694	0.1409703	0.22229687	2.6988608	21	2 15.9	19.8
254094 2004 <i>JE</i> <sub>43</sub>	16.4	X	90.34262	100.97417	62.97356	13.05541	0.1140650	0.23540759	2.5977005	21	6 12.3	19.9
254095 2004 <i>JS</i> <sub>47</sub>	16.6	X	256.79098	197.33651	101.20247	2.95748	0.0779097	0.22294211	2.6936509	21	3 3.1	20.5
254096 2004 <i>KC</i>	16.2	X	39.32759	323.71794	262.86704	10.45269	0.1315029	0.23529131	2.5985562	21	6 25.5	18.9
254097 2004 <i>KE</i>	16.2	X	6.05140	142.35442	47.87370	7.35768	0.2125148	0.22565563	2.6720132	21	2 26.5	18.8
254098 2004 <i>KT</i> <sub>4</sub>	16.0	X	203.35453	184.13174	104.60708	6.80050	0.0863072	0.21182598	2.7870830	21	—	—
254099 2004 <i>KR</i> <sub>8</sub>	16.6	X	311.38047	334.93127	252.61559	10.46747	0.1778610	0.22163443	2.7042358	21	1 19.8	20.5
254100 2004 <i>KH</i> <sub>12</sub>	16.1	X	267.83756	11.55005	215.70211	11.73351	0.1281194	0.21573998	2.7532710	21	—	—
254101 2004 <i>KQ</i> <sub>16</sub>	14.9	X	23.78251	228.69488	127.10378	16.40118	0.2034987	0.18155949	3.0888021	21	12 3.5	19.0
254102 2004 <i>KV</i> <sub>16</sub>	15.5	X	358.33987	86.98251	314.61878	12.01636	0.0448346	0.18614282	3.0378887	21	12 1.2	19.8
254103 2004 <i>LF</i>	17.1	X	349.97390	15.76705	69.95606	22.34204	0.0756918	0.37685541	1.8982477	21	—	—
254104 2004 <i>LC</i> <sub>10</sub>	16.4	X	343.60654	304.54600	268.52751	6.78771	0.1577236	0.22354525	2.6888037	21	2 17.1	19.6
254105 2004 <i>LZ</i> <sub>17</sub>	15.0	X	15.68440	43.34230	330.29145	7.39103	0.3108398	0.17964179	3.1107454	21	12 26.1	18.6
254106 2004 <i>LY</i> <sub>19</sub>	16.7	X	267.15472	337.81206	284.45193	2.27660	0.1536427	0.21827974	2.7318725	21	1 21.3	20.9
254107 2004 <i>LA</i> <sub>22</sub>	17.1	X	188.62433	343.79860	225.79478	20.25486	0.0470286	0.37048521	1.9199451	21	12 27.5	19.5
254108 2004 <i>LS</i> <sub>28</sub>	15.7	X	191.46907	47.22125	233.52414	7.59018	0.1060508	0.20218728	2.8749712	21	—	—
254109 2004 <i>MR</i> <sub>3</sub>	16.7	X	13.52367	141.69578	251.75628	19.74697	0.0745208	0.37250883	1.9129854	21	—	—
254110 2004 <i>NV</i> <sub>2</sub>	14.9	X	13.06788	279.24554	50.51178	25.74927	0.3288572	0.17509860	3.1643239	21	10 31.2	18.1
254111 2004 <i>NC</i> <sub>4</sub>	15.1	X	342.05577	92.19185	272.24192	23.73385	0.2969931	0.17499502	3.1655724	21	8 31.9	18.6
254112 2004 <i>NY</i> <sub>4</sub>	15.3	X	18.09961	38.90278	294.21253	11.07705	0.1414577	0.17885551	3.1198556	21	10 7.5	19.4
254113 2004 <i>ND</i> <sub>14</sub>	16.2	X	68.90428	83.47612	225.88461	2.42230	0.2536147	0.18654471	3.0335240	21	12 5.9	20.8
254114 2004 <i>NX</i> <sub>28</sub>	15.5	X	110.34031	5.47008	272.02212	9.11987	0.1156865	0.18878605	3.0094661	21	11 24.7	20.1
254115 2004 <i>NF</i> <sub>31</sub>	15.6	X	121.00264	40.15586	243.02441	8.31738	0.1847558	0.19059902	2.9903517	21	12 15.5	20.5
254116 2004 <i>NL</i> <sub>31</sub>	15.1	X	11.33488	214.93284	117.01815	23.34185	0.1755988	0.17785999	3.1314865	21	10 15.7	19.3
254117 2004 <i>NL</i> <sub>33</sub>	15.2	X	139.10221	330.86697	336.75704	11.62333	0.1089770	0.19782894	2.9170430	21	—	—
254118 2004 <i>OM</i> <sub>2</sub>	15.7	X	64.86632	3.64720	279.53706	11.93959	0.1823400	0.18281226	3.0746747	21	10 17.2	20.3
254119 2004 <i>ON</i> <sub>9</sub>	15.5	X	41.94835	224.22632	108.05842	17.87962	0.2084544	0.18454148	3.0554374	21	12 1.3	19.8
254120 2004 <i>OX</i> <sub>10</sub>	17.2	X	278.76925	74.72883	210.68527	13.86318	0.1256148	0.34692170	2.0059268	21	7 18.3	19.0
254121 2004 <i>OO</i> <sub>12</sub>	15.7	X	12.15397	180.09824	202.51123	3.52795	0.1255129	0.18518318	3.0483748	21	12 6.4	19.4
254122 2004 <i>OE</i> <sub>15</sub>	16.0	X	47.06463	259.93926	69.32363	3.64134	0.1465761	0.18506657	3.0496551	21	11 21.4	20.2
254123 2004 <i>PR</i> <sub>1</sub>	15.5	X	46.87956	238.09692	116.12605	11.28638	0.1213529	0.18757923	3.0223601	21	12 18.9	19.8
254124 2004 <i>PO</i> <sub>3</sub>	15.5	X	52.62950	339.94892	328.66819	9.58052	0.1640690	0.18272764	3.0756239	21	10 31.9	20.0
254125 2004 <i>PG</i> <sub>10</sub>	16.0	X	64.21294	271.15416	105.72528	0.68564	0.1693905	0.19191116	2.9767056	21	—	—
254126 2004 <i>PQ</i> <sub>11</sub>	15.5	X	353.65952	231.96297	155.35005	5.62412	0.1605793	0.18202004	3.0835897	21	11 16.2	19.0
254127 2004 <i>PQ</i> <sub>14</sub>	15.9	X	14.03224	302.93147	21.39760	5.24127	0.2135089	0.17647603	3.1478370	21	10 3.9	19.1
254128 2004 <i>PW</i> <sub>14</sub>	15.3	X	136.03573	283.14299	347.96175	10.23109	0.1010694	0.18872571	3.0101075	21	12 10.9	20.2
254129 2004 <i>PX</i> <sub>15</sub>	15.1	X	53.58710	25.75307	334.26673	9.93915	0.0526499	0.18676731	3.0311131	21	12 24.2	19.5
254130 2004 <i>PM</i> <sub>16</sub>	14.9	X	302.87109	242.14654	153.81882	16.07327	0.1063295	0.17232105	3.1982359	21	9 2.3	19.1
254131 2004 <i>PT</i> <sub>16</sub>	15.5	X	103.22418	156.95097	160.66132	9.95456	0.1044527	0.19258723	2.9697352	21	—	—
254132 2004 <i>PN</i> <sub>25</sub>	15.2	X	326.40212	247.27318	138.00886	11.12624	0.1609128	0.17622994	3.1507668	21	9 24.3	18.9
254133 2004 <i>PH</i> <sub>28</sub>	15.6	X	317.89979	211.85335	153.60619	4.67024	0.1582824	0.17205648	3.2015137	21	8 9.1	19.4
254134 2004 <i>PK</i> <sub>40</sub>	15.1	X	299.08181	259.27594	169.07922	25.96280	0.1996755	0.17353165	3.1833441	21	9 26.8	19.0
254135 2004 <i>PT</i> <sub>43</sub>	15.6	X	11.18587	39.22496	300.49521	8.74271	0.1061802	0.17812765	3.1283487	21	10 2.7	19.8
254136 2004 <i>PH</i> <sub>53</sub>	15.8	X	334.09280	354.56830	8.15741	5.53566	0.1728111	0.17441717	3.1725603	21	9 4.9	19.2
254137 2004 <i>PN</i> <sub>53</sub>	15.8	X	24.47628	260.83721	105.32068	5.90816	0.1591874	0.18411423	3.0601625	21	12 8.4	19.7
254138 2004 <i>PD</i> <sub>57</sub>	16.2	X	353.55860	84.97917	269.81397	4.27798	0.1939935	0.17720842	3.1391578	21	9 29.6	19.6
254139 2004 <i>PL</i> <sub>57</sub>	15.9	X	26.76379	58.73587	295.12695	6.88301	0.1232887	0.18320246	3.0703073	21	11 19.2	20.0
254140 2004 <i>PR</i> <sub>59</sub>	15.6	X	334.07518	209.08947	157.08586	12.82234	0.1261783	0.17565956	3.1575836	21	9 11.9	19.4
254141 2004 <i>PT</i> <sub>60</sub>	15.3	X	357.94086	217.53677	165.13657	17.14827	0.2300640	0.17890033	3.1193345	21	11 25.4	18.9
254142 2004 <i>PV</i> <sub>60</sub>	15.3	X	317.73685	247.62122	169.74073	16.88211	0.2415670	0.17595515	3.1540463	21	10 12.5	18.7
254143 2004 <i>PN</i> <sub>61</sub>	15.4	X	69.11507	2.59981	324.56316	10.54245	0.1238043	0.18450726	3.0558151	21	12 10.9	20.1
254144 2004 <i>PF</i> <sub>66</sub>	15.3	X	327.24220	257.72228	149.15738	16.36143	0.1375490	0.17838415	3.1253491	21	10 28.5	19.3
254145 2004 <i>PQ</i> <sub>73</sub>	15.3	X	353.59118	36.23880	334.27906	8.54811	0.1082518	0.17956836	3.1115934	21	10 16.1	19.2
254146 2004 <i>PD</i> <sub>75</sub>	15.2	X	37.40460	341.33897	334.85575	21.77054	0.0286632	0.17876324	3.1202921	21	9 26.8	19.8
254147 2004 <i>PB</i> <sub>76</sub>	16.0	X	130.16715	116.04733	184.99135	5.63145	0.1429215	0.19454961	2.9497315	21	—	—
254148 2004 <i>PU</i> <sub>76</sub>	15.4	X	43.22497	104.23217	271.25438	7.74689	0.1159692	0.18953105	3.0015745	21	—	—
254149 2004 <i>PB</i> <sub>77</sub>	15.4	X	70.23707	135.50886	160.14445	12.57268	0.1581417	0.18403844	3.0610025	21	11 12.7	20.1
254150 2004 <i>PV</i> <sub>79</sub>	15.5	X	3.09766	51.13384	317.23861	15.78397	0.2383387	0.17828336	3.1265269	21	11 7.1	19.2
254151 2004 <i>PR</i> <sub>82</sub>	15.6	X	348.70673	245.94854	98.77197	2.94627	0.2143214	0.17341340	3.1847911	21	9 8.7	18.8
254152 2004 <i>PL</i> <sub>83</sub>	15.1</											

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
254161	2004	PG <sub>100</sub>	15.3	X	335.59576	253.13293	121.55115	10.17161	0.1723215	0.17727195	3.1384077	21	9 27.9	18.9
254162	2004	PH <sub>109</sub>	15.8	X	19.60646	189.26567	140.45915	8.98437	0.1603720	0.17730521	3.1380153	21	10 17.5	19.7
254163	2004	PY <sub>113</sub>	15.5	X	347.97436	256.70407	93.82392	8.24605	0.1729647	0.17554437	3.1589648	21	9 18.8	19.1
254164	2004	PP <sub>114</sub>	15.7	X	347.68525	147.91708	192.56850	19.41024	0.1957984	0.17366197	3.1817514	21	8 25.9	19.3
254165	2004	QG <sub>2</sub>	15.4	X	53.97989	238.34565	98.55816	10.32777	0.1140635	0.18406138	3.0607482	21	12 5.4	19.7
254166	2004	QP <sub>5</sub>	15.2	X	91.08269	313.31536	337.92695	15.21100	0.0883728	0.18375790	3.0641171	21	11 12.9	20.0
254167	2004	QO <sub>8</sub>	16.7	X	349.78796	272.71199	70.15794	14.47780	0.3048397	0.17506778	3.1646953	21	9 18.3	19.6
254168	2004	QM <sub>10</sub>	15.2	X	70.10951	278.59809	8.29378	18.66691	0.1803996	0.18075272	3.0979863	21	10 26.6	19.9
254169	2004	QW <sub>10</sub>	16.0	X	96.38727	242.95412	63.05019	9.30004	0.1917543	0.18703590	3.0282105	21	12 20.5	21.0
254170	2004	QX <sub>14</sub>	14.9	X	289.54011	103.91158	333.94511	25.58546	0.1799480	0.17532180	3.1616377	21	9 16.6	19.2
254171	2004	QU <sub>17</sub>	14.8	X	357.72538	108.99704	246.78046	14.04926	0.2125753	0.17219266	3.1998255	21	10 7.3	18.4
254172	2004	QC <sub>27</sub>	15.6	X	355.95659	166.87782	172.45415	25.80573	0.3410343	0.17632168	3.1496738	21	9 25.9	17.8
254173	2004	RT <sub>1</sub>	16.3	X	94.58404	270.15214	23.05337	0.96307	0.1141700	0.18364889	3.0653296	21	11 27.0	20.9
254174	2004	RG <sub>3</sub>	15.0	X	62.93728	39.46355	252.73302	26.19814	0.1167861	0.17806984	3.1290257	21	10 15.6	19.8
254175	2004	RT <sub>5</sub>	15.0	X	34.20342	244.65826	103.55670	11.57809	0.0685941	0.18062150	3.0994865	21	11 19.4	19.3
254176	2004	RB <sub>6</sub>	15.8	X	355.48748	268.53369	128.50877	14.63134	0.2055286	0.18049555	3.1009283	21	12 7.1	19.4
254177	2004	RA <sub>7</sub>	15.6	X	349.41758	204.48713	148.05542	21.17775	0.1667908	0.17402993	3.1772649	21	9 23.2	19.3
254178	2004	RO <sub>8</sub>	15.6	X	64.38419	52.03703	255.24114	8.13402	0.1137214	0.18217645	3.0818244	21	11 9.5	20.0
254179	2004	RS <sub>12</sub>	15.7	X	67.29179	250.57776	69.15533	6.55140	0.2834734	0.18559193	3.0438972	21	12 19.2	20.6
254180	2004	RN <sub>15</sub>	15.7	X	11.17569	222.71873	154.08680	17.70782	0.2425316	0.18069151	3.0986859	21	12 13.9	19.5
254181	2004	RQ <sub>17</sub>	15.3	X	294.55401	333.85259	89.79303	6.31481	0.1299640	0.17390765	3.1787541	21	9 25.7	19.4
254182	2004	RM <sub>19</sub>	15.6	X	358.72038	221.11115	162.64953	10.51434	0.0872963	0.18077094	3.0977781	21	11 15.6	19.7
254183	2004	RR <sub>20</sub>	15.8	X	356.20977	220.85223	185.71833	5.25822	0.1497983	0.18229190	3.0805231	21	12 13.5	19.4
254184	2004	RH <sub>21</sub>	15.3	X	7.76862	33.77392	344.41515	16.28389	0.1365367	0.18065335	3.0991222	21	11 18.2	19.5
254185	2004	RO <sub>21</sub>	15.8	X	320.12219	190.91387	172.21074	5.92283	0.1539693	0.17053849	3.2204837	21	8 9.5	19.7
254186	2004	RG <sub>26</sub>	15.7	X	5.11016	271.40026	129.12486	5.43179	0.1652569	0.18402707	3.0611286	21	12 22.4	19.2
254187	2004	RO <sub>36</sub>	14.9	X	29.87686	283.68342	7.35142	11.17882	0.1699256	0.17460277	3.1703117	21	9 13.2	18.7
254188	2004	RL <sub>37</sub>	15.4	X	57.97618	292.91805	349.44244	9.41370	0.0919115	0.17700375	3.1415772	21	9 27.5	19.7
254189	2004	RW <sub>37</sub>	15.8	X	341.29500	261.57019	122.59827	6.13002	0.1683689	0.17684301	3.1434806	21	10 20.4	19.3
254190	2004	RK <sub>39</sub>	15.7	X	184.03544	273.27519	10.32071	1.65914	0.0627026	0.19688039	2.9264049	21	—	—
254191	2004	RE <sub>41</sub>	15.7	X	294.23480	291.25037	162.86507	17.82183	0.0892818	0.18120197	3.0928636	21	11 9.9	20.0
254192	2004	RP <sub>41</sub>	15.8	X	81.30921	280.02226	22.99981	3.50334	0.1028282	0.18330981	3.0691086	21	11 22.8	20.2
254193	2004	RL <sub>43</sub>	15.4	X	26.92591	219.00900	168.17267	9.65304	0.0689701	0.18654305	3.0335420	21	12 25.4	19.6
254194	2004	RM <sub>44</sub>	15.4	X	106.71265	320.91553	309.32646	9.77939	0.1464253	0.18372935	3.0644347	21	11 12.1	20.3
254195	2004	RW <sub>44</sub>	15.9	X	340.55680	21.90655	1.04029	5.00081	0.1595969	0.17650913	3.1474435	21	10 13.2	19.3
254196	2004	RM <sub>46</sub>	15.2	X	43.70420	278.13480	355.92582	11.07754	0.1547667	0.17341704	3.1847465	21	9 9.2	19.3
254197	2004	RG <sub>47</sub>	15.7	X	347.31297	234.04098	173.79642	2.29172	0.0277608	0.18292583	3.0734020	21	11 24.8	19.8
254198	2004	RM <sub>48</sub>	15.9	X	48.19734	279.50412	105.25497	2.78897	0.0848655	0.18865585	3.0108505	21	—	—
254199	2004	RB <sub>57</sub>	15.1	X	358.64285	239.06399	94.10479	4.73522	0.1923011	0.17281554	3.1921320	21	9 14.4	18.5
254200	2004	RF <sub>58</sub>	15.3	X	25.31826	140.15635	157.48355	7.80342	0.1545134	0.17235041	3.1978727	21	9 10.3	19.2
254201	2004	RB <sub>66</sub>	15.4	X	35.30374	4.04509	340.69573	4.33336	0.155527	0.17980173	3.1089003	21	11 18.1	19.6
254202	2004	RU <sub>71</sub>	15.8	X	60.83825	122.04948	195.31287	9.70405	0.1485256	0.18190124	3.0849321	21	11 24.4	20.2
254203	2004	RL <sub>72</sub>	16.1	X	357.27153	220.32296	160.10921	1.49508	0.1782801	0.17791421	3.1308502	21	11 12.8	19.4
254204	2004	RL <sub>73</sub>	15.4	X	323.93827	194.64821	174.78703	11.44387	0.0513030	0.17189116	3.2035661	21	9 2.6	19.8
254205	2004	RW <sub>75</sub>	15.5	X	59.12394	143.33518	166.52357	12.25557	0.2403759	0.18007486	3.1057559	21	11 26.4	20.2
254206	2004	RQ <sub>78</sub>	15.5	X	303.47865	73.92512	14.71763	15.79779	0.2724869	0.17633397	3.1495274	21	10 17.1	18.9
254207	2004	RU <sub>83</sub>	14.7	X	340.61985	258.92041	94.36978	20.04521	0.2711753	0.17086459	3.2163848	21	9 7.1	18.1
254208	2004	RF <sub>87</sub>	15.5	X	92.04208	85.78384	202.94110	16.98391	0.0734048	0.18087200	3.0966241	21	11 15.7	20.1
254209	2004	RP <sub>87</sub>	15.7	X	355.01692	142.14954	199.28721	11.97179	0.1593904	0.17268558	3.1937334	21	9 12.1	19.5
254210	2004	RP <sub>89</sub>	15.3	X	298.92921	184.49667	294.15164	8.96763	0.0460201	0.18872997	3.0100622	21	12 18.4	19.4
254211	2004	RV <sub>89</sub>	15.3	X	7.33850	36.85558	316.49247	10.50515	0.0472051	0.17964241	3.1107382	21	10 9.4	19.7
254212	2004	RC <sub>90</sub>	15.3	X	316.02816	202.96235	180.70791	16.50397	0.1123343	0.17477990	3.1681694	21	9 3.4	19.3
254213	2004	RT <sub>91</sub>	15.4	X	358.09549	92.18465	257.38433	10.01817	0.0817998	0.17674979	3.1445857	21	9 23.2	19.6
254214	2004	RU <sub>91</sub>	15.3	X	331.60742	138.27987	282.36007	11.49320	0.1752995	0.18117938	3.0931207	21	11 15.3	18.8
254215	2004	RO <sub>92</sub>	15.3	X	44.66082	27.82423	329.19860	11.06570	0.0531553	0.18497514	3.0506600	21	12 7.8	19.7
254216	2004	RX <sub>92</sub>	15.3	X	68.67342	40.66558	263.43448	9.07112	0.0785387	0.18199531	3.0838690	21	11 5.2	19.7
254217	2004	RY <sub>92</sub>	15.2	X	33.89915	114.92711	201.05829	12.30703	0.0583412	0.17785579	3.1315357	21	10 4.1	19.3
254218	2004	RC <sub>93</sub>	15.4	X	22.09301	129.09303	223.28255	9.25513	0.1121442	0.18078768	3.0975868	21	11 10.4	19.4
254219	2004	RZ <sub>93</sub>	15.3	X	18.67964	187.14428	177.72189	17.13283	0.1996776	0.18101064	3.0950427	21	12 4.4	19.4
254220	2004	RA <sub>94</sub>	15.5	X	210.30216	282.44111	308.31516	9.19449	0.0431645	0.19271054	2.9684683	21	—	—
254221	2004	RP <sub>94</sub>	15.4	X	304.13861	175.00658	195.71376	12.15548	0.0912872	0.16988581	3.2287269	21	7 31.4	19.9
254222	2004	RY <sub>95</sub>	15.4	X	100.57401	102.81185	178.67798	16.04366	0.0547711	0.18421760	3.0590175	21	11 16.4	20.1
254223	2004	RX <sub>96</sub>	15.6	X	103.84079	53.78113	268.89902	8.14568	0.1052697	0.18851932	3.0123041	21	—	—
254224	2004	RG <sub>97</sub>	15.3	X	265.97708	256.94125	252.13101	9.19698	0.0224315	0.18564001	3.0433717	21	12 15.0	19.4
254225	2004	RK <sub>100</sub>	16.0	X	354.69781	43.95679	303.53205	3.09110	0.2532699	0.17426389	3.1744205	21	9 24.9	18.9
254226	2004	RM <sub>103</sub>	15.1	X	245.52587	232.25004	257.17654	9.59011	0.0367619	0.17860644	3.1227554	21	10 21.3	19.7
254227	2004	RT <sub>103</sub>	15.4	X	318.91335	94.62697	332.00750	14.51150	0.1627340	0.17754694	3.1351663	21	10 24.9	19.3
254228	2004	RD <sub>114</sub>	16.0	X	334.59086	321.02248	32.44024	1.99911	0.2250331	0.17337595	3.1852497	21	8 19.1	19.2
254229	2004	RZ <sub>114</sub>	15.8	X	331.88837	302.04960	116.52929	3.83161	0.1701957	0.17964363	3.11072			

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
254241 2004 RH <sub>142</sub>	15.1	X	27.00187	297.39633	45.83098	8.64892	0.1357534	0.17796324	3.1302752	21	11 8.4	19.1
254242 2004 RC <sub>143</sub>	15.3	X	348.64923	133.23710	207.62763	19.34127	0.2109713	0.17210256	3.2009422	21	8 26.3	19.0
254243 2004 RV <sub>143</sub>	15.1	X	132.94624	301.09827	52.80239	8.14509	0.0378776	0.19570625	2.9380979	21	—	—
254244 2004 RT <sub>147</sub>	15.3	X	38.89956	343.62660	7.28968	10.22334	0.0453714	0.18139007	3.0907251	21	11 19.6	19.7
254245 2004 RY <sub>147</sub>	14.9	X	46.41750	289.37661	2.88335	22.31438	0.1492058	0.17561009	3.1581765	21	10 2.1	19.2
254246 2004 RH <sub>153</sub>	15.1	X	25.80535	100.65260	199.10832	14.00149	0.2587680	0.17524515	3.1625595	21	9 27.1	18.7
254247 2004 RO <sub>154</sub>	15.0	X	12.52190	64.94541	315.44860	9.68685	0.1002150	0.18131004	3.0916345	21	11 28.5	19.1
254248 2004 RA <sub>155</sub>	15.3	X	302.17674	232.43601	203.13913	9.66658	0.0730750	0.17903693	3.1177477	21	10 26.5	19.3
254249 2004 RG <sub>156</sub>	15.8	X	68.25394	94.65458	202.02564	8.09643	0.1991197	0.18083377	3.0970605	21	11 14.1	20.3
254250 2004 RZ <sub>156</sub>	15.6	X	17.21574	347.60867	330.62507	4.49162	0.2001093	0.17418214	3.1754136	21	9 27.3	19.2
254251 2004 RV <sub>161</sub>	15.3	X	122.23712	70.59207	235.72219	15.21483	0.0997895	0.19102829	2.9858701	21	—	—
254252 2004 RH <sub>162</sub>	15.3	X	51.95933	37.55650	277.19344	11.16054	0.1297472	0.17898932	3.1183005	21	11 3.2	19.7
254253 2004 RM <sub>165</sub>	14.9	X	293.59954	212.42792	259.92315	21.83463	0.1120911	0.18121976	3.0926612	21	11 24.8	18.9
254254 2004 RM <sub>167</sub>	15.9	X	32.42755	218.66454	112.54828	5.69651	0.1732212	0.17870288	3.1216319	21	11 8.7	19.9
254255 2004 RL <sub>168</sub>	15.3	X	336.20914	223.81485	172.40230	27.79540	0.1584812	0.17922409	3.1155768	21	10 28.3	19.2
254256 2004 RV <sub>168</sub>	15.6	X	335.42453	112.32103	274.72553	7.93040	0.1041668	0.17744462	3.1363715	21	10 7.6	19.6
254257 2004 RJ <sub>170</sub>	15.7	X	39.12968	98.61809	207.35078	9.14431	0.2282801	0.17672580	3.1448704	21	10 23.6	19.5
254258 2004 RV <sub>171</sub>	15.9	X	327.89715	217.04506	158.12815	11.85405	0.1303478	0.17271076	3.1934230	21	9 12.6	19.8
254259 2004 RK <sub>172</sub>	15.4	X	343.58325	219.12070	133.60886	10.80295	0.0348014	0.17301377	3.1896934	21	9 13.1	19.8
254260 2004 RA <sub>176</sub>	15.6	X	87.10656	55.29899	264.30314	7.14077	0.0900224	0.18630168	3.0361615	21	12 18.3	20.1
254261 2004 RA <sub>177</sub>	15.3	X	63.20240	52.31753	259.01186	8.11944	0.0877796	0.18081415	3.0972846	21	11 9.1	19.7
254262 2004 RM <sub>177</sub>	15.8	X	7.98205	46.48730	308.16964	8.82379	0.1144672	0.17802942	3.1294994	21	10 17.9	19.9
254263 2004 RD <sub>179</sub>	15.2	X	30.25936	67.83434	288.60474	8.74451	0.0919895	0.18059419	3.0997990	21	11 22.7	19.4
254264 2004 RM <sub>179</sub>	15.1	X	336.92176	47.07777	320.44181	9.78381	0.0208216	0.17413076	3.1760383	21	9 16.9	19.5
254265 2004 RW <sub>179</sub>	15.8	X	357.03864	98.33255	261.41558	3.88708	0.1648360	0.17582890	3.1555559	21	10 12.2	19.5
254266 2004 RY <sub>183</sub>	14.9	X	355.88825	12.59249	348.61554	10.33212	0.0580619	0.17496171	3.1659742	21	10 5.9	19.1
254267 2004 RB <sub>184</sub>	15.6	X	357.50831	173.71927	212.10930	9.37066	0.0688785	0.17983187	3.1085530	21	11 13.0	19.5
254268 2004 RB <sub>187</sub>	15.1	X	1.64318	118.82049	293.42101	8.68783	0.0810295	0.18348799	3.0671213	21	12 22.9	19.0
254269 2004 RA <sub>188</sub>	15.2	X	66.81357	8.35483	311.57172	8.37854	0.1226962	0.18124333	3.0923931	21	11 28.3	19.8
254270 2004 RZ <sub>188</sub>	15.3	X	72.07115	43.71017	265.64911	6.52463	0.1528230	0.18082943	3.0971101	21	11 26.2	19.8
254271 2004 RY <sub>190</sub>	15.4	X	313.84468	218.42295	187.13172	15.48302	0.2491356	0.17151212	3.2082843	21	9 11.5	19.1
254272 2004 RN <sub>192</sub>	15.5	X	336.91558	238.11609	196.81865	14.42711	0.2389924	0.18008761	3.1056093	21	12 18.2	18.8
254273 2004 RM <sub>193</sub>	15.4	X	41.66826	139.53172	204.88462	10.17827	0.1118449	0.17964501	3.1170782	21	11 27.8	19.7
254274 2004 RM <sub>198</sub>	15.8	X	27.97389	50.79333	312.56033	8.60879	0.1079571	0.18032146	3.1029237	21	11 30.2	20.1
254275 2004 RM <sub>199</sub>	16.3	X	108.87280	132.03531	128.58074	3.46838	0.1555264	0.18202854	3.0834937	21	11 7.6	21.2
254276 2004 RD <sub>202</sub>	15.5	X	49.66129	128.65831	215.66359	11.30864	0.1082586	0.18449236	3.0597996	21	12 7.5	19.8
254277 2004 RC <sub>205</sub>	15.5	X	323.05001	181.34842	252.23640	16.35859	0.1974400	0.18042794	3.1017028	21	11 16.2	18.8
254278 2004 RE <sub>207</sub>	15.2	X	18.49054	126.16422	193.57670	26.30210	0.2659714	0.17715614	3.1397754	21	10 13.8	18.5
254279 2004 RA <sub>210</sub>	15.4	X	43.04199	128.46706	202.74973	16.40985	0.0539301	0.18066612	3.0989762	21	11 5.9	19.7
254280 2004 RN <sub>210</sub>	15.3	X	89.48145	52.43169	232.69044	12.97514	0.1578127	0.18236793	3.0796669	21	11 16.8	20.0
254281 2004 RZ <sub>210</sub>	15.5	X	316.06007	112.40945	266.74380	10.84832	0.1556962	0.17068143	3.2186854	21	8 19.8	19.6
254282 2004 RG <sub>213</sub>	15.3	X	70.34937	71.59192	238.34117	14.98200	0.2892994	0.18245393	3.0786990	21	12 10.8	20.3
254283 2004 RM <sub>214</sub>	14.9	X	355.80412	141.15388	225.74849	13.70908	0.2093443	0.17541442	3.1605247	21	10 22.8	18.3
254284 2004 RD <sub>217</sub>	15.0	X	14.34786	120.13755	216.90327	22.78095	0.0553877	0.17346277	3.1841867	21	9 30.6	19.5
254285 2004 RX <sub>217</sub>	14.8	X	40.25460	25.38786	302.39800	10.09130	0.0889522	0.17608063	3.1525477	21	10 27.5	19.3
254286 2004 RG <sub>219</sub>	15.3	X	358.08078	98.72080	288.51896	9.88721	0.0677070	0.17922478	3.1155688	21	11 12.3	19.5
254287 2004 RA <sub>225</sub>	15.7	X	335.58698	199.41026	162.61340	5.02672	0.1663299	0.17216088	3.2002193	21	9 5.4	19.1
254288 2004 RG <sub>236</sub>	15.7	X	271.92430	322.16428	178.55050	16.14645	0.0526551	0.18489109	3.0515845	21	12 9.7	20.2
254289 2004 RG <sub>238</sub>	15.8	X	326.04895	235.58125	177.36266	9.00377	0.1088274	0.17826688	3.1267197	21	11 1.2	19.7
254290 2004 RT <sub>242</sub>	15.4	X	265.16165	310.59787	156.68529	5.96295	0.0866527	0.17778841	3.1323269	21	10 15.8	19.7
254291 2004 RB <sub>254</sub>	15.1	X	96.61419	260.37619	49.86821	14.16792	0.1048554	0.18573896	3.0422907	21	12 17.3	19.8
254292 2004 RC <sub>257</sub>	15.9	X	313.58203	299.86832	135.84374	1.81368	0.1503150	0.17925394	3.1152308	21	11 6.2	19.5
254293 2004 RE <sub>266</sub>	16.1	X	13.79429	20.29191	58.71491	2.47465	0.0406073	0.19138487	2.9821603	21	—	—
254294 2004 RB <sub>267</sub>	15.4	X	165.06597	352.38715	182.38432	9.36953	0.0304915	0.17369939	3.1812944	21	9 14.8	19.9
254295 2004 RJ <sub>267</sub>	15.9	X	352.93804	86.84334	268.33099	2.06143	0.0553668	0.17481007	3.1678048	21	9 25.7	20.0
254296 2004 RL <sub>269</sub>	16.0	X	120.72019	53.99044	186.34434	4.65220	0.0939661	0.17931883	3.1144793	21	10 20.8	20.8
254297 2004 RY <sub>284</sub>	15.3	X	164.01261	255.56887	162.50529	11.24370	0.1089306	0.15277027	3.4655872	21	4 29.8	20.8
254298 2004 RX <sub>286</sub>	15.5	X	345.02552	120.34626	232.29943	3.18940	0.0720490	0.17068132	3.2186868	21	9 10.2	19.7
254299 Shambleau	16.5	X	96.98289	344.14290	311.94074	0.88273	0.1359541	0.18390536	3.0624790	21	12 4.9	21.1
254300 2004 RN <sub>289</sub>	15.0	X	30.19428	256.73592	97.62955	17.22508	0.2533563	0.18120119	3.0928725	21	12 15.7	19.0
254301 2004 RA <sub>292</sub>	15.2	X	7.07245	28.33924	348.41052	8.87286	0.0503331	0.17886760	3.1197150	21	11 9.6	19.5
254302 2004 RA <sub>293</sub>	15.4	X	257.73278	151.03344	320.21947	4.88397	0.1428152	0.17661379	3.1461999	21	9 29.6	20.0
254303 2004 RJ <sub>293</sub>	15.3	X	311.73169	195.64890	221.30926	14.53478	0.2504446	0.17217316	3.2000671	21	9 20.4	19.1
254304 2004 RN <sub>293</sub>	16.6	X	293.64511	256.17440	294.91697	2.94351	0.0944550	0.19894089	2.9061633	21	—	—
254305 2004 RA <sub>300</sub>	15.9	X	307.91720	5.73941	22.35164	1.70950	0.1582842	0.17017844	3.2250246	21	8 23.8	20.0
254306 2004 RU <sub>304</sub>	15.5	X	324.54209	308.57832	121.38890	6.03720	0.1379819	0.17963100	3.1108699	21	11 19.5	19.2
254307 2004 RM <sub>308</sub>	15.5	X	343.72091	124.45054	292.24719	8.37880	0.1054872	0.18002197	3.1063642	21	12 1.7	19.5
254308 2004 RN <sub>311</sub>	15.4	X	54.27287	94.05924	239.31749	11.51261	0.1084724	0.18064068	3.0992672	21	11 29.1	19.7
254309 2004 RM <sub>313</sub>	15.8	X	46.21007	150.27638	188.31952	9.56274	0.1133784	0.18056772	3.1001019	21	11 27.3	20.1
254310 2004 RW <sub>315</sub>	14.9	X	47.49841	246.51787	103.74651	17.31261	0.1206825	0.18383100	3.0633048	21	12 14.9	19.2
254311 2004 RX <sub>317</sub>	15.9	X	53.47617	89.49382	195.76137	12.24942	0.1491538	0.17640013	3.1487399	21	10 4.9	20.0
254312 2004 RZ <sub>317</sub>	15.8	X	51.17824	92.43369	190.96065	12.59361	0.1207877	0.17539127	3.1608027	21	9 24.7	20.0
254313 2004 RH <sub>319</sub>	15.4	X										

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
254321 2004 <i>RD</i> <sub>346</sub>	15.7	X	39.99521	157.55334	297.64196	11.39429	0.1821587	0.19254059	2.9702148	21	1 3.3	18.8
254322 2004 <i>RZ</i> <sub>346</sub>	15.7	X	337.87468	158.41772	200.79787	12.14882	0.1355332	0.17092537	3.2156222	21	9 3.9	19.6
254323 2004 <i>SR</i> <sub>1</sub>	15.9	X	328.73545	294.34119	126.27834	2.78271	0.1770098	0.17900941	3.1180673	21	11 12.4	19.2
254324 2004 <i>SP</i> <sub>3</sub>	15.5	X	86.14002	264.82407	27.25932	8.94508	0.1725872	0.18289339	3.0737653	21	11 21.5	20.4
254325 2004 <i>ST</i> <sub>3</sub>	15.6	X	303.67573	255.56963	176.75261	15.68328	0.2025701	0.17482123	3.1676701	21	10 9.7	19.3
254326 2004 <i>SJ</i> <sub>4</sub>	15.4	X	310.49575	248.77108	191.17064	10.50792	0.0233316	0.18242723	3.0789994	21	11 17.8	19.7
254327 2004 <i>SW</i> <sub>10</sub>	14.9	X	353.53864	225.33924	136.00740	17.46670	0.2192917	0.17582359	3.1556194	21	10 19.6	18.5
254328 2004 <i>SF</i> <sub>25</sub>	16.2	X	293.67213	107.31092	45.73304	8.40032	0.2273480	0.18649662	3.0340454	21	—	—
254329 2004 <i>SW</i> <sub>29</sub>	15.8	X	311.76305	180.96066	193.98776	2.21738	0.2341364	0.16842193	3.2474088	21	7 30.9	19.7
254330 2004 <i>SS</i> <sub>30</sub>	15.2	X	305.01651	257.88632	187.96793	19.20806	0.1323498	0.17748671	3.1358756	21	11 8.2	19.2
254331 2004 <i>SO</i> <sub>31</sub>	15.2	X	323.18770	288.96970	195.12952	8.83112	0.1014122	0.18885726	3.0087095	21	—	—
254332 2004 <i>SW</i> <sub>31</sub>	15.6	X	315.31101	74.92505	8.75067	6.85059	0.1796118	0.17876790	3.1208749	21	11 14.3	19.1
254333 2004 <i>SB</i> <sub>34</sub>	15.8	X	87.46041	14.19788	278.60097	7.24017	0.0399065	0.18163297	3.0879689	21	11 8.5	20.3
254334 2004 <i>SW</i> <sub>36</sub>	15.9	X	41.46232	105.75327	194.00518	9.05047	0.0819461	0.17593820	3.1542489	21	9 26.9	20.1
254335 2004 <i>SQ</i> <sub>38</sub>	14.9	X	18.63373	299.79206	26.47429	5.30005	0.1668740	0.17343079	3.1845781	21	10 8.5	18.6
254336 2004 <i>SS</i> <sub>42</sub>	15.1	X	315.75292	231.85699	189.77788	15.53509	0.0836329	0.17745632	3.1362335	21	10 28.6	19.2
254337 2004 <i>SW</i> <sub>42</sub>	15.3	X	296.10816	97.31005	327.28516	5.78407	0.1209535	0.17335170	3.1556467	21	9 24.8	19.4
254338 2004 <i>SV</i> <sub>44</sub>	15.0	X	287.56638	217.30328	233.90587	13.76091	0.2465636	0.17284374	3.1917849	21	9 24.9	19.3
254339 2004 <i>SA</i> <sub>45</sub>	15.3	X	264.97988	133.45775	339.27028	14.11813	0.2249298	0.17317830	3.1876728	21	9 26.0	20.0
254340 2004 <i>SW</i> <sub>45</sub>	15.2	X	327.94666	136.63654	266.04176	9.59396	0.1743779	0.17251215	3.1958736	21	10 11.1	19.0
254341 2004 <i>SK</i> <sub>49</sub>	15.2	X	337.92512	328.83874	49.75879	9.78535	0.0865951	0.17425098	3.1745772	21	10 8.4	19.2
254342 2004 <i>SY</i> <sub>52</sub>	15.7	X	50.80899	110.89047	198.41907	25.59583	0.2367694	0.18095854	3.0956367	21	11 14.9	20.2
254343 2004 <i>SN</i> <sub>58</sub>	14.8	X	252.23572	90.56515	15.18987	26.06115	0.2003168	0.16836241	3.2481740	21	9 19.3	19.8
254344 2004 <i>TE</i> <sub>3</sub>	15.3	X	308.57767	101.16770	327.16641	24.07234	0.2354767	0.17360115	3.1824944	21	9 23.3	19.3
254345 2004 <i>TO</i> <sub>8</sub>	14.7	X	328.15458	257.89494	150.50432	25.82893	0.1850415	0.17360972	3.1283897	21	10 30.9	18.8
254346 2004 <i>TQ</i> <sub>19</sub>	15.4	X	330.54990	34.51689	48.69532	9.86592	0.0569163	0.18152471	3.0891966	21	12 14.7	19.5
254347 2004 <i>TA</i> <sub>27</sub>	15.3	X	338.27165	172.84447	192.38855	7.78017	0.0436210	0.17167675	3.2062328	21	9 17.7	19.6
254348 2004 <i>TF</i> <sub>27</sub>	15.5	X	244.39537	145.76264	7.05280	3.98407	0.1287232	0.17991885	3.1075511	21	11 6.9	20.0
254349 2004 <i>TF</i> <sub>29</sub>	15.9	X	278.43756	351.60207	72.97097	1.74522	0.1550852	0.16832333	3.2486768	21	8 28.6	20.3
254350 2004 <i>TL</i> <sub>32</sub>	15.8	X	5.18548	107.40183	245.06931	3.90099	0.0512119	0.17266921	3.1939353	21	10 8.8	20.1
254351 2004 <i>TC</i> <sub>33</sub>	15.6	X	75.02172	69.72701	235.41551	4.54917	0.0608204	0.17740557	3.1368316	21	11 12.5	19.9
254352 2004 <i>TD</i> <sub>39</sub>	15.1	X	95.32298	254.07152	28.60242	10.98401	0.0344817	0.17672980	3.1448229	21	11 4.5	19.6
254353 2004 <i>TU</i> <sub>40</sub>	16.2	X	306.74229	104.86147	355.51620	0.62260	0.1529249	0.17947190	3.1127082	21	11 25.4	19.8
254354 2004 <i>TM</i> <sub>41</sub>	14.8	X	198.59713	141.52648	3.16910	8.07037	0.0223714	0.16826664	3.2494065	21	9 18.2	19.4
254355 2004 <i>TD</i> <sub>60</sub>	15.6	X	312.32530	284.26994	173.99368	4.46420	0.2058951	0.17996085	3.1070675	21	11 28.9	19.0
254356 2004 <i>TZ</i> <sub>60</sub>	15.3	X	301.53856	10.63540	54.12389	6.00622	0.0977647	0.17419999	3.1751966	21	10 10.2	19.4
254357 2004 <i>TY</i> <sub>62</sub>	15.7	X	314.56404	110.76557	338.31590	1.98597	0.1494970	0.17811560	3.1284897	21	11 23.7	19.2
254358 2004 <i>TJ</i> <sub>64</sub>	15.8	X	291.16829	48.51938	68.89712	2.13742	0.1191340	0.17937852	3.1137884	21	11 26.5	19.7
254359 2004 <i>TR</i> <sub>67</sub>	15.8	X	50.96767	287.88554	111.05796	8.68203	0.2269206	0.18628092	3.0363870	21	—	—
254360 2004 <i>TS</i> <sub>70</sub>	15.3	X	358.31781	315.91042	178.93465	0.86361	0.1166671	0.19262806	2.9693155	21	—	—
254361 2004 <i>TM</i> <sub>72</sub>	15.5	X	293.16723	68.31477	27.80648	9.74967	0.1049245	0.17673522	3.1447586	21	11 2.8	19.3
254362 2004 <i>TJ</i> <sub>81</sub>	15.6	X	249.17556	184.85688	350.39392	5.72183	0.1949868	0.18388412	3.0627149	21	11 30.9	20.1
254363 2004 <i>TS</i> <sub>83</sub>	15.6	X	157.58030	181.33822	342.42060	2.52460	0.0540100	0.16659592	3.2710948	21	8 24.6	20.3
254364 2004 <i>TS</i> <sub>89</sub>	16.2	X	358.39783	85.57102	202.51036	7.04691	0.3805993	0.17005995	3.2265225	21	7 5.9	18.2
254365 2004 <i>TW</i> <sub>91</sub>	15.8	X	284.94959	77.64374	13.32032	9.36531	0.0550902	0.17438037	3.1730067	21	10 21.7	20.2
254366 2004 <i>TL</i> <sub>94</sub>	16.6	X	310.69248	256.41523	206.81287	0.88289	0.1374137	0.17976200	3.1093584	21	12 7.3	20.2
254367 2004 <i>TO</i> <sub>100</sub>	15.0	X	260.27216	89.15130	273.89129	20.04810	0.1459787	0.15756996	3.3948487	21	5 21.7	20.3
254368 2004 <i>TO</i> <sub>115</sub>	15.3	X	343.44567	107.07300	4.47027	6.83096	0.0358435	0.18544808	3.0454712	21	—	—
254369 2004 <i>TD</i> <sub>116</sub>	15.2	X	289.44549	211.42901	282.33758	10.50843	0.0632220	0.18397273	3.0617314	21	12 21.7	19.4
254370 2004 <i>TA</i> <sub>119</sub>	15.3	X	341.07818	265.83625	107.19423	11.16462	0.3145009	0.17384732	3.1794894	21	10 4.9	18.0
254371 2004 <i>TJ</i> <sub>121</sub>	15.4	X	341.59042	84.14381	20.08450	9.84301	0.2643116	0.18282101	3.0745766	21	—	—
254372 2004 <i>TB</i> <sub>124</sub>	14.9	X	326.99760	358.92750	24.61688	11.04050	0.0269228	0.17390821	3.1787472	21	9 29.9	19.3
254373 2004 <i>TT</i> <sub>124</sub>	15.4	X	244.22656	118.71606	16.10063	21.82817	0.0786953	0.17734253	3.1375750	21	10 19.9	20.0
254374 2004 <i>TO</i> <sub>128</sub>	15.8	X	335.62893	317.08774	58.74755	4.45185	0.2113149	0.17166948	3.2063234	21	9 24.5	19.1
254375 2004 <i>TD</i> <sub>136</sub>	15.3	X	24.05148	115.96436	228.77563	15.04349	0.0992446	0.17535315	3.1612609	21	10 31.2	19.5
254376 2004 <i>TN</i> <sub>136</sub>	15.2	X	270.17550	98.54908	352.26440	9.33599	0.0713725	0.17200863	3.2021074	21	9 29.8	19.7
254377 2004 <i>TJ</i> <sub>137</sub>	15.0	X	2.60033	265.76320	72.35705	6.07314	0.0663750	0.16974289	3.2305390	21	9 22.2	19.3
254378 2004 <i>TU</i> <sub>148</sub>	15.7	X	121.54315	58.91731	225.10950	4.51526	0.1411064	0.18343749	3.0676842	21	12 14.2	20.5
254379 2004 <i>TO</i> <sub>150</sub>	16.0	X	38.44313	88.58160	204.50424	13.66966	0.1334002	0.17111605	3.2132330	21	9 18.7	20.3
254380 2004 <i>TO</i> <sub>153</sub>	15.7	X	312.23613	197.86794	198.65373	4.29475	0.1179972	0.17024270	3.2242130	21	9 14.1	19.6
254381 2004 <i>TA</i> <sub>157</sub>	15.1	X	196.66219	144.31063	25.35745	16.07205	0.1664606	0.17340047	3.1849494	21	10 9.2	20.3
254382 2004 <i>TL</i> <sub>170</sub>	15.1	X	316.35081	7.26374	51.96985	16.22306	0.1482210	0.17290935	3.1909774	21	10 23.2	19.0
254383 2004 <i>TL</i> <sub>179</sub>	16.1	X	315.34156	224.42098	182.71430	8.04979	0.1013179	0.17406540	3.1768332	21	10 6.3	20.0
254384 2004 <i>TR</i> <sub>181</sub>	16.5	X	78.85436	134.51218	154.53035	4.27529	0.1689076	0.17986126	3.1082143	21	11 12.8	21.1
254385 2004 <i>TP</i> <sub>185</sub>	15.9	X	110.55616	256.53201	9.97517	10.19552	0.3185393	0.18257402	3.0773489	21	11 22.1	21.5
254386 2004 <i>TW</i> <sub>209</sub>	16.0	X	352.88578	199.13754	159.60912	2.77558	0.1155443	0.17329581	3.1862316	21	10 3.5	19.7
254387 2004 <i>TR</i> <sub>210</sub>	15.7	X	22.28613	303.48138	8.98841	4.52042	0.1610802	0.17121750	3.2119636	21	9 25.2	19.4
254388 2004 <i>TG</i> <sub>211</sub>	16.2	X	29.88329	302.05156	99.63617	1.85461	0.1828309	0.18373479	3.0643741	21	—	—
254389 2004 <i>TJ</i> <sub>212</sub>	16.0	X	270.13851	80.35676	73.24527	1.69946	0.1218404	0.18083669	3.0970722	21	12 11.7	20.2
254390 2004 <i>TL</i> <sub>220</sub>	14.9	X	336.56092	324.32744	86.60054	11.03620	0.0601950	0.17800597	3.1297742	21	11 15.9	19.0
254391 2004 <i>TX</i> <sub>222</sub>	15.6	X	357.74784	104.78873	275.96954	7.96796	0.081					

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
254401 2004 TQ <sub>252</sub>	15.9	X	35.59166	91.36818	201.03996	9.54420	0.0665444	0.16982779	3.2294622	21	9 5.0	20.3
254402 2004 TQ <sub>288</sub>	16.2	X	337.28610	115.38745	308.62937	1.82976	0.0675332	0.18089219	3.0963936	21	11 30.9	20.3
254403 2004 TS <sub>289</sub>	15.1	X	124.33605	243.17154	346.58877	7.77609	0.0299056	0.17432234	3.1737108	21	10 3.7	19.6
254404 2004 TF <sub>297</sub>	14.9	X	48.36009	60.56669	260.23697	17.64821	0.2016505	0.17447206	3.1718949	21	11 17.7	19.4
254405 2004 TK <sub>299</sub>	15.2	X	28.41023	309.27699	358.76174	18.53792	0.0938849	0.17098636	3.2148576	21	9 20.9	19.4
254406 2004 TM <sub>322</sub>	15.1	X	293.17317	208.89696	233.76583	10.45841	0.0267682	0.17125876	3.2114477	21	10 25.2	19.5
254407 2004 TL <sub>324</sub>	15.3	X	236.79126	91.97441	26.73987	16.09712	0.1015725	0.17110485	3.2133732	21	9 26.6	20.1
254408 2004 TZ <sub>331</sub>	15.5	X	39.98123	294.11697	32.19036	5.80906	0.1512730	0.17455036	3.1709463	21	11 6.6	19.6
254409 2004 TN <sub>339</sub>	15.4	X	276.67590	227.60204	204.81684	4.58517	0.1478183	0.16764666	3.2574127	21	9 3.8	19.8
254410 2004 TL <sub>356</sub>	15.3	X	31.59861	289.90202	66.64015	12.88890	0.0835246	0.17885212	3.1198951	21	11 24.9	19.4
254411 2004 TG <sub>360</sub>	15.2	X	17.85689	1.48031	348.05086	7.82194	0.0646122	0.17467579	3.1694281	21	10 22.5	19.6
254412 2004 UE <sub>2</sub>	15.3	X	317.47867	0.32995	52.36170	10.80835	0.1669386	0.17376844	3.1804515	21	10 14.3	19.0
254413 2004 UF <sub>4</sub>	14.6	X	15.83560	81.99490	250.58697	24.42395	0.2842430	0.17373538	3.1808549	21	10 23.3	18.3
254414 2004 UR <sub>4</sub>	14.2	X	284.10199	204.74261	258.18007	26.06027	0.1477028	0.17376645	3.1804758	21	10 18.3	18.9
254415 2004 UF <sub>7</sub>	14.5	X	81.53646	246.29292	14.65478	15.71679	0.0781209	0.17035276	3.228240	21	9 30.7	19.1
254416 2004 VK	15.4	X	352.11292	264.39076	116.80288	6.96026	0.1777509	0.17436058	3.1732467	21	11 5.7	19.0
254417 2004 VV	17.3	X	217.15864	354.63055	342.73285	52.48561	0.6045732	0.32941966	2.0763619	21	3 1.5	22.0
254418 2004 VG <sub>32</sub>	15.6	X	306.62246	63.04996	91.89877	4.24572	0.1424809	0.18317100	3.0706589	21	—	—
254419 2004 VT <sub>60</sub>	17.6	X	248.39282	247.38652	57.53800	43.50277	0.4341752	0.32955084	2.0758108	21	2 20.2	22.7
254420 2004 VY <sub>61</sub>	15.4	X	298.57418	276.03263	184.02596	15.37230	0.1989288	0.17522895	3.1627544	21	11 7.5	19.3
254421 2004 VE <sub>65</sub>	15.0	X	291.22658	56.04747	79.22746	11.06150	0.1919561	0.17596648	3.1539109	21	12 9.1	18.8
254422 2004 Henrykent	15.5	X	143.06844	348.67276	230.99616	4.18412	0.1244770	0.17127250	3.2112759	21	10 17.5	20.6
254423 2004 WE <sub>6</sub>	15.3	X	343.45879	186.31740	269.38086	6.90795	0.1807192	0.18086617	3.0966906	21	—	—
254424 2004 WO <sub>7</sub>	16.9	X	265.77697	237.46836	264.15361	10.06654	0.0624608	0.29198828	2.2502241	21	12 24.2	19.1
254425 2004 XW <sub>4</sub>	14.4	X	280.51351	254.00665	257.70791	24.71158	0.2884053	0.17421551	3.1750082	21	11 28.2	18.5
254426 2004 XA <sub>13</sub>	15.0	X	12.77545	293.76411	75.63306	10.54195	0.0898546	0.17092480	3.2156295	21	11 15.5	19.1
254427 2004 XY <sub>14</sub>	14.9	X	273.53323	229.33860	263.84597	14.56389	0.0463285	0.17318736	3.1875616	21	11 29.7	19.4
254428 2004 XF <sub>15</sub>	14.9	X	304.92478	30.35654	86.15978	10.58748	0.2034501	0.17481145	3.1677881	21	12 7.3	18.4
254429 2004 XH <sub>92</sub>	15.1	X	288.48909	210.46126	277.17465	10.74257	0.2342291	0.17338663	3.1851189	21	11 16.5	19.1
254430 2004 XY <sub>116</sub>	15.1	X	79.88997	230.10441	102.81566	10.72535	0.0817684	0.17426244	3.1744380	21	12 23.3	19.6
254431 2004 XL <sub>162</sub>	16.8	X	27.75619	6.84218	69.02006	6.45754	0.0957808	0.29841845	2.2177824	21	—	—
254432 2004 YR <sub>13</sub>	17.0	X	328.70306	151.05505	285.85342	6.01757	0.0666498	0.28877699	2.2668755	21	—	—
254433 2004 YU <sub>23</sub>	17.2	X	240.01135	207.53999	301.12719	3.53238	0.1316553	0.28237723	2.3009982	21	11 11.8	20.2
254434 2005 AQ <sub>5</sub>	17.6	X	309.29204	152.13853	346.99486	5.73281	0.1140302	0.29410663	2.2394060	21	—	—
254435 2005 AV <sub>11</sub>	17.6	X	322.61277	136.34610	25.21286	4.22937	0.1243505	0.29911567	2.2143347	21	—	—
254436 2005 AM <sub>13</sub>	17.1	X	326.74554	174.43615	245.21719	2.21905	0.1194707	0.28709950	2.2756970	21	12 5.9	18.9
254437 2005 AP <sub>20</sub>	17.0	X	76.43447	126.46032	294.82040	6.62164	0.0653517	0.30356348	2.1926519	21	—	—
254438 2005 AN <sub>28</sub>	16.6	X	170.47350	308.40661	305.18706	21.80907	0.1984009	0.28760110	2.2730501	21	—	—
254439 2005 AK <sub>37</sub>	16.9	X	233.66744	203.75093	92.01690	7.05838	0.0525212	0.30723310	2.1751575	21	1 18.3	19.5
254440 2005 AX <sub>53</sub>	17.6	X	127.98056	22.84196	207.01607	2.64058	0.1605563	0.27467783	2.3437987	21	10 28.6	21.2
254441 2005 AD <sub>54</sub>	16.9	X	316.75975	106.81120	347.30328	6.72035	0.0495996	0.28597456	2.2816610	21	—	—
254442 2005 AZ <sub>61</sub>	17.0	X	46.21796	350.36179	89.99902	3.51873	0.1166693	0.30061389	2.2069713	21	—	—
254443 2005 AA <sub>65</sub>	16.9	X	299.48976	250.17928	128.91891	8.30503	0.1611373	0.27527962	2.3403816	21	8 2.3	19.3
254444 2005 AT <sub>67</sub>	16.8	X	293.37808	168.08050	263.44887	4.94694	0.0677567	0.28196321	2.3032500	21	10 23.3	19.2
254445 2005 AX <sub>76</sub>	17.3	X	152.17823	227.58776	356.19765	4.80367	0.1841481	0.27730238	2.3289866	21	11 10.6	21.2
254446 2005 BO <sub>4</sub>	17.2	X	63.32847	348.81268	76.03515	3.36616	0.0620133	0.30265732	2.1970263	21	—	—
254447 2005 BY <sub>5</sub>	17.5	X	241.40297	138.56352	56.50064	3.29619	0.0815623	0.29113386	2.2546246	21	—	—
254448 2005 BF <sub>10</sub>	16.9	X	351.94755	182.89670	300.24055	8.66308	0.0539250	0.29774400	2.2211303	21	—	—
254449 2005 BO <sub>19</sub>	17.0	X	133.32472	189.33170	123.92232	7.97614	0.1789020	0.29349657	2.2425081	21	—	—
254450 2005 BQ <sub>48</sub>	17.4	X	74.42264	264.27433	143.33212	6.33646	0.1043297	0.29870784	2.2163498	21	—	—
254451 2005 CL <sub>1</sub>	16.9	X	98.50484	93.09401	311.37962	6.30121	0.0853208	0.30373859	2.1918091	21	—	—
254452 2005 CZ <sub>1</sub>	16.9	X	261.73152	348.78197	183.88552	5.79187	0.1000526	0.28782407	2.2718761	21	—	—
254453 2005 CT <sub>5</sub>	17.1	X	123.36932	52.87656	344.49536	6.08253	0.2081097	0.30752850	2.1737644	21	2 9.8	19.5
254454 2005 CQ <sub>10</sub>	16.6	X	172.80311	238.17169	356.29746	7.14338	0.0960669	0.28200030	2.3030481	21	12 20.1	20.0
254455 2005 CA <sub>14</sub>	17.0	X	152.87172	256.32931	338.90557	6.81964	0.0969310	0.28006834	2.3136271	21	11 27.6	20.4
254456 2005 CF <sub>21</sub>	17.3	X	283.84995	100.44608	4.95920	5.09659	0.1028477	0.28180329	2.3041213	21	11 22.4	19.6
254457 2005 CC <sub>22</sub>	17.4	X	342.54836	235.72703	230.89275	2.49950	0.0737781	0.29290387	2.2455323	21	—	—
254458 2005 CD <sub>29</sub>	17.5	X	87.54003	231.19589	31.62811	2.65207	0.1522535	0.27225770	2.3576678	21	10 29.3	20.8
254459 2005 CG <sub>44</sub>	17.3	X	133.99065	233.57259	353.98302	3.20782	0.1681400	0.27331332	2.3515932	21	10 30.1	21.1
254460 2005 CD <sub>59</sub>	17.2	X	137.77002	100.14547	297.69777	0.69364	0.1653806	0.30872853	2.1681278	21	2 20.9	19.8
254461 2005 CT <sub>59</sub>	17.0	X	46.73990	239.16104	188.72943	5.91534	0.0515573	0.29562595	2.2317267	21	—	—
254462 2005 CL <sub>60</sub>	17.3	X	225.72105	201.45606	331.03960	1.96264	0.0927946	0.28355534	2.2946203	21	12 2.3	20.0
254463 2005 CZ <sub>62</sub>	15.9	X	135.28670	271.06570	336.28712	22.70692	0.1411817	0.27681616	2.3317130	21	11 18.3	20.1
254464 2005 CE <sub>67</sub>	16.6	X	54.12105	262.92017	342.21048	9.68233	0.1215407	0.26296959	2.4128613	21	8 18.8	19.3
254465 2005 CC <sub>69</sub>	13.8	X	2.98132	293.01609	82.07515	1.72627	0.0464101	0.08300443	5.2047739	21	10 22.4	20.5
254466 2005 DE <sub>1</sub>	16.0	X	243.56346	100.30821	94.99528	17.51701	0.2003498	0.22755319	2.6571379	21	12 27.6	19.5
254467 2005 DJ <sub>2</sub>	15.8	X	230.38150	130.14975	220.99002	13.52295	0.2336314	0.23522290	2.5990601	21	3 26.8	20.5
254468 2005 EB <sub>1</sub>	17.4	X	160.04101	211.83773	336.88963	1.71483	0.1096095	0.27001521	2.3707034	21	10 5.7	20.8
254469 2005 EG <sub>1</sub>	16.9	X	25.52879	126.23796	325.84314	7.79194	0.1369424	0.29634695	2.2281054	21	—	—
254470 2005 EN <sub>4</sub>	17.0	X	248.99741	180.74400	1.12785	6.59127	0.1523643	0.28773327	2.2723540	21	—	—
254471 2005 EF <sub>5</sub>	17.1	X	185.78790	186.03617	62.82228	3.14318	0.1476653	0.28291612	2.2980753	21	—	—
254472 2005 ES <sub>6</sub>	17.2	X	127.45939	218.47490	17.07519	1.08096	0.1517243	0.27142982	2.3624593	21	11 3.2	20.7
254473 2005 EG <sub>7</sub>	17.0	X	246.88098	103.74905	353.78138	4.00435	0.0531461	0.27053059	2.3676916	21	9 22.8	20.0
254474 2005 ET <sub>9</sub>	16.8	X	143.57272	78.88185	180.99022	3.38493	0.1643430	0				

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254481 2005 EK <sub>13</sub>	17.5	X	120.96050	230.82749	143.52328	4.20046	0.1312538	0.30225249	2.1989877	21	—	—
254482 2005 EE <sub>14</sub>	16.9	X	61.78117	224.98553	21.00425	5.61795	0.1679898	0.26171012	2.4205963	21	9 8.5	19.8
254483 2005 EK <sub>18</sub>	17.2	X	225.28618	162.79965	3.03703	2.13098	0.1830065	0.28008825	2.3135175	21	11 9.2	20.4
254484 2005 ES <sub>19</sub>	17.1	X	88.36240	11.88753	198.53344	2.20892	0.1426623	0.26112505	2.4242107	21	8 18.2	20.3
254485 2005 ET <sub>20</sub>	17.3	X	219.54876	153.77039	34.58717	2.54295	0.1418773	0.28162895	2.3050721	21	12 8.3	20.3
254486 2005 EO <sub>26</sub>	17.3	X	49.48036	65.81871	348.73753	6.29259	0.1682180	0.29420489	2.2389074	21	—	—
254487 2005 EK <sub>28</sub>	16.5	X	344.82776	95.26250	41.54961	4.14391	0.1073567	0.29424542	2.2387017	21	—	—
254488 2005 EK <sub>32</sub>	17.1	X	18.25063	79.22101	345.98829	7.91148	0.1368243	0.29039136	2.2584662	21	—	—
254489 2005 ES <sub>32</sub>	16.2	X	337.16176	277.14221	20.57000	6.63096	0.1724728	0.25741953	2.4474193	21	6 4.7	18.6
254490 2005 EP <sub>33</sub>	14.7	X	13.30192	128.10330	61.50953	3.77041	0.1162165	0.12579040	3.9449156	21	4 2.7	19.6
254491 2005 ET <sub>33</sub>	16.8	X	271.49639	34.91661	122.42580	5.90778	0.0966861	0.28369769	2.2938527	21	—	—
254492 2005 ED <sub>35</sub>	16.8	X	256.74718	301.81281	228.37598	5.01301	0.1036210	0.28375875	2.2935236	21	—	—
254493 2005 EQ <sub>42</sub>	17.1	X	203.52165	201.69606	17.35561	1.44106	0.1763476	0.28322881	2.2963835	21	12 25.9	20.2
254494 2005 EZ <sub>44</sub>	17.2	X	161.68231	320.83648	260.98227	1.44823	0.1670314	0.27716458	2.3297584	21	11 18.2	20.8
254495 2005 ED <sub>50</sub>	16.8	X	314.09147	124.48490	5.27743	7.39385	0.0326706	0.28800194	2.2709406	21	—	—
254496 2005 EG <sub>50</sub>	16.9	X	336.55679	3.00359	149.61313	4.36217	0.0642881	0.29573376	2.2311843	21	—	—
254497 2005 EJ <sub>51</sub>	16.5	X	226.63372	205.67218	21.04546	9.38112	0.1286843	0.28676935	2.2774432	21	—	—
254498 2005 EQ <sub>51</sub>	17.1	X	88.04894	29.99954	173.96295	3.36038	0.1492422	0.26107787	2.4245027	21	8 9.8	20.3
254499 2005 EJ <sub>52</sub>	17.7	X	315.41086	151.88100	4.80434	4.80195	0.1614684	0.29097323	2.2554543	21	—	—
254500 2005 EF <sub>58</sub>	17.1	X	63.97774	192.09647	245.93749	3.20166	0.1007883	0.29880315	2.2158784	21	—	—
254501 2005 EU <sub>61</sub>	17.2	X	302.25383	351.81524	136.42993	4.11745	0.1229045	0.28810304	2.2704093	21	—	—
254502 2005 EH <sub>73</sub>	17.5	X	163.65283	24.91910	185.59619	1.97838	0.1571673	0.27732924	2.3288362	21	11 6.9	21.0
254503 2005 EQ <sub>73</sub>	16.6	X	87.76137	142.67146	114.44199	3.26579	0.0885681	0.26958458	2.3732274	21	10 16.1	19.7
254504 2005 EX <sub>75</sub>	16.2	X	142.34199	33.13012	332.06295	0.33245	0.0887315	0.17674080	3.1446924	21	1 28.6	20.7
254505 2005 ET <sub>76</sub>	17.5	X	71.71097	108.95527	331.15394	3.97648	0.1195984	0.30091391	2.2055041	21	1 1.5	19.3
254506 2005 EO <sub>78</sub>	16.6	X	23.01393	233.62952	36.32518	6.53853	0.1026788	0.25986435	2.4320449	21	7 31.5	19.2
254507 2005 EK <sub>79</sub>	16.1	X	32.86266	207.05650	32.25472	10.08387	0.1625248	0.25552498	2.4595018	21	7 8.6	18.7
254508 2005 EJ <sub>83</sub>	17.3	X	319.21791	329.90378	176.55082	4.75894	0.0581963	0.29074325	2.2566435	21	—	—
254509 2005 EM <sub>83</sub>	17.3	X	73.20051	63.57940	178.78648	2.13956	0.1729385	0.26203657	2.4185855	21	9 17.1	20.4
254510 2005 EA <sub>85</sub>	16.5	X	294.10881	102.76358	173.18355	6.70455	0.1570681	0.29128358	2.2538519	21	—	—
254511 2005 EP <sub>85</sub>	16.7	X	332.12402	39.81917	134.98581	7.33448	0.0591734	0.29855972	2.2170828	21	—	—
254512 2005 EG <sub>87</sub>	17.7	X	2.77737	306.41189	3.98973	1.15727	0.1757776	0.26158979	2.4213386	21	8 28.5	19.5
254513 2005 EL <sub>87</sub>	17.6	X	24.20238	162.78743	123.43454	0.66968	0.2070457	0.25993172	2.4316246	21	9 9.9	19.8
254514 2005 EV <sub>87</sub>	17.3	X	194.41759	181.59907	352.57215	2.86121	0.0713993	0.27423406	2.3463265	21	10 27.2	20.4
254515 2005 EA <sub>88</sub>	14.9	X	177.59357	65.57863	211.75839	12.41809	0.0454178	0.16825651	3.2495368	21	—	—
254516 2005 ER <sub>88</sub>	17.1	X	246.60009	298.53623	218.48873	3.41827	0.0946464	0.28126435	2.3070637	21	12 9.8	19.8
254517 2005 EE <sub>89</sub>	16.9	X	182.70733	276.83436	334.00569	6.98468	0.0902381	0.28381507	2.2932201	21	—	—
254518 2005 EJ <sub>89</sub>	16.7	X	58.60317	230.69981	27.72333	6.89751	0.1451518	0.26320371	2.4114303	21	9 18.4	19.6
254519 2005 EK <sub>91</sub>	16.8	X	232.23605	351.73100	318.80924	8.73612	0.2026129	0.23940795	2.5686820	21	2 11.2	21.1
254520 2005 EE <sub>92</sub>	17.1	X	174.02754	82.17801	146.62151	3.58866	0.1076282	0.27784061	2.3259778	21	12 12.9	20.3
254521 2005 EU <sub>97</sub>	16.7	X	160.52612	276.64532	245.06056	3.40235	0.2087725	0.26819339	2.3814273	21	8 31.0	20.7
254522 2005 EC <sub>111</sub>	16.8	X	68.96365	306.63653	350.32378	3.23486	0.0820671	0.27505481	2.3416567	21	11 12.2	19.7
254523 2005 EC <sub>112</sub>	16.8	X	189.55240	173.17916	26.31518	4.60053	0.0875901	0.27690543	2.3312118	21	11 22.8	19.9
254524 2005 EL <sub>112</sub>	17.1	X	116.08144	134.49470	78.09975	2.38519	0.1308741	0.26580028	2.3956999	21	9 23.1	20.5
254525 2005 ES <sub>115</sub>	16.8	X	140.28950	22.03066	164.71496	6.91848	0.1619568	0.26546405	2.3977224	21	9 14.8	20.4
254526 2005 EK <sub>119</sub>	16.7	X	296.14683	57.32051	129.45509	2.77240	0.1594425	0.29157419	2.2523541	21	—	—
254527 2005 ES <sub>120</sub>	17.1	X	340.27791	195.17281	303.92001	4.89949	0.1024233	0.29431720	2.2383378	21	—	—
254528 2005 EM <sub>122</sub>	17.1	X	79.01916	312.67020	297.76816	1.23848	0.1753280	0.26673251	2.3901148	21	10 5.1	20.3
254529 2005 EB <sub>124</sub>	17.1	X	285.71677	6.18147	120.77010	2.40737	0.1030904	0.28278017	2.2988118	21	12 29.1	19.3
254530 2005 EB <sub>125</sub>	16.9	X	258.04214	327.20834	169.67566	2.42804	0.0281643	0.27757602	2.3274557	21	12 7.8	19.6
254531 2005 EK <sub>128</sub>	15.9	X	252.97164	93.98112	226.83541	2.62601	0.1195243	0.18733230	3.0250155	21	3 24.5	20.6
254532 2005 EP <sub>130</sub>	17.4	X	213.30832	55.55703	172.32256	3.07493	0.1722952	0.28695376	2.2764674	21	—	—
254533 2005 EF <sub>131</sub>	16.9	X	2.37359	320.25284	315.21797	4.23875	0.1808501	0.25956684	2.4339029	21	6 28.4	18.7
254534 2005 EV <sub>138</sub>	16.9	X	65.45877	195.72037	29.40099	2.86714	0.1455295	0.25685401	2.4510104	21	8 10.1	19.8
254535 2005 EM <sub>139</sub>	16.8	X	134.40472	233.86671	27.85264	6.45908	0.2160186	0.27235032	2.3571332	21	12 11.9	20.9
254536 2005 EJ <sub>146</sub>	16.6	X	0.25950	317.43781	6.07275	14.86059	0.1920474	0.26305880	2.4123158	21	9 17.9	18.4
254537 2005 EJ <sub>151</sub>	17.2	X	3.32974	165.02974	117.86491	3.51281	0.1539253	0.25490283	2.4635021	21	7 12.5	19.3
254538 2005 EN <sub>159</sub>	17.6	X	19.91884	53.93646	358.51627	6.54535	0.1414399	0.28659106	2.2783877	21	—	—
254539 2005 EU <sub>165</sub>	16.8	X	115.99025	222.13610	25.24034	2.18651	0.0671669	0.27155740	2.3617193	21	11 2.0	19.8
254540 2005 EK <sub>175</sub>	17.2	X	87.70427	147.17733	199.23516	6.38344	0.1340305	0.28377639	2.2934285	21	—	—
254541 2005 EC <sub>176</sub>	17.3	X	128.80665	331.96096	245.51337	1.58333	0.1580565	0.27016181	2.3698458	21	10 12.4	21.1
254542 2005 ET <sub>176</sub>	16.1	X	346.78079	129.11458	101.24812	15.33564	0.0796093	0.24575672	2.5242505	21	4 5.5	19.4
254543 2005 EJ <sub>182</sub>	16.6	X	128.53731	208.84482	8.99629	5.39935	0.1021988	0.26826682	2.3809927	21	10 9.9	20.0
254544 2005 EL <sub>188</sub>	15.4	X	11.92923	311.22585	197.82234	17.73012	0.1030776	0.17666132	3.1456355	21	1 25.5	19.8
254545 2005 EM <sub>208</sub>	17.3	X	96.84330	345.49197	337.12128	3.52925	0.1507703	0.28216142	2.3021712	21	—	—
254546 2005 EP <sub>217</sub>	16.9	X	22.74349	163.08396	172.03797	5.27997	0.2244624	0.27017524	2.3697672	21	11 24.9	19.4
254547 2005 EZ <sub>217</sub>	16.9	X	17.63264	16.06750	99.55180	6.25737	0.0946698	0.29691559	2.2252598	21	—	—
254548 2005 EA <sub>222</sub>	17.3	X	142.09060	327.73927	209.04876	2.09869	0.1696689	0.26544180	2.3978564	21	9 2.8	21.2
254549 2005 ED <sub>222</sub>	16.7	X	27.02945	265.09869	9.48275	7.29461	0.1227258	0.25925891	2.4358297	21	8 18.0	19.2
254550 2005 EU <sub>223</sub>	16.9	X	245.44427	355.39898	159.78417	4.85913	0.1238073	0.27875798	2.3208720	21	12 1.7	19.8
254551 2005 EP <sub>226</sub>	15.5	X	284.70268	221.11299	13.65040	5.04982	0.1021051	0.17842771	3.1248404	21	1 20.3	20.1
254552 2005 EF <sub>245</sub>	17.1	X	284.61809	90.25355	50.39659	3.81279	0.1575771	0.28303506	2.2974314	21	—	—
254553 2005 EO <sub>251</sub>	17.4	X	303.22299	81.51426	116.78893	4.43372	0.1033125	0.29553708	2.2321741	21	—	—
254554 2005 EB <sub>264</sub>	16.9	X	24.48423	280.50241	191.98238	4.91613	0.1078806	0.29674502	2.2261124	21	—	—



ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
254561	2005	EU <sub>296</sub>	17.4	X	67.89157	264.42334	24.17067	5.05279	0.1709814	0.26608554	2.3939874	21	11 10.5	20.8
254562	2005	EP <sub>324</sub>	17.2	X	158.74716	221.53551	338.01077	0.65277	0.1311701	0.27029973	2.3690396	21	10 18.4	20.8
254563	2005	EM <sub>329</sub>	16.8	X	312.56241	21.16608	61.43040	7.54043	0.0593832	0.27901233	2.3194612	21	12 10.9	19.4
254564	2005	ES <sub>329</sub>	16.1	X	320.64950	307.75253	303.22053	6.96445	0.1463570	0.24276840	2.5449228	21	3 3.7	19.4
254565	2005	FT <sub>1</sub>	17.6	X	229.54090	161.93491	52.70450	3.05581	0.1626355	0.28302164	2.2975041	21	—	—
254566	2005	FH <sub>2</sub>	16.6	X	248.44705	354.08455	148.41415	6.69220	0.0426280	0.27723402	2.3293694	21	11 30.9	19.5
254567	2005	FQ <sub>2</sub>	16.7	X	114.03098	256.78015	23.99739	7.54225	0.1331569	0.27587830	2.3369945	21	12 16.4	20.3
254568	2005	FF <sub>6</sub>	17.2	X	323.96827	324.82810	169.02783	3.02002	0.0623651	0.28883265	2.2665842	21	—	—
254569	2005	FQ <sub>14</sub>	16.7	X	127.90114	127.31716	129.74362	7.49648	0.0966792	0.27468769	2.3437426	21	12 1.4	20.2
254570	2005	GZ	16.8	X	148.97492	16.18513	173.40201	5.40211	0.0875777	0.26764406	2.3846847	21	9 25.5	20.0
254571	2005	GR <sub>2</sub>	17.0	X	38.50718	177.79504	59.96201	3.42122	0.1433329	0.25397761	2.4694814	21	7 13.6	19.5
254572	2005	GX <sub>3</sub>	16.5	X	19.17049	271.55611	67.24307	4.69650	0.0230660	0.26850091	2.3796087	21	10 24.6	19.2
254573	2005	GU <sub>7</sub>	16.6	X	342.58790	20.33789	140.07075	8.41495	0.1621589	0.29524339	2.2336542	21	—	—
254574	2005	GZ <sub>11</sub>	15.1	X	1.21182	87.40478	42.41550	16.75782	0.0800512	0.17183994	3.2042026	21	—	—
254575	2005	GN <sub>12</sub>	17.0	X	166.97020	108.83420	113.05826	2.82147	0.1622513	0.27406872	2.3472701	21	11 23.8	20.5
254576	2005	GU <sub>19</sub>	17.2	X	118.44692	53.40576	173.08104	1.57136	0.1270990	0.26558669	2.3969842	21	10 12.4	20.8
254577	2005	GS <sub>30</sub>	17.3	X	109.46408	206.11898	50.22429	2.00241	0.1632620	0.26819393	2.3814241	21	11 12.6	20.7
254578	2005	GR <sub>31</sub>	16.9	X	135.41356	287.89415	281.15388	1.30979	0.1300493	0.26682346	2.3895715	21	10 6.5	20.4
254579	2005	GN <sub>36</sub>	16.1	X	119.07283	25.85831	199.96911	14.94437	0.0839971	0.20536043	2.8452791	21	10 1.6	20.4
254580	2005	GB <sub>41</sub>	16.9	X	224.68387	354.16642	184.83972	4.23916	0.1680572	0.27792036	2.3255328	21	11 28.8	20.0
254581	2005	GV <sub>41</sub>	17.7	X	134.76455	341.54256	223.49781	1.45866	0.1279370	0.27162941	2.3613019	21	10 1.3	21.3
254582	2005	GM <sub>43</sub>	17.1	X	40.89777	208.67824	60.30437	5.26393	0.1054375	0.26055650	2.4277359	21	8 31.1	19.9
254583	2005	GZ <sub>44</sub>	17.7	X	17.50852	201.33288	209.16539	1.95410	0.1307041	0.28444433	2.2898368	21	—	—
254584	2005	GV <sub>45</sub>	17.4	X	311.13520	106.60643	358.81683	5.83944	0.0711106	0.28229927	2.3014218	21	—	—
254585	2005	GX <sub>46</sub>	17.5	X	307.41651	242.58247	250.29531	0.47889	0.0957802	0.28619222	2.2805400	21	—	—
254586	2005	GF <sub>47</sub>	16.9	X	19.99062	310.56692	5.13097	4.46167	0.1486970	0.26435898	2.4043997	21	10 7.4	19.2
254587	2005	GM <sub>53</sub>	16.7	X	229.41989	31.89244	37.50676	7.27725	0.1015949	0.25742547	2.4473817	21	7 17.2	20.2
254588	2005	GD <sub>55</sub>	17.2	X	163.05700	40.78645	194.42638	6.52021	0.0586179	0.27683628	2.3316000	21	12 12.1	20.4
254589	2005	GT <sub>59</sub>	17.4	X	269.30722	334.13729	162.64026	3.41907	0.1351476	0.28041957	2.3116949	21	12 10.4	19.8
254590	2005	GL <sub>67</sub>	17.0	X	88.01111	282.03136	20.39492	6.20210	0.1160422	0.27222021	2.3578842	21	12 15.5	20.4
254591	2005	GJ <sub>69</sub>	16.3	X	346.89531	216.38537	30.81608	14.07006	0.1160661	0.24534302	2.5270873	21	4 17.3	18.8
254592	2005	GQ <sub>70</sub>	17.5	X	350.36872	225.08000	245.45663	1.96660	0.0641056	0.28802905	2.2707981	21	—	—
254593	2005	GG <sub>71</sub>	17.7	X	102.24869	126.32672	143.54098	2.51328	0.1919354	0.27244574	2.3565828	21	11 25.6	21.3
254594	2005	GR <sub>71</sub>	16.9	X	317.90020	318.03997	163.30271	3.70822	0.1004942	0.28658763	2.2784058	21	—	—
254595	2005	GV <sub>84</sub>	17.1	X	337.00076	79.61070	215.87428	6.78466	0.0933570	0.25262399	2.4782949	21	6 12.1	19.9
254596	2005	GK <sub>91</sub>	16.9	X	266.10281	291.87702	344.25824	5.20541	0.1837291	0.23643858	2.5901435	21	2 2.0	21.0
254597	2005	GM <sub>92</sub>	16.5	X	188.39922	84.49381	86.63428	7.97608	0.0418607	0.27159027	2.3615288	21	10 22.9	19.7
254598	2005	GF <sub>93</sub>	16.8	X	33.65974	108.44968	238.22836	6.42362	0.1637322	0.27098462	2.3650462	21	12 15.5	19.6
254599	2005	GG <sub>101</sub>	18.2	X	334.39752	8.10555	107.89765	0.47086	0.1697475	0.28794739	2.2712274	21	—	—
254600	2005	GE <sub>102</sub>	16.7	X	0.25262	158.15534	193.85534	14.61893	0.1393348	0.26476909	2.4019163	21	10 26.2	19.0
254601	2005	GK <sub>116</sub>	17.5	X	300.85193	238.07068	227.45055	2.72486	0.1323285	0.27922195	2.3183002	21	12 22.2	19.3
254602	2005	GK <sub>119</sub>	17.2	X	355.98830	306.37776	29.53865	7.52882	0.1527488	0.26073062	2.4266549	21	9 24.4	19.3
254603	2005	GD <sub>124</sub>	17.3	X	74.18707	197.72521	358.13259	0.93090	0.1180867	0.25468391	2.4649137	21	7 5.9	20.1
254604	2005	GP <sub>129</sub>	16.8	X	183.43974	107.83855	181.38335	9.02807	0.2743170	0.22137703	2.7063316	21	—	—
254605	2005	GT <sub>134</sub>	17.6	X	127.31124	346.98938	245.13548	0.50005	0.1448569	0.26720027	2.3873245	21	10 29.1	21.2
254606	2005	GR <sub>137</sub>	17.2	X	41.72321	81.67957	219.86738	5.62916	0.0990175	0.26318489	2.4115453	21	10 13.4	19.9
254607	2005	GC <sub>139</sub>	17.2	X	78.07899	315.16692	275.01670	0.67061	0.1520771	0.25795638	2.4440225	21	9 3.0	20.2
254608	2005	GL <sub>146</sub>	15.6	X	83.46519	318.15157	214.33954	10.95835	0.0551410	0.19104673	2.9856781	21	6 8.1	19.8
254609	2005	GS <sub>150</sub>	16.8	X	260.49244	198.74947	93.77912	4.64231	0.2429536	0.23438018	2.6052863	21	2 12.9	21.2
254610	2005	GC <sub>153</sub>	17.0	X	164.92300	93.16306	109.38294	3.84435	0.1516628	0.26992683	2.3712209	21	10 29.7	20.7
254611	2005	GJ <sub>169</sub>	17.0	X	313.66474	52.34557	207.94865	5.31286	0.1180576	0.24213484	2.5493601	21	3 12.2	20.3
254612	2005	GZ <sub>178</sub>	16.8	X	92.57223	8.06937	211.22771	1.65905	0.1574227	0.25965458	2.4333545	21	9 6.3	20.1
254613	2005	GX <sub>182</sub>	16.7	X	333.36015	348.74840	42.56425	7.26919	0.1249342	0.27092857	2.3653723	21	11 1.4	18.9
254614	2005	GO <sub>203</sub>	17.6	X	53.33152	242.23522	140.74525	2.30804	0.0841577	0.28670851	2.2777654	21	—	—
254615	2005	GA <sub>226</sub>	17.0	X	33.41493	173.03720	116.09750	5.71770	0.1955803	0.25951366	2.4342354	21	10 2.4	19.6
254616	2005	HU	16.7	X	128.69706	256.45117	11.22152	6.27721	0.1056640	0.27305495	2.3530763	21	12 13.4	20.2
254617	2005	HN <sub>1</sub>	17.2	X	337.21205	168.81068	206.23097	7.00466	0.1215759	0.26610445	2.3938740	21	10 13.2	19.2
254618	2005	HW <sub>4</sub>	16.5	X	251.61744	123.69565	150.02724	4.76482	0.2670040	0.23036348	2.6354834	21	1 12.9	21.2
254619	2005	JV <sub>4</sub>	16.4	X	241.84176	234.36747	113.92736	13.55165	0.1925900	0.23954342	2.5677135	21	4 13.2	20.8
254620	2005	JJ <sub>12</sub>	17.3	X	282.24836	358.80047	45.37092	5.73070	0.0352361	0.26277370	2.4140604	21	9 3.6	20.2
254621	2005	JW <sub>16</sub>	16.1	X	293.07158	49.59751	244.02487	14.82467	0.2415571	0.24159584	2.5531505	21	3 7.1	20.2
254622	2005	JN <sub>17</sub>	16.2	X	286.15157	232.96578	76.82793	12.97340	0.3145127	0.24112833	2.5564496	21	3 26.2	20.5
254623	2005	JB <sub>21</sub>	16.5	X	262.19886	105.38878	235.27404	11.20263	0.2260969	0.24039990	2.5616111	21	4 10.6	20.7
254624	2005	JZ <sub>25</sub>	16.5	X	222.88026	204.63350	118.08135	6.09653	0.2262200	0.23162568	2.6259004	21	2 20.1	21.0
254625	2005	JK <sub>31</sub>	17.1	X	142.01517	342.22938	208.65237	3.09500	0.1684770	0.26422936	2.4051860	21	9 20.6	21.0
254626	2005	JR <sub>31</sub>	16.6	X	279.84197	290.35513	321.48113	3.79065	0.2349391	0.23357826	2.6112459	21	1 11.9	20.8
254627	2005	JR <sub>36</sub>	17.1	X	85.26316	122.34149	134.30169	1.99289	0.1593944	0.26110354	2.4243438	21	10 19.3	20.5
254628	2005	JB <sub>41</sub>	16.9	X	103.20407	16.80225	214.42628	5.78371	0.0945930	0.26180507	2.4200111	21	9 26.7	20.2
254629	2005	JH <sub>50</sub>	17.3	X	64.89312	127.69389	102.56321	3.38161	0.0525591	0.25549137	2.4597175	21	7 31.3	20.3
254630	2005	JJ <sub>60</sub>	13.3	X	353.79788	263.86285	1							

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
254641	2005	<i>JW</i> <sub>111</sub>	16.8	X	214.54953	70.87447	232.16507	12.25412	0.1703483	0.22857139	2.6492410	21	1 17.6	21.4
254642	2005	<i>JL</i> <sub>114</sub>	16.8	X	128.55218	96.01013	66.53009	3.14117	0.1288047	0.25770275	2.4456258	21	7 31.0	20.4
254643	2005	<i>JP</i> <sub>118</sub>	16.6	X	209.46663	206.49424	144.10849	4.99686	0.2327291	0.23312752	2.6146106	21	3 14.2	21.2
254644	2005	<i>JC</i> <sub>122</sub>	16.1	X	199.50916	221.11917	143.09840	15.69543	0.1524606	0.23460038	2.6036558	21	3 24.7	20.4
254645	2005	<i>JS</i> <sub>126</sub>	17.3	X	5.64262	235.05666	78.10925	2.20226	0.1933583	0.25623975	2.4549258	21	9 11.1	19.3
254646	2005	<i>JO</i> <sub>127</sub>	17.0	X	49.03839	106.51755	136.91088	3.20420	0.1823843	0.25352211	2.4724385	21	8 16.2	19.5
254647	2005	<i>JJ</i> <sub>130</sub>	16.7	X	66.74300	167.08814	65.01604	3.36297	0.1574125	0.25624628	2.4548842	21	8 24.3	19.7
254648	2005	<i>JS</i> <sub>133</sub>	16.2	X	241.73553	11.60126	86.30875	8.77731	0.0866359	0.26308765	2.4121394	21	9 15.8	19.5
254649	2005	<i>JL</i> <sub>134</sub>	17.5	X	292.67330	49.32461	97.44951	3.24177	0.1453802	0.28291384	2.2980876	21	—	—
254650	2005	<i>JC</i> <sub>137</sub>	16.8	X	308.47913	167.58691	105.01592	3.42543	0.2048681	0.24343836	2.5402515	21	3 11.3	20.1
254651	2005	<i>JD</i> <sub>141</sub>	16.9	X	217.33346	113.43937	76.19711	7.65935	0.0537573	0.27412171	2.3469676	21	12 18.4	19.8
254652	2005	<i>JP</i> <sub>145</sub>	16.8	X	268.49634	299.98312	5.72617	4.34113	0.2873180	0.23534524	2.5981593	21	3 3.2	21.2
254653	2005	<i>JY</i> <sub>162</sub>	16.8	X	209.68186	306.48925	220.03249	8.47526	0.1425367	0.27095715	2.3652060	21	10 27.5	20.1
254654	2005	<i>JS</i> <sub>175</sub>	16.0	X	320.57900	295.70354	341.54709	17.38677	0.2370383	0.24320037	2.5419084	21	3 21.9	19.2
254655	2005	<i>JL</i> <sub>178</sub>	16.6	X	276.19102	272.66720	42.62330	6.61634	0.2984763	0.23994056	2.5648793	21	3 21.3	20.8
254656	2005	<i>JA</i> <sub>181</sub>	16.6	X	91.66597	8.26326	248.78585	5.37629	0.1200428	0.26266696	2.4147143	21	10 20.1	20.1
254657	2005	<i>KG</i>	16.4	X	343.56856	240.42723	342.50007	3.96085	0.0809964	0.23991969	2.5650281	21	3 11.6	19.4
254658	2005	<i>KZ</i>	16.9	X	284.29819	79.00623	198.89547	9.04895	0.1870740	0.23646659	2.5899389	21	2 17.7	20.9
254659	2005	<i>KQ</i> <sub>4</sub>	16.7	X	302.61598	147.63530	171.25804	4.69463	0.1916979	0.24532946	2.5271804	21	5 6.6	19.8
254660	2005	<i>KS</i> <sub>6</sub>	17.3	X	187.96443	126.28690	73.68694	7.86708	0.1455262	0.27142254	2.3625016	21	11 17.7	20.8
254661	2005	<i>KJ</i> <sub>7</sub>	16.4	X	283.25958	165.85730	148.57284	12.90583	0.1881053	0.23942492	2.5685606	21	4 9.9	20.2
254662	2005	<i>KC</i> <sub>8</sub>	17.1	X	52.62644	146.05625	109.00622	4.52070	0.1273622	0.25469363	2.4648509	21	8 31.2	20.0
254663	2005	<i>KU</i> <sub>11</sub>	16.5	X	337.79451	203.33270	78.26562	5.65257	0.1225085	0.24569686	2.5246605	21	5 21.2	19.1
254664	2005	<i>KA</i> <sub>13</sub>	16.1	X	262.86987	131.08976	183.45658	13.03960	0.1935569	0.23563487	2.5960298	21	3 14.9	20.3
254665	2005	<i>LZ</i> <sub>3</sub>	16.2	X	340.32789	323.23580	232.63121	11.19689	0.2387462	0.23727604	2.5840453	21	1 17.1	19.4
254666	2005	<i>LC</i> <sub>4</sub>	16.1	X	204.95860	248.42237	85.66958	13.90958	0.2871327	0.22939286	2.6429125	21	2 24.3	21.1
254667	2005	<i>LC</i> <sub>6</sub>	16.1	X	246.94077	229.39709	105.28519	15.47357	0.2028945	0.23716425	2.5848572	21	4 1.7	20.6
254668	2005	<i>LW</i> <sub>15</sub>	16.8	X	272.97488	100.34252	217.67095	3.88476	0.1241242	0.23552392	2.5968450	21	4 6.5	20.3
254669	2005	<i>LO</i> <sub>19</sub>	12.3	X	347.57273	304.47019	99.96616	18.09939	0.0727107	0.08424193	5.1536769	21	11 10.9	19.0
254670	2005	<i>LR</i> <sub>25</sub>	16.9	X	221.89785	148.54612	194.76870	3.52633	0.2437959	0.23324089	2.6137633	21	3 13.1	21.5
254671	2005	<i>LG</i> <sub>35</sub>	16.2	X	243.60195	245.79042	125.56699	7.69061	0.1632737	0.23722326	2.5844286	21	5 12.4	20.3
254672	2005	<i>LG</i> <sub>41</sub>	17.0	X	30.67186	125.01113	158.29381	2.67873	0.1719819	0.25536908	2.4650527	21	9 11.3	19.5
254673	2005	<i>LT</i> <sub>42</sub>	17.1	X	115.30098	19.70028	185.67100	8.95202	0.1527633	0.25888083	2.4382007	21	9 11.6	20.8
254674	2005	<i>LN</i> <sub>45</sub>	17.3	X	269.95453	53.65557	214.88888	11.16879	0.1635175	0.23215116	2.6219364	21	1 25.4	21.7
254675	2005	<i>LK</i> <sub>46</sub>	16.5	X	353.40801	166.27576	112.03305	5.31628	0.1040756	0.24309792	2.5426225	21	6 15.8	19.1
254676	2005	<i>LR</i> <sub>46</sub>	16.2	X	195.76479	293.56523	138.61221	11.76184	0.2152932	0.23914777	2.5705447	21	6 11.1	20.7
254677	2005	<i>LB</i> <sub>47</sub>	17.2	X	126.24800	103.76669	263.26731	0.95897	0.3059101	0.21190640	2.7863778	21	2 1.9	21.5
254678	2005	<i>LK</i> <sub>49</sub>	15.7	X	171.46392	262.23330	87.71120	14.86400	0.2164482	0.22726673	2.6593702	21	2 16.4	20.3
254679	2005	<i>LU</i> <sub>50</sub>	12.9	X	332.59390	260.09584	154.28935	13.48149	0.1214729	0.08377923	5.1726347	21	10 28.6	19.3
254680	2005	<i>LN</i> <sub>53</sub>	16.7	X	126.66421	114.56573	281.37800	1.11410	0.0396420	0.22359937	2.6883698	21	2 1.6	20.3
254681	2005	<i>MU</i> <sub>3</sub>	12.5	X	14.38840	278.80431	90.64550	15.14136	0.0385940	0.08383035	5.1705316	21	11 3.5	19.3
254682	2005	<i>MW</i> <sub>3</sub>	12.7	X	56.78079	231.49512	101.56398	11.02950	0.0744036	0.08366994	5.1771381	21	11 14.4	19.5
254683	2005	<i>MD</i> <sub>4</sub>	17.2	X	296.06507	113.25813	197.55125	4.17920	0.1112532	0.24294992	2.5436550	21	4 28.5	20.3
254684	2005	<i>MK</i> <sub>4</sub>	17.2	X	65.90945	148.93248	116.72762	3.20292	0.0661160	0.25870070	2.4393324	21	9 24.6	20.2
254685	2005	<i>MO</i> <sub>9</sub>	15.7	X	157.02356	231.08508	122.28133	11.99338	0.0687826	0.22002078	2.7174418	21	1 20.6	19.5
254686	2005	<i>MA</i> <sub>15</sub>	16.0	X	256.64847	339.63409	285.15494	3.68483	0.0618614	0.22227872	2.6990077	21	1 20.2	19.8
254687	2005	<i>MS</i> <sub>16</sub>	16.3	X	181.84189	77.77629	278.69293	6.70059	0.0785016	0.22425250	2.6831473	21	2 18.2	20.3
254688	2005	<i>MS</i> <sub>18</sub>	16.6	X	135.25139	71.05201	261.92305	3.25219	0.2054858	0.21103273	2.7940629	21	—	—
254689	2005	<i>MZ</i> <sub>20</sub>	15.6	X	162.56658	15.69169	303.90480	15.62191	0.2072936	0.21488442	2.7605742	21	1 1.6	20.1
254690	2005	<i>MD</i> <sub>22</sub>	16.9	X	332.56378	306.13397	300.16690	3.71923	0.1207194	0.23383020	2.6093699	21	3 21.5	20.0
254691	2005	<i>MG</i> <sub>24</sub>	13.1	X	335.63704	172.53965	236.49080	30.74961	0.0759898	0.08340624	5.1880444	21	10 23.2	19.8
254692	2005	<i>MH</i> <sub>24</sub>	16.0	X	266.06054	126.33192	201.40846	12.15605	0.1499800	0.23788297	2.5796482	21	4 8.4	19.7
254693	2005	<i>MB</i> <sub>26</sub>	17.1	X	206.18330	157.35095	175.47111	5.60864	0.2104898	0.22898279	2.6460669	21	2 17.2	21.6
254694	2005	<i>MD</i> <sub>29</sub>	16.6	X	207.23849	131.13271	164.53449	8.12421	0.1196401	0.21894805	2.7263105	21	1 5.9	21.1
254695	2005	<i>MW</i> <sub>31</sub>	16.4	X	13.21899	238.14395	93.43774	7.32432	0.1566296	0.25264407	2.4781636	21	10 22.3	19.0
254696	2005	<i>MO</i> <sub>32</sub>	16.0	X	323.10735	284.34887	314.18125	27.58188	0.2068868	0.23274539	2.6174717	21	2 10.3	19.4
254697	2005	<i>MD</i> <sub>35</sub>	16.7	X	85.21594	271.16406	125.01449	5.35740	0.1215253	0.21344573	2.7729651	21	—	—
254698	2005	<i>MZ</i> <sub>35</sub>	16.6	X	285.58572	334.39564	308.31911	7.96993	0.1314535	0.23134164	2.6280493	21	3 4.2	20.5
254699	2005	<i>MY</i> <sub>38</sub>	16.5	X	156.10301	354.02659	304.82555	5.03618	0.0312258	0.20999468	2.8032630	21	—	—
254700	2005	<i>MM</i> <sub>40</sub>	16.4	X	207.60216	221.96716	146.67320	7.06932	0.1043750	0.23055569	2.6340185	21	4 6.1	20.4
254701	2005	<i>MA</i> <sub>42</sub>	15.7	X	20.98335	54.61636	212.88608	6.72152	0.1270049	0.18355654	3.0636576	21	7 19.3	19.4
254702	2005	<i>MT</i> <sub>45</sub>	16.7	X	242.69299	91.28715	180.98936	4.48767	0.1299372	0.22296101	2.6934987	21	1 10.4	21.0
254703	2005	<i>MA</i> <sub>55</sub>	16.9	X	296.09962	145.43044	173.39245	4.22991	0.1168631	0.23775756	2.5805552	21	5 9.8	20.2
254704	2005	<i>NH</i>	15.6	X	138.85621	109.84082	236.77019	12.92161	0.3006985	0.21135907	2.7911861	21	1 16.6	20.3
254705	2005	<i>ND</i> <sub>3</sub>	16.0	X	253.03055	209.66583	135.15943	19.41128	0.2407439	0.23812883	2.5778723	21	4 16.0	20.6
254706	2005	<i>NF</i> <sub>3</sub>	16.0	X	152.29846	176.52072	147.10361	14.61178	0.2807897	0.21079780	2.7961385	21	1 2.8	20.8
254707	2005	<i>NR</i> <sub>6</sub>	16.4	X	272.44727	82.01919	272.38796	4.57230	0.0902643	0.23973866	2.5663192	21	5 29.1	19.8
254708	2005	<i>NU</i> <sub>16</sub>	16.6	X	137.64110	82.20408	276.58600	4.98936						

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254721 2005 <i>NL</i> <sub>54</sub>	16.7	X	211.82205	50.23595	278.46016	5.41051	0.0737421	0.22471064	2.6794992	21	2 16.4	20.7
254722 2005 <i>NJ</i> <sub>61</sub>	16.4	X	102.31555	283.72414	133.52430	6.11005	0.0850666	0.21948335	2.7218760	21	2 5.0	19.7
254723 2005 <i>NC</i> <sub>62</sub>	16.6	X	200.68436	158.77697	329.67937	2.14438	0.0542448	0.24999854	2.4956158	21	9 3.1	19.8
254724 2005 <i>NA</i> <sub>63</sub>	16.2	X	117.89016	110.84602	323.48595	12.07187	0.2242071	0.22057482	2.7128894	21	3 31.2	20.4
254725 2005 <i>NP</i> <sub>64</sub>	16.8	X	51.12507	313.64627	267.29513	4.63819	0.1530975	0.24405518	2.5359695	21	7 11.2	19.6
254726 2005 <i>NQ</i> <sub>72</sub>	16.2	X	79.29845	344.32984	105.43839	4.46890	0.0323537	0.22416207	2.6838689	21	2 8.6	19.6
254727 2005 <i>NB</i> <sub>76</sub>	17.0	X	5.19351	288.64371	285.76637	3.87015	0.1573875	0.23689437	2.5868200	21	3 28.5	19.5
254728 2005 <i>NU</i> <sub>76</sub>	16.2	X	171.07258	104.51022	270.54534	4.44855	0.1023020	0.22455504	2.6807368	21	3 3.6	20.3
254729 2005 <i>NZ</i> <sub>79</sub>	16.0	X	345.98792	215.83605	72.69377	9.46317	0.1962693	0.24353673	2.5395674	21	6 8.8	18.0
254730 2005 <i>NX</i> <sub>84</sub>	15.7	X	163.03044	134.13543	197.07587	8.20487	0.1472467	0.21311630	2.7758220	21	1 7.9	20.1
254731 2005 <i>NA</i> <sub>85</sub>	15.4	X	145.09908	100.26539	246.72612	7.66909	0.2518253	0.21118067	2.7927578	21	1 19.3	19.9
254732 2005 <i>NU</i> <sub>93</sub>	16.3	X	42.36827	93.95017	114.22656	5.91231	0.0218201	0.23933918	2.5691740	21	5 24.2	19.6
254733 2005 <i>NA</i> <sub>94</sub>	16.6	X	328.17072	59.67247	131.10406	3.28090	0.1323031	0.22577874	2.6710418	21	1 2.9	20.1
254734 2005 <i>NW</i> <sub>101</sub>	16.8	X	176.47157	28.60155	316.90683	3.86334	0.1202245	0.21987849	2.7186140	21	2 5.2	20.7
254735 2005 <i>OB</i> <sub>5</sub>	16.8	X	313.43660	348.36897	270.26041	3.28255	0.1694756	0.23230913	2.6207476	21	3 3.2	20.3
254736 2005 <i>OJ</i> <sub>6</sub>	16.3	X	160.91077	255.68716	116.28193	5.97344	0.1310511	0.21908843	2.7251458	21	2 24.2	20.5
254737 2005 <i>OY</i> <sub>15</sub>	16.7	X	211.45943	130.05869	276.40459	4.07152	0.0514822	0.23554719	2.5966740	21	5 27.9	20.2
254738 2005 <i>OD</i> <sub>16</sub>	16.2	X	104.44907	239.19294	157.94298	6.53227	0.0742497	0.21488075	2.7606057	21	1 12.0	19.9
254739 2005 <i>OK</i> <sub>16</sub>	16.0	X	136.62226	36.97662	307.18893	11.14372	0.1542223	0.21162340	2.7888613	21	—	—
254740 2005 <i>OL</i> <sub>17</sub>	15.9	X	119.60095	158.15034	273.27226	9.60191	0.1149343	0.22286712	2.6942551	21	3 15.5	19.9
254741 2005 <i>OO</i> <sub>18</sub>	16.1	X	195.17059	157.66258	166.54501	5.11138	0.1610097	0.21786673	2.7353240	21	1 29.6	20.5
254742 2005 <i>OT</i> <sub>18</sub>	16.4	X	158.37171	104.08116	249.33250	1.28539	0.0609150	0.21539718	2.7519124	21	1 21.9	20.3
254743 2005 <i>OB</i> <sub>19</sub>	16.3	X	145.70324	164.82114	181.09724	6.85049	0.1218870	0.21273328	2.7791528	21	1 5.7	20.5
254744 2005 <i>OD</i> <sub>22</sub>	16.6	X	153.72474	248.05128	134.70916	5.86995	0.0421269	0.22076930	2.7112960	21	2 19.8	20.3
254745 2005 <i>OT</i> <sub>22</sub>	16.5	X	213.47201	34.42128	338.75590	3.47104	0.1360943	0.23262996	2.6183375	21	4 13.0	20.7
254746 2005 <i>OL</i> <sub>28</sub>	16.2	X	138.32844	70.92595	334.91071	4.22120	0.1142423	0.21913100	2.7247929	21	3 10.1	20.1
254747 2005 <i>OB</i> <sub>31</sub>	16.6	X	214.88097	124.05394	183.96694	5.84056	0.1303553	0.21964086	2.7205745	21	1 26.9	20.9
254748 2005 <i>PP</i> <sub>1</sub>	16.1	X	160.49752	236.67746	100.95580	4.58755	0.0749341	0.21536139	2.7564968	21	1 6.9	19.9
254749 2005 Kurosawa	17.0	X	141.36875	291.11503	132.50028	2.70968	0.0681392	0.22658125	2.6647312	21	3 31.6	20.7
254750 2005 <i>PS</i> <sub>8</sub>	16.0	X	318.13769	129.01399	120.93444	11.48317	0.0226772	0.22846907	2.6500319	21	3 27.7	19.7
254751 2005 <i>PU</i> <sub>12</sub>	16.4	X	98.54346	272.35615	107.20544	8.03261	0.1740076	0.20912971	2.8109874	21	—	—
254752 2005 <i>PC</i> <sub>15</sub>	16.5	X	169.95464	273.43344	35.89618	4.03333	0.0864147	0.21206194	2.7850152	21	—	—
254753 2005 <i>PN</i> <sub>15</sub>	16.5	X	98.07772	283.89249	140.83348	16.53309	0.2586992	0.21422109	2.7662700	21	3 10.6	20.3
254754 2005 <i>PO</i> <sub>16</sub>	15.7	X	203.19328	227.64902	100.34987	10.58513	0.2273095	0.21774723	2.7363246	21	2 13.9	20.6
254755 2005 <i>PG</i> <sub>19</sub>	16.6	X	150.81673	76.12125	244.32704	0.56503	0.2495125	0.21126831	2.7919854	21	—	—
254756 2005 <i>QW</i> <sub>1</sub>	16.7	X	237.72236	36.32500	274.20180	3.40614	0.1935348	0.22521747	2.6754777	21	2 16.7	21.1
254757 2005 <i>QA</i> <sub>2</sub>	16.0	X	129.25047	169.78118	174.41276	7.64981	0.0594005	0.21064189	2.7975180	21	—	—
254758 2005 <i>QM</i> <sub>3</sub>	16.4	X	129.39162	201.13485	185.73151	3.77672	0.1836990	0.21438294	2.7648775	21	2 13.6	20.5
254759 2005 <i>QX</i> <sub>5</sub>	16.8	X	230.20137	105.43924	228.45520	2.62253	0.1248228	0.22547670	2.6734266	21	3 12.9	21.0
254760 2005 <i>QB</i> <sub>8</sub>	16.0	X	129.86896	189.11057	153.16194	9.70991	0.1489600	0.20834058	2.8180810	21	—	—
254761 2005 <i>QR</i> <sub>9</sub>	16.6	X	179.26936	2.30763	318.41808	2.26086	0.0639434	0.21551147	2.7552169	21	1 6.2	20.4
254762 2005 <i>QZ</i> <sub>16</sub>	16.4	X	175.13904	192.77180	146.74661	3.99488	0.0978571	0.21522057	2.7576990	21	1 26.5	20.4
254763 2005 <i>QE</i> <sub>21</sub>	15.8	X	107.68462	252.20660	147.98834	13.24907	0.1768466	0.21234686	2.7825234	21	2 4.7	19.6
254764 2005 <i>QF</i> <sub>24</sub>	16.0	X	358.72323	292.55330	14.711005	4.85654	0.1965633	0.18073396	3.0982006	21	8 8.9	19.2
254765 2005 <i>QK</i> <sub>24</sub>	16.3	X	109.10827	327.26931	154.50590	5.05974	0.1288529	0.22497055	2.6774350	21	5 15.9	20.1
254766 2005 <i>QQ</i> <sub>24</sub>	16.5	X	225.86401	147.20201	152.43435	5.08720	0.0934023	0.21725501	2.7404561	21	1 28.9	20.6
254767 2005 <i>QZ</i> <sub>25</sub>	16.4	X	140.06005	215.62877	116.45339	3.21178	0.0669363	0.20682567	2.8318251	21	—	—
254768 2005 <i>QB</i> <sub>32</sub>	16.0	X	36.54256	324.51605	169.08013	14.00242	0.0814225	0.21867428	2.7285855	21	2 5.5	19.3
254769 2005 <i>QL</i> <sub>33</sub>	16.4	X	98.75323	76.23755	332.46011	6.78638	0.1986216	0.21270847	2.7793689	21	2 8.3	19.9
254770 2005 <i>QH</i> <sub>37</sub>	15.7	X	164.70783	180.66992	196.47769	4.42834	0.1244968	0.21829507	2.7317446	21	3 3.1	19.9
254771 2005 <i>QQ</i> <sub>37</sub>	15.9	X	153.22745	6.76551	1.88145	4.88363	0.1641192	0.21465482	2.7625424	21	2 15.9	20.1
254772 2005 <i>QW</i> <sub>37</sub>	16.4	X	167.43798	41.85457	323.36026	3.73626	0.1302086	0.21687857	2.7436263	21	2 20.8	20.6
254773 2005 <i>QT</i> <sub>38</sub>	15.9	X	249.18478	317.68822	351.57770	8.71295	0.1126573	0.22313088	2.6921315	21	3 4.6	20.0
254774 2005 <i>QP</i> <sub>40</sub>	16.6	X	166.06158	154.66455	184.37112	8.68500	0.1790354	0.21529444	2.7507682	21	1 21.8	21.1
254775 2005 <i>QZ</i> <sub>41</sub>	15.6	X	65.89008	67.55455	334.31507	14.08051	0.1555829	0.20519707	2.8467890	21	—	—
254776 2005 <i>QD</i> <sub>43</sub>	15.9	X	171.10210	22.10531	299.56423	7.00830	0.2159338	0.21395954	2.7685239	21	1 10.8	20.4
254777 2005 <i>QP</i> <sub>48</sub>	16.4	X	173.59098	173.27006	122.85481	5.38520	0.0867573	0.20880517	2.8138993	21	—	—
254778 2005 <i>QB</i> <sub>49</sub>	16.4	X	135.20974	27.65075	19.35498	6.76926	0.0755190	0.21885646	2.7270711	21	3 6.2	20.3
254779 2005 <i>QJ</i> <sub>49</sub>	15.8	X	203.01049	194.44522	125.81066	6.73387	0.0351101	0.21717259	2.7411494	21	1 30.3	19.6
254780 2005 <i>QH</i> <sub>50</sub>	15.5	X	183.73213	175.66604	160.98491	17.27975	0.0646575	0.21570014	2.7536100	21	1 28.7	19.7
254781 2005 <i>QD</i> <sub>52</sub>	16.5	X	195.36505	26.35378	324.61910	4.14621	0.1174864	0.22185687	2.7024280	21	3 1.1	20.7
254782 2005 <i>QM</i> <sub>54</sub>	16.8	X	268.08092	144.27099	169.47506	3.84942	0.1248529	0.22884471	2.6471311	21	3 28.3	20.5
254783 2005 <i>QX</i> <sub>60</sub>	16.6	X	68.61705	307.38339	276.27106	5.39055	0.1364016	0.24294682	2.5436767	21	8 7.4	19.8
254784 2005 <i>QC</i> <sub>63</sub>	16.6	X	156.42491	13.69295	12.95934	5.62870	0.0866167	0.22008642	2.7169014	21	3 5.4	20.6
254785 2005 <i>QL</i> <sub>64</sub>	16.8	X	164.50079	309.78589	36.96699	3.52222	0.2039107	0.21519959	2.7578782	21	2 3.3	21.3
254786 2005 <i>QE</i> <sub>65</sub>	16.7	X	215.01275	229.54015	102.70052	3.63770	0.0762557	0.22069174	2.7119312	21	2 28.1	20.7
254787 2005 <i>QP</i> <sub>65</sub>	15.8	X	84.01833	155.07815	220.30510	7.76096	0.2169624	0.20551107	2.8438886	21	—	—
254788 2005 <i>QT</i> <sub>66</sub>	15.8	X	173.37419	198.10612	131.84391	6.64084	0.0226460	0.21275016	2.7790058	21	1 7.3	19.6
254789 2005 <i>QQ</i> <sub>67</sub>	15.9	X	63.51011	242.31856	130.06610	3.01178	0.0730126	0.20059184	2.8901954	21	—	—
254790 2005 <i>QJ</i> <sub>74</sub>	16.0	X	189.00080	317.16169	358.94440	11.57744	0.1115307	0.21356130	2.7719646	21	1 16.9	20.4
254791 2005 <i>QX</i> <sub>77</sub>	16.5	X	301.92084	283.89035	348.02710	6.23329	0.1671203	0.22796111	2.6539671	21	3 8.4	19.9
254792 2005 <i>QV</i> <sub></sub>												

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
254801 2005 QT <sub>93</sub>	16.9	X	257.81120	281.07553	10.64050	9.14609	0.1396296	0.22358408	2.6884923	21	2 20.3	21.1
254802 2005 QP <sub>94</sub>	16.0	X	135.91828	307.78852	350.40077	5.81147	0.0492418	0.20477900	2.8506622	21	—	—
254803 2005 QT <sub>102</sub>	16.1	X	40.55277	268.85706	197.31355	7.57700	0.0655517	0.21317342	2.7753261	21	1 8.6	19.6
254804 2005 QA <sub>103</sub>	16.0	X	173.67630	160.86508	180.36980	5.28702	0.0776296	0.21598091	2.7512231	21	1 24.6	20.2
254805 2005 QD <sub>104</sub>	16.7	X	110.70828	120.19639	302.95903	4.02364	0.1114994	0.21713036	2.7415048	21	2 26.4	20.3
254806 2005 QT <sub>106</sub>	15.9	X	113.49496	239.71875	144.70339	12.93939	0.1489234	0.21135544	2.7912180	21	1 19.4	19.7
254807 2005 QG <sub>109</sub>	16.9	X	147.35008	129.18652	196.42097	2.40534	0.1969994	0.20939248	2.8086351	21	—	—
254808 2005 QW <sub>111</sub>	15.6	X	237.07899	275.91345	339.62538	11.98258	0.0899488	0.21270703	2.7793814	21	—	—
254809 2005 QK <sub>112</sub>	16.5	X	58.64064	194.19653	200.01322	1.55722	0.0719566	0.20319978	2.8654130	21	—	—
254810 2005 QG <sub>115</sub>	16.3	X	158.15479	0.77710	330.95793	2.59777	0.0736390	0.20959487	2.8068268	21	—	—
254811 2005 QU <sub>116</sub>	16.8	X	158.14868	317.04141	358.80196	1.72966	0.0814229	0.21016743	2.8017267	21	—	—
254812 2005 QL <sub>117</sub>	16.9	X	154.89308	24.18802	347.70376	6.05173	0.0699993	0.21789832	2.7350596	21	2 11.8	20.8
254813 2005 QR <sub>121</sub>	16.4	X	31.21427	347.88111	170.91864	11.23211	0.1117438	0.22224597	2.6992729	21	3 3.9	19.4
254814 2005 QN <sub>124</sub>	16.5	X	43.19881	45.10489	15.42508	1.91353	0.0567914	0.20601932	2.8392094	21	—	—
254815 2005 QP <sub>124</sub>	16.6	X	30.88899	35.64007	1.75830	1.68895	0.0865479	0.19963519	2.8994212	21	—	—
254816 2005 QW <sub>124</sub>	16.7	X	73.47433	21.04657	4.59164	1.75205	0.0736878	0.20528302	2.8459943	21	—	—
254817 2005 QZ <sub>126</sub>	16.3	X	274.43101	69.72456	156.49341	3.37605	0.0230072	0.21421712	2.7663041	21	—	—
254818 2005 QQ <sub>129</sub>	16.6	X	140.52114	346.81667	29.07647	4.60985	0.0853570	0.21496210	2.7599092	21	2 3.0	20.6
254819 2005 QH <sub>131</sub>	16.9	X	72.48494	124.94264	50.30916	4.47974	0.1024681	0.23231176	2.6207279	21	6 1.4	20.1
254820 2005 QQ <sub>131</sub>	15.4	X	141.57898	287.12222	1.53161	12.47718	0.0652477	0.20221255	2.8747317	21	—	—
254821 2005 QZ <sub>135</sub>	16.6	X	283.46369	192.11864	17.76628	3.37277	0.0373508	0.21081467	2.7959893	21	—	—
254822 2005 QY <sub>137</sub>	16.0	X	73.43384	37.09389	21.84312	4.82702	0.1096359	0.20885793	2.8134254	21	1 3.2	19.4
254823 2005 QH <sub>140</sub>	16.2	X	113.71296	95.57681	357.58556	11.01465	0.1112233	0.202181068	2.7028031	21	4 7.6	19.9
254824 2005 QS <sub>141</sub>	16.1	X	351.90704	156.33839	350.88959	6.39183	0.0248413	0.21372518	2.7705474	21	—	—
254825 2005 QO <sub>145</sub>	16.0	X	124.97094	240.34216	68.08178	7.50374	0.1065933	0.20216997	2.8751353	21	—	—
254826 2005 QW <sub>145</sub>	15.9	X	133.88067	251.89478	130.39958	12.32367	0.1904992	0.21340621	2.7733074	21	2 15.7	20.0
254827 2005 QP <sub>150</sub>	16.3	X	0.85976	210.63593	42.48577	9.76534	0.1456706	0.23798515	2.5789098	21	5 19.5	18.8
254828 2005 QS <sub>150</sub>	16.3	X	54.22412	328.23864	0.87535	9.36024	0.0729982	0.19167486	2.9791516	21	11 17.9	20.6
254829 2005 QK <sub>151</sub>	17.0	X	95.48849	260.18205	146.82895	3.64503	0.1879477	0.20928678	2.8095808	21	1 30.4	20.5
254830 2005 QY <sub>152</sub>	16.4	X	314.59722	307.96019	293.99477	11.09087	0.2243198	0.22909945	2.6451686	21	2 3.4	20.2
254831 2005 QY <sub>152</sub>	16.7	X	89.03132	144.32082	206.68593	11.22183	0.2623959	0.20156661	2.8808700	21	—	—
254832 2005 QW <sub>156</sub>	15.4	X	273.24708	102.54961	327.07584	24.71978	0.2809858	0.17832324	3.1260608	21	8 12.7	20.0
254833 2005 QO <sub>165</sub>	16.1	X	123.81337	241.31161	132.40557	8.43831	0.2382367	0.20900806	2.8120780	21	1 31.3	20.2
254834 2005 QX <sub>165</sub>	16.0	X	35.41459	239.08924	161.92080	13.30130	0.1620917	0.19678046	2.9273955	21	—	—
254835 2005 QM <sub>170</sub>	16.0	X	155.44243	162.71783	208.43130	14.99975	0.0982730	0.21742334	2.7390415	21	2 8.5	20.3
254836 2005 QH <sub>173</sub>	15.6	X	148.54816	169.99383	189.61393	8.79369	0.2524633	0.21210741	2.7846171	21	2 5.5	20.2
254837 2005 QD <sub>174</sub>	15.8	X	124.01986	35.48021	327.87080	8.34291	0.1673183	0.20944461	2.8081691	21	1 11.1	19.8
254838 2005 QX <sub>174</sub>	15.5	X	331.22335	94.20171	233.69547	8.88012	0.2705810	0.17919572	3.1159056	21	6 27.6	18.7
254839 2005 QQ <sub>177</sub>	16.0	X	152.71298	72.77143	286.16510	5.19859	0.0694599	0.21377451	2.7701212	21	1 23.3	20.0
254840 2005 QZ <sub>179</sub>	16.2	X	131.62434	290.76439	29.61631	6.84333	0.0608569	0.20384732	2.8593417	21	—	—
254841 2005 QO <sub>180</sub>	16.0	X	94.84044	156.51140	189.49431	7.82684	0.0406681	0.20328455	2.8646164	21	—	—
254842 2005 QK <sub>182</sub>	16.6	X	167.57895	150.46652	195.13025	3.33445	0.1053620	0.21392666	2.7688076	21	1 26.3	20.7
254843 2005 QO <sub>190</sub>	16.7	X	87.53933	240.94629	162.44533	4.29590	0.1031388	0.20854666	2.8162242	21	1 2.6	20.3
254844 2005 QW <sub>190</sub>	15.7	X	136.25224	58.59093	277.93913	10.79788	0.1299884	0.20880146	2.8139326	21	—	—
254845 2005 RX	15.6	X	203.30365	280.61579	31.90376	24.81711	0.2579255	0.21932610	2.7231768	21	2 4.0	20.9
254846 Csontváry	16.6	X	10.05884	87.58358	354.78424	5.11151	0.0698459	0.20342997	2.8632510	21	—	—
254847 2005 RG <sub>4</sub>	16.1	X	176.19959	24.96933	290.86944	7.96395	0.2726333	0.21385680	2.7649106	21	1 11.1	20.9
254848 2005 RQ <sub>8</sub>	16.0	X	119.61905	20.99442	347.59425	5.30597	0.0535277	0.20903932	2.8117976	21	—	—
254849 2005 RE <sub>9</sub>	15.6	X	161.21702	47.20404	318.82324	11.12396	0.1058983	0.21622474	2.7491544	21	2 13.3	19.8
254850 2005 RN <sub>16</sub>	16.1	X	96.12334	111.27620	237.36163	13.82905	0.1669233	0.20245837	2.8724042	21	—	—
254851 2005 RP <sub>16</sub>	16.1	X	137.02826	100.98552	238.85454	12.35760	0.2379578	0.20936274	2.8890911	21	1 2.5	20.5
254852 2005 RQ <sub>20</sub>	16.5	X	241.60984	206.85252	56.68493	1.05949	0.0232606	0.21354785	2.7720810	21	1 6.2	20.2
254853 2005 RN <sub>20</sub>	16.0	X	164.89596	57.60438	176.40971	8.11714	0.1619906	0.21195880	2.7859185	21	1 15.0	20.5
254854 2005 RH <sub>23</sub>	16.6	X	174.76818	145.12591	282.37704	12.12474	0.1271666	0.21495803	2.7599439	21	1 18.2	21.4
254855 2005 RZ <sub>29</sub>	16.1	X	168.14612	124.36329	189.54872	8.70502	0.1568448	0.21112575	2.7932421	21	—	—
254856 2005 RP <sub>33</sub>	15.2	X	236.44605	63.90561	249.08403	27.84118	0.2184352	0.22526362	2.6751122	21	2 6.2	20.4
254857 2005 RT <sub>33</sub>	16.4	X	75.18456	145.28271	188.08324	1.47559	0.1183979	0.19475237	2.9476838	21	12 26.5	20.7
254858 2005 RG <sub>44</sub>	15.9	X	53.58618	46.98044	17.08597	17.09030	0.0790639	0.20652382	2.8345837	21	—	—
254859 2005 RH <sub>44</sub>	15.7	X	308.12385	47.92829	43.65804	10.99624	0.0732021	0.19025386	2.9939674	21	11 24.3	19.5
254860 2005 RK <sub>45</sub>	15.7	X	128.20160	335.20734	63.13751	14.55668	0.1285436	0.21394008	2.7686918	21	2 27.9	20.0
254861 2005 RS <sub>51</sub>	15.8	X	13.55324	252.86631	213.78846	16.16467	0.0546949	0.20688536	2.8312804	21	—	—
254862 2005 SU <sub>1</sub>	16.2	X	95.68592	35.58748	344.35533	7.96418	0.2329518	0.20486045	2.8499067	21	1 6.2	19.8
254863 Robinwarren	16.0	X	0.91081	26.67029	218.54025	11.44711	0.0964694	0.22984532	2.6394429	21	5 12.6	18.9
254864 2005 SS <sub>5</sub>	16.2	X	209.59186	109.49627	215.25597	4.35281	0.0146991	0.21642829	2.7474304	21	2 10.6	20.1
254865 2005 SM <sub>7</sub>	16.3	X	74.48911	350.90726	351.34299	1.44932	0.1023370	0.19525181	2.9426549	21	—	—
254866 2005 SE <sub>8</sub>	16.2	X	23.38122	212.45553	148.26480	7.37136	0.1732278	0.18944009	3.0025353	21	12 4.0	20.0
254867 2005 SF <sub>11</sub>	16.5	X	138.29528	329.73321	57.80938	0.85165	0.0819745	0.21354297	2.7721232	21	2 13.3	20.5
254868 2005 SO <sub>11</sub>	16.2	X	325.70422	230.20531	184.28209	8.84023	0.0790479	0.18741833	3.0240897	21	11 5.2	20.0
254869 2005 SP <sub>11</sub>	16.3	X	24.97957	55.63480	19.97275	12.45507	0.1549007	0.20007931	2.8951291	21	—	—
254870 2005 SR <sub>11</sub>	16.6	X	217.38996	168.35244	157.99099	1.87884	0.0689159	0.21785953	2.7353842	21	2 22.4	20.7
254871 2005 SE <sub>12</sub>	15.5	X	82.42348	282.53582	347.98905	10.77954	0.0930516	0.18669105	3.0319385	21	10 12.1	20.0
254872 2005 SA <sub>14</sub>	16.0	X	157.87264	335.11248	25.46532	6.49104	0.0632561	0.21295934	2.7771857	21	2 2.5	20.1
254873 2005 SO <sub>16</sub>	16.4	X	246.91435	37.52257	249.72281	1.20896	0.0994503	0.21798154	2.7343634	21	2 4.0	20.6
254874 2005 SG <sub>17</sub>	16.4	X	167.95013	355.75092	10.28122	6.50199	0.0703236	0.21614945	2.7497927			

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
254881 2005 <i>SL</i> <sub>27</sub>	16.2	X	90.40990	89.12971	317.88537	5.05816	0.0394476	0.20863915	2.8153918	21	1 3.9	20.0
254882 2005 <i>SW</i> <sub>29</sub>	16.5	X	185.30280	111.14312	222.84957	5.87318	0.0401897	0.21343688	2.7730418	21	1 25.8	20.7
254883 2005 <i>SH</i> <sub>30</sub>	16.1	X	152.77214	101.05628	174.68298	7.91355	0.0651308	0.19747723	2.9205055	21	—	—
254884 2005 <i>SS</i> <sub>30</sub>	15.9	X	222.06368	305.72682	341.69632	8.15476	0.1245644	0.21412482	2.7670991	21	1 12.9	20.4
254885 2005 <i>SY</i> <sub>31</sub>	16.4	X	272.87048	56.17573	110.01030	3.35535	0.0344418	0.19753152	2.9199704	21	—	—
254886 2005 <i>SD</i> <sub>32</sub>	15.9	X	19.88092	149.04500	181.56239	8.92587	0.1505303	0.18441925	3.0567873	21	10 16.7	19.5
254887 2005 <i>SE</i> <sub>35</sub>	15.6	X	153.01940	321.41774	44.57787	6.43293	0.0459793	0.21236167	2.7823940	21	2 1.7	19.6
254888 2005 <i>SJ</i> <sub>35</sub>	16.5	X	56.80635	348.39255	84.54454	3.25275	0.0440833	0.20629568	2.8366732	21	—	—
254889 2005 <i>ST</i> <sub>41</sub>	16.1	X	106.57902	114.94930	284.89989	3.16249	0.1522374	0.20914973	2.8108080	21	1 30.9	19.8
254890 2005 <i>SV</i> <sub>41</sub>	16.2	X	91.85296	11.51295	302.49154	3.72875	0.0679865	0.19374941	2.9578476	21	12 15.8	20.5
254891 2005 <i>SP</i> <sub>42</sub>	16.7	X	68.55740	200.80491	252.84826	3.31266	0.0284189	0.21214526	2.7842859	21	1 30.3	20.4
254892 2005 <i>ST</i> <sub>57</sub>	16.5	X	73.97938	209.14139	183.47734	1.90172	0.0723801	0.20371958	2.8605368	21	—	—
254893 2005 <i>SA</i> <sub>58</sub>	16.3	X	187.20956	330.65560	5.04562	2.37089	0.1945903	0.21597469	2.7512759	21	2 8.2	20.8
254894 2005 <i>SD</i> <sub>58</sub>	15.8	X	188.86567	316.36462	9.21592	6.28023	0.0635011	0.21348528	2.7726226	21	1 24.5	20.0
254895 2005 <i>SN</i> <sub>59</sub>	16.2	X	317.43219	109.80559	290.59844	0.52415	0.0491935	0.18326586	3.0695992	21	10 5.3	20.1
254896 2005 <i>SN</i> <sub>62</sub>	16.2	X	70.20612	356.47941	18.91745	10.94479	0.1404039	0.19945217	2.9011947	21	—	—
254897 2005 <i>SA</i> <sub>68</sub>	16.2	X	186.15197	93.41807	235.17804	3.47210	0.0815491	0.21328774	2.7743343	21	1 23.4	20.4
254898 2005 <i>SX</i> <sub>72</sub>	15.9	X	79.20322	58.94659	34.23900	9.81087	0.2368695	0.20996484	2.8035286	21	3 19.7	19.3
254899 2005 <i>SF</i> <sub>80</sub>	15.7	X	348.60250	114.12357	176.22857	9.69402	0.2068317	0.17655551	3.1468922	21	6 20.3	19.2
254900 2005 <i>SM</i> <sub>82</sub>	16.8	X	191.99138	262.23263	336.79326	1.16908	0.0170420	0.19836800	2.9117560	21	—	—
254901 2005 <i>SV</i> <sub>82</sub>	16.5	X	343.68929	134.91676	324.34122	1.27939	0.0390054	0.19932891	2.9023906	21	—	—
254902 2005 <i>SO</i> <sub>83</sub>	16.1	X	117.46485	238.16243	6.70432	9.57260	0.0193529	0.18622504	3.0369944	21	10 14.9	20.4
254903 2005 <i>SU</i> <sub>84</sub>	16.5	X	280.29083	355.88781	192.00935	1.62878	0.0071571	0.20406238	2.8573323	21	—	—
254904 2005 <i>SQ</i> <sub>86</sub>	16.4	X	101.29396	181.02164	159.18852	2.05161	0.1244132	0.20074299	2.8887444	21	—	—
254905 2005 <i>SW</i> <sub>86</sub>	16.6	X	10.73348	6.05290	41.06402	2.41549	0.0842269	0.19465171	2.9486998	21	—	—
254906 2005 <i>SC</i> <sub>87</sub>	16.3	X	22.38766	277.45073	75.19477	1.26278	0.0960686	0.18854469	3.0120338	21	11 10.6	20.2
254907 2005 <i>SS</i> <sub>87</sub>	16.8	X	318.06039	49.16160	162.89307	2.10538	0.0270406	0.21530835	2.7569494	21	2 3.0	20.6
254908 2005 <i>SP</i> <sub>88</sub>	15.3	X	315.92841	165.82520	209.34233	9.78353	0.0674145	0.17911452	3.1168473	21	8 26.4	19.5
254909 2005 <i>SL</i> <sub>91</sub>	16.4	X	126.19398	101.29201	233.69323	1.16619	0.0718612	0.20248632	2.8721399	21	—	—
254910 2005 <i>SK</i> <sub>95</sub>	16.4	X	15.69846	310.23141	171.42589	4.71728	0.0625983	0.20828246	2.8186052	21	—	—
254911 2005 <i>SN</i> <sub>96</sub>	16.4	X	60.26147	275.30048	126.48245	2.97867	0.0663762	0.20268086	2.8703018	21	—	—
254912 2005 <i>SO</i> <sub>96</sub>	16.1	X	343.54251	203.47771	179.58278	16.81610	0.1080302	0.18604923	3.0389074	21	10 23.7	19.9
254913 2005 <i>SF</i> <sub>98</sub>	16.2	X	68.63890	166.81642	300.20663	5.26872	0.0318776	0.21437057	2.7649839	21	2 15.9	19.7
254914 2005 <i>SG</i> <sub>100</sub>	16.0	X	19.75450	230.38682	228.38230	6.87773	0.1684252	0.20155780	2.8809539	21	—	—
254915 2005 <i>SO</i> <sub>102</sub>	15.3	X	212.61402	220.63457	235.32098	7.75223	0.0462740	0.17385768	3.1793631	21	7 31.2	20.1
254916 2005 <i>SM</i> <sub>106</sub>	16.2	X	115.90848	82.85328	191.04610	10.31693	0.0178897	0.19126680	2.9833874	21	11 21.3	20.6
254917 2005 <i>SK</i> <sub>107</sub>	15.8	X	188.89595	117.32406	227.30311	12.10021	0.1090526	0.21767792	2.7369054	21	2 11.3	20.3
254918 2005 <i>SL</i> <sub>108</sub>	16.4	X	351.24988	112.13116	348.42946	1.35598	0.0189272	0.20023635	2.8936152	21	—	—
254919 2005 <i>SP</i> <sub>111</sub>	15.5	X	297.39060	145.00167	358.91276	10.62223	0.0256399	0.19732814	2.9219764	21	—	—
254920 2005 <i>SG</i> <sub>116</sub>	16.1	X	297.23941	269.89757	198.28790	9.68970	0.0759103	0.19167103	2.9791913	21	12 1.9	20.1
254921 2005 <i>SJ</i> <sub>118</sub>	16.0	X	209.46066	183.51553	128.16800	5.76912	0.0388269	0.21497842	2.7597965	21	1 27.4	19.8
254922 2005 <i>SP</i> <sub>119</sub>	16.3	X	134.68378	40.51019	311.25830	3.46600	0.0831931	0.21067100	2.7972603	21	—	—
254923 2005 <i>SK</i> <sub>121</sub>	15.8	X	324.60230	125.78435	322.59346	5.10186	0.1542465	0.17826422	3.1267507	21	7 28.0	19.5
254924 2005 <i>SL</i> <sub>121</sub>	16.2	X	95.72280	165.44509	202.34295	12.52796	0.1519573	0.20377204	2.8600458	21	—	—
254925 2005 <i>SW</i> <sub>121</sub>	16.6	X	43.26001	236.40605	312.08207	1.31138	0.10154015	0.23094569	2.6310523	21	4 26.3	19.8
254926 2005 <i>SS</i> <sub>123</sub>	16.2	X	56.06266	125.01256	224.06455	5.52581	0.1078072	0.19471467	2.9480641	21	12 22.4	20.3
254927 2005 <i>SJ</i> <sub>124</sub>	16.2	X	165.54877	347.02662	334.57573	8.93433	0.1582109	0.21048707	2.7988896	21	1 2.9	20.7
254928 2005 <i>SE</i> <sub>129</sub>	16.2	X	104.54463	259.16520	25.62376	1.93135	0.0860074	0.19073738	2.9889054	21	11 25.7	20.6
254929 2005 <i>SG</i> <sub>135</sub>	16.7	X	119.98990	182.73187	166.31373	2.19179	0.0798818	0.20549139	2.8440701	21	—	—
254930 2005 <i>SH</i> <sub>135</sub>	17.0	X	134.60768	296.17748	19.81679	2.64434	0.0236055	0.20224299	2.8744432	21	—	—
254931 2005 <i>SH</i> <sub>136</sub>	16.1	X	106.44022	256.20319	49.12785	2.28416	0.0994170	0.19681556	2.9270474	21	12 24.2	20.5
254932 2005 <i>SO</i> <sub>136</sub>	16.5	X	115.17893	278.26405	16.56930	8.99519	0.0964087	0.19679038	2.9272971	21	12 19.9	21.1
254933 2005 <i>SB</i> <sub>140</sub>	16.7	X	42.00347	313.44778	165.59002	5.23668	0.1210162	0.21118850	2.7926888	21	1 29.9	19.8
254934 2005 <i>SE</i> <sub>141</sub>	16.7	X	112.00594	230.88342	133.17066	3.22418	0.0847075	0.20566119	2.8425045	21	—	—
254935 2005 <i>SN</i> <sub>146</sub>	15.5	X	255.78589	279.00813	195.72935	9.28612	0.0918897	0.18416879	3.0595580	21	10 11.7	19.9
254936 2005 <i>SL</i> <sub>151</sub>	16.8	X	45.41125	74.69739	24.61090	11.03323	0.3430212	0.20324928	2.8649478	21	2 2.2	18.9
254937 2005 <i>SX</i> <sub>152</sub>	15.9	X	150.75737	51.80351	199.95410	10.64905	0.0537974	0.19102966	2.9858560	21	12 4.5	20.4
254938 2005 <i>SB</i> <sub>157</sub>	15.9	X	37.08177	341.17346	24.72918	9.26564	0.1064259	0.19213278	2.9744162	21	12 18.3	20.0
254939 2005 <i>SO</i> <sub>159</sub>	16.2	X	220.82284	184.29310	272.76413	7.89615	0.1236962	0.23793638	2.5792621	21	8 6.7	20.1
254940 2005 <i>SO</i> <sub>161</sub>	17.1	X	45.29536	58.53658	325.88616	1.04663	0.0779776	0.19776853	2.9176370	21	—	—
254941 2005 <i>SA</i> <sub>162</sub>	15.9	X	24.49201	158.54244	338.21842	3.29120	0.0508790	0.21204167	2.7851927	21	1 27.1	19.3
254942 2005 <i>SY</i> <sub>163</sub>	15.6	X	40.38726	285.69354	71.74044	8.27647	0.0776841	0.19079089	2.9883466	21	12 8.4	19.7
254943 2005 <i>SR</i> <sub>164</sub>	16.7	X	206.44692	262.95398	113.62277	6.94964	0.2790239	0.22295468	2.6935497	21	4 14.2	21.7
254944 2005 <i>SD</i> <sub>172</sub>	16.4	X	262.26421	59.30306	225.25828	4.61442	0.0458203	0.21923931	2.7238955	21	2 20.4	20.3
254945 2005 <i>SW</i> <sub>178</sub>	16.7	X	231.18856	60.69989	225.60928	2.57494	0.1668569	0.21671632	2.7449955	21	1 16.5	21.1
254946 2005 <i>SY</i> <sub>183</sub>	15.5	X	69.92977	270.26180	3.00971	7.28586	0.1698051	0.18514101	3.0488376	21	10 13.3	19.8
254947 2005 <i>SH</i> <sub>184</sub>	16.4	X	149.38146	356.38624	216.13531	5.08163	0.0554117	0.18516187	3.0486087	21	10 14.9	20.8
254948 2005 <i>SG</i> <sub>187</sub>	16.2	X	134.63401	148.09843	224.66246	7.20317	0.2324743	0.21084769	2.7956973	21	2 6.3	20.6
254949 2005 <i>SP</i> <sub>192</sub>	16.2	X	97.27554	101.48930	177.39807	1.58981	0.2008223	0.18920481	3.0050240	21	11 21.9	21.1
254950 2005 <i>SZ</i> <sub>193</sub>	16.1	X	154.08092	357.90568	10.88831	4.46794	0.0613821	0.21185714	2.7868097	21	2 7.4	20.0
254951 2005 <i>SB</i> <sub>197</sub>	17.3	X	13.22968	257.77069	176.85101	5.61695	0.2454808	0.19782989	2.9170336	21	—	—
254952 2005 <i>SE</i> <sub>199</sub>	16.6	X	196.18021	128.91896								

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254961 2005 SR <sub>210</sub>	16.6	X	152.14442	348.02926	345.28923	3.17141	0.0991171	0.20845478	2.8170516	21	—	—
254962 2005 SH <sub>216</sub>	16.0	X	106.81944	302.69742	34.88202	12.75084	0.1250988	0.19980785	2.8977507	21	—	—
254963 2005 SP <sub>217</sub>	15.8	X	343.53363	211.04494	171.76064	4.42970	0.1506656	0.18400642	3.0613576	21	10 22.2	19.3
254964 2005 SR <sub>217</sub>	15.7	X	59.32914	182.30238	180.47162	7.44523	0.0577906	0.19425374	2.9527258	21	—	—
254965 2005 SG <sub>226</sub>	16.1	X	18.90564	141.58748	198.24215	8.54089	0.1233058	0.18648119	3.0342127	21	10 23.5	19.7
254966 2005 SL <sub>226</sub>	16.7	X	336.76865	186.01557	218.22889	2.06058	0.1249436	0.18780196	3.0199700	21	11 7.2	20.2
254967 2005 SE <sub>228</sub>	16.9	X	209.57907	122.43457	198.08490	1.04656	0.0368011	0.21697195	2.7428390	21	2 6.7	20.7
254968 2005 SN <sub>229</sub>	16.5	X	83.48242	87.62795	358.08628	4.30445	0.1693803	0.21281135	2.7784731	21	3 1.9	19.8
254969 2005 SO <sub>229</sub>	17.0	X	317.40116	223.59814	215.71106	1.11772	0.0666607	0.19179716	2.9778851	21	11 24.3	20.7
254970 2005 SN <sub>237</sub>	16.2	X	169.33461	246.29671	19.60816	11.34154	0.0580383	0.19663484	2.9288406	21	—	—
254971 2005 SW <sub>240</sub>	16.2	X	226.25709	35.07670	263.44299	4.29503	0.0684859	0.21394391	2.7686588	21	1 28.6	20.3
254972 2005 SE <sub>245</sub>	16.0	X	75.07769	272.31825	198.26261	13.56307	0.0972141	0.21499274	2.7596469	21	3 7.7	19.5
254973 2005 SZ <sub>246</sub>	16.2	X	290.94168	162.47833	211.95673	8.93536	0.0140729	0.17342231	3.1846820	21	7 29.1	20.8
254974 2005 SQ <sub>247</sub>	15.7	X	241.27142	229.74128	201.56857	9.17220	0.0689828	0.17339534	3.1850122	21	7 31.4	20.5
254975 2005 SQ <sub>247</sub>	16.1	X	224.82390	295.99020	222.69803	2.14350	0.0694669	0.18715315	3.0269456	21	11 1.2	20.6
254976 2005 SL <sub>250</sub>	15.8	X	357.84324	26.59162	27.97748	12.55540	0.1366987	0.19188417	2.9769848	21	12 27.5	19.6
254977 2005 SN <sub>251</sub>	15.9	X	32.70669	309.20266	10.60798	8.78619	0.1163542	0.18914049	3.0057052	21	10 15.9	19.7
254978 2005 ST <sub>252</sub>	15.9	X	20.08703	324.95137	41.44112	10.90700	0.1108716	0.19056713	2.9906854	21	11 25.2	19.7
254979 2005 SG <sub>255</sub>	16.1	X	22.36307	61.30782	350.27946	7.80057	0.1509371	0.19860538	2.9094353	21	—	—
254980 2005 SW <sub>255</sub>	15.9	X	348.66435	224.78593	179.58429	5.59269	0.0584588	0.19245518	2.9710935	21	11 25.9	19.7
254981 2005 SV <sub>256</sub>	15.5	X	70.72600	42.13855	182.45468	11.11401	0.0023419	0.17549378	3.1595718	21	7 19.3	20.1
254982 2005 SH <sub>257</sub>	16.5	X	56.45591	275.35981	112.23307	3.02458	0.0719099	0.20033116	2.8927021	21	—	—
254983 2005 SG <sub>258</sub>	16.0	X	220.77450	242.95673	40.41286	7.20395	0.0326809	0.20974917	2.8054501	21	1 7.6	20.1
254984 2005 SJ <sub>258</sub>	16.1	X	143.27991	206.72327	117.82327	3.09251	0.0648030	0.20319513	2.8654567	21	—	—
254985 2005 SS <sub>260</sub>	16.2	X	57.56052	3.18425	97.01343	5.16269	0.0700772	0.20906549	2.8115630	21	1 21.4	19.7
254986 2005 SM <sub>262</sub>	16.1	X	177.19916	186.50983	173.64540	15.17410	0.1955314	0.22006741	2.7170579	21	2 26.1	20.6
254987 2005 SM <sub>265</sub>	16.9	X	233.40032	293.50655	350.26086	10.63598	0.1751171	0.21938010	2.7227299	21	1 18.0	21.5
254988 2005 SY <sub>266</sub>	16.0	X	357.53934	76.75220	343.55633	11.96177	0.1015327	0.19520754	2.9430999	21	—	—
254989 2005 SB <sub>267</sub>	16.5	X	81.69826	198.11355	179.77618	15.16850	0.1381473	0.20375559	2.8601997	21	—	—
254990 2005 SK <sub>268</sub>	16.4	X	209.74390	297.60393	232.71918	7.00099	0.1925099	0.20973191	2.8056040	21	—	—
254991 2005 SN <sub>280</sub>	15.8	X	162.45822	295.45527	216.30617	10.32118	0.0416373	0.17405091	3.1770095	21	8 11.3	20.7
254992 2005 SZ <sub>280</sub>	16.2	X	12.37720	89.98962	357.28964	5.75529	0.0333687	0.19973796	2.8984266	21	—	—
254993 2005 SX <sub>285</sub>	16.8	X	192.61012	214.75024	57.43668	8.47423	0.0821401	0.20454740	2.8528136	21	—	—
254994 2005 TQ <sub>2</sub>	15.6	X	318.12833	213.55380	356.72078	9.18670	0.1005813	0.21573664	2.7532994	21	1 24.3	19.4
254995 2005 TC <sub>3</sub>	16.6	X	194.54889	16.90968	310.00377	3.40415	0.0738076	0.21444231	2.7643672	21	1 30.6	20.7
254996 2005 TT <sub>5</sub>	15.7	X	53.85595	351.66051	339.62003	10.33548	0.1321524	0.19043562	2.9920621	21	11 28.7	20.1
254997 2005 TZ <sub>6</sub>	15.7	X	103.69551	211.00588	238.77957	13.86838	0.0829815	0.21634089	2.7481703	21	3 14.8	19.7
254998 2005 TQ <sub>8</sub>	16.4	X	223.43101	193.72650	29.72711	17.90898	0.0686161	0.1945024	2.9012134	21	—	—
254999 2005 TS <sub>10</sub>	16.2	X	307.37629	103.75053	131.51868	4.91449	0.0105702	0.21842600	2.7306529	21	2 21.6	19.9
255000 2005 TW <sub>11</sub>	15.9	X	43.49847	277.79883	51.01148	4.53766	0.1284171	0.18697354	3.0288838	21	11 13.8	19.8
255001 2005 TX <sub>12</sub>	16.7	X	89.24450	46.59139	341.40031	1.30029	0.1153775	0.20359323	2.8617202	21	—	—
255002 2005 TT <sub>13</sub>	15.4	X	9.55828	111.01703	250.37980	8.95107	0.1622503	0.18400694	3.0613518	21	11 7.7	19.0
255003 2005 TD <sub>17</sub>	16.5	X	155.62946	330.08740	22.38641	4.27987	0.1429733	0.21319296	2.7751565	21	1 28.2	20.7
255004 2005 TT <sub>18</sub>	16.2	X	77.17351	266.61819	69.48738	1.70733	0.1214741	0.19760071	2.9192887	21	—	—
255005 2005 TU <sub>20</sub>	16.9	X	121.17759	81.55223	289.53053	0.79982	0.0839871	0.20929291	2.8095259	21	1 4.3	20.8
255006 2005 TV <sub>21</sub>	16.2	X	146.92249	295.24196	80.66252	1.62462	0.0833558	0.21334620	2.7738274	21	2 9.2	20.1
255007 2005 TB <sub>25</sub>	15.6	X	163.48595	260.12685	39.57460	6.60328	0.0910699	0.20160295	2.8805238	21	—	—
255008 2005 TH <sub>25</sub>	15.3	X	22.42279	109.74875	208.15986	9.88586	0.0930770	0.17995225	3.1071665	21	9 23.4	19.3
255009 2005 TQ <sub>25</sub>	15.9	X	324.44378	307.04899	62.72650	1.98332	0.0952275	0.17741765	3.1366893	21	9 3.1	19.7
255010 2005 TM <sub>28</sub>	15.4	X	245.83237	355.01596	134.20988	3.05904	0.1824912	0.17333250	3.1857820	21	10 5.9	20.1
255011 2005 TU <sub>28</sub>	16.1	X	283.47245	43.42506	236.37647	12.60323	0.2439417	0.22588025	2.6702415	21	2 11.9	20.6
255012 2005 TT <sub>36</sub>	16.0	X	39.92362	321.15187	43.88379	7.20508	0.0581187	0.19216337	2.9741005	21	12 14.2	20.0
255013 2005 TN <sub>40</sub>	16.3	X	58.94130	15.97275	45.39563	6.68117	0.0794317	0.20357513	2.8618898	21	—	—
255014 2005 TD <sub>41</sub>	16.5	X	264.35513	134.11332	163.43372	3.11483	0.0738436	0.22051184	2.7134059	21	3 10.0	20.3
255015 2005 TF <sub>42</sub>	15.2	X	346.80121	148.58328	214.32423	10.09806	0.0930088	0.18193392	3.0845626	21	9 26.8	19.1
255016 2005 TX <sub>46</sub>	16.0	X	234.14603	40.25475	242.37881	3.39029	0.0369004	0.21196010	2.7859072	21	1 19.7	20.0
255017 2005 TB <sub>48</sub>	15.9	X	37.31884	49.20335	353.26162	6.40775	0.1118129	0.19711920	2.9240408	21	—	—
255018 2005 TK <sub>48</sub>	15.6	X	12.24097	177.35654	230.52657	9.51532	0.0960793	0.19012965	2.9952712	21	—	—
255019 Fleurmaxwell	16.7	X	307.47926	181.11472	228.31153	1.47582	0.1722077	0.17961648	3.1110376	21	9 18.2	20.4
255020 2005 TB <sub>54</sub>	16.0	X	147.08398	218.28159	166.59248	5.25121	0.0460811	0.21458618	2.7631315	21	2 14.6	20.0
255021 2005 TS <sub>54</sub>	15.9	X	318.38135	174.35581	197.76224	9.28421	0.2546072	0.17812472	3.1283830	21	8 3.5	19.6
255022 2005 TJ <sub>55</sub>	15.9	X	53.20693	121.77052	206.99893	13.81831	0.2483186	0.19033642	2.9931016	21	12 12.8	20.4
255023 2005 TT <sub>55</sub>	16.1	X	100.34047	188.24279	125.25117	3.03291	0.0755274	0.19595919	2.9355690	21	12 25.5	20.4
255024 2005 TY <sub>61</sub>	16.0	X	243.05216	273.66683	196.65434	9.36430	0.0843950	0.17959083	3.1113338	21	9 20.0	20.6
255025 2005 TK <sub>62</sub>	16.2	X	47.46653	256.56534	82.38822	2.37116	0.1154466	0.18915308	3.0055718	21	11 30.0	20.3
255026 2005 TV <sub>63</sub>	15.5	X	113.73049	64.50231	202.89024	9.02000	0.1033275	0.19107690	2.9853638	21	11 17.2	20.1
255027 2005 TQ <sub>64</sub>	15.5	X	192.55614	91.83938	40.96767	6.21664	0.0895384	0.17463800	3.1698853	21	9 2.1	20.4
255028 2005 TY <sub>70</sub>	16.1	X	173.36115	269.76475	59.73776	4.43050	0.0950598	0.20800094	2.8211478	21	1 14.8	20.4
255029 2005 TQ <sub>72</sub>	16.2	X	321.77898	285.30392	142.50931	8.48308	0.2278799	0.18560487	3.0437558	21	11 9.1	19.3
255030 2005 TJ <sub>74</sub>	15.5	X	278.36832	283.21022	164.59869	10.59706	0.2160275	0.17959824	3.1112483	21	9 18.7	19.6
255031 2005 TE <sub>75</sub>	15.8	X	339.63336	65.37441	335.99134	9.89440	0.1791083	0.18686652	3.0300402	21	11 4.2	19.2
255032 2005 TJ <sub>78</sub>	16.0	X	173.52776	208.52821	104.61441	3.28112	0.0531471	0.20677738	2.8322659	21	—	—
255033 2005 TX <sub>84</sub>	16.2	X	229.80181	273.45266	357.58027	3.70439	0.1673441	0.21159150	2.7891417	21	—	—
255034 2005 TJ <sub>86</sub>	18.0	X	41.31943	53.65565	20.83216	19.6						

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
255041	2005	TU <sub>105</sub>	17.6	X	325.39157	167.05378	20.21400	20.83766	0.0806961	0.40031681	1.8233365	21	—	—
255042	2005	TD <sub>114</sub>	16.8	X	18.19714	95.51016	352.02781	1.55431	0.0342146	0.20272474	2.8698876	21	—	—
255043	2005	TT <sub>116</sub>	17.4	X	71.39498	236.12601	224.28721	2.50995	0.0526016	0.21441634	2.7645904	21	2 13.6	21.1
255044	2005	TW <sub>121</sub>	16.4	X	190.18825	132.40329	188.87871	5.40854	0.0507803	0.21160899	2.7889880	21	1 17.4	20.5
255045	2005	TT <sub>125</sub>	16.7	X	105.77353	350.06862	56.29710	0.90274	0.0725673	0.20958933	2.8068762	21	1 27.2	20.3
255046	2005	TY <sub>126</sub>	16.5	X	125.22885	342.33570	23.02513	1.82710	0.0406664	0.20650711	2.8347366	21	—	—
255047	2005	TT <sub>128</sub>	15.6	X	338.51554	103.09398	209.15319	10.17771	0.0446677	0.17164421	3.2066380	21	7 10.7	20.1
255048	2005	TQ <sub>131</sub>	15.6	X	313.03731	50.50385	32.71830	12.17699	0.0904029	0.18811239	3.0166467	21	11 18.4	19.5
255049	2005	TO <sub>137</sub>	16.1	X	103.75174	292.86990	41.76678	12.59929	0.0679763	0.19749814	2.9202994	21	—	—
255050	2005	TS <sub>137</sub>	16.4	X	103.68861	233.38993	101.89565	3.42637	0.0598120	0.19740756	2.9211926	21	—	—
255051	2005	TM <sub>139</sub>	16.4	X	119.81656	190.73272	150.92210	2.81245	0.0620362	0.20249031	2.8721022	21	—	—
255052	2005	TS <sub>139</sub>	16.2	X	91.63096	234.57164	129.35099	3.09545	0.0984133	0.20127357	2.8836656	21	—	—
255053	2005	TE <sub>141</sub>	15.9	X	82.99534	242.53610	44.88559	8.77210	0.1801886	0.18963128	3.0005168	21	11 15.8	20.4
255054	2005	TZ <sub>142</sub>	16.3	X	217.93759	150.86585	139.74774	4.14353	0.0669850	0.21091438	2.7951080	21	1 11.7	20.5
255055	2005	TY <sub>150</sub>	16.0	X	109.45611	202.56855	118.78605	3.27827	0.0770719	0.19795956	2.9157597	21	—	—
255056	2005	TT <sub>152</sub>	16.0	X	257.68855	195.08051	270.36566	13.87326	0.2185673	0.17182664	3.2043680	21	9 6.5	21.1
255057	2005	TJ <sub>155</sub>	16.6	X	343.40597	328.65692	261.27299	2.79643	0.0963658	0.22325609	2.6911248	21	3 21.5	19.8
255058	2005	TR <sub>160</sub>	16.2	X	54.30877	320.91041	348.40189	4.49376	0.0466463	0.18498505	3.0505511	21	10 21.1	20.5
255059	2005	TG <sub>161</sub>	15.6	X	143.30680	321.63005	248.83417	4.37968	0.0898628	0.18251426	3.0780205	21	10 5.7	20.3
255060	2005	TG <sub>167</sub>	16.5	X	56.10105	26.39987	2.20506	1.90912	0.1401548	0.19749021	2.9233776	21	—	—
255061	2005	TX <sub>167</sub>	16.4	X	32.98017	340.70884	23.27292	1.98035	0.1224948	0.18995337	2.9971240	21	12 12.9	20.2
255062	2005	TS <sub>170</sub>	16.4	X	230.83650	247.98148	29.35925	4.88143	0.0341513	0.21236363	2.7823768	21	1 11.2	20.4
255063	2005	TX <sub>174</sub>	15.6	X	109.15064	188.81163	91.33181	4.16381	0.1315706	0.19264806	2.9691100	21	11 29.4	20.3
255064	2005	TC <sub>178</sub>	16.1	X	97.15274	306.46891	71.07277	3.05463	0.0845533	0.20424984	2.8555838	21	—	—
255065	2005	TX <sub>181</sub>	15.6	X	16.61697	17.20797	294.44979	8.01216	0.0711027	0.18008547	3.1056339	21	9 2.9	19.8
255066	2005	TQ <sub>182</sub>	15.5	X	337.02194	254.19838	81.78788	6.85118	0.1908740	0.18061614	3.0995478	21	8 3.5	18.9
255067	2005	TD <sub>191</sub>	15.4	X	213.22647	314.11235	202.70175	16.06450	0.0079905	0.18336851	3.0684535	21	10 23.5	19.6
255068	2005	UO <sub>1</sub>	16.2	X	34.58654	16.43486	10.06125	5.09698	0.1234593	0.19305944	2.9648907	21	—	—
255069	2005	UP <sub>1</sub>	16.4	X	5.53511	76.71539	30.59595	2.94234	0.1483072	0.19941246	2.9015798	21	—	—
255070	2005	UP <sub>3</sub>	16.0	X	30.31099	334.37569	53.01848	12.32100	0.0813782	0.19241270	2.9715307	21	—	—
255071	2005	UH <sub>6</sub>	18.2	X	312.93167	200.22101	19.30561	2.63947	0.6323457	0.98385105	1.0011899	21	—	—
255072	2005	UP <sub>8</sub>	15.7	X	353.99292	350.68742	73.19037	9.09634	0.1992013	0.18890859	3.0081645	21	—	—
255073	2005	Victoriabond	16.3	X	117.00146	259.22732	71.66929	3.03613	0.0926527	0.19617464	2.9334192	21	—	—
255074	2005	UZ <sub>17</sub>	16.9	X	347.33344	206.41083	227.42476	4.00627	0.2136964	0.19177189	2.9781466	21	—	—
255075	2005	UN <sub>18</sub>	15.7	X	16.99065	274.35676	68.86908	5.22410	0.1643403	0.18268595	3.0760918	21	10 29.9	19.4
255076	2005	UP <sub>18</sub>	15.7	X	84.17060	280.46179	61.24131	6.19006	0.0482029	0.19232876	2.9723952	21	—	—
255077	2005	UU <sub>18</sub>	15.8	X	348.07285	328.67772	68.90935	11.38243	0.0931360	0.18452135	3.0556596	21	11 16.7	19.6
255078	2005	UU <sub>21</sub>	16.4	X	210.59715	192.91883	11.16179	4.41385	0.0456037	0.19169419	2.9789514	21	12 12.8	20.6
255079	2005	UF <sub>30</sub>	15.7	X	339.88226	169.02069	225.73120	11.17727	0.1921038	0.18220755	3.0814738	21	10 29.5	18.9
255080	2005	UQ <sub>35</sub>	16.6	X	76.19467	141.97397	216.57548	1.29098	0.0150321	0.19343853	2.9610158	21	—	—
255081	2005	UG <sub>36</sub>	15.8	X	124.93867	27.36221	225.24558	6.38075	0.1047818	0.18505589	3.0497725	21	11 10.4	20.6
255082	2005	UD <sub>39</sub>	15.5	X	280.45666	54.05769	61.65762	5.13163	0.1112096	0.18420188	3.0591916	21	11 11.6	19.6
255083	2005	UG <sub>39</sub>	16.3	X	43.74412	153.73055	153.86290	1.44825	0.1703771	0.18089353	3.0963784	21	10 24.4	20.2
255084	2005	UT <sub>39</sub>	15.6	X	97.13404	89.18701	223.23499	4.26098	0.2436277	0.19241276	2.9715301	21	—	—
255085	2005	UJ <sub>40</sub>	15.7	X	39.15257	230.08558	66.63009	5.43504	0.0954249	0.17598333	3.1537095	21	9 25.2	19.9
255086	2005	UL <sub>40</sub>	16.6	X	21.01800	279.68860	116.83077	1.09367	0.1591231	0.18990564	2.9976262	21	—	—
255087	2005	UY <sub>40</sub>	15.3	X	273.73226	252.76691	229.49649	10.28824	0.0395304	0.18445772	3.0563623	21	11 20.0	19.5
255088	2005	UV <sub>41</sub>	16.4	X	60.89205	182.75306	200.34745	7.18198	0.2277065	0.19704634	2.9247615	21	—	—
255089	2005	UU <sub>42</sub>	16.2	X	49.50402	200.12660	195.40064	4.76017	0.2006152	0.19665518	2.9286386	21	—	—
255090	2005	UV <sub>42</sub>	16.3	X	71.01052	241.51520	96.66669	2.24767	0.1635457	0.19281066	2.9674405	21	—	—
255091	2005	UU <sub>44</sub>	16.6	X	180.03487	159.52696	109.08660	2.90401	0.0265664	0.19682454	2.9269584	21	—	—
255092	2005	UP <sub>47</sub>	18.0	X	152.70260	277.56859	45.22660	21.38405	0.1340862	0.39281983	1.8464623	21	—	—
255093	2005	UM <sub>48</sub>	15.7	X	34.38723	146.37838	215.89807	9.25769	0.1157044	0.18922350	3.0048260	21	12 11.8	19.8
255094	2005	UM <sub>49</sub>	15.6	X	11.38140	101.46035	269.69059	7.83756	0.1527749	0.18720895	3.0263442	21	11 23.4	19.2
255095	2005	UN <sub>50</sub>	15.7	X	57.46169	177.77440	241.52671	4.71341	0.0521647	0.20152770	2.8812408	21	—	—
255096	2005	UY <sub>57</sub>	15.7	X	118.61955	219.58490	34.61128	11.71266	0.1005743	0.18389612	3.0625816	21	11 3.7	20.3
255097	2005	UH <sub>61</sub>	15.3	X	342.35238	180.45196	211.92602	15.17525	0.1980102	0.18242162	3.0790626	21	11 1.6	18.5
255098	2005	UP <sub>62</sub>	15.6	X	17.90299	258.59467	57.90558	10.09159	0.0891837	0.17647455	3.1478545	21	9 21.6	19.8
255099	2005	UK <sub>63</sub>	15.8	X	1.50995	118.04929	220.43804	6.22959	0.1762852	0.17889614	3.1193832	21	9 22.8	19.4
255100	2005	UQ <sub>65</sub>	15.3	X	161.50478	194.91523	276.45706	21.06412	0.0719305	0.23173633	2.6250644	21	6 25.2	18.9
255101	2005	UB <sub>66</sub>	15.3	X	248.34389	223.54413	227.64789	8.77317	0.0318520	0.17809907	3.1286834	21	9 7.2	19.9
255102	2005	UC <sub>67</sub>	16.1	X	57.71923	224.01637	181.22291	14.02010	0.1441782	0.19920792	2.9035656	21	—	—
255103	2005	US <sub>67</sub>	15.3	X	330.68587	199.75862	194.54419	10.48110	0.0243923	0.18289380	3.0737608	21	10 17.6	19.4
255104	2005	UJ <sub>68</sub>	16.3	X	64.38221	286.54675	76.50599	6.58946	0.1483653	0.19500139	2.9451737	21	—	—
255105	2005	UB <sub>70</sub>	15.7	X	344.66664	96.94443	300.99086	10.75343	0.0790956	0.18695280	3.0291078	21	11 6.9	19.8
255106	2005	UW <sub>70</sub>	15.5	X	78.66200	243.54328	8.46152	10.61133	0.0402026	0.17758162	3.1347582	21	9 12.4	20.0
255107	2005	UH <sub>73</sub>	15.5	X	350.88424	178.11346	226.36334	8.83419	0.0887225	0.18677092	3.0310740	21	11 29.0	19.3
255108	2005	UD <sub>87</sub>	16.5	X	94.20469	214.02374	181.05143	1.97931	0.0741832	0.20472455	2.8511677	21	—	—
255109	2005	UU <sub>88</sub>	16.3	X	87.21997	219.48362	174.74280	2.02224	0.0719881	0.20349960	2.8625978	21	—	—
255110	2005	UH <sub>90</sub>	15.3	X	230.29000	167.01615	322.78326	5.27577	0.0896492	0.17955665	3.1117287	21	9 27.9	19.9
255111	2005	UB <sub>93</sub>												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
255121 2005 UW <sub>113</sub>	16.0	X	1.41171	307.36049	30.43520	1.49358	0.2040431	0.17888025	3.1195680	21	9 26.2	19.1
255122 2005 UB <sub>114</sub>	16.4	X	45.67748	38.77597	31.92346	1.76449	0.1225084	0.19894548	2.9061186	21	—	—
255123 2005 UR <sub>115</sub>	15.5	X	240.26766	95.74793	27.28431	5.19854	0.1108776	0.17985201	3.1083209	21	10 1.5	20.1
255124 2005 UU <sub>119</sub>	15.7	X	72.00004	16.53308	222.16573	9.94875	0.1641408	0.17492166	3.1664575	21	8 29.5	20.3
255125 2005 UH <sub>120</sub>	16.4	X	346.17785	145.29885	1.94146	1.61944	0.0337410	0.20477379	2.8507107	21	—	—
255126 2005 UL <sub>126</sub>	16.0	X	84.20803	25.94440	38.34724	2.41918	0.0441693	0.20609870	2.8384803	21	1 18.7	19.7
255127 2005 UE <sub>128</sub>	16.0	X	247.36106	250.54628	230.28145	6.73460	0.0816986	0.18058084	3.0999518	21	10 8.1	20.5
255128 2005 US <sub>128</sub>	15.7	X	27.96274	294.63524	46.70396	2.37289	0.0569978	0.18309063	3.0715575	21	10 29.5	19.8
255129 2005 UC <sub>130</sub>	16.7	X	32.69843	288.05512	89.40727	11.58437	0.2944509	0.19179946	2.9778613	21	—	—
255130 2005 UG <sub>130</sub>	16.3	X	181.71683	289.79709	87.05575	14.01951	0.2242659	0.21792686	2.7348208	21	3 31.4	21.2
255131 2005 UJ <sub>130</sub>	15.7	X	56.76682	247.11622	98.48375	11.86756	0.1576009	0.19084617	2.9877694	21	12 25.2	19.9
255132 2005 UE <sub>131</sub>	15.0	X	334.20869	103.87203	235.60238	13.75349	0.0553630	0.17188179	3.2036825	21	8 4.8	19.5
255133 2005 UO <sub>132</sub>	15.6	X	33.26444	277.42442	124.24135	11.26577	0.1267804	0.19311630	2.9643087	21	—	—
255134 2005 UY <sub>136</sub>	15.9	X	300.47440	171.00506	211.01997	8.73632	0.0404797	0.17566461	3.1575231	21	8 16.7	20.3
255135 2005 UR <sub>138</sub>	15.1	X	31.27632	50.66009	222.54433	16.16954	0.1045056	0.17147486	3.2087490	21	8 5.7	19.6
255136 2005 UE <sub>141</sub>	15.5	X	69.96372	147.62545	213.85451	9.59082	0.0939393	0.19329169	2.9625152	21	—	—
255137 2005 UY <sub>141</sub>	15.6	X	148.87147	246.89951	94.06580	10.24863	0.1396027	0.20549969	2.8439935	21	1 7.4	19.7
255138 2005 UY <sub>141</sub>	15.4	X	4.10037	262.75682	92.81679	11.36337	0.1275243	0.18208487	3.0828577	21	10 24.9	19.3
255139 2005 UP <sub>142</sub>	16.1	X	105.42701	286.20037	51.35981	2.75604	0.0930580	0.19664655	2.9287243	21	—	—
255140 2005 UT <sub>146</sub>	15.6	X	343.67408	107.91294	241.83133	7.98203	0.0908483	0.17715326	3.1398094	21	9 2.1	19.8
255141 2005 UE <sub>148</sub>	16.2	X	123.60501	346.81787	1.92398	2.40166	0.0526943	0.20113597	2.8849805	21	—	—
255142 2005 US <sub>150</sub>	15.6	X	36.46019	124.90925	229.89136	5.40828	0.1211076	0.18721998	3.0262253	21	12 5.8	19.6
255143 2005 UY <sub>153</sub>	16.1	X	169.98642	250.87481	43.80984	2.60649	0.0462056	0.19858187	2.9096650	21	—	—
255144 2005 UD <sub>155</sub>	16.2	X	94.52519	130.44633	228.63540	0.96529	0.1414835	0.19821281	2.9132756	21	—	—
255145 2005 UY <sub>161</sub>	15.5	X	354.28912	293.84821	24.53430	8.70311	0.1359887	0.17967642	3.1103456	21	9 28.1	19.1
255146 2005 UD <sub>165</sub>	16.2	X	126.98356	13.85925	233.36797	2.32975	0.0867172	0.18550193	3.0448817	21	11 3.8	20.7
255147 2005 UX <sub>166</sub>	16.7	X	231.10405	60.80527	227.04891	4.12464	0.1511583	0.21248098	2.7813524	21	1 18.8	21.2
255148 2005 UM <sub>167</sub>	15.9	X	146.05921	83.74042	219.33900	7.51279	0.0801584	0.19899793	2.9056080	21	—	—
255149 2005 UA <sub>170</sub>	15.5	X	316.15066	18.00346	37.18888	10.84399	0.0581334	0.18225778	3.0809075	21	10 22.7	19.6
255150 2005 US <sub>171</sub>	16.7	X	352.15753	86.67874	311.57636	0.90088	0.0679252	0.18573024	3.0423860	21	11 21.1	20.7
255151 2005 UF <sub>174</sub>	15.8	X	347.01198	8.56630	6.59716	5.25684	0.1677363	0.18127955	3.0919812	21	10 16.0	19.1
255152 2005 UY <sub>176</sub>	15.9	X	23.87901	21.79238	10.10518	2.05194	0.0747736	0.18987019	2.9979993	21	12 28.9	19.9
255153 2005 UY <sub>177</sub>	16.0	X	134.56369	88.64903	252.78110	5.28947	0.0487600	0.20201774	2.8765795	21	—	—
255154 2005 UL <sub>179</sub>	16.4	X	231.93126	35.25781	118.20158	2.50568	0.1150595	0.18206741	3.0830547	21	10 28.9	20.9
255155 2005 UD <sub>181</sub>	16.3	X	142.21827	152.33142	170.49920	2.16309	0.0679845	0.19867836	2.9087229	21	—	—
255156 2005 UF <sub>181</sub>	15.9	X	115.91916	99.81702	223.63459	9.70499	0.1313026	0.19532729	2.9418968	21	—	—
255157 2005 UN <sub>183</sub>	15.9	X	210.20010	159.71584	44.17218	3.24488	0.0444571	0.19002314	2.9963903	21	12 12.1	20.1
255158 2005 UU <sub>183</sub>	16.2	X	90.78659	34.10988	224.80863	4.75109	0.1106916	0.17998509	3.1067886	21	10 11.5	20.9
255159 2005 UV <sub>183</sub>	16.7	X	6.47756	61.16350	52.03622	1.96113	0.1531513	0.19896450	2.9059334	21	—	—
255160 2005 UO <sub>184</sub>	15.9	X	139.30409	274.97583	50.08696	11.30891	0.0693245	0.19959814	2.8997800	21	—	—
255161 2005 UG <sub>190</sub>	15.6	X	89.19791	70.77188	229.81429	10.28677	0.0900730	0.18732300	3.0251157	21	11 28.6	20.1
255162 2005 UL <sub>190</sub>	16.3	X	226.30182	101.31274	38.18316	1.56669	0.1070644	0.17965234	3.1106236	21	10 5.9	20.8
255163 2005 UT <sub>192</sub>	16.3	X	33.40064	217.27371	207.08161	14.89021	0.1473843	0.19894097	2.9061625	21	—	—
255164 2005 UP <sub>196</sub>	16.0	X	52.14374	19.81125	48.51917	6.84269	0.0558256	0.20199849	2.8767622	21	—	—
255165 2005 UT <sub>198</sub>	16.5	X	142.79845	122.81238	191.43509	1.68330	0.0920638	0.20004773	2.8954338	21	—	—
255166 2005 US <sub>199</sub>	16.2	X	262.74130	348.03957	136.97684	1.42019	0.1352526	0.18342066	3.0678718	21	10 27.2	20.4
255167 2005 UF <sub>201</sub>	15.3	X	359.60465	177.35305	219.54635	9.12810	0.0765173	0.18689373	3.0297461	21	12 1.5	19.3
255168 2005 US <sub>205</sub>	16.6	X	309.68789	277.94050	174.07231	1.01108	0.0874807	0.18643054	3.0347623	21	11 26.8	20.4
255169 2005 UC <sub>210</sub>	15.9	X	296.02610	334.56329	83.04911	6.52417	0.1201489	0.17852373	3.1237198	21	9 22.1	20.0
255170 2005 UN <sub>217</sub>	16.0	X	18.58304	359.09314	43.98026	12.26157	0.1743179	0.19280719	2.9674761	21	—	—
255171 2005 UQ <sub>217</sub>	16.0	X	176.49500	351.56203	183.35343	5.35245	0.0847153	0.17707285	3.1407598	21	9 27.9	20.8
255172 2005 UO <sub>221</sub>	15.4	X	301.65386	190.95033	239.85854	7.81415	0.1682492	0.18167292	3.0875163	21	10 5.5	19.2
255173 2005 UE <sub>222</sub>	16.1	X	309.58330	338.53141	237.95886	7.56965	0.1057610	0.21057820	2.7980821	21	1 17.1	20.0
255174 2005 UL <sub>226</sub>	15.6	X	264.23455	252.48966	220.39719	8.49193	0.0646885	0.18275392	3.0753290	21	10 22.9	20.0
255175 2005 UU <sub>230</sub>	16.3	X	46.40152	256.54014	45.80542	1.05030	0.1553576	0.18193152	3.0845897	21	10 19.0	20.4
255176 2005 UL <sub>236</sub>	16.1	X	164.64832	358.36629	201.45102	9.34012	0.0262309	0.18039512	3.1020790	21	10 16.5	20.5
255177 2005 UA <sub>239</sub>	15.4	X	215.95569	91.96931	75.70726	12.07116	0.1421055	0.18217376	3.0818547	21	10 29.5	20.3
255178 2005 UJ <sub>241</sub>	15.8	X	223.52798	339.49000	197.59004	10.53348	0.0567939	0.18649368	3.0340772	21	11 24.6	20.2
255179 2005 UD <sub>242</sub>	16.0	X	356.92798	128.89343	290.38264	4.68040	0.0629255	0.18861604	3.0112741	21	12 24.6	19.8
255180 2005 UT <sub>246</sub>	16.1	X	29.70688	353.57761	53.60057	2.31943	0.0614930	0.19099725	2.9861937	21	—	—
255181 2005 UG <sub>248</sub>	16.3	X	37.70402	221.10886	87.15146	2.33127	0.1409540	0.18071610	3.0984048	21	10 13.0	20.2
255182 2005 UE <sub>255</sub>	16.5	X	86.81668	287.46813	142.83496	1.72115	0.0650046	0.21034787	2.8001243	21	1 30.6	20.1
255183 2005 UJ <sub>256</sub>	16.6	X	338.32309	286.93350	141.23826	2.20556	0.1140592	0.19066997	2.9896099	21	12 11.5	20.2
255184 2005 UR <sub>256</sub>	16.4	X	307.56807	118.43260	46.79108	6.30395	0.0133660	0.20344308	2.8631280	21	—	—
255185 2005 UH <sub>258</sub>	16.3	X	85.63012	238.21899	68.58948	4.64925	0.0950253	0.18901881	3.0069950	21	12 2.6	20.5
255186 2005 UG <sub>265</sub>	16.4	X	221.30186	21.38192	132.13308	2.12019	0.1307887	0.18053690	3.1004548	21	10 15.7	21.0
255187 2005 UC <sub>279</sub>	16.1	X	303.04320	248.56556	190.07897	2.23831	0.0979813	0.18379400	3.0637160	21	10 29.8	20.0
255188 2005 UK <sub>282</sub>	16.4	X	302.25660	263.10532	202.44895	9.83120	0.0801655	0.18941366	3.0028146	21	12 4.7	20.3
255189 2005 UV <sub>284</sub>	15.7	X	240.12484	284.45003	189.76665	9.65648	0.0613839	0.17951950	3.1121580	21	9 25.2	20.1
255190 2005 UU <sub>287</sub>	16.0	X	119.64788	114.08066	117.32669	3.71669	0.1248823	0.18215036	3.0821187	21	10 12.7	20.9
255191 2005 UF <sub>294</sub>	15.8	X	155.06987	276.72254	32.50371	10.65423	0.0770339	0.19977214	2.8980960	21	—	—
255192 2005 UY <sub>299</sub>	16.3	X	44.55900	251.54025	67.90286	1.92737	0.1679654	0.18374542	3.0642560	21	11 9.1	20.4
255193 2005 UA <sub>304</sub>	15.7	X	198.20981	31.66710	192.15974	10.57469	0.0665483	0.18945131	3.0024167	21	12 20.3	20.3
255194 2005 UH <sub>308</sub>												



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255201	2005	UY <sub>321</sub>	15.6 <sup>m</sup>	X	37.36614	109.07837	250.97585	8.56404	0.1350125	0.18718076	3.0266480	21	12 15.1	19.6
255202	2005	UU <sub>327</sub>	15.4	X	348.36605	147.46363	256.25600	8.56376	0.0913135	0.18436248	3.0574147	21	11 23.1	19.1
255203	2005	UJ <sub>329</sub>	16.6	X	73.64481	343.74322	74.20741	3.12475	0.0538307	0.20444988	2.8537207	21	—	—
255204	2005	UM <sub>330</sub>	15.7	X	194.08929	328.42205	222.56733	9.25379	0.0631126	0.18328274	3.0694107	21	11 6.3	20.2
255205	2005	UU <sub>337</sub>	15.9	X	25.85212	41.79239	215.26563	7.91942	0.1518954	0.17067453	3.2187722	21	7 15.5	19.8
255206	2005	UD <sub>338</sub>	16.3	X	109.15586	60.02023	215.02179	9.89908	0.0678952	0.18715574	3.0269177	21	11 17.8	20.8
255207	2005	UG <sub>341</sub>	15.7	X	79.94963	95.31472	215.70097	16.60137	0.0806598	0.18918777	3.0052044	21	11 30.1	20.2
255208	2005	UN <sub>343</sub>	15.5	X	20.90228	256.56819	82.43081	9.15758	0.0270874	0.18413267	3.0599581	21	11 10.2	19.1
255209	2005	UC <sub>349</sub>	15.7	X	12.40508	149.96557	1.82462	8.13308	0.0665385	0.20944170	2.8081952	21	1 30.9	19.3
255210	2005	UH <sub>351</sub>	15.1	X	101.77511	41.83499	250.74141	10.82119	0.1404124	0.19158320	2.9801018	21	12 7.0	19.7
255211	2005	UN <sub>351</sub>	15.8	X	21.51095	340.75068	357.86281	6.78349	0.1223303	0.18456895	3.0551342	21	10 22.8	19.8
255212	2005	UL <sub>353</sub>	15.3	X	33.51238	89.66845	265.80858	9.44592	0.1430968	0.18806587	3.0171442	21	12 5.7	19.2
255213	2005	UW <sub>353</sub>	15.6	X	77.35416	9.25035	337.55289	6.67124	0.1052424	0.19319622	2.9634912	21	—	—
255214	2005	UQ <sub>354</sub>	15.1	X	59.24749	96.28352	259.70384	11.33006	0.0929689	0.19098857	2.9862842	21	12 31.1	19.4
255215	2005	UG <sub>355</sub>	15.5	X	15.76142	157.92861	260.31539	8.72060	0.0610022	0.19234124	2.9722667	21	—	—
255216	2005	UQ <sub>357</sub>	15.4	X	339.74505	280.07565	105.28590	17.80026	0.2811748	0.18259021	3.0771669	21	10 26.9	18.5
255217	2005	UX <sub>359</sub>	16.3	X	242.56590	230.31694	153.96337	4.57510	0.0672807	0.21196907	2.7858285	21	1 31.7	20.4
255218	2005	UR <sub>378</sub>	16.3	X	52.16459	320.90987	181.97395	3.16534	0.2186272	0.21395529	2.7685606	21	4 1.9	19.0
255219	2005	UZ <sub>384</sub>	15.7	X	353.42058	311.21018	47.78122	6.23757	0.1112337	0.17910627	3.1169429	21	10 6.9	19.4
255220	2005	UY <sub>391</sub>	16.5	X	220.02195	117.92632	75.41457	3.96447	0.0446121	0.19149374	2.9810299	21	12 11.2	20.8
255221	2005	UU <sub>392</sub>	16.7	X	160.31957	201.93703	74.35861	3.06185	0.0191774	0.19842820	2.9111670	21	—	—
255222	2005	UJ <sub>397</sub>	16.1	X	74.83432	261.48495	84.12590	5.61991	0.1300096	0.19458831	2.9493403	21	—	—
255223	2005	UQ <sub>398</sub>	15.4	X	322.08368	152.45331	263.26103	6.92147	0.0244801	0.18478531	3.0527489	21	10 30.8	19.7
255224	2005	UD <sub>399</sub>	15.5	X	275.24512	83.83211	43.15863	11.09396	0.0692077	0.18512246	3.0490413	21	11 22.5	19.5
255225	2005	UM <sub>408</sub>	16.1	X	186.93457	340.13206	189.48343	5.94895	0.0770129	0.18111385	3.0938668	21	10 2.9	20.9
255226	2005	UU <sub>411</sub>	16.1	X	296.47980	12.16386	103.08395	4.01249	0.1149002	0.18635658	3.0355652	21	12 4.1	19.8
255227	2005	UO <sub>420</sub>	15.4	X	115.47850	222.28922	48.31699	15.01962	0.0594839	0.18587642	3.0407907	21	11 17.0	19.9
255228	2005	UH <sub>422</sub>	16.1	X	205.04943	138.52965	39.92012	2.83840	0.0172666	0.18431705	3.0591971	21	11 7.6	20.4
255229	2005	UJ <sub>424</sub>	16.4	X	109.02157	259.99394	20.23630	1.72743	0.0679672	0.18875696	3.0097752	21	11 23.2	20.7
255230	2005	UZ <sub>432</sub>	16.1	X	220.14013	308.44265	227.14427	9.05850	0.0512781	0.18484116	3.0521339	21	11 18.4	20.5
255231	2005	UD <sub>438</sub>	16.1	X	308.67088	134.04935	284.22800	2.97697	0.1689855	0.17963944	3.1107725	21	10 1.4	19.9
255232	2005	UF <sub>438</sub>	15.5	X	1.64876	133.20974	251.28621	4.58599	0.1887823	0.18471069	3.0535711	21	11 28.4	18.9
255233	2005	UT <sub>438</sub>	16.6	X	94.45166	13.71710	41.88772	4.15899	0.0882926	0.20911955	2.8110784	21	1 27.3	20.2
255234	2005	UO <sub>439</sub>	16.1	X	284.88115	57.53430	282.49846	10.10304	0.1477708	0.23270320	2.6177880	21	5 16.0	19.7
255235	2005	UH <sub>440</sub>	15.9	X	359.44060	24.61517	2.47929	9.62527	0.0826902	0.18792115	3.0186929	21	11 16.2	19.9
255236	2005	UK <sub>440</sub>	15.7	X	326.31639	152.95489	17.34424	13.54539	0.0792366	0.20653801	2.8344538	21	—	—
255237	2005	UF <sub>443</sub>	15.9	X	263.32626	121.38297	1.91397	10.35861	0.2851496	0.18173787	3.0867806	21	10 3.1	20.2
255238	2005	UZ <sub>444</sub>	16.2	X	342.13755	347.52232	56.51045	1.42630	0.1053401	0.18655024	3.0334600	21	11 15.2	19.7
255239	2005	UM <sub>446</sub>	15.4	X	356.99668	148.59963	264.30790	8.00045	0.0497233	0.19105136	2.9856299	21	12 16.2	19.3
255240	2005	UM <sub>447</sub>	15.2	X	267.47313	177.69478	264.58920	9.60251	0.0398501	0.17736295	3.1373342	21	9 17.2	19.8
255241	2005	UP <sub>459</sub>	16.3	X	2.11940	112.18793	343.61757	1.07682	0.0983681	0.19458692	2.9493544	21	—	—
255242	2005	UW <sub>460</sub>	16.0	X	181.83767	155.47188	16.47645	1.85560	0.0645514	0.17594202	3.1542032	21	9 30.5	20.8
255243	2005	UD <sub>482</sub>	15.1	X	227.20310	203.93242	243.57198	8.21858	0.0497438	0.17445758	3.1720704	21	8 5.9	19.8
255244	2005	UC <sub>485</sub>	15.3	X	359.09958	109.95384	189.57978	15.74277	0.2339604	0.17632552	3.1496280	21	7 24.1	18.8
255245	2005	UJ <sub>495</sub>	15.4	X	287.97198	127.78154	327.62439	9.05034	0.1405867	0.18429769	3.0581313	21	10 18.7	19.5
255246	2005	UE <sub>497</sub>	16.2	X	140.59175	284.38489	75.76323	5.97609	0.1383633	0.20972691	2.8056486	21	1 20.9	20.3
255247	2005	UB <sub>500</sub>	15.3	X	24.01467	233.90397	126.25336	11.88322	0.1266828	0.18537754	3.0462436	21	11 28.5	19.4
255248	2005	UR <sub>508</sub>	16.0	X	17.55022	269.48979	136.65325	2.72598	0.1218539	0.19126588	2.9833970	21	—	—
255249	2005	UZ <sub>508</sub>	15.6	X	191.36216	138.76673	233.09220	6.02814	0.0739799	0.15158585	3.4836159	21	3 27.8	20.9
255250	2005	UP <sub>510</sub>	16.5	X	150.53446	259.06056	49.79306	2.62483	0.0723096	0.19751366	2.9201464	21	—	—
255251	2005	UR <sub>511</sub>	17.3	X	324.32303	125.72379	305.67856	1.52567	0.1732580	0.18484770	3.0520620	21	11 18.5	20.6
255252	2005	UA <sub>514</sub>	16.4	X	315.43621	43.07488	1.55342	1.62060	0.0854396	0.17842619	3.1248582	21	10 4.5	20.2
255253	2005	US <sub>519</sub>	15.7	X	92.09096	160.59445	147.55100	9.35044	0.0766287	0.19155803	2.9803629	21	12 10.8	20.2
255254	2005	US <sub>523</sub>	16.4	X	277.12120	151.51767	89.13016	4.81950	0.0443137	0.21294670	2.7727956	21	1 18.3	20.2
255255	2005	UP <sub>524</sub>	16.2	X	348.27141	90.93701	239.99823	4.82570	0.0506712	0.17363547	3.1820751	21	8 17.6	20.5
255256	2005	VL	18.1	X	19.05847	227.93280	226.55436	21.51185	0.0787560	0.38903879	1.8584068	21	—	—
255257	2005	Mechwart	15.4	X	298.87287	225.90609	265.89775	11.59933	0.0850024	0.18793230	3.0185736	21	12 30.6	19.3
255258	2005	VH <sub>4</sub>	15.8	X	299.30267	183.09386	253.75750	11.01282	0.2879838	0.17998797	3.1067554	21	9 17.9	19.7
255259	2005	VQ <sub>6</sub>	15.3	X	305.68084	156.44998	272.29200	8.74165	0.0990173	0.18053428	3.1004847	21	10 16.2	19.4
255260	2005	VV <sub>6</sub>	15.8	X	255.65351	75.31299	18.22144	4.52379	0.0936151	0.17493981	3.1662385	21	9 15.0	20.2
255261	2005	VU <sub>7</sub>	15.7	X	310.71687	83.53042	29.62506	11.63594	0.1056234	0.18883943	3.0088990	21	12 23.9	19.5
255262	2005	VH <sub>25</sub>	15.4	X	197.30221	309.62157	251.03419	7.81466	0.0586516	0.18796290	3.0182459	21	11 22.1	19.7
255263	2005	VG <sub>26</sub>	16.3	X	268.98988	332.24419	249.16745	3.50156	0.0545256	0.20915357	2.8107736	21	—	—
255264	2005	VG <sub>32</sub>	16.2	X	45.47593	314.41194	72.64866	3.76809	0.1581804	0.19243876	2.9172625	21	—	—
255265	2005	VH <sub>41</sub>	16.1	X	338.35352	353.11586	80.06344	7.66342	0.0404882	0.18764868	3.0216144	21	12 14.9	20.0
255266	2005	VH <sub>42</sub>	15.9	X	148.53629	356.66596	76.03542	14.83588	0.1763068	0.21782422	2.7356799	21	5 4.2	20.4
255267	2005	VE <sub>48</sub>	16.2	X	40.86620	312.86263	56.14606	11.12613	0.1110237	0.19063535	2.9899717	21	12 27.6	20.4
255268	2005	VH <sub>49</sub>	15.5	X	10.28943	299.30787	51.35984	18.95122	0.3364579	0.18344113	3.0676436	21	11 19.7	18.5
255269	2005	VK <sub>49</sub>	15.2	X	1.30663	128.30654	299.93604	8.74886	0.0647359	0.18011757	3.1052649	21	—	—
255270	2005	VV												

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
255281	2005	VW <sub>71</sub>	16.1	X	101.55674	230.56033	114.64397	3.05974	0.0354197	0.19461013	2.9491199	21	—	—
255282	2005	VX <sub>75</sub>	15.3	X	9.82097	53.40841	254.45045	6.90766	0.0219042	0.17244849	3.1966601	21	8 16.3	19.8
255283	2005	VA <sub>77</sub>	15.3	X	300.97245	161.00500	248.23785	16.49193	0.1905512	0.18022030	3.1040849	21	8 27.5	19.6
255284	2005	VO <sub>77</sub>	16.2	X	31.61197	354.41096	33.94591	1.66726	0.0611234	0.19101824	2.9859749	21	—	—
255285	2005	VF <sub>78</sub>	15.4	X	64.63204	85.19964	269.16741	7.90519	0.0656345	0.18974948	2.9992706	21	—	—
255286	2005	VS <sub>78</sub>	15.4	X	324.94601	319.75056	88.17997	10.90271	0.0777033	0.18220561	3.0814956	21	10 28.9	19.5
255287	2005	VS <sub>81</sub>	14.8	X	12.18647	244.55467	71.12551	12.26341	0.0314838	0.17442350	3.1724835	21	9 8.8	19.3
255288	2005	VE <sub>85</sub>	15.4	X	337.67936	23.19477	80.44787	12.17349	0.0931993	0.19225967	2.9731074	21	—	—
255289	2005	VF <sub>90</sub>	15.5	X	296.17351	356.19005	20.55728	7.59526	0.0200689	0.16934146	3.2356424	21	8 12.8	20.1
255290	2005	VF <sub>99</sub>	15.3	X	303.81900	57.98473	51.50462	17.34582	0.2002465	0.18213548	3.0822866	21	11 26.1	18.7
255291	2005	VJ <sub>102</sub>	15.8	X	311.88199	13.16434	97.12916	4.43347	0.0394378	0.18964971	3.0003224	21	12 25.8	19.7
255292	2005	VH <sub>107</sub>	16.1	X	100.23654	284.63837	307.99816	3.29070	0.0941205	0.17509992	3.1643080	21	9 17.2	20.8
255293	2005	VC <sub>109</sub>	16.4	X	350.19834	32.29605	38.64724	1.65996	0.0466062	0.19131348	2.9829021	21	12 29.2	20.4
255294	2005	VO <sub>112</sub>	15.9	X	0.98306	74.16393	294.99471	3.52259	0.1352918	0.18151945	3.0892563	21	10 30.9	19.6
255295	2005	VS <sub>113</sub>	15.8	X	345.41732	130.55031	282.67304	3.58923	0.1635042	0.18541539	3.0458291	21	12 4.5	19.1
255296	2005	VD <sub>116</sub>	16.0	X	216.57091	193.23855	343.95281	3.26926	0.0569653	0.18487984	3.0517083	21	11 14.3	20.4
255297	2005	VB <sub>118</sub>	15.5	X	259.09240	146.35347	318.23197	4.23188	0.0731778	0.16941890	3.2346563	21	10 2.2	20.2
255298	2005	VB <sub>119</sub>	15.3	X	60.41119	139.31217	264.22580	9.63449	0.1078220	0.19849735	2.9104908	21	—	—
255299	2005	VQ <sub>119</sub>	15.4	X	76.36202	30.91096	10.99489	19.97714	0.2371352	0.19750243	2.9202571	21	1 9.5	19.1
255300	2005	VL <sub>120</sub>	15.8	X	334.99426	69.24021	21.23380	11.71405	0.2688485	0.18574077	3.0422710	21	—	—
255301	2005	VD <sub>121</sub>	15.7	X	35.64653	216.72554	158.69321	15.86555	0.2535626	0.18967047	3.0001035	21	—	—
255302	2005	VQ <sub>122</sub>	15.0	X	156.45268	274.17227	261.53458	26.85865	0.2941552	0.23755486	2.5820230	21	8 31.6	20.4
255303	2005	VN <sub>125</sub>	15.8	X	19.68411	47.65443	313.61246	12.14508	0.0893950	0.18646378	3.0344016	21	11 12.2	20.0
255304	2005	VO <sub>129</sub>	16.5	X	70.14964	303.93629	131.88427	4.55496	0.0750358	0.20901355	2.8120287	21	1 15.7	20.1
255305	2005	VN <sub>131</sub>	15.7	X	61.37095	76.31195	194.23903	25.92399	0.1018263	0.18009211	3.0515576	21	9 18.5	20.1
255306	2005	VH <sub>132</sub>	15.9	X	28.24353	113.06852	184.64650	16.23307	0.0886233	0.17846825	3.1243672	21	9 5.1	20.0
255307	2005	WR	15.3	X	45.66482	122.59428	242.14956	7.40176	0.1988888	0.18974710	2.9992957	21	—	—
255308	2005	Christianzuber	16.5	X	287.17221	53.27538	62.12606	0.99235	0.1679201	0.18432226	3.0578595	21	11 12.7	20.0
255309	2005	WJ <sub>8</sub>	16.5	X	300.20398	7.75936	68.61206	0.27681	0.1656920	0.18073774	3.0981575	21	10 13.5	20.0
255310	2005	WA <sub>12</sub>	16.1	X	339.88239	105.52405	235.92139	3.92609	0.1868924	0.17532017	3.1616573	21	8 13.3	19.6
255311	2005	WC <sub>14</sub>	16.5	X	348.52798	240.69623	238.42379	1.00079	0.0727268	0.19605141	2.9346484	21	—	—
255312	2005	WA <sub>16</sub>	15.1	X	72.39813	282.88200	67.41936	9.54438	0.0999194	0.19033592	2.9931068	21	—	—
255313	2005	WJ <sub>19</sub>	15.2	X	358.09396	306.74372	119.53903	10.88996	0.0818726	0.18889700	3.0082875	21	—	—
255314	2005	WN <sub>19</sub>	15.7	X	122.21206	341.34729	103.72293	13.45807	0.2557647	0.21267683	2.7796445	21	5 3.4	20.3
255315	2005	WV <sub>21</sub>	15.3	X	315.44401	319.77331	60.49367	14.74127	0.1087023	0.17441049	3.1726413	21	9 8.9	19.6
255316	2005	WZ <sub>23</sub>	15.8	X	339.55130	352.38475	11.56619	2.78861	0.1309138	0.17698668	3.1417792	21	9 17.9	19.4
255317	2005	WD <sub>25</sub>	15.3	X	15.46025	115.58789	291.16944	8.93269	0.0695816	0.18437345	3.0572934	21	11 26.7	19.3
255318	2005	WH <sub>26</sub>	15.8	X	12.33789	148.57013	262.56875	3.74935	0.0510628	0.19355507	2.9598271	21	—	—
255319	2005	WV <sub>26</sub>	16.1	X	353.13443	135.96544	295.56874	1.88889	0.0743821	0.18865237	3.0108875	21	—	—
255320	2005	WJ <sub>27</sub>	15.9	X	345.46102	33.75166	334.82385	1.64141	0.1653473	0.17850851	3.1238974	21	10 3.8	19.2
255321	2005	WJ <sub>29</sub>	15.3	X	72.92525	109.60429	253.86572	8.89103	0.1111346	0.19295816	2.9659281	21	—	—
255322	2005	WC <sub>30</sub>	15.5	X	232.59782	100.94684	56.11863	9.37983	0.1323927	0.18045620	3.1013790	21	11 1.1	20.2
255323	2005	WJ <sub>32</sub>	15.5	X	295.91021	29.53814	66.24651	6.40550	0.1243921	0.18177955	3.0863087	21	11 7.3	19.3
255324	2005	WT <sub>32</sub>	15.1	X	6.62854	322.57146	67.11867	10.13847	0.1411467	0.18496639	3.0507562	21	12 7.9	18.8
255325	2005	WU <sub>32</sub>	15.7	X	296.74936	238.41751	281.97571	2.82373	0.2053008	0.19037403	2.9927073	21	—	—
255326	2005	WB <sub>34</sub>	15.8	X	322.50660	9.54173	49.04212	2.57397	0.2136249	0.18026077	3.1036201	21	10 25.6	18.8
255327	2005	WX <sub>34</sub>	15.9	X	182.64019	257.62445	269.74806	1.84611	0.0566526	0.17479542	3.1679819	21	9 24.9	20.5
255328	2005	WL <sub>36</sub>	16.0	X	92.15053	209.94328	91.39520	6.35728	0.1410166	0.18435535	3.0574936	21	12 7.2	20.7
255329	2005	WA <sub>37</sub>	16.6	X	7.04078	259.69042	155.03010	1.68846	0.1293554	0.18870179	3.0103619	21	—	—
255330	2005	WW <sub>40</sub>	15.0	X	337.73444	260.91625	118.45878	19.15895	0.1586099	0.17891623	3.1191497	21	10 13.9	19.0
255331	2005	WY <sub>40</sub>	16.8	X	38.14430	234.10490	168.63423	7.56541	0.2148372	0.19450480	2.9501844	21	—	—
255332	2005	WR <sub>43</sub>	15.3	X	116.28171	337.11050	258.42037	8.01897	0.0408988	0.17523448	3.1626880	21	9 30.8	20.1
255333	2005	WS <sub>44</sub>	16.0	X	193.05006	272.57099	297.95041	1.53314	0.1326841	0.18491141	3.0513608	21	11 23.4	20.7
255334	2005	WY <sub>45</sub>	16.4	X	343.77836	334.78229	46.96145	1.53211	0.0245370	0.17895423	3.1187082	21	10 18.2	20.6
255335	2005	WC <sub>52</sub>	16.6	X	96.12213	136.18398	229.29243	1.19412	0.0851389	0.19703422	2.9248815	21	—	—
255336	2005	WX <sub>52</sub>	16.5	X	200.53011	217.58628	79.12681	3.16396	0.0403363	0.20309547	2.8663941	21	1 1.6	20.6
255337	2005	WC <sub>55</sub>	16.0	X	47.46891	219.86708	227.69359	14.09620	0.1143020	0.20467275	2.8516487	21	—	—
255338	2005	WP <sub>59</sub>	17.1	X	359.76913	342.27408	88.06834	24.30389	0.0469857	0.37790982	1.8947152	21	—	—
255339	2005	WZ <sub>59</sub>	16.3	X	40.28368	143.95710	273.96574	12.85853	0.3046217	0.19735868	2.9216749	21	—	—
255340	2005	WO <sub>63</sub>	15.8	X	112.84546	168.85847	63.28213	6.08473	0.0807890	0.17571535	3.1569152	21	10 3.2	20.5
255341	2005	WA <sub>64</sub>	15.3	X	280.82963	88.70451	60.79629	5.07791	0.1127285	0.18607793	3.0385950	21	12 23.7	19.1
255342	2005	WE <sub>65</sub>	15.3	X	335.44053	275.92049	141.28294	21.65565	0.1667055	0.18474280	3.0532172	21	11 27.6	19.2
255343	2005	WY <sub>65</sub>	15.5	X	356.83830	84.91133	247.46271	17.20683	0.1909029	0.17597018	3.1538667	21	8 28.7	19.3
255344	2005	WW <sub>67</sub>	16.2	X	13.08736	216.55185	192.37262	1.53364	0.0371713	0.18803782	3.0174442	21	12 30.5	20.4
255345	2005	WC <sub>68</sub>	15.1	X	275.11713	47.43907	77.88854	11.96895	0.0669112	0.18342817	3.0677881	21	11 23.0	19.2
255346	2005	WB <sub>71</sub>	15.6	X	305.16756	133.83971	293.43013	4.68057	0.1185541	0.18045584	3.1013831	21	10 12.7	19.7
255347	2005	WV <sub>75</sub>	15.2	X	148.42478	172.67237	59.36044	12.14124	0.0172732	0.18097214	3.0954817	21	11 7.3	19.6
255348	2005	WB <sub>77</sub>	16.6	X	10.19015	61.18634	327.34929	1.73634	0.1265478	0.18508129	3.0494935	21	12 10.5	20.4
255349	2005	WT <sub>77</sub>	15.7	X	333.54471	105.19453	277.30269	6.00760	0.1033166	0.17677055	3.1443396	21	9 29.3	19.7
255350	2005	WB <sub>82</sub>	15.0	X	44.93026	306.56535	66.04028	9.08799	0.1547948	0.18833678	3.014			

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
255361	2005	WE <sub>100</sub>	16.2	X	344.61457	251.42512	129.15113	1.78859	0.1875200	0.18121141	3.0927562	21	10 20.9	19.5
255362	2005	WT <sub>102</sub>	15.8	X	49.69373	180.91622	189.55743	9.45583	0.0878966	0.19044997	2.9919118	21	—	—
255363	2005	WB <sub>104</sub>	15.9	X	338.80126	280.99265	150.12489	2.44344	0.1647435	0.18636032	3.0355246	21	12 16.7	19.2
255364	2005	WY <sub>104</sub>	15.7	X	155.53972	294.75891	39.35989	20.76994	0.2172790	0.21024998	2.8009933	21	1 15.5	20.6
255365	2005	WZ <sub>104</sub>	14.8	X	17.39630	231.48040	74.13508	17.86072	0.2129043	0.17882822	3.1201730	21	9 25.9	18.7
255366	2005	WZ <sub>105</sub>	15.8	X	37.84981	249.97219	149.08916	10.74927	0.1516356	0.19273860	2.9681801	21	—	—
255367	2005	WE <sub>107</sub>	16.5	X	104.43542	108.08944	132.61062	1.94446	0.0882157	0.17701276	3.1414706	21	10 3.3	21.0
255368	2005	WA <sub>108</sub>	15.9	X	298.90006	193.48929	215.86060	4.41372	0.1036640	0.17637030	3.1490949	21	9 12.3	20.1
255369	2005	WO <sub>110</sub>	15.9	X	318.09140	271.89910	94.07229	2.49713	0.2398818	0.17458064	3.1705796	21	7 30.9	19.4
255370	2005	WS <sub>111</sub>	15.1	X	345.20260	283.59055	78.53122	14.58198	0.1680721	0.17773429	3.1329627	21	10 3.9	18.9
255371	2005	WW <sub>111</sub>	15.5	X	52.79804	122.28898	225.80076	8.80427	0.0989016	0.18775270	3.0204983	21	12 14.9	19.7
255372	2005	WR <sub>113</sub>	15.6	X	330.16365	0.49127	46.02479	11.73448	0.0616977	0.18079166	3.0975414	21	10 31.3	19.7
255373	2005	WL <sub>115</sub>	16.2	X	297.12485	263.61840	126.43640	0.55665	0.2994245	0.18321795	3.0701342	21	11 15.4	19.3
255374	2005	WY <sub>115</sub>	16.0	X	307.67572	323.57693	215.00437	5.32126	0.2104600	0.18659801	3.0329462	21	12 14.1	19.2
255375	2005	WL <sub>116</sub>	15.9	X	12.62571	254.76656	166.49001	2.71714	0.1475343	0.19025704	2.9939340	21	—	—
255376	2005	WW <sub>117</sub>	15.9	X	41.25606	102.75771	271.61180	7.61853	0.2379630	0.19132635	2.9827684	21	—	—
255377	2005	WO <sub>119</sub>	16.2	X	302.05750	15.70622	51.13765	6.00921	0.1335288	0.17900908	3.1180710	21	10 9.9	20.1
255378	2005	WA <sub>123</sub>	16.5	X	105.28429	24.61133	38.53053	4.54926	0.0937289	0.21192661	2.7862007	21	2 21.1	20.2
255379	2005	WB <sub>127</sub>	16.2	X	105.70592	166.96858	85.00103	0.29275	0.1362714	0.17990230	3.1077416	21	10 22.5	21.1
255380	2005	WS <sub>136</sub>	15.4	X	34.31341	59.57770	219.71075	12.52173	0.1111802	0.17662774	3.1460342	21	8 20.7	19.7
255381	2005	WL <sub>137</sub>	16.0	X	108.87064	10.07752	239.70446	1.90731	0.0504304	0.17933908	3.1142448	21	10 14.2	20.4
255382	2005	WL <sub>138</sub>	15.3	X	118.63514	19.91257	247.50070	14.64109	0.1449125	0.18370900	3.0646609	21	11 22.5	20.1
255383	2005	WG <sub>142</sub>	15.8	X	235.06493	17.22546	54.67612	1.84404	0.0455311	0.16650958	3.2722255	21	7 30.6	20.5
255384	2005	WS <sub>147</sub>	15.4	X	273.16803	349.97952	118.56205	9.37223	0.0527800	0.18136980	3.0909553	21	11 3.9	19.8
255385	2005	WR <sub>151</sub>	15.6	X	340.93010	23.11341	64.00550	6.72914	0.1686805	0.18645567	3.0344896	21	—	—
255386	2005	WS <sub>151</sub>	15.1	X	34.48898	288.51427	75.80933	13.85657	0.1687907	0.18537691	3.0462505	21	12 20.6	19.2
255387	2005	WO <sub>152</sub>	15.7	X	74.28874	255.51913	62.22228	9.74342	0.0647856	0.18396434	3.0618245	21	11 28.3	20.1
255388	2005	WG <sub>156</sub>	15.2	X	304.37449	350.48001	116.27346	11.46304	0.0753356	0.18582149	3.0413898	21	12 9.7	19.3
255389	2005	WO <sub>158</sub>	16.7	X	313.23646	206.99917	270.76596	19.31897	0.0760681	0.37622323	1.9003735	21	—	—
255390	2005	WS <sub>158</sub>	15.0	X	296.49750	357.32471	97.33719	19.25191	0.1100862	0.17830248	3.1263035	21	11 13.9	19.3
255391	2005	WL <sub>159</sub>	15.9	X	352.79104	239.95892	152.89494	11.44623	0.1109670	0.18415113	3.0597536	21	11 20.7	19.8
255392	2005	WE <sub>160</sub>	15.5	X	64.47040	316.43079	46.94391	9.85657	0.1257897	0.19058166	2.9905334	21	—	—
255393	2005	WG <sub>163</sub>	15.2	X	13.60449	239.00230	61.00814	9.20181	0.0719632	0.16943350	3.2344705	21	8 21.4	19.5
255394	2005	WE <sub>166</sub>	16.0	X	339.08411	340.63475	83.19190	2.43727	0.0973461	0.18227445	3.0807197	21	12 4.6	19.7
255395	2005	WX <sub>166</sub>	16.3	X	34.13515	195.15621	148.73780	1.41867	0.1750886	0.18415469	3.0597141	21	11 26.5	20.2
255396	2005	WY <sub>166</sub>	16.7	X	231.85996	325.57537	191.31324	1.59651	0.0781187	0.18184425	3.0855766	21	11 5.6	21.1
255397	2005	WS <sub>178</sub>	15.3	X	296.24730	191.40542	274.15095	6.00604	0.0748453	0.18531432	3.0469365	21	11 24.5	19.2
255398	2005	WF <sub>182</sub>	15.8	X	351.66326	172.57093	212.35670	5.85833	0.2235808	0.18255077	3.0767101	21	11 12.6	18.7
255399	2005	WF <sub>185</sub>	16.0	X	286.14154	277.90398	190.71948	14.32052	0.2318310	0.18110283	3.0939923	21	10 24.7	19.8
255400	2005	WE <sub>186</sub>	14.6	X	182.05649	82.03956	84.62741	19.36375	0.1020896	0.16901949	3.2397502	21	10 3.1	20.0
255401	2005	WA <sub>188</sub>	15.7	X	38.45098	317.79517	83.96140	14.84792	0.2232654	0.19689560	2.9262541	21	—	—
255402	2005	WA <sub>189</sub>	15.2	X	246.53364	37.43724	87.54264	10.42907	0.0404089	0.17870026	3.1216624	21	10 24.1	19.7
255403	2005	WW <sub>189</sub>	16.3	X	358.94614	251.79330	147.88624	10.36770	0.1980383	0.18659546	3.0329738	21	12 16.2	19.8
255404	2005	WQ <sub>190</sub>	15.6	X	324.01900	69.22149	2.70186	9.47172	0.0908650	0.18526199	3.0475102	21	11 19.5	19.6
255405	2005	WV <sub>197</sub>	16.1	X	128.31480	349.08904	65.29569	4.48043	0.0870935	0.20967808	2.8060841	21	3 10.2	20.0
255406	2005	WV <sub>207</sub>	15.2	X	78.43973	223.38089	87.15723	16.88040	0.1262908	0.18228032	3.0806536	21	12 3.5	19.8
255407	2005	WW <sub>207</sub>	15.6	X	316.89877	42.40111	17.78684	5.11924	0.1341750	0.17934188	3.1142124	21	10 22.6	19.4
255408	2005	XP <sub>2</sub>	15.7	X	57.40181	78.40010	269.49472	14.42290	0.0848986	0.18681987	3.0305445	21	12 18.2	20.0
255409	2005	XA <sub>5</sub>	15.3	X	311.49090	316.71055	122.55617	12.35310	0.3074566	0.17953126	3.1120221	21	10 24.4	18.6
255410	2005	XF <sub>9</sub>	15.1	X	149.49150	293.64942	289.29061	8.60688	0.1798970	0.17781673	3.1319944	21	10 26.3	20.5
255411	2005	XY <sub>11</sub>	16.5	X	347.71338	99.58242	62.95546	4.57094	0.0384111	0.20880514	2.8138996	21	1 11.0	20.2
255412	2005	XB <sub>12</sub>	15.7	X	116.16779	297.73392	60.31068	17.89669	0.0928710	0.20021100	2.8938594	21	—	—
255413	2005	XF <sub>14</sub>	15.1	X	311.47522	293.43888	92.15739	17.17246	0.2817482	0.17501236	3.1653633	21	8 10.8	18.9
255414	2005	XC <sub>19</sub>	15.7	X	251.58652	254.65132	5.04242	12.28183	0.0787647	0.21601288	2.7509516	21	1 11.4	20.0
255415	2005	XQ <sub>23</sub>	15.9	X	271.23216	95.14913	67.13206	2.25243	0.1762682	0.18682471	3.0304922	21	12 17.4	19.8
255416	2005	XT <sub>28</sub>	15.8	X	318.17089	136.40368	317.01431	3.10565	0.0920172	0.18751923	3.0230048	21	12 10.9	19.6
255417	2005	XK <sub>29</sub>	15.1	X	262.78404	207.02085	260.59338	14.31502	0.1322491	0.17616893	3.1514942	21	9 28.0	19.9
255418	2005	XO <sub>36</sub>	14.9	X	334.81764	310.96909	87.20265	16.82720	0.0703132	0.17690016	3.1428036	21	11 1.9	19.2
255419	2005	XH <sub>50</sub>	15.7	X	351.31158	332.23721	49.19380	5.88035	0.0666687	0.17768525	3.1335392	21	10 29.2	19.7
255420	2005	XQ <sub>56</sub>	15.8	X	269.26860	145.02126	354.13266	5.15815	0.2467684	0.18158136	3.0885540	21	11 3.1	19.9
255421	2005	XT <sub>56</sub>	14.8	X	334.16178	113.87914	269.27878	25.45654	0.2065394	0.17843019	3.1248115	21	9 14.5	18.8
255422	2005	XP <sub>58</sub>	15.9	X	175.84385	203.43996	314.60068	0.38382	0.1013786	0.17037459	3.2225488	21	9 6.0	20.8
255423	2005	XB <sub>61</sub>	15.9	X	344.99574	265.43634	135.96434	2.00033	0.1901876	0.18228024	3.0806545	21	11 19.2	19.1
255424	2005	XD <sub>61</sub>	16.3	X	73.00755	213.48248	112.90076	3.07702	0.1093807	0.18473132	3.0533436	21	12 13.2	20.6
255425	2005	XO <sub>71</sub>	15.5	X	249.40236	45.33101	40.51806	4.67445	0.1249326	0.16901701	3.2397819	21	8 25.6	20.2
255426	2005	XS <sub>71</sub>	15.6	X	154.47529	195.96348	2.43905	2.40482	0.0255761	0.17312177	3.1883667	21	10 1.9	20.3
255427	2005	XH <sub>73</sub>	15.0	X	258.90641	61.09699	72.59993	11.68527	0.0825692	0.17959455	3.1112909	21	11 10.8	19.4
255428	2005	XM <sub>74</sub>	15.9	X	0.63183	83.03141	340.95343	5.07775	0.2436376	0.18730081	3.0253545	21	—	—
255429	2005	XH <sub>76</sub>	16.7	X	211.85706	258.48714	7.24631	2.01959	0.0918817	0.32189422	2.1085987	21	—	—

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
255441 2005 YF <sub>4</sub>	17.1	X	10.35126	111.91541	293.56113	19.02796	0.0828258	0.37551333	1.9027679	21	—	—
255442 2005 YW <sub>11</sub>	14.8	X	181.98299	115.80197	89.30416	17.56096	0.2025422	0.17487592	3.1670095	21	11 9.4	20.3
255443 2005 YB <sub>14</sub>	15.1	X	284.77381	177.14834	295.54059	7.16636	0.0538270	0.17750113	3.1357057	21	11 17.6	19.5
255444 2005 YC <sub>14</sub>	15.7	X	264.92847	174.11979	287.33849	3.54878	0.1401155	0.17275891	3.1928297	21	9 26.3	20.2
255445 2005 YO <sub>20</sub>	16.3	X	326.10223	90.85690	326.94704	0.87865	0.0566475	0.17732995	3.1377234	21	11 6.9	20.4
255446 2005 YV <sub>21</sub>	16.3	X	232.69722	159.91076	3.66636	0.61684	0.1103306	0.17702793	3.1412912	21	11 9.5	21.0
255447 2005 YN <sub>24</sub>	16.1	X	255.48699	271.40511	252.34603	0.00772	0.1196686	0.18098963	3.0952822	21	12 5.6	20.3
255448 2005 YB <sub>26</sub>	15.9	X	283.36646	5.45583	123.20914	2.74546	0.1346019	0.17995763	3.1071046	21	11 27.9	19.9
255449 2005 YJ <sub>30</sub>	15.8	X	17.55592	345.00691	79.82790	2.20267	0.1405836	0.19078074	2.9884525	21	—	—
255450 2005 YZ <sub>35</sub>	15.4	X	328.19122	114.09793	285.83398	12.40391	0.0637524	0.17405759	3.1769282	21	10 11.8	19.9
255451 2005 YB <sub>36</sub>	15.4	X	120.83327	186.43861	80.07028	9.94938	0.0258676	0.18085290	3.0968421	21	11 17.4	19.9
255452 2005 YC <sub>38</sub>	15.4	X	229.61175	170.42159	317.49029	16.19254	0.1728916	0.17150779	3.2083382	21	9 11.3	20.7
255453 2005 YW <sub>42</sub>	16.2	X	244.00229	320.95558	168.29602	1.09832	0.1379048	0.17381010	3.1799433	21	10 8.4	20.9
255454 2005 YP <sub>47</sub>	15.7	X	344.40727	13.74652	64.97845	3.72621	0.1387454	0.18475538	3.0530786	21	—	—
255455 2005 YC <sub>50</sub>	16.2	X	359.42731	252.16590	143.96946	2.32546	0.0960503	0.18353653	3.0665805	21	12 1.1	20.1
255456 2005 YW <sub>52</sub>	17.1	X	325.34078	271.61607	112.73545	25.30907	0.0916519	0.36174766	1.9507378	21	11 10.1	19.4
255457 2005 YG <sub>55</sub>	16.0	X	336.57143	102.75752	337.71202	4.06299	0.2126204	0.18397233	3.0617358	21	12 26.0	19.0
255458 2005 YW <sub>72</sub>	15.4	X	131.86532	200.41063	60.09984	4.24680	0.0558823	0.17886310	3.1197674	21	11 22.2	19.8
255459 2005 YB <sub>76</sub>	15.1	X	49.53595	146.69085	92.67117	13.23346	0.0498299	0.15901309	3.3742775	21	7 18.9	19.7
255460 2005 YS <sub>77</sub>	16.1	X	232.49939	70.89394	74.62124	2.33495	0.0973612	0.17529481	3.1619622	21	10 20.9	20.8
255461 2005 YO <sub>78</sub>	17.0	X	14.20460	307.29990	58.62403	1.64184	0.1989024	0.18014133	3.1049919	21	11 26.3	20.5
255462 2005 YP <sub>82</sub>	16.1	X	296.47095	246.64292	185.47091	0.67454	0.1507040	0.17420617	3.1751216	21	10 3.1	19.8
255463 2005 YC <sub>84</sub>	16.7	X	326.14223	224.03385	233.23383	1.50563	0.2277895	0.18432131	3.0578700	21	12 26.3	19.5
255464 2005 YJ <sub>86</sub>	16.1	X	275.54159	284.43724	105.79840	4.90425	0.1921477	0.16555363	3.2848100	21	7 6.2	20.6
255465 2005 YU <sub>86</sub>	16.0	X	228.32607	46.23040	105.20029	6.37581	0.1065489	0.17455036	3.1709462	21	10 24.4	20.7
255466 2005 YG <sub>93</sub>	15.8	X	253.77370	243.37501	250.65687	4.84881	0.1312450	0.17555177	3.1588759	21	10 24.9	20.3
255467 2005 YG <sub>98</sub>	16.2	X	121.71214	125.24233	88.28749	4.22442	0.0414685	0.17291622	3.1908929	21	9 15.8	20.8
255468 2005 YJ <sub>112</sub>	15.5	X	224.74531	17.73846	106.88328	5.71957	0.0976175	0.16998140	3.2275163	21	9 18.6	20.4
255469 2005 YK <sub>121</sub>	15.6	X	40.21796	221.39583	92.05238	2.64596	0.1608557	0.17302648	3.1895372	21	10 24.8	19.7
255470 2005 YV <sub>123</sub>	15.0	X	291.10555	330.90709	136.25358	11.49058	0.0679855	0.17735925	3.1373779	21	11 8.5	19.1
255471 2005 YP <sub>127</sub>	16.1	X	306.04360	66.56015	53.21060	8.92535	0.2696096	0.18441121	3.0568761	21	12 7.6	19.1
255472 2005 YG <sub>142</sub>	15.4	X	23.40799	258.42542	89.32642	7.28306	0.0830935	0.17469224	3.1692291	21	11 4.3	19.6
255473 2005 YW <sub>158</sub>	14.9	X	225.30146	218.70491	269.38292	11.81760	0.0385155	0.17063974	3.2192097	21	9 20.9	19.9
255474 2005 YJ <sub>165</sub>	14.9	X	257.38116	235.38436	258.91010	9.50146	0.0515508	0.17882451	3.1202162	21	11 10.2	19.4
255475 2005 YN <sub>165</sub>	16.0	X	316.36396	103.45198	307.59676	15.03338	0.2393817	0.17611841	3.1520967	21	9 19.3	19.7
255476 2005 YR <sub>167</sub>	16.6	X	337.91243	220.84031	201.77541	2.51575	0.3201322	0.18189015	3.0850575	21	12 7.8	18.8
255477 2005 YP <sub>169</sub>	15.9	X	310.56315	303.96310	134.14682	5.22133	0.1812892	0.18048345	3.1010668	21	11 2.7	19.4
255478 2005 YR <sub>181</sub>	14.9	X	233.56660	114.06697	67.41701	14.41696	0.2721685	0.17561662	3.1580983	21	11 15.3	19.9
255479 2005 YF <sub>185</sub>	15.5	X	239.80006	237.10574	289.15974	4.42802	0.0909629	0.17726942	3.1384377	21	11 22.5	19.9
255480 2005 YB <sub>209</sub>	15.6	X	262.68310	75.78260	68.88769	16.85489	0.1967456	0.17748123	3.1359401	21	11 12.9	20.0
255481 2005 YR <sub>214</sub>	16.8	X	47.02975	304.53051	334.67341	18.78607	0.0296454	0.35494511	1.9755829	21	9 13.8	18.7
255482 2005 YS <sub>214</sub>	15.3	X	306.83308	71.66172	30.23258	15.71801	0.1116987	0.17946804	3.1127528	21	11 27.8	19.4
255483 2005 YU <sub>222</sub>	16.0	X	11.25441	117.43592	306.45000	0.29878	0.1305819	0.18944729	3.0024592	21	—	—
255484 2005 YY <sub>231</sub>	16.3	X	336.45695	215.30788	262.00098	2.07414	0.0884393	0.19221652	2.9735522	21	—	—
255485 2005 YL <sub>235</sub>	15.5	X	236.02867	79.27079	67.29631	2.80626	0.0423342	0.17540582	3.1606279	21	11 1.9	20.1
255486 2005 YZ <sub>275</sub>	15.9	X	34.43188	350.72480	72.29455	2.57173	0.0569032	0.19261816	2.9694173	21	—	—
255487 2006 AT <sub>4</sub>	14.8	X	236.33782	71.27216	52.92755	11.97732	0.0288264	0.17151933	3.2081944	21	10 11.4	19.5
255488 2006 AN <sub>6</sub>	15.4	X	13.58434	296.84762	87.02785	10.90255	0.0767037	0.18343651	3.0676951	21	12 4.6	19.3
255489 2006 AS <sub>7</sub>	15.3	X	287.70535	83.47738	80.70537	26.44351	0.2536993	0.17951840	3.1121707	21	12 30.4	19.0
255490 2006 AY <sub>7</sub>	16.2	X	83.61560	37.48433	159.71386	8.17379	0.2985430	0.21291634	2.7775596	21	8 13.3	20.5
255491 2006 AO <sub>20</sub>	17.2	X	137.50971	129.80893	39.70842	4.83909	0.1591967	0.28537786	2.2848404	21	8 23.5	20.7
255492 2006 AL <sub>28</sub>	16.4	X	334.33188	239.02001	191.92583	0.67864	0.2260185	0.18252531	3.0778964	21	12 7.7	19.3
255493 2006 AP <sub>34</sub>	15.3	X	294.45198	17.15939	64.72910	17.15361	0.1359284	0.17296679	3.1902709	21	10 21.6	19.6
255494 2006 AJ <sub>36</sub>	15.6	X	316.57097	97.97431	323.14470	2.96177	0.0364770	0.17347567	3.1840289	21	10 28.5	19.9
255495 2006 AZ <sub>68</sub>	15.3	X	5.42017	236.31953	112.05958	6.47287	0.0088403	0.17199175	3.2023168	21	10 6.1	19.8
255496 2006 AE <sub>75</sub>	15.3	X	246.08667	246.45452	256.80118	5.38754	0.1514267	0.17405031	3.1770168	21	10 24.1	19.9
255497 2006 AX <sub>83</sub>	15.4	X	5.70864	22.53066	75.83137	11.93952	0.0741619	0.18763973	3.0217104	21	—	—
255498 2006 AV <sub>85</sub>	15.5	X	255.31928	77.18293	29.57416	24.07737	0.2128086	0.17151476	3.2082513	21	9 24.3	20.5
255499 2006 AY <sub>96</sub>	15.2	X	221.69716	73.56012	62.26663	15.06421	0.0603887	0.16901729	3.2397783	21	10 7.4	20.1
255500 2006 AX <sub>97</sub>	17.1	X	300.59649	23.76998	42.51063	21.40451	0.1026782	0.36115061	1.9528871	21	11 11.9	18.4
255501 2006 BG	18.5	X	347.09476	341.18763	280.99505	4.81753	0.7318556	0.45140682	1.6830253	21	1 4.3*	21.8
255502 2006 BR <sub>1</sub>	15.8	X	281.77361	347.94603	113.73073	2.09538	0.1706799	0.17497766	3.1657818	21	10 17.4	19.9
255503 2006 BS <sub>17</sub>	15.5	X	277.21753	71.58509	337.35232	8.43492	0.1703112	0.16447752	3.2991218	21	8 5.6	20.1
255504 2006 BV <sub>26</sub>	14.6	X	114.15749	171.41809	28.97144	14.43091	0.1010415	0.15820893	3.3857019	21	8 31.9	19.9
255505 2006 BE <sub>27</sub>	15.8	X	3.79786	323.80158	117.27613	3.98335	0.1411544	0.18445889	3.0563494	21	—	—
255506 2006 BR <sub>55</sub>	15.3	X	279.23473	139.43646	54.51167	9.89275	0.2277541	0.18311560	3.0712782	21	—	—
255507 2006 BC <sub>74</sub>	15.3	X	257.64358	45.92330	71.74642	4.38928	0.0899589	0.17154214	3.2079099	21	10 17.8	19.8
255508 2006 BG <sub>83</sub>	15.5	X	281.04212	323.18437	126.26125	4.73699	0.1545106	0.17137809	3.2099568	21	10 4.1	19.7
255509 2006 BR <sub>96</sub>	17.4	X	140.82011	293.48829	321.79492	6.01864	0.1574379	0.29544260	2.2326499	21	12 13.5	20.8
255510 2006 BM <sub>145</sub>	15.3	X	224.51243	245.01399	266.63854	3.63538	0.0993479	0.17121985	3.2119342	21	10 16.6	20.1
255511 2006 BO <sub>145</sub>	15.0	X	289.74005	283.91398	146.68401	23.68710	0.1276389	0.17032422	3.2231841	21	9 28.5	19.5
255512 2006 BT <sub>166</sub>	15.8	X	292.94954	99.13457	329.97588	4.60649	0.1043173	0.16827656	3.2492787	21	9 28.0	20.1
255513 2006 BO <sub>185</sub>	15.6	X	283.20623	285.49151	164.03997	5.41233	0.1382867					

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>		
255521	2006	DV <sub>4</sub>	17.6	X	150.99026	276.25415	355.18784	5.07289	0.2091816	0.29890451	2.2153775	21	—	—
255522	2006	DQ <sub>5</sub>	16.1	X	9.91560	29.75603	83.49645	3.83416	0.1645918	0.18964808	3.0003396	21	—	—
255523	2006	DV <sub>61</sub>	14.9	X	286.04477	63.38572	111.34778	18.63038	0.1375182	0.18135680	3.0911031	21	—	—
255524	2006	DY <sub>69</sub>	17.2	X	156.34016	148.76360	164.90537	4.79884	0.2016472	0.30654579	2.1784076	21	—	—
255525	2006	DU <sub>215</sub>	14.4	X	177.35834	325.32646	15.36914	8.28916	0.1319483	0.12426882	3.9770521	21	2 16.7	20.6
255526	2006	ET <sub>42</sub>	17.8	X	181.92337	54.93031	239.51816	3.10516	0.1990955	0.30666651	2.1778359	21	—	—
255527	2006	ET <sub>44</sub>	18.9	X	121.00035	40.19509	169.84275	12.80504	0.1012994	0.54131395	1.4910879	21	10 29.1	19.9
255528	2006	FP <sub>21</sub>	17.9	X	202.65733	276.37786	26.34805	2.54340	0.1589933	0.31364712	2.1454012	21	—	—
255529	2006	FL <sub>49</sub>	15.3	X	264.72753	74.18648	40.32368	25.19747	0.3694180	0.17089009	3.2160648	21	9 26.7	20.6
255530	2006	FK <sub>51</sub>	16.6	X	333.22551	116.62477	190.47459	6.64428	0.1208442	0.27055970	2.3675217	21	6 19.3	19.0
255531	2006	GS <sub>1</sub>	16.8	X	96.60522	275.52746	48.46408	6.09923	0.1528233	0.29686126	2.2255282	21	—	—
255532	2006	HU <sub>19</sub>	17.7	X	191.48486	107.48903	194.51695	4.98517	0.1629979	0.30805897	2.1712964	21	—	—
255533	2006	HC <sub>25</sub>	17.4	X	179.70958	112.50527	189.49310	5.22488	0.1135462	0.30331222	2.1938627	21	—	—
255534	2006	HK <sub>40</sub>	17.4	X	100.32061	279.85872	4.13245	2.91590	0.1702050	0.28731825	2.2745417	21	12 11.1	21.0
255535	2006	HS <sub>56</sub>	17.3	X	90.29835	225.99341	62.58811	8.78203	0.2890255	0.28363474	2.2941920	21	12 14.5	21.1
255536	2006	HB <sub>60</sub>	16.9	X	191.87033	234.94631	41.55601	8.39254	0.1627857	0.30068377	2.2066293	21	—	—
255537	2006	HB <sub>66</sub>	17.7	X	250.89511	172.30993	60.38117	4.34320	0.1004936	0.30618860	2.1801014	21	—	—
255538	2006	HD <sub>80</sub>	17.6	X	125.23178	257.28279	62.65642	3.40827	0.1836490	0.29534604	2.2331366	21	—	—
255539	2006	HX <sub>81</sub>	17.0	X	323.69044	233.06346	121.79795	5.39879	0.0480684	0.29320632	2.2439878	21	—	—
255540	2006	HY <sub>105</sub>	14.6	X	118.24561	321.78829	293.81173	14.20055	0.0683607	0.15778896	3.3917068	21	10 25.4	19.9
255541	2006	HV <sub>111</sub>	18.1	X	198.28603	89.09894	175.60425	6.88376	0.2094128	0.30045786	2.2077353	21	—	—
255542	2006	HB <sub>120</sub>	18.3	X	111.00397	3.47962	65.73334	1.48927	0.0192026	0.31638678	2.1329982	21	2 3.6	20.6
255543	2006	JW <sub>6</sub>	17.5	X	160.90595	53.05829	208.96147	6.37261	0.1110342	0.29447397	2.2375433	21	—	—
255544	2006	JX <sub>8</sub>	18.1	X	135.20821	322.31300	26.67793	3.22290	0.0445296	0.30538055	2.1839455	21	—	—
255545	2006	JK <sub>13</sub>	17.4	X	176.52861	197.32226	110.01402	5.04990	0.0805290	0.30390310	2.1910181	21	—	—
255546	2006	JE <sub>14</sub>	17.4	X	101.97626	31.44761	233.03475	5.60309	0.2203075	0.28361996	2.2942717	21	11 21.3	21.1
255547	2006	JT <sub>19</sub>	17.2	X	138.79628	59.09253	120.46456	9.09201	0.1494454	0.29070438	2.2568447	21	12 28.2	20.8
255548	2006	JM <sub>25</sub>	17.5	X	132.55180	80.64236	199.69264	6.33916	0.1461792	0.29282391	2.2459411	21	—	—
255549	2006	JP <sub>25</sub>	17.4	X	324.76548	184.70810	61.16564	3.20608	0.1572521	0.25747921	2.4470411	21	3 3.0	20.3
255550	2006	JB <sub>26</sub>	17.5	X	93.79725	298.55902	345.79458	3.66316	0.2788356	0.28345210	2.2951774	21	12 11.6	21.5
255551	2006	JF <sub>29</sub>	17.9	X	193.35358	208.10798	70.63465	4.94984	0.1492224	0.30241277	2.1982106	21	—	—
255552	2006	JL <sub>39</sub>	17.9	X	67.89963	124.85227	169.59373	2.37546	0.2194536	0.27932604	2.3177242	21	11 27.1	21.2
255553	2006	JN <sub>46</sub>	17.2	X	68.85834	62.09630	179.86542	11.53099	0.2248653	0.26831658	2.3806984	21	9 19.0	20.3
255554	2006	JK <sub>52</sub>	17.5	X	199.30483	102.53513	195.13362	4.83699	0.1958519	0.30652587	2.1785020	21	—	—
255555	2006	JR <sub>57</sub>	17.3	X	182.45001	67.89367	175.38734	3.67423	0.2032857	0.29361951	2.2418821	21	—	—
255556	2006	KE <sub>4</sub>	17.1	X	191.22170	33.63991	241.63105	5.25863	0.1462365	0.30180188	2.2011759	21	—	—
255557	2006	KQ <sub>11</sub>	16.7	X	245.49024	22.62612	231.29968	13.22608	0.1228642	0.24153864	2.5535536	21	—	—
255558	2006	KS <sub>20</sub>	17.4	X	139.18378	206.46754	71.61783	5.93248	0.1603593	0.29095415	2.2555529	21	—	—
255559	2006	KK <sub>27</sub>	18.0	X	302.07169	356.10913	232.17719	1.35028	0.1223761	0.31424871	2.1426622	21	—	—
255560	2006	KS <sub>27</sub>	17.3	X	23.19382	167.69523	234.84984	4.38018	0.1238818	0.29496293	2.2350698	21	—	—
255561	2006	KY <sub>42</sub>	16.8	X	124.71860	217.93070	64.96059	7.15975	0.1824883	0.28834032	2.2691636	21	—	—
255562	2006	KT <sub>43</sub>	14.8	X	285.14113	253.53834	269.10766	23.75595	0.3002645	0.17587404	3.1550160	21	12 17.7	18.5
255563	2006	KH <sub>49</sub>	17.0	X	174.84785	237.79493	76.12141	7.31394	0.2070544	0.30203662	2.2000353	21	—	—
255564	2006	KM <sub>51</sub>	17.5	X	65.46412	185.98771	124.81160	3.14306	0.2299553	0.28143159	2.3061497	21	12 16.3	20.9
255565	2006	KY <sub>65</sub>	16.8	X	299.97516	222.85026	69.14886	6.81587	0.1926793	0.25820218	2.4424711	21	3 28.1	20.1
255566	2006	KK <sub>77</sub>	17.1	X	136.73739	257.79198	109.60661	5.11625	0.1455547	0.30618306	2.1801278	21	1 6.2	19.3
255567	2006	KS <sub>80</sub>	17.2	X	65.35215	66.69465	194.07825	6.29111	0.1347809	0.27515206	2.3411049	21	9 27.5	20.0
255568	2006	KZ <sub>82</sub>	17.6	X	226.41568	206.33627	87.41754	1.86069	0.1029106	0.30958177	2.1641422	21	1 6.8	20.3
255569	2006	JN <sub>85</sub>	15.0	X	242.94003	253.60881	339.80332	21.11786	0.1526236	0.17483222	3.1675373	21	—	—
255570	2006	KP <sub>86</sub>	16.8	X	98.74762	250.21398	88.49172	7.80568	0.1653715	0.29184551	2.2509579	21	—	—
255571	2006	KY <sub>100</sub>	17.1	X	86.50412	232.68714	107.47125	3.94506	0.1163720	0.28509080	2.2863738	21	—	—
255572	2006	KA <sub>107</sub>	17.6	X	355.13693	260.07057	32.49166	5.11022	0.2559853	0.26775904	2.3840020	21	7 8.5	18.8
255573	2006	KW <sub>107</sub>	17.6	X	120.84331	330.58123	33.18803	4.86361	0.1459961	0.30586026	2.1816614	21	—	—
255574	2006	KW <sub>117</sub>	18.3	X	90.14925	44.20844	288.55709	2.02346	0.2522916	0.29001660	2.2604113	21	—	—
255575	2006	KM <sub>120</sub>	17.7	X	104.43165	207.92559	140.06203	7.00761	0.1916544	0.29470782	2.2363594	21	—	—
255576	2006	KU <sub>120</sub>	17.4	X	177.65107	189.24616	110.05248	5.71300	0.1728220	0.30175547	2.2014016	21	—	—
255577	2006	KY <sub>123</sub>	16.1	X	194.39312	312.29327	266.83753	21.47149	0.1383318	0.28699571	2.2762456	21	12 20.9	19.3
255578	2006	KO <sub>126</sub>	16.8	X	73.93083	138.66571	132.90480	6.90970	0.0888855	0.27053941	2.3676401	21	10 19.9	19.9
255579	2006	LQ <sub>1</sub>	17.3	X	224.94408	146.84315	97.56406	6.89063	0.1344417	0.30092177	2.2054657	21	—	—
255580	2006	LW <sub>4</sub>	16.4	X	68.41828	196.78415	104.73445	14.00448	0.2499666	0.27881424	2.3205597	21	12 10.5	20.1
255581	2006	LM <sub>5</sub>	18.0	X	100.12818	202.70904	92.21119	2.65517	0.2041302	0.28459432	2.2890322	21	12 26.1	21.6
255582	2006	LY <sub>6</sub>	16.5	X	328.55961	219.64601	122.73742	10.65435	0.2206093	0.26170423	2.4206326	21	7 24.2	18.4
255583	2006	MH <sub>3</sub>	17.1	X	329.78043	221.98887	111.01041	5.75051	0.2151836	0.26176220	2.4202752	21	7 11.8	19.0
255584	2006	MH <sub>9</sub>	16.1	X	77.49630	40.70983	284.68143	11.27809	0.2141269	0.21412694	2.7670808	21	—	—
255585	2006	NZ	16.3	X	127.52366	213.75854	76.10733	7.36058	0.1705884	0.28576376	2.2827829	21	—	—
255586	2006	OU <sub>1</sub>	17.5	X	35.00587	267.74953	75.19123	3.53665	0.2650126	0.27517092	2.3409979	21	12 28.2	20.5
255587	2006	Gardenia	17.6	X	295.18084	247.63584	153.64372	6.92169	0.3815482	0.26116792	2.4239454	21	7 17.2	20.4
255588	2006	OJ <sub>5</sub>	16.9	X	25.29333	224.38876	112.65540	7.61697	0.1511260	0.27353065	2.3503473	21	11 21.1	19.6
255589	2006	OM <sub>5</sub>	17.1	X	99.22407	4.55367	308.06634	5.05896	0.1768301	0.28361624	2.2942918	21	—	—
255590	2006	ON <sub>5</sub>	17.3	X	69.99087	313.84306	7.55370	2.50508	0.2302020	0.27911025	2.3189187	21	—	—
255591	2006	OB <sub>6</sub>	17.0	X	0.81464	30.66462	320.38794	3.28119	0.3284571	0.26876648	2.3780409	21	11	

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255601	2006	PD <sub>4</sub>	16.3	X	108.68729	240.20278	125.08221	15.19198	0.2793756	0.22250088	2.6972108	21	1 6.8	19.8
255602	2006	PG <sub>7</sub>	17.1	X	346.16270	251.24995	134.17684	14.41337	0.2059813	0.27063293	2.3670946	21	11 30.3	19.4
255603	2006	PD <sub>8</sub>	17.4	X	27.95937	10.99292	323.89179	3.97978	0.1838163	0.27170639	2.3608559	21	11 23.7	20.0
255604	2006	PY <sub>10</sub>	16.4	X	145.23854	262.24874	312.43613	8.48548	0.0846833	0.27246635	2.3564639	21	10 20.1	20.0
255605	2006	PZ <sub>11</sub>	17.9	X	21.81304	109.17890	227.29117	0.75415	0.1567803	0.27001284	2.3707173	21	11 12.7	20.1
255606	2006	PA <sub>12</sub>	17.2	X	58.38854	5.42476	288.53463	3.25231	0.1934633	0.27133411	2.3630149	21	11 10.2	20.4
255607	2006	PR <sub>13</sub>	17.7	X	336.38083	156.12881	190.51240	5.39611	0.2010625	0.26387834	2.4073185	21	8 21.8	19.6
255608	2006	PS <sub>13</sub>	17.2	X	118.08833	82.58286	196.46152	5.74740	0.1153449	0.28079915	2.3096111	21	12 19.1	20.7
255609	2006	PY <sub>14</sub>	16.9	X	330.83639	195.19516	115.99269	3.30407	0.1928670	0.25800195	2.4437347	21	6 11.5	19.1
255610	2006	PT <sub>15</sub>	16.9	X	47.53246	228.57180	101.34644	4.33212	0.2355112	0.27417060	2.3466886	21	12 21.4	20.2
255611	2006	PZ <sub>15</sub>	17.4	X	205.38439	264.94012	354.34168	7.84446	0.2505049	0.29474001	2.2361966	21	—	—
255612	2006	PW <sub>16</sub>	17.3	X	359.15682	158.49018	178.13230	0.83382	0.2011716	0.26478665	2.4018101	21	10 5.6	18.9
255613	2006	PF <sub>17</sub>	16.4	X	61.26578	142.34469	163.49868	8.61659	0.1399000	0.27145720	2.3623005	21	11 24.9	19.7
255614	2006	PS <sub>17</sub>	16.7	X	40.43299	47.89626	289.58874	3.36052	0.1579717	0.27224185	2.3577592	21	12 11.5	19.7
255615	2006	PK <sub>18</sub>	17.4	X	34.66095	332.94033	342.52772	0.78777	0.1937643	0.27177606	2.3604524	21	11 9.1	20.1
255616	2006	PK <sub>19</sub>	17.7	X	134.57103	86.88252	174.04464	1.77161	0.1722136	0.28098047	2.3086174	21	12 13.0	21.2
255617	2006	PE <sub>21</sub>	17.5	X	345.14099	243.67145	144.58242	1.86382	0.1820127	0.27105689	2.3646257	21	11 25.7	19.3
255618	2006	PP <sub>21</sub>	17.3	X	11.14423	281.38450	4.03581	1.03145	0.2303704	0.26238358	2.4164526	21	8 12.7	18.9
255619	2006	PG <sub>22</sub>	16.9	X	26.54401	24.87332	306.74940	4.19889	0.2161980	0.26956529	2.3733406	21	11 22.0	19.5
255620	2006	PV <sub>22</sub>	17.5	X	330.09088	127.33061	224.61453	0.40428	0.2004145	0.26112036	2.4242397	21	8 16.2	19.1
255621	2006	PX <sub>22</sub>	17.1	X	331.72166	181.54520	187.18689	4.82442	0.2180016	0.26314513	2.4117882	21	9 17.5	18.6
255622	2006	PR <sub>25</sub>	17.6	X	16.00787	212.90602	104.64932	0.65597	0.2411937	0.26683485	2.3895035	21	10 19.6	19.6
255623	2006	PV <sub>25</sub>	16.8	X	339.45287	10.13257	339.42237	6.07187	0.1426606	0.26405270	2.4062586	21	9 7.1	18.8
255624	2006	PA <sub>28</sub>	16.4	X	356.98213	261.36914	89.16961	13.28249	0.2056173	0.26771255	2.3842780	21	10 31.7	18.6
255625	2006	PC <sub>28</sub>	16.3	X	242.31447	223.98870	32.62220	13.58238	0.1288757	0.23542732	2.5975554	21	—	—
255626	2006	PZ <sub>29</sub>	17.4	X	68.89487	245.74483	77.45811	2.93907	0.2183861	0.27814239	2.3242951	21	—	—
255627	2006	PL <sub>32</sub>	16.7	X	316.11990	253.14024	105.82553	7.35474	0.1398315	0.26049951	2.4280900	21	8 5.9	19.0
255628	2006	PT <sub>39</sub>	16.9	X	55.20175	355.53796	338.95414	7.34279	0.1450466	0.27747605	2.3280147	21	12 25.4	20.1
255629	2006	PP <sub>42</sub>	17.8	X	87.57868	87.06443	175.78315	3.90349	0.1927872	0.27378134	2.3489124	21	11 3.7	21.2
255630	2006	QL <sub>1</sub>	16.9	X	20.34950	240.10400	96.91785	7.17137	0.1323160	0.27005828	2.3704514	21	11 7.3	19.5
255631	2006	QN <sub>1</sub>	16.8	X	305.86693	308.20855	56.73079	7.32363	0.1512713	0.26046421	2.4283094	21	7 26.0	19.4
255632	2006	QO <sub>2</sub>	17.0	X	58.84830	344.61476	330.38766	3.90227	0.2495075	0.27411625	2.3469988	21	12 15.7	20.4
255633	2006	QP <sub>2</sub>	16.7	X	270.24240	80.80417	331.00572	4.65866	0.1026263	0.26054193	2.4278264	21	8 13.8	19.8
255634	2006	QR <sub>2</sub>	17.2	X	318.38588	336.50426	23.24396	0.89682	0.1656824	0.26075495	2.4265040	21	8 7.3	19.3
255635	2006	QB <sub>5</sub>	17.2	X	29.16262	323.14380	339.28366	1.70333	0.1619357	0.26619670	2.3933209	21	10 6.1	19.6
255636	2006	QJ <sub>6</sub>	17.1	X	356.18021	227.62364	135.57731	2.78277	0.2025921	0.26825484	2.3810636	21	11 12.9	18.9
255637	2006	QL <sub>6</sub>	16.9	X	326.03986	177.58193	148.30958	9.79865	0.2564396	0.25823187	2.4422840	21	6 14.7	19.3
255638	2006	QN <sub>6</sub>	17.4	X	32.80496	192.97737	145.85450	1.44889	0.1729591	0.27172132	2.3607694	21	12 5.7	20.1
255639	2006	QR <sub>7</sub>	17.1	X	316.87021	232.80440	166.14121	4.64157	0.1767087	0.26626861	2.3928900	21	10 7.1	18.9
255640	2006	QL <sub>8</sub>	17.9	X	71.42517	125.66483	188.42259	0.57788	0.2371287	0.27642031	2.3339386	21	12 25.6	21.4
255641	2006	QH <sub>9</sub>	17.0	X	344.66803	49.99517	323.05122	5.63646	0.1160259	0.26739439	2.3861689	21	10 21.9	19.5
255642	2006	QG <sub>12</sub>	16.9	X	329.90780	286.52376	65.77288	3.01113	0.2202026	0.26268649	2.4145946	21	8 16.3	18.5
255643	2006	QG <sub>13</sub>	16.7	X	30.41153	258.03464	94.43748	6.49100	0.1771482	0.27365065	2.3496602	21	12 21.7	19.6
255644	2006	QH <sub>14</sub>	17.3	X	103.76362	237.17665	4.68176	5.31469	0.1589228	0.27287781	2.3540946	21	10 18.8	20.8
255645	2006	QP <sub>15</sub>	17.4	X	33.29519	129.40935	179.19000	4.69831	0.1994607	0.26909845	2.3760847	21	10 30.4	20.0
255646	2006	QF <sub>18</sub>	17.0	X	354.74966	281.99722	31.21084	7.52839	0.1085306	0.26114398	2.4222635	21	8 15.9	19.5
255647	2006	QA <sub>19</sub>	16.7	X	21.58896	248.31906	132.78485	7.57885	0.0840704	0.27646073	2.3337111	21	—	—
255648	2006	QD <sub>19</sub>	17.3	X	298.42872	348.23186	32.06018	3.09946	0.2052300	0.25929726	2.4355895	21	7 25.6	19.8
255649	2006	QO <sub>19</sub>	16.8	X	80.32086	209.16588	122.44838	8.38062	0.1282531	0.27936097	2.3175310	21	—	—
255650	2006	QT <sub>19</sub>	16.5	X	171.40215	270.78103	66.76423	2.67219	0.3093927	0.22860299	2.6489968	21	2 2.4	21.2
255651	2006	QK <sub>21</sub>	17.4	X	357.16837	182.36989	215.61857	1.55398	0.1909054	0.27375982	2.3490355	21	—	—
255652	2006	QQ <sub>21</sub>	17.3	X	335.52526	54.55733	311.94143	2.18199	0.1917287	0.26555339	2.3971846	21	9 24.7	18.9
255653	2006	QY <sub>24</sub>	16.4	X	348.45456	89.90961	235.27523	3.73600	0.2083308	0.26232048	2.4168401	21	8 15.9	18.0
255654	2006	QO <sub>26</sub>	17.7	X	112.41586	106.09890	160.73325	2.35970	0.1862163	0.27635807	2.3342890	21	11 30.9	21.5
255655	2006	QS <sub>26</sub>	17.4	X	244.71358	67.76742	288.97112	1.27012	0.1770066	0.24668193	2.5179349	21	4 19.8	21.3
255656	2006	QG <sub>27</sub>	16.7	X	259.75165	242.18686	169.91705	6.42373	0.1289295	0.25583821	2.4574939	21	7 24.6	20.1
255657	2006	QX <sub>27</sub>	17.5	X	40.84678	250.09265	34.70324	2.77365	0.2111585	0.26639472	2.3921348	21	10 9.1	20.1
255658	2006	QL <sub>28</sub>	17.1	X	319.84799	227.67290	161.67409	2.66960	0.2198816	0.26377492	2.4079477	21	9 22.6	18.9
255659	2006	QW <sub>28</sub>	17.9	X	62.27953	272.28791	30.39575	1.80775	0.1932063	0.27259560	2.3557190	21	11 26.8	21.1
255660	2006	QK <sub>29</sub>	16.9	X	100.01028	215.31211	77.06669	3.60057	0.1044148	0.27839739	2.3228755	21	12 16.2	20.1
255661	2006	QR <sub>30</sub>	16.9	X	42.67292	224.13523	104.74012	2.43931	0.1997791	0.27158039	2.3615860	21	12 9.2	19.9
255662	2006	QL <sub>32</sub>	16.7	X	7.18912	26.63344	321.36943	5.97434	0.1400534	0.26727097	2.3869035	21	10 28.9	19.2
255663	2006	QO <sub>32</sub>	16.9	X	31.44203	40.56401	310.82779	5.67142	0.1433418	0.27358084	2.3500599	21	12 16.2	19.7
255664	2006	QZ <sub>32</sub>	16.5	X	16.75439	324.44609	325.04519	9.93793	0.1725194	0.26104941	2.4246789	21	8 24.0	18.4
255665	2006	QC <sub>33</sub>	16.4	X	59.73128	330.33936	341.65564	6.92311	0.1168638	0.27340446	2.3510705	21	11 24.4	19.5
255666	2006	QN <sub>34</sub>	17.1	X	21.32101	120.98101	177.44928	4.15696	0.1983869	0.26408681	2.4060515	21	9 22.1	19.3
255667	2006	QM <sub>35</sub>	17.2	X	328.81649	110.78689	260.55644	1.64169	0.1950332	0.26411498	2.4058804	21	9 15.4	18.8
255668	2006	QC <sub>36</sub>	17.2	X	345.65420	160.58554	209.71306	1.69703	0.1764545	0.26695239	2.3888021	21	10 27.0	19.0
255669	2006	QR <sub>40</sub>	16.8	X	33.13135	301.14845	40.95426	7.26523	0.1364594	0.27342361	2.3509607	21	12 3.9	19.5
255670	2006	QL <sub>41</sub>												

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
255681 2006 QN <sub>50</sub>	17.2	X	357.34185	224.38223	110.80678	3.32705	0.2160889	0.26381056	2.4077308	21	10 2.5	18.9
255682 2006 QK <sub>51</sub>	17.4	X	117.90740	277.93034	357.42423	6.06457	0.2207792	0.28138321	2.3064140	21	12 16.8	21.3
255683 2006 QZ <sub>51</sub>	16.9	X	334.73838	357.01623	29.81009	7.90898	0.2475303	0.26711603	2.3878264	21	10 30.3	18.2
255684 2006 QF <sub>53</sub>	17.2	X	44.66636	177.21403	113.81768	3.44726	0.1999366	0.26749087	2.3855951	21	10 22.9	20.1
255685 2006 QO <sub>53</sub>	16.6	X	13.66859	220.82348	78.11595	6.95970	0.1885292	0.26420698	2.4053218	21	9 9.9	18.7
255686 2006 QM <sub>55</sub>	17.4	X	329.51762	5.12500	341.93020	2.03191	0.1921492	0.26116552	2.4239602	21	8 8.0	19.2
255687 2006 QS <sub>58</sub>	16.7	X	293.73551	278.28332	81.29371	7.11435	0.1470014	0.25868154	2.4394528	21	6 26.0	19.4
255688 2006 QJ <sub>59</sub>	17.2	X	43.18545	159.28683	141.79051	1.71491	0.1766620	0.26976619	2.3721622	21	10 30.3	20.0
255689 2006 QL <sub>60</sub>	17.7	X	349.30308	184.96969	146.65845	3.09585	0.2072370	0.26398077	2.4066958	21	9 2.0	19.3
255690 2006 QT <sub>60</sub>	17.4	X	359.78463	26.39672	296.43785	2.00521	0.1718218	0.26483605	2.4015113	21	9 9.8	19.4
255691 2006 QD <sub>61</sub>	16.9	X	347.38225	18.98173	299.76279	7.90320	0.0757030	0.26060356	2.4274436	21	8 5.4	19.3
255692 2006 QZ <sub>61</sub>	17.4	X	14.31233	99.69616	235.75913	0.48257	0.1981021	0.26706219	2.3881473	21	11 4.5	19.5
255693 2006 QP <sub>62</sub>	16.7	X	351.32906	266.77244	51.28580	4.04291	0.2245744	0.26127308	2.4232949	21	8 16.2	18.2
255694 2006 QU <sub>63</sub>	17.0	X	336.08021	183.52835	183.56755	3.80457	0.1356925	0.26392149	2.4070561	21	9 28.6	19.1
255695 2006 QZ <sub>65</sub>	17.0	X	77.33804	236.58076	30.22032	6.73251	0.1948524	0.26952473	2.3735787	21	10 27.7	20.3
255696 2006 QM <sub>66</sub>	17.0	X	62.24850	118.83657	156.47784	2.58312	0.1464572	0.26864719	2.3787448	21	10 15.9	19.9
255697 2006 QG <sub>81</sub>	17.1	X	355.30278	186.00092	144.34314	5.54106	0.1243043	0.26312701	2.4118989	21	9 10.9	19.3
255698 2006 QC <sub>82</sub>	16.9	X	50.86975	263.61325	34.39522	4.47551	0.1985784	0.26825811	2.3810443	21	11 7.3	19.9
255699 2006 QE <sub>84</sub>	17.3	X	69.40053	101.49918	153.42476	3.15969	0.1496229	0.26613408	2.3936963	21	9 27.4	20.3
255700 2006 QY <sub>86</sub>	17.8	X	13.44545	60.34801	243.77308	1.59136	0.1797727	0.26342640	2.4100711	21	9 10.6	19.9
255701 2006 QK <sub>88</sub>	17.2	X	70.76653	338.26257	353.00316	1.98205	0.1291974	0.27681717	2.3317073	21	—	—
255702 2006 QO <sub>88</sub>	17.2	X	337.43321	344.19407	359.70357	4.21031	0.2130799	0.26137255	2.4226801	21	8 22.4	18.9
255703 Stetson	17.3	X	357.99480	296.99059	11.43017	5.14457	0.1181710	0.26164087	2.4210234	21	8 13.3	19.7
255704 2006 QJ <sub>93</sub>	17.0	X	337.66026	306.20039	128.45338	7.24301	0.0785736	0.27978178	2.3152066	21	—	—
255705 2006 QO <sub>93</sub>	15.9	X	49.61312	228.90025	120.73099	6.25499	0.0897856	0.21090795	2.7951648	21	12 16.6	19.7
255706 2006 QL <sub>94</sub>	17.4	X	6.39233	117.44643	206.87251	1.57041	0.2102266	0.26522640	2.3991545	21	10 3.2	19.0
255707 2006 QH <sub>97</sub>	17.3	X	33.05171	97.36339	174.42903	2.64315	0.1746952	0.26151431	2.4218045	21	8 29.5	19.7
255708 2006 QP <sub>99</sub>	16.5	X	25.56645	247.47104	69.10220	7.72734	0.1365538	0.26684710	2.3894305	21	10 20.7	19.1
255709 2006 QD <sub>101</sub>	16.7	X	39.69398	290.84516	64.76801	6.86801	0.1432262	0.27688899	2.3313041	21	—	—
255710 2006 QL <sub>104</sub>	16.7	X	337.68829	76.64433	263.02030	1.33214	0.2308774	0.26278121	2.4140143	21	8 11.9	18.2
255711 2006 QR <sub>104</sub>	16.2	X	138.20711	157.42804	177.52167	16.00198	0.2726626	0.22438157	2.6821183	21	—	—
255712 2006 QE <sub>105</sub>	17.5	X	355.20147	183.81257	193.47362	5.02997	0.2098822	0.26991629	2.3712826	21	12 3.9	19.5
255713 2006 QP <sub>108</sub>	17.2	X	103.72173	306.55238	326.14754	5.58003	0.1073751	0.27332816	2.3515080	21	11 22.9	20.6
255714 2006 QS <sub>114</sub>	16.4	X	339.11080	102.90469	250.38763	5.61985	0.1222215	0.26418473	2.4054569	21	9 9.5	18.8
255715 2006 QK <sub>117</sub>	17.0	X	349.27110	45.72996	310.28925	1.21800	0.1899892	0.26492228	2.4009903	21	10 11.9	18.9
255716 2006 QK <sub>119</sub>	17.2	X	287.95385	223.30437	172.45450	2.17271	0.2047516	0.25985273	2.4321174	21	7 29.8	19.9
255717 2006 QH <sub>120</sub>	16.7	X	318.58582	169.72297	210.79275	4.45770	0.1947888	0.26403681	2.4063552	21	9 4.7	18.6
255718 2006 QJ <sub>120</sub>	16.9	X	309.46112	46.73461	291.50059	5.50469	0.1343844	0.25691198	2.4506417	21	6 22.4	19.6
255719 2006 QT <sub>120</sub>	16.8	X	8.59012	111.38890	246.32965	5.99046	0.1273511	0.27008934	2.3702696	21	11 16.3	19.2
255720 2006 QM <sub>121</sub>	17.4	X	321.60311	132.82619	251.25087	3.20527	0.2044734	0.26357936	2.4091386	21	9 16.9	19.2
255721 2006 QF <sub>122</sub>	17.4	X	41.32206	95.32598	206.74985	5.61312	0.2333685	0.26794291	2.3829112	21	11 6.6	20.2
255722 2006 QY <sub>122</sub>	17.3	X	351.40119	292.55680	108.67133	5.62584	0.1948127	0.27176970	2.3604893	21	12 30.1	19.4
255723 2006 QK <sub>124</sub>	17.5	X	349.51183	71.43621	277.36872	1.47221	0.2106350	0.26613963	2.3936630	21	10 2.0	19.2
255724 2006 QH <sub>125</sub>	16.9	X	335.57786	245.88175	133.44518	7.11721	0.1305901	0.26737857	2.3862630	21	10 21.2	19.2
255725 2006 QM <sub>127</sub>	16.7	X	31.30555	245.66815	80.67248	8.68123	0.2145322	0.27039012	2.3685115	21	11 23.8	19.3
255726 2006 QW <sub>128</sub>	16.6	X	315.04292	285.99015	136.28684	5.10676	0.1322893	0.27012803	2.3700433	21	11 13.9	18.7
255727 2006 QE <sub>129</sub>	17.1	X	301.43995	331.41388	34.16555	3.35959	0.1912993	0.25726627	2.4483912	21	7 10.5	19.7
255728 2006 QH <sub>132</sub>	16.6	X	40.22967	221.84010	92.16697	6.17950	0.1628592	0.26857065	2.3791967	21	11 11.6	19.5
255729 2006 QP <sub>132</sub>	16.9	X	353.85309	276.66519	54.23781	2.88039	0.1861151	0.26293903	2.4130483	21	9 12.9	18.8
255730 2006 QB <sub>133</sub>	17.2	X	88.17529	302.79494	75.81903	5.65701	0.1682175	0.28654485	2.2786326	21	—	—
255731 2006 QO <sub>135</sub>	16.7	X	28.21653	170.39831	145.07786	7.29575	0.1335081	0.26981336	2.3718856	21	10 23.3	19.4
255732 2006 QS <sub>135</sub>	16.8	X	9.95755	192.20979	130.75080	5.88270	0.2401962	0.26472645	2.4021742	21	10 17.6	18.8
255733 2006 QJ <sub>136</sub>	15.9	X	89.29329	50.80095	253.22957	6.95112	0.2268065	0.21026649	2.8008467	21	12 18.5	20.5
255734 2006 QD <sub>138</sub>	16.6	X	278.33796	16.39901	243.12601	4.48193	0.1846206	0.24135773	2.5548294	21	1 21.4	20.6
255735 2006 QG <sub>138</sub>	17.2	X	349.66391	227.35754	128.61696	3.80478	0.0985136	0.26678994	2.3897717	21	10 9.6	19.6
255736 2006 QK <sub>138</sub>	17.5	X	91.73551	181.56021	105.32113	2.82742	0.1251209	0.27522866	2.3406705	21	12 1.9	20.9
255737 2006 QA <sub>145</sub>	17.0	X	279.93850	210.19671	212.81799	2.17210	0.1882989	0.26180206	2.4200296	21	8 28.7	19.8
255738 2006 QW <sub>147</sub>	17.3	X	297.65415	31.18208	19.99903	1.76577	0.1794489	0.26175708	2.4203068	21	9 13.9	19.4
255739 2006 QJ <sub>148</sub>	17.9	X	278.57477	279.47406	0.43959	10.84462	0.2135426	0.24119219	2.5559983	21	2 17.1	21.9
255740 2006 QZ <sub>158</sub>	17.5	X	195.50455	48.69396	198.02041	2.28182	0.1227000	0.28606387	2.2811861	21	—	—
255741 2006 QA <sub>164</sub>	17.3	X	7.52131	20.10186	283.62911	3.07674	0.1710495	0.26082443	2.4260730	21	8 25.9	19.3
255742 2006 QC <sub>183</sub>	17.3	X	259.10418	175.98719	258.83566	1.57512	0.1365751	0.26162185	2.4211408	21	8 24.2	20.2
255743 2006 RV	16.4	X	120.74117	339.46743	48.93458	4.26027	0.1823983	0.21967765	2.7202708	21	2 7.6	20.2
255744 2006 RQ <sub>2</sub>	17.3	X	307.68347	118.82612	263.23665	3.83984	0.2398298	0.26166284	2.4208879	21	8 6.2	19.4
255745 2006 RU <sub>2</sub>	16.6	X	347.27482	308.70044	47.56699	8.38456	0.1624222	0.26441016	2.4040894	21	10 9.9	18.6
255746 2006 RC <sub>6</sub>	16.9	X	354.13589	338.85420	1.44913	4.27275	0.2469970	0.26249135	2.4157912	21	10 3.2	18.1
255747 2006 RS <sub>11</sub>	17.0	X	2.69257	230.62656	107.28535	4.46958	0.2029782	0.26376951	2.4079806	21	10 18.6	19.0
255748 2006 RA <sub>12</sub>	17.2	X	270.71622	231.06405	181.55356	2.14324	0.1979461	0.25660320	2.4526072	21	7 29.9	20.4
255749 2006 RV <sub>16</sub>	17.2	X	34.67674	284.66496	16.00595	5.96124	0.1674337	0.26558775	2.3969779	21	10 13.7	19.6
255750 2006 RC <sub>18</sub>	17.2	X	306.70996	76.06674	297.02353	6.33023	0.2183312	0.25757473	2.4464361	21	7 25.9	19.3
255751 2006 RO <sub>18</sub>	17.0	X	231.10884	98.18396	269.03615	2.21765	0.1653794	0.24256126	2.5463715	21	4 20.9	21.0
255752 2006 RR <sub>20</sub>	17.0	X	4.44634	189.37598	149.52927	2.78094	0.2291981	0.26511732	2.3998125	21	10 27.1	18.8
255753 2006 RO <sub>22</sub>	16.8	X	145.82177	159.73369	232.53319	5.64991	0.2687882	0.230				

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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
255761 2006 RM <sub>42</sub>	17.6	X	312.26904	38.59825	17.99833	2.17818	0.1021716	0.26506720	2.4001151	21	10 28.9	20.0
255762 2006 RX <sub>42</sub>	16.2	X	354.69612	33.61555	183.12126	8.81999	0.1099076	0.23821474	2.5772524	21	3 18.7	18.9
255763 2006 RE <sub>46</sub>	17.0	X	252.37306	35.14081	52.69431	2.27870	0.1477777	0.25763544	2.4460518	21	9 2.4	20.3
255764 2006 RW <sub>49</sub>	17.4	X	230.43908	188.64030	194.76928	4.25104	0.1171569	0.24425756	2.5345686	21	5 15.7	21.3
255765 2006 RK <sub>55</sub>	17.1	X	133.00750	85.76218	24.05171	5.54189	0.1386667	0.23920378	2.5701434	21	5 25.7	21.0
255766 2006 RZ <sub>55</sub>	17.2	X	3.13023	244.91324	177.55699	5.06242	0.2144331	0.27325057	2.3519531	21	—	—
255767 2006 RB <sub>57</sub>	16.8	X	130.19824	238.83197	179.15659	3.71641	0.1654915	0.23069389	2.6329664	21	3 21.6	20.6
255768 2006 RO <sub>58</sub>	16.8	X	129.47951	265.89182	174.95169	4.30059	0.1410306	0.23498515	2.6008128	21	4 16.6	20.4
255769 2006 RW <sub>58</sub>	16.6	X	119.97004	31.18483	164.35137	2.45232	0.1525291	0.25695225	2.4503856	21	9 4.6	20.1
255770 2006 RA <sub>59</sub>	16.7	X	187.46955	9.40323	341.73060	4.00742	0.1766628	0.23225546	2.6211513	21	2 23.6	21.0
255771 2006 RE <sub>65</sub>	17.4	X	276.01586	68.18142	323.74403	6.05492	0.1165284	0.25655044	2.4529435	21	7 22.7	20.5
255772 2006 RK <sub>66</sub>	16.7	X	222.06785	324.71139	356.29718	3.97614	0.1543955	0.23382108	2.6094377	21	2 17.9	20.8
255773 2006 RD <sub>70</sub>	17.6	X	213.37545	120.77618	338.43249	0.72566	0.1395011	0.25412569	2.4685220	21	8 3.4	21.4
255774 2006 RZ <sub>75</sub>	17.2	X	141.41278	285.72928	173.33261	5.38420	0.2254603	0.23875694	2.5733491	21	5 29.8	21.4
255775 2006 RS <sub>82</sub>	17.5	X	67.56542	336.46945	321.55625	0.55199	0.1859713	0.27011678	2.3701091	21	11 25.5	20.7
255776 2006 RY <sub>83</sub>	17.0	X	320.95036	264.28099	353.94402	2.59338	0.1577501	0.24236372	2.5477549	21	3 15.0	20.2
255777 2006 RK <sub>86</sub>	17.4	X	110.64857	78.92082	183.26074	2.28979	0.1609534	0.27123580	2.3635858	21	11 21.7	21.1
255778 2006 RS <sub>87</sub>	17.3	X	283.20074	73.53654	180.52373	7.43583	0.1661516	0.23463900	2.6033701	21	1 22.1	21.4
255779 2006 RK <sub>88</sub>	16.8	X	316.41478	56.99451	196.33834	14.79558	0.0745986	0.23844469	2.5755952	21	3 13.3	20.2
255780 2006 RM <sub>88</sub>	16.9	X	212.99504	290.91171	209.70009	5.69608	0.1229409	0.26138977	2.4225737	21	9 27.4	20.4
255781 2006 RW <sub>92</sub>	17.2	X	83.17583	348.19554	263.40680	1.38039	0.1069106	0.26216440	2.4177993	21	10 2.1	20.5
255782 2006 RH <sub>95</sub>	17.7	X	160.07017	227.25770	218.65562	3.97761	0.2845337	0.23739968	2.5831480	21	5 31.1	22.3
255783 2006 RJ <sub>95</sub>	17.0	X	272.78178	291.88974	356.57482	2.16951	0.0421406	0.23479739	2.6021992	21	3 10.3	20.4
255784 2006 RJ <sub>96</sub>	17.2	X	180.29529	195.32979	215.19627	1.84337	0.1743234	0.23828660	2.5767343	21	4 29.9	21.3
255785 2006 RE <sub>97</sub>	16.8	X	98.73578	113.71221	113.78555	3.23558	0.1709367	0.22971785	2.6404192	21	4 1.2	20.2
255786 2006 RW <sub>98</sub>	16.5	X	333.64292	3.76100	18.15757	7.70736	0.1705838	0.26313864	2.4118278	21	10 16.2	18.3
255787 2006 RF <sub>100</sub>	16.6	X	305.19730	181.60507	252.51090	7.28321	0.0741890	0.26967939	2.3726711	21	11 13.7	19.0
255788 2006 RK <sub>100</sub>	16.4	X	89.55414	220.22702	86.73938	6.67797	0.0296391	0.27604539	2.3360513	21	12 16.3	19.3
255789 2006 RY <sub>100</sub>	16.7	X	332.30242	276.87603	66.14546	7.11152	0.1418994	0.25985530	2.4321013	21	8 15.7	19.0
255790 2006 SQ	16.3	X	185.52735	32.17379	293.11394	6.43818	0.2017782	0.22971308	2.6404558	21	1 23.2	20.7
255791 2006 SF <sub>3</sub>	17.0	X	346.46452	342.91178	350.75961	5.90100	0.1173593	0.26070148	2.4268358	21	8 28.7	19.2
255792 2006 ST <sub>7</sub>	16.9	X	75.05064	231.14029	73.43982	5.81012	0.2356450	0.27335904	2.3513309	21	12 16.5	20.5
255793 2006 SB <sub>8</sub>	16.6	X	220.90497	346.24119	333.26222	7.03961	0.1723380	0.23429996	2.6058809	21	2 14.4	21.0
255794 2006 SE <sub>8</sub>	16.4	X	104.15477	174.01390	222.33277	10.11381	0.2905125	0.22060822	2.7126156	21	2 7.2	20.2
255795 2006 SH <sub>8</sub>	16.0	X	352.10931	296.24674	31.73452	22.46599	0.2499825	0.25966869	2.4332664	21	9 21.1	18.1
255796 2006 SY <sub>10</sub>	17.0	X	247.52717	222.87443	191.18787	4.36679	0.1593719	0.25307894	2.4753239	21	7 8.6	20.6
255797 2006 SN <sub>11</sub>	16.8	X	19.53924	240.39877	92.27712	3.94212	0.2461487	0.26670035	2.3903069	21	11 18.9	19.2
255798 2006 SG <sub>13</sub>	16.9	X	302.35429	239.15939	173.67062	9.08307	0.2268019	0.26222614	2.4174197	21	9 18.4	18.9
255799 2006 ST <sub>14</sub>	16.6	X	326.87019	184.89040	282.59219	3.98197	0.0953832	0.27775923	2.3264321	21	—	—
255800 2006 SN <sub>15</sub>	16.3	X	105.30427	155.31473	224.47465	5.47459	0.0471995	0.22175606	2.7032469	21	—	—
255801 2006 SD <sub>19</sub>	16.6	X	246.03756	64.82059	266.10909	3.18004	0.0815074	0.23882683	2.5728471	21	3 26.6	20.5
255802 2006 SZ <sub>21</sub>	17.4	X	39.25878	97.98146	219.17237	5.12573	0.1608955	0.26791811	2.3830583	21	11 12.5	20.0
255803 2006 SL <sub>22</sub>	16.7	X	349.15306	229.84917	93.09475	7.86816	0.1509302	0.25871021	2.4392726	21	8 19.0	18.9
255804 2006 SV <sub>24</sub>	17.2	X	150.62432	109.65227	268.68219	4.71146	0.2330879	0.22895030	2.6463172	21	2 25.7	21.5
255805 2006 SM <sub>25</sub>	16.9	X	286.02656	191.40833	191.48400	4.76012	0.1175191	0.25651195	2.4531889	21	7 22.1	20.0
255806 2006 SD <sub>33</sub>	17.1	X	297.65570	251.60514	185.58984	11.19477	0.1807387	0.26525291	2.3989947	21	10 26.2	19.2
255807 2006 SO <sub>34</sub>	16.5	X	282.74550	48.28209	230.91086	4.63797	0.1834331	0.23996898	2.5646768	21	2 18.2	20.4
255808 2006 SM <sub>35</sub>	16.7	X	265.90287	299.84243	357.83846	7.71592	0.1148994	0.23832508	2.5764569	21	3 6.1	20.5
255809 2006 SN <sub>40</sub>	16.9	X	277.11073	313.56245	110.25240	3.67816	0.1696523	0.25922898	2.4360172	21	8 30.9	19.8
255810 2006 SC <sub>42</sub>	16.9	X	221.87671	281.21796	107.37966	5.79153	0.1643677	0.24469909	2.5315187	21	5 11.9	20.9
255811 2006 SB <sub>46</sub>	17.1	X	15.87257	296.29697	26.79371	3.76512	0.1379749	0.26402641	2.4064184	21	10 10.3	19.5
255812 2006 SE <sub>46</sub>	16.8	X	58.25923	112.73966	265.50278	6.05459	0.1435762	0.27809571	2.3245552	21	—	—
255813 2006 SO <sub>48</sub>	16.7	X	145.18754	225.20507	201.90373	12.92082	0.2476810	0.23102516	2.6304488	21	4 25.1	21.1
255814 2006 SD <sub>50</sub>	16.7	X	180.46824	89.07291	20.20254	7.27483	0.2075360	0.24523188	2.5278508	21	7 15.0	21.0
255815 2006 SP <sub>51</sub>	16.5	X	64.22193	206.93164	94.61167	8.63989	0.2046744	0.27167469	2.3610395	21	11 30.1	19.9
255816 2006 SN <sub>52</sub>	17.6	X	288.75451	56.76975	323.54996	5.97559	0.1167385	0.25661946	2.4525036	21	7 24.9	20.6
255817 2006 SQ <sub>54</sub>	17.0	X	298.00549	1.31823	71.28664	3.38939	0.1861928	0.26351235	2.4095470	21	10 18.1	19.1
255818 2006 SZ <sub>54</sub>	16.2	X	197.78514	316.37194	77.56435	5.46954	0.1250611	0.24027225	2.5625183	21	4 26.5	20.1
255819 2006 SE <sub>57</sub>	17.4	X	18.40499	102.83949	237.16470	2.41505	0.2095562	0.26671976	2.3901909	21	11 20.3	19.9
255820 2006 SP <sub>57</sub>	16.8	X	78.98629	347.77439	322.54353	6.15315	0.1286029	0.27340560	2.3510639	21	12 17.7	20.2
255821 2006 SB <sub>68</sub>	16.6	X	255.57081	333.14550	171.81565	6.22592	0.1525228	0.27103773	2.3647372	21	11 25.9	19.3
255822 2006 SO <sub>70</sub>	17.4	X	218.73626	359.78945	37.11063	3.46712	0.2277439	0.24320557	2.5418722	21	5 14.6	21.8
255823 2006 SB <sub>71</sub>	16.8	X	212.88941	294.36897	185.87485	6.62438	0.0509258	0.25683219	2.4511492	21	9 7.2	20.1
255824 2006 SF <sub>71</sub>	17.3	X	248.96938	254.36076	72.16150	2.10980	0.1307174	0.23858694	2.5745714	21	3 22.9	21.2
255825 2006 SL <sub>72</sub>	17.4	X	102.04971	288.07447	188.50997	6.95651	0.0800370	0.23487964	2.6015917	21	4 21.2	20.7
255826 2006 SB <sub>76</sub>	17.3	X	337.74828	214.76169	163.66043	3.45469	0.1359295	0.26290799	2.4132382	21	10 20.8	19.5
255827 2006 SZ <sub>85</sub>	16.8	X	214.70308	140.76146	193.05425	4.46584	0.1011939	0.23376265	2.6098726	21	2 25.1	20.7
255828 2006 SC <sub>86</sub>	18.0	X	272.99801	270.61027	193.58347	1.15675	0.1388460	0.26447947	2.4036694	21	10 26.2	20.5
255829 2006 ST <sub>87</sub>	16.4	X	2.10727	209.04106	27.55185	4.56937	0.1341880	0.24290912	2.5439398	21	4 27.5	18.7
255830 2006 SY <sub>89</sub>	16.9	X	167.81511	77.19745	14.93948	15.29445	0.0858958	0.24295589	2.5436133	21	6 3.3	20.9
255831 2006 SO <sub>90</sub>	16.8	X	283.83082	328.02111	259.57677	0.97486	0.1728636	0.22570032	2.6716605	21	—	—
255832 2006 SH <sub>95</sub>	16.9	X	71.35561	126.17130	31.10993	5.96664	0.1258537	0.23623113	2.5916596	21	5 8.2	19.9
255833 2006 SK <sub>95</sub>	17.8	X	216.41328	321.71672	31.70050	3.02889	0.2492496	0.23747370	2.5826112	21	3 21.9	



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Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
255841 2006 SM <sub>110</sub>	16.5	X	16.07915	263.19068	65.89445	8.74580	0.2443262	0.26561862	2.3967921	21	11 7.9	18.7
255842 2006 SG <sub>111</sub>	17.0	X	215.86576	267.69634	273.84821	5.67630	0.0646583	0.27786070	2.3258657	21	12 4.8	19.8
255843 2006 SJ <sub>116</sub>	17.5	X	154.90545	61.39530	26.39906	1.79410	0.1425640	0.23861296	2.5743842	21	5 21.2	21.4
255844 2006 SH <sub>117</sub>	16.5	X	162.09900	239.95917	197.95764	13.46695	0.0803758	0.23955772	2.5676112	21	5 13.9	20.3
255845 2006 SM <sub>117</sub>	17.4	X	274.92250	19.45348	60.50705	1.25275	0.1739814	0.25905670	2.4370971	21	9 18.4	20.2
255846 2006 SQ <sub>121</sub>	16.3	X	188.16617	37.94834	342.37659	5.49831	0.2979870	0.23385853	2.6091592	21	3 31.8	21.1
255847 2006 SA <sub>136</sub>	17.1	X	334.45122	283.29364	76.87496	7.06227	0.1714168	0.26290937	2.4132298	21	9 17.8	19.2
255848 2006 SH <sub>138</sub>	15.9	X	117.87579	68.39357	25.67409	17.52445	0.2344031	0.23087715	2.6315730	21	4 28.6	19.9
255849 2006 SS <sub>142</sub>	17.2	X	115.59251	223.16907	41.64460	2.64776	0.1778672	0.27487384	2.3426843	21	11 29.9	21.0
255850 2006 SO <sub>143</sub>	17.4	X	340.64332	121.10769	204.41678	6.03063	0.1259419	0.25647879	2.4534003	21	7 30.8	19.9
255851 2006 SP <sub>151</sub>	16.9	X	196.51089	286.03681	223.31802	2.71415	0.1201324	0.25908455	2.4369225	21	9 21.0	20.6
255852 2006 SS <sub>151</sub>	17.6	X	311.34516	164.12878	262.97089	1.13589	0.0399216	0.26680888	2.3896586	21	11 15.2	20.2
255853 2006 SQ <sub>152</sub>	17.4	X	357.79798	51.99379	235.77992	2.01950	0.1801130	0.25408539	2.4687830	21	7 7.5	19.2
255854 2006 SK <sub>153</sub>	17.2	X	156.75714	219.83693	63.25090	6.26235	0.1320696	0.28528496	2.2853364	21	—	—
255855 2006 SF <sub>154</sub>	16.9	X	313.37056	246.30928	73.71124	7.41968	0.1736935	0.25155839	2.4852887	21	5 26.6	19.4
255856 2006 SJ <sub>154</sub>	16.7	X	59.04782	239.64331	91.59128	3.83481	0.1735211	0.27310085	2.3528127	21	12 27.7	19.9
255857 2006 SC <sub>160</sub>	16.2	X	1.18630	204.53222	51.25347	5.36030	0.1148205	0.24575595	2.5242557	21	5 25.8	18.9
255858 2006 SF <sub>160</sub>	17.5	X	244.73127	9.43502	66.98386	3.55240	0.1664778	0.25270925	2.4777374	21	8 5.7	20.9
255859 2006 SL <sub>163</sub>	16.9	X	189.98360	55.18054	33.56880	3.15251	0.0444255	0.24726600	2.5139682	21	7 1.2	20.4
255860 2006 SV <sub>165</sub>	16.6	X	239.46516	227.47698	235.50660	4.37056	0.0677477	0.26089724	2.4256217	21	9 12.4	19.9
255861 2006 ST <sub>169</sub>	16.3	X	282.39769	16.29761	197.27343	11.65861	0.1316316	0.22659797	2.6646001	21	—	—
255862 2006 SG <sub>171</sub>	17.5	X	25.87134	334.51099	338.81929	1.85524	0.2155354	0.26540239	2.3990938	21	10 25.3	19.8
255863 2006 SJ <sub>172</sub>	17.2	X	194.79271	180.59641	345.26542	6.35994	0.0526527	0.26592595	2.3984952	21	10 15.8	20.4
255864 2006 SB <sub>175</sub>	17.1	X	282.59138	69.10564	235.39302	2.91309	0.1033495	0.24058226	2.5603165	21	4 15.8	20.6
255865 2006 SL <sub>182</sub>	17.3	X	159.37669	77.81684	7.96620	4.35450	0.0167354	0.24090867	2.5580033	21	5 20.1	21.1
255866 2006 SW <sub>184</sub>	17.3	X	152.27248	21.33410	37.97045	1.72746	0.2001001	0.23379821	2.6096079	21	4 17.3	21.3
255867 2006 SA <sub>186</sub>	16.9	X	201.80440	37.51658	24.99363	7.29934	0.1006735	0.24310032	2.5426057	21	6 4.0	20.8
255868 2006 SW <sub>187</sub>	16.9	X	311.42815	9.54021	18.36507	7.14445	0.1321169	0.26048119	2.4282038	21	9 13.4	19.2
255869 2006 SS <sub>196</sub>	16.7	X	151.30800	80.49431	359.69268	12.14824	0.1546086	0.23649965	2.5896976	21	5 4.6	20.9
255870 2006 SW <sub>196</sub>	16.7	X	121.71990	171.87822	336.92325	6.28704	0.2374055	0.24115105	2.5562890	21	7 14.6	20.9
255871 2006 SA <sub>203</sub>	17.8	X	306.64231	229.52533	197.96373	0.94700	0.2053420	0.26521746	2.3992084	21	10 25.4	19.4
255872 2006 SS <sub>208</sub>	16.7	X	196.91555	274.46654	120.00690	2.12690	0.1217922	0.24085686	2.5583701	21	4 25.5	20.7
255873 2006 SL <sub>211</sub>	16.5	X	258.75610	242.60226	74.86493	8.16293	0.2003665	0.24026582	2.5625640	21	3 18.9	20.7
255874 2006 SB <sub>215</sub>	15.5	X	167.04276	195.66370	214.71604	11.98519	0.1732127	0.23385508	2.6091849	21	4 17.4	19.6
255875 2006 SJ <sub>223</sub>	17.1	X	341.48860	245.90926	16.01615	4.26366	0.0890352	0.24379759	2.5377555	21	5 1.0	20.0
255876 2006 SN <sub>223</sub>	17.0	X	183.60553	144.87606	21.72022	5.47350	0.1033852	0.26031202	2.4292557	21	10 2.6	20.6
255877 2006 SS <sub>223</sub>	16.2	X	192.07497	167.44699	202.77023	8.22087	0.0734893	0.23331798	2.6131875	21	3 18.1	20.0
255878 2006 SQ <sub>239</sub>	17.3	X	298.53745	27.67797	51.81312	1.97719	0.1556123	0.26563340	2.3967032	21	11 2.1	19.2
255879 2006 SB <sub>241</sub>	17.4	X	171.57824	69.74931	127.22444	2.12449	0.1237459	0.26722659	2.3871677	21	10 29.1	20.9
255880 2006 SJ <sub>250</sub>	17.1	X	230.48788	300.24809	204.82293	5.87454	0.0675056	0.26628656	2.3927825	21	11 3.2	20.0
255881 2006 SE <sub>254</sub>	16.7	X	161.71941	71.87893	25.40464	3.62462	0.1147597	0.24395328	2.5366757	21	6 7.8	20.5
255882 2006 SG <sub>259</sub>	17.3	X	171.97285	349.68560	231.22884	1.84663	0.1284613	0.27105687	2.3646259	21	11 28.1	20.8
255883 2006 SV <sub>259</sub>	16.8	X	257.23021	316.29733	212.04481	1.68495	0.1548504	0.27506639	2.3415909	21	12 30.4	19.3
255884 2006 SN <sub>262</sub>	17.3	X	201.21390	164.48760	177.41771	2.18832	0.2197664	0.23207694	2.6224953	21	2 24.3	21.9
255885 2006 SJ <sub>263</sub>	16.1	X	165.16623	357.33779	286.94203	5.49381	0.0527392	0.21353584	2.7721849	21	—	—
255886 2006 SX <sub>268</sub>	16.8	X	136.19481	244.98237	320.15944	4.38752	0.0568438	0.25922205	2.4360660	21	9 27.2	20.2
255887 2006 SS <sub>269</sub>	16.6	X	226.18885	45.94779	197.36568	4.69831	0.1191082	0.21452792	2.7636318	21	—	—
255888 2006 SD <sub>271</sub>	17.3	X	32.40769	299.28842	30.85509	2.58258	0.1040555	0.26809310	2.3820212	21	11 10.8	20.1
255889 2006 SG <sub>271</sub>	17.1	X	23.54887	179.12775	51.56205	2.85615	0.0762711	0.24716895	2.5146262	21	5 28.7	19.7
255890 2006 SD <sub>274</sub>	17.2	X	112.74398	242.78406	224.74695	3.49743	0.0698408	0.23164120	2.6257831	21	4 20.5	20.7
255891 2006 SS <sub>274</sub>	16.6	X	100.71102	26.27216	46.65142	5.47328	0.0843899	0.22240865	2.6979565	21	2 25.0	20.1
255892 2006 SL <sub>275</sub>	16.5	X	73.55315	51.90842	32.45098	4.73720	0.0177466	0.22064644	2.7123024	21	1 24.9	20.2
255893 2006 ST <sub>279</sub>	16.1	X	56.90674	186.56894	238.45331	8.06027	0.0917906	0.21713578	2.7414592	21	—	—
255894 2006 SK <sub>284</sub>	17.2	X	25.46976	64.39968	238.74554	5.74363	0.1829110	0.26233489	2.4167516	21	10 1.6	19.8
255895 2006 SN <sub>286</sub>	16.1	X	131.09982	11.27176	83.91355	14.32392	0.0543812	0.23753774	2.5821471	21	5 1.2	19.8
255896 2006 SA <sub>289</sub>	16.5	X	268.27184	3.39507	62.06437	7.83185	0.0892920	0.25885178	2.4383831	21	9 5.8	19.6
255897 2006 SY <sub>289</sub>	16.5	X	355.52483	320.51668	296.21513	1.92775	0.0187904	0.24695411	2.5160845	21	5 21.5	19.6
255898 2006 SK <sub>294</sub>	17.2	X	167.40726	80.65780	317.22566	2.18699	0.1161559	0.23587984	2.5942322	21	3 29.1	21.0
255899 2006 SP <sub>298</sub>	16.6	X	272.30188	76.13682	200.87564	14.30129	0.0945475	0.23276870	2.6172969	21	2 13.1	20.7
255900 2006 SR <sub>298</sub>	16.4	X	38.74829	215.61276	357.36815	8.36355	0.1072806	0.24306819	2.5428299	21	5 29.9	19.3
255901 2006 SH <sub>306</sub>	17.2	X	21.99810	318.81496	72.67987	1.80939	0.2035812	0.27268699	2.3551927	21	—	—
255902 2006 SD <sub>308</sub>	16.8	X	74.28226	106.40392	267.23321	3.26392	0.0821171	0.21368565	2.7708891	21	—	—
255903 2006 SS <sub>315</sub>	17.1	X	249.62051	243.38468	177.33413	7.97142	0.1652525	0.25245158	2.4794232	21	7 18.6	20.7
255904 2006 SO <sub>316</sub>	17.7	X	173.81433	34.88344	41.75340	4.99797	0.1611394	0.24089783	2.5580800	21	5 25.9	21.9
255905 2006 SC <sub>323</sub>	17.0	X	187.99340	336.80322	77.88950	2.90451	0.1307903	0.24103348	2.5571202	21	5 11.9	20.9
255906 2006 SY <sub>325</sub>	16.1	X	281.18805	241.35144	25.06311	17.13410	0.1921227	0.23490502	2.6014043	21	2 10.8	20.4
255907 2006 SE <sub>327</sub>	17.6	X	151.45049	297.33616	174.26999	3.85967	0.1224157	0.24227185	2.5483989	21	6 16.8	21.4
255908 2006 SC <sub>329</sub>	17.1	X	264.99542	333.80113	103.94497	2.30938	0.1671278	0.25698061	2.4502053	21	9 1.9	20.3
255909 2006 SN <sub>339</sub>	17.2	X	334.96487	329.01270	62.26181	3.94018	0.1290984	0.26511034	2.3998546	21	11 3.8	19.2
255910 2006 SK <sub>342</sub>	16.5	X	149.05805	270.38470	278.39158	3.46586	0.1262438	0.25807415	2.4432789	21	9 22.1	20.4
255911 2006 SS <sub>348</sub>	17.8	X	240.22705	260.26594	207.00936	1.95735	0.1308814	0.25804405	2.4434689	21	9 14.2	20.9
255912 2006 SA <sub>354</sub>	16.7	X	227.75491	29.97786	64.35711	5.05618	0.2043979	0.25180223	2.4836840	21	8 7.8	20.6
255913 2006 SE <sub>354</sub>	16.8	X	285.18126	220.88209	91.44875	4.07478	0.241453					

ELEMENTS AND OPPOSITION DATES IN 2021

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2021 JULY 5.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	$\omega$	$\Omega$	<i>i</i>	<i>e</i>	$\mu$	<i>a</i>	TE	Oppos.	<i>V</i>
255921 2006 SV <sub>365</sub>	17.0	X	220.70884	353.31073	58.70663	2.25943	0.1032269	0.24456426	2.5324491	21	6 11.9	20.7
255922 2006 SU <sub>366</sub>	16.3	X	295.35740	124.62766	237.31019	12.22879	0.1437407	0.25417371	2.4682111	21	6 30.9	19.4
255923 2006 SE <sub>367</sub>	16.1	X	182.33535	102.43869	329.94694	15.02341	0.1452929	0.24037994	2.5617529	21	5 25.4	20.5
255924 2006 SM <sub>388</sub>	16.0	X	275.53541	150.59215	124.71673	9.92559	0.0340281	0.23128774	2.6284576	21	2 28.6	19.6
255925 2006 SF <sub>390</sub>	15.8	X	142.23753	288.37173	139.58998	12.27181	0.1220630	0.23170317	2.6253149	21	4 16.2	19.9
255926 2006 SY <sub>390</sub>	15.7	X	153.99636	66.89610	336.65600	13.78611	0.0699238	0.23116961	2.6293529	21	3 15.8	19.6
255927 2006 SO <sub>391</sub>	16.1	X	178.33360	223.91817	186.31414	12.60875	0.1627706	0.23438776	2.6052302	21	4 29.6	20.3
255928 2006 SN <sub>392</sub>	17.3	X	288.05464	89.95290	198.57115	13.72530	0.2117270	0.24182129	2.5515634	21	3 2.9	21.3
255929 2006 SM <sub>393</sub>	16.6	X	180.54616	241.88531	144.38738	2.52780	0.1104193	0.23072507	2.6327292	21	3 30.1	20.5
255930 2006 SD <sub>397</sub>	16.1	X	181.22623	264.90044	149.99379	15.97384	0.1660899	0.23818223	2.5774870	21	5 10.9	20.6
255931 2006 SW <sub>400</sub>	17.4	X	157.80729	332.42967	200.47880	0.95900	0.1237818	0.25371028	2.4712158	21	9 11.8	21.2
255932 2006 SA <sub>402</sub>	16.0	X	297.28377	40.71138	210.76464	13.38159	0.0804560	0.22931877	2.6434817	21	2 12.1	20.0
255933 2006 SV <sub>406</sub>	15.9	X	140.80297	258.02705	150.37265	15.54606	0.2243523	0.22774469	2.6556482	21	3 30.4	20.2
255934 2006 SU <sub>408</sub>	16.1	X	251.98760	197.98281	130.28784	14.25095	0.2923147	0.23952712	2.5678299	21	3 19.8	20.7
255935 2006 SZ <sub>412</sub>	15.8	X	132.30927	15.86914	311.67408	13.45088	0.0944323	0.21790958	2.7349654	21	—	—
255936 2006 TP <sub>1</sub>	16.6	X	72.13882	299.80062	179.19699	9.90318	0.0953934	0.23228584	2.6209228	21	3 13.6	19.7
255937 2006 TD <sub>4</sub>	17.3	X	34.45484	38.05738	156.44155	4.52781	0.0642334	0.23597289	2.5935501	21	4 26.7	20.3
255938 2006 TB <sub>8</sub>	17.2	X	327.95217	8.88445	232.86336	3.30422	0.0507083	0.23764837	2.5813456	21	3 18.4	20.4
255939 2006 TT <sub>9</sub>	16.9	X	175.68190	208.03735	204.65178	13.10019	0.1913195	0.23714364	2.5850070	21	4 29.9	21.1
255940 2006 TZ <sub>9</sub>	17.0	X	273.99612	201.05027	224.92761	2.05150	0.1866057	0.25896049	2.4377007	21	8 23.9	20.1
255941 2006 TT <sub>10</sub>	17.1	X	276.02774	345.55645	359.02155	2.09718	0.1396481	0.24625241	2.5208619	21	5 12.4	20.6
255942 2006 TT <sub>11</sub>	16.7	X	197.95119	160.49726	210.49392	9.99855	0.1598189	0.23600112	2.5933433	21	3 25.9	21.0
255943 2006 TT <sub>12</sub>	15.7	X	99.04744	218.55396	278.10577	11.22678	0.1118598	0.23912185	2.5707304	21	5 16.2	19.2
255944 2006 TM <sub>15</sub>	16.1	X	112.29426	242.61982	208.11278	14.47013	0.0946619	0.23241365	2.6199618	21	3 31.0	19.7
255945 2006 TZ <sub>16</sub>	16.6	X	329.60834	81.94816	197.34381	3.16130	0.0879677	0.24370231	2.5384169	21	5 8.3	19.4
255946 2006 TA <sub>17</sub>	16.6	X	140.21979	296.28754	51.73236	1.58825	0.2159039	0.22183989	2.7025659	21	1 12.7	20.7
255947 2006 TG <sub>17</sub>	16.7	X	166.42108	17.20357	41.22950	5.13065	0.1901751	0.23577411	2.5950076	21	4 28.2	20.8
255948 2006 TG <sub>22</sub>	16.5	X	273.82795	262.71798	65.67068	5.07485	0.1689235	0.24214338	2.5493002	21	4 17.2	20.1
255949 2006 TU <sub>22</sub>	16.8	X	179.71581	321.60969	62.72728	3.84621	0.1413676	0.23294373	2.6159857	21	3 28.8	20.8
255950 2006 TN <sub>23</sub>	17.2	X	46.22417	237.58570	73.87742	2.61289	0.1081404	0.26332909	2.4106648	21	11 5.6	20.0
255951 2006 TY <sub>26</sub>	16.2	X	129.48270	270.40684	211.88565	14.48217	0.0924246	0.23952710	2.5678300	21	6 3.7	20.0
255952 2006 TD <sub>27</sub>	16.1	X	156.03129	184.49024	217.01182	3.62073	0.0268420	0.23121892	2.6289791	21	3 13.2	19.7
255953 2006 TH <sub>27</sub>	16.8	X	290.80949	216.58871	65.15859	0.82994	0.1322130	0.23672400	2.5880611	21	3 11.6	20.3
255954 2006 TT <sub>27</sub>	16.1	X	252.09607	64.92779	213.82460	14.22147	0.1121116	0.22818817	2.6522063	21	1 23.9	20.5
255955 2006 TD <sub>28</sub>	17.0	X	286.99046	217.47200	97.73502	1.36075	0.0900851	0.24158236	2.5532454	21	4 25.7	20.5
255956 2006 TP <sub>28</sub>	17.1	X	235.48619	318.87648	45.52993	5.63243	0.2342324	0.24167381	2.5526013	21	4 19.2	21.3
255957 2006 TQ <sub>28</sub>	16.9	X	151.87042	6.88556	54.04348	4.66388	0.0855664	0.23342466	2.6123912	21	4 10.8	20.6
255958 2006 TK <sub>29</sub>	16.2	X	325.15076	62.98745	199.05654	4.16530	0.1472870	0.23940766	2.5686841	21	3 28.3	19.0
255959 2006 TP <sub>34</sub>	16.7	X	124.23883	359.44454	251.70942	2.54371	0.0955682	0.26527837	2.3988411	21	11 16.8	20.1
255960 2006 TC <sub>35</sub>	17.0	X	211.98663	23.31757	351.23063	1.98533	0.1126804	0.23725508	2.5841975	21	4 14.2	21.0
255961 2006 TB <sub>36</sub>	17.0	X	230.57950	290.91035	24.03013	3.03882	0.1414071	0.23125674	2.6286925	21	2 19.3	21.1
255962 2006 TH <sub>37</sub>	17.0	X	200.32814	150.70230	239.98479	1.87366	0.1069645	0.23712888	2.5851143	21	4 23.1	21.0
255963 2006 TV <sub>38</sub>	16.9	X	232.71223	290.46094	43.64072	4.08342	0.2365624	0.23651793	2.5895642	21	3 12.7	21.3
255964 2006 TZ <sub>39</sub>	17.0	X	47.02647	244.73348	215.82727	2.10310	0.1468300	0.21875167	2.7279420	21	1 12.9	19.9
255965 2006 TG <sub>40</sub>	16.6	X	90.25722	254.46678	210.99474	4.57325	0.1805529	0.22708078	2.6608218	21	4 5.1	20.0
255966 2006 TA <sub>44</sub>	16.5	X	251.37643	258.37604	40.00033	4.61872	0.0806110	0.22979839	2.6398022	21	2 24.5	20.4
255967 2006 TE <sub>44</sub>	16.7	X	131.63052	275.21008	215.01448	2.15527	0.1875380	0.23779757	2.5802657	21	6 25.5	20.6
255968 2006 TR <sub>44</sub>	17.0	X	133.03904	33.03850	43.09441	3.36308	0.0656600	0.23109208	2.6299410	21	4 5.6	20.7
255969 2006 TV <sub>44</sub>	17.1	X	219.60635	97.35822	222.79654	2.79044	0.0865488	0.22787311	2.6546503	21	2 14.4	21.2
255970 2006 TG <sub>46</sub>	16.6	X	152.76531	80.71365	216.86954	7.96587	0.1593121	0.21292479	2.7774862	21	—	—
255971 2006 TL <sub>47</sub>	17.1	X	311.73605	227.47557	69.51850	0.99911	0.1013110	0.24168177	2.5525453	21	5 3.3	20.2
255972 2006 TE <sub>49</sub>	16.5	X	158.25987	191.95356	215.09240	2.56148	0.0692997	0.23323409	2.6138141	21	3 30.1	20.2
255973 2006 TV <sub>50</sub>	16.5	X	237.93375	85.72289	216.57309	3.89045	0.1191231	0.22847373	2.6499959	21	2 9.6	20.6
255974 2006 TH <sub>51</sub>	16.6	X	309.36724	150.60647	53.23602	3.71289	0.0365923	0.22026531	2.7154302	21	1 11.3	20.3
255975 2006 TQ <sub>52</sub>	17.5	X	142.05586	245.12882	191.57977	3.27701	0.0648917	0.23261601	2.6184422	21	4 16.6	20.9
255976 2006 TF <sub>53</sub>	16.5	X	105.62287	16.27184	82.21038	2.88678	0.0619552	0.22935747	2.6431844	21	3 31.2	19.9
255977 2006 TC <sub>64</sub>	16.1	X	249.39451	256.29032	61.54985	13.50421	0.1750492	0.23756225	2.5819694	21	3 15.9	20.4
255978 2006 TE <sub>70</sub>	16.6	X	248.92898	313.09910	123.39024	10.10854	0.1031849	0.25519616	2.4616140	21	8 19.9	19.8
255979 2006 TU <sub>70</sub>	16.9	X	274.09696	37.53572	62.92448	7.48260	0.0887917	0.26410912	2.4059160	21	10 31.9	19.7
255980 2006 TE <sub>71</sub>	17.3	X	179.34475	75.36511	315.32216	2.20988	0.1603025	0.23525355	2.5988343	21	4 3.1	21.5
255981 2006 TJ <sub>75</sub>	14.7	X	335.60998	274.07428	80.69174	9.94762	0.2028267	0.12356269	3.9921896	21	8 23.3	19.4
255982 2006 TF <sub>78</sub>	16.2	X	167.76662	91.40490	249.58009	7.26097	0.1168104	0.22594433	2.6697366	21	1 19.1	20.2
255983 2006 TY <sub>78</sub>	17.1	X	150.82871	0.82763	49.84747	2.06833	0.1197311	0.23005071	2.6378716	21	3 30.4	20.9
255984 2006 TB <sub>79</sub>	15.8	X	193.88185	315.32977	44.59910	14.15045	0.1980584	0.23141293	2.6275095	21	3 18.7	20.4
255985 2006 TF <sub>79</sub>	17.1	X	162.83662	238.73623	156.50492	2.97220	0.1279462	0.22965412	2.6409077	21	3 24.2	21.1
255986 2006 TL <sub>82</sub>	17.2	X	138.85981	169.42689	285.06520	2.79375	0.1261469	0.23577445	2.5950051	21	5 11.3	21.0
255987 2006 TT <sub>85</sub>	17.1	X	214.38446	44.17603	9.48289	6.70599	0.1430181	0.24316448	2.5421585	21	6 3.9	21.2
255988 2006 TP <sub>91</sub>	16.1	X	130.76383	82.82567	33.81359	7.55004	0.1495274	0.23608716	2.5927131	21	6 2.3	20.1
255989 Dengyushian	16.8	X	125.77749	210.56909	186.73832	5.24230	0.1891686	0.22406420	2.6846504	21	2 21.5	20.7
255990 2006 TG <sub>98</sub>	17.1	X	280.06756	121.25132	207.29786	11.31387	0.1256367	0.24425594	2.5345798	21	4 29.3	20.4
255991 2006 TL <sub>102</sub>	16.8	X	169.47249	288.09343	229.01959	5.24040	0.0711247	0.25383863	2.4703827	21	9 1.5	20.5
255992 2006 TN <sub>102</sub>	16.3	X	128.07693	7.93690	254.31876	2.53270	0.0552287	0.20112844	2.8850525	21	11 23.4	20.4
255993 2006 TE <sub>104</sub>	17.1	X	159.48593	51.47511	41.84505	8.99499	0.0339599	0.24050154				