

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
332001	2005	<i>JN</i> ₁₅₆	17.7	X	298.52171	25.34958	64.68591	2.54156	0.0354721	0.29008311	2.2600658	20	12 18.5	20.0
332002	2005	<i>LJ</i> ₄	17.0	X	232.49436	178.91133	82.46300	16.03528	0.0797004	0.24313870	2.5423382	20	—	—
332003	2005	<i>LS</i> ₁₃	18.2	X	75.82524	133.62781	172.39610	5.30739	0.2170591	0.28400392	2.2922034	20	12 27.5	21.8
332004	2005	<i>LL</i> ₁₆	17.2	X	35.47523	44.90387	265.21342	5.82762	0.1468808	0.27368320	2.3494739	20	11 7.7	20.0
332005	2005	<i>LG</i> ₁₈	17.7	X	152.35990	25.76544	162.86952	3.41772	0.1772391	0.28287453	2.2983005	20	10 9.2	21.2
332006	2005	<i>LG</i> ₃₉	16.8	X	15.91462	131.87666	234.98527	23.02545	0.1942846	0.28275480	2.2989493	20	—	—
332007	2005	<i>MD</i> ₁₄	15.2	X	134.92691	135.59810	237.25815	21.59826	0.0940130	0.17701334	3.1414637	20	1 29.4	20.3
332008	2005	<i>MR</i> ₁₅	15.8	X	31.44457	70.29308	249.98820	21.73064	0.2233433	0.27164635	2.3612038	20	11 28.7	18.6
332009	2005	<i>MN</i> ₂₅	18.3	X	39.41449	40.22262	270.93019	0.87219	0.1949999	0.27413170	2.3469106	20	11 22.8	21.3
332010	2005	<i>MT</i> ₄₂	14.8	X	289.07884	146.25488	199.17181	3.43658	0.2295520	0.12308294	4.0025565	20	5 29.4	20.4
332011	2005	<i>ML</i> ₅₂	17.4	X	12.11762	91.51437	293.83980	5.25187	0.1752677	0.27813416	2.3243409	20	—	—
332012	2005	<i>NO</i> ₇	17.2	X	84.69489	90.91293	127.52288	2.10253	0.1273081	0.26780700	2.3837174	20	9 4.7	20.4
332013	2005	<i>NN</i> ₁₁	18.0	X	23.43937	4.29746	305.42664	0.67679	0.1976579	0.27012118	2.3700833	20	10 29.3	20.4
332014	2005	<i>NT</i> ₄₇	15.6	X	299.42320	312.19242	17.87978	2.97123	0.2404009	0.12451203	3.9718714	20	5 21.5	20.8
332015	2005	<i>NY</i> ₅₄	17.4	X	325.19776	197.70690	175.05108	2.82388	0.2424836	0.26680209	2.3896991	20	10 4.2	18.6
332016	2005	<i>NL</i> ₈₄	17.1	X	32.56276	344.19079	332.65364	2.19651	0.2266483	0.27310596	2.3527833	20	11 25.8	20.1
332017	2005	<i>NR</i> ₈₆	18.4	X	47.19168	113.43367	159.88463	1.51089	0.1750215	0.27094076	2.3653014	20	10 9.7	21.1
332018	2005	<i>NH</i> ₉₅	17.8	X	63.36684	118.10242	150.38344	1.60000	0.1674616	0.27272621	2.3549668	20	10 22.6	20.9
332019	2005	<i>NP</i> ₁₂₂	14.8	X	325.33917	71.66094	248.34098	7.80704	0.3002678	0.12415822	3.9794135	20	6 11.2	19.1
332020	2005	<i>NR</i> ₁₂₄	17.2	X	9.04560	39.67133	253.63293	6.24170	0.1282232	0.26404532	2.4063035	20	8 24.3	19.7
332021	2005	<i>OA</i> ₃	15.9	X	82.42767	359.64316	289.54461	25.44673	0.2242860	0.27499655	2.3419874	20	12 13.8	19.9
332022	2005	<i>OZ</i> ₄	17.5	X	72.39981	12.92252	292.89094	4.72984	0.2090588	0.27819924	2.3239784	20	12 22.8	21.1
332023	2005	<i>OF</i> ₈	15.7	X	320.12530	131.57072	245.32911	23.62807	0.2451399	0.26311287	2.4119853	20	9 8.4	18.2
332024	2005	<i>OO</i> ₂₄	17.2	X	123.68916	343.73513	243.45934	4.41484	0.1683558	0.27487138	2.3426983	20	10 29.1	20.8
332025	2005	<i>OX</i> ₂₇	17.3	X	80.44788	84.75735	204.71661	3.52872	0.2355741	0.27774157	2.3265307	20	12 11.8	21.0
332026	2005	<i>PH</i>	16.8	X	37.68721	69.68887	243.43531	10.72274	0.3300269	0.27079239	2.3661653	20	12 10.5	20.2
332027	2005	<i>PE</i> ₃	17.2	X	83.04976	186.07140	143.84938	7.28456	0.2892603	0.28077199	2.3097600	20	—	—
332028	2005	<i>PY</i> ₄	18.1	X	5.40417	256.65068	55.64495	2.23540	0.2002670	0.26788047	2.3832815	20	10 2.2	20.0
332029	2005	<i>PQ</i> ₁₀	17.6	X	346.89525	241.10730	101.04454	4.37802	0.2021573	0.26601992	2.3943811	20	10 10.6	19.4
332030	2005	<i>PK</i> ₁₅	17.4	X	345.95367	230.83078	103.97383	2.65662	0.1978768	0.26464365	2.4026752	20	9 23.5	19.1
332031	2005	<i>PD</i> ₁₆	15.2	X	294.92946	239.34577	104.81143	3.81772	0.2695699	0.12209699	4.0240750	20	5 29.5	20.7
332032	2005	<i>PW</i> ₁₈	17.4	X	73.80090	181.81996	146.54150	5.66602	0.1821575	0.28115569	2.3076581	20	—	—
332033	2005	<i>PL</i> ₂₃	16.7	X	25.94942	227.39424	107.45207	10.08089	0.3311401	0.27050996	2.3678119	20	12 26.1	20.0
332034	2005	<i>QS</i> ₅	17.7	X	59.29276	174.03893	142.92746	7.26904	0.1232244	0.27717788	2.3296839	20	12 15.6	21.0
332035	2005	<i>QZ</i> ₁₇	17.3	X	16.25783	226.42817	150.99242	2.81953	0.2472272	0.27355294	2.3502197	20	—	—
332036	2005	<i>QD</i> ₅₃	16.4	X	78.72210	72.79180	158.22689	23.12535	0.2208244	0.26688677	2.3891936	20	9 28.2	20.1
332037	2005	<i>QJ</i> ₆₂	18.0	X	352.50091	219.92967	112.03741	1.20277	0.2221999	0.26489569	2.4011509	20	10 7.3	19.8
332038	2005	<i>QZ</i> ₇₃	16.5	X	346.35960	219.19535	177.61531	11.37598	0.2589776	0.26919991	2.3754876	20	—	—
332039	2005	<i>QU</i> ₇₆	17.5	X	350.44551	348.80671	351.99866	4.89591	0.2519197	0.26608634	2.3939827	20	10 19.2	19.1
332040	2005	<i>QY</i> ₈₀	16.9	X	37.69110	139.33627	201.60592	10.81910	0.2679463	0.27437211	2.3455394	20	—	—
332041	2005	<i>QD</i> ₈₃	17.8	X	30.80229	172.71047	177.63519	6.14638	0.2089961	0.27379648	2.3488258	20	—	—
332042	2005	<i>QN</i> ₈₉	17.4	X	308.77713	60.89344	314.65717	1.26268	0.2281134	0.26302085	2.4125478	20	8 22.3	19.1
332043	2005	<i>QC</i> ₉₉	15.9	X	286.39019	346.81771	0.10878	10.05456	0.1070853	0.18767411	3.0213414	20	6 14.2	20.2
332044	2005	<i>QP</i> ₉₉	17.1	X	11.98794	27.28803	281.45494	3.48200	0.2025985	0.26552917	2.3973304	20	10 6.2	19.5
332045	2005	<i>QC</i> ₁₁₅	18.1	X	346.34263	81.50654	246.91365	1.33969	0.2312475	0.26178218	2.4201521	20	9 13.1	19.6
332046	2005	<i>QP</i> ₁₂₁	17.9	X	343.79577	114.80845	278.24295	0.79061	0.1669516	0.27131617	2.3631191	20	12 16.8	20.1
332047	2005	<i>QU</i> ₁₄₇	16.8	X	298.74895	296.38680	59.21615	7.57633	0.1196396	0.25836619	2.4414374	20	7 19.3	19.6
332048	2005	<i>QN</i> ₁₅₇	17.4	X	29.75047	151.31041	194.97780	4.43590	0.2516153	0.27083986	2.3658888	20	—	—
332049	2005	<i>QC</i> ₁₅₈	17.2	X	1.06703	316.83344	47.66188	3.82469	0.1974319	0.26928996	2.3749580	20	12 9.9	19.5
332050	2005	<i>QH</i> ₁₇₅	17.2	X	126.07343	166.65162	168.28652	9.85877	0.2268084	0.28823763	2.2697025	20	—	—
332051	2005	<i>QJ</i> ₁₇₆	17.5	X	311.16077	353.19923	359.10272	2.75898	0.1907699	0.25778293	2.4451187	20	7 26.2	19.7
332052	2005	<i>QJ</i> ₁₈₃	17.1	X	58.68229	181.38306	128.93343	5.93771	0.2255061	0.27259617	2.3557157	20	12 16.4	20.7
332053	2005	<i>RR</i> ₇	17.3	X	33.00697	23.01734	355.05173	3.07798	0.2077593	0.27646408	2.3336922	20	—	—
332054	2005	<i>RB</i> ₂₅	16.5	X	4.22469	45.47218	311.05401	6.97946	0.2312065	0.26811443	2.3818949	20	12 9.1	19.0
332055	2005	<i>RW</i> ₃₃	16.0	X	58.57133	128.43178	223.57955	21.92355	0.2375824	0.27589858	2.3368800	20	—	—
332056	2005	<i>RM</i> ₄₄	16.8	X	36.76733	188.31572	124.25497	11.12656	0.3218504	0.26921566	2.3753950	20	12 9.3	20.3
332057	2005	<i>SY</i> ₂	17.5	X	325.50291	187.32590	165.00915	2.24669	0.2305541	0.26025035	2.4296394	20	8 25.8	19.0
332058	2005	<i>SM</i> ₁₂	16.1	X	351.31956	116.35987	238.98375	6.39451	0.1154344	0.26465335	2.4026165	20	10 25.8	18.6
332059	2005	<i>SD</i> ₁₉	16.1	X	81.44184	114.94516	194.25646	23.10026	0.2366077	0.27410100	2.3470858	20	—	—
332060	2005	<i>SA</i> ₂₇	15.9	X	281.14666	352.13565	333.48310	8.50283	0.0983527	0.17963684	3.1108025	20	5 9.6	20.5
332061	2005	<i>SN</i> ₅₅	17.2	X	229.58827	354.87394	33.33769	1.96083	0.0835773	0.24575187	2.5242837	20	6 1.4	20.6
332062	2005	<i>SG</i> ₆₅	16.6	X	290.00466	167.75120	255.42961	4.25829	0.1291270	0.26393251	2.4069891	20	10 9.9	19.0
332063	2005	<i>SL</i> ₇₀	16.6	X	273.40353	357.18164	7.43462	6.34158	0.1195885	0.25336506	2.4734601	20	6 20.6	19.8
332064	2005	<i>ST</i> ₉₉	16.9	X	57.66727	13.31885	254.67783	5.50121	0.1280206	0.26135343	2.4227982	20	10 4.3	20.1
332065	2005	<i>SM</i> ₁₀₂	16.7	X	147.63110	176.67530	251.04067	4.26605	0.0934363	0.23736017	2.5834347	20	4 21.6	20.4
332066	2005	<i>SP</i> ₁₀₈	18.3	X	346.16165	356.26689	305.03972	0.55671	0.1844713	0.25588309	2.4572065	20	7 23.9	20.0
332067	2005	<i>SG</i> ₁₃₂	15.7	X	164.33335	196.91843	225.52587	10.93603	0.1730995	0.23472374	2.6027435	20	5 7.7	19.9
332068	2005	<i>SX</i> ₁₆₂	16.8	X	96.72361	253.96916	63.40597	7.35533	0.1328610	0.28072873	2.3099973	20	—	—
332														

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ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332081 2005 TA ₁₃₈	17.0	X	163.59143	241.84998	188.42420	14.28053	0.0846048	0.24120411	2.5559141	20	5 15.4	20.9
332082 2005 TH ₁₄₁	17.0	X	74.63653	134.87434	92.74320	3.03171	0.0807816	0.25498697	2.4629602	20	8 28.2	20.2
332083 2005 TX ₁₆₉	16.6	X	52.28861	57.47059	276.81866	4.05626	0.2118936	0.27297150	2.3535559	20	—	—
332084 2005 Vasyakulbeda	16.0	X	15.16535	289.31517	201.78695	23.48498	0.2439491	0.218882043	2.7273705	20	—	—
332085 2005 UQ ₄₃	16.4	X	27.58739	241.94653	235.06494	11.95727	0.1495397	0.21893633	2.7264079	20	1 11.7	19.5
332086 2005 UN ₅₇	17.2	X	116.06855	101.18697	228.93989	2.20805	0.1471951	0.28272586	2.2991062	20	—	—
332087 2005 UE ₇₁	16.5	X	37.36784	19.98645	301.95663	5.14777	0.2653673	0.26932581	2.3747473	20	12 12.9	19.8
332088 2005 UH ₇₉	16.7	X	205.90082	197.62599	193.32223	8.94578	0.1644120	0.23901900	2.5714679	20	5 7.2	20.9
332089 2005 UP ₇₉	17.0	X	25.64011	272.15071	85.32177	10.82232	0.1776237	0.26886691	2.3774487	20	—	—
332090 2005 UU ₈₄	17.5	X	66.86209	294.68460	199.14803	2.56621	0.0592968	0.23193739	2.6235471	20	4 2.2	20.6
332091 2005 UR ₈₉	15.8	X	65.92974	197.45299	341.84645	6.64724	0.1475843	0.17078710	3.2173577	20	6 15.2	20.2
332092 2005 UO ₉₄	16.3	X	346.79512	237.61632	242.41782	8.69574	0.2315966	0.21036673	2.7999569	20	—	—
332093 2005 UP ₁₀₃	17.5	X	324.05331	245.74092	76.29116	2.75058	0.2241748	0.25191704	2.4829293	20	6 28.9	19.6
332094 2005 UR ₁₂₁	17.5	X	247.59330	83.51677	226.88233	3.43985	0.0478236	0.23345754	2.6121460	20	3 15.4	21.1
332095 2005 UO ₁₄₂	17.0	X	7.15734	57.30839	48.04704	3.19136	0.1632356	0.21269675	2.7794710	20	—	—
332096 2005 UQ ₁₄₉	16.6	X	320.29318	8.57171	229.36732	9.94219	0.1280386	0.23231010	2.6207403	20	2 29.1	20.1
332097 2005 UE ₁₅₅	16.6	X	174.82277	281.03170	124.55442	6.14741	0.1663244	0.23551045	2.5969400	20	4 28.5	20.9
332098 2005 UH ₁₅₈	16.4	X	338.46764	17.82288	230.59267	8.81944	0.0903431	0.23867842	2.5739135	20	4 20.2	19.5
332099 2005 UE ₁₇₄	15.9	X	29.53419	252.00520	242.20958	16.11778	0.0650782	0.22250283	2.6971951	20	2 2.2	19.6
332100 2005 UE ₁₈₂	16.8	X	278.04854	282.90551	51.62808	5.08204	0.1232822	0.24279977	2.5447036	20	5 15.2	20.0
332101 2005 UZ ₂₀₁	15.6	X	331.56616	219.86568	60.21132	9.90513	0.1976595	0.17692252	3.1425387	20	5 15.2	19.0
332102 2005 UL ₂₁₂	17.2	X	328.28376	228.88611	56.89452	13.87649	0.2079417	0.24491365	2.5300400	20	5 13.3	19.4
332103 2005 UY ₂₁₉	17.3	X	290.91058	75.67613	232.22760	10.24615	0.1512395	0.24418672	2.5350587	20	4 26.1	20.6
332104 2005 UE ₂₂₀	17.1	X	18.46349	40.05353	250.66539	6.26830	0.0867443	0.25502271	2.4627301	20	8 30.3	20.0
332105 2005 UC ₂₃₄	16.8	X	325.75806	148.65097	145.19983	3.27539	0.1394730	0.24528443	2.5274897	20	5 30.9	19.5
332106 2005 US ₂₅₃	17.0	X	274.95795	48.68594	300.77155	3.91283	0.1410398	0.24649131	2.5192329	20	5 28.3	20.4
332107 2005 UC ₂₇₂	16.7	X	186.51915	214.00732	194.13174	4.11425	0.1185545	0.23743239	2.5829108	20	5 10.5	20.7
332108 2005 UK ₂₉₇	16.6	X	311.41986	30.38387	232.24167	11.21883	0.1395739	0.23470746	2.6028639	20	3 18.4	20.1
332109 2005 UZ ₂₉₇	16.7	X	305.23835	196.57981	51.23075	9.25941	0.1321790	0.22962932	2.6410986	20	3 1.4	20.3
332110 2005 UJ ₃₁₄	17.2	X	343.55240	291.26797	85.89742	4.75562	0.2123570	0.26529381	2.3987481	20	11 27.0	19.0
332111 2005 UG ₃₉₇	17.4	X	5.62069	283.50810	72.30064	6.11158	0.2598512	0.26641535	2.3920112	20	12 15.1	19.9
332112 2005 UV ₄₀₁	17.1	X	31.33186	351.63060	214.57343	12.18986	0.2081128	0.23541085	2.5976765	20	6 5.9	19.7
332113 2005 UE ₄₂₄	17.5	X	289.89304	48.59189	256.97047	0.15350	0.0569667	0.24087665	2.5582299	20	5 2.3	20.6
332114 2005 UK ₄₃₀	17.3	X	263.06168	342.89683	2.79157	1.55835	0.1031398	0.24211162	2.5495232	20	5 13.6	20.6
332115 2005 UN ₄₃₃	15.8	X	359.24166	237.21033	234.23478	13.61429	0.1275718	0.21109897	2.7934783	20	—	—
332116 2005 UW ₄₅₄	16.1	X	214.26778	318.61151	59.67118	15.30452	0.1312275	0.23784906	2.5798934	20	5 2.2	20.1
332117 2005 UR ₄₈₅	16.6	X	136.58081	233.24655	199.02083	10.44072	0.1079745	0.23330649	2.6132734	20	4 18.4	20.4
332118 2005 UF ₅₁₂	16.7	X	273.87607	120.28797	288.90375	6.16560	0.1107259	0.25481742	2.4640526	20	8 23.8	19.7
332119 2005 UE ₅₁₃	17.0	X	169.13556	165.14567	232.60101	31.99257	0.1626383	0.23539239	2.5978123	20	4 7.2	21.6
332120 2005 VC ₆	15.4	X	206.96635	297.73574	83.57020	11.13273	0.0449006	0.16996755	3.2276916	20	5 5.1	20.2
332121 2005 VV ₁₀	16.9	X	169.26859	356.17225	97.42784	3.96420	0.0786132	0.24150277	2.5538064	20	6 19.6	20.7
332122 2005 VH ₃₄	15.9	X	319.74902	278.60950	80.90233	8.74252	0.1194967	0.19235392	2.9721361	20	8 25.5	19.5
332123 2005 VM ₆₆	17.3	X	270.01422	211.37504	89.86377	2.67496	0.0720048	0.23635198	2.5907761	20	3 30.6	20.9
332124 2005 VU ₈₃	16.3	X	266.33116	132.71404	218.57309	13.46163	0.0711612	0.24245133	2.5471411	20	5 31.2	19.7
332125 2005 WL ₁₆	16.6	X	291.79231	83.27944	248.73587	7.88945	0.2011090	0.24488889	2.5302105	20	5 18.0	19.8
332126 2005 WE ₁₉	17.0	X	253.13154	283.62162	97.22808	17.24975	0.2293322	0.24571642	2.5245265	20	6 4.6	20.9
332127 2005 WO ₃₃	16.0	X	154.06760	145.78517	258.65575	12.54232	0.1415450	0.22864800	2.6486492	20	3 29.5	20.4
332128 2005 WJ ₃₇	16.0	X	233.41271	319.12936	78.41517	11.69236	0.0480195	0.17346426	3.1841685	20	6 21.1	20.5
332129 2005 WG ₅₄	17.5	X	153.80003	249.74417	235.38937	22.12027	0.1582319	0.37595627	1.9012731	20	7 15.5	20.6
332130 2005 WH ₅₄	17.8	X	196.53471	215.02480	248.71809	18.95418	0.0398796	0.38488667	1.8717484	20	8 10.2	20.3
332131 2005 WD ₈₇	16.6	X	219.56612	290.12424	84.36493	3.73706	0.2186033	0.23544766	2.5974057	20	4 26.5	20.9
332132 2005 WT ₉₂	16.2	X	293.66415	236.92329	74.72367	9.02038	0.1678691	0.23995526	2.5647746	20	5 1.2	19.4
332133 2005 WS ₁₀₁	16.1	X	20.91535	13.50233	86.00635	8.86081	0.1700255	0.21148040	2.7901184	20	—	—
332134 2005 WU ₁₀₇	16.4	X	135.19738	302.68001	88.85310	7.33579	0.1531939	0.22016897	2.7162223	20	3 5.2	20.5
332135 2005 WD ₁₀₈	16.2	X	110.44540	355.04327	73.81056	12.79377	0.0596092	0.22572060	2.6715004	20	3 14.8	20.1
332136 2005 WT ₁₁₀	17.5	X	168.58420	83.88521	241.73469	6.33493	0.3452473	0.29161677	2.2521348	20	1 18.2	21.5
332137 2005 WU ₁₃₅	17.1	X	172.21273	154.94671	243.10750	0.69817	0.1128775	0.23182329	2.6244079	20	4 12.2	20.9
332138 2005 WN ₁₄₄	16.0	X	234.93885	146.12289	209.98515	11.10277	0.1166487	0.23645195	2.5900458	20	4 23.7	19.7
332139 2005 WY ₁₅₇	15.8	X	226.19550	280.26614	108.09948	27.95905	0.2427342	0.23741939	2.5830051	20	5 26.1	20.6
332140 2005 WM ₁₅₉	16.5	X	69.78643	172.11058	226.47677	3.38293	0.0739528	0.21288334	2.7778467	20	—	—
332141 2005 WQ ₁₇₀	16.3	X	281.64147	354.83225	253.04745	5.17594	0.0839281	0.22070981	2.7117831	20	2 2.6	20.1
332142 2005 WC ₁₇₇	16.8	X	40.45483	33.75355	63.94790	3.82288	0.1116733	0.21259859	2.7803265	20	1 12.8	19.9
332143 2005 XH ₇	16.2	X	108.62217	18.71973	70.04126	22.73320	0.0326061	0.22883641	2.6471952	20	4 9.4	20.2
332144 2005 XC ₄₂	17.3	X	157.06074	150.34250	253.45943	5.33459	0.1230301	0.23213261	2.6220760	20	4 2.5	21.3
332145 2005 XK ₅₀	16.4	X	234.07033	80.33871	291.93211	6.00583	0.2444496	0.23955593	2.5676240	20	4 30.9	20.9
332146 2005 XH ₆₁	16.8	X	225.14706	145.54957	242.79966	6.94180	0.3050871	0.24087768	2.5582227	20	5 11.8	21.2
332147 2005 XU ₇₀	16.4	X	275.76034	306.94552	44.56685	3.26773	0.2579141	0.24452994	2.5326860	20	5 15.3	19.9
332148 2005 XB ₁₁₅	16.6	X	113.07174	145.13660	283.80656	3.76258	0.1682772	0.22374681	2.6871886	20	3 23.9	20.4
332149 2005 YT ₄₁	17.0	X	194.34702	326.84405	101.48187	4.20020	0.1510922	0.23574278	2.5952376	20	6 12.1	21.0
332150 2005 YQ ₄₄	16.9	X	116.61363	256.70622	130.43804	3.95040	0.0828357	0.214400357	2.7681442	20	1 27.2	20.7
332151 2005 YY ₇₀	17.7	X	239.45848	280.10187	114.34640	23.41445	0.1001391	0.37471241	1.9054783	20	6 26.2	19.9
332152 2005 YG ₇₇	16.5	X	32.39652	41.24064	76.24694	4.86222	0.0505591	0.21345287	2.7729032	20	1 24.9	19.9
332153 2005 YL ₇₇	17.5	X	278.79669	243.45642	99.31912	24.29823	0.0835496	0.37337353	1.91			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332161 2005 YD ₁₇₅	16.2	X	172.07243	298.39067	135.19655	13.71214	0.1262484	0.22961610	2.6411992	20	5 31.2	20.6
332162 2005 YW ₁₇₈	16.3	X	193.21943	9.89434	306.33650	6.90204	0.1441932	0.21076809	2.7964012	20	1 27.1	20.8
332163 2005 YJ ₁₈₅	16.4	X	25.85148	310.04472	129.25698	2.96351	0.0398984	0.20346278	2.8629432	20	—	—
332164 2005 YP ₁₉₂	17.3	X	272.04533	227.11183	116.67656	23.25571	0.0709909	0.36900988	1.9250590	20	6 4.2	19.7
332165 2005 YE ₁₉₇	16.7	X	227.60408	134.60907	167.19502	1.78937	0.0391692	0.21860218	2.7291855	20	2 13.4	20.5
332166 2005 YS ₂₀₄	16.9	X	57.79290	131.06170	117.08346	24.20990	0.0887418	0.37627663	1.9001937	20	10 3.6	19.6
332167 2005 YT ₂₂₈	16.6	X	182.90133	232.34855	119.80343	5.40294	0.1169290	0.21855524	2.7295763	20	2 29.1	20.9
332168 2005 YH ₂₃₉	16.6	X	244.39201	248.16749	87.03807	6.51852	0.1065666	0.23479093	2.6022470	20	4 11.3	20.4
332169 2006 AX ₄	15.6	X	223.92186	277.18359	102.20539	30.08112	0.2477634	0.23257897	2.6187201	20	5 16.2	20.6
332170 2006 AO ₁₄	16.7	X	197.07250	118.25064	295.04164	3.74649	0.2239728	0.23382453	2.6094121	20	5 23.8	21.1
332171 2006 AD ₃₉	17.2	X	66.12463	155.71612	305.91971	3.15565	0.0613577	0.215477784	2.7555036	20	2 20.2	20.8
332172 2006 AE ₃₉	16.3	X	296.39001	0.04803	300.46571	11.33484	0.1091066	0.22811364	2.6527840	20	4 21.3	20.0
332173 2006 AB ₇₉	16.5	X	189.96412	204.77603	128.43971	7.43959	0.0674349	0.21377265	2.7701373	20	2 11.4	20.5
332174 2006 BH ₃₈	16.7	X	64.90488	263.35011	156.58184	2.56912	0.0682000	0.20417095	2.8563193	20	—	—
332175 2006 BP ₄₆	17.1	X	220.59302	194.49241	348.17204	1.21291	0.1027690	0.18504532	3.0498887	20	11 27.7	21.4
332176 2006 BG ₅₄	16.6	X	233.71357	31.73864	133.39891	1.47824	0.2151941	0.18398271	3.0616206	20	11 8.1	21.1
332177 2006 BU ₇₁	17.1	X	255.69223	314.14712	70.55505	5.70052	0.2233482	0.23810324	2.5780570	20	6 10.4	20.7
332178 2006 BV ₉₆	18.0	X	199.48120	103.44008	318.56457	4.67756	0.0765126	0.29746410	2.2225234	20	6 12.8	20.9
332179 2006 BH ₁₀₉	16.1	X	273.01330	206.75797	129.27569	17.09145	0.1905504	0.22955561	2.6416632	20	5 8.4	—
332180 2006 BK ₁₁₀	16.1	X	108.56508	247.54090	121.86224	9.18167	0.0337025	0.20305928	2.8667346	20	—	—
332181 2006 BM ₁₂₇	16.8	X	127.07312	181.84857	175.84371	2.05339	0.0769491	0.20160826	2.8804732	20	1 4.7	20.8
332182 2006 BG ₁₄₅	16.0	X	161.99510	146.97037	302.43236	11.92283	0.1321681	0.23025215	2.6363329	20	6 7.0	20.3
332183 Jaroussky	16.0	X	185.65123	195.68707	146.32006	9.20197	0.2043219	0.21147709	2.7901475	20	2 21.3	20.6
332184 2006 BC ₁₉₃	15.6	X	220.05317	331.82872	146.79088	15.07168	0.1286315	0.17665430	3.1457189	20	9 8.9	20.4
332185 2006 BP ₂₁₇	15.7	X	39.05897	204.93781	306.33462	12.97652	0.0538620	0.21346947	2.7727595	20	3 10.9	19.5
332186 2006 BX ₂₂₃	16.4	X	201.88155	72.74137	309.33180	5.64708	0.0485076	0.22287780	2.6941690	20	4 21.9	20.3
332187 2006 BM ₂₃₂	16.4	X	182.77527	354.78336	71.71277	4.10276	0.1186546	0.23061027	2.6336029	20	5 29.7	20.5
332188 2006 BL ₂₃₈	17.3	X	283.87930	275.26414	85.95107	4.35826	0.2152046	0.23875526	2.5733612	20	6 14.8	20.5
332189 2006 BN ₂₅₆	16.7	X	229.59683	311.67941	14.70898	3.21401	0.0889981	0.21515425	2.7582657	20	3 15.3	20.7
332190 2006 BR ₂₇₇	16.3	X	186.24120	214.68163	131.11824	5.97921	0.1260361	0.21645379	2.7472146	20	2 24.6	20.5
332191 2006 CG ₃₈	16.4	X	158.93240	240.45310	161.86056	11.85590	0.1329571	0.21881660	2.7274023	20	4 8.9	20.7
332192 2006 CH ₄₄	16.8	X	323.76285	130.52194	131.10985	5.07933	0.0475740	0.22658957	2.6646660	20	4 25.1	20.2
332193 2006 DD ₃₄	16.4	X	171.59784	48.16500	168.65096	5.76994	0.1686583	0.17666436	3.1455994	20	11 15.8	21.7
332194 2006 DH ₅₀	16.1	X	45.53559	50.04057	91.21753	5.55162	0.0131152	0.21208608	2.7848038	20	3 13.6	19.8
332195 2006 DB ₅₈	16.6	X	140.93573	88.91099	344.50098	4.45328	0.0965140	0.21763347	2.7372781	20	4 22.0	20.6
332196 2006 DX ₇₈	16.8	X	149.42508	64.22420	331.19583	4.48659	0.0872603	0.21261838	2.7801539	20	3 14.8	20.8
332197 2006 DN ₇₉	16.4	X	1.88265	285.03486	174.25596	9.00093	0.1687549	0.19830009	2.9124207	20	—	—
332198 2006 DQ ₁₀₁	17.8	X	224.84476	167.59023	144.19726	6.20288	0.2080115	0.27526144	2.3404846	20	2 11.1	21.4
332199 2006 DV ₁₁₄	15.9	X	224.46553	97.39784	10.63949	12.99782	0.2704476	0.17414407	3.1758763	20	8 22.1	21.3
332200 2006 DL ₁₁₅	17.0	X	154.11004	180.81366	48.98975	1.72464	0.1354898	0.17582834	3.1555626	20	11 14.8	22.1
332201 2006 DZ ₁₅₄	16.3	X	258.87394	296.73350	208.91609	5.59289	0.2306770	0.18466600	3.0540637	20	11 10.9	20.4
332202 2006 DK ₁₈₇	16.6	X	158.16816	216.70768	54.77176	2.58127	0.1026035	0.18400271	3.0613988	20	—	—
332203 2006 DU ₁₉₆	16.5	X	165.03900	189.06587	218.50162	9.04902	0.3578716	0.22741415	2.6582208	20	4 25.8	21.5
332204 2006 EH ₁₅	16.5	X	120.45437	217.17197	70.41244	0.92720	0.0944819	0.18045716	3.1013680	20	12 20.2	21.2
332205 2006 EU ₁₆	16.5	X	186.50457	117.49854	94.71270	2.27687	0.1501446	0.17852126	3.1237487	20	11 23.4	21.5
332206 2006 EY ₃₃	16.4	X	147.60701	263.66572	161.57356	9.37457	0.1458666	0.21781128	2.7357882	20	4 27.1	20.8
332207 2006 EW ₅₇	16.5	X	353.45407	259.28090	187.92727	9.42315	0.0302206	0.19174948	2.9783787	20	—	—
332208 2006 EF ₆₉	15.8	X	236.40527	98.80350	61.32394	26.95697	0.1964955	0.18253502	3.0777871	20	11 10.9	20.5
332209 2006 FC ₉	15.7	X	130.96500	113.69486	191.96540	11.76365	0.2470631	0.17777272	3.1325112	20	—	—
332210 2006 FG ₁₂	16.3	X	190.04379	65.63443	174.40181	10.18316	0.2743385	0.18353308	3.0666190	20	12 20.9	21.7
332211 2006 FS ₁₈	15.8	X	198.78884	21.76009	196.55945	16.63665	0.1195185	0.18036195	3.1024593	20	12 14.3	20.8
332212 2006 FQ ₂₅	15.8	X	183.90042	263.49065	16.70371	18.91069	0.1177860	0.18833549	3.0142639	20	—	—
332213 2006 FY ₃₀	17.2	X	107.36600	189.66392	141.91609	3.20431	0.2093130	0.25683198	2.4511505	20	—	—
332214 2006 FQ ₅₀	15.4	X	131.68027	163.74293	144.86189	24.57436	0.1647638	0.17655153	3.1469395	20	—	—
332215 2006 GN ₃	16.0	X	233.95140	81.09881	77.26553	17.56842	0.1185105	0.17786738	3.1313997	20	11 14.5	20.7
332216 2006 GC ₂₂	16.1	X	215.49593	359.70285	190.98455	11.37662	0.0564936	0.17781242	3.1320450	20	12 6.7	20.8
332217 2006 GV ₃₆	15.9	X	181.02204	49.29583	184.89877	10.35450	0.1037865	0.18001891	3.1063994	20	12 16.7	20.9
332218 2006 GC ₄₁	15.5	X	184.90290	86.86179	158.61992	16.85719	0.2219925	0.18105555	3.0945309	20	12 26.1	21.0
332219 2006 GJ ₄₄	15.0	X	138.05535	83.04540	207.68157	15.94070	0.1933118	0.17654997	3.1469580	20	—	—
332220 2006 GP ₄₈	15.5	X	283.96681	60.95550	32.61637	15.86430	0.0372583	0.17198072	3.2024538	20	11 2.1	19.9
332221 2006 GG ₅₀	15.5	X	181.08143	328.30290	257.29698	10.87422	0.1160101	0.17833065	3.1259741	20	12 5.5	20.4
332222 2006 GA ₅₃	15.2	X	128.66333	168.74958	109.00032	18.21641	0.1662734	0.17566974	3.1574616	20	12 19.2	20.5
332223 2006 GU ₅₄	17.1	X	201.76652	11.93834	157.44656	1.77593	0.1509440	0.17275600	3.1928655	20	10 18.1	22.0
332224 2006 GZ ₅₄	17.8	X	25.40624	38.04613	197.54345	3.27713	0.2280766	0.21644961	2.7472500	20	7 10.0	20.4
332225 2006 HW ₃₂	16.0	X	131.05006	115.75786	197.25455	21.53182	0.1465234	0.18370105	3.0647493	20	—	—
332226 2006 HF ₄₁	15.9	X	149.09247	103.71189	184.34717	14.49568	0.1756453	0.17619768	3.1511513	20	—	—
332227 2006 HL ₄₂	15.3	X	188.30020	73.63674	133.02173	27.01599	0.2055575	0.17560316	3.1582597	20	11 22.9	21.0
332228 2006 HD ₄₆	15.6	X	86.44976	289.40002	30.01551	12.26219	0.1318104	0.17695880	3.1421092	20	12 25.7	20.6
332229 2006 HA ₅₄	16.1	X	200.34388	110.87133	58.91809	13.73304	0.2283097	0.17447984	3.1718007	20	10 16.8	21.5
332230 2006 HN ₅₅	15.7	X	184.78873	42.46746	193.90331	12.40020	0.1716112	0.17783584	3.1317699	20	12 17.7	20.9
332231 2006 HK ₇₆	15.4	X	20.78356	304.74976	77.11447	34.11469	0.1846843	0.17075153	3.2178044	20	12 27.0	19.8
332232 2006 HY ₈₃	15.7	X	188.84520	351.75818	207.60503	12.58524	0.0774842	0.17096527	3.2151220	20	11 14.9	20.6
332233 2006 HJ ₉₆	16.6	X	301.23342	76.07481	47.63078	17.07134	0.2718782	0.18462178	3.0545514	20	12 1	

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332241 2006 <i>KB</i> ₁₂	15.4	X	269.15464	43.36071	94.93037	18.00736	0.0332469	0.17729782	3.1381024	20	12 11.7	19.8
332242 2006 <i>KL</i> ₁₃	15.6	X	315.23141	329.67576	137.40989	11.49307	0.0127226	0.17913630	3.1165946	20	—	—
332243 2006 <i>KT</i> ₂₇	16.3	X	168.15105	230.53484	53.07901	2.50178	0.1358338	0.18064015	3.0992732	20	—	—
332244 2006 <i>KC</i> ₃₁	16.2	X	64.86559	302.26200	35.11513	1.68286	0.1550452	0.16957927	3.2326167	20	12 25.9	21.1
332245 2006 <i>KH</i> ₃₁	16.0	X	336.33340	168.80390	250.30121	3.13193	0.0570608	0.17219444	3.1998034	20	11 29.9	20.1
332246 2006 <i>KM</i> ₄₆	15.0	X	26.13856	190.04485	231.26374	22.19625	0.0812725	0.18143106	3.0902596	20	—	—
332247 2006 <i>KG</i> ₄₉	15.5	X	60.81264	164.59026	230.80253	26.33216	0.0963796	0.18227962	3.0806614	20	—	—
332248 2006 <i>KE</i> ₅₄	15.8	X	339.07881	342.99618	80.53564	10.03416	0.1082393	0.17262425	3.1944898	20	12 11.2	19.7
332249 2006 <i>KM</i> ₈₅	15.3	X	173.99214	183.71366	102.49008	20.01573	0.0710180	0.18165402	3.0877304	20	—	—
332250 2006 <i>KH</i> ₉₀	15.3	X	254.26620	46.84249	102.55804	17.43075	0.0636581	0.17768888	3.1334965	20	12 4.3	19.8
332251 2006 <i>KZ</i> ₁₀₁	16.1	X	46.27765	245.69192	162.42297	9.93356	0.0374561	0.18121262	3.0927425	20	—	—
332252 2006 <i>KP</i> ₁₀₃	15.4	X	202.99374	345.54692	251.29828	19.77160	0.1731013	0.17918334	3.1160491	20	12 31.9	20.5
332253 2006 <i>KR</i> ₁₂₃	17.5	X	155.99487	57.83901	238.02137	0.93320	0.1706402	0.24290766	2.5439500	20	—	—
332254 2006 <i>MZ</i> ₂	15.2	X	136.63308	192.01866	99.08320	16.88902	0.1610843	0.17395204	3.1782133	20	—	—
332255 2006 <i>MH</i> ₆	14.5	X	178.38889	345.49337	298.98165	29.28928	0.2134197	0.17397623	3.1779187	20	—	—
332256 2006 <i>MU</i> ₁₁	15.4	X	67.83817	253.16946	80.62397	16.88606	0.0584294	0.17229209	3.1985943	20	12 13.7	20.0
332257 2006 <i>QO</i> ₂₇	18.0	X	132.72992	41.22306	269.94437	1.92114	0.1665762	0.30836361	2.1698380	20	—	—
332258 2006 <i>QJ</i> ₃₄	18.8	X	117.79257	39.43625	290.74858	0.64820	0.1303470	0.30855103	2.1689592	20	—	—
332259 2006 <i>QV</i> ₇₆	17.9	X	200.21872	45.73077	144.50167	5.97831	0.1043489	0.29839978	2.2178749	20	12 9.0	20.7
332260 2006 <i>QO</i> ₁₀₀	16.9	X	19.63655	177.72535	209.79263	6.25250	0.2219835	0.29324789	2.2437758	20	—	—
332261 2006 <i>RA</i> ₃₆	17.3	X	43.23574	261.30444	120.54307	7.38955	0.1442249	0.29990040	2.2104703	20	—	—
332262 2006 <i>RN</i> ₃₇	15.3	X	279.63411	207.04978	136.67969	3.64685	0.2266512	0.12511382	3.9591249	20	5 17.4	21.0
332263 2006 <i>RT</i> ₆₂	17.7	X	63.17001	300.44314	41.02718	3.03324	0.1967737	0.29909987	2.2144127	20	—	—
332264 2006 <i>RS</i> ₇₇	17.7	X	22.98816	227.44391	144.85068	2.26753	0.1861459	0.29377352	2.2410985	20	—	—
332265 2006 <i>RZ</i> ₇₈	18.3	X	127.33621	220.46822	98.49281	0.92848	0.1824930	0.30735831	2.1745668	20	—	—
332266 2006 <i>RW</i> ₉₅	17.4	X	130.83122	42.78048	200.85993	6.72938	0.0730394	0.28884950	2.2664961	20	11 29.3	20.5
332267 2006 <i>RO</i> ₁₂₀	17.8	X	97.61057	235.52473	53.07618	1.54599	0.0339784	0.29149005	2.2527875	20	12 18.1	20.4
332268 2006 <i>SO</i> ₂₁	17.4	X	324.05597	195.12493	219.30429	6.41229	0.1358723	0.28944389	2.2633921	20	12 14.1	19.4
332269 2006 <i>SD</i> ₂₄	17.0	X	260.41445	1.18982	64.16443	9.70779	0.2267462	0.27225658	2.3576742	20	8 16.8	20.1
332270 2006 <i>SP</i> ₃₁	18.1	X	67.03151	162.06624	204.75926	3.30081	0.1932586	0.30182254	2.2010755	20	—	—
332271 2006 <i>SQ</i> ₄₀	17.9	X	31.13565	229.42466	153.27998	7.29673	0.1394225	0.29729697	2.2233563	20	—	—
332272 2006 <i>SQ</i> ₁₄₅	17.8	X	127.51632	52.48932	184.65738	4.23082	0.0997237	0.28814425	2.2701928	20	11 17.2	20.9
332273 2006 <i>SN</i> ₁₄₉	17.3	X	236.86863	300.80748	216.63214	5.01077	0.1533044	0.28922803	2.2645181	20	12 3.1	19.8
332274 2006 <i>SG</i> ₁₅₀	17.7	X	159.99059	152.29876	14.00367	3.70585	0.0223200	0.27777802	2.3263272	20	9 20.3	20.4
332275 2006 <i>SD</i> ₁₈₁	14.6	X	279.49032	221.58566	136.34926	10.38300	0.2061999	0.12544714	3.9521087	20	6 6.5	20.3
332276 2006 <i>SZ</i> ₂₀₀	18.3	X	139.62537	98.38911	202.24402	4.16266	0.2102763	0.30536953	2.1839981	20	—	—
332277 2006 <i>SS</i> ₂₁₃	17.5	X	41.29165	154.41584	199.77635	4.00383	0.1894949	0.29478326	2.2359779	20	—	—
332278 2006 <i>SW</i> ₂₂₃	16.9	X	299.68343	317.00474	35.16574	10.31208	0.0942593	0.19728343	2.9224178	20	7 15.7	20.8
332279 2006 <i>SA</i> ₃₀₀	18.0	X	103.67951	266.13394	52.16495	6.21907	0.2020199	0.30291307	2.1957895	20	—	—
332280 2006 <i>SF</i> ₃₁₇	18.2	X	314.71827	243.95478	60.93908	2.78198	0.1820883	0.26875006	2.3781377	20	5 19.2	20.6
332281 2006 <i>SL</i> ₃₂₉	17.8	X	153.29452	136.59395	168.12434	2.87117	0.1239844	0.30716301	2.1754884	20	—	—
332282 2006 <i>SX</i> ₃₄₂	16.8	X	49.72797	292.13662	342.05622	5.27694	0.0299469	0.20511344	2.8475628	20	9 10.5	20.5
332283 2006 <i>SX</i> ₃₅₅	17.5	X	61.18589	193.96067	154.37417	4.62873	0.1658819	0.29604534	2.2296185	20	—	—
332284 2006 <i>SD</i> ₃₉₄	17.6	X	47.17077	247.40701	60.63286	7.21333	0.1585434	0.28363684	2.2941807	20	11 25.0	20.6
332285 2006 <i>SL</i> ₄₁₁	17.6	X	67.39458	234.87102	111.45146	12.11291	0.2555471	0.29600181	2.2298371	20	—	—
332286 2006 <i>TT</i>	18.0	X	57.07582	79.63540	242.34148	3.74610	0.1292220	0.29242965	2.2479593	20	12 23.1	21.0
332287 2006 <i>TR</i> ₄	18.2	X	113.47453	246.83175	61.19921	5.73534	0.1852211	0.30171605	2.2015934	20	—	—
332288 2006 <i>TE</i> ₁₇	14.6	X	279.20739	315.27970	42.61886	3.46901	0.2654172	0.12439090	3.9744494	20	5 27.3	20.4
332289 2006 <i>TJ</i> ₂₄	17.4	X	222.91999	185.81104	237.88221	2.83829	0.0964413	0.26761460	2.3848598	20	7 11.1	20.5
332290 2006 <i>TK</i> ₃₃	16.7	X	134.86579	142.64604	35.23248	6.72205	0.0998908	0.27226316	2.3576362	20	9 8.0	20.1
332291 2006 <i>TS</i> ₈₄	17.1	X	97.33183	215.59355	9.25945	7.72204	0.0648562	0.27460763	2.3441981	20	9 22.7	20.1
332292 2006 <i>TE</i> ₁₁₀	17.7	X	301.59160	148.03172	239.79264	5.09735	0.0711150	0.27641047	2.3339939	20	9 15.8	20.3
332293 2006 <i>TF</i> ₁₃₀	17.3	X	52.54377	230.53335	116.16632	7.71330	0.2148322	0.29393738	2.2402656	20	—	—
332294 2006 <i>UG</i> ₁₅	15.4	X	286.29827	149.18077	207.37662	9.12116	0.2762133	0.12363750	3.9905790	20	6 2.1	21.0
332295 2006 <i>UG</i> ₂₄	17.1	X	289.85688	167.54462	216.96793	7.52593	0.2188316	0.27469472	2.3437026	20	7 27.7	19.7
332296 2006 <i>UK</i> ₉₂	15.2	X	314.53824	251.21958	66.60763	3.81743	0.2092485	0.12467013	3.9685128	20	6 2.7	20.0
332297 2006 <i>UK</i> ₉₅	17.5	X	302.22314	21.44213	68.90359	4.89917	0.1977745	0.21378489	2.7700315	20	11 22.2	20.1
332298 2006 <i>UP</i> ₁₆₅	17.8	X	131.49429	43.39148	183.80626	6.79160	0.0627085	0.28361714	2.2942870	20	11 8.1	20.9
332299 2006 <i>UG</i> ₁₈₆	17.2	X	0.49073	110.61277	255.53378	6.70646	0.1190549	0.28678897	2.2773393	20	12 4.4	19.5
332300 2006 <i>UO</i> ₂₁₇	15.3	X	36.97975	247.98813	245.83028	28.17982	0.3255078	0.22915583	2.6447347	20	2 21.2	18.0
332301 2006 <i>UW</i> ₂₄₂	18.1	X	77.69476	112.08830	214.81542	6.14317	0.1538322	0.29595030	2.2300958	20	—	—
332302 2006 <i>UR</i> ₂₉₁	16.7	X	238.13590	129.85160	53.20860	4.01413	0.0579584	0.21962110	2.7207377	20	—	—
332303 2006 <i>UN</i> ₃₅₉	18.2	X	149.91121	30.49638	288.58358	2.29745	0.1022830	0.30581134	2.1818940	20	—	—
332304 2006 <i>UR</i> ₃₆₀	17.5	X	355.76634	286.15847	80.66477	7.60692	0.1563412	0.28456508	2.2891890	20	12 3.1	19.6
332305 2006 <i>VN</i> ₂₁	17.4	X	125.95657	350.27940	220.92212	6.74738	0.1348069	0.27834767	2.3231522	20	10 10.0	20.8
332306 2006 <i>VH</i> ₆₅	17.8	X	62.31999	253.80166	69.25484	2.62588	0.2306536	0.28908210	2.2652801	20	—	—
332307 2006 <i>VH</i> ₆₇	17.7	X	93.18727	121.74848	240.53418	5.63067	0.1378803	0.30035479	2.2082403	20	—	—
332308 2006 <i>VT</i> ₇₅	17.5	X	288.97205	33.12166	70.57147	6.58604	0.1311914	0.28195597	2.3032895	20	12 15.7	19.6
332309 2006 <i>VB</i> ₁₀₁	17.5	X	58.33898	206.85082	190.18513	6.66712	0.1261098	0.30071499	2.2064766	20	—	—
332310 2006 <i>VL</i> ₁₂₃	16.9	X	5.23642	302.00378	45.58607	7.28855	0.1608480	0.28059953	2.3107064	20	11 19.6	19.1
332311 2006 <i>VZ</i> ₁₅₃	17.4	X	204.20122	331.02919	111.13800	2.78306	0.1257548	0.26488502	2.4012154	20	7 12.4	20.8
332312 2006 <i>WM</i> ₂	17.0	X	74.79729	82.39529	240.32979	6.40871	0.1790970	0.29162708	2.2520817	20	—	

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332321 2006 WZ ₉₂	17.2	X	81.57528	143.13057	74.20652	7.31918	0.0919161	0.26574603	2.3960260	20	8 28.3	20.4
332322 2006 WS ₁₂₀	15.8	X	299.64105	268.39667	63.48407	12.20818	0.1496013	0.19200776	2.9757072	20	6 6.7	19.7
332323 2006 XF ₂₇	16.9	X	185.43427	89.48801	345.15976	5.86459	0.1156339	0.25322973	2.4743412	20	6 11.8	20.7
332324 Bobmcdonald	17.4	X	153.87798	348.29067	151.47487	12.36487	0.1730081	0.26470239	2.4023197	20	8 5.1	21.3
332325 2006 XA ₆₉	17.8	X	350.86264	299.30183	114.77925	0.72394	0.1262594	0.28328221	2.2960950	20	—	—
332326 2006 Aresi	16.8	X	200.25307	33.33423	109.55403	10.60716	0.0590936	0.26721795	2.3872192	20	10 10.7	20.2
332327 2006 YD ₂₄	18.0	X	102.38455	265.44550	84.10436	4.78536	0.2269352	0.29769732	2.2213625	20	—	—
332328 2006 YK ₄₆	16.9	X	31.54765	70.32978	131.36444	13.24207	0.0716544	0.24239453	2.5475390	20	5 18.7	20.2
332329 2006 YV ₅₃	16.4	X	342.85465	118.20226	124.32888	8.49266	0.1839095	0.23745493	2.5827473	20	4 15.1	19.0
332330 2007 AC ₂₁	16.7	X	262.25210	267.62324	135.57527	14.89008	0.0725532	0.25794839	2.4440730	20	8 6.9	19.8
332331 2007 BL ₁	17.0	X	233.64154	294.89764	106.12611	7.14071	0.2094434	0.25685951	2.4509754	20	6 11.5	20.7
332332 2007 BM ₃₇	17.0	X	129.26429	252.57111	299.81532	2.33388	0.0399127	0.26139500	2.4225413	20	9 12.5	20.2
332333 2007 BE ₃₉	16.9	X	325.86433	3.83175	198.66265	1.80020	0.1350115	0.22748553	2.6576648	20	1 25.1	20.1
332334 2007 BY ₄₁	17.3	X	26.05544	165.79171	351.56141	1.26590	0.1567131	0.23056700	2.6339324	20	3 6.6	19.8
332335 2007 BP ₄₆	17.4	X	92.09238	334.94724	128.56958	10.48638	0.0769958	0.23388908	2.6089319	20	4 4.3	20.9
332336 2007 BK ₅₆	16.8	X	143.76883	1.10636	90.50829	4.41994	0.0675777	0.24339581	2.5405475	20	5 18.3	20.4
332337 2007 BS ₅₇	16.9	X	209.70686	227.03295	185.20566	3.05609	0.2109507	0.25418517	2.4681369	20	6 3.6	20.9
332338 2007 BU ₆₈	16.8	X	1.31722	44.44457	149.26017	11.37693	0.1528436	0.22974441	2.6402157	20	3 12.2	19.4
332339 2007 CB ₂₀	17.4	X	170.06432	48.39519	84.69813	3.65071	0.1522691	0.25732565	2.4480145	20	8 13.5	21.2
332340 2007 CM ₃₆	16.8	X	64.30776	18.02560	134.98921	10.57413	0.1400904	0.23791124	2.5794438	20	5 11.1	20.1
332341 2007 CG ₃₉	17.6	X	347.18690	253.98857	159.20662	2.97755	0.1914987	0.28068874	2.3102167	20	—	—
332342 2007 CS ₆₂	16.3	X	350.72781	313.62905	232.02374	7.57698	0.1896335	0.22751336	2.6574480	20	1 31.7	19.4
332343 2007 DE ₃	16.8	X	353.30470	103.20426	64.19115	6.26436	0.2009547	0.22363166	2.6881109	20	1 14.4	19.6
332344 2007 DE ₆	15.9	X	304.70576	165.42516	159.23826	16.87439	0.1857725	0.24338933	2.5405926	20	6 3.2	19.2
332345 2007 DE ₁₃	16.8	X	35.16989	329.73147	164.32289	5.77856	0.2156224	0.22778630	2.6553248	20	2 23.6	18.9
332346 2007 DQ ₃₄	16.3	X	56.95188	346.44628	162.45619	15.15634	0.0386186	0.23110947	2.6298091	20	4 9.4	19.8
332347 2007 DV ₃₉	17.3	X	22.86308	95.95824	99.88964	4.31771	0.0249024	0.24141331	2.5544373	20	4 21.3	20.5
332348 2007 DU ₄₇	17.0	X	321.63476	231.98377	338.14924	3.05712	0.1512332	0.22243892	2.6977117	20	1 28.7	20.4
332349 2007 DK ₇₆	16.9	X	233.98189	282.77320	49.96897	3.92482	0.0766734	0.22837988	2.6507218	20	3 28.8	20.7
332350 2007 DR ₉₀	16.8	X	278.49586	159.98101	140.41338	5.12162	0.1274802	0.23320394	2.6140394	20	4 2.1	20.4
332351 2007 DY ₁₀₉	16.7	X	104.27295	252.36987	183.49567	14.93249	0.0042562	0.22452865	2.6809468	20	2 27.3	20.5
332352 2007 DY ₁₁₂	16.4	X	294.50541	120.19310	152.69480	12.13738	0.0479753	0.23190090	2.6238223	20	3 30.6	19.9
332353 2007 EU ₁₃	16.2	X	309.47207	211.19459	13.34185	8.69689	0.0510010	0.22496227	2.6775007	20	2 17.2	19.8
332354 2007 EN ₁₄	16.8	X	57.75657	346.65423	147.62276	13.89639	0.1226542	0.23175981	2.6248871	20	4 1.9	20.0
332355 2007 EQ ₁₈	16.4	X	54.45439	25.70006	90.21299	6.15330	0.2042248	0.22788263	2.6545765	20	3 12.3	19.1
332356 2007 EL ₁₉	17.2	X	10.17193	78.38930	118.56750	1.90926	0.0891194	0.23466773	2.6031577	20	4 3.2	20.0
332357 2007 EO ₂₄	16.8	X	210.14191	197.82347	157.50401	6.97185	0.0525143	0.22743288	2.6580749	20	4 1.2	20.6
332358 2007 EH ₂₉	16.2	X	312.14034	282.75773	347.35402	8.17245	0.1921845	0.22760382	2.6567438	20	3 24.6	19.4
332359 2007 ES ₂₉	16.9	X	257.21005	279.69345	35.70941	5.01382	0.1031795	0.22995738	2.6385854	20	3 30.1	20.7
332360 2007 EA ₄₅	17.7	X	267.83968	322.75601	348.15153	20.36804	0.0651430	0.38109533	1.8841420	20	3 22.8	19.6
332361 2007 EL ₆₀	16.6	X	258.24005	184.57951	162.95822	15.17523	0.1051193	0.23962523	2.5671290	20	5 14.2	20.5
332362 2007 EG ₆₈	16.7	X	243.71970	167.99478	155.89968	3.68589	0.0614113	0.22922498	2.6442027	20	3 29.5	20.4
332363 2007 EC ₉₁	16.2	X	44.50270	345.05732	151.60725	12.54839	0.1265326	0.22720630	2.6598418	20	3 12.2	19.1
332364 2007 EF ₉₈	16.2	X	57.17219	344.21861	170.54707	17.93665	0.0948868	0.23227939	2.6209713	20	4 25.4	19.6
332365 2007 EX ₁₀₄	16.9	X	260.80991	227.49657	73.30467	0.84725	0.1620299	0.22564761	2.6720765	20	3 8.8	21.0
332366 2007 EL ₁₃₂	16.9	X	16.42807	341.11826	177.76661	12.00853	0.1262775	0.22361630	2.6882341	20	2 18.4	20.0
332367 2007 EP ₁₃₃	16.3	X	277.34844	94.71586	175.49146	9.31385	0.2267493	0.21996294	2.7179182	20	2 8.8	20.7
332368 2007 ED ₁₅₃	16.4	X	245.51467	158.04273	153.68039	10.86565	0.0365905	0.22760135	2.6567631	20	3 19.7	20.1
332369 2007 ER ₁₆₁	17.4	X	224.13979	209.34976	187.18411	3.41004	0.1039033	0.25001037	2.4955371	20	6 4.9	21.0
332370 2007 EO ₁₆₇	15.8	X	344.44237	259.95488	308.75406	10.47608	0.2115516	0.22535221	2.6744111	20	2 19.2	18.7
332371 2007 EG ₁₇₂	16.1	X	115.14634	247.79348	188.49432	21.72222	0.0594937	0.22658016	2.6647397	20	3 22.1	19.6
332372 2007 EQ ₁₈₁	16.7	X	81.30528	221.66615	213.82023	8.36076	0.1226863	0.21680663	2.7442332	20	2 13.3	20.3
332373 2007 EF ₁₈₃	15.9	X	106.08288	181.97824	115.63100	3.30400	0.0794217	0.19670288	2.9281652	20	12 20.1	20.2
332374 2007 EL ₁₉₃	16.0	X	355.22185	281.93677	285.63373	10.07167	0.2179097	0.22670930	2.6637277	20	3 6.0	18.7
332375 2007 ER ₂₀₀	16.3	X	38.56611	346.45531	136.48340	11.57465	0.0755163	0.22229751	2.6988556	20	2 8.4	19.5
332376 2007 EY ₂₀₀	15.6	X	292.08481	201.62191	141.22801	8.80461	0.2101088	0.24398570	2.5364510	20	6 3.5	18.8
332377 2007 EG ₂₁₇	17.0	X	261.70885	91.29579	185.74791	5.65277	0.0426835	0.22294305	2.6936434	20	2 20.7	20.9
332378 2007 FC ₁₁	16.5	X	258.45603	341.52684	228.08011	8.47698	0.0699870	0.20432256	2.8549062	20	—	—
332379 2007 FJ ₁₈	17.0	X	309.61150	114.66032	152.26067	14.51092	0.2647379	0.22637542	2.6663462	20	3 8.6	20.5
332380 2007 FA ₂₅	16.9	X	38.82036	296.32861	182.42557	12.45678	0.2210699	0.22274605	2.6952313	20	2 8.1	19.5
332381 2007 FF ₄₀	17.4	X	59.57709	62.38411	207.65959	0.68107	0.1664665	0.25577146	2.4579214	20	10 16.6	20.8
332382 2007 FC ₄₃	16.0	X	36.14621	198.30109	357.56489	17.99900	0.1830457	0.22980304	2.6397666	20	5 19.4	19.2
332383 2007 FU ₄₄	16.9	X	274.86868	171.45242	200.45783	4.07645	0.0918002	0.24169683	2.5524393	20	7 6.6	20.2
332384 2007 FT ₄₆	16.3	X	247.60512	67.08873	205.01212	6.80543	0.1767286	0.21166152	2.7885265	20	1 20.3	21.0
332385 2007 GO ₂₄	16.2	X	228.87181	167.61795	73.97733	9.47137	0.1582082	0.19994231	2.8964514	20	—	—
332386 2007 GF ₂₈	16.3	X	9.96052	34.89991	155.39558	14.17280	0.1850545	0.22635337	2.6665193	20	3 25.2	18.8
332387 2007 GJ ₄₅	16.9	X	40.78406	357.07440	188.48069	4.38008	0.0600895	0.22743354	2.6580698	20		

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332401 2007 <i>JC</i> ₃₈	17.3	X	268.31757	150.90540	169.07600	2.96950	0.1053537	0.22506305	2.6767013	20	4 17.6	21.0
332402 2007 <i>LX</i> ₁₂	16.6	X	221.84670	102.49301	160.19873	11.87088	0.0683261	0.20067364	2.8994099	20	—	—
332403 2007 <i>LY</i> ₁₅	15.9	X	222.93620	248.14223	119.79313	14.11504	0.2127161	0.22056230	2.7129921	20	4 26.9	20.7
332404 2007 <i>LH</i> ₂₃	16.3	X	137.03034	286.61378	145.52381	13.10292	0.1559567	0.21929126	2.7234652	20	4 27.8	20.7
332405 2007 <i>LM</i> ₂₆	16.0	X	156.93191	72.24154	210.03951	6.08173	0.0957285	0.18336506	3.0684920	20	—	—
332406 2007 <i>LQ</i> ₃₄	16.9	X	193.77674	116.27762	181.82476	14.80685	0.1452457	0.20226242	2.8742591	20	1 6.2	21.8
332407 2007 <i>MV</i> ₆	16.3	X	270.11401	207.44101	84.68471	14.26963	0.1480965	0.21767602	2.7369213	20	3 17.2	20.6
332408 2007 <i>MM</i> ₁₃	17.8	X	320.16337	294.42182	242.62833	38.19737	0.5684233	0.59428996	1.4011043	20	—	—
332409 2007 <i>NP</i> ₂₆₉	15.2	X	99.57448	201.12781	155.33629	19.47590	0.2639835	0.18207088	3.0830156	20	—	—
332410 2007 <i>OH</i> ₁	16.2	X	157.84881	81.31599	174.51056	14.66633	0.0823572	0.17685782	3.1433052	20	12 19.6	21.3
332411 2007 <i>PJ</i> ₆	15.1	X	111.29644	198.27677	143.07775	28.59743	0.1407366	0.17810035	3.1286683	20	—	—
332412 2007 <i>PS</i> ₂₃	15.5	X	144.71239	164.83187	161.66535	19.52789	0.2043269	0.18507608	3.0495507	20	1 3.2	20.7
332413 2007 <i>PF</i> ₄₃	15.8	X	119.92317	192.58586	183.16251	4.00397	0.3206914	0.18267706	3.0761915	20	2 17.3	20.8
332414 2007 <i>QW</i> ₉	17.6	X	328.59873	226.56430	159.03466	19.77345	0.0850492	0.38738638	1.8636878	20	12 10.5	19.6
332415 2007 <i>RO</i> ₄₃	15.9	X	83.53009	163.07039	194.65462	15.41898	0.1754674	0.17331013	3.1860561	20	—	—
332416 2007 <i>RO</i> ₁₀₉	16.9	X	83.07935	277.07102	352.82269	3.90509	0.1693510	0.23491083	2.6013614	20	11 6.6	21.0
332417 2007 <i>RS</i> ₁₂₂	15.6	X	101.47675	211.97061	166.68050	11.23500	0.1951859	0.17986394	3.1081835	20	1 18.4	20.1
332418 2007 <i>RX</i> ₁₈₂	15.6	X	136.82117	87.11077	215.60573	14.96399	0.2378339	0.17504898	3.1649219	20	—	—
332419 2007 <i>RY</i> ₁₈₈	15.1	X	152.96945	31.18350	282.60661	10.76756	0.1327857	0.18201413	3.0836564	20	—	—
332420 2007 <i>RP</i> ₂₆₉	15.0	X	76.44879	158.47751	241.83896	9.56965	0.2268454	0.17618515	3.1513007	20	1 16.1	19.0
332421 2007 <i>RP</i> ₂₇₂	16.0	X	98.31083	133.71083	235.87419	3.48913	0.1612770	0.17698100	3.1418464	20	—	—
332422 2007 <i>RN</i> ₂₈₆	15.9	X	143.61709	86.23244	262.53730	7.50034	0.2306316	0.18552633	3.0446147	20	1 27.9	21.0
332423 2007 <i>RE</i> ₂₈₇	15.9	X	114.71772	275.61454	101.58162	3.96672	0.2681597	0.18248242	3.0783785	20	2 10.7	20.7
332424 2007 <i>RN</i> ₃₁₀	15.2	X	81.63871	241.47310	144.14414	20.55735	0.1824270	0.17762044	3.1343014	20	1 1.9	19.5
332425 2007 <i>RY</i> ₃₁₁	15.5	X	126.41599	224.12635	111.58017	11.18869	0.1050586	0.17998628	3.1067748	20	—	—
332426 2007 <i>SQ</i> ₂₃	17.0	X	242.76883	187.81230	210.41389	4.92090	0.0499590	0.21222842	2.7835585	20	7 4.3	20.9
332427 2007 <i>TV</i> ₂₃	17.5	X	152.18178	309.85327	201.12175	21.07887	0.0545086	0.37278085	1.9120547	20	8 23.3	20.1
332428 2007 <i>TJ</i> ₇₄	14.8	X	139.83480	107.21559	238.63970	17.96493	0.1692791	0.17652148	3.1472966	20	1 14.3	20.0
332429 2007 <i>TW</i> ₁₃₉	15.3	X	117.71906	134.77663	264.09083	11.31976	0.1567192	0.18238819	3.0794387	20	2 20.1	20.1
332430 2007 <i>TL</i> ₁₈₀	15.7	X	143.24958	62.80060	259.51071	8.05566	0.1709190	0.17849048	3.1241078	20	—	—
332431 2007 <i>TZ</i> ₁₉₆	16.0	X	156.54531	88.63288	170.51020	11.24886	0.0574001	0.17067894	3.2187168	20	12 21.2	21.0
332432 2007 <i>TL</i> ₄₀₀	15.5	X	96.37481	118.14764	199.88400	18.42477	0.1277016	0.16901030	3.2398676	20	12 29.9	20.9
332433 2007 <i>TV</i> ₄₁₇	15.5	X	107.12133	266.96784	120.72506	26.15596	0.3009140	0.18174347	3.0867172	20	2 21.2	20.4
332434 2007 <i>UZ</i> ₄	15.2	X	131.46872	97.43705	240.01336	16.64661	0.2572755	0.17847580	3.1242791	20	1 6.8	20.4
332435 2007 <i>VE</i> ₁₀	15.6	X	96.10184	134.36213	236.28597	14.04061	0.2402371	0.17335481	3.1855086	20	1 8.4	20.2
332436 2007 <i>VR</i> ₂₇	17.4	X	317.32185	331.99195	203.81847	0.84063	0.1325132	0.25615946	2.4554388	20	—	—
332437 2007 <i>VV</i> ₄₈	16.9	X	351.51211	82.61103	284.75788	4.67573	0.0556911	0.22492316	2.6778111	20	10 27.0	20.4
332438 2007 <i>VA</i> ₃₀₂	16.8	X	243.71921	245.63226	111.31998	23.60622	0.1046950	0.35739179	1.9665561	20	5 13.4	19.8
332439 2007 <i>XJ</i> ₃₄	17.7	X	328.95960	139.20832	299.03075	3.78475	0.2208312	0.23301098	2.6154823	20	—	—
332440 2007 <i>XO</i> ₃₉	17.0	X	335.17385	130.51201	310.17770	7.20933	0.2466162	0.22997042	2.6384856	20	—	—
332441 2007 <i>XL</i> ₅₂	17.5	X	124.71726	124.00482	83.34678	7.75379	0.0613748	0.28560639	2.2836214	20	10 7.5	20.7
332442 2007 <i>YQ</i> ₈	14.7	X	150.44451	66.39152	264.46712	21.90010	0.1185670	0.17192565	3.2031376	20	1 5.1	19.7
332443 2007 <i>YO</i> ₄₆	17.8	X	290.02472	339.23685	108.28033	3.59835	0.1372206	0.29719508	2.2238644	20	11 29.0	19.4
332444 2007 <i>YT</i> ₅₅	16.9	X	209.51519	173.48633	310.43214	5.44141	0.1001496	0.28211148	2.3024429	20	9 15.3	20.1
332445 2008 <i>AU</i> ₂	17.3	X	236.32305	247.30286	266.11216	5.16882	0.0882861	0.29750071	2.2223411	20	12 9.1	19.5
332446 2008 <i>AF</i> ₄	19.7	X	254.33648	293.44423	109.35182	8.92127	0.4106482	0.60625179	1.3826132	20	6 18.4	20.5
332447 2008 <i>AR</i> ₁₆	17.8	X	162.21953	81.69588	134.06740	7.01287	0.0851453	0.29291422	2.2454794	20	11 29.5	20.9
332448 2008 <i>AJ</i> ₃₇	18.0	X	168.05256	49.87195	118.41821	1.67792	0.1558135	0.28358625	2.2944535	20	9 28.4	21.3
332449 2008 <i>AC</i> ₆₂	17.6	X	146.18080	267.91281	306.86273	2.70900	0.1096023	0.28831520	2.2692953	20	11 5.9	21.0
332450 2008 <i>BB</i> ₁₄	17.2	X	172.99342	132.28427	68.57902	10.31147	0.0987156	0.29174877	2.2514554	20	11 20.0	20.1
332451 2008 <i>BK</i> ₂₃	17.5	X	272.51270	307.78363	135.37877	3.62193	0.1049690	0.28799860	2.2709581	20	10 22.3	19.7
332452 2008 <i>CF</i> ₁₂	17.2	X	123.54905	167.87997	27.78767	2.98479	0.1611469	0.27591354	2.3367955	20	9 20.4	20.6
332453 2008 <i>CX</i> ₁₄	17.2	X	266.96841	329.97327	123.67520	8.01797	0.0777813	0.28838624	2.2689227	20	11 3.7	19.8
332454 2008 <i>CJ</i> ₂₀	17.4	X	156.65927	55.81045	111.01141	5.29005	0.1779412	0.27742879	2.3282791	20	9 16.1	21.1
332455 2008 <i>CH</i> ₃₇	17.9	X	38.04057	232.72019	167.31310	3.71712	0.1405453	0.30746256	2.1740752	20	—	—
332456 2008 <i>CN</i> ₄₄	17.2	X	49.68954	312.65554	0.81456	7.12883	0.1320704	0.28414541	2.2914424	20	11 30.2	20.3
332457 2008 <i>CG</i> ₆₉	17.9	X	174.77942	11.59154	138.54782	2.75066	0.1453931	0.27763646	2.3271179	20	9 10.9	21.3
332458 2008 <i>CW</i> ₈₄	17.7	X	148.73300	34.32616	155.44130	6.03700	0.0930358	0.28029935	2.3123558	20	10 8.8	20.9
332459 2008 <i>CM</i> ₉₇	17.7	X	85.21288	131.11428	98.13289	2.10724	0.1482312	0.27379638	2.3488264	20	9 23.8	20.9
332460 2008 <i>CL</i> ₁₁₈	17.1	X	130.54689	183.91169	32.09818	8.10505	0.0774311	0.28274333	2.2990115	20	10 21.9	20.2
332461 2008 <i>CD</i> ₁₃₂	17.7	X	172.86907	95.88985	154.12254	6.59474	0.1363672	0.29754413	2.2221249	20	—	—
332462 2008 <i>CR</i> ₁₅₃	17.1	X	69.03378	263.22221	21.08001	5.65847	0.2350652	0.27814137	2.3243007	20	11 24.2	20.7
332463 2008 <i>CC</i> ₁₅₉	17.4	X	166.03309	261.87478	266.55321	4.19146	0.0389106	0.27980624	2.3150718	20	9 27.7	20.6
332464 2008 <i>CW</i> ₁₆₃	18.1	X	176.12773	9.85242	144.48171	2.05136	0.1510983	0.28148664	2.3058490	20	9 17.8	21.7
332465 2008 <i>CG</i> ₁₉₅	17.2	X	51.41595	297.43572	353.88903	7.03332	0.2140548	0.27571714	2.3379051	20	11 11.4	20.5
332466 2008 <i>DV</i> ₄₃	17.3	X	57.87261	146.29750	72.65935	2.53202	0.1264623	0.26175554	2.4203163	20	7 30.6	20.0
332467 2008 <i>DL</i> ₅₃	17.4	X	52.05786	94.10408	185.42604	8.69487	0.2047626	0.27104798	2.3646775	20	10 29.7	20.5
332468 2008 <i>DA</i> ₅₆	17.4	X	77.68255	355.42127	230.64647	3.51235	0.2134967	0.26741209	2.3860637	20	9 15.2	20.9
332469 2008 <i>DT</i> ₆₉	17.7	X	157.62325	5.03581	146.75795	6.78179	0.1728748	0.27358630	2.3500286	20	8 26.1	21.4
332470 2008 <i>DH</i> ₈₁	17.4	X	195.61158	296.65350	184.96585	7.23351	0.2095592	0.27717545	2.3296975	20	8 18.7	21.3
332471 2008 <i>DM</i> ₈₁	18.1	X	100.53368	342.11478	284.48167	0.18829	0.2038337	0.27835669	2.3231020	20	11 28.9	21.7

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332481 2008 EN ₁₁₅	17.8	X	41.38957	15.29232	273.81672	3.96816	0.1786573	0.26982075	2.3718424	20	10 21.7	20.7
332482 2008 EQ ₁₂₂	17.7	X	90.41851	3.04173	176.21547	3.85979	0.1510920	0.26131910	2.4230104	20	7 20.8	20.9
332483 2008 EM ₁₂₈	17.1	X	183.81858	89.55078	54.99535	3.34620	0.0962101	0.27760251	2.3273076	20	9 17.1	20.4
332484 2008 ET ₁₃₃	17.7	X	104.08322	63.43241	198.30232	9.32986	0.1818131	0.28289853	2.2981706	20	11 26.9	21.4
332485 2008 EP ₁₃₆	17.6	X	44.37621	238.85314	61.15047	1.67991	0.2086728	0.27275338	2.3548105	20	11 15.9	20.8
332486 2008 EB ₁₅₇	17.1	X	47.39256	153.43824	157.87166	2.50328	0.1937016	0.27720815	2.3295143	20	12 3.4	20.3
332487 2008 ES ₁₅₈	17.6	X	35.50384	101.23689	151.10932	5.51966	0.1696259	0.25952491	2.4341650	20	8 19.4	20.0
332488 2008 EY ₁₆₅	17.6	X	178.30784	340.49410	146.92961	6.47938	0.1011460	0.27027534	2.3691821	20	8 15.6	21.0
332489 2008 FP ₁₈	17.7	X	116.74394	5.79825	182.36256	0.84435	0.1331881	0.27069501	2.3667327	20	8 31.3	21.0
332490 2008 FJ ₂₀	17.6	X	112.14765	92.49742	197.04925	6.65333	0.1319213	0.28784884	2.2717458	20	—	—
332491 2008 FU ₅₅	17.0	X	15.13794	325.57706	195.59940	8.45368	0.1052161	0.23962961	2.5670977	20	2 16.5	19.9
332492 2008 FS ₅₇	17.4	X	47.84748	208.36436	36.40078	6.33474	0.0657978	0.26116891	2.4239392	20	8 14.2	20.4
332493 2008 FD ₆₀	17.5	X	77.63020	115.40735	97.32867	3.74587	0.1358732	0.26389499	2.4072172	20	8 20.5	20.6
332494 2008 FY ₆₈	17.4	X	212.90384	331.87878	121.85910	2.85953	0.1717278	0.26959456	2.3731688	20	8 2.9	20.9
332495 2008 FQ ₇₃	17.2	X	181.42739	18.37212	71.74312	7.05710	0.0963440	0.26162194	2.4211402	20	6 29.2	20.8
332496 2008 FW ₇₃	17.2	X	90.18008	224.22420	45.47139	6.55124	0.1877322	0.27580779	2.3373928	20	11 21.8	20.8
332497 2008 FK ₁₀₃	17.1	X	227.18169	289.81422	165.20801	6.65226	0.0687422	0.26953622	2.3735113	20	9 2.5	20.1
332498 2008 FN ₁₁₀	17.9	X	98.63619	131.46997	154.70535	5.96816	0.1636819	0.28233619	2.3012211	20	12 20.5	21.5
332499 2008 FG ₁₁₃	17.7	X	39.15721	159.34355	89.65446	2.41975	0.1559111	0.25991629	2.4317208	20	8 19.5	20.2
332500 2008 FF ₁₁₅	17.8	X	188.51987	324.68592	138.99026	3.11747	0.1385993	0.26883479	2.3776380	20	7 23.8	21.3
332501 2008 FE ₁₁₇	17.7	X	73.06353	28.15759	161.39377	1.50515	0.1363475	0.25638650	2.4539890	20	7 10.6	20.6
332502 2008 FO ₁₁₈	17.0	X	61.78379	16.10016	208.29605	5.63947	0.0724951	0.25974452	2.4327928	20	8 1.2	20.0
332503 2008 FZ ₁₂₇	17.8	X	24.65191	183.31299	101.26150	4.05727	0.2147982	0.26207148	2.4183707	20	9 28.9	20.3
332504 2008 FF ₁₂₈	17.5	X	64.36742	103.69702	119.01885	2.08586	0.1381785	0.26102198	2.4248488	20	8 15.9	20.5
332505 2008 GX ₁₁	17.5	X	97.78080	34.05223	126.36808	4.89215	0.0910858	0.27153798	2.3618320	20	10 28.7	20.5
332506 2008 GV ₁₆	17.9	X	136.34385	3.67296	152.85866	1.59560	0.1277823	0.26649812	2.3915160	20	8 9.3	21.2
332507 2008 GE ₅₁	17.7	X	74.50229	47.08678	143.87733	1.98436	0.1293338	0.25899867	2.4374611	20	7 13.8	20.7
332508 2008 GA ₅₂	17.6	X	102.05474	146.10099	177.83842	2.80871	0.2464426	0.28946691	2.2632721	20	—	—
332509 2008 GA ₈₂	17.3	X	35.60259	180.53888	114.18841	3.15477	0.2078011	0.26824694	2.3811104	20	10 29.3	20.1
332510 2008 GG ₈₂	16.9	X	299.45541	325.81068	58.80774	11.09017	0.0961489	0.27034361	2.3687832	20	9 13.7	19.6
332511 2008 GD ₈₇	17.9	X	124.64320	160.38954	34.38618	3.45279	0.1333957	0.27430139	2.3459426	20	9 19.3	21.3
332512 2008 GK ₁₀₂	17.5	X	73.11918	100.25425	104.34517	3.25727	0.1187820	0.25846916	2.4407890	20	7 30.0	20.4
332513 2008 GE ₁₀₇	17.5	X	33.51250	167.64250	139.46302	7.36794	0.1270661	0.27283466	2.3543427	20	11 2.0	20.4
332514 2008 GX ₁₄₃	17.9	X	87.63415	63.24190	229.66826	5.54375	0.1178501	0.27903325	2.3193453	20	12 14.9	21.3
332515 2008 GS ₁₄₅	16.7	X	8.96543	180.55859	95.55376	9.61804	0.2394149	0.25609741	2.4558354	20	8 17.9	18.7
332516 2008 HB ₁₄	16.7	X	333.63571	340.93501	227.23671	4.93778	0.0180413	0.23915202	2.5705143	20	2 24.9	20.1
332517 2008 JB ₄	16.8	X	34.66551	43.22910	231.91325	22.47030	0.1870102	0.25892393	2.4379301	20	9 15.3	20.2
332518 2008 JK ₁₃	17.4	X	93.27271	164.63368	140.97302	5.08541	0.1279651	0.28626250	2.2801307	20	—	—
332519 2008 JG ₂₆	16.0	X	264.80699	198.33225	101.39947	9.17363	0.1831192	0.23317608	2.6142476	20	3 12.5	20.1
332520 2008 JJ ₃₆	17.4	X	22.99700	254.94243	120.91070	7.28953	0.2147852	0.27666166	2.3325810	20	—	—
332521 2008 KB ₂₈	16.3	X	299.26251	186.07081	133.56958	16.36658	0.1464400	0.24606635	2.5221325	20	5 26.5	19.7
332522 2008 KB ₃₅	17.6	X	88.21698	357.20552	168.37519	2.95645	0.1168847	0.25251712	2.4789941	20	6 24.3	20.8
332523 2008 KD ₄₁	17.5	X	120.65872	333.44734	179.11534	9.54354	0.1844802	0.26028575	2.4294192	20	7 20.6	21.4
332524 2008 LP ₄	17.0	X	305.79677	271.70164	161.15469	7.31619	0.0849606	0.27749662	2.3278996	20	12 2.7	19.5
332525 2008 LB ₆	17.6	X	49.28367	106.45595	215.70997	5.46074	0.1521231	0.27278611	2.3546221	20	12 13.0	20.8
332526 2008 LK ₈	16.7	X	126.34963	334.49852	171.31239	8.29308	0.1294669	0.25593666	2.4568636	20	7 13.6	20.4
332527 2008 NZ ₄	17.1	X	238.02131	145.69433	169.33435	3.82186	0.1053248	0.22281592	2.6946679	20	3 7.7	21.1
332528 2008 NE ₅	16.3	X	319.51942	192.47988	105.59649	11.08680	0.1956441	0.23710841	2.5852631	20	5 19.9	19.2
332529 2008 OJ ₃	16.2	X	252.59936	181.72001	140.14636	14.95356	0.2824010	0.22605517	2.6688638	20	3 19.4	20.8
332530 Canders	17.0	X	201.59117	153.14366	184.17159	5.57685	0.0529641	0.21738759	2.7393417	20	2 26.9	21.0
332531 2008 OP ₁₉	17.0	X	330.72247	88.20101	170.91320	6.66508	0.0872427	0.22888821	2.6467958	20	4 26.9	20.2
332532 2008 OU ₁₉	17.4	X	292.49792	136.46548	162.76024	2.94109	0.0483949	0.22785310	2.6548058	20	4 30.2	20.9
332533 2008 OS ₂₃	16.1	X	168.15427	223.66417	152.75679	11.32228	0.1880605	0.21175579	2.7876988	20	3 11.7	20.8
332534 2008 OW ₂₄	16.6	X	192.61447	223.17075	159.83748	11.26525	0.3142852	0.22060785	2.7126186	20	4 16.9	21.7
332535 2008 PJ ₂	16.6	X	277.58647	177.06043	201.33691	2.93333	0.2281591	0.24176709	2.5519447	20	6 27.8	20.0
332536 2008 PX ₇	16.4	X	283.89117	156.82545	148.26171	14.80786	0.2538734	0.23143009	2.6273797	20	3 30.4	20.4
332537 2008 PD ₁₁	16.5	X	215.20318	152.11134	214.62834	13.09648	0.1361438	0.22232997	2.6985929	20	4 15.3	20.7
332538 2008 PJ ₁₇	16.9	X	306.05310	53.95921	272.54215	11.88505	0.2197878	0.23840547	2.5758777	20	5 29.4	19.9
332539 2008 PN ₂₀	15.5	X	206.58749	255.19105	96.39628	16.63679	0.3073158	0.21882763	2.7273107	20	3 25.8	20.8
332540 2008 PN ₂₁	15.5	X	167.55803	230.19653	145.50107	25.86907	0.1451151	0.21068996	2.7970925	20	3 17.6	20.1
332541 2008 QG ₆	16.5	X	218.06730	108.57061	229.57330	7.95439	0.2288651	0.21881123	2.7274395	20	3 8.8	21.4
332542 2008 QT ₈	16.7	X	213.55552	180.11132	153.86762	4.10196	0.2004484	0.21712687	2.7415342	20	3 4.6	21.2
332543 2008 QE ₁₀	16.6	X	297.64284	116.90562	165.53125	13.16667	0.2763922	0.22853935	2.6494886	20	3 10.8	20.4
332544 2008 QX ₁₀	16.1	X	275.06505	160.35552	168.54550	14.48717	0.2714408	0.22988516	2.6391380	20	4 17.4	20.2
332545 2008 QM ₁₅	16.3	X	211.14232	109.75292	162.46519	11.73241	0.0401528	0.20228513	2.8740440	20	—	—
332546 2008 QH ₁₆	16.1	X	160.38604	231.56538	117.61591	11.77668	0.1520083	0.20591678	2.8401518	20	2 6.9	20.6
332547 2008 QV ₂₀	16.0	X	173.96552	158.19294	188.11083	12.87236	0.1774460	0.21073532	2.7966911	20	2 12.9	20.7
332548 2008 QP ₂₄	16.3	X	244.04534	125.47119	182.12415	9.39126	0.1846237	0.21772050	2.7365486	20	2 26.9	20.8
332549 2008 QH ₃₂	16.7	X	288.50076	41.18435	269.44646	5.96251	0.3180522	0.22926338	2.6439075	20	3 27.3	20.8
332550 2008 QJ ₄₁	16.4	X	86.40541	212.96658	203.21623	1.49308	0.0620407	0.20302119	2.8670931	20	1 23.4	20.1
332551 2008 RA	16.5	X	234.90298	141.49429	216.91657	14.30636	0.2443574	0.22410842	2.6842972	20	4 16.5	21.1
332552 2008 RM ₁	16.1	X	241.83936	192.42015	137.13928	17.20765	0.2944675	0.22455625	2.6807272	20	3 20.3	21.0
332553 2008 RY ₃	17.0	X	161.24160	141.67045	181.16737	11.94180	0.0490163	0.19858175	2.9096662			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332561 2008 RT ₁₀₂	16.3	X	68.95695	264.57414	99.29032	3.29552	0.1639314	0.18480531	3.0525287	20	—	—
332562 2008 RH ₁₀₄	16.4	X	60.83818	107.45162	222.63397	8.71708	0.0837141	0.17467517	3.1694356	20	12 5.6	21.0
332563 2008 RO ₁₁₃	16.3	X	79.96867	137.81994	212.03093	10.21176	0.0698803	0.18341866	3.0678941	20	—	—
332564 2008 RB ₁₁₇	15.9	X	132.46449	100.57214	23.02352	5.35327	0.0609857	0.21942564	2.7223532	20	6 14.4	19.8
332565 2008 RT ₁₁₇	15.9	X	6.03817	185.52934	216.72343	10.06587	0.0522596	0.17754601	3.1351773	20	12 19.9	20.2
332566 2008 RY ₁₂₉	16.5	X	193.08773	328.90285	351.41769	2.74228	0.1770565	0.21027507	2.8007705	20	2 2.1	21.0
332567 2008 RA ₁₃₂	16.5	X	222.49983	222.23939	159.99306	14.15612	0.2668239	0.22398481	2.6852847	20	5 8.7	21.4
332568 2008 RW ₁₃₃	16.2	X	125.81867	154.52111	218.48605	11.85199	0.1643589	0.20247540	2.8722432	20	1 29.0	20.7
332569 2008 SH	15.9	X	119.40024	251.16172	72.28446	10.30099	0.0217019	0.18732638	3.0250793	20	—	—
332570 2008 SN ₁₂	17.1	X	299.23085	53.54142	270.79397	3.59072	0.2795824	0.23480014	2.6021789	20	5 4.6	20.3
332571 2008 SX ₃₈	16.1	X	91.18395	302.87434	21.06989	10.67515	0.0760734	0.17966736	3.1104503	20	—	—
332572 2008 SM ₄₅	16.1	X	100.89531	158.53198	193.20631	8.45562	0.1123447	0.18749405	3.0232755	20	—	—
332573 2008 SZ ₅₁	15.8	X	327.65526	85.73595	7.77599	10.15509	0.1407552	0.17704488	3.1410906	20	—	—
332574 2008 SR ₅₃	16.9	X	238.87766	189.73763	168.28205	2.11639	0.2254175	0.22318388	2.6917052	20	4 22.1	21.2
332575 2008 SU ₅₅	15.8	X	129.39348	224.01510	25.62052	7.09541	0.0739555	0.16939702	3.2349348	20	11 11.1	20.7
332576 2008 SD ₆₇	16.0	X	283.57419	26.13601	313.21076	12.24268	0.2582907	0.22944703	2.6424965	20	5 3.9	20.0
332577 2008 SE ₇₃	15.5	X	42.14718	250.26911	100.23856	10.70645	0.0752808	0.17423509	3.1747703	20	12 7.2	19.9
332578 2008 SM ₈₀	16.4	X	287.08873	104.82487	221.33376	14.20962	0.2692600	0.22831287	2.6512404	20	4 23.7	20.0
332579 2008 SD ₈₂	16.1	X	24.18352	321.22506	62.07643	5.66268	0.1235957	0.17629068	3.1500430	20	12 29.9	20.3
332580 2008 SY ₈₃	15.7	X	65.81990	112.95989	241.55695	10.76790	0.0595832	0.18420487	3.0591584	20	—	—
332581 2008 SG ₉₃	16.1	X	74.53038	126.69429	225.64305	8.23108	0.0814598	0.18115127	3.0934406	20	—	—
332582 2008 SO ₉₇	16.3	X	230.87684	268.85253	358.52372	5.36462	0.0301136	0.19272143	2.9225363	20	1 11.0	20.6
332583 2008 SL ₉₈	16.6	X	100.61556	110.55896	214.33561	4.31898	0.1279346	0.18195603	3.0843128	20	—	—
332584 2008 SQ ₁₂₈	15.3	X	122.25318	77.67004	195.16900	25.29635	0.1803164	0.17975317	3.1094603	20	12 26.9	20.9
332585 2008 SK ₁₄₃	16.2	X	52.86106	178.73980	216.11698	6.71496	0.1713744	0.17863961	3.1223689	20	—	—
332586 2008 SS ₁₄₉	16.6	X	252.13951	98.14897	239.37234	5.30204	0.1686063	0.22300922	2.6931105	20	4 12.2	20.7
332587 2008 SF ₁₅₁	16.5	X	94.38823	105.84847	221.67397	8.11790	0.0902014	0.18432674	3.0578100	20	—	—
332588 2008 SC ₁₅₃	16.7	X	297.27391	277.29554	2.26235	11.20161	0.2927065	0.22692149	2.6620669	20	3 6.6	20.5
332589 2008 SE ₁₆₅	15.6	X	190.47833	196.11950	30.33980	7.18138	0.0662307	0.18084951	3.0968808	20	12 19.8	20.2
332590 2008 SD ₁₇₀	16.0	X	275.68355	321.02560	193.09778	11.77566	0.0271621	0.18539745	3.0460255	20	—	—
332591 2008 SP ₁₇₄	15.9	X	243.05398	221.68271	128.16643	14.65558	0.2759478	0.22262269	2.6962269	20	4 17.5	20.7
332592 2008 SR ₁₇₄	16.0	X	221.76646	94.48479	285.61790	9.95018	0.2391564	0.22241776	2.6978828	20	4 30.0	20.9
332593 2008 SE ₁₇₇	16.3	X	287.13715	187.98952	133.32569	5.02708	0.2158359	0.22739052	2.6584050	20	4 27.9	20.0
332594 2008 SE ₁₈₅	16.1	X	56.88160	108.21106	268.66714	6.22792	0.1644499	0.18096216	3.0955955	20	—	—
332595 2008 SD ₂₀₁	16.2	X	29.46552	160.36436	223.10074	8.21103	0.0747406	0.17519800	3.1631269	20	12 29.1	20.6
332596 2008 SQ ₂₂₃	15.9	X	199.96546	347.78962	237.28571	5.49972	0.1236206	0.18433023	3.0577713	20	12 23.6	20.6
332597 2008 SK ₂₂₉	16.6	X	252.23738	76.04776	243.59735	4.51022	0.0616560	0.21835787	2.7312208	20	4 1.1	20.4
332598 2008 SL ₂₃₄	15.6	X	113.66466	278.08353	26.29718	10.98188	0.0954704	0.18265866	3.0763981	20	—	—
332599 2008 SH ₂₅₁	15.7	X	152.20810	120.22946	192.36073	10.69377	0.0966538	0.19055830	2.9907777	20	—	—
332600 2008 ST ₂₅₂	16.2	X	273.86815	155.65787	331.73022	3.37540	0.1193007	0.17046931	3.2213550	20	11 19.7	20.4
332601 2008 SW ₂₅₈	16.3	X	162.95188	57.94249	210.47934	9.89230	0.0959411	0.18592914	3.0402158	20	—	—
332602 2008 SP ₂₆₄	16.1	X	15.45607	229.66543	208.17958	9.14057	0.0598907	0.18152403	3.0892043	20	—	—
332603 2008 SW ₂₇₆	15.4	X	330.07507	180.95788	215.57985	21.86683	0.0588523	0.16808795	3.2517090	20	10 23.2	19.7
332604 2008 SF ₂₈₂	16.3	X	107.20778	281.92919	45.43657	7.69866	0.2034418	0.17913695	3.1165871	20	—	—
332605 2008 SW ₂₈₅	16.1	X	58.07255	237.51048	200.31597	11.24733	0.0078097	0.19345085	2.9608901	20	1 8.2	20.4
332606 2008 SC ₂₈₇	16.1	X	128.48186	307.78905	296.88808	4.84190	0.0613620	0.16977006	3.2301943	20	11 3.2	21.0
332607 2008 SO ₂₉₁	16.5	X	225.98928	83.73237	258.93635	5.29686	0.0721479	0.21829250	2.7317661	20	3 29.4	20.7
332608 2008 TH ₆	16.2	X	187.22831	206.85619	192.68636	9.09524	0.1616893	0.21518805	2.7579769	20	5 1.4	20.7
332609 2008 TR ₆	15.9	X	224.74546	305.26801	115.76301	5.49962	0.1005532	0.22746610	2.6578161	20	7 7.7	19.8
332610 2008 TA ₁₂	16.7	X	206.27200	167.52865	193.24958	5.32264	0.0632851	0.21610403	2.7501780	20	4 2.3	20.6
332611 2008 TG ₁₅	16.4	X	187.33273	341.06584	293.14259	1.21889	0.0508024	0.19202018	2.9755789	20	—	—
332612 2008 TF ₁₆	16.4	X	51.02051	184.04942	202.48126	8.99235	0.0666168	0.18437027	3.0573286	20	—	—
332613 2008 TF ₃₃	16.2	X	93.28999	153.40437	195.68032	10.40161	0.1170791	0.18447727	3.0561463	20	—	—
332614 2008 TR ₃₆	16.2	X	94.62659	121.30397	221.29876	2.62655	0.1121327	0.18606362	3.0387507	20	—	—
332615 2008 TT ₅₀	16.3	X	183.55949	66.17549	190.78432	10.85345	0.0378660	0.18466062	3.0541230	20	—	—
332616 2008 TM ₆₁	16.6	X	126.83853	30.73348	274.11085	1.44053	0.1013212	0.18307315	3.0717529	20	—	—
332617 2008 TZ ₉₁	16.1	X	274.92229	236.34180	98.51076	12.99498	0.2876848	0.22804726	2.6532987	20	4 25.9	20.3
332618 2008 TX ₉₇	16.8	X	180.26204	82.17631	297.20095	3.82687	0.1809837	0.21277212	2.7788146	20	3 28.9	21.5
332619 2008 TO ₉₈	16.5	X	157.55660	51.49325	195.12989	10.47739	0.0904517	0.17738220	3.1371072	20	12 8.8	21.5
332620 2008 TP ₁₀₄	16.2	X	80.62280	130.59442	220.95590	5.40283	0.1570530	0.18267600	3.0762034	20	—	—
332621 2008 TW ₁₀₅	16.0	X	145.08273	44.35406	213.01588	8.41294	0.0556452	0.17457504	3.1706474	20	12 8.2	20.8
332622 2008 TK ₁₁₁	15.5	X	18.30573	188.76393	212.40295	28.46510	0.1873929	0.17630509	3.1498713	20	—	—
332623 2008 TY ₁₁₁	16.0	X	78.37289	137.31930	231.11271	8.86711	0.1811699	0.18550788	3.0448167	20	—	—
332624 2008 TJ ₁₁₂	16.4	X	195.54106	94.92203	276.81514	3.70140	0.1732920	0.21335412	2.7737588	20	4 1.8	21.0
332625 2008 TC ₁₁₃	16.0	X	86.45067	134.59597	193.88123	8.62574	0.0397709	0.17622360	3.1508423	20	12 26.8	20.7
332626 2008 TU ₁₁₈	15.8	X	287.46596	280.59189	203.14785	10.34252	0.0610112	0.17801600	3.1296566	20	12 13.7	20.1
332627 2008 TF ₁₃₁	16.5	X	158.42185	73.60338	238.65441	6.41162	0.2268194	0.19454668	2.9497610	20	—	—
332628 2008 TT ₁₃₂	15.8	X	94.08030	40.75041	271.66015	4.84884	0.1017278	0.17657136	3.1467039	20	12 22.7	20.6
332629 2008 TK ₁₃₈	16.1	X	94.98550	328.78288	340.48318	4.63956	0.1368970	0.17655672	3.1468778	20	12 22.9	21.0
332630 2008 TT ₁₅₇	16.2	X	211.83186	239.96872	141.88733	14.28811	0.2270674	0.21951696	2.7215982	20	5 2.9	21.1
332631 2008 TF ₁₈₄	16.2	X	309.63295	19.27501	287.77987	13.05624	0.2575464	0.23239080	2.6201336	20	4 25.9	19.6
332632 2008 UO ₁	16.0	X	71.34241	218.26832	161.23699	11.98869	0.1700071	0.18484422	3.0521003	20	—	—
332633 2008 UK ₄	15.9	X	128.07082	89.26484	230.26279	7.84874	0.0805668	0.18799121	3.0179429	20	—	—
332634 2008 UM ₄	15.2	X	43.47772	180.45823	244.88574	17.39583	0.1808980	0.18123104	3.0925329			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332641 2008 UK ₉₁	16.2	X	298.60794	80.48799	225.90467	16.15099	0.3332983	0.23050559	2.6344001	20	3 30.4	20.2
332642 2008 UZ ₉₈	15.2	X	39.77300	95.05683	257.92534	9.02933	0.1239019	0.17262169	3.1945215	20	12 12.4	19.6
332643 2008 UC ₁₀₆	16.4	X	194.20512	43.24671	314.23868	2.46765	0.0818617	0.21150254	2.7899237	20	3 15.5	20.6
332644 2008 UV ₁₁₃	15.9	X	99.88255	285.81763	10.01217	4.69770	0.1533838	0.17257929	3.1950446	20	12 12.0	21.0
332645 2008 UY ₁₂₆	16.6	X	75.82587	221.60921	121.77201	2.04180	0.1963213	0.17732420	3.1377912	20	—	—
332646 2008 UJ ₁₂₈	15.4	X	140.30480	84.90735	234.27687	8.73164	0.0506412	0.17934443	3.1141830	20	—	—
332647 2008 UF ₁₄₃	16.2	X	122.51295	220.99046	84.26355	2.43487	0.1642921	0.17945042	3.1129566	20	—	—
332648 2008 UX ₁₉₄	16.5	X	179.13102	251.26124	37.75813	1.83484	0.1233426	0.18593741	3.0401256	20	—	—
332649 2008 UM ₂₀₀	16.8	X	195.43832	132.03248	240.98704	3.74870	0.1743470	0.21445790	2.7642332	20	4 3.8	21.4
332650 2008 UG ₂₀₃	15.2	X	74.97144	80.21184	251.14178	8.07997	0.0699481	0.17452767	3.1712210	20	12 20.7	19.8
332651 2008 UF ₂₁₄	15.6	X	91.89350	69.60437	243.09090	12.91776	0.1283234	0.17630646	3.1498550	20	12 22.3	20.5
332652 2008 UR ₂₂₉	15.5	X	188.22200	34.25864	261.24682	10.23337	0.0895054	0.18621906	3.0370595	20	—	—
332653 2008 UN ₂₅₅	15.8	X	124.39769	263.41328	77.18824	11.90522	0.1421922	0.19112206	2.9848935	20	—	—
332654 2008 UK ₃₅₃	16.5	X	98.09916	79.65170	293.87324	1.14886	0.1147255	0.18543661	3.0455967	20	—	—
332655 2008 VF ₂₆	16.1	X	302.53986	12.41044	306.11863	13.44525	0.2606041	0.23091338	2.6312977	20	4 29.8	19.8
332656 2008 VG ₅₁	16.2	X	127.96453	307.84370	48.74115	4.39961	0.1661068	0.18908899	3.0062509	20	1 18.5	20.7
332657 2008 UW ₇₄	16.7	X	283.34022	270.50761	74.24458	17.07349	0.2371254	0.22697056	2.6616832	20	5 21.2	20.3
332658 2008 VD ₇₅	16.2	X	219.27763	241.33174	104.43518	9.87800	0.2382636	0.21262746	2.7800748	20	3 26.5	21.1
332659 2008 WG ₇	16.0	X	116.83105	94.33373	225.61345	16.19431	0.1081552	0.18134099	3.0912827	20	—	—
332660 2008 WM ₇	16.0	X	99.78413	267.58959	46.95444	5.83701	0.1502797	0.17699461	3.1421853	20	—	—
332661 2008 WO ₇	16.3	X	94.66176	111.33129	227.65141	4.42988	0.1366396	0.18077238	3.0977617	20	—	—
332662 2008 WN ₁₈	16.4	X	83.04290	337.35935	358.76191	1.25320	0.1506630	0.17839155	3.1252627	20	—	—
332663 2008 WA ₅₅	18.4	X	116.78032	259.01593	256.70755	5.62485	0.2001001	0.38538704	1.8701279	20	7 29.5	21.0
332664 2008 WB ₆₀	16.4	X	243.70978	252.72849	85.61997	6.43468	0.2733186	0.21657249	2.7462107	20	4 1.9	21.1
332665 2008 WM ₆₁	15.5	X	89.91669	308.19175	81.69942	14.75719	0.1585296	0.18568542	3.0428754	20	1 12.9	19.6
332666 2008 WO ₉₆	16.3	X	148.18364	84.44347	210.96540	10.35888	0.0316358	0.17377261	3.1804007	20	—	—
332667 2008 WB ₁₀₃	15.9	X	108.25091	159.72785	192.10406	10.38791	0.1880213	0.18745725	3.0236712	20	—	—
332668 2008 YX ₁	15.5	X	73.71826	130.25583	270.22767	10.98667	0.0975053	0.18173675	3.0867933	20	—	—
332669 2008 YH ₁₀₈	17.6	X	314.32689	284.44223	303.63387	6.54582	0.1465968	0.27014181	2.3699627	20	2 2.9	20.3
332670 2009 AR ₂₃	18.5	X	99.25953	89.53838	304.67909	3.12594	0.2006917	0.26969036	2.3726068	20	1 21.9	21.2
332671 2009 AO ₄₆	17.2	X	183.71081	208.26012	94.25045	3.33494	0.1800396	0.26246019	2.4159824	20	—	—
332672 2009 BJ ₂₉	16.9	X	330.83572	233.77807	111.95581	8.58646	0.1577967	0.22270255	2.6955823	20	8 27.6	19.6
332673 2009 BV ₃₈	15.9	X	94.27124	282.07446	128.96500	15.43945	0.3244796	0.18449970	3.0558986	20	3 10.5	20.5
332674 2009 BC ₄₄	16.5	X	217.15379	121.62905	314.81515	7.89585	0.1267722	0.21265494	2.7798353	20	7 17.1	20.8
332675 2009 BS ₁₃₈	17.7	X	87.62405	143.07660	220.53963	1.16603	0.2294389	0.25607374	2.4559868	20	—	—
332676 2009 BK ₁₅₁	15.4	X	84.57434	323.90994	100.01746	17.54880	0.1019686	0.18141882	3.0903985	20	2 11.9	19.8
332677 2009 BE ₁₇₁	17.0	X	164.54420	223.81950	230.18786	1.44991	0.0179027	0.20202477	2.8765127	20	6 12.3	20.9
332678 2009 CW ₂₁	17.2	X	21.71908	319.04260	308.17418	4.22774	0.1174192	0.29522698	2.2337369	20	8 13.5	19.2
332679 2009 CK ₄₃	17.4	X	316.95004	184.30462	39.62431	1.80130	0.1383746	0.26398371	2.4066779	20	2 4.5	20.2
332680 2009 DR ₅₁	17.1	X	194.52342	264.39519	38.53220	2.52534	0.1938777	0.25541420	2.4602129	20	1 9.1	21.2
332681 2009 DL ₁₂₀	18.0	X	90.26453	306.19289	170.27583	1.22151	0.1357166	0.27489638	2.3425563	20	4 21.8	20.6
332682 2009 DO ₁₄₁	17.0	X	290.77625	261.29066	169.41709	11.54908	0.1879819	0.22470187	2.6795689	20	10 9.1	19.8
332683 2009 DL ₁₄₂	16.8	X	81.82794	39.85206	212.48222	4.26866	0.1126712	0.21161716	2.7889162	20	10 5.2	20.9
332684 2009 FT ₅₆	17.5	X	47.44640	311.84194	234.49779	19.55329	0.0596379	0.36638864	1.9342297	20	5 11.9	18.7
332685 2009 HH ₃₆	10.8	X	53.45648	240.13819	72.15607	23.30315	0.4461604	0.02175135	12.7099927	20	11 25.7	21.5
332686 2009 OL ₂	17.9	X	93.52739	178.22128	153.24933	5.39763	0.2140343	0.30044247	2.2078107	20	—	—
332687 2009 OV ₂	16.4	X	8.87424	262.56942	115.66678	23.04146	0.3584209	0.27998441	2.3140895	20	—	—
332688 2009 OS ₂₄	17.5	X	65.90663	196.05416	139.73383	7.66874	0.1505271	0.29044915	2.2581666	20	—	—
332689 2009 PR ₁₇	16.8	X	17.35733	307.70284	62.50221	5.92131	0.2233962	0.28415088	2.2914130	20	—	—
332690 2009 PZ ₁₇	17.1	X	87.30115	321.92185	289.26983	4.80597	0.0811856	0.27875803	2.3208717	20	10 15.1	20.3
332691 2009 QP ₇	18.5	X	38.58693	121.24544	199.08806	6.07058	0.2437683	0.28467475	2.2886010	20	—	—
332692 2009 QQ ₃₀	16.5	X	282.29702	116.27698	255.51598	7.66392	0.2424275	0.25846855	2.4407928	20	6 23.2	19.4
332693 2009 QO ₄₅	17.4	X	293.66139	121.74076	272.29863	1.11924	0.2260767	0.26609251	2.3939456	20	8 19.3	19.3
332694 2009 QM ₅₆	15.9	X	61.93321	8.63680	153.82903	4.07421	0.1734389	0.24378277	2.5378583	20	5 23.2	18.8
332695 2009 RM ₁	16.2	X	123.91717	178.72744	221.12222	8.40607	0.2176351	0.22325345	2.6911460	20	3 4.0	20.4
332696 2009 RM ₁₉	17.9	X	60.71835	66.80656	330.01631	2.77625	0.1756994	0.29930966	2.2133779	20	—	—
332697 2009 RO ₁₉	17.4	X	334.57438	154.71854	187.87383	3.19645	0.1934357	0.26730753	2.3866858	20	9 5.4	19.1
332698 2009 RG ₂₁	17.2	X	58.98806	4.25548	258.82377	6.28364	0.0703379	0.27353199	2.3503397	20	9 21.3	20.2
332699 2009 RR ₂₂	17.7	X	10.87739	154.03439	193.80796	6.83769	0.1261719	0.28039475	2.3118312	20	11 25.1	20.3
332700 2009 RB ₃₀	17.2	X	357.81026	60.45496	254.00097	3.13071	0.1429274	0.26510872	2.3998644	20	9 7.9	19.5
332701 2009 RG ₃₅	17.5	X	220.70809	121.08991	199.66902	2.21648	0.0742100	0.22693304	2.6619766	20	2 26.2	21.4
332702 2009 RS ₄₁	17.0	X	276.68554	123.51634	241.22008	5.05571	0.1509933	0.25463780	2.4652112	20	6 20.3	19.9
332703 2009 RV ₅₁	17.8	X	14.99987	285.00734	29.41028	2.68641	0.1960103	0.26965837	2.3727944	20	10 22.3	20.1
332704 2009 RV ₅₅	17.1	X	135.78419	293.29571	132.18093	2.74710	0.0592388	0.22926765	2.6438747	20	4 4.3	20.7
332705 2009 RA ₅₆	16.4	X	291.51997	3.94261	101.38439	2.71672	0.1596275	0.18352767	3.0666792	20	11 17.9	19.9
332706 Karlheidlas	17.2	X	85.81242	114.76056	263.86305	4.75864	0.1631647	0.30055244	2.2072721	20	—	—
332707 2009 RR ₇₀	18.0	X	47.79412	235.17812	45.21735	1.78825	0.1825195	0.27124087	2.3635564	20	10 21.2	20.9
332708 2009 SE ₃₅	17.5	X	262.97622	279.56251	222.62013	4.68135	0.1447395	0.27967307	2.3158066	20	12 21.8	19.7
332709 2009 SR ₅₃	16.8	X	314.42237	142.14754	226.83048	4.63022	0.2308410	0.26549096	2.3975604	20	8 23.0	18.5
332710 2009 SW ₇₃	16.7	X	117.52797	351.52454	58.19079	6.17752	0.1421439	0.22053571	2.7132102	20	3 6.9	20.6
332711 2009 SE ₇₇	17.3	X	323.04726	209.89497	67.04467	6.94021	0.0868906	0.24242467	2.5473279	20	5 8.5	20.3
332712 2009 SF ₈₀	18.5	X	101.37124	70.47297	187.16080	1.73008	0.1871039	0.28388527	2.2928421	20	11 19.1	21.9
332713 2009 SL ₈₃	18.0	X	105.16254	95.61872	179.85533	5.19703	0.1642791	0.28834745	2.2691261	20	12 14.5	21.6
332714 2009 SS ₁₀₀	17.7	X	9.51459	145.90180	176.03607	7.77733	0.1251912	0.26816020	2			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V		
332721	2009	SA ₂₂₅	17.1	X	279.73805	239.03452	72.21955	4.01656	0.0586920	0.23969542	2.5666278	20	4 27.1	20.4
332722	2009	ST ₂₃₃	16.1	X	180.25550	351.14841	29.25439	12.76107	0.1965933	0.23013100	2.6372581	20	4 3.0	20.5
332723	2009	SB ₂₆₂	17.1	X	359.50197	49.04319	241.57897	5.59670	0.1367703	0.25975898	2.4327025	20	8 2.2	19.4
332724	2009	SR ₂₇₃	17.1	X	27.80861	275.47420	179.00920	2.65014	0.0808115	0.21095778	2.7947246	20	—	—
332725	2009	SZ ₂₇₄	16.8	X	1.01470	6.35936	178.61123	7.90298	0.0584882	0.22891158	2.6466157	20	3 2.9	19.9
332726	2009	SF ₂₇₆	17.5	X	21.68621	273.19066	47.29542	3.70186	0.1650882	0.27281122	2.3544776	20	11 6.5	20.2
332727	2009	SX ₂₈₂	16.9	X	339.75064	204.43240	41.07459	9.35438	0.1139009	0.24122107	2.5557943	20	4 18.3	19.7
332728	2009	SD ₂₈₃	16.9	X	104.45212	341.20162	54.59790	6.82913	0.0559775	0.21622620	2.7491420	20	1 20.1	20.7
332729	2009	SO ₂₈₃	17.5	X	270.17799	208.27556	164.70071	6.88375	0.1583362	0.25359977	2.4719337	20	6 21.9	20.8
332730	2009	SG ₂₈₉	16.0	X	217.42693	128.65092	35.92616	15.18598	0.2185258	0.17966528	3.1104743	20	10 22.7	21.0
332731	2009	SX ₃₁₅	17.2	X	221.66235	170.19226	200.36411	3.40350	0.0607750	0.24039839	2.5616218	20	5 2.1	20.6
332732	2009	SZ ₃₁₉	17.6	X	51.58373	357.64036	311.22494	1.66660	0.2460553	0.27844643	2.3226028	20	12 10.5	20.9
332733	2009	Drolshagen	16.8	X	44.23946	95.77451	235.38244	8.50842	0.0320703	0.27742716	2.3282881	20	12 2.7	19.6
332734	2009	SY ₃₂₇	17.4	X	262.92225	174.24838	169.97208	6.67207	0.0707667	0.24411580	2.5355497	20	5 18.2	20.9
332735	2009	SX ₃₃₄	15.9	X	54.86034	25.62820	39.72329	9.85211	0.0345924	0.21181135	2.7872114	20	—	—
332736	2009	ST ₃₃₉	15.4	X	308.98377	68.33694	61.38589	9.93064	0.0485072	0.18816762	3.0160564	20	—	—
332737	2009	SX ₃₄₈	16.8	X	127.11001	318.38274	134.39722	4.78849	0.0237367	0.23660224	2.5889489	20	4 25.5	20.2
332738	2009	SS ₃₄₉	17.0	X	41.01744	228.26987	95.40241	10.28515	0.2386349	0.27625029	2.3348961	20	12 17.5	20.1
332739	2009	SL ₃₅₂	17.7	X	61.87650	261.66707	82.57810	0.68717	0.2342386	0.28273943	2.2990326	20	—	—
332740	2009	TT ₃	16.1	X	157.12886	132.42743	224.80778	11.49969	0.1076482	0.21994117	2.7180975	20	2 3.2	20.4
332741	2009	TU ₃	16.8	X	292.56128	300.87123	89.72424	4.70843	0.2027089	0.26541517	2.3980168	20	8 18.4	19.2
332742	2009	TL ₁₀	17.6	X	30.68920	271.63583	46.33565	3.58737	0.2189248	0.27575962	2.3376650	20	11 24.6	20.5
332743	2009	TY ₁₃	17.6	X	353.77970	48.27932	306.74341	0.40546	0.2062890	0.27110986	2.3643178	20	11 14.7	19.6
332744	2009	TV ₁₄	16.3	X	316.21243	73.24554	205.39190	5.30854	0.0959765	0.24046349	2.5611595	20	4 28.1	19.3
332745	2009	TZ ₁₉	17.1	X	23.36738	314.05284	29.98257	1.80411	0.2620938	0.276888281	2.3313388	20	12 27.0	19.9
332746	2009	TW ₂₀	17.4	X	27.22150	206.10084	110.77176	3.73134	0.1990187	0.27325212	2.3519442	20	11 16.3	20.2
332747	2009	TM ₂₃	16.4	X	231.03656	140.03523	225.52916	5.30857	0.1143919	0.23730209	2.5838562	20	5 1.5	20.0
332748	2009	TF ₂₇	16.1	X	145.49276	230.44544	172.00680	13.92517	0.0894157	0.22444121	2.6816431	20	3 20.2	20.0
332749	2009	TN ₂₇	17.4	X	18.58067	206.85609	142.00830	5.11879	0.2604984	0.27696263	2.3308908	20	12 27.2	20.2
332750	2009	TY ₂₇	15.9	X	99.90760	337.75174	85.27602	10.34713	0.1528583	0.21602616	2.7508389	20	3 6.5	19.8
332751	2009	TV ₄₆	17.2	X	40.35134	45.41418	275.21759	3.36320	0.2434708	0.27692517	2.3311010	20	12 13.4	20.4
332752	2009	TO ₄₇	16.1	X	250.60769	252.77460	246.74096	6.01951	0.1297877	0.18077336	3.0977504	20	11 5.5	20.5
332753	2009	TT ₄₇	16.2	X	227.24422	256.42637	97.51780	12.60275	0.0779173	0.23653908	2.5894098	20	4 21.6	20.2
332754	2009	UY ₈	17.6	X	24.56070	210.32349	113.00669	3.33478	0.1897412	0.27414102	2.3468574	20	11 19.9	20.2
332755	2009	UO ₁₇	16.3	X	93.83721	41.60437	29.18849	5.59119	0.0701852	0.21824425	2.7321687	20	2 22.4	19.9
332756	2009	UW ₃₇	16.7	X	312.57170	76.59231	83.90419	3.84108	0.0175186	0.20207397	2.8760458	20	—	—
332757	2009	UN ₄₆	16.5	X	228.90409	282.83623	46.01855	15.11059	0.1792760	0.22992553	2.6388290	20	3 18.5	21.0
332758	2009	UM ₇₀	16.9	X	321.72056	142.49592	82.39691	7.30825	0.1371913	0.22840512	2.6505265	20	2 20.7	20.3
332759	2009	UB ₇₇	16.9	X	230.76968	121.64767	218.97871	13.37196	0.1030240	0.23468446	2.6030339	20	3 28.7	21.0
332760	2009	UQ ₈₁	15.9	X	312.65339	28.72438	31.99451	10.33410	0.1059957	0.17899529	3.1182313	20	10 28.5	19.5
332761	2009	UK ₈₄	16.9	X	23.92313	301.02666	155.19092	2.38487	0.0271966	0.20318280	2.8655726	20	—	—
332762	2009	US ₈₄	16.8	X	185.91506	1.09164	55.18977	15.49397	0.2495911	0.23542541	2.5975694	20	5 18.6	21.4
332763	2009	UY ₈₄	16.6	X	82.50245	259.95777	136.36783	2.92119	0.0750670	0.20396181	2.8582715	20	—	—
332764	2009	UR ₈₆	16.7	X	52.03278	42.97363	263.70409	6.14120	0.0768800	0.27052491	2.3677247	20	11 13.9	19.8
332765	2009	UR ₉₁	15.6	X	262.25168	49.95781	52.99022	23.72277	0.1823868	0.17335061	3.1855601	20	10 9.9	20.4
332766	2009	UW ₁₀₂	15.2	X	306.99024	209.06381	243.07087	18.88788	0.2845011	0.17846966	3.1243508	20	11 11.2	18.2
332767	2009	UB ₁₁₂	16.5	X	216.20245	243.36810	55.82381	5.11468	0.0498985	0.21397923	2.7683541	20	1 30.4	20.6
332768	2009	UJ ₁₃₆	17.4	X	52.27153	234.80624	89.36659	3.63260	0.2519625	0.27954395	2.3165196	20	12 31.1	20.8
332769	2009	UV ₁₃₇	16.4	X	131.09869	328.89966	45.00309	10.58974	0.2081819	0.21427456	2.7658098	20	2 16.5	20.8
332770	2009	UQ ₁₄₀	16.4	X	69.02214	128.61252	275.54536	6.53105	0.0885301	0.20213927	2.8754264	20	—	—
332771	2009	UG ₁₄₈	16.7	X	175.91012	250.05526	68.55215	5.22768	0.0986176	0.20883364	2.8136435	20	1 12.5	20.9
332772	2009	VM	16.5	X	177.14075	25.30410	334.86006	5.73992	0.0428435	0.22369082	2.6876370	20	2 27.6	20.3
332773	2009	VQ ₁₂	17.2	X	281.42737	273.24642	336.70897	1.21941	0.0219850	0.21934935	2.7229844	20	2 15.4	20.8
332774	2009	VM ₂₁	17.0	X	279.13466	133.52892	182.13875	3.25085	0.1312814	0.23654947	2.5893340	20	4 20.9	20.6
332775	2009	VO ₂₄	19.7	X	121.03475	343.52889	163.69189	6.05625	0.4619481	0.51199746	1.5474769	20	8 9.3	22.1
332776	2009	VY ₃₀	16.1	X	228.21915	267.94175	270.24072	8.05402	0.0612661	0.18297823	3.0728151	20	12 5.9	20.6
332777	2009	UU ₃₂	15.3	X	9.15976	24.42484	41.21026	10.32854	0.0806996	0.18990890	2.9975919	20	—	—
332778	2009	VK ₃₇	16.0	X	98.86255	330.78336	51.18827	16.06958	0.1440756	0.20600150	2.8393731	20	1 9.7	20.0
332779	2009	VX ₃₇	16.3	X	239.28467	298.00257	61.14840	9.25178	0.1500101	0.23712228	2.5851623	20	4 30.8	20.3
332780	2009	VZ ₃₇	15.6	X	342.45785	13.50855	64.38788	17.75432	0.1342182	0.18549149	3.0449960	20	—	—
332781	2009	VF ₄₅	15.4	X	9.39077	44.68296	26.26441	7.67036	0.0649407	0.19130660	2.9829736	20	—	—
332782	2009	VT ₄₇	17.3	X	233.69088	214.31554	135.25525	3.24731	0.0934591	0.23288101	2.6164554	20	4 17.3	21.1
332783	2009	VC ₅₂	17.3	X	29.20755	291.35374	80.38953	3.67418	0.1782231	0.27947362	2.3169083	20	—	—
332784	2009	VR ₆₂	17.4	X	351.02936	317.69500	71.37455	2.42534	0.1881793	0.27245511	2.3565287	20	12 27.9	19.5
332785	2009	VG ₆₈	16.9	X	23.92824	18.12825	274.43656	1.72323	0.0856060	0.25447490	2.4662631	20	9 13.3	19.7
332786	2009	VA ₇₇	15.6	X	328.41721	342.92819	115.26052	12.56676	0.1916246	0.18738759	3.0244204	20	—	—
332787	2009	VS ₇₈	15.7	X	236.73272	268.49195	91.99584	16.13692	0.1652336	0.23595445	2.5936852	20	5 3.5	20.0
332788	2009	VC ₈₁	15.7	X	274.64868	235.77243	227.37305	13.57687	0.0672761	0.17743510	3.1364836	20	10 30.8	19.9
332789	2009	VT ₁₀₄	16.3	X	249.01918	241.25308	110.62119	10.66231	0.1420697	0.23965135	2.5669424	20	5 5.2	20.2
332790	2009	WM ₂	16.9	X	101.63710	254.68589	167.64133	2.84371	0.					

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332801 2009 <i>WF</i> ₇₄	16.5 ^m	X	136.95221	298.93712	88.31600	5.91912	0.1353480	0.21525764	2.7573824	20	2 28.6	20.7
332802 2009 <i>WD</i> ₇₅	16.5	X	238.83963	196.05831	97.94269	6.08383	0.1368989	0.21914399	2.7246853	20	2 11.9	20.7
332803 2009 <i>WP</i> ₈₈	15.7	X	329.13384	195.13974	235.04290	8.76229	0.0892754	0.17974108	3.1095997	20	12 6.0	19.7
332804 2009 <i>WP</i> ₈₉	16.6	X	319.34044	190.98435	116.19655	5.10385	0.0494041	0.23990676	2.5651202	20	6 18.7	19.8
332805 2009 <i>WO</i> ₁₃₃	15.7	X	265.18845	50.33769	73.76328	17.11017	0.0304231	0.17796875	3.1302105	20	11 21.0	20.1
332806 2009 <i>WQ</i> ₁₅₀	16.2	X	198.48641	221.98395	98.74891	6.45341	0.0189257	0.21457143	2.7632581	20	2 5.3	20.0
332807 2009 <i>WT</i> ₁₅₆	16.5	X	225.45363	83.93256	244.35111	14.81240	0.1486119	0.22728135	2.6592562	20	3 1.9	21.2
332808 2009 <i>WD</i> ₁₆₂	15.8	X	147.08760	201.07998	56.48391	7.93743	0.1129574	0.18064913	3.0991705	20	12 10.7	20.7
332809 2009 <i>WR</i> ₁₆₆	15.6	X	244.52337	283.65261	291.24808	8.54590	0.0312638	0.18229779	3.0804567	20	—	—
332810 2009 <i>WS</i> ₁₆₇	16.3	X	137.74994	214.50929	90.39714	4.22181	0.0365243	0.19381870	2.9571426	20	—	—
332811 2009 <i>WR</i> ₁₇₁	17.1	X	263.42515	31.61029	307.03098	3.87562	0.1608880	0.23995427	2.5647816	20	4 25.5	20.8
332812 2009 <i>WQ</i> ₁₈₁	16.4	X	350.30297	58.09031	205.15742	8.04127	0.1312337	0.23952792	2.5678242	20	6 2.0	19.0
332813 2009 <i>WX</i> ₁₈₇	15.8	X	233.87996	225.54581	49.54251	11.35127	0.1854329	0.21517728	2.7580689	20	1 14.5	20.5
332814 2009 <i>WE</i> ₁₉₅	15.3	X	248.35512	67.89659	94.76771	11.79190	0.0562823	0.18201025	3.0837002	20	12 12.6	19.6
332815 2009 <i>WV</i> ₂₁₁	15.6	X	203.67752	339.11185	227.32689	10.49588	0.0981684	0.18124001	3.0924308	20	12 7.8	20.2
332816 2009 <i>WN</i> ₂₂₈	16.4	X	122.60771	305.84011	76.34080	7.36218	0.0533641	0.21208565	2.7848706	20	1 26.0	20.3
332817 2009 <i>WC</i> ₂₄₀	17.2	X	130.91398	112.50248	123.46945	6.24318	0.1815219	0.29724201	2.2236303	20	—	—
332818 2009 <i>WP</i> ₂₅₀	16.0	X	179.05499	175.34026	263.23728	13.79221	0.0654688	0.23527130	2.5987036	20	6 10.7	19.5
332819 2009 <i>WQ</i> ₂₅₂	15.6	X	212.25089	131.36037	64.24534	19.04447	0.0884828	0.17874904	3.1210943	20	12 3.6	20.2
332820 2009 <i>WQ</i> ₂₅₇	16.5	X	103.17963	294.55171	77.09604	9.64524	0.1168393	0.20039265	2.8921103	20	—	—
332821 2009 <i>WU</i> ₂₆₁	15.8	X	214.80005	127.23064	105.32671	11.98208	0.0713785	0.18007795	3.1057204	20	—	—
332822 2009 <i>WV</i> ₂₆₁	15.5	X	144.38631	35.67255	261.52282	14.80613	0.0766136	0.19002103	2.9964125	20	—	—
332823 2009 <i>WP</i> ₂₆₃	15.5	X	40.94978	341.65531	75.00610	13.25109	0.0482536	0.19284910	2.9670461	20	—	—
332824 2009 <i>XO</i> ₁₆	16.2	X	167.20349	135.97602	266.64105	4.15252	0.06819587	0.21743236	2.7389657	20	4 10.5	20.4
332825 2009 <i>XZ</i> ₁₆	15.7	X	317.51899	324.75581	111.78700	6.80794	0.1860983	0.17192616	3.2031312	20	11 22.7	19.4
332826 2009 <i>XG</i> ₁₈	16.6	X	136.08811	345.80269	86.02375	3.17529	0.0806616	0.21601852	2.7509037	20	4 16.2	20.5
332827 2009 <i>YB</i> ₁₅	15.7	X	323.71319	323.43297	102.16994	19.83790	0.1133071	0.17022087	3.2244886	20	11 24.6	19.9
332828 2009 <i>YN</i> ₁₆	15.4	X	354.83037	274.90396	129.38355	12.81988	0.0662334	0.17143471	3.2092500	20	12 9.5	19.8
332829 2010 <i>AU</i> ₁	15.0	X	327.96487	318.20497	122.48640	19.63422	0.1678995	0.17372998	3.1809200	20	12 18.6	18.8
332830 2010 <i>AA</i> ₉	15.5	X	64.83254	230.61707	132.27205	16.31602	0.1149716	0.17773881	3.1329096	20	—	—
332831 2010 <i>AD</i> ₁₈	15.8	X	48.43016	264.74249	100.29054	11.64054	0.0770064	0.17790916	3.1309095	20	—	—
332832 2010 <i>AT</i> ₃₁	15.2	X	263.21461	27.39329	136.70580	19.73861	0.0426226	0.16996692	3.2276996	20	12 31.7	19.9
332833 2010 <i>AG</i> ₄₃	15.7	X	54.01004	287.02619	75.00109	12.32533	0.0848390	0.18161099	3.0882181	20	—	—
332834 2010 <i>AP</i> ₆₀	15.9	X	19.89442	213.46916	262.37953	10.47661	0.0415799	0.19294846	2.9660275	20	1 7.4	19.9
332835 2010 <i>AJ</i> ₆₅	15.3	X	30.38689	233.27904	133.78971	23.00749	0.1424732	0.16981841	3.2295812	20	12 22.1	20.0
332836 2010 <i>AT</i> ₆₉	15.8	X	141.74521	346.30786	69.00050	7.54791	0.0363129	0.21248505	2.7813168	20	3 30.8	19.8
332837 2010 <i>AY</i> ₇₄	16.2	X	156.73102	148.49811	296.45702	12.14184	0.1459735	0.22682221	2.6628436	20	5 26.6	20.6
332838 2010 <i>AE</i> ₇₉	15.7	X	185.34410	138.05066	126.64729	12.17326	0.0647178	0.18048466	3.1010530	20	—	—
332839 2010 <i>CP</i> ₅₅	15.1	X	11.86369	292.79800	137.55347	28.12740	0.1925059	0.18467430	3.0539722	20	—	—
332840 2010 <i>DZ</i> ₅₉	15.6	X	264.39274	268.45819	214.22839	13.29952	0.1549862	0.17285984	3.1915867	20	10 28.9	19.7
332841 2010 <i>EA</i> ₆	16.1	X	172.77370	79.12087	271.27932	8.66858	0.1339036	0.21409419	2.7673630	20	2 13.6	20.6
332842 2010 <i>EP</i> ₁₂	16.8	X	6.28116	86.88346	271.57254	2.19968	0.0611074	0.24552999	2.5258042	20	11 12.6	19.8
332843 2010 <i>EP</i> ₂₁	15.7	X	26.82585	77.04764	353.19625	4.41492	0.1112765	0.17637750	3.1490092	20	—	—
332844 2010 <i>EW</i> ₈₇	16.5	X	143.25083	267.07192	297.52194	10.17511	0.2069418	0.23640692	2.5903747	20	10 9.6	21.1
332845 2010 <i>EP</i> ₁₁₂	17.4	X	25.06548	100.58304	164.19144	4.12304	0.2302706	0.21523936	2.7575385	20	8 22.6	20.2
332846 2010 <i>EW</i> ₁₃₉	16.7	X	306.61281	137.89028	243.97049	0.33384	0.0461613	0.23217486	2.6217579	20	9 12.5	19.9
332847 2010 <i>FA</i> ₃₀	16.3	X	215.65614	305.86947	125.09787	2.54822	0.0841875	0.21879991	2.7275410	20	7 11.4	20.1
332848 2010 <i>GC</i> ₉₇	16.8	X	185.56922	182.81655	137.98475	6.88803	0.1288944	0.26758189	2.3850541	20	1 17.5	20.4
332849 2010 <i>HS</i> ₅₆	15.9	X	141.49367	223.42794	132.60552	17.56157	0.1301601	0.19434703	2.9517809	20	1 25.9	20.3
332850 2010 <i>JK</i> ₁₁₉	17.0	X	8.93672	66.00567	218.23180	8.43947	0.1188062	0.20946054	2.8080267	20	8 2.1	20.4
332851 2010 <i>MO</i> ₅₉	16.2	X	75.77103	330.45914	236.25016	3.67416	0.0515793	0.21823287	2.7322637	20	7 21.5	19.8
332852 2010 <i>RZ</i> ₃	16.7	X	38.56559	202.39972	283.12108	9.97619	0.0882591	0.24671449	2.5177133	20	2 4.9	19.6
332853 2010 <i>RL</i> ₄₄	17.1	X	174.84407	234.44116	177.98711	6.68704	0.0932434	0.26528405	2.3988069	20	5 3.6	20.5
332854 2010 <i>RN</i> ₇₁	17.5	X	215.30254	89.39142	343.51886	4.74671	0.1297040	0.28277782	2.2988245	20	7 13.6	20.7
332855 2010 <i>RX</i> ₉₉	18.2	X	200.77304	206.58995	203.33598	5.08793	0.1426609	0.26935282	2.3745885	20	5 26.4	21.8
332856 2010 <i>SM</i> ₃₄	17.7	X	95.44275	94.52235	145.14655	5.99712	0.1230872	0.29908384	2.2144918	20	10 21.5	20.8
332857 2010 <i>TJ</i> ₁₆₉	16.8	X	341.32819	226.08530	100.70335	7.64344	0.1625914	0.28755282	2.2733046	20	9 4.3	18.5
332858 2010 <i>TX</i> ₁₇₆	16.6	X	172.95678	231.28193	226.11478	21.86147	0.2677780	0.26285005	2.4135928	20	6 25.9	21.2
332859 2010 <i>UT</i> ₂₄	16.6	X	196.68812	87.45539	206.10487	3.05715	0.0840318	0.23517168	2.5994374	20	—	—
332860 2010 <i>VY</i> ₂₅	17.8	X	253.82316	265.02924	228.29044	5.19941	0.0955864	0.29766934	2.2215017	20	12 6.7	20.2
332861 2010 <i>VU</i> ₉₀	16.6	X	344.06772	75.09336	52.92613	11.61928	0.1930924	0.21453825	2.7635430	20	—	—
332862 2010 <i>VS</i> ₁₀₃	17.9	X	177.83171	292.70620	217.63109	2.35333	0.1318787	0.27887527	2.3202212	20	9 13.5	21.3
332863 2010 <i>VE</i> ₁₇₈	17.0	X	275.59333	147.01746	47.09661	3.49315	0.0177191	0.22191407	2.7019636	20	—	—
332864 2010 <i>WK</i> ₁₈₁	16.9	X	19.00969	311.83202	222.44849	4.05957	0.2470237	0.23560528	2.5962472	20	3 14.9	18.7
332865 2010 <i>VP</i> ₁₉₁	17.0	X	176.42520	36.59813	86.11321	7.81117	0.0582057	0.26498570	2.4006071	20	8 10.6	20.3
332866 2010 <i>WG</i> ₁₄	18.1	X	4.60550	316.17944	122.98908	1.84961	0.0456572	0.31669884	2.1315968	20	—	—
332867 2010 <i>WE</i> ₁₇	17.6	X	214.53096	140.29861	47.18689	6.76645	0.0665709	0.30203386	2.2000487	20	12 30.6	20.1
332868 2010 <i>WM</i> ₄₇	17.9	X	229.32927	44.16031	67.14495	6.31001	0.1027526	0.28309946	2.2970830	20	9 28.9	20.8
332869 2010 <i>WN</i> ₅₈	17.1	X	125.22844	326.89401	241.61742	6.52097	0.1730923	0.27932352	2.3177382	20	10 6.1	20.9
332870 2010 <i>XP</i> ₁	16.7	X	37.50368	350.34079	173.79428	4.97164	0.1893714	0.24070416	2.5594520	20	4 12.4	18.9
332871 2010 <i>XX</i> ₁₆	17.6	X	340.27252	336.39428	92.13718	6.06406	0.1025176	0.30113741	2.2044127	20	—	—
332872												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332881 2011 AQ ₄₁	17.0	X	257.18204	234.86524	45.51184	5.20585	0.0591246	0.22736913	2.6585717	20	2 20.9	20.9
332882 2011 AK ₄₈	16.7	X	96.00637	1.74233	124.64576	15.55205	0.0558054	0.23892274	2.5721585	20	5 8.8	20.4
332883 2011 AA ₄₉	16.2	X	237.12094	141.14528	133.66569	9.59861	0.2549711	0.21095113	2.7947834	20	1 12.8	21.1
332884 2011 AG ₅₃	16.4	X	337.39469	149.90224	112.07094	7.97965	0.1979239	0.23516395	2.5994944	20	5 1.1	19.0
332885 2011 AN ₅₃	16.6	X	67.48248	348.40525	101.63353	6.18830	0.0848958	0.21913460	2.7247630	20	2 11.5	19.9
332886 2011 AH ₅₄	17.5	X	100.03098	194.40526	103.22172	5.49133	0.1819178	0.29352715	2.2423524	20	—	—
332887 2011 AJ ₅₅	17.3	X	312.53552	94.34527	105.65328	4.38780	0.1303196	0.21716448	2.7412177	20	1 7.3	21.0
332888 2011 AW ₆₁	16.6	X	318.74512	110.29272	115.32098	7.39862	0.1277943	0.22490654	2.6779430	20	2 17.8	20.0
332889 2011 AH ₇₄	15.8	X	341.45697	348.84381	73.28182	10.75615	0.0641960	0.19072980	2.9889846	20	12 15.6	19.7
332890 2011 AT ₇₆	16.2	X	50.44784	348.84501	117.17654	11.13282	0.0273254	0.21704018	2.7422642	20	2 2.3	19.7
332891 2011 AU ₇₇	17.1	X	105.62792	357.08858	106.14674	6.06127	0.1611041	0.23681624	2.5873890	20	5 1.4	20.8
332892 2011 BC ₁₁	16.8	X	145.84927	327.77867	141.22501	7.44935	0.1242212	0.25039231	2.4929988	20	6 16.7	20.6
332893 2011 BP ₁₂	16.2	X	200.79955	48.02094	131.75920	12.83894	0.1956582	0.17617996	3.1513626	20	10 30.9	21.5
332894 2011 BQ ₁₂	15.8	X	324.40098	228.99468	287.66677	7.69840	0.0829158	0.20877762	2.8141468	20	—	—
332895 2011 BH ₁₃	17.0	X	39.62161	226.99077	76.98753	7.28261	0.1875317	0.27534300	2.3400224	20	11 14.2	20.0
332896 2011 BW ₁₃	15.9	X	295.61784	105.84503	114.44140	13.94273	0.0981706	0.21538552	2.7562908	20	1 16.7	19.7
332897 2011 BB ₂₅	17.0	X	75.23786	348.46073	131.76842	7.09611	0.1073490	0.23277078	2.6172813	20	4 6.4	20.3
332898 2011 BM ₃₆	17.0	X	70.16242	2.25798	143.92541	5.87533	0.0236312	0.23515543	2.5995572	20	4 21.2	20.4
332899 2011 BQ ₃₈	16.0	X	114.49387	304.00152	163.19137	14.80298	0.0779116	0.23194685	2.6234758	20	5 7.9	19.9
332900 2011 BU ₄₄	16.7	X	309.16680	359.97335	139.20725	3.03671	0.1277498	0.19617191	2.9334465	20	—	—
332901 2011 BA ₅₁	15.7	X	290.49000	221.10955	281.32391	9.14589	0.0663098	0.19180486	2.9778054	20	—	—
332902 2011 BS ₅₄	16.3	X	74.94043	13.60434	117.17181	14.62800	0.0846368	0.23286906	2.6165449	20	4 21.0	20.0
332903 2011 BA ₅₅	16.1	X	243.12058	235.84105	126.45226	26.51493	0.0673425	0.24306485	2.5428531	20	5 25.8	20.2
332904 2011 BD ₅₆	16.5	X	313.89490	84.86767	158.92134	8.55763	0.0783133	0.23060263	2.6336611	20	3 11.8	19.9
332905 2011 BQ ₆₃	16.5	X	156.48354	306.49679	131.19969	15.45168	0.0216465	0.23790880	2.5794615	20	5 16.8	20.3
332906 2011 BM ₇₅	17.1	X	49.39774	35.01424	305.43046	5.03732	0.1045074	0.28270521	2.2992182	20	—	—
332907 2011 BP ₇₈	17.1	X	87.42951	129.34413	78.67039	2.07795	0.1289369	0.25603578	2.4562295	20	8 24.1	20.4
332908 2011 BR ₇₉	17.8	X	166.49649	113.94209	59.80316	2.24204	0.1288226	0.26941081	2.3742477	20	10 3.4	21.3
332909 2011 BU ₈₄	16.3	X	332.06259	212.41080	351.98014	12.65423	0.1178795	0.22069150	2.7119331	20	2 13.6	19.7
332910 2011 BA ₉₃	16.7	X	338.81588	62.12934	250.93685	6.32643	0.0954570	0.25939427	2.4349823	20	7 26.6	19.3
332911 2011 BD ₁₀₁	17.2	X	40.73043	305.88532	73.94185	7.01534	0.0965316	0.30088535	2.2056437	20	—	—
332912 2011 BO ₁₀₃	16.4	X	220.36087	337.09353	185.37513	4.63560	0.1173680	0.17405924	3.1769082	20	11 1.0	21.1
332913 2011 BX ₁₀₃	16.7	X	174.22294	189.41569	31.46864	0.41035	0.0901837	0.17774677	3.1328161	20	11 24.7	21.6
332914 2011 BR ₁₀₄	16.6	X	290.98913	155.04420	158.03054	14.47559	0.1658069	0.23728106	2.5840089	20	5 1.6	20.2
332915 2011 BE ₁₁₂	17.0	X	202.56300	314.94724	232.00084	2.01964	0.0819572	0.17399821	3.1776510	20	11 13.9	21.8
332916 2011 BA ₁₁₃	17.3	X	221.76381	118.81816	208.43217	3.86196	0.0453032	0.22196933	2.7015151	20	3 7.8	21.2
332917 2011 BB ₁₁₆	16.3	X	63.49769	325.50519	100.11624	6.88406	0.0384344	0.21378522	2.7702086	20	—	—
332918 2011 CH ₁	15.6	X	189.82203	110.49149	111.90609	11.84989	0.0838836	0.18071560	3.0984105	20	12 14.2	20.4
332919 2011 CY ₁	15.7	X	35.86613	311.22340	143.04196	13.71283	0.1433986	0.21118356	2.7927324	20	1 1.0	19.0
332920 2011 CW ₅	17.4	X	267.20580	288.68188	126.16211	7.28948	0.0971649	0.26923803	2.3752634	20	8 30.3	20.1
332921 2011 CE ₉	17.2	X	163.27305	237.90231	294.69425	5.63344	0.1120795	0.26790422	2.3831407	20	9 24.8	20.9
332922 2011 CN ₁₇	15.1	X	122.30305	127.28726	130.85115	19.38793	0.1344674	0.17093149	3.2155455	20	11 23.8	20.5
332923 2011 CH ₂₀	16.4	X	258.47545	180.30888	96.69672	6.07934	0.0729839	0.21960331	2.7208846	20	2 17.2	20.3
332924 2011 CT ₂₆	16.4	X	180.00886	79.19559	135.25606	6.31248	0.1362400	0.17593726	3.1542601	20	11 21.8	21.5
332925 2011 CV ₃₃	16.5	X	44.03799	33.18139	131.63436	14.33746	0.1119080	0.23337733	2.6127445	20	4 23.0	19.8
332926 2011 CT ₄₂	16.0	X	263.57066	258.15000	266.38063	10.41884	0.1697010	0.18974267	2.9993424	20	12 20.1	19.7
332927 2011 CA ₄₈	16.2	X	222.43536	73.35165	78.52017	6.09260	0.1493254	0.17488825	3.1668607	20	10 19.8	21.0
332928 2011 CN ₅₀	16.2	X	76.75526	245.86961	292.21513	20.86238	0.2286093	0.23842983	2.5757023	20	7 13.2	19.6
332929 2011 CV ₅₉	16.9	X	299.21444	133.71968	146.64950	11.02713	0.1355935	0.23121714	2.6289926	20	4 2.9	20.4
332930 2011 CV ₆₀	16.5	X	259.62569	124.95716	149.59561	5.85384	0.0416219	0.21963168	2.7206503	20	2 16.9	20.3
332931 2011 CB ₇₂	15.6	X	213.78277	118.63716	89.66199	11.27446	0.0379483	0.18668917	3.0319588	20	12 29.1	19.8
332932 2011 CD ₇₂	16.0	X	203.48017	49.33226	136.44524	17.62581	0.1814579	0.17709916	3.1404488	20	11 11.3	21.3
332933 2011 CB ₇₃	15.6	X	244.02625	87.69397	95.77973	11.45012	0.0584632	0.18748411	3.0233823	20	—	—
332934 2011 CP ₇₅	15.4	X	180.85700	275.30964	278.37726	13.28110	0.0479049	0.17089638	3.2159859	20	10 27.5	20.5
332935 2011 CA ₇₉	17.0	X	92.36959	172.05845	254.18232	2.72429	0.0855513	0.21892000	2.7265435	20	2 13.1	20.5
332936 2011 CT ₈₅	15.7	X	230.12454	16.53789	194.70266	8.20210	0.1078011	0.18931734	3.0038330	20	—	—
332937 2011 CB ₈₇	16.3	X	189.43018	340.51061	213.21569	1.20712	0.0888907	0.17299526	3.1899209	20	11 7.6	21.0
332938 2011 CK ₉₀	16.7	X	246.14422	37.91532	176.55967	1.82695	0.0404302	0.19688757	2.9263337	20	—	—
332939 2011 CY ₉₂	17.0	X	272.93081	71.43303	189.87542	6.35803	0.0183321	0.22009523	2.7168290	20	2 17.7	20.8
332940 2011 CH ₁₀₅	16.8	X	179.90066	82.96005	244.28546	2.52757	0.0937669	0.20979859	2.8050095	20	1 25.1	21.0
332941 2011 DZ ₇	16.2	X	39.26139	2.28189	39.16327	2.88375	0.0815553	0.18672635	3.0315563	20	—	—
332942 2011 DO ₁₀	15.6	X	177.89655	97.74447	156.65154	17.48319	0.1643377	0.17495213	3.1660898	20	—	—
332943 2011 DJ ₁₃	16.8	X	167.40564	180.25307	160.89568	8.85490	0.0797681	0.21477529	2.7615093	20	1 26.9	21.0
332944 2011 DK ₂₄	16.5	X	70.83043	25.63914	73.71447	6.81037	0.0825882	0.22222725	2.6994608	20	2 29.9	20.0
332945 2011 DM ₂₈	17.2	X	230.33207	264.84507	154.59967	6.66838	0.1111098	0.25774239	2.4453751	20	7 11.8	20.6
332946 2011 DY ₂₉	16.0	X	308.17132	100.43470	154.44826	12.75033	0.1812197	0.22287430	2.6941973	20	3 3.5	19.3
332947 2011 DZ ₃₂	16.0	X	326.23611	131.27026	344.75521	2.70092	0.0494377	0.19064618	2.9898586	20	—	—
332948 2011 DV ₃₆	16.6	X	98.94895	173.87546	183.81466	2.64543	0.0939212	0.19444311	2.9508084	20	—	—
332949 2011 DP ₄₂	15.2	X	283.40466	317.67028	137.76098	14.43983	0.0440884	0.16964181	3.2318222	20	11 8.8	19.9
332950 2011 DE ₄₃	16.2	X	269.42971	316.28330	189.63968	3.32881	0.0737469	0.18248139	3.0783902	20	12 16.4	20.4
332951 2011 DU ₄₃	16.3	X	269.77609	146.12813	160.97714	14.47833	0.0863186	0.22720031	2.6598886	20	4 7.5	20.1
332952 2011 DR ₅₀	16.3	X	61.84777	358.14779	166.73806	15.26992	0.1864693	0.22885251	2.6470710	20	5 30.6	19.8
332953 2011 DF ₅₁	15.4	X	296.95523	358.31723	119.37184	17.46710	0.1282554	0.18356997	3.0662081	20	12 17.2	19.3
332954 2011 EA ₄												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
332961 2011 EM ₂₈	16.0	X	328.15391	346.86088	163.09745	11.26408	0.0427436	0.19203733	2.9754017	20	—	—
332962 2011 EA ₄₀	16.2	X	284.51796	46.69830	125.83789	6.01161	0.0862646	0.18611063	3.0382390	20	—	—
332963 2011 ED ₄₂	15.7	X	243.89009	11.48226	155.76287	9.69231	0.0590185	0.17775975	3.1326636	20	12 11.8	20.2
332964 2011 EH ₅₃	15.6	X	332.42999	273.73496	160.90008	14.66781	0.1064260	0.17288940	3.1912228	20	12 15.9	19.9
332965 2011 EQ ₅₉	15.9	X	127.21767	256.59578	47.84708	10.32618	0.1584800	0.18088007	3.0965319	20	—	—
332966 2011 EX ₇₃	15.4	X	178.25822	160.49538	64.66041	8.70110	0.0949251	0.17737894	3.1371457	20	12 3.1	20.2
332967 2011 EV ₇₄	15.8	X	289.89266	310.21719	177.26325	14.53654	0.0275801	0.17758696	3.1346953	20	12 23.9	20.4
332968 2011 EM ₇₅	16.7	X	57.57506	133.45726	65.27698	4.52626	0.0760428	0.24048220	2.5610266	20	6 20.3	19.7
332969 2011 EZ ₈₀	15.7	X	283.31738	305.69341	166.15430	9.61912	0.0646466	0.17465697	3.1696558	20	11 24.3	20.1
332970 2011 ER ₈₁	16.2	X	278.89004	104.84141	350.59439	10.40960	0.0362578	0.16953232	3.2332135	20	10 25.9	20.9
332971 2011 EH ₈₄	16.2	X	202.07295	75.21186	174.82142	15.90832	0.0288856	0.18443334	3.0566316	20	—	—
332972 2011 FY ₁	15.8	X	267.61931	211.33214	83.71228	10.19191	0.0908516	0.21889260	2.7267710	20	3 22.9	19.9
332973 2011 FG ₃	16.1	X	210.74678	142.16755	156.12841	15.62284	0.1405902	0.20480649	2.8504072	20	1 21.2	20.9
332974 2011 FK ₃	17.4	X	218.62911	55.53241	190.90525	5.87490	0.1937157	0.29529277	2.2334051	20	—	—
332975 2011 FR ₄	16.5	X	331.20946	92.90871	25.32496	14.22041	0.1857372	0.19270178	2.9685582	20	—	—
332976 2011 FG ₆	15.2	X	219.68057	91.34810	104.70005	9.06814	0.1145598	0.17416295	3.1756469	20	12 9.9	19.9
332977 2011 FL ₉	15.9	X	162.02445	121.84777	164.94380	9.89848	0.1088713	0.17724888	3.1386800	20	—	—
332978 2011 FR ₁₀	15.8	X	224.89272	64.12564	166.77232	6.33689	0.1536116	0.18470177	3.0536694	20	—	—
332979 2011 FE ₁₇	15.8	X	265.34935	307.24778	183.11262	16.52296	0.2003976	0.17693156	3.1424317	20	11 5.2	20.2
332980 2011 FJ ₂₉	15.3	X	304.60924	304.22914	159.32755	15.39901	0.0242198	0.17115721	3.2127178	20	12 13.9	20.0
332981 2011 FY ₃₆	16.4	X	71.94782	176.88308	161.07346	6.73835	0.0433265	0.17403925	3.1771514	20	12 22.0	21.0
332982 2011 FM ₄₃	15.6	X	153.18113	101.57510	177.97187	11.09741	0.0164444	0.17978528	3.1090901	20	—	—
332983 2011 FZ ₄₅	16.2	X	347.77566	47.13084	118.82440	3.15681	0.0168544	0.20025584	2.8934274	20	1 28.7	20.1
332984 2011 FG ₆₇	15.4	X	287.23148	74.92229	31.92101	13.17953	0.0458246	0.17289183	3.1911930	20	11 20.4	19.8
332985 2011 FJ ₆₈	16.2	X	62.34812	302.62990	72.03779	6.12074	0.1655571	0.18532358	3.0468350	20	—	—
332986 2011 FY ₇₅	16.1	X	338.56397	279.41703	176.85347	10.05892	0.0524279	0.18524497	3.0476968	20	—	—
332987 2011 FZ ₇₅	16.2	X	235.27446	135.73215	177.45429	13.42726	0.1959656	0.21213822	2.7843475	20	2 25.7	20.9
332988 2011 FR ₈₉	15.2	X	248.61525	40.79527	140.49804	13.25562	0.0137726	0.18163454	3.0879511	20	—	—
332989 2011 FP ₁₂₇	15.5	X	201.23182	129.56149	68.82128	9.63837	0.0420187	0.17510352	3.1642646	20	11 30.0	20.0
332990 2011 FJ ₁₂₈	17.7	X	110.25022	14.57125	267.67736	5.38829	0.1748226	0.27142905	2.3624638	20	12 12.1	21.4
332991 2011 FX ₁₄₇	16.2	X	263.22192	209.81264	342.81035	5.56746	0.1195242	0.19085205	2.9877081	20	—	—
332992 2011 FK ₁₅₄	16.0	X	178.43838	58.52982	187.91762	10.42845	0.0744674	0.17082027	3.2169411	20	12 27.5	21.0
332993 2011 GK ₉	16.0	X	307.85794	60.80356	134.49538	11.48651	0.0822786	0.20141284	2.8823360	20	1 5.2	20.0
332994 2011 GE ₃₇	15.0	X	350.26917	268.78407	154.64996	21.91772	0.1339807	0.17506370	3.1647444	20	12 31.8	19.3
332995 2011 GM ₆₃	15.3	X	198.31455	107.52997	114.55544	18.22602	0.1140813	0.17266744	3.1939572	20	12 18.8	20.3
332996 2011 GX ₆₄	15.4	X	260.93107	80.94302	85.36644	10.21237	0.0469494	0.17502572	3.1652022	20	12 31.4	19.7
332997 2011 GF ₆₆	15.9	X	242.56645	347.58327	249.29563	6.83523	0.1026994	0.18816877	3.0160440	20	—	—
332998 2011 GA ₆₇	15.1	X	169.78390	124.49059	142.11898	16.31590	0.0592970	0.17529169	3.1619998	20	—	—
332999 2011 HV ₄	15.9	X	26.39041	323.12453	115.60633	11.03040	0.0675740	0.18587340	3.0408236	20	—	—
333000 2011 HL ₃₇	15.9	X	85.17308	246.59827	170.08345	9.75641	0.0792691	0.19426989	2.9525622	20	1 25.0	19.9
333001 2011 HB ₃₈	15.6	X	239.89871	5.98585	175.69705	10.22124	0.0330394	0.16793557	3.2536756	20	12 24.2	20.4
333002 2011 HW ₅₃	16.8	X	341.41461	297.43281	70.27040	16.56451	0.1218419	0.25610802	2.4557676	20	11 1.0	19.5
333003 2011 HP ₅₈	16.1	X	156.67993	213.55488	169.31557	11.44953	0.0985336	0.20334236	2.8640734	20	3 9.9	20.5
333004 2011 HJ ₆₉	15.9	X	131.58935	261.71897	51.32129	2.94566	0.1019174	0.17529931	3.1619081	20	—	—
333005 2011 JV ₁₅	15.8	X	209.65304	74.40646	165.58386	17.31464	0.0615236	0.17739625	3.1369416	20	—	—
333006 2011 KK ₂₄	15.8	X	97.20082	275.40910	87.29182	10.62203	0.0998327	0.17394888	3.1782517	20	—	—
333007 2011 LT ₂₅	15.4	X	190.38532	69.84489	261.46582	10.14703	0.0888747	0.19202060	2.9755746	20	2 8.1	20.2
333008 2011 LN ₂₈	16.9	X	17.61483	43.08718	260.88867	4.09199	0.1511935	0.22111180	2.7084954	20	9 21.2	20.0
333009 2011 OU ₃	16.5	X	45.04272	55.59059	199.37796	3.05625	0.1082404	0.22245493	2.6975822	20	8 22.4	19.8
333010 2011 OJ ₄	16.6	X	49.48469	137.08986	239.10288	2.69704	0.2503403	0.25111934	2.4881846	20	—	—
333011 2011 OB ₅₅	17.1	X	26.49817	191.60404	122.38299	4.10592	0.1845723	0.23223710	2.6212895	20	10 31.2	20.2
333012 2011 PP ₇	16.7	X	99.37068	235.70931	325.59641	6.96623	0.1553391	0.21529612	2.7570538	20	8 26.3	20.9
333013 2011 PY ₁₁	15.9	X	206.66642	194.02822	162.00444	10.66601	0.0940331	0.18843685	3.0131829	20	3 30.8	20.6
333014 2011 QA ₂	18.4	X	64.19049	123.39021	191.75348	1.77990	0.2124257	0.23954991	2.5676671	20	12 19.6	22.2
333015 2011 QQ ₁₁	16.8	X	37.96835	55.48098	296.90865	13.57897	0.1913641	0.23929937	2.5694589	20	—	—
333016 2011 QY ₁₄	16.7	X	129.38940	259.36189	341.73279	4.98008	0.1044119	0.23903656	2.5713419	20	11 13.0	20.7
333017 2011 QG ₂₆	16.1	X	52.51571	305.17933	320.17143	12.12806	0.2422275	0.22815569	2.6524580	20	10 2.0	20.0
333018 2011 QE ₂₈	17.4	X	121.89924	327.31081	333.19208	1.82972	0.2070160	0.25556259	2.4592605	20	—	—
333019 2011 QT ₆₀	17.0	X	309.79327	265.07131	248.87467	5.65539	0.0374697	0.26208158	2.4183086	20	—	—
333020 2011 QC ₆₂	16.8	X	232.88059	248.55238	263.05515	3.36528	0.0224883	0.23513952	2.5996745	20	11 25.9	20.3
333021 2011 QU ₆₄	16.1	X	72.69137	294.24531	337.50494	10.97123	0.1667230	0.22933782	2.6433353	20	10 24.4	20.2
333022 2011 QB ₇₉	16.7	X	77.31457	106.19981	150.12771	3.74220	0.0864718	0.22682131	2.6628506	20	10 5.9	20.4
333023 2011 RN ₁	17.6	X	124.58238	114.68897	205.81104	2.01111	0.2056598	0.25901440	2.4373624	20	—	—
333024 2011 RK ₁₃	17.3	X	95.43389	204.46140	173.87261	7.04034	0.1496802	0.26023457	2.4297377	20	—	—
333025 2011 RW ₁₄	16.5	X	261.36910	255.55792	213.41216	8.72957	0.1069728	0.23258648	2.6186638	20	10 26.5	19.8
333026 2011 RR ₁₈	18.2	X	74.27658	205.08061	146.98898	1.63614	0.1058838	0.24634394	2.5202374	20	—	—
333027 2011 SC ₁₂	16.0	X	36.84574	325.73433	347.96017	13.06646	0.2547499	0.23102654	2.6304384	20	11 18.0	19.8
333028 2011 SE ₂₉	17.5	X	140.36213	335.15804	356.93355	1.02246	0.1991024	0.26377124	2.4079701	20	—	—
333029 2011 SK ₃₂	17.6	X	223.04310	352.81334	281.47007	2.47204	0.1155791	0.26980523	2.3719333	20	—	—
333030 2011 SR ₃₂	17.8	X	70.61828	205.19113	189.18886	1.28057	0.1881934	0.25743034	2.4473508	20	—	—
333031 2011 SX ₄₂	16.3	X	123.33794	241.01943	356.67645	11.10057	0.1456629	0.23246372	2.6195856	20	10 31.9	20.6
333032 2011 SC ₆₅	16.8	X	208.27011	267.07866	276.10598	6.75779	0.0302402	0.23844760	2.5755743	20	12 4.7	20.3
333033 2011 SO ₆₆	17.7	X	145.68039	127.10637	208.46980	2.53923	0.1918970	0.26555313	2.3971862	20	1 1.9	21.2
333034 2011 SL ₇₂	17.5	X	284.26137	241.04920	205.57197	3.75255	0.0695346	0.22813956	2.65			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333041 2011 SY ₁₁₅	17.9	X	17.12793	205.05113	209.26164	14.00781	0.2498376	0.24382680	2.5375528	20	—	—
333042 2011 SW ₁₁₉	17.2	X	77.39113	355.25620	43.74603	3.41533	0.1823723	0.25873661	2.4391067	20	—	—
333043 2011 SU ₁₂₉	18.2	X	63.05901	343.59519	99.80788	2.23746	0.1819959	0.26206100	2.4184352	20	1 28.0	20.3
333044 2011 SP ₁₃₁	17.2	X	128.21021	219.97773	54.76167	6.00316	0.1820978	0.24123117	2.5557229	20	12 25.2	21.5
333045 2011 SE ₁₃₄	17.2	X	70.26787	238.39801	187.69603	4.77310	0.1506738	0.26275155	2.4141960	20	1 10.8	19.7
333046 2011 SQ ₁₃₅	16.9	X	85.74989	273.45232	10.04669	11.56738	0.3167532	0.23918311	2.5702915	20	12 5.9	21.7
333047 2011 SL ₁₄₄	17.8	X	77.05297	263.17640	164.77999	4.62452	0.2108191	0.26473481	2.4021236	20	2 3.8	20.0
333048 2011 SS ₁₆₄	16.5	X	257.42747	107.37522	31.83378	9.21031	0.1529643	0.22720691	2.6598370	20	11 19.9	19.8
333049 2011 SP ₁₆₈	17.5	X	201.66461	78.33646	221.72836	1.85720	0.1881850	0.27306634	2.3530109	20	1 8.8	21.3
333050 2011 SA ₁₇₄	16.9	X	350.52644	227.19479	184.19036	11.61789	0.0731426	0.23531361	2.5983921	20	12 28.5	20.3
333051 2011 SA ₁₈₅	17.2	X	298.70895	32.44961	91.41124	4.47883	0.1759529	0.23187844	2.6239918	20	—	—
333052 2011 SQ ₁₈₅	17.1	X	65.91559	216.45726	103.55518	4.00557	0.2245348	0.23330348	2.6132958	20	12 26.9	21.3
333053 2011 SV ₁₈₅	17.4	X	65.92794	8.43706	315.39152	1.96312	0.1352504	0.23501113	2.6006212	20	12 22.9	21.2
333054 2011 SK ₂₀₀	17.2	X	78.48875	259.47720	27.79700	4.82715	0.1432706	0.23478564	2.6022860	20	11 21.2	21.0
333055 2011 SC ₂₂₃	17.3	X	10.37526	138.75280	237.39113	1.23105	0.0731328	0.23161777	2.6259602	20	12 10.5	20.5
333056 2011 SE ₂₂₆	16.4	X	162.74832	300.99776	248.51415	8.15097	0.1529639	0.21773170	2.7364547	20	10 8.6	20.9
333057 2011 SQ ₂₃₄	16.8	X	310.17485	260.72582	190.03393	13.93525	0.1254429	0.23497717	2.6008717	20	12 19.5	19.8
333058 2011 SD ₂₅₅	16.4	X	293.33992	124.29777	273.58463	2.80692	0.1011345	0.21378435	2.7700362	20	9 3.8	19.8
333059 2011 SG ₂₆₁	17.7	X	188.35423	283.35632	12.07377	1.04656	0.1897829	0.26696724	2.3887135	20	—	—
333060 2011 TF	16.6	X	174.66012	40.94263	175.62342	8.40956	0.0684390	0.23436960	2.6053647	20	12 3.3	20.5
333061 2011 TD ₁₃	17.8	X	95.12953	72.58068	289.16190	1.56297	0.1976404	0.25762622	2.4461101	20	—	—
333062 2011 TZ ₁₄	16.1	X	69.83084	307.95952	67.69443	10.01406	0.2385283	0.25296331	2.4760782	20	—	—
333063 2011 UQ ₉	16.8	X	223.13121	283.30029	221.69474	3.39243	0.0266103	0.21620166	2.7493501	20	10 31.6	20.5
333064 2011 UG ₁₅	17.0	X	117.58174	280.81494	48.92577	7.59845	0.2005916	0.25363567	2.4717004	20	—	—
333065 2011 UJ ₁₇	17.3	X	102.02368	194.00233	237.80144	1.89167	0.1383647	0.27089814	2.3655495	20	3 6.1	20.1
333066 2011 UP ₂₁	16.7	X	174.88928	332.00234	308.81815	5.88564	0.0782142	0.25702379	2.4499309	20	—	—
333067 2011 UE ₂₇	17.9	X	62.86749	301.86612	131.26286	1.86642	0.1691373	0.25717731	2.4489558	20	1 11.5	20.2
333068 2011 UN ₃₆	17.7	X	47.72838	311.05575	158.00852	2.61021	0.1938373	0.25819665	2.4425061	20	2 4.9	19.5
333069 2011 UJ ₄₆	17.2	X	133.55625	191.66632	283.62999	3.76337	0.0518403	0.29472992	2.2362476	20	6 4.5	19.9
333070 2011 UK ₄₈	16.7	X	213.83940	205.03896	31.27325	5.05641	0.1026937	0.24500778	2.5293920	20	—	—
333071 2011 UZ ₄₉	17.3	X	134.68376	273.88770	42.92139	4.83664	0.2092257	0.25244724	2.4794516	20	—	—
333072 2011 UJ ₅₃	17.3	X	207.97989	67.70161	245.90784	5.13454	0.1126141	0.26988019	2.3714941	20	1 28.8	20.9
333073 2011 UA ₅₉	17.6	X	7.54133	30.32396	49.04862	5.73773	0.1630353	0.24595131	2.5229189	20	—	—
333074 2011 UP ₆₅	17.6	X	8.06683	281.49053	139.08745	4.08023	0.1578755	0.24262817	2.5459033	20	—	—
333075 2011 UV ₇₁	16.5	X	319.11786	337.10858	243.73864	5.39663	0.1495406	0.27706239	2.3303313	20	1 27.8	19.4
333076 2011 UL ₈₀	16.9	X	268.12082	285.26108	240.76462	4.58305	0.0685872	0.23720490	2.5845620	20	—	—
333077 2011 UW ₉₈	16.9	X	33.14495	228.97803	237.59942	13.88389	0.1017986	0.25779853	2.4450201	20	—	—
333078 2011 UN ₁₀₈	15.2	X	175.24903	115.78547	290.97043	24.30677	0.1535288	0.17519231	3.1631954	20	4 20.1	20.9
333079 2011 UP ₁₁₂	17.3	X	323.89778	287.00472	213.99944	5.28714	0.1780489	0.24130807	2.5551799	20	—	—
333080 2011 UE ₁₁₉	18.2	X	126.41281	350.35093	356.05626	0.85413	0.1989295	0.26060926	2.4274082	20	—	—
333081 2011 UM ₁₂₂	17.7	X	55.40317	338.31651	79.41263	4.17385	0.1723061	0.25621395	2.4550907	20	—	—
333082 2011 UT ₁₂₆	17.0	X	73.37833	228.27996	243.64484	4.52633	0.1766871	0.26860569	2.3789898	20	3 24.8	19.5
333083 2011 UT ₁₂₉	17.1	X	39.36635	136.11481	42.80587	7.80083	0.0430308	0.28001253	2.3139346	20	4 19.9	19.7
333084 2011 UH ₁₃₁	16.9	X	342.02603	218.47455	28.43264	6.43213	0.1508915	0.28815171	2.2701536	20	4 15.0	18.7
333085 2011 UM ₁₃₁	17.8	X	112.68442	35.92518	242.08162	2.26519	0.0797766	0.23977553	2.5660561	20	12 12.4	21.5
333086 2011 UU ₁₆₁	18.1	X	120.81651	54.38381	18.85340	4.02189	0.1972331	0.27315876	2.3524801	20	4 9.4	21.5
333087 2011 UK ₁₆₄	17.0	X	207.45178	203.16612	157.86038	7.52850	0.1331054	0.28389730	2.2927773	20	3 30.8	20.5
333088 2011 UM ₁₆₆	17.9	X	93.58578	282.54887	171.58743	1.03425	0.1541720	0.26841945	2.3800901	20	3 29.2	20.7
333089 2011 UD ₁₇₅	17.2	X	265.53392	326.28615	320.01996	5.04722	0.1575778	0.28282773	2.2985541	20	2 18.5	20.6
333090 2011 UE ₁₇₉	15.4	X	285.39695	223.40730	76.11958	11.41954	0.2095450	0.17755677	3.1350507	20	4 5.7	20.1
333091 2011 UX ₂₂₂	17.3	X	0.51133	356.73678	33.20873	5.76159	0.0390639	0.23014012	2.6371884	20	12 9.4	20.6
333092 2011 UQ ₂₂₅	17.3	X	203.19515	170.61790	98.02658	2.47597	0.1636345	0.26128673	2.4232105	20	—	—
333093 2011 UN ₂₃₈	17.1	X	253.53697	309.27004	333.22113	1.53585	0.1839129	0.27580183	2.3374265	20	2 1.3	20.5
333094 2011 UU ₂₃₉	17.5	X	54.42874	150.60319	44.31115	5.73425	0.0973377	0.29043821	2.2582233	20	6 14.1	19.8
333095 2011 UA ₂₄₆	16.6	X	250.20024	192.10795	73.28918	7.48153	0.0857878	0.26630369	2.3926798	20	1 15.9	20.0
333096 2011 UC ₂₄₈	17.6	X	34.89764	305.65461	210.88803	1.60747	0.1124070	0.26954800	2.3734421	20	3 13.9	19.7
333097 2011 UT ₂₄₈	18.1	X	78.63379	234.38902	200.38728	1.04288	0.1655380	0.25994933	2.4315148	20	2 10.4	20.7
333098 2011 UA ₂₇₄	17.4	X	7.75181	223.75770	286.40540	3.68193	0.1118120	0.26502085	2.4003948	20	1 15.8	19.7
333099 2011 UT ₂₇₄	16.6	X	5.40915	349.59336	351.09243	3.22489	0.0993076	0.21432989	2.7653338	20	10 15.2	20.0
333100 2011 UL ₂₈₃	17.7	X	117.75854	260.91816	160.74479	3.18824	0.1675640	0.27068933	2.3667658	20	3 18.5	20.8
333101 2011 UE ₂₉₈	17.7	X	89.32030	249.70068	87.22459	2.83269	0.1416915	0.24171044	2.5523434	20	—	—
333102 2011 UZ ₂₉₈	16.9	X	350.44977	36.11702	220.05380	3.76293	0.1458098	0.29495525	2.2351086	20	5 19.9	18.6
333103 2011 UY ₃₀₇	17.3	X	51.91601	134.44841	305.39894	7.20229	0.1845686	0.25467856	2.4649482	20	1 1.5	19.4
333104 2011 UF ₃₀₈	17.3	X	203.06984	165.31064	168.74126	6.82845	0.1332286	0.27732297	2.3288713	20	2 18.8	20.9
333105 2011 UU ₃₀₉	17.8	X	346.10772	50.71516	59.18934	2.34121	0.1007049	0.24497683	2.5296050	20	—	—
333106 2011 UG ₃₁₁	18.1	X	70.28104	222.76056	239.79267	1.58571	0.1473417	0.26680706	2.3896695	20	3 2.6	20.4
333107 2011 US ₃₅₃	17.7	X	266.63702	303.14894	346.06742	2.75092	0.1418444	0.28281855	2.2986038	20	2 25.8	20.8
333108 2011 UZ ₃₅₅	17.3	X	335.24440	356								

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333121 2011 <i>WN</i> ₁₀	16.1	X	305.48683	227.38083	63.80123	6.80418	0.1278749	0.17688060	3.1430352	20	4 28.6	20.3
333122 2011 <i>WP</i> ₁₂	18.3	X	71.74925	63.84726	52.27481	2.19033	0.1322701	0.26859117	2.3790755	20	3 24.3	20.7
333123 2011 <i>WW</i> ₄₈	17.0	X	124.44019	236.08017	202.46658	7.17783	0.0859595	0.27526922	2.3404405	20	4 6.2	20.0
333124 2011 <i>WA</i> ₄₉	16.2	X	195.78647	297.45789	256.99300	13.41046	0.0544805	0.22266859	2.6958563	20	11 27.3	19.9
333125 2011 <i>WT</i> ₅₂	18.1	X	55.60644	221.73760	184.79479	4.46204	0.1549873	0.24674730	2.5174902	20	—	—
333126 2011 <i>WY</i> ₅₆	15.9	X	216.46740	115.71585	203.82722	4.93938	0.0630375	0.15423683	3.4435837	20	2 27.1	21.1
333127 2011 <i>WB</i> ₇₂	15.6	X	357.35719	12.01546	276.51964	8.83091	0.0766791	0.18547965	3.0451256	20	7 17.4	19.5
333128 2011 <i>WD</i> ₇₆	17.1	X	159.74869	234.73483	173.47565	4.02736	0.2369825	0.27935597	2.3175587	20	4 18.1	20.9
333129 2011 <i>WE</i> ₈₁	18.0	X	85.01388	257.48844	217.69975	1.65266	0.1731164	0.27122474	2.3636501	20	4 18.2	20.8
333130 2011 <i>WR</i> ₈₃	16.1	X	121.83382	230.81684	75.02400	14.75815	0.1024189	0.23502841	2.6004937	20	—	—
333131 2011 <i>WV</i> ₈₇	16.7	X	225.07867	335.19630	212.88730	5.65419	0.0847822	0.22385228	2.6863445	20	12 20.7	20.4
333132 2011 <i>WR</i> ₉₈	18.2	X	82.54144	40.15620	82.30501	2.27926	0.1366521	0.27189732	2.3597505	20	4 19.9	20.9
333133 2011 <i>WT</i> ₁₁₇	17.3	X	153.84686	259.06807	85.21743	6.70228	0.1835061	0.26450772	2.4034983	20	1 21.4	21.0
333134 2011 <i>WY</i> ₁₂₃	17.7	X	66.78506	33.00383	95.89839	5.04410	0.0835051	0.27070516	2.3666736	20	3 29.2	20.3
333135 2011 <i>WR</i> ₁₄₄	18.3	X	95.55744	12.85227	90.36648	2.44903	0.1431456	0.27104959	2.3646682	20	4 12.8	21.1
333136 2011 <i>WA</i> ₁₄₅	17.2	X	61.38893	304.67442	281.30389	4.79438	0.1378415	0.29752853	2.2222025	20	8 18.1	19.9
333137 2011 <i>YO</i> ₂	17.9	X	48.16184	152.93623	348.72624	2.24582	0.1216663	0.26530253	2.3986955	20	3 18.2	20.2
333138 2011 <i>YW</i> ₄	17.1	X	166.62946	349.91806	93.54236	10.79994	0.1786665	0.27946695	2.3169451	20	6 6.5	20.8
333139 2011 <i>YM</i> ₈	17.7	X	149.79592	254.57864	212.82897	1.29292	0.1468672	0.28364745	2.2941235	20	6 19.9	21.2
333140 2011 <i>YY</i> ₄₆	17.2	X	48.41343	187.36343	85.52786	7.11341	0.1752060	0.29849837	2.2173865	20	10 18.9	20.0
333141 2011 <i>YH</i> ₅₃	17.4	X	189.94863	282.75113	133.62096	4.44705	0.1719191	0.28409847	2.2916948	20	5 23.9	21.0
333142 2011 <i>YU</i> ₆₃	17.5	X	164.01948	13.72398	53.61832	4.65767	0.1914766	0.27934876	2.3175986	20	5 13.4	21.0
333143 2012 <i>AK</i> ₁₁	17.7	X	144.37671	242.41939	226.79912	3.33222	0.1038523	0.28175043	2.3044095	20	6 14.1	20.8
333144 2012 <i>AE</i> ₁₂	17.1	X	242.61595	137.11005	263.53099	9.40650	0.0553361	0.29281097	2.2460073	20	7 10.3	19.7
333145 2012 <i>AR</i> ₁₅	17.4	X	23.31290	274.16920	4.04798	5.40481	0.1444142	0.29663269	2.2266744	20	9 9.7	19.3
333146 2012 <i>AH</i> ₂₀	17.9	X	132.09618	88.06639	357.15572	2.62671	0.2017804	0.27342950	2.3509270	20	5 6.6	21.5
333147 2012 <i>BP</i>	16.4	X	53.62477	283.57587	100.76098	11.92866	0.1924416	0.23160282	2.6260732	20	—	—
333148 2012 <i>BC</i> ₁₂	15.9	X	332.16177	1.23072	338.65354	8.42557	0.1131231	0.18579474	3.0416818	20	8 16.7	19.5
333149 2012 <i>BO</i> ₂₂	16.6	X	256.26306	21.94058	151.45677	10.21098	0.1191606	0.21579630	2.7527920	20	—	—
333150 2012 <i>BH</i> ₂₃	17.8	X	100.88307	188.62811	314.84581	4.07514	0.1503963	0.27418325	2.3466164	20	6 14.9	20.9
333151 2012 <i>BY</i> ₂₇	15.7	X	125.48340	65.03229	146.06082	9.13103	0.0219387	0.18028715	3.1033174	20	9 23.4	20.1
333152 2012 <i>BC</i> ₃₀	17.7	X	130.93761	301.55952	132.00687	5.64640	0.1961350	0.26901880	2.3765537	20	4 23.2	21.3
333153 2012 <i>BM</i> ₃₉	17.9	X	178.00970	147.22102	321.94976	4.35886	0.0622028	0.28997726	2.2606158	20	7 24.6	20.8
333154 2012 <i>BK</i> ₅₅	16.1	X	173.33173	42.90221	99.04230	6.08328	0.1113879	0.17241602	3.1970614	20	8 22.7	21.1
333155 2012 <i>BR</i> ₅₇	18.1	X	132.74503	286.29907	127.84480	2.02895	0.1470885	0.26373631	2.4081827	20	3 24.2	21.4
333156 2012 <i>BP</i> ₆₈	17.6	X	88.17013	190.52990	21.74741	1.62953	0.0280130	0.29140412	2.2532303	20	8 20.5	20.1
333157 2012 <i>BO</i> ₇₈	17.6	X	205.51143	83.04319	350.91960	0.81417	0.1744920	0.28870308	2.2672623	20	6 30.4	20.8
333158 2012 <i>BK</i> ₉₂	16.5	X	132.97301	350.09375	288.04145	2.82658	0.0671976	0.21275044	2.7790033	20	12 27.9	20.4
333159 2012 <i>BP</i> ₁₁₇	18.1	X	96.30314	45.12424	131.05316	6.32006	0.1855514	0.27868833	2.3212586	20	7 29.6	21.5
333160 2012 <i>BE</i> ₁₂₅	17.4	X	184.47585	193.18759	291.16469	6.86784	0.0382132	0.29313536	2.2443500	20	8 22.3	20.2
333161 2012 <i>BM</i> ₁₃₃	18.3	X	113.65026	336.67838	165.23831	2.39204	0.1790657	0.27555644	2.3388139	20	6 30.9	21.6
333162 2012 <i>BP</i> ₁₄₃	16.4	X	204.03345	291.97382	38.99164	5.71432	0.2282526	0.25877040	2.4388944	20	2 21.5	20.6
333163 2012 <i>CY</i>	18.1	X	112.64853	346.56646	203.72045	1.02698	0.0379834	0.28959384	2.2626107	20	8 22.7	20.8
333164 2012 <i>CS</i> ₁₀	18.1	X	184.78145	33.57066	133.67056	5.12606	0.0750055	0.30520361	2.1847895	20	10 26.0	20.9
333165 2012 <i>CG</i> ₁₂	18.0	X	236.62377	303.94398	109.97892	3.89601	0.1558314	0.29118153	2.2543785	20	7 8.5	21.1
333166 2012 <i>CF</i> ₁₉	15.2	X	230.04420	5.56282	96.96438	17.56569	0.1003587	0.18336242	3.0685215	20	9 9.2	20.0
333167 2012 <i>CF</i> ₂₉	15.6	X	173.83870	1.86305	177.70846	10.59929	0.0342998	0.18799301	3.0179236	20	10 11.6	19.9
333168 2012 <i>CR</i> ₄₁	15.5	X	299.26088	322.48920	343.84807	9.28324	0.0515702	0.15153393	3.4844117	20	5 16.2	20.5
333169 2012 <i>CS</i> ₄₄	18.4	X	261.05869	288.68899	150.87556	1.09442	0.1099428	0.30385374	2.1912553	20	9 28.7	20.3
333170 2012 <i>CX</i> ₄₆	15.6	X	94.97449	284.81245	333.87460	25.30495	0.1937544	0.17908777	3.1171576	20	10 16.9	21.1
333171 2012 <i>CD</i> ₅₁	15.3	X	333.11938	37.43114	165.96729	3.16150	0.1001341	0.12444760	3.9732422	20	2 26.0	20.5
333172 2012 <i>CE</i> ₅₁	16.1	X	175.32517	251.57582	325.43598	10.07055	0.0627323	0.19574374	2.9377226	20	11 23.8	20.7
333173 2012 <i>CE</i> ₅₃	15.1	X	349.70562	192.20738	131.71861	26.31669	0.1182811	0.17548205	3.1597127	20	8 24.1	19.0
333174 2012 <i>CP</i> ₅₄	15.3	X	152.39223	170.77659	2.59848	9.46036	0.0303502	0.17786190	3.1314640	20	9 8.1	19.8
333175 2012 <i>DZ</i> ₃	15.6	X	162.31711	125.55158	123.49255	26.25717	0.4432501	0.17773605	3.1329420	20	12 12.8	22.1
333176 2012 <i>DW</i> ₈	16.2	X	91.35202	190.79409	140.32906	4.49643	0.0960427	0.20851975	2.8164664	20	—	—
333177 2012 <i>DB</i> ₁₃	17.2	X	8.75471	33.95870	215.35586	6.08532	0.0505431	0.27155161	2.3617529	20	6 14.2	19.8
333178 2012 <i>DZ</i> ₁₆	16.2	X	139.58816	76.74578	131.05247	5.33192	0.1371879	0.17675051	3.1445773	20	10 9.7	21.2
333179 2012 <i>DZ</i> ₅₂	18.5	X	316.38325	253.64521	160.41437	2.25172	0.1222292	0.30763559	2.1732599	20	12 4.3	20.2
333180 2012 <i>DP</i> ₅₉	16.8	X	296.11071	265.83305	21.06056	6.16320	0.1185375	0.25263984	2.4781913	20	4 5.2	19.8
333181 2012 <i>DZ</i> ₆₅	15.8	X	346.87575	22.43781	342.25743	7.81667	0.0556444	0.18421077	3.0590932	20	10 7.8	20.0
333182 2012 <i>DF</i> ₇₆	16.6	X	267.91796	174.60393	0.08496	4.67350	0.0951462	0.21069084	2.7970847	20	—	—
333183 2012 <i>DS</i> ₇₉	16.6	X	72.33579	55.47652	77.44400	7.06928	0.0516185	0.25387165	2.4701685	20	4 9.9	19.7
333184 2012 <i>EU</i> ₈	17.1	X	185.22147	151.16963	190.65040	3.72658	0.0668493	0.23974914	2.5662443	20	2 12.1	20.7
333185 2012 <i>EZ</i> ₈	16.1	X	78.90565	156.11520	142.06032	5.90261	0.1437141	0.18346559	3.0673709	20	11 27.5	20.8
333186 2012 <i>FQ</i> ₁₂	18.0											

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
333201	2012	GS ₂₈	15.2	X	115.37944	174.60617	99.31105	15.34638	0.1415855	0.17414941	3.1758114	20	12 3.2	20.4
333202	2012	GY ₃₁	15.8	X	199.67318	293.29705	228.84226	4.12648	0.1801342	0.17383796	3.1796035	20	10 4.2	21.0
333203	2012	GL ₃₄	16.3	X	269.13272	225.39763	49.60413	12.40342	0.1392510	0.22762259	2.6565978	20	2 22.6	20.5
333204	2012	GY ₃₇	16.7	X	6.16714	101.68466	70.64632	11.01836	0.2067080	0.23657230	2.5891673	20	2 17.3	19.2
333205	2012	HA	17.3	X	356.46526	181.62023	36.57982	22.26239	0.0255178	0.36583493	1.9361809	20	4 9.1	19.2
333206	2012	HV ₃	17.4	X	59.99171	72.98120	66.81417	23.17983	0.0532847	0.35962448	1.9584082	20	4 4.0	19.9
333207	2012	HA ₄	17.9	X	120.22562	113.64924	67.78921	3.18154	0.1547962	0.27652238	2.3333642	20	8 29.9	21.3
333208	2012	HR ₈	16.9	X	275.94134	243.92218	36.03717	13.25969	0.2536790	0.23211935	2.6221759	20	2 23.3	21.2
333209	2012	HS ₁₁	16.2	X	349.56290	157.60013	73.64006	16.02012	0.0427059	0.24134673	2.5549071	20	4 25.6	19.5
333210	2012	HX ₁₄	15.4	X	224.12146	88.07706	71.51722	9.92847	0.0862121	0.18578312	3.0418086	20	11 8.5	19.8
333211	2012	HH ₁₇	16.2	X	244.84680	94.69493	89.05829	10.05412	0.0425581	0.19127779	2.9832731	20	—	—
333212	2012	HQ ₁₇	17.9	X	62.72488	96.41207	173.33211	6.49958	0.2493022	0.27436311	2.3455907	20	11 3.7	21.4
333213	2012	HS ₁₇	15.8	X	180.67915	194.92687	108.31302	12.12231	0.1153178	0.20403873	2.8575531	20	—	—
333214	2012	HH ₁₉	16.7	X	264.20125	183.94992	126.49139	5.82038	0.1308022	0.23490369	2.6014141	20	3 29.3	20.5
333215	2012	HG ₂₀	17.5	X	3.68333	18.50673	211.43905	21.21440	0.0532609	0.36509694	1.9387892	20	5 3.8	18.8
333216	2012	HV ₂₃	15.6	X	196.21793	205.65232	2.67835	17.16134	0.1003612	0.18753553	3.0228296	20	11 28.8	20.5
333217	2012	HG ₂₄	16.1	X	307.39347	74.37497	193.84369	14.47888	0.0848689	0.23436531	2.6053966	20	4 1.9	19.2
333218	2012	HA ₃₈	15.7	X	152.32122	170.35877	61.24647	10.50991	0.0632087	0.17381882	3.1798370	20	11 15.8	20.6
333219	2012	HE ₃₈	16.3	X	333.69916	248.85556	225.70541	10.33890	0.0575281	0.19763442	2.9189568	20	—	—
333220	2012	HN ₃₈	17.7	X	17.73115	246.22065	56.41826	2.94039	0.1908390	0.26856138	2.3792514	20	10 9.7	19.9
333221	2012	HG ₃₉	17.2	X	161.96962	324.97123	295.99859	5.55085	0.1465342	0.31140327	2.1556948	20	—	—
333222	2012	HU ₃₉	15.9	X	163.99355	155.27150	49.18632	17.48422	0.2073858	0.17576527	3.1563175	20	10 27.3	21.4
333223	2012	HY ₃₉	16.2	X	359.73853	37.47255	175.17947	10.88317	0.1732396	0.24022787	2.5628339	20	4 2.9	18.4
333224	2012	HB ₄₀	17.5	X	121.17167	187.54401	47.70867	6.20236	0.2034339	0.29001337	2.2604282	20	11 9.6	21.0
333225	2012	HD ₄₀	16.5	X	322.56810	175.54867	56.89706	5.71852	0.1172540	0.234304043	2.6055809	20	3 5.2	19.7
333226	2012	HH ₄₀	15.7	X	207.64429	340.57798	214.64563	12.63997	0.1306701	0.18559117	3.0439056	20	11 26.8	20.5
333227	2012	HR ₄₁	15.5	X	126.45716	181.68033	83.50887	6.55325	0.1383703	0.17627935	3.1501780	20	12 1.4	20.5
333228	2012	HW ₄₂	15.8	X	148.34896	167.11189	84.33893	9.98249	0.0223058	0.17767861	3.1336173	20	12 5.6	20.4
333229	2012	HO ₄₅	16.3	X	181.20338	253.94627	70.79645	6.17413	0.1286948	0.21376110	2.7702370	20	1 26.6	20.7
333230	2012	HO ₄₇	16.1	X	117.07749	311.87165	84.83008	14.81822	0.0401529	0.21669879	2.7451435	20	2 5.5	20.0
333231	2012	HF ₄₈	16.3	X	312.82570	132.65724	153.84287	7.59904	0.2209700	0.24011006	2.5636721	20	4 16.0	19.3
333232	2012	HK ₄₈	15.7	X	84.41392	231.59140	114.43329	12.39325	0.0677781	0.18970176	2.9997736	20	—	—
333233	2012	HY ₄₈	16.2	X	122.42227	314.01363	104.80505	15.02617	0.0525454	0.22779642	2.6552461	20	3 15.0	20.1
333234	2012	HQ ₄₉	17.3	X	301.57295	107.67994	147.47679	3.70877	0.1239178	0.23120752	2.6290655	20	3 2.6	20.5
333235	2012	HZ ₄₉	16.1	X	298.18098	166.34763	105.31733	15.74082	0.0921308	0.23372818	2.6101292	20	4 1.4	19.9
333236	2012	HE ₅₀	15.4	X	208.62197	114.16240	69.41364	18.80066	0.0485265	0.18319457	3.0703954	20	11 23.0	19.8
333237	2012	HU ₅₀	16.2	X	218.78136	131.66085	171.24183	9.71224	0.1302222	0.21544879	2.7557513	20	2 1.4	20.6
333238	2012	HC ₅₁	16.4	X	212.02094	164.82282	137.39551	10.30156	0.1267001	0.21544047	2.7588222	20	1 26.6	20.8
333239	2012	HP ₅₂	16.1	X	118.68808	236.79034	43.49576	5.78357	0.1070879	0.17861113	3.1227008	20	12 9.8	20.9
333240	2012	HO ₆₃	16.8	X	218.82127	246.59267	79.75258	4.28257	0.1866004	0.22394358	2.6856143	20	3 1.4	21.4
333241	2012	HF ₆₅	16.6	X	290.16894	196.54842	63.28946	4.00404	0.0704538	0.22774314	2.6556603	20	3 3.9	20.1
333242	2012	HG ₆₅	17.4	X	142.36616	335.80140	223.60500	5.10064	0.1033827	0.28288772	2.2982291	20	10 12.0	20.7
333243	2012	HA ₆₇	16.5	X	27.58028	67.34723	71.69777	12.91976	0.1306977	0.23153234	2.6266060	20	2 17.1	19.5
333244	2012	HE ₆₈	16.9	X	52.56310	62.85323	86.63032	12.96630	0.1199109	0.24024590	2.5627057	20	4 16.7	20.8
333245	2012	HA ₇₁	15.5	X	129.95693	193.56286	48.40083	10.92890	0.1183661	0.17062951	3.2193384	20	11 6.4	20.6
333246	2012	HY ₇₁	15.5	X	248.76800	207.57273	155.31423	14.00829	0.2226696	0.23933512	2.5692031	20	5 10.5	19.8
333247	2012	HO ₇₇	16.5	X	252.15239	191.90393	58.63371	5.78012	0.1079113	0.21317574	2.7753059	20	1 5.6	20.7
333248	2012	HE ₇₈	16.8	X	249.28304	61.82503	234.75101	11.26771	0.0356377	0.22838845	2.6056555	20	2 26.8	20.8
333249	2012	HM ₇₈	16.5	X	171.51982	148.32211	87.12667	2.69900	0.1303996	0.18013621	3.1505057	20	12 7.7	21.3
333250	2012	HO ₇₉	16.5	X	235.78834	61.75350	219.85907	4.26325	0.0279305	0.21672569	2.7449164	20	1 28.8	20.5
333251	2012	JJ ₁	15.6	X	236.86208	113.02648	62.04054	12.50852	0.0364894	0.18867485	3.0106484	20	12 16.5	19.9
333252	2012	JO ₂	16.7	X	18.51463	95.72849	73.19519	7.43963	0.1044668	0.23666152	2.5885166	20	3 12.1	19.6
333253	2012	JE ₆	15.2	X	135.65229	122.72130	123.37052	20.88184	0.0458796	0.17252221	3.1957419	20	11 20.9	20.3
333254	2012	JQ ₆	17.2	X	317.33659	71.99474	239.51896	4.82858	0.0183251	0.25708770	2.4495249	20	6 25.3	20.2
333255	2012	JS ₈	17.4	X	52.64398	138.85611	359.69978	1.36241	0.0195107	0.23187011	2.6240546	20	3 15.1	20.7
333256	2012	JZ ₈	16.0	X	206.33925	99.03875	98.33487	7.26454	0.1881918	0.18427956	3.0583319	20	11 23.3	20.9
333257	2012	JB ₉	15.5	X	123.07238	77.57149	234.87164	8.87432	0.0625337	0.18875233	3.0098245	20	—	—
333258	2012	JK ₉	16.0	X	164.11114	177.00875	79.36075	3.20766	0.0570301	0.18543367	3.0456289	20	12 28.9	20.4
333259	2012	JG ₁₅	15.8	X	82.15762	264.88527	47.33448	9.81586	0.0683919	0.17529554	3.1619535	20	12 5.3	20.5
333260	2012	JE ₁₆	16.5	X	14.71516	151.06236	106.21862	16.88128	0.0959543	0.25449618	2.4661257	20	7 9.1	19.2
333261	2012	JF ₁₉	17.1	X	356.23695	266.83291	55.90620	6.23279	0.1153010	0.27154276	2.3618042	20	9 22.2	19.4
333262	2012	JY ₂₀	17.6	X	18.27123	41.49256	233.92416	5.78139	0.1032720	0.26152599	2.4217324	20	8 11.1	20.2
333263	2012	JV ₂₁	17.8	X	68.25689	96.28722	53.84470	22.07967	0.0559593	0.36355536	1.9442660	20	4 25.5	19.6
333264	2012	JL ₂₂	15.7	X	198.79494	125.12794	51.10637	16.11861	0.1236671	0.17877424	3.1208011	20	10 28.5	20.5
333265	2012	JY ₂₆	15.1	X	101.07320	214.42004	100.81154	31.25669	0.3037540	0.17592222	3.1559948	20	—	—
333266	2012	JA ₂₉	17.7	X	43.17825	65.77764	252.56974	1.79720	0.2207495	0.28070985	2.3101009	20	12 11.5	20.8
333267	2012	JH ₃₂	17.7	X	153.08489	305.77763	241.68400	1.57185	0.1253062	0.28513262	2.2861503	20	10 8.1	20.9
333268	2012	KO ₉	15.9	X	219.62151	82.20500	61.70467	10.19912	0.1442890	0.17703820	3.1411696	20	10 10.2	20.8
333269	2012	KR ₂₄	17.4	X	308.96664	67.15402	221.24438	22.34313	0.1127414	0.36394187	1.9428892	20	4 18.4	19.2
333270	2146	P-L	16.1	X	266.64873	14								

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333281 1998 <i>RD</i> ₂₀	17.0	X	74.65721	319.09152	9.04932	6.85468	0.2741814	0.28081951	2.3094994	20	—	—
333282 1998 <i>SG</i> ₁₅₃	16.2	X	170.88033	167.59182	202.40062	2.31579	0.2094074	0.20385292	2.8592892	20	3 12.9	20.9
333283 1998 <i>YQ</i> ₃₁	17.2	X	332.20664	280.17919	118.94132	3.26015	0.1827020	0.26512696	2.3997543	20	12 2.6	19.1
333284 1999 <i>PJ</i> ₁	18.1	X	174.41481	80.54060	319.45586	34.47886	0.3595854	0.45461538	1.6750970	20	3 21.9	21.8
333285 1999 <i>RP</i> ₈₁	17.7	X	107.76558	20.98261	335.86641	6.63178	0.2000545	0.30017767	2.2091089	20	—	—
333286 1999 <i>RE</i> ₁₂₅	15.8	X	282.79606	15.36299	332.51095	5.85950	0.2546761	0.22812330	2.6527090	20	5 17.9	19.6
333287 1999 <i>RD</i> ₂₀₂	16.0	X	268.56006	50.41370	272.69571	8.86312	0.2296729	0.22293116	2.6937391	20	4 1.3	20.3
333288 1999 <i>SU</i> ₁₄	16.0	X	260.85170	112.08102	248.33184	11.77174	0.2851070	0.22578390	2.6710011	20	5 7.7	20.3
333289 1999 <i>TK</i> ₂₂₁	16.3	X	262.13089	174.32986	179.75663	13.70441	0.1933401	0.22368726	2.6876655	20	5 14.9	20.5
333290 1999 <i>TZ</i> ₃₀₁	15.9	X	264.92975	105.01687	37.87715	10.58562	0.1517726	0.19035781	2.9928773	20	11 26.2	20.0
333291 1999 <i>VR</i> ₃₄	16.0	X	248.89103	121.26979	242.71729	14.69355	0.2905915	0.22078498	2.7111676	20	4 30.9	20.7
333292 1999 <i>VH</i> ₆₃	16.3	X	241.61836	140.63419	223.35449	8.22938	0.2286633	0.22066466	2.7121531	20	4 30.9	20.8
333293 2000 <i>QC</i> ₁₃	17.3	X	345.03567	328.54362	335.69538	6.08934	0.2378564	0.24553793	2.5257498	20	7 25.9	18.9
333294 2000 <i>QW</i> ₂₁₅	16.8	X	296.79034	353.30010	14.87864	5.49160	0.2664819	0.24193009	2.5507983	20	7 7.2	19.7
333295 2000 <i>SE</i> ₁₁	16.7	X	304.62940	167.70453	184.96379	17.01281	0.1675122	0.24225529	2.5485151	20	7 12.2	19.9
333296 2000 <i>SG</i> ₁₆	16.0	X	329.99618	357.65643	322.65367	9.95587	0.0816839	0.24113953	2.5563704	20	7 24.3	18.8
333297 2000 <i>SH</i> ₈₉	15.8	X	279.60277	121.64141	241.54710	12.06137	0.1638840	0.24081812	2.5586444	20	6 19.3	19.2
333298 2000 <i>SS</i> ₉₀	16.0	X	328.52517	46.22854	236.25949	11.68393	0.2022249	0.23922804	2.5699696	20	5 8.7	18.6
333299 2000 <i>SV</i> ₁₃₁	16.2	X	267.58447	110.42518	261.24967	10.72630	0.0649802	0.23924738	2.5698312	20	6 30.1	19.5
333300 2000 <i>SF</i> ₂₁₂	16.8	X	295.66422	298.43816	62.35377	7.23930	0.2976058	0.24050210	2.5608854	20	6 17.3	19.8
333301 2000 <i>ST</i> ₂₈₄	16.8	X	339.14264	100.34218	224.67256	8.37023	0.2121874	0.24370448	2.5384018	20	8 8.7	19.1
333302 2000 <i>SN</i> ₃₀₂	16.7	X	328.34710	26.40711	280.23069	5.72693	0.1963533	0.24041842	2.5614795	20	6 16.9	19.0
333303 2000 <i>UD</i> ₂₂	16.6	X	272.67032	302.74562	80.22995	6.40894	0.2347660	0.23776537	2.5804987	20	6 26.5	20.1
333304 2000 <i>UT</i> ₆₂	16.3	X	264.98423	111.50697	285.84477	4.36684	0.2466152	0.23784939	2.5798910	20	7 4.9	19.9
333305 2000 <i>VB</i> ₃₅	16.3	X	251.74266	192.78205	227.97423	7.57732	0.3616376	0.23595165	2.5937057	20	7 6.5	20.7
333306 2000 <i>VQ</i> ₅₆	16.8	X	268.33598	132.01873	267.12647	4.68711	0.3168924	0.23744076	2.5828501	20	7 1.2	20.3
333307 2000 <i>WB</i> ₁₅₆	15.9	X	281.74957	97.47975	277.39759	9.77672	0.2788856	0.23735151	2.5834975	20	6 20.6	19.1
333308 2001 <i>FV</i> ₆₀	16.8	X	172.50901	55.80426	156.87947	6.82659	0.1845192	0.28496477	2.2871459	20	11 27.4	20.3
333309 2001 <i>FR</i> ₁₁₆	17.5	X	115.57905	91.26382	147.58157	7.41742	0.2842380	0.27798557	2.3251691	20	11 12.2	21.7
333310 2001 <i>GC</i> ₁	17.0	X	114.59416	48.54450	140.81936	23.26109	0.0693758	0.37544560	1.9029967	20	9 10.7	19.2
333311 2001 <i>MR</i> ₃	19.1	X	70.56324	59.44145	220.39336	4.42458	0.4516063	0.27052679	2.3677138	20	12 5.9	23.6
333312 2001 <i>MR</i> ₁₈	16.8	X	27.27951	53.74647	284.72990	7.83280	0.3304925	0.26782508	2.3836101	20	12 31.3	20.1
333313 2001 <i>OF</i> ₂₉	15.6	X	194.66474	130.18476	112.41326	27.90115	0.2032638	0.17781146	3.1320562	20	—	—
333314 2001 <i>OM</i> ₅₇	15.6	X	139.12804	14.70969	304.58065	16.71075	0.1992165	0.17687065	3.1431531	20	—	—
333315 2001 <i>OY</i> ₆₆	15.2	X	163.01313	326.83391	317.26215	16.76509	0.1931318	0.17674456	3.1446479	20	—	—
333316 2001 <i>OR</i> ₈₇	15.5	X	136.34289	108.15707	189.71007	16.24304	0.2317715	0.17428505	3.1741635	20	—	—
333317 2001 <i>OA</i> ₁₀₀	15.3	X	178.76250	315.49421	316.08170	21.63435	0.2108728	0.17854615	3.1234583	20	—	—
333318 2001 <i>OK</i> ₁₁₃	15.5	X	102.03594	284.84695	81.65979	6.42868	0.2264968	0.17596712	3.1539032	20	1 11.2	20.0
333319 2001 <i>PD</i> ₁₇	15.2	X	80.32520	292.64854	108.50667	16.79434	0.2070438	0.17762350	3.1342654	20	1 22.1	19.1
333320 2001 <i>PU</i> ₆₂	15.5	X	131.89757	170.93547	166.55236	18.15445	0.2158248	0.17622362	3.1508420	20	1 5.8	20.7
333321 2001 <i>QX</i> ₃	15.6	X	158.02330	119.23563	143.60490	26.07593	0.3249956	0.17543328	3.1602982	20	12 24.8	21.8
333322 2001 <i>QG</i> ₂₆	16.8	X	357.28352	220.08141	156.02310	2.77530	0.2284799	0.26533163	2.3985201	20	12 24.3	19.2
333323 2001 <i>QX</i> ₆₀	17.6	X	26.71020	192.97450	144.29780	1.67389	0.1998410	0.26753205	2.3853503	20	12 10.8	20.5
333324 2001 <i>QK</i> ₉₅	15.9	X	110.28291	56.66343	313.70866	5.20106	0.1664518	0.17926693	3.1150572	20	1 16.7	20.3
333325 2001 <i>QW</i> ₁₄₈	17.1	X	13.11717	339.12465	19.60358	2.41083	0.2218899	0.26803300	2.3823773	20	12 24.6	19.9
333326 2001 <i>QV</i> ₁₈₇	15.0	X	85.71222	105.34655	272.92833	11.93237	0.3069432	0.17336492	3.1853848	20	1 15.4	19.2
333327 2001 <i>QB</i> ₂₀₉	15.6	X	88.19568	47.59752	330.77832	11.75820	0.1399391	0.17642213	3.1484781	20	—	—
333328 2001 <i>QT</i> ₂₁₃	15.3	X	88.72500	14.14542	334.89559	9.86225	0.1047693	0.17158182	3.2074153	20	—	—
333329 2001 <i>QN</i> ₂₅₀	17.0	X	356.30439	306.35778	52.39140	5.70827	0.2546858	0.26380030	2.4077933	20	11 30.8	19.0
333330 2001 <i>QW</i> ₂₇₂	17.5	X	21.82720	324.68743	30.35665	3.84626	0.2926607	0.26766516	2.3845594	20	—	—
333331 2001 <i>QD</i> ₂₉₄	17.2	X	48.23926	346.18401	324.12031	4.60788	0.2432868	0.26828569	2.3808811	20	12 6.3	20.7
333332 2001 <i>RF</i> ₂	15.7	X	105.13530	96.42389	292.02114	22.51718	0.3912228	0.17611305	3.1521607	20	2 18.6	21.1
333333 2001 <i>RC</i> ₃	15.4	X	146.54595	148.72507	217.26071	10.47259	0.3127594	0.18223115	3.0812077	20	2 22.9	20.9
333334 2001 <i>RB</i> ₁₀	17.5	X	297.47780	99.99634	225.76075	20.15756	0.1210943	0.35674474	1.9689333	20	5 31.5	19.2
333335 2001 <i>RK</i> ₄₉	17.1	X	27.07272	123.45839	213.67282	3.80071	0.2499409	0.26592095	2.3949752	20	12 17.9	20.1
333336 2001 <i>RU</i> ₁₁₅	17.5	X	62.46802	168.78355	107.82200	2.47731	0.1536696	0.26413633	2.4057507	20	10 29.5	20.7
333337 2001 <i>RO</i> ₁₂₀	17.2	X	332.36493	349.40525	23.17271	2.95573	0.1926576	0.26129907	2.4231342	20	10 19.9	18.8
333338 2001 <i>SC</i> ₇	17.7	X	34.11653	309.30189	4.80319	1.41678	0.1823679	0.26545227	2.3977933	20	11 15.9	20.7
333339 2001 <i>SM</i> ₃₂	17.0	X	35.12214	157.01156	178.32081	7.01201	0.2289093	0.26597922	2.3946253	20	12 22.1	20.3
333340 2001 <i>SS</i> ₈₁	15.8	X	127.52103	52.99217	274.79482	3.22254	0.1657379	0.17553441	3.1590842	20	—	—
333341 2001 <i>SD</i> ₁₀₄	16.9	X	74.43989	71.19736	199.03696	5.95730	0.0679060	0.26330996	2.4107815	20	10 23.5	20.0
333342 2001 <i>SE</i> ₂₁₀	16.9	X	324.99631	309.24909	72.24736	3.46723	0.2044765	0.26042623	2.4285454	20	10 18.1	18.5
333343 2001 <i>SE</i> ₃₂₅	16.6	X	39.41038	196.35818	131.65063	7.57073	0.1416489	0.26450819	2.4034954	20	12 6.5	19.8
333344 2001 <i>SE</i> ₃₃₉	15.5	X	130.17135	85.67881	282.13664	15.43921	0.3064263	0.17896371	3.1185980	20	2 11.0	20.9
333345 2001 <i>ST</i> ₃₄₄	15.6	X	115.81711	263.43241	118.76780	14.31927	0.2645209	0.17696918	3.1419863	20	2 18.9	20.5
333346 2001 <i>TF</i> ₅₅	15.6	X	126.78179	328.21211	342.47655	4.76690	0.1279458	0.16886062	3.2417819	20	—	—
333347 2001 <i>TT</i> ₇₂	17.3	X	347.02993	314.41705	50.83960	3.13561	0.2093093	0.26023123	2.4297585	20	11 13.1	19.2
333348 2001 <i>TK</i> ₁₂₈	17.4	X	18.79205	124.41714	211.47389	0.75496	0.2151102	0.26323425	2.4112438	20	11 29.4	20.0
333349 2001 <i>TU</i> ₁₃₁	16.7	X	18.21312	205.68156	134.05086	8.55448	0.2125122	0.26498169	2.4006313	20	12 5.4	19.6
333350 2001 <i>TO</i> ₁₅₀	16.9	X	342.94690	294.91893	73.34038	4.18704	0.2226127	0.26037737	2.4288492	20	11 11.3	18.6
333351 2001 <i>TB</i> ₂₂₇	14.9	X	75.54169	60.25525	308.29716	15.30859	0.1179255	0.17106866	3.2			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
333361	2001	XA ₂₂₂	17.0	X	337.15161	335.70163	10.63909	2.87323	0.1992412	0.25477048	2.4643553	20	9 16.9	18.8
333362	2001	XH ₂₄₃	16.0	X	293.82794	232.35613	108.45159	16.36344	0.1291899	0.24026165	2.5625937	20	6 16.7	19.2
333363	2001	YC ₅₁	16.9	X	338.14262	318.91707	75.41123	5.93849	0.2014829	0.25855040	2.4402777	20	12 7.0	18.6
333364	2001	YM ₇₁	16.0	X	22.12908	309.77301	292.01055	13.48338	0.0205228	0.23765656	2.5812863	20	6 22.1	19.3
333365	2002	CC ₉₃	16.8	X	52.74633	61.70257	117.07456	3.44433	0.1074278	0.22748565	2.6576639	20	5 21.2	19.9
333366	2002	CP ₁₄₃	14.7	X	352.12501	82.81976	298.95370	14.72694	0.0903565	0.14643181	3.5648870	20	10 26.6	19.7
333367	2002	CH ₂₁₂	17.1	X	241.02389	69.81834	339.13639	3.81460	0.1563321	0.23970980	2.5665251	20	7 5.1	20.8
333368	2002	FS ₄	15.6	X	302.24799	282.73217	297.55405	28.42871	0.3761431	0.21214846	2.7842579	20	—	—
333369	2002	GA ₇₇	16.5	X	325.03984	65.18852	151.61625	8.33355	0.1588640	0.21385256	2.7694471	20	2 10.3	20.1
333370	2002	HO ₇	17.9	X	197.36970	182.26823	74.00608	2.45702	0.1048072	0.30748952	2.1739481	20	—	—
333371	2002	JM ₉₃	17.2	X	165.47318	65.37669	235.92793	7.45613	0.1983443	0.30533772	2.1841497	20	—	—
333372	2002	NE ₃₁	17.7	X	116.69594	25.62035	290.46831	7.32312	0.1795388	0.29567526	2.2314786	20	—	—
333373	2002	NS ₇₅	16.1	X	198.47586	153.11797	170.85753	12.98489	0.0934328	0.19766390	2.9186665	20	2 9.0	20.8
333374	2002	NY ₇₉	16.1	X	130.74259	181.68716	87.09323	6.80514	0.1193939	0.18132946	3.0914138	20	12 9.5	20.9
333375	2002	PE ₂₈	17.4	X	84.37111	65.78064	291.64914	3.38798	0.2009274	0.29365332	2.2417101	20	—	—
333376	2002	PD ₆₆	16.4	X	201.52019	172.28615	146.65616	9.45502	0.2015096	0.19842944	2.9111549	20	2 7.5	21.4
333377	2002	PH ₁₀₇	17.4	X	135.28683	183.48350	121.10665	5.99767	0.1768932	0.29618422	2.2289215	20	—	—
333378	2002	PH ₁₂₃	15.9	X	206.97401	117.90824	184.62752	11.05775	0.1321743	0.19495815	2.9456091	20	1 23.0	20.8
333379	2002	PJ ₁₂₇	17.6	X	135.71920	332.85874	321.30450	4.76226	0.2374562	0.29483433	2.2357197	20	—	—
333380	2002	PY ₁₈₆	18.0	X	118.38375	294.99859	11.15240	2.96343	0.1717900	0.29333172	2.2433482	20	—	—
333381	2002	PX ₁₈₈	15.4	X	139.03200	243.83600	119.67750	12.84061	0.1367975	0.19146759	2.9813013	20	2 3.1	19.8
333382	2002	PG ₁₉₂	15.9	X	280.12152	291.19036	264.85850	11.31707	0.0470199	0.19112799	2.9848318	20	—	—
333383	2002	PX ₂₀₀	16.6	X	211.76149	109.80259	241.68809	1.09689	0.0794366	0.20381150	2.8596767	20	3 27.6	20.9
333384	2002	QC ₁₅₁	16.6	X	130.67496	46.60337	324.20136	13.38402	0.0826680	0.24655315	2.5188116	20	1 21.2	20.1
333385	2002	QM ₁₅₁	16.1	X	14.89028	149.73343	313.41194	8.85655	0.0524360	0.18763314	3.0217812	20	—	—
333386	2002	QP ₁₅₁	15.9	X	352.33658	311.50640	174.95024	9.82529	0.0208088	0.18832235	3.0144041	20	—	—
333387	2002	RJ ₉	17.8	X	96.94204	169.59993	160.78791	6.50522	0.1641177	0.29192461	2.2505512	20	—	—
333388	2002	RZ ₇₃	17.6	X	99.01677	164.24088	169.92110	6.50150	0.1383194	0.29201610	2.2500812	20	—	—
333389	2002	RS ₁₈₁	16.9	X	66.66716	179.17216	185.42914	6.46130	0.2312726	0.28939212	2.2636620	20	—	—
333390	2002	RQ ₂₁₇	17.5	X	103.95924	348.71930	340.24063	6.35287	0.1195214	0.29245528	2.2478280	20	—	—
333391	2002	RZ ₂₂₃	18.1	X	113.01689	217.76423	105.22835	7.73750	0.2518590	0.29386018	2.2406579	20	—	—
333392	2002	SO ₃₈	17.1	X	115.80404	254.94521	49.83102	2.09951	0.1167802	0.28916075	2.2648694	20	—	—
333393	2002	TB ₈	17.5	X	41.21453	187.87217	205.32949	2.62013	0.1772192	0.28790772	2.2714360	20	—	—
333394	2002	TG ₂₆	16.2	X	125.00524	209.20812	189.13120	9.57892	0.1677153	0.18913256	3.0057892	20	3 2.3	20.7
333395	2002	TQ ₅₉	17.1	X	41.37533	19.67458	276.95760	18.42629	0.0405234	0.38493441	1.8715936	20	10 30.6	19.3
333396	2002	TR ₇₃	17.2	X	83.03045	75.22789	265.86747	4.67576	0.1646237	0.28752102	2.2734722	20	—	—
333397	2002	TJ ₁₁₃	15.6	X	106.10290	89.48667	310.04008	9.99856	0.1185345	0.18772736	3.0207700	20	2 6.9	19.8
333398	2002	TM ₁₂₅	17.1	X	117.40180	330.87011	318.92220	9.99731	0.1678112	0.28788344	2.2715637	20	—	—
333399	2002	TS ₁₂₈	15.6	X	151.68687	80.04310	243.65758	7.53914	0.0900726	0.18507507	3.0495618	20	—	—
333400	2002	TO ₁₈₂	16.3	X	107.07285	207.82821	206.08037	2.42506	0.2645166	0.18899855	3.0072098	20	3 14.9	20.8
333401	2002	TE ₂₈₃	17.2	X	25.12418	117.17457	293.38370	5.37901	0.2330377	0.28531970	2.2851509	20	—	—
333402	2002	TW ₂₉₁	15.7	X	109.01517	100.86723	278.22313	7.63951	0.1514644	0.18413622	3.0599188	20	1 21.4	20.1
333403	2002	TZ ₃₄₆	15.6	X	110.79838	296.87203	68.42244	10.03364	0.1485751	0.18305899	3.0719113	20	1 8.3	20.0
333404	2002	TB ₃₄₈	17.3	X	102.68001	202.49431	107.49294	7.46635	0.1444850	0.28598610	2.2815996	20	—	—
333405	2002	TB ₃₆₆	17.4	X	89.37832	167.88346	156.27581	6.31327	0.1300513	0.28644483	2.2791630	20	—	—
333406	2002	TU ₃₇₅	17.4	X	32.07569	36.58429	359.36236	3.90362	0.1804579	0.28533219	2.2850842	20	—	—
333407	2002	VB ₈	15.0	X	359.12976	196.31962	235.71110	22.74539	0.1313634	0.17294878	3.1904924	20	—	—
333408	2002	VU ₁₂	15.1	X	134.22601	114.48825	241.95365	11.82733	0.1277052	0.18332791	3.0689065	20	1 17.4	19.9
333409	2002	VF ₂₆	15.3	X	87.66478	337.53422	49.82631	13.20429	0.1443241	0.17941226	3.1133979	20	1 6.2	19.6
333410	2002	VY ₂₆	17.2	X	39.20698	313.97391	46.01202	6.89414	0.1469467	0.28104185	2.3082812	20	—	—
333411	2002	VW ₁₀₉	16.3	X	146.40662	35.23032	350.97294	1.68631	0.3572175	0.18935296	3.0034562	20	3 21.9	21.9
333412	2002	WE ₂₉	13.5	X	205.28035	278.53028	108.55501	8.74364	0.1128967	0.08424339	5.1536172	20	5 8.9	20.9
333413	2002	XZ ₁₇	15.9	X	118.21552	315.58779	71.08051	5.74673	0.3132640	0.18449991	3.0558963	20	3 2.1	20.9
333414	2002	XD ₆₂	17.6	X	46.15309	47.30662	330.42357	3.35319	0.2455041	0.28387648	2.2928894	20	—	—
333415	2002	XB ₆₈	15.9	X	121.27116	154.45899	229.38380	17.26929	0.2937131	0.18397114	3.0617490	20	2 19.3	21.2
333416	2003	AG ₂	16.1	X	9.57296	121.74123	294.52565	21.18990	0.3318581	0.27831224	2.3233493	20	—	—
333417	2003	AR ₇₂	16.5	X	15.85092	258.21196	310.45717	26.75747	0.3804106	0.23698848	2.5861352	20	5 2.7	18.7
333418	2003	FP ₂₉	16.9	X	343.22821	40.20122	214.74799	4.51411	0.2424212	0.23429600	2.6059104	20	4 22.9	18.8
333419	2003	FT ₁₁₃	16.4	X	351.60624	253.96992	357.42273	14.11446	0.1598235	0.23617932	2.5920386	20	5 8.6	19.3
333420	2003	GR ₃₈	17.1	X	323.61124	172.77015	137.94158	5.69405	0.1528489	0.23910333	2.5708632	20	6 19.3	19.9
333421	2003	HG ₅	16.5	X	357.24307	173.15381	72.88419	4.64094	0.1587671	0.23364944	2.6107155	20	5 19.6	19.0
333422	2003	KJ ₂	16.6	X	305.77285	158.19626	120.61146	9.66166	0.2101210	0.22665871	2.6641240	20	3 30.7	20.1
333423	2003	KL ₁₁	16.2	X	281.62392	67.17615	246.04615	12.45295	0.2164953	0.22250498	2.6971777	20	4 4.7	20.3
333424	2003	MX ₃	15.8	X	2.16339	84.41058	138.11978	25.59203	0.1882723	0.22890064	2.6467000	20	5 4.0	19.0
333425	2003	NE ₁	16.3	X	277.02746	169.27237	101.75666	17.08273	0.3247788	0.21704541	2.7422201	20	2 3.9	21.0
333426	2003	OQ ₃₀	16.3	X	207.69640	57.82020	319.76114	4.07837	0.1718168	0.21547671	2.7555132	20	4 19.5	21.0
333427	2003	QD ₂₂	15.5	X	222.29662	201.17158	169.65372	17.61251	0.1396816	0.21692986	2.7431938	20	5 1.8	20.0
333428	2003	QL ₂₂	16.4	X	227.63913	53.46197	294.75265	8.15282	0.2467831	0.21470639	2.7621000	20	3 26.4	21.3
333429	2003	QJ ₂₉	16.2	X	249.91155	36.51651	311.61009	3.82402	0.2441534	0.21833308	2.7314276	20	4 15.9	20.7
333430	2003	QT ₁₁₀	16.1	X	219.71934	350.47441	350.45999	22.29640	0.2343682	0.21342616	2.7731346	20	3 15.0	20.9
333431	2003													

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333441 2003 <i>SL</i> ₃₂₅	16.5	X	214.68414	355.40429	331.19685	6.72746	0.1211916	0.20896839	2.8124338	20	2 27.6	21.0
333442 2003 <i>TN</i> ₈	15.6	X	226.08028	51.96059	312.81636	12.26157	0.2246426	0.21368352	2.7709075	20	4 13.1	20.5
333443 2003 <i>TE</i> ₁₉	16.7	X	219.94291	282.18831	47.23674	3.95819	0.1919336	0.20906862	2.8115349	20	3 6.7	21.4
333444 2003 <i>UG</i> ₁	16.6	X	254.64471	40.80120	272.10574	6.81315	0.2135137	0.21218858	2.7839069	20	3 9.9	21.3
333445 2003 <i>UU</i> ₁₃₀	15.6	X	225.70577	3.10499	307.33045	14.54044	0.1342703	0.20519682	2.8467914	20	2 16.1	20.2
333446 2003 <i>UM</i> ₁₃₅	16.1	X	225.95474	91.03342	243.98260	16.49553	0.2950167	0.20961090	2.8066837	20	3 5.3	21.5
333447 2003 <i>US</i> ₂₄₉	16.3	X	226.10214	301.70757	62.44344	9.22688	0.2238465	0.21165919	2.7885470	20	4 21.3	21.0
333448 2003 <i>UD</i> ₂₈₈	16.3	X	146.77495	37.45885	353.49927	1.50697	0.0848998	0.20239355	2.8730175	20	3 8.2	20.5
333449 2003 <i>UR</i> ₃₇₁	16.3	X	189.70680	95.80003	288.41537	12.82417	0.1157555	0.21459713	2.7630375	20	4 7.1	20.9
333450 2003 <i>WD</i> ₇₅	16.3	X	175.39894	9.08107	344.96267	5.70960	0.1522831	0.20050330	2.8910462	20	2 26.2	20.9
333451 2003 <i>WW</i> ₁₂₉	15.8	X	140.68589	327.67489	59.04465	4.72796	0.1183014	0.19777931	2.9175310	20	3 2.5	20.2
333452 2003 <i>WU</i> ₁₇₉	15.8	X	25.22039	253.82424	256.50857	11.81959	0.0297099	0.19692935	2.9259198	20	2 20.9	20.1
333453 2003 <i>YS</i> ₂₅	16.8	X	109.95649	287.47143	74.47592	5.57228	0.1791521	0.30528572	2.1843977	20	—	—
333454 2004 <i>BW</i> ₄₄	16.0	X	150.58181	280.94088	294.07649	22.02620	0.2374439	0.27862144	2.3216301	20	10 30.5	20.5
333455 2004 <i>FE</i> ₆₆	16.5	X	126.50486	253.66760	339.14686	22.61663	0.1879663	0.27591329	2.3367969	20	10 28.3	20.8
333456 2004 <i>OE</i> ₁₃	17.6	X	274.00015	78.77160	302.76325	17.92667	0.0765777	0.37049032	1.9199274	20	8 1.7	19.0
333457 2004 <i>PF</i> ₁	17.0	X	35.81650	281.86312	331.74150	19.27935	0.0515548	0.36975784	1.9224621	20	8 18.3	18.6
333458 2004 <i>PS</i> ₂	17.1	X	29.08015	148.34474	135.40132	24.38629	0.0802657	0.37370050	1.9089165	20	10 11.0	19.5
333459 2004 <i>PQ</i> ₃₁	17.2	X	313.55100	220.32621	139.91806	4.39910	0.2646006	0.24500942	2.5293807	20	8 1.8	19.1
333460 2004 <i>PR</i> ₇₃	16.9	X	309.12310	252.09359	112.15744	4.07303	0.2587344	0.24471059	2.5314395	20	7 27.2	19.1
333461 2004 <i>PD</i> ₉₃	16.9	X	356.67579	255.19501	39.28291	5.48202	0.2028490	0.24637309	2.5200387	20	8 10.6	18.9
333462 2004 <i>PW</i> ₉₆	16.4	X	264.53194	43.92702	334.66417	13.61819	0.0789487	0.24023832	2.5627596	20	7 6.9	20.0
333463 2004 <i>QH</i> ₁₂	16.4	X	344.75790	193.94907	114.86503	14.97249	0.1809245	0.24373410	2.5381962	20	8 1.4	18.4
333464 2004 <i>QH</i> ₁₈	15.8	X	252.96005	59.06326	282.70646	12.02952	0.3543215	0.22956622	2.6415818	20	3 28.4	20.8
333465 2004 <i>QR</i> ₂₇	16.2	X	47.65596	280.88420	305.34407	14.20857	0.0872191	0.24057027	2.5604015	20	7 17.6	19.3
333466 2004 <i>RF</i> ₃	15.5	X	206.68043	171.04501	248.94489	21.81084	0.0620783	0.23265061	2.6181825	20	6 17.3	19.3
333467 2004 <i>RW</i> ₆	17.0	X	319.68235	202.17817	139.65542	13.22963	0.1834474	0.24288681	2.5440956	20	7 25.5	19.4
333468 2004 <i>RX</i> ₁₄₄	17.4	X	314.81162	204.88563	130.47525	1.31844	0.1447827	0.24160348	2.5530967	20	7 10.9	19.8
333469 2004 <i>RF</i> ₁₅₁	16.2	X	250.81964	185.97646	171.42794	14.85994	0.3007430	0.23087172	2.6316142	20	4 27.8	20.8
333470 2004 <i>RF</i> ₁₅₄	16.6	X	340.89239	38.85878	251.75581	4.91013	0.1796277	0.23999383	2.5644998	20	6 21.5	18.7
333471 2004 <i>RH</i> ₁₇₈	16.5	X	342.08342	350.41485	316.92794	11.96437	0.1927144	0.24202539	2.5501287	20	7 23.8	18.5
333472 2004 <i>RI</i> ₁₈₁	17.5	X	302.93777	121.42682	223.61199	3.48514	0.2224058	0.23998195	2.5645844	20	6 20.5	20.1
333473 2004 <i>RF</i> ₂₁₁	16.7	X	336.84848	50.97641	246.95692	10.45066	0.2518607	0.24145790	2.5541228	20	6 16.2	18.5
333474 2004 <i>RH</i> ₂₄₉	17.1	X	289.51892	47.89845	320.17406	17.63226	0.1163337	0.36244544	1.9482333	20	8 3.8	18.4
333475 2004 <i>RW</i> ₃₂₂	16.8	X	336.15872	122.30596	208.83157	12.25180	0.3410567	0.24317133	2.5421107	20	8 1.8	18.2
333476 2004 <i>RA</i> ₃₂₃	17.3	X	287.05486	35.37998	334.84294	3.46818	0.2988119	0.23751986	2.5822767	20	6 17.9	20.7
333477 2004 <i>SJ</i> ₁₆	17.2	X	289.49642	246.75455	98.65664	7.17429	0.2204746	0.23755215	2.5820426	20	5 31.7	20.3
333478 2004 <i>SD</i> ₂₀	18.2	X	313.10127	94.45761	46.58394	21.33269	0.4649263	1.20372994	0.8752189	20	—	—
333479 2004 <i>ST</i> ₅₁	16.1	X	298.99697	271.79039	45.98012	7.95398	0.2104859	0.23405727	2.6076820	20	5 7.7	19.3
333480 2004 <i>TC</i> ₁₀	20.2	X	325.92492	135.95862	16.44565	14.10464	0.4072908	0.83095769	1.1205127	20	—	—
333481 2004 <i>TB</i> ₄₁	17.4	X	309.61333	164.77717	171.81200	1.61699	0.2589573	0.23891814	2.5721915	20	6 13.6	19.9
333482 2004 <i>TD</i> ₉₁	16.7	X	300.71153	273.49786	15.38696	11.28401	0.1762096	0.22818670	2.6522177	20	4 6.4	20.1
333483 2004 <i>TT</i> ₁₆₃	16.7	X	292.97029	288.28092	43.77233	5.01247	0.2638167	0.23420132	2.6066126	20	5 9.9	20.2
333484 2004 <i>VE</i> ₁₆	16.0	X	286.98088	260.48603	114.67263	13.94574	0.2461207	0.23618932	2.5919655	20	7 3.8	19.1
333485 2004 <i>VG</i> ₂₅	16.7	X	296.13759	134.64490	258.03886	3.93337	0.2217224	0.24011686	2.5636237	20	8 17.2	19.5
333486 2004 <i>VM</i> ₃₆	17.6	X	297.74968	106.05497	235.02213	4.31379	0.2996980	0.23576887	2.5950461	20	5 23.5	20.6
333487 2004 <i>VV</i> ₅₉	16.1	X	218.63982	145.24032	252.68576	11.06808	0.1027444	0.22644669	2.6657867	20	5 31.2	19.8
333488 2004 <i>WN</i> ₁	16.7	X	232.90682	336.69434	42.67810	5.14853	0.1510286	0.22631367	2.6668312	20	5 17.9	20.8
333489 2004 <i>XQ</i> ₇	16.3	X	295.59137	339.41612	39.90628	5.10198	0.3011981	0.23734816	2.5835219	20	7 15.1	19.1
333490 2004 <i>XC</i> ₉	16.1	X	245.76127	120.78714	264.46908	11.77312	0.2762864	0.22974469	2.6402136	20	5 26.5	20.5
333491 2004 <i>XF</i> ₄₁	16.4	X	232.15856	83.66157	265.45011	3.68239	0.1750824	0.22010203	2.7167730	20	4 6.5	20.8
333492 2004 <i>XX</i> ₁₄₈	16.7	X	211.85958	113.69727	288.61843	11.68948	0.2541842	0.22253571	2.6969294	20	5 20.1	21.6
333493 2004 <i>XG</i> ₁₆₄	16.0	X	202.75823	141.36366	306.85471	14.36186	0.2391912	0.22458665	2.6804853	20	7 12.2	20.6
333494 2004 <i>XG</i> ₁₇₂	16.3	X	239.75249	117.00028	265.17822	5.28968	0.1659968	0.22832473	2.6511487	20	5 22.5	20.4
333495 2005 <i>AF</i> ₁₇	16.0	X	258.20114	263.29643	115.10050	13.45716	0.2707354	0.22690954	2.6621604	20	6 2.1	20.3
333496 2005 <i>AX</i> ₄₂	15.6	X	263.70544	210.70533	298.60027	9.15890	0.1322311	0.17884089	3.1200257	20	12 3.4	19.9
333497 2005 <i>BO</i> ₁₅	16.7	X	197.22714	97.61355	283.58199	6.78859	0.2240101	0.21466537	2.7624519	20	4 12.8	21.6
333498 2005 <i>CG</i> ₅	15.9	X	247.44632	288.87024	144.78159	12.82293	0.3200012	0.22920402	2.6443639	20	7 23.5	20.2
333499 2005 <i>CC</i> ₁₈	16.9	X	139.55929	114.03560	305.07290	5.65569	0.1043788	0.27101797	2.3648521	20	3 29.2	20.3
333500 2005 <i>CT</i> ₆₉	15.2	X	241.44265	229.66750	338.40622	15.80615	0.1646292	0.17833287	3.1259482	20	—	—
333501 2005 <i>CA</i> ₈₁	15.8	X	359.93712	221.87988	285.28477	7.87905	0.0642747	0.19342520	2.9611518	20	1 18.2	19.6
333502 2005 <i>EW</i> ₆₇	15.5	X	265.46776	171.90493	2.53244	10.46967	0.1672487	0.17586133	3.1551680	20	—	—
333503 2005 <i>EC</i> ₂₁₂	15.4	X	95.04446	40.08346	26.22485	9.83795	0.0719619	0.19348486	2.9605431	20	2 23.7	19.6
333504 2005 <i>ES</i> ₃₃₀	15.4	X	273.76936	250.95231	297.01469	10.03175	0.0486094	0.18071878	3.0983741	20	—	—
333505 2005 <i>GX</i> ₇₀	15.9	X	133.57979	306.68388	9.20500	10.30513	0.0575619	0.17370498	3.1812261	20	—	—
333506 2005 <i>JK</i> ₃₂	17.8	X	224.09697	166.09735	48.48271	6.23469	0.1112870	0.30057282	2.2071723	20	—	—
333507 2005 <i>JT</i> ₉₇	17.7	X	121.95115	233.35973	72.98490	8.07576	0.1474816	0.29490410	2.2353670	20	—	—
333508 2005 <i>Voiture</i>	17.4	X	102.73517	186.95654	131.31476	7.81432	0.1399303	0.29114082	2.2545886	20	—	—
333509 2005 <i>LD</i> ₆	16.6	X	42.36279	45.51533	247.60997	24.21146	0.2468380	0.27548736	2.3392049	20	11 9.3	19.9
333510 2005 <i>MD</i>	18.7	X	96.98040	202.52372	188.92812	20.73382	0.6073541	0.42247864	1.7590015	20	2 27.8	20.4
333511 2005 <i>MR</i> ₄	17.6	X	73.45885	34.11283	287.02726	5.33874	0.2420474	0.28128076	2.3069740	20	—	—

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333521 2005 PO	19.9 ^m	X	301.08871	249.47411	300.52369	12.51465	0.3730170	0.70337940	1.2522075	20	—	—
333522 2005 PB ₂	16.9	X	98.60485	141.23548	139.58145	24.44681	0.1980070	0.27935601	2.3175585	20	12 18.3	21.1
333523 2005 QD ₇	17.6	X	55.45882	185.83854	153.07638	3.54823	0.2197148	0.27731386	2.3289223	20	—	—
333524 2005 QM ₁₇	17.8	X	30.15856	311.41906	36.92310	1.84487	0.2087198	0.27283426	2.3543451	20	—	—
333525 2005 QF ₂₈	17.0	X	4.50807	256.13362	136.64381	5.29925	0.3278603	0.27219236	2.3580450	20	—	—
333526 2005 QT ₅₀	17.4	X	86.35339	136.97256	144.32380	7.48244	0.2786065	0.27569180	2.3380483	20	12 9.7	21.5
333527 2005 QE ₁₇₁	16.9	X	60.22522	35.34497	288.79993	4.81047	0.2471853	0.27582214	2.3373117	20	—	—
333528 2005 QF ₁₈₀	16.9	X	82.84188	327.38403	326.79505	7.07897	0.1302490	0.27645598	2.3337378	20	12 11.4	20.4
333529 2005 RA ₂₃	16.9	X	79.26836	129.61752	173.42941	22.38186	0.1787242	0.27732916	2.3288366	20	12 23.6	21.0
333530 2005 RJ ₂₅	16.9	X	14.68336	94.59689	265.94622	5.31501	0.1142436	0.27029541	2.3690648	20	12 12.7	19.6
333531 2005 SU ₅	17.5	X	9.63453	143.69072	229.81742	1.28341	0.2222282	0.27113618	2.3641647	20	—	—
333532 2005 SZ ₆₄	17.4	X	31.82508	68.91154	285.02597	2.44030	0.2286631	0.27347497	2.3506664	20	—	—
333533 2005 SH ₈₅	17.9	X	55.89311	107.78305	183.68113	1.95628	0.2007780	0.26828419	2.3808900	20	11 16.4	21.3
333534 2005 SC ₉₈	16.6	X	349.90497	111.43552	239.72833	6.10892	0.1281089	0.26338126	2.4103464	20	10 17.4	19.1
333535 2005 SM ₁₁₉	16.5	X	40.95795	203.71339	140.90230	10.19359	0.2002443	0.27225584	2.3576785	20	—	—
333536 2005 SG ₁₂₇	17.7	X	61.74335	127.86704	178.70238	2.06370	0.1535821	0.27107182	2.3645389	20	12 6.8	21.1
333537 2005 SE ₁₈₀	15.0	X	352.80280	23.58690	297.47559	3.17320	0.2321096	0.12557392	3.9494481	20	8 17.7	19.3
333538 2005 SB ₂₀₈	17.6	X	35.72209	119.55333	230.67856	5.07698	0.2389152	0.27251793	2.3561666	20	—	—
333539 2005 SU ₂₂₀	17.4	X	58.73333	65.20956	175.75834	5.54274	0.2970816	0.27571620	2.3379104	20	—	—
333540 2005 SA ₂₅₃	16.5	X	96.02730	180.28747	152.01348	5.70043	0.1686911	0.28095607	2.3087510	20	—	—
333541 2005 TT ₁₄	16.8	X	58.39512	241.52556	67.23725	7.46035	0.1260521	0.27224690	2.3577301	20	12 2.5	19.9
333542 2005 TS ₄₁	17.0	X	14.34413	98.88355	244.71774	4.93980	0.1235021	0.26712243	2.3877882	20	11 19.2	19.5
333543 2005 TL ₈₁	15.1	X	24.78364	349.99152	279.26559	3.14660	0.1806624	0.12264770	4.0120202	20	8 8.1	20.1
333544 2005 TR ₁₇₅	17.6	X	41.95448	180.25574	140.04808	5.94935	0.2066204	0.27039597	2.3684774	20	12 9.4	20.8
333545 2005 UW ₄₃	17.6	X	56.90996	80.96570	244.60058	3.33826	0.1660164	0.27221163	2.3579337	20	12 26.9	21.1
333546 2005 UA ₄₄	17.1	X	37.85402	263.85730	57.49395	3.06661	0.2395830	0.26933961	2.3746662	20	12 9.3	20.2
333547 2005 UB ₇₆	17.0	X	354.22934	326.75796	40.12972	8.16444	0.1830717	0.26416904	2.4055521	20	11 26.2	19.4
333548 2005 UC ₉₁	16.6	X	33.39876	16.77370	272.92974	5.25823	0.1067322	0.25760617	2.4462371	20	9 25.6	19.6
333549 2005 UQ ₉₇	17.6	X	24.31650	198.15702	99.96052	3.53023	0.1636035	0.25824052	2.4422294	20	10 8.2	20.2
333550 2005 UJ ₁₀₈	17.7	X	25.45757	247.37659	82.85351	3.40568	0.2119596	0.26508143	2.4000291	20	11 30.7	20.5
333551 2005 UR ₁₄₁	17.1	X	37.43467	274.71134	70.53493	5.52972	0.2828717	0.27107027	2.3645479	20	—	—
333552 2005 UO ₃₆₉	16.6	X	13.02932	129.27970	93.99473	5.69454	0.2113497	0.23636065	2.5907128	20	5 22.0	18.6
333553 2005 UN ₄₆₀	18.3	X	322.55509	80.85700	236.48427	19.84399	0.0629633	0.38159243	1.8825053	20	7 10.6	20.2
333554 2005 VT ₈	17.5	X	7.07110	248.42472	76.67187	3.96474	0.1185049	0.26016811	2.4301514	20	10 11.7	20.0
333555 2005 VY ₁₇	17.3	X	35.58593	66.32813	79.19530	25.42941	0.4386808	0.35253980	1.9845587	20	4 23.7	18.2
333556 2005 VV ₈₉	16.7	X	50.56506	330.08261	253.11125	16.02154	0.0805006	0.24227887	2.5483497	20	7 11.9	20.0
333557 2005 VX ₁₂₈	16.6	X	57.83699	89.76097	179.02577	7.67044	0.0261638	0.26031460	2.4292397	20	9 22.2	19.5
333558 2005 WR ₁₆	17.2	X	21.46083	243.97314	74.92381	1.92122	0.2513352	0.26033070	2.4291395	20	11 15.4	20.0
333559 2005 WB ₅₈	17.9	X	215.62897	238.28906	250.91822	20.02131	0.1152867	0.38883938	1.8590421	20	10 13.4	20.2
333560 2005 XL ₇₃	16.6	X	334.26404	41.41303	279.81805	14.40948	0.1449559	0.24592994	2.5230650	20	7 25.6	19.1
333561 2005 YP ₅₉	15.6	X	316.42102	271.26987	301.93008	11.84386	0.1659956	0.21285230	2.7781167	20	1 24.2	19.1
333562 2005 YC ₁₃₅	16.1	X	321.75543	353.73878	300.02762	11.79235	0.1253248	0.23442585	2.6049480	20	5 22.5	19.2
333563 2005 YU ₁₆₈	16.9	X	179.67856	166.45522	316.21681	17.91364	0.0983972	0.37472332	1.9054413	20	8 18.1	19.2
333564 2005 YN ₁₈₉	17.0	X	304.45361	53.96336	276.72171	6.06422	0.1431693	0.23918765	2.5702589	20	6 15.4	19.9
333565 2006 AJ ₃₄	17.2	X	252.01877	306.75665	139.17490	24.92964	0.0885152	0.38334017	1.8767791	20	10 26.4	19.5
333566 2006 AY ₇₄	17.5	X	267.93193	83.57128	329.75045	18.47130	0.0945991	0.38116100	1.8932526	20	9 9.3	18.9
333567 2006 BN ₈	17.3	X	17.08024	331.90651	311.74985	17.65787	0.0796891	0.37552450	1.9027301	20	8 31.4	18.9
333568 2006 BL ₃₀	15.8	X	327.89312	244.62463	323.98297	12.13774	0.0787774	0.21244582	2.7816592	20	2 15.6	19.3
333569 2006 BY ₁₅₄	16.2	X	246.35378	231.61977	137.36502	12.45433	0.1329228	0.22843390	2.6503039	20	5 24.8	20.3
333570 2006 BO ₁₅₇	15.4	X	280.30240	9.47222	345.09752	14.27129	0.2014264	0.23020151	2.6367195	20	5 30.5	19.4
333571 2006 BV ₁₇₉	16.5	X	289.89755	139.18479	131.06155	6.97763	0.0299748	0.21742581	2.7390207	20	3 24.7	20.2
333572 2006 BO ₁₈₉	16.5	X	203.89529	21.89292	11.76051	5.97846	0.1235051	0.22121019	2.7076922	20	5 7.6	20.8
333573 2006 HY ₆₉	15.9	X	223.83290	97.89454	155.24223	14.30054	0.0970505	0.18551159	3.0447760	20	—	—
333574 2006 HO ₁₀₄	16.3	X	174.68424	166.92984	135.23740	12.48969	0.1402740	0.18452694	3.0555979	20	—	—
333575 2006 JU ₃₄	16.7	X	173.30429	234.36964	56.33400	1.25142	0.1347192	0.18299994	3.0725721	20	—	—
333576 2006 JE ₄₇	15.4	X	189.80023	15.77890	246.20194	19.69087	0.2139686	0.18044641	3.1014912	20	—	—
333577 2006 KQ ₆₂	15.5	X	153.34473	243.67851	100.69453	10.20490	0.1125281	0.18819396	3.0157749	20	1 24.2	20.1
333578 2006 KM ₁₀₃	20.2	X	316.66146	196.96901	169.46841	11.67978	0.1635589	0.49933208	1.5735350	20	—	—
333579 2006 SO ₁₇₄	17.4	X	109.89083	268.11216	203.81981	11.38253	0.1603165	0.25515361	2.4618877	20	5 16.1	20.9
333580 2006 SQ ₃₁₅	17.4	X	124.69036	207.49475	39.90755	6.30531	0.1820480	0.29111946	2.2546989	20	11 26.8	21.1
333581 2006 WT ₃₄	17.3	X	268.60857	111.37109	140.76419	3.34375	0.0072731	0.23872141	2.5736045	20	1 31.9	20.8
333582 2006 WK ₁₄₄	17.5	X	127.98575	197.49973	137.30639	4.58001	0.1966188	0.30389513	2.1910564	20	—	—
333583 2006 XE ₂₇	16.8	X	250.91281	179.04663	313.27595	7.40349	0.1001273	0.27645741	2.3337297	20	11 21.6	19.6
333584 2006 XJ ₆₉	17.1	X	112.61833	115.13421	92.52503	5.21783	0.1290055	0.26053080	2.4278956	20	9 23.4	20.7
333585 2006 YB ₁	17.3	X	100.43468	264.95350	83.69213	5.75903	0.1908289	0.29819673	2.2188816	20	—	—
333586 2007 AS ₂₆	17.1	X	80.34724	120.91891	120.48444	8.22365	0.0786317	0.26048219	2.4281976	20	9 26.5	20.4
333587 2007 BS ₁₆	17.3	X	260.91822	36.60595	74.06885	2.70606	0.1376305	0.27184997	2.3600246	20	11 2.2	19.8
333588 2007 BL ₃₃	16.6	X	36.91304	156.85789	122.77443	7.25307	0.1275964	0.26007776	2.4307142	20	9 27.3	19.5
333589 2007 CR ₉	16.5	X	79.73182	53.80006	166.26481	8.44799	0.1094814	0.25410373	2.4686642	20	8 26.3	19.8
333590 2007 CQ ₂₆	16.2	X	337.28722	223.15151	172.61910	13.44033	0.2609899	0.23894597	2.5719918	20	6 11.9	17.9
333591 2007 CM ₂₉	16.8	X	58.79263	107.45219	132.44107	16.04759	0.0942958	0.25446056	2.4663558	20	8 26.0	19.9
333592 2007 CP ₆₄	17.4	X	57.14951	146.17182	77.75789	1.80408	0.0949180	0.24415261	2.5352948	20	7 29.6	20.6
333593 2007 DQ ₁₀₉	16.8	X	2.30404	122.59004	165.06345	7.69707	0.2299093	0.24324413	2.5416036	20	8 11.3	18.7
333594 2007 EW ₁₇	16.7	X										

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333601 2007 GG ₁₈	16.6	X	34.04433	81.84741	146.22900	12.82107	0.1304684	0.23502711	2.6005033	20	7 2.8	19.7
333602 2007 GA ₂₇	16.4	X	292.12789	168.00501	101.94618	5.59172	0.1830909	0.21797753	2.7343969	20	3 4.6	20.2
333603 2007 GW ₃₄	16.9	X	319.74461	66.50278	180.89045	7.75272	0.2200336	0.22463016	2.6801392	20	3 1.9	20.3
333604 2007 GS ₄₄	17.0	X	263.22675	229.84589	70.59032	3.73948	0.1691642	0.21835216	2.7312684	20	3 12.2	21.1
333605 2007 HX ₈₁	17.0	X	0.38360	135.16539	90.35719	8.46140	0.0435834	0.22619719	2.6677466	20	5 1.3	20.4
333606 2007 JW ₃₅	16.1	X	265.16683	201.10482	101.57402	10.88108	0.2727252	0.21638318	2.7478123	20	3 9.5	20.7
333607 2007 LY	16.8	X	334.47228	96.37121	140.02031	11.55332	0.1185887	0.21968575	2.7202039	20	3 31.7	20.2
333608 2007 LA ₃	16.0	X	4.87192	327.62657	102.87352	11.46287	0.1003553	0.19254975	2.9701205	20	—	—
333609 2007 LR ₁₁	16.8	X	292.50685	190.57949	90.53046	6.39150	0.0342800	0.22085393	2.7106033	20	4 10.9	20.5
333610 2007 PT ₂₄	15.0	X	57.86399	80.71915	322.34316	14.20270	0.0845813	0.17824844	3.1269352	20	—	—
333611 2007 QC ₁₆	15.5	X	156.85099	244.04544	55.12093	18.87298	0.2239510	0.18150422	3.0894291	20	—	—
333612 2007 RB ₁₁	15.9	X	126.63565	332.23784	8.55787	10.16945	0.0791433	0.17887174	3.1196669	20	—	—
333613 2007 RW ₂₂₇	17.0	X	354.16132	340.43831	38.67078	5.28864	0.0947565	0.22733906	2.6588061	20	11 21.2	20.1
333614 2007 RN ₂₄₇	16.4	X	140.28807	218.42238	129.20075	2.57949	0.1225928	0.18688504	3.0298400	20	1 15.1	20.9
333615 2007 SD ₁	15.2	X	118.55197	65.79119	305.75333	14.74462	0.2856880	0.18262442	3.0767827	20	2 7.0	20.1
333616 2007 TX ₁₉	16.1	X	149.16314	49.78196	289.27161	1.37122	0.2271745	0.18299790	3.0725950	20	1 23.3	21.0
333617 2007 LY ₈₂	15.7	X	141.75544	125.67025	229.24075	9.02456	0.0739795	0.18214050	3.0822299	20	1 18.5	20.4
333618 2007 TJ ₃₂₅	16.7	X	146.04257	109.55305	224.85002	14.03616	0.3056446	0.18164761	3.0878031	20	1 17.9	22.2
333619 2007 TP ₃₇₄	16.2	X	143.87793	108.72284	207.04862	10.12056	0.0945084	0.17627899	3.1501822	20	—	—
333620 2007 TP ₃₉₃	15.7	X	83.53117	104.17772	299.99670	14.55433	0.2180226	0.17924973	3.1152797	20	1 29.9	19.8
333621 2007 VS ₁	17.3	X	328.36168	69.62757	225.28319	20.12670	0.0585015	0.36472753	1.9400981	20	6 15.5	19.2
333622 2007 VZ ₄	16.2	X	103.92617	236.73250	134.88335	11.13556	0.2325646	0.17765742	3.1338665	20	1 19.1	20.7
333623 2007 VD ₅	15.6	X	82.86609	86.53710	288.05402	8.07247	0.1030278	0.17420221	3.1751697	20	—	—
333624 2007 VW ₉₃	15.0	X	123.51702	346.57815	254.97897	6.83887	0.0196462	0.14750724	3.5475389	20	10 18.0	20.2
333625 2007 VB ₁₁₁	15.3	X	342.21533	350.76966	59.18076	6.31805	0.0780496	0.15128412	3.4882463	20	11 23.3	19.8
333626 2008 AT ₁₀	17.5	X	84.60401	271.47235	129.11295	11.20526	0.1460059	0.24341927	2.5403842	20	1 4.6	20.4
333627 2008 ED ₄₃	17.6	X	82.65037	133.94266	138.35823	3.02158	0.1979950	0.27335184	2.3513722	20	11 19.9	21.1
333628 2008 EQ ₈₈	17.6	X	191.07888	126.44683	74.92081	3.87924	0.1272274	0.28960156	2.2625705	20	12 6.9	20.8
333629 2008 EF ₁₆₈	17.8	X	82.76520	139.67412	148.79050	3.42820	0.2116925	0.27690732	2.3312012	20	12 11.0	21.5
333630 2008 FX ₁₅	17.7	X	70.83969	171.60275	99.14238	5.61887	0.2412743	0.26851329	2.3795355	20	11 10.9	21.3
333631 2008 GN ₅₀	17.3	X	115.11250	211.95473	35.24271	3.66523	0.1752329	0.27759199	2.3273664	20	11 16.2	21.1
333632 2008 GH ₅₂	17.9	X	100.40313	88.22202	172.74559	2.24574	0.1942474	0.27642990	2.3338846	20	11 21.8	21.6
333633 2008 GR ₉₇	17.2	X	74.91157	279.03561	37.61301	5.66807	0.1568038	0.27952785	2.3166086	20	—	—
333634 2008 GG ₁₂₈	16.5	X	97.14725	156.86537	121.86057	24.94780	0.1937949	0.27582378	2.3373024	20	12 14.6	20.6
333635 2008 KT ₃₉	18.0	X	76.40393	227.89152	91.97833	3.76260	0.2503451	0.27646747	2.3336731	20	—	—
333636 Reboul	17.0	X	282.72828	211.65976	163.30564	13.87713	0.2787480	0.23760719	2.5816439	20	6 22.4	20.6
333637 2008 QZ ₁₀	16.5	X	308.44330	139.79664	168.87294	7.39922	0.2031247	0.23346067	2.6121226	20	5 13.2	19.5
333638 2008 QL ₁₁	16.3	X	300.22939	11.40488	291.35299	11.43293	0.1838631	0.23190388	2.6232998	20	4 17.6	20.0
333639 Yaima	16.5	X	62.37045	84.25330	131.28371	15.63502	0.0599867	0.24333991	2.5409365	20	7 18.7	19.8
333640 2008 QB ₂₂	16.8	X	359.31169	5.61350	269.82818	5.84597	0.2774681	0.24175541	2.5520269	20	7 16.5	18.2
333641 2008 QH ₂₂	16.0	X	253.70635	34.11201	309.44687	11.27458	0.1064867	0.22593423	2.6698162	20	4 24.5	20.1
333642 2008 QC ₂₉	16.3	X	281.53044	153.83639	202.05084	13.31663	0.2083208	0.23283168	2.6168249	20	6 5.7	20.0
333643 2008 QM ₃₂	16.1	X	221.76298	73.10212	297.61691	7.87978	0.2312229	0.21848410	2.7301688	20	4 18.8	21.0
333644 2008 QZ ₃₇	16.8	X	219.16375	20.73788	2.80075	5.30266	0.1753746	0.22381173	2.6866689	20	5 7.1	21.2
333645 2008 RM ₂	17.3	X	297.00172	100.16954	218.63968	3.07593	0.1729560	0.23175833	2.6248983	20	5 12.8	20.4
333646 2008 RT ₁₆	16.4	X	224.96881	118.20502	271.39030	2.65405	0.1149763	0.22656605	2.6648503	20	5 26.1	20.4
333647 2008 RB ₇₄	16.7	X	275.25754	180.65667	179.03024	4.17175	0.1685907	0.23391938	2.6087067	20	6 8.6	20.3
333648 2008 RJ ₁₀₇	16.1	X	270.96120	15.26373	303.94090	7.18773	0.1420148	0.22606463	2.6687894	20	4 10.1	20.2
333649 2008 RG ₁₁₇	16.1	X	263.74568	37.85688	284.26583	12.49380	0.1800568	0.22415986	2.6838865	20	3 29.2	20.5
333650 2008 SG ₅	15.8	X	169.96064	293.14639	101.93365	4.63075	0.0848600	0.21388820	2.7691395	20	4 8.6	20.0
333651 2008 SV ₆	16.8	X	257.06051	198.20631	142.86895	6.88398	0.1745740	0.22443178	2.6817182	20	4 25.2	20.9
333652 2008 SP ₁₂	16.4	X	283.14656	110.18189	168.82488	15.99981	0.1410621	0.22241016	2.6979442	20	3 8.2	20.2
333653 2008 SN ₂₉	16.2	X	134.26382	153.21372	278.80509	2.28134	0.0816755	0.21267808	2.7796337	20	4 11.9	20.1
333654 2008 SK ₄₃	17.5	X	322.29042	248.79496	7.46259	5.93278	0.2680994	0.22684174	2.6626908	20	3 11.7	20.7
333655 2008 SU ₅₁	16.8	X	266.95576	346.28326	0.42408	1.23344	0.1793969	0.22786574	2.6547076	20	5 9.6	20.7
333656 2008 SE ₆₀	16.0	X	285.03935	26.50186	281.43756	14.24423	0.1735813	0.22345310	2.6895428	20	4 4.6	20.1
333657 2008 SS ₆₀	16.3	X	313.32063	5.63504	310.46816	13.89973	0.2132327	0.23236665	2.6203151	20	5 26.3	19.5
333658 2008 SJ ₇₄	15.8	X	265.75837	138.47461	214.00255	14.33904	0.1667546	0.22732664	2.6589030	20	5 18.7	19.7
333659 2008 SD ₁₄₆	16.9	X	250.55163	47.93222	276.55288	5.19245	0.0790538	0.21929766	2.7234122	20	4 2.3	20.8
333660 2008 ST ₁₆₁	17.1	X	353.55050	138.52016	154.90949	4.05941	0.2744676	0.24105731	2.5569516	20	7 31.1	18.4
333661 2008 SU ₁₆₃	16.4	X	290.94303	131.86892	183.18402	13.30768	0.2747970	0.22988852	2.6391122	20	4 15.2	20.0
333662 2008 SB ₁₇₄	15.8	X	221.92324	91.22471	286.56858	13.29085	0.1261801	0.22379158	2.6868302	20	5 3.3	20.2
333663 2008 SZ ₂₄₀	16.6	X	231.74525	236.45995	111.57353	2.84634	0.0867110	0.21974023	2.7197543	20	4 14.3	20.5
333664 2008 ST ₂₄₄	16.3	X	289.52780	182.45772	153.50247	5.45196	0.2617915	0.23221497	2.6214560	20	5 13.1	19.8
333665 2008 SB ₂₄₉	16.6	X	307.93888	234.64927	74.38584	7.57600	0.3313091	0.23289828	2.6163260	20	4 21.7	19.8
333666 2008 SR ₂₈₂	15.7	X	289.38883	38.17883	319.35431	15.24462	0.2044331	0.23276520	2.6173232	20	6 20.7	19.2
333667 2008 SQ ₂₈₄	16.5	X	230.44276	31.71966	330.55285	4.13414	0.1755333	0.21915317	2.7246092	20	4 21.1	20.8
33366												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333681 2008 TT ₁₇₄	16.6	X	130.19690	111.63025	173.65685	16.30512	0.1482223	0.18104829	3.0946137	20	12 27.9	21.9
333682 2008 TK ₁₈₁	15.9	X	201.39439	245.16804	127.83514	9.20516	0.1469403	0.21501246	2.7594782	20	4 14.7	20.5
333683 2008 TL ₁₈₁	16.3	X	214.73141	243.38101	143.43447	14.04325	0.1288743	0.22188341	2.7022125	20	5 15.6	20.8
333684 2008 UJ ₂₇	16.5	X	158.63139	164.73842	194.20322	2.97298	0.0783254	0.19900646	2.9055249	20	2 10.1	20.9
333685 2008 UU ₉₀	17.0	X	210.37766	57.20431	302.48706	1.46280	0.1438324	0.21425184	2.7660053	20	4 2.1	21.3
333686 2008 UC ₉₂	14.9	X	109.72381	230.50383	140.40015	28.09347	0.2180203	0.17298017	3.1901064	20	1 23.8	19.7
333687 2008 UU ₉₃	16.0	X	225.26356	271.83412	78.68806	14.77427	0.2637791	0.21499625	2.7596169	20	4 7.3	21.1
333688 2008 UU ₁₀₈	16.4	X	166.69840	4.73335	348.15781	5.43745	0.0968607	0.19684632	2.9267425	20	2 14.7	20.8
333689 2008 UG ₁₂₁	15.6	X	12.70546	193.23622	283.07296	8.41718	0.1110634	0.18591611	3.0403578	20	—	—
333690 2008 UC ₁₇₀	16.0	X	275.40326	70.56477	234.23595	8.14822	0.1066774	0.21886251	2.7270209	20	4 3.5	19.9
333691 2008 UE ₁₇₆	15.9	X	206.47804	143.16854	225.57116	8.59219	0.2309952	0.21515825	2.7582315	20	4 6.5	20.8
333692 2008 UN ₁₈₂	16.5	X	130.69197	261.94507	153.03920	2.27879	0.0506370	0.20522535	2.8465274	20	3 15.9	20.4
333693 2008 UG ₂₁₇	16.0	X	180.11654	194.53100	40.74317	5.41113	0.1427852	0.18178252	3.0862751	20	12 14.4	21.0
333694 2008 UN ₂₄₁	15.9	X	223.54852	231.02072	136.51100	12.39823	0.1359560	0.21987436	2.7186481	20	4 30.2	20.4
333695 2008 UL ₂₈₀	16.2	X	250.99763	209.40981	158.44368	13.44826	0.2135236	0.22420843	2.6834989	20	5 19.5	20.6
333696 2008 UG ₃₁₅	16.2	X	201.71370	89.49640	234.41204	0.83980	0.1769101	0.19988564	2.8969988	20	2 13.3	20.9
333697 2008 UG ₃₆₄	16.1	X	269.21495	242.23306	100.75095	11.31825	0.2214636	0.22862558	2.6488224	20	5 6.6	20.2
333698 2008 VM ₁₉	16.5	X	213.50888	120.26967	243.89372	12.01167	0.1619749	0.21303387	2.7765379	20	4 7.2	21.2
333699 2008 WU ₇	16.7	X	138.64051	351.93217	54.61588	2.96089	0.0951046	0.20386136	2.8592104	20	3 20.6	21.0
333700 2008 WP ₁₈	16.5	X	189.44038	144.91453	220.47414	1.37467	0.0919563	0.20846041	2.8170010	20	3 20.9	20.9
333701 2008 WK ₅₉	16.5	X	267.04256	260.60608	86.16912	6.35739	0.2613945	0.22584357	2.6705306	20	5 2.2	20.6
333702 2008 WK ₉₈	15.9	X	189.35488	8.97516	294.78366	9.86737	0.0294540	0.19089844	2.9872241	20	1 8.1	20.2
333703 2008 WB ₁₄₁	15.8	X	154.67439	263.69957	80.51395	9.96465	0.0975071	0.19195131	2.9762906	20	1 24.2	20.3
333704 2008 XZ ₂	16.3	X	158.93450	72.10740	296.20834	1.13913	0.1200756	0.19902499	2.9053445	20	2 25.3	20.7
333705 2008 XL ₁₄	16.1	X	120.53035	107.09962	160.59878	7.89688	0.0548837	0.18855381	3.0119367	20	1 8.9	20.4
333706 2008 XQ ₄₆	15.9	X	231.03926	301.01082	263.30835	4.47801	0.1076970	0.17434493	3.1734366	20	12 31.9	20.4
333707 2008 YT ₃₀	19.4	X	212.62554	334.10921	299.58618	16.14254	0.2753045	0.68897293	1.2696030	20	—	—
333708 2008 YZ ₅₈	15.0	X	100.42704	99.23747	260.04433	21.25429	0.1223917	0.18144169	3.0901388	20	1 19.2	19.3
333709 2008 YD ₁₂₂	15.2	X	75.76619	41.30439	270.26260	8.78654	0.0950680	0.15396410	3.4476492	20	11 26.9	20.4
333710 2009 AX ₅	16.1	X	81.47061	337.82800	67.99743	2.97657	0.1366301	0.18090181	3.0962839	20	1 18.9	20.1
333711 2009 BT ₃	15.4	X	33.54508	274.60047	141.89681	17.48547	0.1749055	0.17071529	3.2182598	20	—	—
333712 2009 DW ₁₆	14.7	X	146.43860	48.63382	333.64134	22.79602	0.3111369	0.18617709	3.0375158	20	3 9.8	20.2
333713 2009 DJ ₁₃₈	16.9	X	285.88206	242.55177	185.06521	7.87351	0.1406769	0.22282016	2.6946336	20	9 30.8	19.9
333714 2009 QN ₅₇	17.8	X	132.64304	357.49514	328.37762	8.41040	0.2308667	0.30214796	2.1994948	20	—	—
333715 2009 RD ₁₀	18.2	X	168.54651	297.58510	346.37355	1.97855	0.1748947	0.30361568	2.1924006	20	—	—
333716 2009 RG ₅₂	18.1	X	329.38334	194.01787	162.22430	1.80394	0.1889237	0.26541618	2.3980107	20	9 16.3	19.8
333717 Alexgreaves	17.8	X	30.34739	182.45822	220.03765	4.96883	0.1484821	0.29123454	2.2541049	20	—	—
333718 2009 SZ ₅₉	17.9	X	152.46249	9.91617	276.73532	3.41099	0.1932603	0.29880165	2.2158859	20	—	—
333719 2009 SC ₁₁₇	18.4	X	142.63380	347.21175	326.93092	4.07850	0.1704886	0.30314315	2.1946783	20	—	—
333720 2009 SR ₁₄₈	17.9	X	88.13029	93.23639	274.58773	4.11824	0.1900200	0.29895150	2.2151453	20	—	—
333721 2009 SG ₃₁₀	17.8	X	150.65669	294.71436	352.52561	3.24155	0.2081540	0.30003788	2.2097950	20	—	—
333722 2009 SX ₃₂₅	17.0	X	121.83964	258.34193	71.45054	7.30332	0.2273357	0.29995950	2.2101799	20	—	—
333723 2009 TT ₂₂	17.5	X	84.39120	264.26665	102.66761	5.66382	0.2096937	0.29670340	2.2263206	20	—	—
333724 2009 TG ₃₅	17.4	X	108.67449	281.31901	57.06501	5.24874	0.1869824	0.29602934	2.2296989	20	—	—
333725 2009 TX ₃₉	17.1	X	139.68027	280.66710	64.23286	8.45078	0.2424663	0.30803809	2.1713663	20	1 7.6	20.0
333726 2009 US ₁₄	17.1	X	99.42529	125.87286	255.00151	2.77118	0.1210317	0.30309687	2.1949017	20	—	—
333727 2009 UM ₅₉	17.7	X	111.60100	217.98580	98.85838	6.66220	0.2183094	0.29432194	2.2383137	20	—	—
333728 2009 UQ ₈₇	17.1	X	62.70484	144.53310	229.89678	4.73472	0.1878087	0.28996606	2.2606740	20	—	—
333729 2009 UJ ₁₀₆	17.5	X	317.39151	131.41591	295.26650	0.53043	0.1641255	0.27109135	2.3644254	20	12 13.5	19.4
333730 2009 UN ₁₁₀	17.6	X	94.96338	269.14486	49.66015	3.29892	0.2500652	0.28748092	2.2736836	20	—	—
333731 2009 VF ₃₁	16.8	X	74.79101	296.28497	22.44988	6.42822	0.1536465	0.27914595	2.3187210	20	—	—
333732 2009 VN ₄₁	17.5	X	40.37798	272.99691	84.68325	5.55193	0.1158292	0.27936683	2.3174987	20	—	—
333733 2009 VV ₇₁	17.5	X	126.68951	54.44870	265.25194	4.31369	0.2232472	0.29537609	2.2329851	20	—	—
333734 2009 VS ₁₀₇	16.9	X	66.47777	196.74130	59.35002	5.97347	0.0833636	0.26029835	2.4293408	20	9 28.5	20.1
333735 2009 VB ₁₁₀	17.4	X	75.42877	218.60283	105.79861	3.65112	0.1914830	0.28147362	2.3059201	20	—	—
333736 2009 WX ₄₀	15.9	X	323.76137	13.14997	256.46446	12.30320	0.1550226	0.23027949	2.6361243	20	4 14.8	19.1
333737 2009 WM ₁₀₀	15.9	X	144.76123	331.95998	104.35020	9.54331	0.1568482	0.21706315	2.7420707	20	5 9.5	20.4
333738 2009 WE ₁₇₀	17.1	X	39.49082	331.94767	26.29232	5.04658	0.1649314	0.27763117	2.3271474	20	—	—
333739 2009 WO ₁₈₀	17.8	X	48.36569	200.65111	120.69672	3.00474	0.2180508	0.27167891	2.3610151	20	12 18.7	21.0
333740 2009 XB	16.3	X	266.98560	154.86821	261.45970	9.21491	0.0434478	0.25952078	2.4341908	20	9 1.2	19.5
333741 2009 XM ₅	16.7	X	307.49061	179.58374	92.67239	6.22880	0.2306688	0.22715147	2.6602698	20	3 19.9	20.2
333742 2009 XT ₁₆	16.4	X	299.73662	245.53559	101.98541	15.62634	0.1574348	0.23983853	2.5650667	20	6 30.0	19.1
333743 2009 YQ ₅	17.8	X	140.84170	127.51657	296.19798	4.11831	0.1027449	0.31074820	2.1587233	20	4 3.8	20.5
333744 2009 YW ₆	16.8	X	174.02074	150.25422	295.45842	6.90249	0.1681846	0.23206468	2.6225877	20	6 14.8	21.1
333745 2010 AP ₄₁	16.1	X	173.55710	259.26912	127.06944	7.37179	0.0814693	0.21389489	2.7690817	20	4 2.3	20.3
333746 2010 AJ ₄₆	16.5	X	240.57204	62.34101	290.12198	6.30414	0.0802030	0.22252970	2.6969779	20	4 26.5	20.5
333747 2010 AM ₇₄	15.3	X	265.10125	279.33680	283.73011	10.08388	0.1002723	0.18544374	3.0455186	20	—	—
333748 2010 AF ₇₅	15.5	X	267.89643	65.55505	110.03624	18.06206	0.1146410	0.17964674	3.1106882	20	—	—
333749 2010 AT ₈₀	16.6	X	19.25568	246.59828	112.00409	11.54612	0.2328298	0.26418804	2.4054368	20	—	—
333750 2010 BB ₂	16.6	X	257.33029	166.29989	243.54030	6.96806	0.1733100	0.24485661	2.5304329	20	7 21.5	20.1
333751 2010 EL ₂	15.6	X	154.36682	358.58786	356.16178	10.79268	0.0884832	0.19269858	2.9685910	20	2 6.4	20.1
333752 2010 EM ₄₃	16.3	X	325.15420	135.13273	4.05804	5.15234	0.1300378	0.18162063	3.0881088	20	—	—
333753 2010 FH ₅₇	15.6	X	51.79009	24.37079	39.88492	6.73884	0.1419925	0.17717875	3.1395082	20	—	—
333754 2010 UZ ₆₅	16.9	X	21.72889	14.60197	34.73173	3.77353	0.0678502	0.21351620	2.7723549	20	—	

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333761 2011 <i>BV</i> ₉₉	17.2	X	79.26021	332.32982	296.89457	6.27055	0.0860038	0.26980268	2.3719483	20	10 28.2	20.4
333762 2011 <i>CM</i> ₃₁	17.4	X	103.95131	30.16848	235.61176	2.48531	0.1600581	0.27632757	2.3344607	20	11 28.9	20.8
333763 2011 <i>CF</i> ₃₆	18.2	X	230.14619	135.77541	98.09887	3.89249	0.0552902	0.30632849	2.1794377	20	—	—
333764 2011 <i>CV</i> ₄₁	17.2	X	47.46265	4.33217	252.77280	2.63615	0.1387766	0.25432666	2.4672214	20	9 6.9	20.3
333765 2011 <i>CA</i> ₄₇	16.0	X	339.67182	316.27999	290.04623	12.32048	0.2532970	0.22663386	2.6643188	20	3 23.0	18.9
333766 2011 <i>CH</i> ₈₂	17.5	X	96.22423	350.85813	311.72956	9.63405	0.1443574	0.28256343	2.2999872	20	—	—
333767 2011 <i>DH</i> ₆	16.0	X	293.47163	273.36103	330.84475	14.92117	0.1711338	0.21250657	2.7811291	20	2 5.5	20.0
333768 2011 <i>ER</i>	17.1	X	155.65964	233.59718	353.25485	3.97082	0.0811324	0.27948184	2.3168628	20	12 1.6	20.3
333769 2011 <i>EN</i> ₇	16.0	X	174.75321	81.48160	150.32994	13.25128	0.0354854	0.18246882	3.0785315	20	12 13.6	20.7
333770 2011 <i>EA</i> ₂₆	16.3	X	274.27765	116.78637	150.75074	12.97016	0.1542660	0.21209508	2.7847251	20	2 12.4	20.3
333771 2011 <i>EP</i> ₃₀	17.0	X	164.49619	89.16778	95.37629	7.06194	0.0732985	0.26715652	2.3875851	20	10 19.9	20.4
333772 2011 <i>EG</i> ₄₃	16.3	X	257.38385	133.20872	137.36117	4.72316	0.1555673	0.20450875	2.8531731	20	1 31.3	20.9
333773 2011 <i>EP</i> ₅₀	15.6	X	253.36124	26.44553	100.59316	11.34019	0.0487557	0.17069674	3.2184930	20	11 8.0	20.2
333774 2011 <i>EJ</i> ₅₃	16.0	X	218.33167	174.92091	148.40041	10.08896	0.1317411	0.20620348	2.8755186	20	2 28.2	20.5
333775 2011 <i>EJ</i> ₆₅	17.0	X	275.87071	125.77466	146.11372	11.36273	0.1641831	0.21378332	2.7700451	20	2 18.6	21.2
333776 2011 <i>ER</i> ₆₅	15.4	X	244.87528	150.95245	9.59821	8.56919	0.0562750	0.17834317	3.1258279	20	12 2.8	19.9
333777 2011 <i>EL</i> ₈₂	16.5	X	16.04129	164.21195	150.44780	5.56166	0.1769517	0.25730926	2.4481185	20	10 20.5	19.1
333778 2011 <i>FP</i> ₆	16.1	X	215.89405	267.44135	184.97016	12.00286	0.1380831	0.24573520	2.5243978	20	8 2.9	20.1
333779 2011 <i>FK</i> ₁₂	16.4	X	330.19733	220.06907	84.60968	4.40934	0.0450917	0.23962259	2.5671478	20	7 2.3	19.3
333780 2011 <i>FK</i> ₃₅	16.2	X	134.08072	213.35481	171.39689	9.20168	0.1627818	0.21045535	2.7991708	20	2 22.3	20.4
333781 2011 <i>FO</i> ₆₆	16.5	X	288.41762	26.81033	193.49084	5.60692	0.0772035	0.20119083	2.8844560	20	1 12.3	20.6
333782 2011 <i>FH</i> ₈₃	16.5	X	345.72767	277.66979	70.43103	3.23514	0.2080066	0.25471732	2.4646981	20	10 13.3	18.3
333783 2011 <i>FP</i> ₁₀₀	16.0	X	346.41854	235.17327	338.12708	10.47302	0.0790570	0.21858778	2.7293054	20	3 16.9	19.4
333784 2011 <i>FM</i> ₁₂₃	16.1	X	318.94953	359.33375	341.21365	8.11964	0.1601418	0.24732469	2.5135705	20	7 28.4	18.6
333785 2011 <i>FV</i> ₁₃₃	16.5	X	227.90191	179.78282	349.40931	8.05534	0.0937029	0.17454283	3.1710375	20	11 23.9	21.2
333786 2011 <i>FZ</i> ₁₄₆	16.9	X	124.13992	324.54192	300.75256	5.94031	0.0990705	0.27101904	2.3648459	20	12 15.3	20.4
333787 2011 <i>GZ</i> ₂₁	15.5	X	143.52894	62.62891	220.23244	15.11927	0.1632217	0.17064378	3.2191589	20	—	—
333788 2011 <i>GZ</i> ₆₄	15.7	X	319.39289	213.41886	75.13010	12.66367	0.0533981	0.22636367	2.6664385	20	5 23.8	19.0
333789 2011 <i>GF</i> ₆₇	15.4	X	314.08329	81.83783	109.63778	14.25062	0.0723992	0.20071151	2.8890465	20	1 9.9	19.4
333790 2011 <i>GJ</i> ₇₅	16.4	X	219.90393	241.16148	128.82816	6.18210	0.0852512	0.22249288	2.6972754	20	4 30.4	20.5
333791 2011 <i>GK</i> ₈₂	16.3	X	244.26300	266.84137	76.02640	6.51210	0.0874380	0.22128634	2.7070710	20	4 22.7	20.2
333792 2011 <i>GS</i> ₈₂	16.2	X	311.33949	187.52771	75.78663	6.36957	0.0689178	0.21823872	2.7322149	20	4 8.0	19.8
333793 2011 <i>GS</i> ₈₄	16.7	X	206.56083	241.36261	178.91677	4.27659	0.0499636	0.23323580	2.6138013	20	6 19.8	20.5
333794 2011 <i>HT</i> ₄	15.9	X	293.92326	71.66145	154.70714	12.64382	0.0229898	0.20128003	2.8836038	20	2 2.6	19.9
333795 2011 <i>HE</i> ₁₀	15.7	X	187.04298	88.10276	149.31605	7.94252	0.0969501	0.17000814	3.2271779	20	12 24.7	20.8
333796 2011 <i>HX</i> ₂₄	15.3	X	175.94201	151.34165	129.36933	16.63359	0.0196830	0.17637227	3.1490714	20	—	—
333797 2011 <i>HY</i> ₃₃	15.5	X	49.90988	306.34096	101.22817	11.99429	0.0475288	0.17794565	3.1304815	20	—	—
333798 2011 <i>HF</i> ₃₄	16.2	X	179.21013	93.76749	165.44862	1.24103	0.1385375	0.17531529	3.1617160	20	—	—
333799 2011 <i>HE</i> ₄₈	15.5	X	164.02268	190.90026	133.55248	9.55843	0.0590392	0.18781055	3.0198779	20	1 6.5	20.0
333800 2011 <i>HO</i> ₄₈	15.6	X	274.21689	34.33180	149.38429	10.51642	0.0491287	0.18095755	3.0956481	20	—	—
333801 2011 <i>HG</i> ₆₀	15.9	X	120.10258	177.04342	154.45914	9.85905	0.0637984	0.17374285	3.1807638	20	—	—
333802 2011 <i>HY</i> ₇₅	15.8	X	67.58207	276.72438	157.39839	9.91797	0.0554403	0.19079702	2.9882825	20	1 21.3	19.9
333803 2011 <i>HJ</i> ₉₉	15.8	X	3.86168	292.86423	157.96260	10.92737	0.0804427	0.17827957	3.1265712	20	—	—
333804 2011 <i>HE</i> ₁₀₀	17.4	X	83.27732	139.70049	204.90982	5.92258	0.0983196	0.28230475	2.3013920	20	—	—
333805 2011 <i>HN</i> ₁₀₀	16.5	X	327.51723	319.98120	57.24634	5.08965	0.2358501	0.25239464	2.4797960	20	10 15.4	18.1
333806 2011 <i>JY</i>	15.5	X	294.93732	65.30651	130.88516	22.74330	0.1007337	0.19227770	2.9729215	20	—	—
333807 2011 <i>JX</i> ₆	15.3	X	86.78530	231.13484	130.62351	16.91068	0.0668035	0.17319226	3.1875015	20	—	—
333808 2011 <i>JZ</i> ₁₇	15.9	X	294.09440	190.22567	196.16230	13.94522	0.2566805	0.23191145	2.6237427	20	7 25.7	19.2
333809 2011 <i>SJ</i> ₁₆₄	16.9	X	265.58768	207.68972	28.04838	6.69897	0.0653337	0.26732155	2.3866024	20	—	—
333810 2011 <i>UB</i> ₁₅₆	16.4	X	162.84171	208.00582	67.38953	16.00258	0.1033298	0.23933260	2.5692211	20	—	—
333811 2011 <i>WA</i> ₆₄	16.4	X	333.97855	130.32761	278.64335	3.98939	0.0287516	0.21655229	2.7463815	20	11 23.6	20.0
333812 2012 <i>BS</i> ₁₃₂	16.1	X	13.56269	212.87036	291.35369	11.40133	0.2299205	0.23911305	2.5707936	20	1 13.8	17.9
333813 2012 <i>CV</i> ₁₄	18.2	X	140.11197	32.18361	135.55589	4.76436	0.1277247	0.28964507	2.2623439	20	8 31.4	21.3
333814 2012 <i>EU</i> ₁₀	16.3	X	81.45767	240.83834	68.34668	2.36363	0.0651120	0.18956652	3.0012002	20	12 4.6	20.7
333815 2012 <i>FD</i> ₂₇	16.2	X	169.62586	19.42241	147.44677	2.16014	0.1641364	0.17273641	3.1931069	20	9 15.9	21.5
333816 2012 <i>FZ</i> ₃₈	17.0	X	316.94284	28.04710	198.56211	4.74994	0.1268460	0.24088333	2.5581827	20	2 11.1	20.1
333817 2012 <i>FN</i> ₃₉	15.6	X	115.45657	312.95420	323.15463	13.96021	0.2162578	0.18135730	3.0910973	20	12 7.2	21.0
333818 2012 <i>GG</i> ₂₈	15.9	X	88.22231	229.66239	81.90334	16.39540	0.0228724	0.18258133	3.0772667	20	12 9.3	20.2
333819 2012 <i>HR</i> ₂₁	15.8	X	273.46671	165.42198	74.83103	13.75165	0.1214654	0.22233946	2.6985161	20	1 12.9	19.9
333820 2012 <i>HK</i> ₃₉	16.3	X	309.57081	128.73864	91.96698	14.36215	0.2110057	0.22783462	2.6549493	20	1 16.7	20.0
333821 2012 <i>HJ</i> ₄₉	15.6	X	7.53280	262.68662	141.25260	11.09765	0.0650181	0.18663481	3.0325476	20	12 28.4	19.7
333822 2012 <i>HO</i> ₅₇	16.9	X	348.23748	136.06957	76.68919	3.96183	0.0508052	0.24174921	2.5520705	20	3 23.7	19.9
333823 2012 <i>HX</i> ₆₁	17.5	X	151.92402	53.31203	140.84968	4.20543	0.0621681	0.29109212	2.2548401	20	10 20.7	20.4
333824 2012 <i>HM</i> ₆₂	17.5	X	25.28911	82.49028	137.89280	4.36245	0.1628707	0.25450067	2.4660967	20	6 9.7	19.9
333825 2012 <i>HZ</i> ₇₀	16.3	X	185.80083	351.41927	151.85834	17.20292	0.1617901	0.24490606	2.5300923	20	5 4.3	20.3
333826 2012 <i>HF</i> ₇₈	15.8	X	164.84436	182.47377								

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333841 1121 T-3	17.1	X	256.87378	48.46137	301.39122	5.92502	0.3278205	0.22402721	2.6849459	20	4 15.5	21.8
333842 1960 SV	17.3	X	298.04250	195.64067	184.72508	6.25345	0.2098768	0.24510646	2.5287130	20	8 4.9	20.0
333843 1990 SH ₄	17.7	X	184.70728	304.54311	327.13430	7.01255	0.2269036	0.31003441	2.1620353	20	—	—
333844 1990 WQ	16.7	X	179.44522	304.69217	87.22160	8.39851	0.3619211	0.21608565	2.7503340	20	4 20.1	22.1
333845 1991 TD ₁₀	17.0	X	273.98684	189.13426	185.83941	10.77909	0.0666574	0.23175771	2.6249030	20	7 12.0	20.6
333846 1992 SL ₁₁	17.5	X	266.90187	235.49815	182.39860	5.30706	0.2607836	0.24288247	2.5441259	20	7 31.9	20.9
333847 1993 YB	17.7	X	95.52031	20.07155	110.35225	27.70612	0.0914213	0.38449997	1.8730032	20	5 22.2	20.3
333848 1994 SN ₁	16.9	X	265.31118	347.41146	25.18596	6.25288	0.0456182	0.22038484	2.7144482	20	7 1.7	20.6
333849 1994 UE ₉	16.9	X	266.26391	356.37313	325.05608	3.38888	0.0654892	0.21432331	2.7653903	20	4 20.6	20.9
333850 1995 CH ₅	17.1	X	127.54926	327.01574	147.11841	5.40903	0.1303084	0.24544996	2.5263532	20	6 4.4	20.8
333851 1995 FA ₆	16.8	X	9.23044	217.65928	13.32717	4.24070	0.2221331	0.23976571	2.5661261	20	5 22.9	18.6
333852 1995 FK ₁₅	18.1	X	213.69892	100.99768	139.89591	3.92974	0.1559761	0.30124250	2.2039000	20	—	—
333853 1995 SV ₈	17.7	X	143.21569	277.42507	357.05396	3.31282	0.1594012	0.28834740	2.2691264	20	—	—
333854 1995 SE ₁₂	16.8	X	266.81126	207.28762	176.87976	7.07964	0.2513127	0.23089542	2.6314341	20	6 18.7	20.8
333855 1995 SD ₃₇	17.3	X	72.21572	43.98028	342.43143	2.49468	0.1241142	0.29011840	2.2598825	20	—	—
333856 1995 SL ₆₃	17.8	X	34.93856	81.97520	328.09808	0.79899	0.2045549	0.28625261	2.2801832	20	—	—
333857 1995 SY ₆₄	18.3	X	345.30380	260.46508	207.84156	2.91706	0.1831252	0.28638508	2.2794800	20	—	—
333858 1995 SW ₆₉	16.5	X	263.59251	101.35822	293.63509	12.34203	0.2156049	0.23269244	2.6178687	20	7 4.8	20.1
333859 1995 TB ₁₁	16.6	X	334.55451	351.01819	286.97674	11.49586	0.1163978	0.23113337	2.6296278	20	5 23.9	19.7
333860 1995 UM ₄₀	16.8	X	265.23161	171.51852	211.77479	3.62684	0.2481198	0.22995994	2.6385658	20	6 16.0	20.6
333861 1995 UV ₄₀	16.1	X	141.52567	179.43443	199.70962	8.76965	0.1590670	0.17679488	3.1440511	20	2 24.4	21.1
333862 1995 WF ₁	18.4	X	87.02957	18.36296	39.32894	0.48344	0.2200512	0.29067602	2.2569915	20	2 3.9	20.3
333863 1995 WK ₁₄	16.0	X	291.74115	246.28050	81.68310	12.92687	0.1213255	0.18490540	3.0514270	20	5 27.6	20.1
333864 1996 AT ₆	17.3	X	78.61860	261.98281	341.13357	4.76866	0.1204635	0.26363136	2.4088218	20	9 27.5	20.7
333865 1996 AM ₁₉	16.8	X	213.06058	95.71819	279.72706	11.31002	0.2323558	0.21599305	2.7511200	20	4 16.7	21.8
333866 1996 EZ ₆	16.3	X	95.29039	79.14983	350.13939	8.72094	0.1247273	0.20457620	2.8525459	20	3 1.5	20.2
333867 1996 RH ₈	15.7	X	144.58116	184.46766	168.84408	11.47851	0.1336477	0.18382075	3.0634188	20	1 26.1	20.5
333868 1996 TA ₁₆	15.8	X	159.81370	78.80693	262.83188	5.91355	0.0740103	0.18354086	3.0665323	20	1 23.1	20.3
333869 1996 TQ ₃₃	15.9	X	198.73156	63.73937	204.33012	15.54974	0.0435140	0.17723843	3.1388035	20	—	—
333870 1997 ES ₁₂	17.6	X	287.00136	197.25131	280.13335	4.92208	0.0411234	0.28372415	2.2937100	20	—	—
333871 1997 EP ₃₁	16.2	X	336.54762	273.14809	2.48510	7.85243	0.0724364	0.21969400	2.7201358	20	5 27.3	19.7
333872 1997 HY ₂	17.6	X	192.77939	29.67479	202.28346	5.72217	0.0859325	0.28205935	2.3027266	20	—	—
333873 1997 SN ₅	17.4	X	12.08436	197.40589	163.89963	1.90916	0.2316511	0.26227515	2.4171186	20	12 25.1	20.2
333874 1997 SH ₂₃	16.7	X	59.70038	282.58720	217.54060	4.38472	0.1837519	0.23630752	2.5911011	20	4 17.6	19.5
333875 1997 SP ₂₃	18.1	X	214.56334	35.37162	331.08940	0.62592	0.1573180	0.24207190	2.5498020	20	4 13.0	22.0
333876 1997 SY ₂₇	17.1	X	81.79769	276.94987	335.10184	5.54373	0.0951911	0.25685079	2.4510309	20	10 8.0	20.4
333877 1997 TM ₉	15.7	X	88.38653	217.55210	213.55669	10.76605	0.0675874	0.18956379	3.0012289	20	2 12.8	20.0
333878 1997 WF ₇	15.1	X	11.07042	322.28904	96.09268	17.16695	0.0607472	0.17119161	3.2122875	20	—	—
333879 1997 WG ₂₄	15.8	X	357.34984	157.84491	225.17619	9.74599	0.1020729	0.17289948	3.1910989	20	11 18.5	19.7
333880 1997 YV ₁₂	16.1	X	81.88448	127.48501	290.85573	4.20175	0.1368724	0.18109258	3.0941091	20	2 2.7	20.1
333881 1998 BX ₄₄	15.5	X	20.46397	155.78954	309.17292	9.12841	0.0617596	0.17609562	3.1523688	20	—	—
333882 1998 HP ₁₀	16.6	X	154.38648	99.20556	37.51442	7.28868	0.1173607	0.23564120	2.5959833	20	8 2.4	20.7
333883 1998 HU ₃₀	16.6	X	155.70795	314.12425	206.81318	12.69031	0.0953830	0.23540520	2.5977181	20	8 28.3	20.8
333884 1998 HS ₅₀	16.8	X	134.53611	164.67200	136.54710	8.25563	0.1960392	0.29112642	2.2546630	20	—	—
333885 1998 QC ₇₄	15.4	X	50.98859	100.29689	200.48834	11.90751	0.2503614	0.18425415	3.0586130	20	11 14.4	19.9
333886 1998 RN ₄₃	17.4	X	180.10102	36.34780	331.99335	4.97054	0.2114865	0.29642358	2.2277214	20	3 12.1	20.8
333887 1998 RX ₅₀	16.8	X	58.07865	28.74847	343.60190	6.86574	0.1222809	0.28132742	2.3067189	20	—	—
333888 1998 ST ₄	16.7	X	182.56748	207.58238	239.14845	9.21586	0.5947274	0.20716336	2.8287469	20	6 19.7	23.0
333889 1998 SV ₄	18.2	X	310.06516	359.50535	177.24920	53.29575	0.6419706	1.33594010	0.8164784	20	—	—
333890 1998 SK ₂₄	16.9	X	66.19499	351.26668	19.42110	6.64551	0.2221490	0.28205114	2.3027713	20	—	—
333891 1998 SO ₄₆	18.0	X	26.24485	339.35826	27.02892	0.04832	0.2345469	0.27520361	2.3408125	20	—	—
333892 1998 SP ₅₁	17.2	X	32.09245	47.68143	337.78835	1.74138	0.1967376	0.27741706	2.3283447	20	—	—
333893 1998 SA ₅₃	17.6	X	49.39065	345.81752	15.48440	6.03087	0.2356763	0.27777733	2.3263311	20	—	—
333894 1998 SM ₈₅	17.3	X	126.35845	154.43339	171.45153	7.07439	0.2696668	0.28610160	2.2809855	20	—	—
333895 1999 BV ₃₀	17.7	X	0.23246	296.14444	104.12105	3.25348	0.1920680	0.26927902	2.3750224	20	—	—
333896 1999 BE ₃₃	16.0	X	175.13380	30.25927	308.88868	7.63810	0.0939185	0.18988091	2.9978865	20	2 6.1	20.6
333897 1999 RF ₁₃	16.2	X	259.79496	213.67473	163.37067	5.88930	0.2441116	0.22723998	2.6595790	20	6 3.3	20.2
333898 1999 RN ₁₆	16.2	X	269.30460	19.19877	347.53714	6.57926	0.1945655	0.22761204	2.6566799	20	6 5.1	20.0
333899 1999 RQ ₂₁	16.1	X	196.86320	348.61265	54.96586	2.65160	0.2274129	0.22060547	2.7126381	20	5 12.4	20.6
333900 1999 RG ₇₀	17.0	X	306.60339	137.75920	168.55253	13.52173	0.2668048	0.22799340	2.6537165	20	4 27.6	20.4
333901 1999 RX ₁₁₂	16.7	X	239.53784	58.73581	328.31950	7.79113	0.3875125	0.22474428	2.6792317	20	5 13.5	21.7
333902 1999 RX ₁₂₄	17.1	X	261.22646	10.42830	341.24475	5.12963	0.0928737	0.22524234	2.6752808	20	5 19.9	21.0
333903 1999 RE ₁₂₇	16.8	X	241.35881	76.72177	295.65294	10.15887	0.3067000	0.22456158	2.6806848	20	5 1.6	21.6
333904 1999 RR ₁₅₄	16.9	X	281.45586	332.81756	334.66487	7.97284	0.3713894	0.22544205	2.6737006	20	3 12.8	21.2
333905 1999 RS ₁₉₁	18.1	X	104.32945	18.59294	333.55208	1.73265	0.2297719	0.29933656	2.2132452	20	—	—
333906 1999 RP ₂₁₂	16.1	X	255.91563	18.11583	339.40869	13.80436	0.2678191	0.22371273	2.6874615	20	4 26.1	20.7
333907 1999 TV ₂	18.0	X	93.20159	321.73626	231.01250	2.58461	0.1966759	0.29471457	2.2363253	20	—	—
333908 1999 TN ₁₂	17.6	X	2.72854	150.30102	212.33730	37.27398	0.3906201	0.38033948	1.8866374	20		

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
333921 1999 TR ₁₅₉	16.3	X	220.25881	179.86228	199.29742	9.66012	0.2117040	0.22130912	2.7068852	20	5 3.4	20.8
333922 1999 TC ₁₇₆	16.8	X	261.51307	3.32754	333.39819	3.11394	0.1768744	0.22192605	2.7018664	20	4 20.2	21.0
333923 1999 TE ₂₅₀	16.4	X	240.97780	143.61813	254.21161	7.01590	0.2079203	0.22465323	2.6799556	20	6 13.9	20.5
333924 1999 TM ₂₆₃	16.2	X	314.99720	173.28341	209.44771	9.76836	0.1072870	0.18428389	3.0582839	20	9 10.9	20.1
333925 1999 TM ₂₆₅	16.3	X	261.00436	120.40616	257.56923	11.75328	0.2726757	0.22656680	2.6648445	20	6 1.3	20.2
333926 1999 TL ₂₉₇	17.2	X	301.68779	234.38520	353.59616	6.01496	0.0648048	0.26179767	2.4200566	20	2 2.2	20.2
333927 1999 TK ₃₁₅	16.6	X	297.63440	269.73578	22.83036	18.28722	0.2642215	0.22329333	2.6908256	20	3 29.4	20.3
333928 1999 TP ₃₃₃	16.5	X	200.07712	215.79153	209.48008	13.17439	0.1957238	0.22086371	2.7105233	20	6 11.6	21.2
333929 1999 UP ₂	16.2	X	288.55509	340.29657	54.80110	17.97635	0.2690881	0.22986901	2.6392615	20	8 5.9	19.7
333930 1999 US ₅	15.7	X	277.91821	314.27296	20.25689	9.23732	0.3092321	0.22429844	2.6827810	20	4 19.1	19.9
333931 1999 UM ₂₃	15.5	X	235.02987	185.51846	215.85576	20.08572	0.3603461	0.22383938	2.6864477	20	5 31.3	20.5
333932 1999 UE ₃₂	17.0	X	349.99933	263.03677	48.05073	2.71288	0.0706224	0.22781270	2.6551196	20	8 12.2	20.0
333933 1999 VF ₁₈	16.3	X	198.47454	18.46597	18.66897	5.47369	0.1577360	0.21845601	2.7304028	20	5 6.2	20.7
333934 1999 VG ₂₇	16.5	X	283.17421	302.48608	9.67760	5.17322	0.0538744	0.21931830	2.7232414	20	5 2.0	20.1
333935 1999 VK ₆₃	16.4	X	205.03568	186.78367	229.21906	8.71681	0.1816326	0.22008255	2.7169333	20	6 5.2	20.9
333936 1999 VC ₈₂	16.3	X	267.48147	27.75239	33.83643	15.49952	0.2581514	0.22951223	2.6419960	20	8 15.3	20.2
333937 1999 VH ₁₀₃	17.1	X	189.99446	350.34181	54.33772	5.70487	0.1298756	0.21680881	2.7442147	20	5 9.5	21.5
333938 1999 VR ₁₁₉	16.8	X	287.27267	30.86228	290.93839	2.13693	0.0960831	0.22172370	2.7035100	20	5 14.7	20.3
333939 1999 VZ ₁₂₀	16.6	X	228.35806	143.85067	224.77825	11.96191	0.1751095	0.21983004	2.7190135	20	4 28.4	21.0
333940 1999 VJ ₁₂₄	16.7	X	308.75526	52.31114	237.32079	3.02077	0.2150745	0.22201281	2.7011624	20	4 12.6	19.9
333941 1999 VJ ₁₃₆	16.7	X	279.18846	275.08217	59.91836	3.28217	0.0838412	0.21992904	2.7181974	20	5 23.9	20.2
333942 1999 VK ₁₄₃	16.3	X	189.26637	185.91755	240.24188	25.99028	0.0931389	0.21847765	2.7302225	20	6 4.5	20.5
333943 1999 VO ₁₆₄	16.5	X	251.54287	343.57984	21.44457	2.69458	0.3145431	0.22248384	2.6973486	20	5 3.2	20.9
333944 1999 VK ₁₈₀	16.4	X	200.49261	296.91336	138.07038	8.23858	0.2803512	0.21981683	2.7191224	20	6 21.3	21.3
333945 1999 VU ₁₉₆	16.2	X	259.31065	286.91264	93.45074	12.29886	0.2636156	0.22389051	2.6860387	20	6 4.9	20.3
333946 1999 VT ₂₀₉	16.7	X	221.30109	170.53972	220.68913	1.18679	0.1006750	0.22001599	2.7174812	20	5 25.7	20.7
333947 1999 XA ₃₁	16.9	X	89.73170	218.60236	206.34688	6.15498	0.1238811	0.29993057	2.2103221	20	1 29.5	19.2
333948 1999 XG ₁₃₅	16.5	X	347.85160	36.47074	86.86772	11.38712	0.5041890	0.19362218	2.9591432	20	—	—
333949 1999 XM ₁₄₉	15.6	X	347.60200	300.19435	63.40672	10.53428	0.0891884	0.18406553	3.0607022	20	10 15.8	19.5
333950 1999 XJ ₂₅₁	17.2	X	32.36226	302.04365	76.98678	11.74602	0.1491631	0.24026373	2.5625789	20	—	—
333951 2000 AH ₅₇	15.3	X	174.52056	104.00582	304.59704	23.09927	0.2284437	0.21063072	2.7976169	20	4 20.9	20.7
333952 2000 AP ₂₁₅	16.0	X	146.98133	21.08553	111.60275	9.79095	0.0683019	0.21491938	2.7602748	20	7 14.4	20.0
333953 2000 AF ₂₂₁	16.5	X	245.67766	264.81240	99.60108	5.50654	0.0857938	0.21291156	2.7776011	20	5 21.4	20.4
333954 2000 AN ₂₂₁	17.6	X	64.57879	265.55627	102.29371	6.86364	0.1926592	0.28736243	2.2743086	20	—	—
333955 2000 AL ₂₃₁	16.3	X	149.70610	170.68389	289.75441	5.33903	0.1310623	0.21295505	2.7772230	20	6 8.7	20.7
333956 2000 BW ₁₁	16.8	X	164.93209	114.14775	300.92904	7.94988	0.1526777	0.20937892	2.8087564	20	4 25.6	21.5
333957 2000 CU ₇₁	16.2	X	166.84434	256.74474	135.10126	15.75414	0.1634519	0.20552585	2.8437521	20	4 8.6	21.1
333958 2000 CQ ₉₉	16.3	X	269.36989	263.07388	323.27542	8.91555	0.1156099	0.19115703	2.9845294	20	—	—
333959 2000 CW ₁₃₆	17.8	X	56.01411	281.01397	332.23785	6.89321	0.2982426	0.25913614	2.4365990	20	10 5.8	21.4
333960 2000 CJ ₁₄₂	18.4	X	67.92317	265.10274	120.14867	3.64511	0.2154892	0.28983878	2.2613358	20	—	—
333961 2000 EV ₁₄	15.4	X	248.66393	240.62725	352.50219	13.72808	0.0682408	0.18709980	3.0275210	20	—	—
333962 2000 EL ₂₇	17.0	X	41.90218	245.84373	334.94577	6.99291	0.1777038	0.25430286	2.4673754	20	7 16.5	19.7
333963 2000 EZ ₃₅	17.0	X	83.38911	98.77036	170.81419	10.59682	0.0886661	0.26735880	2.3863807	20	11 8.0	20.4
333964 2000 EP ₈₆	16.9	X	113.82805	11.35300	184.93154	9.83657	0.2153848	0.26136235	2.4227431	20	9 11.7	20.8
333965 2000 FW ₉	17.6	X	98.16484	56.22045	149.09791	0.82141	0.1475613	0.25897634	2.4376012	20	9 3.4	21.1
333966 2000 FF ₁₅	15.8	X	237.44992	130.76009	28.31079	28.58564	0.3398659	0.17745693	3.1362264	20	10 20.9	20.8
333967 2000 FO ₄₈	17.1	X	139.03891	115.75872	105.41916	6.60568	0.2020174	0.26566274	2.3965268	20	11 6.4	21.2
333968 2000 GW ₂₆	15.8	X	167.63191	236.30177	22.68044	11.34265	0.0865433	0.17661337	3.1462048	20	—	—
333969 2000 GL ₁₂₂	17.5	X	198.71140	277.17042	171.56754	22.98960	0.0847469	0.35979044	1.9578059	20	7 21.7	20.3
333970 2000 GE ₁₃₀	16.6	X	162.08499	250.95023	192.14191	12.34163	0.3632287	0.20791838	2.8218946	20	6 5.9	22.1
333971 2000 HZ	15.8	X	131.11087	322.57251	33.32096	9.72672	0.0781101	0.18295223	3.0731063	20	1 12.1	20.4
333972 2000 HY ₃₆	16.5	X	82.26282	172.93845	83.93857	15.22725	0.2010718	0.25963319	2.4334882	20	11 3.5	20.4
333973 2000 JY ₉₂	15.8	X	118.50058	212.41655	170.30106	17.21122	0.1214747	0.18449151	3.0559883	20	1 31.4	20.5
333974 2000 KA ₅	16.9	X	46.44392	184.78446	82.36168	14.32163	0.2412641	0.25396157	2.4695858	20	10 15.2	20.4
333975 2000 LK ₇	17.1	X	319.44431	116.49130	137.77520	6.23208	0.1657033	0.24213043	2.5493911	20	3 20.7	20.1
333976 2000 QA ₇	17.1	X	308.64006	33.10284	333.98644	12.88275	0.2803324	0.24474988	2.5311685	20	7 30.0	19.3
333977 2000 QM ₁₇₀	17.0	X	324.14122	159.95908	196.29370	3.37654	0.2306680	0.24539136	2.5267554	20	8 24.0	18.8
333978 2000 QS ₁₇₀	16.6	X	299.50804	135.57243	251.28167	2.23031	0.2728371	0.24400630	2.5363082	20	8 7.2	19.1
333979 2000 QZ ₁₉₅	16.2	X	261.52276	27.52668	12.86841	8.00067	0.1949859	0.24027145	2.5625240	20	7 14.2	19.8
333980 2000 RL ₁₂	15.7	X	352.13153	275.12856	4.79132	34.31469	0.4839192	0.24389482	2.5370810	20	4 26.2*	17.3
333981 2000 RF ₈₈	17.7	X	110.00112	38.85613	290.57940	2.37167	0.2517393	0.31453626	2.1413562	20	—	—
333982 2000 SU ₉	16.4	X	311.13641	19.37938	342.29463	16.90705	0.1705975	0.24280421	2.5446726	20	8 15.1	19.0
333983 2000 SW ₁₃	16.0	X	283.26004	110.52561	232.04280	11.00667	0.3065797	0.24049055	2.5609674	20	5 5.3	19.6
333984 2000 SX ₂₇	16.4	X	331.85195	94.40194	309.02649	5.60876	0.1647964	0.25065752	2.4912399	20	11 29.4	18.7
333985 2000 SR ₄₂	16.2	X	311.77735	173.60133	171.91178	39.20774	0.2823201	0.24191953	2.5508725	20	7 9.4	19.9
333986 2000 SF ₆₆	17.2	X	326.05196	177.13342	162.56260	2.38942	0.2469179	0.24349750	2.5398401	20	7 29.9	19.2
333987 2000 SP ₁₇₄	16.7	X	264.05425	179.16325	224.85472	13.54728	0.2420430	0.23912442	2.5707120	20	7 10.3	20.5
333988 2000 SC ₁₈₀	15.8	X	261.57070	114.31186	235.20897	12.47348	0.1151782	0.23321975	2.6139212	20	5 15.8	19.4
333989 2000 SJ ₁₉₄	17.3	X	55.57796	18.79924	346.80686	1.70299	0.2207951	0.25865939	2.4395921	20	—	—
333990 2000 SF ₂₂₅	16.7	X	284.62474	219.34475	197.72811	14.73016	0.1162549	0.24453100	2.5326787	20	9 19.2	19.6
333991 2000 SQ ₂₅₁	17.4	X	305.69826	201.84593	164.94658	4.52642	0.2390307	0.24274773	2.5450672	20	7 25.8	19.8
333992 2000 SN ₂₆₂	17.5	X	299.67156	237.96105	141.15841	4.17954	0.2751987	0.24285705	2.5443035	20	7 26.4	20.0
333993 2000 SO ₂₆₄	16.2	X	92.01256	294.37504	30.45927	5.89403	0.1462668	0.25846172	2.4408358			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334001 2000 TR ₅₀	16.5	X	243.30502	328.99009	78.08802	7.45829	0.3124227	0.23589146	2.5941470	20	6 17.9	20.9
334002 2000 UO ₁₄	16.8	X	264.28362	152.19430	245.49566	4.92209	0.2459997	0.23783857	2.5799692	20	7 4.0	20.4
334003 2000 UL ₁₇	17.5	X	266.67729	251.02149	145.16710	4.47558	0.2581616	0.23805675	2.5783926	20	7 3.4	21.1
334004 2000 UM ₃₈	17.5	X	288.00608	191.40992	218.58947	5.19646	0.2712018	0.24242199	2.5473466	20	8 18.9	20.5
334005 2000 UV ₄₄	16.5	X	240.06885	2.17085	48.90294	5.33018	0.2567328	0.23486755	2.6016810	20	6 25.3	20.7
334006 2000 UZ ₅₁	16.8	X	248.98796	201.64895	227.42888	12.22501	0.2936974	0.23733913	2.5835873	20	7 19.7	21.1
334007 2000 UB ₅₇	17.3	X	320.16806	34.26194	14.25072	5.29766	0.2183479	0.24726956	2.5139441	20	11 10.8	19.1
334008 2000 UP ₆₆	17.2	X	266.82080	146.15973	265.73312	3.13089	0.2478717	0.23955275	2.5676467	20	7 26.1	20.7
334009 2000 UK ₇₁	16.1	X	283.38779	132.41752	251.64742	5.12887	0.2244663	0.23902079	2.5714550	20	7 13.9	19.2
334010 2000 UV ₈₁	16.8	X	275.52614	347.92516	41.28025	6.09191	0.2637222	0.23989541	2.5652011	20	7 5.0	20.2
334011 2000 UL ₉₀	16.2	X	305.43843	357.86358	33.46979	7.83862	0.2141664	0.24223021	2.5486910	20	9 11.7	18.5
334012 2000 VF ₁₂	16.5	X	229.27652	35.34622	59.35312	6.12666	0.3695444	0.23698613	2.5861523	20	8 2.2	21.1
334013 2000 VL ₁₉	17.3	X	4.54055	234.44354	205.14037	1.72100	0.1743781	0.25648248	2.4533768	20	—	—
334014 2000 VD ₄₄	16.3	X	125.68869	131.92329	232.57131	11.48609	0.1474411	0.21492296	2.7602442	20	1 15.8	20.4
334015 2000 VV ₄₅	16.9	X	280.27753	159.04527	234.04998	1.72793	0.2361502	0.23917123	2.5703766	20	7 20.6	19.9
334016 2000 VC ₅₂	17.1	X	254.62686	150.74087	270.42162	4.25744	0.3046846	0.23766182	2.5812482	20	7 16.8	21.1
334017 2000 WP ₅	16.9	X	280.63721	78.66766	325.89498	5.04864	0.2998526	0.23961348	2.5672129	20	7 27.8	20.1
334018 2000 WB ₂₀	15.8	X	314.73507	76.65669	251.13615	11.89456	0.1950570	0.23456259	2.6039354	20	6 20.7	18.4
334019 2000 WV ₂₀	16.8	X	286.11673	177.81952	217.01445	8.23813	0.1601500	0.23929368	2.5694996	20	8 11.3	19.9
334020 2000 WL ₄₅	16.5	X	289.73746	169.87120	206.54768	6.96138	0.1511039	0.23784357	2.5799331	20	7 24.2	19.7
334021 2000 WZ ₆₂	16.6	X	258.50954	120.39438	298.41188	2.51959	0.2820647	0.23753165	2.5821912	20	7 21.2	20.1
334022 2000 WK ₉₄	16.8	X	258.96967	329.46511	72.41239	5.98081	0.2562389	0.23559461	2.5963255	20	7 2.7	20.5
334023 2000 WV ₁₁₅	16.8	X	223.23370	165.81441	270.15415	8.72803	0.2190642	0.23310044	2.6148131	20	7 13.8	21.0
334024 2000 WD ₁₃₇	16.2	X	247.58886	193.97165	205.03897	13.76598	0.2483897	0.23439416	2.6051827	20	6 17.4	20.5
334025 2000 WV ₁₉₅	16.5	X	203.93470	163.67398	260.62941	12.76833	0.2319360	0.22894608	2.6463498	20	6 12.4	20.9
334026 2000 XC ₁	17.1	X	274.66122	233.28254	150.24074	17.42875	0.3200732	0.23790485	2.5794900	20	6 19.0	21.2
334027 2000 XY ₁₇	15.7	X	153.79474	192.02561	302.12796	12.39434	0.0838187	0.23221817	2.6214319	20	7 25.6	19.5
334028 2000 XT ₃₇	17.4	X	115.77065	93.94276	305.72030	18.35163	0.1154806	0.41505417	1.7799161	20	1 11.9	18.5
334029 2000 XA ₃₉	16.0	X	312.89625	71.33242	303.29318	26.70994	0.2996193	0.24070220	2.5594959	20	8 7.9	18.2
334030 2000 XA ₄₇	16.4	X	56.35875	132.96446	339.84978	26.03276	0.2362808	0.26409817	2.4059825	20	3 4.0	18.2
334031 2000 YB ₂₈	17.0	X	289.95096	239.28798	169.73908	12.55126	0.3286928	0.24164711	2.5527894	20	8 10.3	19.8
334032 2000 YL ₁₀₈	15.8	X	162.80428	29.74522	95.25048	12.31731	0.1274989	0.22797117	2.6538891	20	7 24.8	20.0
334033 2000 YL ₁₁₃	16.6	X	186.92559	151.31841	303.05950	12.86725	0.2145932	0.22766320	2.6562818	20	7 7.5	21.2
334034 2000 YE ₁₄₀	15.9	X	302.73714	78.30465	20.09673	17.97917	0.2895133	0.24351116	2.5397451	20	12 6.3	18.0
334035 2000 AY ₂₂	15.5	X	255.29753	119.72071	260.55789	13.45917	0.1354543	0.22902307	2.6457566	20	6 15.4	19.2
334036 2001 AK ₃₃	15.5	X	280.63781	85.01528	305.18081	11.98099	0.1924896	0.23453889	2.6041109	20	7 24.9	18.6
334037 2001 BM ₇₆	16.2	X	125.89875	171.24109	288.04956	11.77981	0.1308356	0.21773514	2.7364259	20	5 10.9	20.6
334038 2001 CK ₂₀	16.4	X	277.43819	71.71867	350.75446	11.81890	0.3782685	0.23740148	2.5831350	20	8 7.3	19.9
334039 2001 CA ₄₆	16.3	X	156.05484	62.56140	128.31395	23.60998	0.2187027	0.28041331	2.3117292	20	10 22.7	20.7
334040 2001 DT ₂₅	16.2	X	144.90426	328.82661	143.10818	16.38456	0.1458728	0.22077231	2.7112713	20	6 21.1	20.7
334041 2001 DG ₄₁	16.5	X	190.24866	62.25235	169.28050	23.70553	0.2555374	0.28952637	2.2629622	20	12 30.6	20.5
334042 2001 EC ₁₈	18.3	X	284.26337	274.86562	347.43765	16.35052	0.2066660	0.46224695	1.6566090	20	1 14.9	20.6
334043 2001 FB ₂₄	17.2	X	151.01694	71.72740	158.45925	8.30901	0.2211305	0.28339844	2.2954671	20	11 28.4	21.1
334044 2001 FS ₁₁₆	14.8	X	222.01729	269.06224	186.85834	26.95995	0.4187177	0.23242734	2.6198590	20	7 21.1	20.2
334045 2001 KX ₁₇	17.9	X	106.73368	71.65687	184.29586	5.84733	0.1467408	0.27701189	2.3306145	20	11 19.8	21.4
334046 2001 KY ₅₀	17.4	X	137.15317	53.61654	192.82843	2.53947	0.1802834	0.27979172	2.3151518	20	12 5.7	21.2
334047 2001 LR ₁	15.5	X	195.22119	229.37456	90.19402	23.15352	0.1670888	0.19147816	2.9811916	20	2 7.3	20.7
334048 2001 LT ₁₆	15.9	X	159.19392	85.30112	258.60031	8.14928	0.2254352	0.23659461	2.5890046	20	1 29.2	20.3
334049 2001 MX ₉	15.6	X	238.68873	315.11150	314.02093	10.60283	0.1453168	0.18849498	3.0125633	20	1 16.3	20.4
334050 2001 NM ₁	14.9	X	97.83077	99.32388	270.84153	23.53091	0.3181102	0.17536354	3.1611360	20	1 17.6	19.6
334051 2001 NA ₁₇	17.4	X	65.07528	275.40949	29.83031	4.72412	0.1582790	0.27111395	2.3642940	20	12 8.3	20.7
334052 2001 OM ₄	17.5	X	16.00579	11.16761	343.28158	7.73259	0.2586048	0.26792533	2.3830155	20	12 29.4	20.5
334053 2001 OY ₁₁	15.5	X	114.86538	104.64515	241.97341	23.87958	0.2168398	0.17380325	3.1800269	20	—	—
334054 2001 OY ₁₅	16.2	X	21.14000	278.70748	77.31688	7.57812	0.1267237	0.27003604	2.3705815	20	12 17.4	18.8
334055 2001 OK ₂₁	16.9	X	9.12970	9.15490	314.89907	7.13271	0.3335519	0.26286879	2.4134781	20	11 15.7	19.5
334056 2001 OU ₂₉	15.7	X	111.51984	143.62120	242.93044	26.79789	0.1728127	0.17773487	3.1329560	20	1 27.1	20.8
334057 2001 OR ₄₇	16.6	X	22.46920	34.51552	293.92220	7.21347	0.3065595	0.26590669	2.3950608	20	12 9.1	19.6
334058 2001 OH ₅₉	16.3	X	50.76911	303.94056	285.78199	13.97460	0.1379292	0.26060534	2.4274326	20	8 2.0	19.2
334059 2001 OB ₇₅	17.9	X	81.43937	0.64746	312.45096	22.90238	0.1037827	0.37787382	1.8948355	20	—	—
334060 2001 OR ₇₆	16.9	X	55.15940	347.74129	358.68103	10.02054	0.2172107	0.27225219	2.3576996	20	—	—
334061 2001 OU ₉₁	15.3	X	97.39463	136.17243	247.74663	15.78236	0.2495298	0.17694337	3.1422918	20	1 24.0	20.0
334062 2001 OS ₁₁₀	15.4	X	178.47184	297.96443	0.46950	22.36422	0.0988012	0.17861581	3.1226462	20	—	—
334063 2001 PQ ₂	17.5	X	27.47463	353.58530	332.59964	5.01349	0.2621342	0.26662512	2.3907565	20	12 5.4	20.6
334064 2001 PD ₁₁	17.4	X	52.78605	334.56533	8.29005	2.71652	0.2451856	0.27223432	2.3578027	20	—	—
334065 2001 PN ₁₂	15.4	X	138.13662	208.93707	113.30808	11.49918	0.2263252	0.17513768	3.1638532	20	—	—
334066 2001 PO ₁₆	15.1	X	200.91458	353.97965	267.98373	16.60416	0.1044443	0.17810632	3.1285985	20	—	—
334067 2001 PW ₁₆	17.1	X	114.83706	71.72635	176.24083	21.86006	0.2306763	0.27125455	2.3634769	20	11 21.0	21.5
334068 2001 PP ₂₈	15.5	X	135.32749	184.12866	160.33787	17.47826	0.1756783	0.17915176	3.1164153	20	1 12.4	20.5
334069 2001 PN ₃₃	15.3	X	171.62188	284.17731	0.87008	21.13244	0.2576006	0.17846835	3.1243660	20	—	—
334070 2001 PG ₄₀	15.2	X	93.72126	32.44691	315.37841	26.69787	0.1693508	0.17092706	3.2156011	20	—	—
334071 2001 PO ₄₈	17.0	X	17.67047	319.78518	61.88496	6.51930	0.2393439	0.27077029	2.3662940	20	—	—
334072 2001 PL ₅₁	17.6	X	2.73154	42.38536	326.24700	9.12789	0.2281037	0.26690255	2.3890995	20	12 23.9	20.3
334073 2001 PL ₅₉	15.8	X	15.97742	72.00272	4.94630	22.67539	0.4052875	0.27168792	2.3609629	20	—	—
334074 20												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334081 2001 QJ ₅₉	16.4	X	21.06749	318.67606	347.60661	13.32298	0.2202641	0.26069793	2.4268578	20	10 16.7	19.3
334082 2001 QA ₉₀	16.5	X	110.75804	94.51666	297.78717	17.60840	0.2153974	0.22920755	2.6443368	20	2 7.9	20.3
334083 2001 QB ₉₁	17.2	X	4.03755	65.29774	195.49792	22.02569	0.0697476	0.35813375	1.9638390	20	6 26.1	19.5
334084 2001 QO ₁₁₀	15.6	X	116.73178	275.24820	132.41027	9.69704	0.2165574	0.18034148	3.1026942	20	3 15.6	20.4
334085 2001 QO ₁₁₂	15.5	X	141.30689	83.27295	278.86564	9.57587	0.1465752	0.18131518	3.0915760	20	2 2.8	20.3
334086 2001 QM ₁₂₂	15.3	X	159.22005	335.71361	347.03274	11.13285	0.0599798	0.18017435	3.1046125	20	1 2.3	20.0
334087 2001 QD ₁₂₃	15.6	X	134.07271	33.79242	338.70016	12.67973	0.1711817	0.18231277	3.0802880	20	2 14.3	20.3
334088 2001 QW ₁₂₃	15.6	X	84.15712	255.38539	127.94690	12.22385	0.2139147	0.17564773	3.1577254	20	1 6.6	19.7
334089 2001 QT ₁₂₈	15.7	X	134.02688	174.34378	170.48358	17.91322	0.2011232	0.17920436	3.1158055	20	1 13.6	20.8
334090 2001 QS ₁₃₂	15.7	X	87.81309	95.26653	323.49736	15.19199	0.2792923	0.17762419	3.1342573	20	2 29.4	20.2
334091 2001 QK ₁₄₃	16.3	X	92.05621	234.39833	167.33952	12.06350	0.2312006	0.17702095	3.1413737	20	2 8.9	20.8
334092 2001 QT ₁₄₃	17.8	X	5.90591	35.53878	327.59447	1.89035	0.2055974	0.26557344	2.3970640	20	12 16.3	20.4
334093 2001 QP ₁₆₀	17.6	X	42.49391	34.32961	300.46840	1.42760	0.2319491	0.26919750	2.3755018	20	12 30.5	20.9
334094 2001 QU ₁₇₁	17.1	X	28.78679	99.46673	263.22485	5.24680	0.1637071	0.27028823	2.3691067	20	—	—
334095 2001 QS ₁₉₁	15.7	X	158.79998	102.76947	196.06968	26.44609	0.2129853	0.22879303	2.6475298	20	—	—
334096 2001 QR ₁₉₃	17.1	X	289.24174	10.49888	319.00363	17.76828	0.0875093	0.35444649	1.9774352	20	5 25.7	19.5
334097 2001 QH ₂₀₂	17.2	X	45.23917	78.16989	167.40130	22.64524	0.0724075	0.36309919	1.9458941	20	8 19.9	19.0
334098 2001 QR ₂₀₂	15.5	X	197.15401	175.30848	131.13307	16.58642	0.1312552	0.18463330	3.0544242	20	1 21.7	20.5
334099 2001 QQ ₂₀₃	17.1	X	52.78543	265.22108	80.82979	3.58989	0.2067857	0.27279555	2.3545678	20	—	—
334100 2001 QH ₂₀₆	16.9	X	11.59483	39.93661	344.33780	6.92924	0.1187310	0.26998836	2.3708606	20	—	—
334101 2001 QC ₂₀₈	15.5	X	110.55046	349.15902	345.00505	19.81801	0.1811135	0.17384737	3.1794888	20	—	—
334102 2001 QW ₂₀₉	16.2	X	150.60735	34.28195	289.59451	6.82043	0.2095872	0.17888404	3.1195239	20	1 6.7	21.2
334103 2001 QY ₂₁₆	17.4	X	39.43637	327.68940	10.99769	2.28272	0.2204689	0.26820631	2.3813509	20	12 30.8	20.7
334104 2001 QF ₂₂₆	15.3	X	110.57440	86.78961	299.36894	8.49179	0.1185188	0.17813216	3.1282959	20	1 28.6	19.8
334105 2001 QJ ₂₂₇	16.0	X	90.55369	75.64278	319.376134	14.84277	0.2855690	0.17545879	3.1599918	20	2 8.9	20.4
334106 2001 QS ₂₂₇	17.1	X	42.43392	49.63132	298.15699	9.15435	0.2486068	0.26956112	2.3733651	20	—	—
334107 2001 QZ ₂₃₆	15.6	X	112.50704	46.84139	350.69877	11.16305	0.1089792	0.17960706	3.1111464	20	2 15.1	20.1
334108 2001 QH ₂₃₉	16.8	X	59.20068	178.92057	145.20022	7.63880	0.1291349	0.27002669	2.3706362	20	12 23.3	20.2
334109 2001 QE ₂₄₈	15.9	X	110.64589	4.06954	15.89424	4.44754	0.2696961	0.17517670	3.1633833	20	2 11.6	20.7
334110 2001 QC ₂₅₃	17.1	X	14.75173	0.11703	15.74834	4.23208	0.2268039	0.26840286	2.3801882	20	—	—
334111 2001 QH ₂₅₈	15.2	X	127.70064	129.20232	241.36863	8.94874	0.2273133	0.17885966	3.1198074	20	2 6.9	20.3
334112 2001 QD ₂₆₉	15.4	X	109.42313	52.54117	327.96873	21.16210	0.2894018	0.17665800	3.1456749	20	2 12.9	20.1
334113 2001 QT ₂₇₂	17.5	X	12.66097	218.39462	132.13794	10.98878	0.2277909	0.26627319	2.3928626	20	12 14.6	20.4
334114 2001 QG ₂₈₀	17.0	X	37.10975	224.28276	123.66019	6.42964	0.2553137	0.26866343	2.3786489	20	—	—
334115 2001 QA ₂₈₇	16.8	X	22.49127	88.20165	289.71265	4.13693	0.2534248	0.26907882	2.3762003	20	—	—
334116 2001 QT ₂₉₃	17.5	X	16.18867	284.15077	94.33531	3.77872	0.1973241	0.26845332	2.3798899	20	—	—
334117 2001 QK ₂₉₅	16.4	X	353.94786	5.19983	6.26371	23.87078	0.2074268	0.26247231	2.4159080	20	11 28.2	19.4
334118 2001 QN ₃₂₈	17.3	X	217.07775	275.85042	84.78328	3.89485	0.2217720	0.24379451	2.5377769	20	4 7.7	21.6
334119 2001 QL ₃₂₉	16.7	X	14.80776	27.08552	335.68860	6.16314	0.1290863	0.26805427	2.3822512	20	12 17.5	19.5
334120 2001 QT ₃₃₄	16.7	X	17.04807	241.56993	103.15747	7.94324	0.1559243	0.26411319	2.4058912	20	11 30.7	19.5
334121 2001 RR ₂	17.1	X	358.18947	173.12753	206.10422	7.42885	0.2274866	0.26604166	2.3942507	20	12 29.6	19.7
334122 2001 RH ₃	16.7	X	342.72920	87.33701	299.16598	9.52677	0.1580501	0.26517390	2.3994711	20	11 30.4	19.1
334123 2001 RV ₃	17.4	X	23.54386	93.75194	273.24802	0.93591	0.2361833	0.26876605	2.3780434	20	—	—
334124 2001 RJ ₆	15.2	X	86.22235	64.25215	303.88067	25.25875	0.2370123	0.17115781	3.2127103	20	—	—
334125 2001 RE ₁₅	15.4	X	115.50104	161.38967	217.62708	12.77359	0.3463506	0.17733533	3.1374453	20	2 16.9	20.7
334126 2001 RS ₂₇	15.9	X	163.96575	307.52842	315.69810	15.91688	0.2148324	0.17656237	3.1468107	20	—	—
334127 2001 RD ₃₂	15.5	X	109.33823	78.93104	313.31695	15.10458	0.2878356	0.17938281	3.1137387	20	2 21.5	20.3
334128 2001 RY ₃₅	15.8	X	145.48927	22.45424	310.90961	5.2394	0.1499649	0.17858710	3.1229808	20	1 8.2	20.6
334129 2001 RR ₃₆	16.1	X	88.15956	50.95832	336.73579	12.75346	0.2964828	0.17461592	3.1701525	20	2 1.2	20.4
334130 2001 RN ₃₉	16.7	X	199.77198	74.61789	236.30313	11.95210	0.2000684	0.23582003	2.5946708	20	1 21.4	21.3
334131 2001 RP ₃₉	18.3	X	201.06034	96.32141	318.08965	15.61216	0.192112	0.35248549	1.9847625	20	5 30.5	21.4
334132 2001 RQ ₃₉	15.2	X	114.98420	21.26723	329.53217	27.74428	0.1903759	0.17490013	3.1667173	20	1 9.7	20.2
334133 2001 RS ₃₉	15.8	X	170.22778	51.67001	248.89175	10.35993	0.2588269	0.17707063	3.1332762	20	—	—
334134 2001 RX ₃₉	15.8	X	106.84649	165.58834	204.25678	17.13362	0.1992945	0.17597914	3.1537596	20	1 13.2	20.6
334135 2001 RM ₄₀	17.4	X	33.44856	137.22142	226.35094	5.10043	0.2324636	0.27034235	2.3687905	20	—	—
334136 2001 RC ₄₁	15.9	X	140.20093	98.10784	256.50177	6.95109	0.2225601	0.17991151	3.1076356	20	1 31.4	21.1
334137 2001 RF ₄₁	15.7	X	156.65303	20.08957	304.79187	10.63280	0.0810361	0.17803469	3.1294375	20	1 3.7	20.4
334138 2001 RE ₅₀	17.3	X	16.35419	82.37016	279.78832	5.39073	0.2077680	0.26691729	2.3890115	20	12 31.1	20.1
334139 2001 RN ₅₆	17.8	X	343.31893	5.10874	47.06599	1.51113	0.3238385	0.26561526	2.3968124	20	—	—
334140 2001 RM ₈₅	17.8	X	18.35689	59.73103	310.23894	1.53384	0.1892671	0.26738707	2.3862125	20	—	—
334141 2001 RS ₈₉	17.4	X	340.22342	336.25705	38.30507	3.10141	0.2232415	0.26204448	2.4185368	20	11 14.5	19.2
334142 2001 RP ₉₁	16.1	X	138.21469	190.79500	167.21208	16.13241	0.2521790	0.17927676	3.1149666	20	2 5.5	21.3
334143 2001 RB ₉₇	18.0	X	29.67081	143.48177	175.42862	2.42530	0.2063306	0.26525923	2.3989565	20	11 21.1	20.8
334144 2001 RJ ₁₀₀	16.8	X	332.36849	327.41814	46.61877	1.86194	0.2095157	0.26210665	2.4181544	20	10 24.1	18.4
334145 2001 RM ₁₁₇	16.6	X	141.61028	322.21353	34.32700	0.56356	0.2736737	0.18046028	3.1013323	20	2 11.1	21.6
334146 2001 RF ₁₂₂	17.5	X	358.53718	355.52952	15.10518	2.65744	0.2012085	0.26488795	2.4011977	20	12 13.6	19.9
334147 2001 RA ₁₂₄	17.5	X	4.90119	14.90899	11.82990	2.45170	0.2217557	0.26713763	2.3876977	20	—	—
334148 2001 RM ₁₂₅	15.9	X	97.42690	354.24211	33.43788	5.51825	0.1857204	0.17638748	3.1488904	20	1 26.5	20.3
334149 2001 RH ₁₂₈	16.9	X	310.03575	296.82428	93.30676	3.38146	0.2271390	0.25918927	2.4362660	20	9 21.6	18.6
334150 2001 RA ₁₂₉	16.7	X	10.28225	236.26406	153.24672	7.07002	0.1176296	0.26895337	2.3769391	20	—	—
334151 2001 RX ₁₃₇	16.0	X	100.13497	204.00962	155.49490	3.63520	0.1262227	0.17431695	3.1737762	20	—	—
334152 2001 RE ₁₄₁	15.2	X	129.06854	335.90216	21.62800	17.20202	0.2213154	0.17736504	3.1373095	20	2 2.7	20.4
334153 2001 RE ₁₄₇	16.9	X	342.67518	94.75093	295.33855	13.19764	0.1855445	0.26501429	2.4004345	20	12 10.5	19.2
334154 2001 RO ₁₅₀	15.6	X	115.75610</									

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
334161	2001	SD ₂₉	17.1	X	312.16748	247.25633	146.38100	1.58310	0.1926447	0.25922763	2.4360257	20	10 4.8	19.0
334162	2001	SR ₃₄	17.1	X	2.41407	341.01650	22.64078	4.44956	0.1904465	0.26356636	2.4092178	20	12 7.6	19.5
334163	2001	SP ₇₈	17.8	X	226.73074	14.87265	359.09478	12.78375	0.1567102	0.24592106	2.5231258	20	4 29.7	22.0
334164	2001	SG ₈₉	15.7	X	113.89637	209.16571	193.02945	8.73694	0.0993294	0.18139530	3.0906657	20	2 15.8	20.2
334165	2001	SL ₉₉	18.0	X	359.26074	150.75842	252.53352	0.96131	0.1654594	0.26825952	2.3810360	20	—	—
334166	2001	SG ₁₀₄	17.1	X	22.40883	84.34354	262.16638	5.03850	0.1343493	0.26554856	2.3972137	20	12 6.4	20.0
334167	2001	SP ₁₁₉	17.3	X	52.40429	351.53546	310.75310	4.75442	0.2283368	0.26629876	2.3927094	20	11 28.0	20.7
334168	2001	ST ₁₁₉	15.3	X	116.36272	356.08819	338.15316	15.60058	0.0828089	0.17242918	3.1968987	20	—	—
334169	2001	SX ₁₁₉	16.6	X	13.15203	57.80746	318.61289	6.00280	0.1170721	0.26776949	2.3839400	20	—	—
334170	2001	SQ ₁₂₂	15.4	X	159.42046	327.06260	345.24741	16.81428	0.1884612	0.17674595	3.1446313	20	1 2.2	20.8
334171	2001	SN ₁₂₃	15.7	X	163.36265	335.28638	307.67234	10.26621	0.1646684	0.17426582	3.1743970	20	—	—
334172	2001	SP ₁₂₄	15.8	X	95.05029	37.34434	340.17153	16.54372	0.2357625	0.17522599	3.1627901	20	1 21.5	20.4
334173	2001	SY ₁₂₅	17.9	X	45.77564	20.66450	304.33762	1.46778	0.1977258	0.26757900	2.3850713	20	12 17.1	21.0
334174	2001	SJ ₁₂₆	17.0	X	84.42194	338.62341	314.25822	6.44955	0.1435097	0.26877215	2.3780074	20	12 11.0	20.6
334175	2001	SN ₁₂₇	17.4	X	353.14575	136.97937	279.33726	1.49080	0.1948004	0.26874025	2.3781956	20	—	—
334176	2001	SA ₁₃₀	17.7	X	21.07498	117.32252	243.48720	1.28456	0.2066716	0.26687200	2.3892818	20	—	—
334177	2001	SC ₁₃₃	15.6	X	106.26056	51.12483	346.95901	9.34733	0.2375981	0.17737537	3.1371877	20	2 23.9	20.2
334178	2001	SO ₁₃₅	16.0	X	126.50951	5.18728	353.60460	3.01487	0.2018881	0.17720811	3.1391615	20	1 24.9	20.7
334179	2001	SO ₁₄₂	15.5	X	132.62092	83.90884	259.20899	3.51595	0.1619051	0.17636554	3.1491516	20	1 7.7	20.3
334180	2001	SV ₁₅₆	15.6	X	116.43152	167.69848	194.84438	17.25502	0.2045279	0.17609241	3.1524070	20	1 15.9	20.6
334181	2001	SD ₁₅₇	16.4	X	284.73904	133.81251	325.00656	6.30944	0.0825789	0.26514636	2.3996373	20	11 27.7	19.1
334182	2001	SE ₁₆₂	17.4	X	0.64217	53.28789	339.56680	4.22788	0.2356045	0.26564122	2.3966562	20	—	—
334183	2001	SR ₁₆₂	16.9	X	15.57576	329.13540	5.87121	6.18511	0.1734183	0.26211769	2.4180865	20	11 14.1	19.7
334184	2001	SV ₁₆₄	17.4	X	300.02706	50.55014	22.33806	21.08936	0.1438703	0.36594299	1.9357997	20	12 26.6	19.2
334185	2001	SS ₁₆₈	17.3	X	143.00665	190.66478	179.35275	4.80716	0.1934026	0.28387760	2.2928834	20	2 8.5	20.6
334186	2001	SK ₁₇₀	16.7	X	85.23015	326.79856	308.60930	6.84896	0.1012586	0.26594939	2.3948044	20	11 13.8	20.2
334187	2001	SH ₁₇₈	17.0	X	353.26837	210.32104	161.22584	5.67077	0.2307288	0.26203762	2.4185791	20	12 10.4	19.3
334188	2001	SP ₁₉₅	16.1	X	82.88400	207.43097	172.66192	9.22273	0.0868167	0.17372057	3.1810358	20	—	—
334189	2001	SU ₁₉₇	17.7	X	25.85052	310.98349	25.46856	1.41882	0.2330797	0.26575110	2.3959955	20	12 12.9	20.7
334190	2001	SO ₁₉₉	14.7	X	298.06199	208.42929	1.81587	19.07791	0.1816866	0.18191928	3.0847281	20	1 4.7	19.6
334191	2001	SL ₂₀₃	17.2	X	26.81253	225.28567	147.10762	4.15661	0.2319398	0.26886908	2.3774358	20	—	—
334192	2001	SW ₂₀₅	16.5	X	145.91283	302.27231	47.21722	3.02945	0.3285198	0.18052813	3.1005552	20	2 9.8	22.0
334193	2001	SD ₂₀₆	15.8	X	60.19234	65.90520	357.46082	6.36161	0.0901457	0.17518074	3.1633347	20	1 6.5	19.9
334194	2001	SG ₂₀₈	16.4	X	63.19901	60.80671	6.37730	14.81365	0.1145179	0.22819262	2.6521718	20	1 8.6	19.8
334195	2001	SM ₂₂₁	17.4	X	150.98364	256.40909	180.57519	9.26608	0.1942460	0.24053982	2.5606176	20	5 16.5	21.7
334196	2001	SE ₂₃₀	15.9	X	71.08906	19.39172	19.48387	5.74857	0.1593877	0.17157714	3.2074737	20	—	—
334197	2001	SV ₂₄₀	16.5	X	144.63282	266.74378	177.69516	2.19743	0.1754206	0.17714170	3.1399459	20	1 22.5	21.3
334198	2001	SW ₂₄₀	17.5	X	318.51327	148.38448	180.69296	12.65898	0.2148859	0.25366840	2.4714878	20	6 28.3	20.1
334199	2001	SO ₂₅₅	16.0	X	96.82625	200.45192	180.96752	4.97986	0.1360018	0.17271931	3.1933177	20	1 9.6	20.5
334200	2001	SE ₂₆₅	17.4	X	358.96635	25.03203	359.76533	1.94129	0.2161049	0.26402536	2.4064248	20	—	—
334201	2001	SZ ₂₈₉	15.3	X	140.93286	46.40338	307.81710	15.60318	0.2337917	0.17913440	3.1166166	20	2 2.9	20.3
334202	2001	SS ₂₉₁	16.5	X	61.05994	185.09122	151.23010	12.25450	0.2676722	0.26850650	2.3795756	20	—	—
334203	2001	SO ₂₉₈	16.5	X	141.89186	42.09695	311.68926	3.89674	0.1422594	0.17925332	3.1152381	20	1 27.1	21.3
334204	2001	SZ ₂₉₈	17.7	X	198.82892	185.15850	222.06846	2.54642	0.2399264	0.24462501	2.5320298	20	5 18.0	22.1
334205	2001	SL ₂₉₉	17.3	X	297.05575	93.82842	349.52222	7.73324	0.1100623	0.26527083	2.3988866	20	11 23.7	19.9
334206	2001	SL ₃₀₄	16.2	X	97.01480	217.51589	202.08137	1.03421	0.1666814	0.17820029	3.1274985	20	2 28.4	20.6
334207	2001	SJ ₃₀₅	17.9	X	200.61005	16.20780	359.90064	12.40232	0.1995778	0.24112203	2.5564941	20	4 8.9	22.3
334208	2001	SF ₃₀₈	17.3	X	16.94774	248.24150	115.41360	3.17535	0.2018487	0.26614983	2.3936019	20	—	—
334209	2001	SZ ₃₀₈	16.3	X	99.75626	176.39141	195.76331	7.70967	0.1533321	0.17501656	3.1653128	20	1 3.9	20.7
334210	2001	SQ ₃₀₉	18.1	X	39.33396	134.41092	188.10047	2.17205	0.1774418	0.26552166	2.3973756	20	12 3.7	21.2
334211	2001	SA ₃₁₅	15.6	X	112.48933	114.72384	269.89662	9.67017	0.1248381	0.17735524	3.1374251	20	1 28.0	20.2
334212	2001	SF ₃₁₉	17.8	X	7.28876	296.80554	48.95534	2.39648	0.1926723	0.26329262	2.4108874	20	11 21.1	20.2
334213	2001	SC ₃₂₄	17.6	X	346.82590	48.90020	143.11864	2.18635	0.1777434	0.26450589	2.4035093	20	12 20.8	19.8
334214	2001	SV ₃₂₆	15.6	X	182.26835	121.06297	373.07035	16.13474	0.0440813	0.17719043	3.1393703	20	—	—
334215	2001	SO ₃₃₀	17.4	X	325.35662	220.59288	176.20989	6.57538	0.1310359	0.26331516	2.4107498	20	11 11.8	19.7
334216	2001	SH ₃₃₉	15.3	X	87.76651	95.64529	278.28370	14.85016	0.1580585	0.17337045	3.1853170	20	—	—
334217	2001	SM ₃₅₀	17.2	X	356.40652	338.53848	22.22040	2.19424	0.2159653	0.26028079	2.4294500	20	11 26.1	19.5
334218	2001	SW ₃₅₁	15.7	X	113.42691	192.78792	151.43384	13.51685	0.2760263	0.17290648	3.1910127	20	1 3.6	20.7
334219	2001	SS ₃₅₄	17.7	X	33.07244	293.69665	46.38221	7.79437	0.2387720	0.26668988	2.3903695	20	12 27.3	21.0
334220	2001	TV ₁₁	17.1	X	184.22424	165.09171	197.48313	15.67484	0.1781084	0.23675499	2.5878352	20	3 10.2	21.6
334221	2001	TU ₂₄	13.0	X	157.11802	181.45369	255.53701	7.21791	0.0981234	0.08231358	5.2338556	20	5 17.4	20.3
334222	2001	TX ₂₈	16.5	X	14.29654	91.08088	282.26311	3.90703	0.2414903	0.26502699	2.4003578	20	—	—
334223	2001	TP ₃₀	17.0	X	354.80852	250.67182	143.11388	4.89055	0.1757551	0.26423727	2.4051380	20	—	—
334224	2001	TL ₅₃	17.2	X	338.96128	306.56903	52.96914	3.87849	0.2084657	0.25950466	2.4342916	20	10 16.7	19.0
334225	2001	TT ₅₃	17.1	X	326.67793	316.26766	97.51825	3.58285	0.1956326	0.26266054	2.4147536	20	12 12.9	18.9
334226	2001	TN ₅₄	17.5	X	195.75719	215.14138	198.68994	21.41259	0.1044330	0.35135301	1.9890251	20	5 27.5	20.4
334227	2001	TM ₅₇	15.9	X	103.85092	164.67667	204.96119	6.71220	0.2182521	0.17386501	3.1792737	20	1 14.4	20.5
334228	2001	TX ₅₇	16.8	X	51.37277	93.48674	209.35695	8.26359	0.2389575	0.26447529	2.4036947	20	11 30.1	20.3
334229	2001	TJ ₆₀	15.6	X	106.63102	190.99751	190.67663	4.64626	0.1214354	0.17428307	3.1741875	20	1 19.2	20.2
334230	2001	TW ₆₀	17.6	X	346.69823	24.22243								

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334241 2001 TU ₉₉	15.6	X	119.58428	28.94610	295.24948	3.48280	0.1255703	0.16929200	3.2362725	20	—	—
334242 2001 TA ₁₀₃	15.9	X	108.71368	115.51077	258.35366	12.15808	0.3066807	0.17403513	3.1772016	20	2 1.5	20.9
334243 2001 TR ₁₀₉	15.6	X	50.17423	200.60039	224.36544	12.01599	0.1212136	0.17010361	3.2259702	20	—	—
334244 2001 TX ₁₁₇	15.6	X	64.07229	114.34174	304.35681	17.10610	0.2153151	0.17233057	3.1981182	20	1 21.7	19.4
334245 2001 TZ ₁₂₂	16.7	X	204.15304	63.19723	241.60961	7.84633	0.2513079	0.23440248	2.6051211	20	1 19.8	21.5
334246 2001 TN ₁₂₆	16.1	X	154.65628	301.99904	13.11022	9.23064	0.0617171	0.17385135	3.1794403	20	—	—
334247 2001 TT ₁₄₁	16.0	X	96.64407	243.91348	126.80822	4.09688	0.2108837	0.17334321	3.1856507	20	1 7.6	20.4
334248 2001 TL ₁₅₉	17.2	X	202.00199	129.43321	195.82663	1.08017	0.2102918	0.23530182	2.5984789	20	2 12.1	21.5
334249 2001 TF ₁₇₉	15.8	X	96.41147	169.65554	213.57145	26.70410	0.1385724	0.17293852	3.1906185	20	1 6.6	20.7
334250 2001 TF ₁₈₄	17.6	X	268.23197	147.61711	303.55314	1.84839	0.1374966	0.25959302	2.4337392	20	10 12.3	20.3
334251 2001 TE ₁₈₇	17.3	X	345.81805	9.23000	11.88936	1.17828	0.1992629	0.26072786	2.4266721	20	12 3.4	19.4
334252 2001 TO ₂₀₉	17.1	X	355.98252	244.62409	142.20873	11.55257	0.2686085	0.26291480	2.4131966	20	—	—
334253 2001 TT ₂₁₁	17.1	X	16.45177	255.66496	92.68222	5.95810	0.1830916	0.26396827	2.4067717	20	12 8.2	19.7
334254 2001 TK ₂₁₈	16.7	X	36.91642	260.59082	78.03722	5.63770	0.2152786	0.26487936	2.4012496	20	12 26.3	20.0
334255 2001 TO ₂₁₈	16.2	X	11.65960	256.62213	82.09354	7.15986	0.1511014	0.26031823	2.4292171	20	11 12.7	18.8
334256 2001 TS ₂₂₇	16.8	X	1.01519	289.94792	106.78700	5.37069	0.3201481	0.26642056	2.3919801	20	—	—
334257 2001 TA ₂₃₀	13.5	X	209.97607	167.14626	201.02298	13.88554	0.0609544	0.08310793	5.2004519	20	4 22.6	20.6
334258 2001 TK ₂₃₅	16.7	X	355.46873	242.34222	117.31434	6.85282	0.1335727	0.26069460	2.4268784	20	11 13.6	19.3
334259 2001 TC ₂₄₅	16.1	X	131.91055	357.36245	349.61329	4.14380	0.1548789	0.17665506	3.1457098	20	1 11.6	20.9
334260 2001 TJ ₂₅₄	13.5	X	246.50154	194.23715	136.56734	7.83230	0.1176291	0.08375425	5.1736631	20	4 14.7	20.7
334261 2001 TK ₂₆₀	17.7	X	164.64607	339.73158	116.45472	3.19325	0.1159537	0.24544035	2.5264192	20	6 18.8	21.6
334262 2001 TF ₂₆₁	17.4	X	219.84238	302.03178	143.84097	4.51323	0.1799290	0.25087374	2.4898083	20	7 28.3	21.3
334263 2001 UD	15.6	X	108.81375	162.64952	206.13131	15.96071	0.2291603	0.17470304	3.1690986	20	1 17.9	20.6
334264 2001 UH ₆	17.2	X	81.80711	237.12154	200.12130	6.53693	0.1733168	0.22804258	2.6533350	20	2 23.5	20.4
334265 2001 UZ ₈	17.8	X	2.81341	245.78216	145.05237	2.46629	0.2077512	0.26531746	2.3986055	20	—	—
334266 2001 UZ ₂₅	16.7	X	89.92883	32.29690	314.83990	6.44936	0.1140861	0.27301220	2.3533220	20	—	—
334267 2001 UY ₂₇	16.9	X	349.28998	161.11385	193.21952	6.41568	0.1343066	0.25992687	2.4316549	20	10 23.5	19.2
334268 2001 UE ₃₈	17.6	X	94.19935	182.65143	216.47888	5.36450	0.1594528	0.28015283	2.3131620	20	1 10.6	20.1
334269 2001 UC ₄₀	17.4	X	16.69157	258.97419	99.93448	2.23428	0.2033739	0.26439128	2.4042039	20	12 25.8	20.3
334270 2001 UD ₄₀	17.5	X	344.87292	229.52622	127.80764	2.06322	0.2082533	0.25953788	2.4340839	20	10 27.4	19.4
334271 2001 UA ₄₂	16.9	X	346.60469	356.03399	53.25119	3.60530	0.1813440	0.26470080	2.4023294	20	—	—
334272 2001 UN ₅₈	16.1	X	116.47292	158.48011	218.55621	9.87275	0.2290314	0.17587102	3.1550520	20	2 4.3	21.1
334273 2001 UY ₆₂	15.5	X	116.33139	325.07232	25.34211	15.45287	0.2153329	0.17293817	3.1906229	20	1 8.5	20.5
334274 2001 UZ ₇₃	17.3	X	356.88077	237.15329	133.78991	3.43392	0.2295423	0.26229191	2.4170156	20	12 15.6	19.7
334275 2001 UY ₇₄	17.0	X	350.66264	236.55149	129.35285	2.14747	0.2005348	0.26042966	2.4285241	20	11 21.2	19.1
334276 2001 UY ₈₉	16.3	X	90.01977	151.96610	218.49976	4.19286	0.1570262	0.17226773	3.1988958	20	—	—
334277 2001 UY ₈₉	17.6	X	18.76158	107.89834	210.52904	5.98201	0.1384672	0.26091862	2.4254891	20	10 22.6	20.2
334278 2001 UU ₉₉	16.9	X	18.77755	137.34537	208.43702	4.30850	0.2166179	0.26255214	2.4154183	20	12 12.9	19.8
334279 2001 UQ ₁₁₆	17.1	X	322.08221	253.43004	123.02007	2.34427	0.1993606	0.25683961	2.4511020	20	9 30.5	18.8
334280 2001 UJ ₁₃₃	16.4	X	76.54316	189.66062	223.41116	2.39919	0.1865020	0.17322322	3.1871217	20	1 28.1	20.5
334281 2001 UJ ₁₃₃	16.2	X	68.04880	212.58269	217.43784	4.08754	0.1704372	0.17353922	3.1832515	20	2 2.6	20.2
334282 2001 UR ₁₃₄	17.6	X	4.85352	300.67613	34.95829	2.67353	0.2150110	0.25966498	2.4332896	20	11 4.8	19.9
334283 2001 UM ₁₄₈	17.7	X	342.33043	303.48648	81.56104	3.81638	0.2141173	0.26102797	2.4248117	20	12 4.7	19.7
334284 2001 UQ ₁₆₁	16.5	X	316.05402	123.69756	237.26060	5.03238	0.1738179	0.25267333	2.4779723	20	8 18.6	18.9
334285 2001 UF ₁₆₄	16.9	X	276.08177	244.50019	189.66281	8.16982	0.1761723	0.25680233	2.4513392	20	9 24.1	19.6
334286 2001 UE ₁₇₀	17.6	X	31.77023	194.12295	247.57488	3.27451	0.1822892	0.27458939	2.3443019	20	—	—
334287 2001 UU ₁₇₀	17.1	X	346.24220	141.76030	239.48844	2.12786	0.2030107	0.26123760	2.4235143	20	12 5.5	19.2
334288 2001 UA ₁₇₉	17.6	X	348.59990	312.00416	93.70070	3.42647	0.2226239	0.26444249	2.4038935	20	—	—
334289 2001 UD ₁₇₉	16.7	X	52.50635	205.16418	215.50527	11.16558	0.1657657	0.22240921	2.6979519	20	—	—
334290 2001 UO ₁₈₄	17.5	X	61.75866	280.13186	130.76697	5.30719	0.2164497	0.27635355	2.3343144	20	—	—
334291 2001 UT ₁₉₉	17.2	X	322.89578	69.19249	354.78490	2.09324	0.1542971	0.26375456	2.4080716	20	12 17.3	19.2
334292 2001 UP ₂₀₁	16.7	X	63.58677	204.41709	215.11443	11.29667	0.1096312	0.22497713	2.6773828	20	—	—
334293 2001 UX ₂₀₂	17.3	X	270.70351	97.60036	334.04111	2.01428	0.1487814	0.25629864	2.4545498	20	9 16.3	20.2
334294 2001 UY ₂₁₉	17.3	X	329.70994	209.13569	200.52578	1.14482	0.1695678	0.26095229	2.4252805	20	12 9.9	20.2
334295 2001 UM ₂₂₀	17.0	X	279.90203	147.93161	283.89088	1.78679	0.1757896	0.25652148	2.4531281	20	9 26.8	19.7
334296 2001 UL ₂₂₁	17.3	X	355.84360	282.14155	75.93460	4.11661	0.2062918	0.25953247	2.4341177	20	11 20.2	19.4
334297 2001 UT ₂₂₃	17.3	X	252.29246	257.79950	135.52500	4.97414	0.1357178	0.25139505	2.4863651	20	6 29.9	20.8
334298 2001 VU ₂	17.2	X	278.96914	85.91219	234.08663	22.14671	0.1096602	0.34750644	2.0036759	20	4 21.4	19.4
334299 2001 VD ₈	16.2	X	81.73455	172.65282	239.98011	4.40380	0.1852260	0.17223637	3.1992841	20	2 2.9	20.4
334300 2001 VV ₁₅	16.1	X	324.22305	261.15072	177.94457	21.69599	0.2810135	0.26365869	2.4086553	20	—	—
334301 2001 VM ₅₅	16.6	X	34.26559	161.10069	258.34396	7.33868	0.1757585	0.21901235	2.7257769	20	—	—
334302 2001 VU ₅₇	16.7	X	145.34388	27.86639	29.39416	10.48441	0.1724052	0.23517285	2.5994288	20	4 14.0	20.7
334303 2001 VS ₆₃	17.5	X	2.78191	16.79242	349.20581	1.49589	0.2815712	0.26218122	2.4176958	20	12 27.4	19.9
334304 2001 VV ₆₃	17.2	X	5.75452	59.05035	303.78296	1.82388	0.2406854	0.26191930	2.4193074	20	12 20.5	19.7
334305 2001 VZ ₈₈	15.2	X	153.81720	85.80792	299.59677	11.28215	0.2304689	0.18209480	3.0827456	20	3 14.7	20.6
334306 2001 VZ ₉₀	16.7	X	342.12743	299.23506	93.80475	10.65106	0.2398366	0.26133065	2.4229390	20	12 20.7	18.5
334307 2001 VS ₁₀₆	17.3	X	353.84017	186.42296	246.65511	9.89068	0.2286786	0.21368403	2.7709031	20	—	—
334308 20												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334321 2001 WX ₆₃	17.2	X	13.73867	96.51327	240.86513	1.55853	0.1883705	0.25969421	2.4331070	20	11 18.2	19.6
334322 2001 WN ₉₅	17.9	X	330.55871	57.76287	331.67613	0.49681	0.1881432	0.25909657	2.4368471	20	11 10.8	19.7
334323 2001 WR ₉₇	17.4	X	307.81052	295.83289	101.36209	2.47932	0.1758860	0.25508243	2.4623457	20	10 1.8	19.4
334324 2001 WW ₉₉	17.5	X	312.26949	196.59330	207.78081	1.04271	0.1650427	0.25639575	2.4539300	20	10 22.6	19.5
334325 2001 WG ₁₀₂	15.8	X	148.98922	309.25781	65.85389	8.27126	0.0963145	0.17675526	3.1445209	20	2 27.9	20.7
334326 2001 XH	16.9	X	108.74241	105.88412	323.04030	24.05776	0.2487973	0.28384252	2.2930723	20	3 14.6	20.3
334327 2001 XA ₈	17.0	X	214.20551	110.63394	306.95158	16.62112	0.1124753	0.35067349	1.9915938	20	6 25.6	19.6
334328 2001 XL ₅₁	17.7	X	8.86132	191.31976	220.38106	2.76906	0.1210474	0.26607143	2.3940721	20	—	—
334329 2001 XX ₅₇	17.2	X	341.57128	266.26123	140.07021	6.80725	0.3007802	0.26139828	2.4225211	20	—	—
334330 2001 XJ ₇₇	17.3	X	330.62767	307.10864	115.66556	3.94967	0.2140247	0.26196696	2.4190139	20	—	—
334331 2001 XW ₉₂	16.6	X	293.87270	188.67232	255.76955	8.12159	0.1181506	0.20569032	2.8422361	20	11 2.8	20.1
334332 2001 XH ₁₂₆	16.7	X	348.96375	191.24115	250.23012	8.10425	0.1289147	0.21333930	2.7738872	20	—	—
334333 2001 XP ₁₂₆	17.9	X	330.01580	241.86245	161.72379	1.31225	0.1883013	0.25981151	2.4323746	20	12 2.7	19.8
334334 2001 XH ₁₃₇	17.2	X	333.95895	281.17170	93.73300	5.82548	0.2168922	0.25665498	2.4522773	20	10 30.8	19.0
334335 2001 XY ₁₄₅	17.4	X	192.99073	199.80570	259.52661	3.64020	0.1622650	0.24377766	2.5378938	20	7 19.8	21.5
334336 2001 XY ₁₆₇	16.6	X	15.26267	339.09179	44.28384	10.83334	0.2805215	0.21021858	2.8012723	20	—	—
334337 2001 XO ₁₇₇	16.1	X	133.68833	296.66121	242.12787	3.50764	0.1289314	0.24228186	2.5483287	20	9 3.3	20.3
334338 2001 XN ₁₈₀	17.2	X	266.02744	269.93119	191.60558	2.67832	0.1741099	0.25354226	2.4723075	20	10 17.5	20.1
334339 2001 XA ₁₉₉	15.7	X	91.00074	180.27947	271.85275	15.49814	0.1815211	0.17270389	3.1935077	20	4 8.7	20.6
334340 2001 XS ₂₁₇	15.7	X	203.87110	182.58662	275.68620	13.62500	0.0953358	0.24220155	2.5488920	20	7 30.8	19.5
334341 2001 XW ₂₂₈	17.7	X	312.59946	153.23211	281.26071	4.36968	0.2094269	0.25998905	2.4312671	20	12 11.1	19.3
334342 2001 XO ₂₃₁	17.0	X	15.29264	168.69736	278.78803	7.07990	0.0471512	0.27064880	2.3670021	20	—	—
334343 2001 XO ₂₃₂	16.9	X	328.94383	317.14742	52.86973	5.54283	0.2057761	0.25526644	2.4611622	20	10 8.1	18.6
334344 2001 XJ ₂₃₃	16.8	X	338.79916	340.50616	33.41807	1.60739	0.2040087	0.25716101	2.4490593	20	11 6.1	18.7
334345 2001 XC ₂₆₄	17.7	X	95.18040	177.14841	264.96071	6.91230	0.1303636	0.28228135	2.3015191	20	3 4.9	20.5
334346 2001 YA ₄	16.5	X	2.04041	73.73232	314.32836	19.50935	0.3410126	0.26094806	2.4253067	20	—	—
334347 2001 YD ₁₃	17.8	X	295.46412	343.12909	76.60008	2.21872	0.1728425	0.25591248	2.4570184	20	10 10.9	19.9
334348 2001 YW ₁₈	17.3	X	70.10358	63.50272	69.92532	7.02268	0.1639645	0.28072673	2.3100083	20	4 22.2	19.7
334349 2001 YA ₂₁	17.0	X	353.24497	76.06991	265.44478	5.19569	0.1468822	0.25615909	2.4554412	20	10 8.3	19.4
334350 2001 YE ₂₆	17.5	X	320.68343	31.62382	355.16966	0.76848	0.1872564	0.25603572	2.4562299	20	10 12.6	19.3
334351 2001 YN ₃₃	16.9	X	184.20873	288.55502	67.39679	16.06157	0.2244334	0.23235796	2.6203804	20	3 14.8	21.7
334352 2001 YF ₅₂	15.5	X	345.55737	282.87239	271.30629	13.96639	0.4364101	0.21985214	2.7188312	20	—	—
334353 2001 YG ₅₉	16.0	X	295.28445	66.57519	287.55893	3.86104	0.1534891	0.24624513	2.5209116	20	7 3.2	18.7
334354 2001 YD ₇₇	15.7	X	99.82508	266.91503	291.19844	16.46176	0.0868080	0.24157381	2.5533057	20	8 12.6	19.4
334355 2001 YP ₉₄	17.6	X	50.68349	74.87244	287.72794	3.69330	0.2037041	0.26282872	2.4137234	20	—	—
334356 2001 YY ₉₇	16.9	X	331.72221	270.95803	103.80010	3.29788	0.2108343	0.25615197	2.4554867	20	10 23.1	18.6
334357 2001 YV ₉₉	17.5	X	26.38269	185.21966	259.33889	4.70746	0.1863881	0.27094114	2.3652992	20	—	—
334358 2001 YV ₁₁₉	16.0	X	214.38228	277.57211	231.30955	6.77242	0.3357642	0.19741429	2.9211263	20	9 20.9	21.2
334359 2001 YK ₁₂₅	16.7	X	192.79583	143.46253	321.23484	4.99697	0.1977885	0.24395604	2.5366565	20	7 26.2	20.9
334360 2001 YO ₁₃₃	16.2	X	347.78522	102.12431	253.52363	10.98703	0.0325840	0.20061364	2.8899860	20	9 27.1	20.3
334361 2001 YN ₁₆₁	16.1	X	136.19506	203.48292	343.89847	14.29803	0.0477694	0.24486829	2.5303525	20	9 12.4	19.6
334362 2002 AE ₂₀	16.2	X	2.29352	60.64763	128.43052	23.66348	0.2744668	0.27531437	2.3401847	20	2 10.5	17.7
334363 2002 AZ ₃₁	17.4	X	213.42310	158.67637	317.17638	10.82626	0.1817765	0.24510279	2.5287382	20	8 27.4	21.4
334364 2002 AP ₃₂	16.5	X	87.40226	177.49735	348.29135	7.35067	0.1436162	0.23205210	2.6228825	20	6 27.5	20.2
334365 2002 AA ₃₅	16.5	X	4.01299	349.37287	36.71241	9.52914	0.2695702	0.20864911	2.8153023	20	—	—
334366 2002 AD ₄₄	16.9	X	343.81126	16.08491	134.82945	5.14964	0.0975406	0.27056884	2.3674684	20	—	—
334367 2002 AA ₄₇	17.2	X	340.08366	10.53833	119.30903	9.14914	0.1696263	0.21334070	2.7738751	20	—	—
334368 2002 AB ₄₇	17.0	X	208.47859	193.22691	275.51360	2.86672	0.1223558	0.24483715	2.5305670	20	8 19.4	20.6
334369 2002 AL ₄₈	16.7	X	353.56346	29.39305	129.82755	5.22046	0.2173488	0.27121132	2.3637280	20	—	—
334370 2002 AN ₅₈	16.0	X	200.13497	319.30475	129.40542	15.52293	0.1287394	0.23965794	2.5668953	20	7 15.2	20.0
334371 2002 AB ₇₈	16.3	X	240.13424	319.80934	83.19877	3.03654	0.1889452	0.18870331	3.0103457	20	6 20.9	20.8
334372 2002 AT ₉₈	16.5	X	227.01351	120.11911	306.97944	14.82024	0.1005655	0.24182645	2.5515271	20	7 20.2	20.0
334373 2002 AB ₁₁₄	16.4	X	319.46972	265.24719	117.81707	13.14988	0.1953138	0.25091341	2.4895459	20	10 9.9	18.8
334374 2002 AN ₁₁₅	16.4	X	92.16885	253.08555	309.49152	8.49544	0.1460596	0.23709672	2.5853480	20	8 20.1	20.1
334375 2002 AR ₁₂₁	15.9	X	66.80304	207.18370	320.33925	13.27167	0.0508406	0.22970307	2.6405325	20	5 12.5	19.6
334376 2002 AB ₁₃₃	17.1	X	80.35193	53.67393	108.22360	5.60557	0.1390660	0.23278811	2.6171514	20	6 12.1	20.5
334377 2002 AK ₁₅₈	17.2	X	358.47997	233.19416	273.40471	4.94727	0.1296884	0.27013290	2.3700148	20	—	—
334378 2002 AG ₁₆₆	16.1	X	193.82688	301.93202	142.91276	29.10033	0.1965111	0.23795404	2.5791345	20	7 3.7	20.8
334379 2002 AV ₁₈₅	16.5	X	230.82298	55.63677	29.43223	6.40579	0.0994927	0.24417706	2.5351256	20	8 20.7	19.6
334380 2002 AS ₂₀₂	16.8	X	239.75669	153.90643	267.42312	4.05512	0.1056254	0.24116300	2.5562045	20	7 25.5	20.3
334381 2002 AP ₂₀₈	16.8	X	192.42875	123.51606	334.88886	7.41279	0.0865162	0.24088007	2.5582058	20	7 23.8	20.5
334382 2002 BY ₁₅	16.6	X	140.42177	234.05513	279.30263	2.95276	0.1808258	0.23718151	2.5847319	20	8 8.8	20.9
334383 2002 BL ₂₄	16.6	X	228.10792	164.03882	280.05738	16.75107	0.2091301	0.24437167	2.5337795	20	7 27.7	20.7
334384 2002 BL ₂₆	15.5	X	51.02567	206.60028	331.57959	38.48558	0.3932398	0.22776598	2.6554827	20	7 22.8	19.6
334385 2002 BC ₂₇	16.2	X	95.64313	257.71706	302.16875	27.92733	0.0261301	0.24110840	2.5565904	20	8 3.0	19.6
334386 2002 CZ ₂₆	16.6	X	221.65108	71.43283	24.61506	4.33161	0.1691451	0.24508794	2.5288404	20	8 15.4	20.4
334387 2002 CY ₃₀	16.8	X	296.33386	51.95605	10.90989	5.79965	0.1859876	0.25177763	2.4838457	20	10 12.8	19.0
334388 2002 CH ₃₈	17.5	X	20.52481	173.12727	337.77121	3.65331	0.1577476	0.27327471	2.3518146	20	2 5.8	19.3
334389 2002 CM ₈₃	16.1	X	12.23773	246.72668	341.50524	13.70710	0.1409071	0.22656087	2.6648910	20	5 17.8	19.3
334390 2002 CT ₉₀	16.3	X	340.16471	22.86187	149.21695	12.33551	0.0383368	0.21540256	2.7561455	20	1 20.8	20.1
334391 2002 CT ₉₃	17.1	X	136.83663	58.44632	135.28950	8.34771	0.1361374	0.24109008	2.5567199	20	9 28.1	21.1
334392 2002 CP ₁₁₈	16.0	X	175.06569	340.36942	164.92140	14.26116	0.1208018	0.24010687	2.5636948	20	8 31.9	19.8
334393 2002 CP ₁₄₅	15.4	X	100.23085	177.38575	335.69324	16.87362	0.1433201	0.17534385	3.1613727	20	6 25.8	20.4
3												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	H	G	M	ω	Ω	i	e	μ	a	TE	Oppos.	V
334401 2002 CA ₂₆₉	16.2	X	348.77962	319.33103	311.23678	9.84886	0.0812125	0.23252408	2.6191322	20	6 10.9	19.3
334402 2002 CJ ₂₇₄	17.4	X	37.56742	269.55912	126.97250	5.71884	0.1107332	0.26062960	2.4272819	20	—	—
334403 2002 CC ₂₇₇	15.8	X	58.20070	55.08224	149.69513	18.23037	0.0914123	0.17796291	3.1302790	20	6 30.3	20.3
334404 2002 CV ₂₈₁	17.2	X	343.83813	257.32661	298.95305	2.81576	0.1486497	0.27309345	2.3528552	20	2 2.9	19.4
334405 2002 CL ₂₈₄	17.2	X	220.97026	289.76122	159.19911	12.22015	0.1305343	0.24031121	2.5622413	20	8 5.8	21.1
334406 2002 CR ₃₀₄	16.2	X	169.38219	299.63486	164.08608	28.82406	0.1472935	0.23586968	2.5943066	20	7 4.3	20.9
334407 2002 CM ₃₁₁	16.7	X	264.73355	89.10831	311.58308	1.03050	0.2825194	0.24349578	2.5398521	20	7 4.3	20.2
334408 2002 DK ₁₄	16.2	X	283.33685	110.96495	140.43459	9.61042	0.0986272	0.21718641	2.7410331	20	2 9.2	20.1
334409 2002 DS ₁₅	17.8	X	84.22959	191.26820	296.57372	4.37259	0.1997626	0.27989462	2.3145844	20	5 7.8	20.6
334410 2002 DC ₁₇	16.1	X	96.39995	118.08473	96.27812	12.93579	0.1109557	0.23729116	2.5839355	20	9 13.2	20.1
334411 2002 DW ₁₉	16.2	X	342.63522	115.12500	162.33727	11.02813	0.0365710	0.17947788	3.1126390	20	6 12.9	20.6
334412 2002 EZ ₂	20.2	X	176.78782	186.47314	181.08209	13.02438	0.0459919	0.70593914	1.2491786	20	—	—
334413 2002 EO ₃₈	16.9	X	20.22077	63.35691	150.69148	5.46030	0.1647688	0.22574209	2.6713309	20	5 21.4	19.6
334414 2002 ES ₃₈	16.7	X	259.31913	108.72133	152.56396	14.88990	0.0937659	0.21547192	2.7555540	20	1 25.4	20.9
334415 2002 EN ₄₂	16.8	X	80.87871	17.92214	172.14384	14.67527	0.1864856	0.23069027	2.6329940	20	7 25.5	20.8
334416 2002 EV ₆₀	16.9	X	91.59719	260.47792	247.29221	2.20495	0.1417164	0.22786036	2.6547494	20	6 7.5	20.6
334417 2002 EA ₆₃	17.7	X	64.29295	138.81023	318.64504	0.63946	0.1500293	0.27149702	2.3620695	20	2 13.7	19.7
334418 2002 ER ₁₁₃	16.9	X	326.29367	252.58066	356.99718	7.51293	0.0644264	0.22210572	2.7004090	20	4 6.5	20.3
334419 2002 EV ₁₁₃	16.6	X	285.39579	335.66989	357.45499	12.96876	0.1992928	0.22837724	2.6507423	20	5 6.6	20.4
334420 2002 EG ₁₃₁	17.4	X	317.91643	164.09357	319.22901	3.64268	0.1716575	0.26018348	2.4300557	20	—	—
334421 2002 ED ₁₄₂	16.7	X	12.23566	224.20412	16.33808	3.96094	0.0502408	0.22829752	2.6513593	20	6 5.5	20.0
334422 2002 EM ₁₄₄	16.6	X	331.24226	239.84310	7.00132	8.08749	0.1488518	0.22021448	2.7158480	20	3 31.9	19.8
334423 2002 EB ₁₅₁	16.2	X	290.19876	153.09604	174.09333	11.76895	0.0111692	0.22789038	2.6545162	20	6 10.0	19.9
334424 2002 EB ₁₅₂	16.9	X	229.32900	258.47950	177.75651	11.04635	0.2557005	0.23979792	2.5658963	20	7 16.2	21.3
334425 2002 EW ₁₆₁	15.8	X	47.08446	26.87252	171.59477	18.12363	0.1752926	0.17441105	3.1726346	20	6 18.1	20.2
334426 2002 GM ₃₄	16.7	X	79.56749	115.74989	65.16170	3.57170	0.1227343	0.22898436	2.6460548	20	7 4.3	20.2
334427 2002 GX ₃₄	16.7	X	134.00937	19.81431	146.97897	8.13831	0.1050456	0.23538616	2.5978582	20	8 16.7	20.6
334428 2002 GD ₄₁	15.9	X	123.31255	187.22600	18.77247	16.94998	0.1611493	0.18302207	3.0723244	20	9 25.9	20.9
334429 2002 GQ ₄₇	14.9	X	41.37416	253.95576	23.84118	8.94532	0.0501984	0.12491604	3.9633027	20	8 31.8	20.4
334430 2002 GJ ₅₈	15.9	X	59.25604	229.70454	303.67701	9.91914	0.1421780	0.22427234	2.6829891	20	5 26.8	19.3
334431 2002 GD ₈₅	16.9	X	180.74663	58.65655	71.89008	4.49181	0.1795547	0.23733781	2.5835969	20	8 18.8	21.2
334432 2002 GM ₁₀₀	16.6	X	197.65957	151.96250	357.37817	13.56809	0.0925741	0.24256023	2.5463787	20	10 1.1	20.2
334433 2002 GM ₁₀₉	16.3	X	157.92641	4.62104	156.86584	12.50837	0.2145604	0.23687937	2.5869292	20	9 4.8	20.7
334434 2002 GT ₁₁₆	16.3	X	150.01614	297.85498	180.20006	12.44514	0.1187761	0.22880784	2.6474155	20	6 30.8	20.6
334435 2002 GS ₁₃₈	16.7	X	53.90721	309.28538	206.62845	6.01365	0.2207815	0.22462175	2.6802060	20	7 8.9	20.0
334436 2002 GL ₁₄₂	15.5	X	84.26591	50.68847	250.67577	16.29028	0.1897052	0.18021460	3.1041502	20	10 18.8	20.1
334437 2002 GE ₁₄₈	16.4	X	137.92565	328.03665	239.64971	7.04015	0.1415840	0.23987447	2.5653502	20	10 11.6	20.5
334438 2002 GD ₁₆₀	16.5	X	127.43938	343.57738	196.87146	13.06916	0.1414834	0.23282272	2.6168921	20	8 26.1	20.8
334439 2002 GN ₁₈₄	18.3	X	193.30467	60.06623	200.25484	5.55257	0.2034456	0.30678677	2.1772667	20	—	—
334440 2002 JL ₁₉	15.9	X	293.56920	142.31843	75.81246	8.32319	0.1408937	0.20694801	2.8307089	20	1 7.7	20.0
334441 2002 JJ ₁₁₉	15.9	X	98.30211	152.69812	117.03263	12.25834	0.1380028	0.18345748	3.0674613	20	11 15.6	20.9
334442 2002 JG ₁₂₁	16.7	X	307.56107	19.78483	121.59377	11.59466	0.2331026	0.25618750	2.4552596	20	—	—
334443 2002 JR ₁₄₄	16.0	X	118.97402	62.35624	110.12584	14.11679	0.1879556	0.23021181	2.6366409	20	8 16.2	20.3
334444 2002 JU ₁₅₀	16.4	X	110.88434	291.70082	242.18363	13.62503	0.1294317	0.22962773	2.6411101	20	7 28.5	20.6
334445 2002 KQ ₁₆	15.5	X	136.50168	217.57381	124.06996	19.51960	0.2128638	0.19063884	2.9899353	20	1 13.3	20.2
334446 2002 LB ₁	17.2	X	262.96011	187.39141	90.20457	5.69837	0.2513911	0.26228483	2.4170591	20	2 1.2	21.1
334447 2002 LD ₄₄	15.9	X	340.44592	218.86062	113.62637	9.66368	0.1285519	0.22727913	2.6592736	20	8 28.8	18.8
334448 2002 LJ ₆₁	15.9	X	329.44968	329.91127	249.93941	14.15408	0.1383715	0.21234153	2.7825699	20	2 17.4	19.7
334449 2002 NJ ₁₁	17.4	X	172.33755	5.31781	280.21654	6.70927	0.2105147	0.30117933	2.2042082	20	—	—
334450 2002 NP ₁₆	16.1	X	155.81842	152.04379	111.57497	30.13589	0.1454908	0.24063988	2.5599077	20	—	—
334451 2002 NM ₄₁	16.3	X	101.38250	297.59333	320.44860	14.41250	0.1784772	0.23182199	2.6244178	20	11 5.2	20.9
334452 2002 NE ₆₃	16.6	X	210.91896	279.98313	56.07889	2.87632	0.0724022	0.20287598	2.8684611	20	3 10.0	20.9
334453 2002 NC ₆₉	16.3	X	109.89261	99.02902	290.29725	9.15103	0.0696489	0.19429536	2.9523042	20	1 22.3	20.3
334454 2002 NK ₆₉	15.9	X	238.30831	194.53827	117.55183	16.45591	0.1342642	0.20297387	2.8675387	20	3 8.9	20.6
334455 2002 NZ ₇₃	17.9	X	241.72557	30.86222	312.98470	4.67665	0.1567684	0.26229920	2.4169708	20	4 7.7	21.7
334456 2002 NT ₇₇	17.9	X	152.70861	223.19099	84.90366	5.35925	0.1749859	0.30016535	2.2091694	20	—	—
334457 2002 OH ₂₁	17.3	X	140.91003	311.51069	17.33606	5.27640	0.3555564	0.29929878	2.2134315	20	1 2.9	20.6
334458 2002 OG ₂₈	16.4	X	176.28917	155.92650	138.19906	5.01821	0.0498047	0.19066204	2.9896928	20	—	—
334459 2002 PY ₁₀	17.1	X	112.58629	46.49726	290.58178	6.35162	0.1085249	0.29568686	2.2314202	20	—	—
334460 2002 PR ₁₉	15.5	X	93.73363	62.55275	292.04352	9.03956	0.0530510	0.18622987	3.0369419	20	—	—
334461 2002 PJ ₂₁	17.7	X	148.78543	331.02774	307.35310	4.26122	0.1570850	0.29546387	2.2325428	20	—	—
334462 2002 PV ₃₂	17.7	X	45.13081	57.68763	295.19022	4.95304	0.1947847	0.28692761	2.2766057	20	—	—
334463 2002 PY ₄₅	17.3	X	108.86452	179.51756	159.48193	5.99597	0.1958419	0.29363249	2.2418161	20	—	—
334464 2002 PG ₆₅	17.5	X	163.78858	315.52504	357.90843	5.73811	0.2702361	0.30227750	2.1988664	20	—	—
334465 2002 PZ ₇₆	17.9	X	175.14664	267.52680	355.87789	5.27454	0.1712507	0.29793817	2.201652	20	—	—
334466 2002 PA ₁₂₃	15.4	X	12.95156	48.07341	307.34957	20.31617	0.0769685	0.17239776	3.1972871	20	10 25.3	20.1
334467 2002 PH ₁₂₉	17.2	X	124.00519	254.57222	95.82892	6.81323	0.2418146	0.29743135	2.2226865	20	—	—
334468 2002 PA ₁₃₂	18.3	X	150.35463									

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334481 2002 QM ₆	17.5	X	128.73375	81.46904	144.61339	23.13070	0.0525971	0.39234880	1.8479399	20	12 1.8	20.2
334482 2002 QE ₁₈	16.1	X	53.20084	306.54304	343.47226	12.37667	0.2453571	0.22565549	2.6720143	20	11 4.0	20.2
334483 2002 QN ₁₉	15.3	X	63.59272	16.56722	348.60192	17.95249	0.0827359	0.17993992	3.1073084	20	—	—
334484 2002 QO ₂₂	18.0	X	104.14524	117.09061	247.15143	1.31392	0.1760889	0.29712877	2.2241952	20	—	—
334485 2002 QK ₂₇	16.3	X	200.66535	207.82821	140.95123	10.86877	0.1086965	0.19976753	2.8981406	20	3 15.6	20.8
334486 2002 QC ₃₀	16.0	X	157.40444	201.10211	89.95855	2.83746	0.1081424	0.18595178	3.0399690	20	—	—
334487 2002 QL ₃₀	18.4	X	80.62398	285.44272	78.94236	1.74275	0.2234358	0.29324031	2.2438144	20	—	—
334488 2002 QW ₃₆	18.1	X	74.30109	193.35048	154.15082	4.55063	0.1783630	0.28924765	2.2644157	20	—	—
334489 2002 QY ₅₁	16.6	X	137.72599	109.52239	152.81334	12.71893	0.1690314	0.23475792	2.6024908	20	12 18.5	21.1
334490 2002 QN ₅₇	17.6	X	24.91857	236.26492	162.43663	4.52236	0.1085422	0.28978158	2.2616334	20	—	—
334491 2002 QH ₆₀	16.6	X	193.10678	92.87829	248.86774	4.94993	0.2315592	0.19770599	2.9182522	20	2 25.5	21.8
334492 2002 QG ₆₈	17.1	X	89.86056	227.57514	149.31299	8.04926	0.1412717	0.29632480	2.2282165	20	—	—
334493 2002 QC ₆₉	15.9	X	95.08272	331.79995	358.89788	9.33769	0.0927102	0.18101958	3.0949408	20	—	—
334494 2002 QS ₇₁	16.5	X	191.87427	195.29446	148.97139	12.70959	0.0654020	0.19810729	2.9143100	20	2 28.7	20.9
334495 2002 QO ₈₈	16.4	X	117.50758	232.41357	92.76847	4.68998	0.1063724	0.18282577	3.0745232	20	—	—
334496 2002 QT ₈₈	18.1	X	170.91857	106.88777	167.95989	7.59855	0.1395781	0.29565872	2.2315618	20	—	—
334497 2002 QD ₈₉	16.9	X	209.42734	130.47192	199.70256	1.21174	0.0946652	0.19844677	2.9109854	20	2 28.5	21.4
334498 2002 QX ₉₃	16.2	X	236.62844	259.17326	345.55875	6.09564	0.1499367	0.19124084	2.9836574	20	—	—
334499 2002 QY ₉₃	16.3	X	76.25832	188.03109	150.45536	10.25828	0.0768921	0.17842665	3.1248528	20	—	—
334500 2002 QH ₉₄	16.0	X	160.35544	194.25991	203.36011	11.28114	0.0986763	0.19852740	2.9101971	20	3 30.9	20.6
334501 2002 QJ ₁₀₇	16.0	X	61.29146	155.94423	312.38773	11.70484	0.0612065	0.19711620	2.9240705	20	2 22.4	19.8
334502 2002 QH ₁₂₄	17.7	X	57.68319	244.40112	161.16038	6.84600	0.0910225	0.29765903	2.2215530	20	—	—
334503 2002 QF ₁₃₀	18.1	X	157.22851	200.76960	105.06415	5.06766	0.1891546	0.29908786	2.2144720	20	—	—
334504 2002 QN ₁₃₅	16.7	X	358.18550	261.38966	81.92663	5.86906	0.1271328	0.22236825	2.6982832	20	10 15.6	19.7
334505 2002 QO ₁₃₆	18.3	X	181.02693	73.80967	182.72669	2.21696	0.1644324	0.29726141	2.2235336	20	—	—
334506 2002 QG ₁₄₆	16.2	X	121.33020	88.61095	335.00709	10.43573	0.0928725	0.19852430	2.9102275	20	3 18.3	20.5
334507 2002 QM ₁₄₈	17.4	X	6.88150	138.65424	289.22349	6.17661	0.0570362	0.29272066	2.2464692	20	—	—
334508 2002 QZ ₁₅₂	17.2	X	148.61896	5.08321	32.01527	6.38121	0.1151144	0.25341488	2.4731358	20	3 18.5	20.8
334509 2002 RE ₁₉	17.0	X	89.46128	329.59453	8.14814	6.80209	0.2232517	0.29040768	2.2583815	20	—	—
334510 2002 RQ ₂₆	17.6	X	144.98219	51.13628	241.90086	5.48958	0.1911850	0.29438876	2.2379750	20	—	—
334511 2002 RM ₅₃	17.9	X	102.27037	216.20292	147.22726	5.65422	0.2005303	0.29548622	2.2324302	20	—	—
334512 2002 RN ₅₄	17.6	X	87.70880	179.71111	192.05978	4.31832	0.1570069	0.29330751	2.2434717	20	—	—
334513 2002 RZ ₅₈	17.4	X	110.64646	71.32028	278.11827	3.99239	0.1963884	0.29495908	2.2350892	20	—	—
334514 2002 RK ₅₉	16.8	X	208.26288	5.46496	301.38801	4.28145	0.2930293	0.19491218	2.9460722	20	1 29.9	22.2
334515 2002 RY ₆₉	17.5	X	81.12533	237.16273	157.71427	5.80500	0.1354644	0.29648514	2.2274130	20	—	—
334516 2002 RC ₈₂	17.0	X	115.86371	318.87407	349.42449	7.97104	0.0953800	0.28975758	2.2617582	20	—	—
334517 2002 RP ₈₂	17.9	X	98.44359	179.41229	169.93912	6.23841	0.2093679	0.29275628	2.2462870	20	—	—
334518 2002 RO ₉₉	16.8	X	126.86860	327.77640	7.58049	7.16280	0.1557120	0.29395375	2.2401824	20	—	—
334519 2002 RE ₁₀₅	16.9	X	47.60821	359.80712	7.06105	7.04932	0.1285088	0.28600811	2.2814825	20	—	—
334520 2002 RM ₁₂₅	16.3	X	190.76341	134.74044	214.31699	14.33763	0.3267033	0.19700761	2.9251449	20	3 2.1	21.9
334521 2002 RX ₁₃₅	17.3	X	120.79056	227.27782	112.68955	6.24028	0.2009051	0.29584911	2.2306043	20	—	—
334522 2002 RZ ₁₃₆	17.9	X	75.63469	240.47921	116.90142	1.42913	0.2324556	0.29112712	2.2546594	20	—	—
334523 2002 RU ₁₅₀	16.1	X	184.02766	61.41120	290.64836	9.58926	0.1482515	0.19749172	2.9203627	20	2 27.2	21.0
334524 2002 RL ₁₆₃	18.1	X	90.36612	8.20898	334.42114	2.56818	0.1771778	0.29131061	2.2537125	20	—	—
334525 2002 RW ₁₇₀	18.0	X	89.79531	22.41392	308.94270	4.72889	0.1611688	0.29063693	2.2571938	20	—	—
334526 2002 RX ₁₈₆	15.6	X	125.17719	79.25203	324.85294	13.47776	0.3553792	0.19003705	2.9962441	20	3 22.7	20.9
334527 2002 RG ₁₈₉	17.3	X	120.17060	213.97209	130.48530	7.14215	0.3587987	0.29486897	2.2355446	20	1 2.6	20.1
334528 2002 RY ₁₉₈	15.3	X	229.01977	324.82656	4.31635	11.21801	0.1492156	0.20003112	2.8959400	20	3 16.2	19.9
334529 2002 RJ ₂₀₄	15.5	X	119.85417	85.71479	341.19902	10.50970	0.0871314	0.19756568	2.9196337	20	3 20.4	19.8
334530 2002 RB ₂₁₉	17.6	X	102.33341	4.66089	351.02957	5.50934	0.1796268	0.29542897	2.2327186	20	—	—
334531 2002 RO ₂₂₀	17.2	X	286.61296	323.11184	73.28603	4.69212	0.2620564	0.27198550	2.3592405	20	8 5.5	19.6
334532 2002 RL ₂₂₇	18.0	X	83.64900	49.15786	327.77437	4.55534	0.1978152	0.29367893	2.2415797	20	—	—
334533 2002 RV ₂₃₂	16.6	X	108.87249	190.12921	234.88122	2.79465	0.1774199	0.19268543	2.9687261	20	3 18.7	21.0
334534 2002 RA ₂₄₀	16.4	X	219.84102	349.08253	320.13250	5.78666	0.2072118	0.19737722	2.9214920	20	2 10.9	21.5
334535 2002 RL ₂₄₃	16.0	X	163.54829	91.75105	288.34296	10.83417	0.0757058	0.19801421	2.9152232	20	3 7.1	20.6
334536 2002 RT ₂₄₃	16.1	X	165.47463	16.50565	300.62865	5.48557	0.1073262	0.18993459	2.9973216	20	1 3.4	20.6
334537 2002 RP ₂₄₄	17.8	X	97.03538	243.74183	128.18893	5.04600	0.1473646	0.29688443	2.2254155	20	—	—
334538 2002 RA ₂₄₆	18.5	X	89.62297	32.52258	306.29428	0.55504	0.2009123	0.29179763	2.2512041	20	—	—
334539 2002 RV ₂₄₇	15.9	X	133.45596	305.51277	4.06973	8.80838	0.1229229	0.18393289	3.0621735	20	—	—
334540 2002 RC ₂₆₀	16.3	X	85.81759	329.61593	349.99750	7.98341	0.0603292	0.17640257	3.1487109	20	12 18.2	21.0
334541 2002 RY ₂₆₉	18.3	X	167.69571	122.88694	152.82960	5.43175	0.1709566	0.29654617	2.2271074	20	—	—
334542 2002 RW ₂₇₄	18.2	X	43.08584	49.72719	10.32872	3.05953	0.2209945	0.29341626	2.2429173	20	—	—
334543 2002 RH ₂₇₇	16.2	X	66.40949	347.55695	353.98713	12.63245	0.1529991	0.17681448	3.1438187	20	—	—
334544 2002 RP ₂₇₇	17.5	X	155.16914	355.13770	281.39325	6.83345	0.1622386	0.29375780	2.2411785	20	—	—
334545 2002 RC ₂₇₈	16.3	X	197.20039	28.12666	240.29006	7.48607	0.1266085	0.18732057	3.0251418	20	—	—
334546 2002 ST ₇	17.8	X	72.42507	355.64810	7.61944	5.53165	0.1706725	0.28933056	2.2639831	20	—	—
334547 2002 SV ₁₉	17.1	X	230.24597	112.53889	8.58522	21.27737	0.0489406	0.38752597	1.8632402	20	11 2.1	19.1
334548 2002 SY ₁₉	16.9	X	124.14682	79.29401	187.47332	22.54687	0.2455985	0.28610422	2.2809716	20	12 19.4	21.3
334549 2002 SU ₂₉	14.9	X	72.04667	349.84732	26.07414	8.90987	0.2976369	0.12351494	3.9932184	20	1 4.9	20.1
334550 2002 SQ ₃₂	17.0	X	119.61632	331.01539	345.35430	6.42469	0.1609741	0.29095541	2.2555463	20	—	—
334551 2002 SW ₃₇	15.4	X	170.90073	303.94596	19.27982	10.00371	0.2026643	0.18783795	3.0195843	20	1 23.8	20.6
334552 2002 SS ₄₃	16.1	X	173.81328	289.27267	92.80798	1.99591	0.1827003	0.19688590	2.9263503	20	3 30.6	21.0
334553 2002 SV ₄₇	15.8	X	136.02029	174.06941	188.35240	10.56428	0.1096781	0.18827604	3.0148983	20	1 24.4	20.4
334554 2002 SE ₅₄	17.4	X	55.96475	158.69434	228.22968	5.61638	0.1907701	0.29111001	2.2547477	20	—	—
334555 2002 SP ₆₆	16.7	X	167.53391	252.70492	135.0							

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
334561	2002	TZ ₂₄	17.4	X	92.53492	294.33783	25.57730	6.97462	0.2116278	0.28759271	2.2730944	20	—	—
334562	2002	TM ₅₃	15.3	X	105.83313	150.90284	236.23782	16.77688	0.2142945	0.18202306	3.0835555	20	1 30.8	20.1
334563	2002	TV ₅₉	16.9	X	119.22229	66.24325	202.80637	23.10877	0.2322858	0.28548313	2.2842787	20	12 17.3	21.2
334564	2002	TC ₆₂	17.1	X	71.59731	132.70003	265.53734	6.29248	0.0997894	0.29360055	2.2419787	20	—	—
334565	2002	TE ₆₃	17.5	X	66.38144	177.94383	217.27891	6.34376	0.0837919	0.29205733	2.2498694	20	—	—
334566	2002	TS ₇₁	17.2	X	103.75229	67.15491	264.88941	6.19453	0.2295239	0.29075458	2.2565849	20	—	—
334567	2002	TE ₇₆	17.6	X	50.78674	45.27819	335.25586	4.24242	0.1950187	0.28737986	2.2742166	20	—	—
334568	2002	TO ₈₈	15.6	X	176.14919	131.70617	231.60098	8.86161	0.0933406	0.19312770	2.9641920	20	3 3.0	20.3
334569	2002	TH ₈₉	16.9	X	300.27074	91.67803	326.88537	5.60086	0.0837192	0.27491767	2.3424353	20	10 27.9	19.5
334570	2002	TY ₉₅	17.5	X	44.30334	154.17785	242.25111	5.75072	0.1806424	0.28831239	2.2693101	20	—	—
334571	2002	TK ₁₀₀	16.0	X	131.93181	176.81670	219.48089	8.25811	0.2012499	0.19246272	2.9710158	20	3 8.6	20.8
334572	2002	TX ₁₀₁	17.2	X	82.61880	30.77986	353.36106	4.41124	0.2337249	0.29312519	2.2444019	20	—	—
334573	2002	TC ₁₀₂	16.3	X	188.51371	322.31065	347.84997	9.31512	0.2020497	0.18988329	2.9978614	20	1 21.9	21.5
334574	2002	TA ₁₀₅	16.3	X	163.68720	93.42480	268.46065	2.43370	0.1482453	0.19187389	2.9770912	20	2 23.9	21.0
334575	2002	TK ₁₀₅	15.3	X	187.44367	51.18288	308.29285	12.42513	0.1301573	0.19719217	2.9233194	20	3 8.5	20.2
334576	2002	TR ₁₀₆	16.1	X	126.70834	71.89193	279.50463	9.25686	0.2022858	0.17713485	3.1400269	20	12 31.6	21.5
334577	2002	TX ₁₁₃	15.3	X	135.36724	101.93382	266.05434	9.49615	0.1133401	0.18847336	3.0127937	20	1 30.2	19.9
334578	2002	TR ₁₁₇	15.3	X	104.65055	318.93215	352.82754	16.67584	0.2096838	0.17621271	3.1509721	20	—	—
334579	2002	TX ₁₁₇	16.7	X	78.21375	34.52052	314.75875	7.58773	0.1594572	0.28815420	2.2701406	20	—	—
334580	2002	TF ₁₂₂	16.1	X	48.44532	139.91672	232.16256	10.39069	0.1902746	0.17562631	3.1529821	20	—	—
334581	2002	TR ₁₂₂	15.5	X	142.52316	86.99676	274.16511	8.65936	0.1071778	0.18987105	2.9979902	20	1 29.5	20.1
334582	2002	TE ₁₂₃	15.7	X	108.42966	55.74647	320.98106	10.50865	0.1092607	0.18581807	3.0414272	20	1 14.4	19.9
334583	2002	TO ₁₂₇	17.3	X	57.23856	15.43319	319.18321	6.22305	0.1642634	0.28426609	2.9097938	20	—	—
334584	2002	TU ₁₃₃	15.4	X	145.47294	108.64050	268.94848	8.72312	0.0552422	0.19270040	2.9685724	20	2 14.0	19.8
334585	2002	TK ₁₅₅	16.0	X	184.97976	120.43243	232.93113	9.99919	0.1877661	0.19525693	2.9426035	20	2 19.2	21.2
334586	2002	TL ₁₅₅	16.1	X	105.09987	83.12700	309.55004	9.77819	0.2093272	0.18826314	3.0150362	20	2 9.4	20.5
334587	2002	TA ₁₆₈	15.7	X	175.80318	95.92381	241.68727	15.94711	0.1766316	0.19165610	2.9793461	20	2 2.8	20.9
334588	2002	TK ₁₈₂	15.5	X	190.33789	35.54605	282.80994	9.63893	0.0997145	0.19104369	2.9857097	20	1 26.6	20.2
334589	2002	TH ₁₈₄	15.7	X	93.91974	147.65752	244.85301	5.27079	0.1708504	0.18516714	3.0485508	20	1 21.5	19.9
334590	2002	TQ ₁₉₄	15.9	X	147.79162	135.49536	198.22436	16.60040	0.2189547	0.18600421	3.0393977	20	1 12.5	21.1
334591	2002	TP ₂₀₇	15.7	X	112.22622	184.40033	227.51845	8.48168	0.2081320	0.18735377	3.0247844	20	3 8.2	20.4
334592	2002	TW ₂₁₀	17.9	X	99.40397	159.83957	201.29884	2.13980	0.2185273	0.29232488	2.2484964	20	—	—
334593	2002	TT ₂₁₉	15.7	X	108.78567	43.44088	326.40591	9.10431	0.1403030	0.18354065	3.0665346	20	1 11.1	20.3
334594	2002	TS ₂₃₃	15.8	X	80.83737	96.54781	297.46974	10.85602	0.1885425	0.18207355	3.0829855	20	1 10.6	19.7
334595	2002	TV ₂₃₃	15.5	X	150.77185	64.02431	298.30434	10.69689	0.1561309	0.18941050	3.0028480	20	2 12.1	20.2
334596	2002	TE ₂₄₄	16.1	X	255.14439	350.66617	334.99123	1.02293	0.0992029	0.19986444	2.8972037	20	4 10.3	20.4
334597	2002	TZ ₂₅₃	17.9	X	99.81596	75.79175	286.33645	3.49614	0.1759215	0.29304318	2.2448206	20	—	—
334598	2002	TC ₂₆₉	15.3	X	131.77872	171.16893	226.90407	9.21749	0.0635086	0.19173838	2.9784937	20	2 24.0	19.8
334599	2002	TH ₂₇₆	17.1	X	116.17296	112.98541	225.01240	5.35315	0.2269115	0.29310772	2.2444911	20	—	—
334600	2002	TL ₂₇₆	17.8	X	88.42648	20.39049	331.31138	2.84474	0.1995959	0.28993915	2.2608139	20	—	—
334601	2002	TY ₂₇₈	15.9	X	154.45171	69.03858	290.72415	7.38536	0.2290613	0.18973206	2.9994542	20	2 17.4	21.0
334602	2002	TK ₃₁₀	16.4	X	124.12492	195.36455	179.87970	18.33554	0.1384969	0.18635873	3.0355418	20	1 29.9	21.2
334603	2002	TG ₃₁₂	15.6	X	129.87981	220.83363	45.00304	27.39293	0.1541136	0.17193926	3.0209686	20	11 29.2	21.0
334604	2002	TE ₃₁₄	15.9	X	138.09991	211.78306	162.97365	12.95503	0.1498399	0.18774876	3.2025405	20	2 15.4	20.6
334605	2002	TH ₃₁₄	16.8	X	160.26080	43.46253	184.10589	22.95271	0.1561031	0.27970933	2.3156065	20	12 5.2	20.8
334606	2002	TZ ₃₃₁	18.0	X	264.66147	357.89689	160.90453	4.78820	0.0933904	0.28643225	2.2792298	20	—	—
334607	2002	TA ₃₄₉	15.9	X	16.45610	310.25409	129.37319	12.10765	0.0469167	0.17669608	3.1452230	20	—	—
334608	2002	TK ₃₆₁	17.1	X	140.56607	287.23526	98.91501	2.13331	0.1554350	0.19149626	2.9810037	20	3 4.4	21.6
334609	2002	TO ₃₇₀	15.8	X	331.97722	2.35984	169.10370	17.07771	0.0185130	0.18412816	3.0600081	20	1 16.4	20.3
334610	2002	TG ₃₇₆	17.3	X	253.74503	269.03630	24.18333	8.85245	0.1656006	0.30814021	2.1708866	20	2 16.6	20.6
334611	2002	UO ₂	16.0	X	328.28739	190.03327	272.94363	22.56806	0.2311643	0.28204949	2.3027803	20	—	—
334612	2002	UX ₁₁	16.1	X	55.92464	50.33576	290.56610	21.41847	0.2403464	0.28477535	2.2880620	20	—	—
334613	2002	UD ₂₄	16.2	X	128.48387	2.00276	27.05357	3.93596	0.1725449	0.18816347	3.0161008	20	2 27.6	20.8
334614	2002	UG ₄₅	16.4	X	137.66016	243.85956	168.63015	7.51461	0.2914927	0.19116593	2.9844368	20	4 12.9	21.5
334615	2002	UT ₅₇	16.2	X	351.36912	347.53019	165.47210	10.43700	0.0277160	0.18530357	3.0470543	20	1 17.6	20.5
334616	2002	UO ₅₈	18.2	X	72.47375	209.07054	100.68754	7.54888	0.2691492	0.28327225	2.2961488	20	—	—
334617	2002	UU ₆₄	17.9	X	8.78753	262.07129	190.28784	4.30611	0.1080110	0.29133784	2.2535721	20	—	—
334618	2002	UY ₆₇	16.0	X	322.42337	315.39764	171.87381	10.39466	0.0491762	0.17794779	3.1304564	20	—	—
334619	2002	UA ₇₃	16.1	X	128.77930	40.39906	328.91542	1.47768	0.0953584	0.18367522	3.0650367	20	1 26.1	20.5
334620	2002	UU ₇₈	16.1	X	66.35759	218.93097	223.22496	9.71933	0.0601787	0.18504413	3.0499017	20	1 28.8	20.4
334621	2002	VE ₃	15.3	X	355.43234	236.66444	244.24370	14.08266	0.0687563	0.17785565	3.1315374	20	—	—
334622	2002	VT ₃	17.3	X	77.29890	35.35810	207.67160	2.82138	0.2291002	0.28978758	2.2616021	20	—	—
334623	2002	VZ ₃	15.6	X	67.92011	139.83616	296.34182	4.68010	0.1450094	0.18225282	3.0809634	20	2 5.9	19.4
334624	2002	VY ₉	17.4	X	84.27788	41.48949	322.55687	4.31922	0.1738271	0.28921598	2.2645810	20	—	—
334625	2002	VL ₁₅	16.2	X	109.67231	271.46835	49.82878	28.22624	0.4007102	0.23265892	2.6181202	20	—	—
334626	2002	VF ₃₉	17.4	X	83.90612	283.35104	75.44856	9.23510	0.2800704	0.28965801	2.2622765	20	—	—
334627	2002	VA ₆₇	17.4	X	5.32308	167.90310	198.77597	4.68907	0.1951071	0.27793840	3.2543322	20	12 22.5	19.9
334628	2002	VV ₇₆	16.6	X	158.62142	181.61409	207.94723	6.06190	0.2860440	0.19181382	2.9777126	20	3 29.8	22.0
334629	2002	VU ₇₈	16.3	X	129.74603	197.60204	192.30509	5.95887	0.2994454	0.18723778	3.0260335	20	3 9.9	21.4
334630	2002	VE ₈₄	15.7	X	3.88607	173.84940	240.03916	22.48960	0.2155635	0.27939161	2.3173616	20	—	—

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334641 2002 VY ₁₃₉	15.9	X	77.96701	56.60917	333.09060	5.08809	0.1343822	0.17933502	3.1142918	20	—	—
334642 2002 VG ₁₄₃	16.7	X	63.59463	313.66618	132.04028	4.53068	0.1970441	0.18220189	3.0815375	20	2 19.8	20.4
334643 2002 WF ₁	15.9	X	84.26644	248.17966	188.44410	17.15962	0.3311928	0.18286386	3.0740963	20	3 27.8	20.2
334644 2002 WD ₃	15.7	X	88.02891	99.06248	305.23966	9.22240	0.2459734	0.18291335	3.0735417	20	2 8.7	19.9
334645 2002 WT ₁₂	15.9	X	77.17328	225.86727	195.88768	14.50462	0.3048500	0.18080689	3.0973674	20	2 22.8	20.0
334646 2002 WH ₂₁	16.2	X	73.51597	345.19830	73.90726	4.58442	0.1014334	0.18002443	3.1063359	20	1 19.9	20.3
334647 2002 WL ₂₆	18.0	X	13.14445	261.69087	142.06969	3.58269	0.0736303	0.28110126	2.3079560	20	—	—
334648 2002 XE ₁₂	15.7	X	113.82338	125.95128	284.62729	11.70012	0.2172463	0.18569326	3.0427898	20	3 7.1	20.5
334649 2002 XM ₁₇	15.8	X	122.55771	122.47115	288.66242	10.00869	0.1976551	0.18721261	3.0263047	20	3 14.9	20.7
334650 2002 XX ₂₀	15.3	X	91.73323	144.87314	259.90223	15.44264	0.1092830	0.18122378	3.0926155	20	1 22.5	19.7
334651 2002 XY ₂₆	15.9	X	123.50628	104.24845	300.11315	9.63147	0.1598949	0.18772697	3.0207743	20	3 4.8	20.6
334652 2002 XV ₃₀	17.4	X	162.66995	216.06231	280.31435	19.00040	0.0950035	0.37123225	1.9173685	20	8 10.7	20.0
334653 2002 XP ₃₂	17.3	X	136.09891	39.42738	19.34557	4.91448	0.1330542	0.30089660	2.2055887	20	3 29.5	20.2
334654 2002 XT ₄₄	17.1	X	11.90783	314.13503	82.88258	7.51702	0.1081664	0.28073556	2.3099598	20	—	—
334655 2002 XN ₄₆	16.9	X	269.31528	154.52600	320.73612	5.61522	0.1011130	0.27262264	2.3555632	20	11 25.9	19.6
334656 2002 XT ₄₆	16.2	X	122.75167	231.01706	302.55439	8.01220	0.1583056	0.25679260	2.4514011	20	8 17.2	20.1
334657 2002 XO ₄₉	17.1	X	72.03027	339.12374	57.68912	3.18542	0.1622442	0.28876987	2.2669127	20	—	—
334658 2002 XL ₅₃	17.9	X	19.66283	269.44213	152.06484	2.80195	0.2280218	0.28429767	2.2906242	20	—	—
334659 2002 XG ₅₅	17.6	X	57.79774	212.14761	179.60262	3.83548	0.2241495	0.28657211	2.2784881	20	—	—
334660 2002 XC ₅₉	16.8	X	298.32233	110.28535	280.35649	19.60468	0.0802149	0.37705952	1.8975626	20	9 23.1	19.0
334661 2002 XB ₆₉	16.2	X	306.62956	134.05890	340.93493	24.97144	0.2143048	0.27631968	2.3345052	20	—	—
334662 2002 XX ₇₈	16.6	X	319.08387	155.86199	293.03240	7.23217	0.1571936	0.27562175	2.3384445	20	—	—
334663 2002 XR ₉₂	17.9	X	64.78820	28.61360	334.41549	1.93343	0.2353282	0.28540418	2.2846999	20	—	—
334664 2002 XQ ₉₇	16.9	X	29.52343	158.18775	244.54816	6.35696	0.0932258	0.28275768	2.2989337	20	—	—
334665 2002 XO ₁₀₃	17.2	X	350.23175	172.13009	249.87845	7.72859	0.1878659	0.27882248	2.3205140	20	—	—
334666 2002 XY ₁₀₆	15.8	X	95.41813	120.70226	280.57233	14.53023	0.2456644	0.18102410	3.0948892	20	2 10.2	20.4
334667 2002 YS ₁₁₀	15.2	X	72.65749	142.09252	260.64223	12.05294	0.1602009	0.17759446	3.1346070	20	1 4.7	19.1
334668 2002 YE ₁₀	15.8	X	84.10564	144.46335	285.33854	3.40582	0.2064714	0.17963309	3.1108459	20	2 29.2	20.0
334669 2002 YE ₁₇	17.2	X	272.80648	195.24998	288.13083	3.90514	0.1787246	0.27358950	2.3500103	20	12 4.9	19.4
334670 2002 YL ₂₈	16.9	X	344.11900	133.23541	293.62136	7.03405	0.1921890	0.27643697	2.3338448	20	—	—
334671 2002 YS ₃₂	15.2	X	65.96859	145.82928	261.85246	15.98279	0.1411253	0.17753004	3.1353653	20	—	—
334672 2003 AV ₂	16.9	X	173.74224	170.54697	294.31092	17.47105	0.0846304	0.36434633	1.9414511	20	7 16.2	19.1
334673 2003 AL ₁₈	17.8	X	306.04067	339.61891	312.96628	15.72787	0.4165376	0.45081195	1.6845055	20	—	—
334674 2003 AO ₂₉	15.8	X	112.67065	293.63202	132.19703	8.81368	0.2898563	0.18313113	3.0711046	20	4 10.6	20.8
334675 2003 AG ₅₇	16.4	X	295.31643	115.32145	335.64810	6.74663	0.0797396	0.26943837	2.3740859	20	12 6.1	19.1
334676 2003 AR ₆₁	16.9	X	287.08668	203.05046	246.98453	6.69269	0.1846054	0.26909244	2.3761201	20	11 9.9	18.8
334677 2003 AM ₆₄	17.3	X	194.13863	161.60230	301.20009	18.29666	0.0914196	0.37074733	1.9190400	20	8 5.9	19.5
334678 2003 AJ ₇₆	15.0	X	1.29276	196.60089	310.05140	16.40769	0.2128928	0.17480240	3.1678975	20	1 14.0	18.4
334679 2003 AP ₇₉	18.1	X	3.21486	319.89411	137.90130	6.89577	0.1245469	0.28102498	2.3083736	20	—	—
334680 2003 BF ₃	17.2	X	321.77031	161.60461	276.28836	6.04818	0.1752304	0.27240536	2.3568157	20	—	—
334681 2003 BO ₆	15.5	X	22.20207	203.88426	263.34241	6.92878	0.1569199	0.17269822	3.1935776	20	1 3.3	19.0
334682 2003 BR ₁₂	15.4	X	61.17024	150.71024	274.02322	13.88574	0.2721729	0.17466383	3.1695728	20	1 27.9	19.1
334683 2003 BX ₁₄	17.3	X	305.84116	109.36743	347.76214	3.88399	0.1900004	0.27161670	2.3613756	20	—	—
334684 2003 BR ₂₈	17.2	X	161.47852	357.10913	143.78106	24.09378	0.0671163	0.36593838	1.9358160	20	8 26.4	19.3
334685 2003 BV ₃₇	17.5	X	273.33197	106.21946	310.61727	18.36459	0.1114647	0.37487873	1.9049146	20	9 15.3	19.4
334686 2003 BJ ₄₆	17.1	X	92.10664	70.81891	149.16492	24.53941	0.0533736	0.36978794	1.9223578	20	9 25.6	19.3
334687 2003 BO ₄₆	14.9	X	84.14032	234.39141	190.54542	27.03457	0.3811749	0.17830968	3.1262192	20	3 19.6	19.5
334688 2003 BT ₄₉	17.5	X	123.78013	214.74354	312.67420	17.68275	0.0670388	0.36581793	1.9362409	20	8 12.9	19.5
334689 2003 BN ₅₀	17.0	X	133.33459	175.56091	296.50058	3.97868	0.1320624	0.24640513	2.5198202	20	6 7.0	20.8
334690 2003 BG ₅₂	17.6	X	168.77347	327.43315	325.63047	21.86287	0.0187454	0.39175221	1.8498155	20	—	—
334691 2003 BB ₅₉	16.9	X	7.95681	122.57064	296.23885	6.55062	0.1401016	0.27650921	2.3334382	20	—	—
334692 2003 BY ₇₉	16.6	X	307.72271	16.82897	338.39447	19.05445	0.1240664	0.36891779	1.9253794	20	8 22.5	17.5
334693 2003 BW ₈₆	17.2	X	350.59965	158.49019	255.54212	0.77556	0.1759632	0.27261034	2.3556341	20	—	—
334694 2003 BY ₈₆	17.7	X	72.33911	29.33282	151.98893	2.82875	0.0679467	0.24461289	2.5321134	20	6 16.5	20.9
334695 2003 CW ₁₅	14.8	X	340.82017	252.67635	291.15733	21.93113	0.1396598	0.17229803	3.1985208	20	1 28.9	19.0
334696 2003 DW ₁	16.9	X	113.37513	27.21322	116.71388	4.46024	0.0956806	0.24435220	2.5339141	20	6 23.4	20.4
334697 2003 DX ₇	17.3	X	281.78113	236.06148	225.92927	1.80492	0.1552757	0.26590385	2.3950778	20	11 21.1	19.4
334698 2003 EZ ₄	17.3	X	318.06626	16.84263	353.03461	21.40899	0.1204091	0.36949988	1.9233568	20	10 3.9	18.5
334699 2003 EY ₁₇	16.1	X	158.26951	81.75541	133.81510	6.76984	0.1976242	0.20303749	2.8669397	20	11 7.3	21.0
334700 2003 ET ₃₁	16.0	X	75.55885	322.45586	166.85237	15.78724	0.2132480	0.18094599	3.0957799	20	5 8.8	20.4
334701 2003 EX ₃₆	16.4	X	326.63758	135.97242	93.80424	15.10799	0.2262261	0.23181868	2.6244427	20	2 22.1	19.7
334702 2003 EN ₃₉	17.2	X	297.93477	36.26106	95.41872	11.32167	0.1804405	0.27219497	2.3580299	20	—	—
334703 2003 EN ₄₃	15.6	X	24.59936	66.97647	183.72032	22.79488	0.4928351	0.18216431	3.0819614	20	9 12.9	19.0
334704 2003 FM ₆	16.2	X	317.47311	105.34171	183.41773	28.56622	0.3244466	0.23276903	2.6172944	20	4 7.8	19.2
334705 2003 FS ₁₇	17.5	X	39.39566	31.55635	193.87419	3.86065	0.0873448	0.29944585	2.2127067	20	7 4.9	19.7
334706 2003 FW ₃₀	16.6	X	341.43125	200.67130	32.22121	7.19001	0.3292358	0.22920759	2.6443365	20	3 4.8	19.0
334707 2003 FH ₄₅	16.7	X	161.36748	44.19981	195.65569	5.04968	0.1181279	0.26329145	2.4108945	20	12 19.4	20.3
334708 2003 FT ₆₁	16.7	X	79.93036	49.80771	84.99161	5.88073	0.1528140	0.23659428	2.5890070	20	5 8.5	20.0
334709 2003 FS ₁₀₀	17.5	X	12.01575	183.53296	59.98632	5.84550	0.1350977	0.29590041	2.2303465	20	6 16.6	19.2
334710 2003 FG ₁₃₂	17.0	X	2.44690	141.91324	119.41173	5.94360	0.1667392	0.23902898	2.5713963	20	6 24.5	19.3
334711 2003 FQ ₁₃₂	17.1	X	240.59071	113.48232	190.28646	9.03262	0.2348105	0.28179253	2.3041800	20	2 10.4	21.2
334712 2003 GW ₆	17.1	X	312.62734	72.06954	176.29113	12.07814	0.2945931	0.22530237	2.6748055	20	2 9.8	21.0
334713 2003 GL ₃₄	16.8	X	50.91076	77.11105	98.88942	6.19887	0.2011800	0.23601160	2.5932665	20	5 28.9	19.6
334714 2003 GM ₃₄	16.7	X	239.59449	153.43793	94.86330	6.63230	0.2122					

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334721 2003 JQ ₉	16.7	X	259.37783	357.46153	203.45624	7.69594	0.1543422	0.21262680	2.7800805	20	—	—
334722 2003 JY ₁₃	16.3	X	335.69509	156.46597	118.47506	6.45816	0.2727734	0.23035884	2.6355189	20	5 5.5	18.6
334723 2003 KZ ₃	16.6	X	310.16838	247.63298	35.66148	11.42429	0.2551844	0.22751341	2.6574477	20	4 3.2	19.8
334724 2003 KG ₄	15.9	X	238.66319	56.85535	250.16178	14.20530	0.2873232	0.21448211	2.7640252	20	2 12.1	21.1
334725 2003 KN ₅	16.4	X	339.25225	119.45100	151.24735	13.71066	0.2580291	0.23155596	2.6264274	20	5 12.1	18.9
334726 2003 KT ₇	16.7	X	302.39534	145.62593	129.01460	14.23610	0.1763338	0.22178354	2.7030236	20	3 27.0	20.4
334727 2003 KL ₁₇	16.6	X	342.93763	147.10305	96.51935	5.49592	0.2141677	0.22867009	2.6484786	20	4 12.5	19.1
334728 2003 KR ₁₇	16.8	X	191.56015	70.57392	205.00721	12.07528	0.1994521	0.26696354	2.6887356	20	—	—
334729 2003 MP ₆	15.7	X	312.29920	87.81895	254.41558	10.88094	0.2888713	0.22836527	2.3508349	20	6 21.2	18.1
334730 2003 NN ₁₀	16.2	X	228.63681	209.04953	158.50993	8.98089	0.1882174	0.21945831	2.7220830	20	4 29.6	20.7
334731 2003 OH ₇	17.2	X	273.58648	137.55297	180.20731	5.13383	0.2685556	0.22116467	2.7080637	20	3 31.2	21.5
334732 2003 OZ ₁₁	16.2	X	245.93340	135.12562	200.50983	16.31367	0.2344812	0.21825815	2.7320527	20	3 29.9	20.8
334733 2003 OY ₁₃	16.3	X	229.05167	176.44675	196.47243	11.77648	0.2963171	0.21828048	2.7318664	20	4 28.5	21.2
334734 2003 OM ₁₅	16.1	X	343.63084	77.34072	269.58785	11.83881	0.2003609	0.23455814	2.6039684	20	9 19.5	18.7
334735 2003 OM ₁₆	16.3	X	254.96807	126.09527	247.61201	11.66215	0.2005142	0.22421514	2.6834454	20	5 29.1	20.4
334736 2003 OJ ₂₀	16.2	X	247.54124	31.01267	333.88608	17.35090	0.4362134	0.21857381	2.7294217	20	4 13.8	21.6
334737 2003 OK ₂₀	16.3	X	272.29009	66.16799	286.44670	11.47501	0.2886782	0.22432482	2.6825706	20	5 6.5	20.6
334738 2003 OA ₂₆	16.9	X	230.70694	134.53573	253.34094	6.49720	0.2550096	0.22140307	2.7061194	20	5 18.8	21.5
334739 2003 OV ₃₀	16.5	X	307.12534	336.09669	328.19039	13.31055	0.1590938	0.22282960	2.6945575	20	5 4.2	20.1
334740 2003 PT ₅	16.4	X	250.72816	161.35012	223.90137	3.79092	0.3246824	0.22195881	2.7016005	20	5 27.1	20.9
334741 2003 PW ₆	16.9	X	33.49519	167.67888	204.98979	4.47564	0.2000540	0.24512775	2.5285666	20	—	—
334742 2003 QU ₂₅	16.3	X	248.46931	81.96192	268.63190	3.59153	0.1284001	0.21904498	2.7255062	20	4 29.5	20.5
334743 2003 QO ₃₂	16.2	X	336.57256	223.96701	148.98606	9.41924	0.0771965	0.23653538	2.5894368	20	10 20.9	19.3
334744 2003 QO ₃₃	15.6	X	216.39485	7.15364	333.35156	21.24366	0.1948344	0.21247095	2.7814399	20	3 9.6	20.5
334745 2003 QR ₃₉	16.1	X	244.07194	44.93795	341.90970	9.39120	0.2540550	0.22084710	2.7106592	20	5 27.3	20.7
334746 2003 QF ₄₄	16.0	X	206.83099	60.14086	351.01255	6.67645	0.2637975	0.21498513	2.7597120	20	5 26.8	21.0
334747 2003 QY ₄₆	16.1	X	258.47634	177.06351	166.68366	14.73206	0.1001297	0.22061221	2.7125829	20	5 10.4	20.2
334748 2003 QV ₄₇	15.9	X	238.56247	98.55798	271.59850	7.90008	0.1526366	0.21958450	2.7210400	20	5 11.1	20.1
334749 2003 QB ₅₀	16.7	X	224.83392	215.04744	134.04349	8.98858	0.2342533	0.21416831	2.7667244	20	4 2.4	21.5
334750 2003 QG ₇₄	16.1	X	207.23672	68.76908	306.96987	12.05655	0.1921769	0.21551011	2.7552285	20	4 11.9	20.9
334751 2003 QO ₈₈	15.8	X	43.95552	5.58022	14.49369	17.30431	0.4302575	0.18581266	3.0414862	20	—	—
334752 2003 QV ₁₀₄	16.0	X	270.90983	192.23891	159.41475	15.11207	0.2147385	0.21950855	2.7216676	20	5 20.2	20.3
334753 2003 RY	15.7	X	231.85900	11.31628	29.65247	14.47602	0.1830901	0.21926324	2.7236973	20	6 8.7	20.2
334754 2003 RH ₂	16.6	X	256.10706	236.31349	96.27390	10.53345	0.2628266	0.21847479	2.7302463	20	4 8.1	21.2
334755 2003 RJ ₇	16.0	X	225.56480	135.88631	231.57166	8.18499	0.1651853	0.21410677	2.7672545	20	4 24.7	20.4
334756 Leövey	16.7	X	230.19679	22.67994	297.84054	5.73162	0.1300514	0.21103505	2.7940424	20	3 3.8	21.1
334757 2003 RD ₉	15.6	X	281.58107	105.20682	273.03370	11.35121	0.2812775	0.22370116	2.6875541	20	6 24.1	19.1
334758 2003 RP ₁₄	16.4	X	245.94919	84.76344	274.96570	7.46570	0.0918445	0.21836916	2.7311267	20	5 12.3	20.3
334759 2003 RJ ₂₇	17.3	X	248.60679	327.34189	322.14058	4.98933	0.2142749	0.26978944	2.3720259	20	2 4.4	21.1
334760 2003 ST ₁₂	17.4	X	53.08838	357.26770	340.80166	6.09033	0.1976863	0.24307615	2.5427743	20	—	—
334761 2003 ST ₁₆	16.7	X	197.87591	138.29401	253.52545	5.32304	0.0696138	0.21506798	2.7590032	20	5 1.2	20.7
334762 2003 SM ₄₈	16.3	X	188.97728	125.98234	259.99560	6.35855	0.1179983	0.21141499	2.7906939	20	4 12.8	20.7
334763 2003 SQ ₅₀	16.0	X	187.51246	85.20410	300.63536	5.88250	0.2063572	0.21177619	2.7875198	20	4 11.1	20.8
334764 2003 SA ₅₉	16.0	X	215.16198	134.15418	253.08139	7.79485	0.2218787	0.21665800	2.7454881	20	5 6.5	20.7
334765 2003 SB ₆₄	16.4	X	309.10526	11.80303	23.62908	14.96982	0.1844185	0.23148643	2.6269534	20	9 27.8	19.0
334766 2003 SC ₆₄	16.2	X	204.85375	254.46265	134.21532	6.97574	0.0284596	0.21455279	2.7634181	20	5 10.5	20.2
334767 2003 SF ₇₁	16.3	X	232.48529	117.17647	236.90316	8.04588	0.1326224	0.21505163	2.7591430	20	4 16.3	20.6
334768 2003 SR ₇₆	15.9	X	182.19921	126.00787	275.27282	13.30375	0.2006642	0.21404405	2.7677951	20	4 23.9	20.8
334769 2003 ST ₇₉	16.6	X	210.83229	45.98371	332.60072	8.10234	0.1649027	0.21368372	2.7709058	20	4 22.1	21.2
334770 2003 SF ₈₀	15.9	X	201.15722	109.74957	265.74599	8.46392	0.1954185	0.21261640	2.7801712	20	4 9.3	20.8
334771 2003 SK ₈₂	16.8	X	136.69567	343.42642	18.62543	9.16723	0.1750318	0.25893491	2.4378612	20	1 28.0	20.4
334772 2003 SQ ₈₉	15.5	X	233.57122	343.92080	340.98491	20.40569	0.0963961	0.21053887	2.7984305	20	3 13.1	19.7
334773 2003 SR ₉₆	15.6	X	268.92389	83.88262	267.59847	7.86655	0.2334088	0.22051004	2.7134208	20	5 10.2	19.8
334774 2003 SY ₁₀₂	16.8	X	223.79575	116.86827	279.52460	7.36124	0.2633911	0.21723732	2.7406049	20	5 22.6	21.5
334775 2003 SY ₁₁₃	16.4	X	213.80901	209.37746	178.17500	9.29202	0.1812211	0.21677907	2.7444658	20	5 10.6	21.0
334776 2003 SG ₁₂₈	16.1	X	173.03343	89.89961	286.38555	7.82539	0.1478632	0.20685962	2.8315152	20	3 16.2	20.8
334777 2003 SR ₁₃₃	16.4	X	279.68444	83.16709	222.08729	11.31976	0.1545106	0.21900222	2.7258610	20	4 2.8	20.3
334778 2003 SM ₁₃₄	16.0	X	155.15547	89.64717	328.94690	16.21601	0.1381801	0.21160148	2.7890540	20	4 14.9	20.7
334779 2003 SD ₁₃₈	15.8	X	342.40260	358.19884	30.67780	14.23668	0.3058937	0.17569908	3.1571101	20	11 11.1	18.4
334780 2003 ST ₁₃₈	15.6	X	236.58492	6.13416	354.26956	12.60326	0.1571232	0.21430304	2.7655648	20	4 23.2	20.1
334781 2003 SD ₁₃₉	15.9	X	56.02859	176.01157	355.60520	9.47349	0.0608328	0.21352476	2.7722808	20	5 5.5	19.6
334782 2003 SE ₁₄₇	16.0	X	215.35179	137.77183	221.87403	12.47673	0.2083987	0.21064061	2.7975293	20	4 3.0	20.8
334783 2003 SG ₁₅₁	15.8	X	259.95956	243.05278	66.91617	8.21040	0.1610205	0.21357472	2.7718485	20	3 24.1	20.1
334784 2003 SP ₁₅₃	16.1	X	198.06057	30.50058	30.22611	11.55864	0.1759113	0.21704560	2.7422185	20	6 2.8	20.7
334785 2003 SY ₁₅₆	16.4	X	214.91478	1.19121	19.08804	5.04256	0.1871444	0.21412190	2.7671243	20	4 29.6	21.1
334786 2003 SC ₁₆₁	16.1	X	13.57048	37.32147	21.55780	14.90129	0.2673889	0.18449074	3.0559975	20	—	—
334787 2003 SX ₁₆₃	17.8	X	12.67860	317.83432	78.71664	3.20655	0.1755908	0.30176517	2.2013545	20	—	—
334788 2003 SZ ₁₆₇	16.3	X	224.60743	62.66133	332.39814	12.65482	0.2120304	0.21883247	2.7272704	20	5 22.4	21.0
334789 2003 SW ₁₆₉	17.3	X	213.20957	351.80350	341.49517	2.03997	0.2326058	0.26815881	2.3816321	20	2 28.1	21.4
334790 2003 SS ₁₇₂	16.0	X	275.33525	293.97516	4.45097	11.22507	0.1721168	0.21531294	2.7569103	20	3 20.9	20.1
334791 2003 SF ₁₇₄	16.1	X	214.46354	230.39577	192.32915	13.15414	0.1351087	0.21908729	2.7251554	20	6 24.6	20.6
334792 2003 SG ₁₇₄	16.8	X	229.02458	152.22588	200.23269	5.07126	0.0871961	0.21391125	2.7689405	20	4 16.0	20.9
334793 2003 SF ₁₇₅	17.2	X	215.73182	119.23932	174.64856	9.61443	0.2302800	0.26452224	2.4034103	20	1	

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334801 2003 <i>SF</i> ₂₁₀	16.5	X	214.52712	42.22854	322.60155	2.94718	0.1141005	0.21317620	2.7753019	20	4 13.1	20.7
334802 2003 <i>SG</i> ₂₂₄	15.9	X	119.76715	184.35727	241.78401	7.96513	0.0390787	0.20268142	2.8702965	20	3 11.3	20.2
334803 2003 <i>SF</i> ₂₅₀	15.9	X	222.77891	353.28672	22.44682	9.67051	0.2768348	0.21335198	2.7737773	20	4 25.9	20.8
334804 2003 <i>SB</i> ₂₅₃	16.4	X	211.56357	166.92880	202.79779	5.92051	0.0594330	0.21392697	2.7688049	20	4 20.2	20.5
334805 2003 <i>SC</i> ₂₈₃	15.6	X	232.04579	95.37756	253.15277	14.38650	0.1695533	0.21604810	2.7506527	20	4 2.8	20.3
334806 2003 <i>SR</i> ₂₈₅	16.3	X	257.49695	36.14838	256.27665	4.02940	0.1341782	0.21023965	2.8010851	20	2 25.9	20.6
334807 2003 <i>SK</i> ₂₉₃	16.1	X	226.47796	72.96921	315.71156	5.50436	0.0482931	0.21814371	2.7330081	20	6 1.3	20.0
334808 2003 <i>SK</i> ₂₉₇	16.1	X	334.68355	40.56130	277.62288	4.85660	0.0813292	0.22730235	2.6590924	20	7 25.4	19.2
334809 2003 <i>SM</i> ₂₉₇	15.7	X	269.02780	71.76991	250.69470	7.97227	0.0985735	0.21742278	2.7390462	20	4 20.0	19.7
334810 2003 <i>SS</i> ₂₉₇	16.6	X	146.52939	50.09038	313.54458	11.03202	0.3041820	0.20214658	2.8753571	20	2 19.9	21.7
334811 2003 <i>ST</i> ₂₉₇	16.0	X	28.90618	91.32366	302.59647	15.15622	0.1865225	0.18599270	3.0395231	20	—	—
334812 2003 <i>SK</i> ₃₀₂	16.2	X	180.86632	175.92720	222.90407	12.67970	0.1478648	0.21166150	2.7885266	20	4 22.9	20.6
334813 2003 <i>SW</i> ₃₀₇	16.7	X	225.80759	132.23290	258.98682	3.78813	0.1426323	0.21795810	2.7345595	20	5 26.9	20.9
334814 2003 <i>SS</i> ₃₁₀	16.1	X	16.38560	232.60956	105.61519	14.57425	0.1915404	0.23555963	2.5965826	20	11 22.1	19.3
334815 2003 <i>SA</i> ₃₁₂	17.1	X	244.85916	54.77702	269.14292	5.59747	0.1567669	0.27360774	2.3499058	20	3 14.8	20.7
334816 2003 <i>SZ</i> ₃₁₉	16.5	X	20.78386	290.96043	82.43449	11.12389	0.2365165	0.24139003	2.5546015	20	—	—
334817 2003 <i>SK</i> ₃₂₀	16.4	X	200.17747	209.19044	188.76024	6.37097	0.0303725	0.21525348	2.7574179	20	5 15.4	20.3
334818 2003 <i>SA</i> ₃₂₃	15.9	X	170.93664	189.79357	338.56543	10.00242	0.0632005	0.17488319	3.1669218	20	9 18.5	20.6
334819 2003 <i>SR</i> ₃₂₇	16.6	X	153.25839	28.97362	35.35729	5.86760	0.1148897	0.21016084	2.8017853	20	4 26.9	20.9
334820 2003 <i>SK</i> ₃₂₈	16.5	X	244.75099	120.49071	195.76876	27.09983	0.2972667	0.21133771	2.7913741	20	2 29.1	21.8
334821 2003 <i>SZ</i> ₃₂₈	16.9	X	227.50029	197.47848	124.25853	3.22552	0.0953221	0.20833907	2.8180946	20	3 8.1	21.2
334822 2003 <i>SP</i> ₃₂₉	16.2	X	229.67389	234.72689	113.90445	8.92617	0.2364571	0.21157748	2.7892649	20	4 6.5	21.1
334823 2003 <i>SB</i> ₃₃₁	16.3	X	142.73147	67.12194	60.26292	10.14190	0.176012	0.21631603	2.7483808	20	7 5.3	20.6
334824 2003 <i>SN</i> ₃₃₁	16.0	X	31.14039	261.41138	97.49737	10.59974	0.2102993	0.17963055	3.1108751	20	12 22.8	20.2
334825 2003 <i>SF</i> ₃₃₆	15.9	X	86.00622	236.41347	112.92113	10.98521	0.1155163	0.18616110	3.0376898	20	—	—
334826 2003 <i>SN</i> ₃₃₆	16.9	X	238.71013	49.12980	74.70928	8.54359	0.1396932	0.23140396	2.6275774	20	10 14.7	20.6
334827 2003 <i>SD</i> ₃₄₂	17.1	X	169.51344	160.90828	253.02963	2.27110	0.0912649	0.21301929	2.7766646	20	4 29.2	21.4
334828 2003 <i>SF</i> ₃₅₀	16.3	X	275.78984	92.59251	0.98424	13.03967	0.0931498	0.23570078	2.5955458	20	10 25.2	19.6
334829 2003 <i>SH</i> ₃₉₃	16.4	X	235.67873	190.29618	140.50345	6.18853	0.1195450	0.21047238	2.7990199	20	3 26.7	20.7
334830 2003 <i>SH</i> ₃₉₄	17.2	X	227.53806	35.13588	122.97149	6.55318	0.0210684	0.23750617	2.5823758	20	11 29.8	20.6
334831 2003 <i>SK</i> ₃₉₈	16.6	X	191.25126	33.20915	93.01586	9.96072	0.0846257	0.22407191	2.6845888	20	8 29.3	20.7
334832 2003 <i>SO</i> ₃₉₉	16.2	X	313.42327	268.61991	137.32397	11.75769	0.0745818	0.17280432	3.1922703	20	10 16.6	20.5
334833 2003 <i>SH</i> ₄₁₁	17.2	X	89.06414	308.10020	191.37626	4.59013	0.0122917	0.21496068	2.7599213	20	5 5.5	20.9
334834 2003 <i>SQ</i> ₄₂₈	16.2	X	114.72718	304.34752	193.64724	8.54793	0.0736287	0.21666536	2.7454259	20	6 13.9	20.2
334835 2003 <i>TN</i> ₄	16.3	X	281.26754	22.94613	265.69645	3.84455	0.1374280	0.21416764	2.7667303	20	3 17.4	20.3
334836 2003 <i>TK</i> ₁₃	15.3	X	165.46319	172.07483	265.75931	25.75267	0.1579294	0.21112410	2.7932567	20	5 28.2	20.0
334837 2003 <i>TT</i> ₁₆	16.6	X	223.73116	99.92609	243.69516	3.65343	0.1418208	0.21143636	2.7905058	20	3 25.5	21.0
334838 2003 <i>TH</i> ₂₃	16.6	X	283.58727	67.73642	275.12605	6.31990	0.0926684	0.22038284	2.7144647	20	6 11.1	20.0
334839 2003 <i>TX</i> ₂₃	16.9	X	208.63858	133.25225	236.09663	7.19429	0.1444062	0.21175887	2.7876718	20	4 11.4	21.3
334840 2003 <i>TS</i> ₂₅	16.8	X	322.85286	29.23402	248.25879	3.75493	0.0404132	0.21598916	2.7511530	20	5 13.9	20.2
334841 2003 <i>TL</i> ₂₆	16.4	X	220.88123	294.27947	89.00373	9.20254	0.2832590	0.21528804	2.7571228	20	5 7.1	21.3
334842 2003 <i>TT</i> ₅₂	16.7	X	17.87950	316.72914	113.21411	3.12826	0.0686504	0.18779914	3.0200003	20	—	—
334843 2003 <i>TG</i> ₅₆	16.5	X	191.93146	320.69421	88.61361	6.07031	0.1573557	0.21311828	2.7758047	20	5 17.7	21.0
334844 2003 <i>UV</i> ₃	16.7	X	186.86684	205.73331	179.24408	3.62549	0.1077434	0.20928175	2.8096258	20	4 12.6	20.9
334845 2003 <i>UF</i> ₂₈	16.5	X	216.32715	60.55382	342.74511	5.60461	0.0994639	0.21533297	2.7567393	20	6 3.9	20.7
334846 2003 <i>UN</i> ₃₀	17.0	X	247.94892	336.52925	335.40091	6.54738	0.1318311	0.26983294	2.3717709	20	3 7.2	20.4
334847 2003 <i>US</i> ₃₁	17.0	X	215.17982	191.54508	182.99814	1.81709	0.2006606	0.21295207	2.7772489	20	4 23.5	21.5
334848 2003 <i>UN</i> ₄₃	16.9	X	205.55804	308.83870	75.23135	1.60514	0.0857885	0.21275927	2.7789265	20	4 30.8	21.2
334849 2003 <i>US</i> ₄₆	16.8	X	215.48801	123.93723	200.33408	8.01176	0.0990376	0.20523865	2.8464045	20	2 24.8	20.3
334850 2003 <i>US</i> ₄₉	15.8	X	175.89373	97.52034	325.92962	12.25906	0.1909988	0.21016190	2.8017759	20	5 16.1	20.8
334851 2003 <i>UM</i> ₅₀	15.7	X	220.15792	358.50288	7.52461	10.27094	0.1837701	0.21050892	2.7986959	20	4 15.9	20.3
334852 2003 <i>UN</i> ₅₅	16.1	X	188.88400	150.83916	267.65043	6.89731	0.2153608	0.21094801	2.7948109	20	5 23.9	20.9
334853 2003 <i>UZ</i> ₇₃	16.2	X	262.84449	32.21953	275.11421	5.34720	0.0762175	0.21043388	2.7993612	20	3 26.8	20.3
334854 2003 <i>UR</i> ₇₆	16.5	X	227.49212	128.26949	260.85927	7.54094	0.3184175	0.21637303	2.7478558	20	5 13.5	21.4
334855 2003 <i>UN</i> ₉₄	16.6	X	1.62431	328.88247	0.99355	7.13386	0.1880335	0.23166511	2.6256024	20	10 7.8	19.3
334856 2003 <i>UE</i> ₉₉	16.2	X	64.34636	277.72716	91.99233	9.31462	0.3094822	0.18579375	3.0416926	20	—	—
334857 2003 <i>UB</i> ₁₀₄	15.5	X	298.72036	73.81139	342.15593	15.09855	0.2250854	0.17118580	3.2123602	20	9 12.2	19.3
334858 2003 <i>UV</i> ₁₀₅	16.3	X	354.34691	67.38731	7.20935	22.31919	0.2106066	0.18208998	3.0828000	20	—	—
334859 2003 <i>UF</i> ₁₁₂	16.2	X	242.48561	284.97787	68.12287	9.48527	0.1806192	0.21403766	2.6785020	20	4 25.5	20.6
334860 2003 <i>UQ</i> ₁₁₆	15.9	X	332.97086	325.43380	63.52322	8.52296	0.1428640	0.17357008	3.1828742	20	10 21.6	19.6
334861 2003 <i>UN</i> ₁₂₁	15.4	X	217.11982	95.87112	280.65504	15.87396	0.1652413	0.21439876	2.7647416	20	4 23.5	20.2
334862 2003 <i>UE</i> ₁₂₄	16.0	X	207.28906	142.99196	267.10301	8.30195	0.2632351	0.21722711	2.7406907	20	5 26.9	20.9
334863 2003 <i>UH</i> ₁₃₁	15.1	X	53.35482	96.76547	280.92970	8.66659	0.3076138	0.12558924	3.9491270	20	—	—
334864 2003 <i>UN</i> ₁₃₈	16.3	X	145.11978	261.67846	195.60088	9.21304	0.1560712	0.20936795	2.8088546	20	6 2.6	20.9
334865 2003 <i>UF</i> ₁₄₂	16.2	X	238.01302	116.31584	167.59288	15.15820	0.1360229	0.20321798	2.8652419	20	1 28.7	20.9
334866 2003 <i>UE</i> ₁₄₃	16.4	X	246.56985	77.26322	270.40434	2.77717	0.2835643	0.21432763	2.7653532	20	4 10.2	21.2
334867 2003 <i>UH</i> ₁₅₀	16.6	X	208.21235	297.71330	62.65823	4.73786	0.1116053	0.20883525	2.8136291	20	4 4.9	20.9
334868 2003 <i>UJ</i> ₁₅₁	15.7	X	251.41279	312.50437	52.83510	14.85643	0.1936908	0.21553669	2.7550019	20	5 15.3	19.9
334869 2003 <i>US</i> ₁₅₂	15.9	X	238.35193	272.37188	87.57953	10.80169	0.3159931	0.21334989	2.7737954	20	4 22.2	20.9
334870 2003 <i>UE</i> ₁₇₉	16.5	X	180.93241	357.19778	59.99044	3.41091	0.2240152	0.21077536	2.7963368	20	5 16.6	21.3
334871 2003 <i>UD</i> ₁₉₄	16.0	X	242.90303	351.41706	31.05950	14.75966	0					

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334881 2003 <i>UE</i> ₃₀₄	17.2	X	59.91129	338.88682	3.13854	5.74823	0.1923565	0.24172550	2.5522374	20	—	—
334882 2003 <i>UF</i> ₃₀₉	16.3	X	99.89587	326.95858	117.24144	2.99052	0.0862903	0.20078356	2.8883553	20	3 21.4	20.3
334883 2003 <i>UN</i> ₃₁₆	16.9	X	146.68767	175.41055	244.35769	2.40231	0.1068525	0.20420112	2.8560379	20	4 13.5	21.1
334884 2003 <i>UD</i> ₃₁₈	16.7	X	227.20432	326.17464	359.80455	5.80690	0.0562017	0.20937516	2.8087901	20	3 14.5	20.7
334885 2003 <i>UL</i> ₃₂₃	16.8	X	195.02332	4.05357	31.68122	4.76205	0.0802128	0.21124150	2.7922216	20	5 3.5	20.9
334886 2003 <i>UR</i> ₃₂₃	16.2	X	355.96279	59.85938	190.16381	3.79945	0.0490135	0.21462724	2.7627790	20	5 25.9	19.6
334887 2003 <i>UE</i> ₃₂₈	16.8	X	224.96611	63.61494	293.45461	5.51828	0.0125756	0.21530937	2.7569407	20	4 20.3	20.8
334888 2003 <i>UM</i> ₃₄₈	16.6	X	244.51735	223.17004	140.05721	3.36591	0.1713917	0.21700035	2.7425997	20	5 9.3	20.9
334889 2003 <i>UQ</i> ₃₄₈	16.9	X	155.83608	258.56110	158.28591	4.99180	0.0561659	0.20997501	2.8034382	20	4 18.2	21.0
334890 2003 <i>UM</i> ₃₇₇	17.0	X	201.76283	203.22677	189.59112	2.85121	0.0949167	0.21464812	2.7625999	20	5 7.6	21.2
334891 2003 <i>VR</i> ₁	16.4	X	8.84832	78.22983	230.99098	8.43428	0.2831682	0.23010408	2.6374638	20	10 5.1	18.9
334892 2003 <i>WH</i> ₂₇	16.0	X	1.55837	55.54050	21.82606	9.79002	0.0666210	0.18263635	3.0766487	20	—	—
334893 2003 <i>WT</i> ₃₁	16.6	X	172.97263	142.69927	248.62007	9.01163	0.0996117	0.20585471	2.8407227	20	4 2.4	21.1
334894 2003 <i>WO</i> ₄₂	16.1	X	26.04162	269.33403	76.85656	17.22431	0.2603719	0.23764827	2.5813464	20	12 22.1	19.5
334895 2003 <i>WW</i> ₄₅	17.2	X	152.45697	70.72305	270.83177	19.34780	0.1133998	0.36975125	1.9224849	20	—	—
334896 2003 <i>WS</i> ₆₅	15.9	X	136.15794	32.45468	66.97463	18.55325	0.1322797	0.20621167	2.8374435	20	5 25.3	20.2
334897 2003 <i>WP</i> ₆₆	16.3	X	172.52011	30.48247	309.35885	3.19467	0.1366238	0.19814351	2.9139548	20	2 5.9	20.9
334898 2003 <i>WC</i> ₇₂	15.9	X	121.82525	160.33179	274.69253	5.86866	0.2208366	0.20057124	2.8903933	20	4 16.3	20.6
334899 2003 <i>WB</i> ₇₈	16.7	X	153.87035	62.42933	351.99682	3.40829	0.2658701	0.20452452	2.8530264	20	4 22.8	21.6
334900 2003 <i>WT</i> ₈₉	15.7	X	238.49936	71.74035	235.32561	13.22537	0.1611484	0.20404100	2.8575319	20	2 19.9	20.6
334901 2003 <i>WG</i> ₉₅	16.1	X	148.15377	171.93810	238.02216	12.58797	0.1461530	0.20243764	2.8726003	20	4 3.3	20.8
334902 2003 <i>WU</i> ₁₃₁	16.0	X	356.77155	36.86560	263.83214	7.73400	0.1098793	0.22382856	2.6865343	20	8 5.5	19.1
334903 2003 <i>WO</i> ₁₄₃	16.5	X	128.22923	254.91722	112.56304	10.60410	0.1792041	0.25398342	2.4694438	20	1 23.9	19.8
334904 2003 <i>WL</i> ₁₆₇	16.6	X	197.43296	250.01240	157.08410	9.57055	0.2305456	0.21179108	2.7873891	20	5 19.6	21.6
334905 2003 <i>WT</i> ₁₇₄	15.7	X	328.34977	48.79235	32.73263	10.44721	0.1762659	0.18001235	3.1064749	20	12 19.7	19.2
334906 2003 <i>WP</i> ₁₈₆	16.6	X	109.85018	123.96723	268.11292	5.85002	0.0899144	0.19778767	2.9174488	20	1 27.2	20.7
334907 2003 <i>XL</i> ₅	16.1	X	195.26102	81.71348	330.64263	8.11255	0.2313338	0.21145792	2.7903161	20	5 19.6	21.1
334908 2003 <i>XC</i> ₇	16.0	X	223.83007	225.72136	302.55950	24.13050	0.2517806	0.28357189	2.2945310	20	11 5.6	19.9
334909 2003 <i>XT</i> ₄₃	17.5	X	14.91087	44.46414	256.61293	5.82718	0.1288803	0.28189763	2.3036073	20	9 19.8	19.9
334910 2003 <i>YJ</i> ₃	15.2	X	58.69627	134.26751	336.32602	15.67599	0.1313163	0.19066405	2.9896717	20	3 2.9	18.8
334911 2003 <i>YK</i> ₈	17.5	X	226.90458	19.05044	254.39738	19.07711	0.0535396	0.36968208	1.9227248	20	—	—
334912 2003 <i>YK</i> ₁₁	17.3	X	128.77582	39.77060	336.90702	5.93671	0.1146205	0.31079210	2.1585200	20	1 19.1	19.8
334913 2003 <i>YU</i> ₁₁	15.4	X	349.02859	9.86020	71.82843	23.82858	0.1287652	0.17630308	3.1498952	20	—	—
334914 2003 <i>YS</i> ₁₂	15.1	X	337.85844	162.95273	295.87784	26.94325	0.1547642	0.17530241	3.1618708	20	—	—
334915 2003 <i>YW</i> ₃₂	16.0	X	197.49480	191.30847	328.63535	8.74722	0.1527891	0.20908016	2.8114315	20	5 11.0	20.5
334916 2003 <i>YK</i> ₃₉	18.2	X	2.32723	178.10688	320.30706	3.73649	0.0853669	0.30482774	2.1865851	20	—	—
334917 2003 <i>YY</i> ₄₃	15.7	X	65.47583	111.84863	303.90743	7.27432	0.0629084	0.18241712	3.0791132	20	—	—
334918 2003 <i>YU</i> ₈₈	16.1	X	111.93857	359.80938	61.57049	4.38060	0.1768074	0.19314223	2.9640433	20	3 20.9	20.5
334919 2003 <i>YD</i> ₉₂	16.1	X	113.24741	89.70967	326.31411	8.10803	0.1264096	0.19595169	2.9356439	20	3 5.4	20.3
334920 2003 <i>YU</i> ₁₁₄	16.4	X	107.07902	165.57342	304.12173	5.57906	0.1790578	0.19810016	2.9143799	20	5 10.5	20.9
334921 2003 <i>YY</i> ₁₁₅	16.1	X	64.43996	261.70617	104.04993	16.90455	0.2657609	0.23888278	2.5724454	20	—	—
334922 2003 <i>YA</i> ₁₂₄	15.8	X	295.20368	38.66765	55.13336	19.97672	0.2132532	0.17281668	3.1921180	20	11 2.5	19.6
334923 2003 <i>YY</i> ₁₃₂	15.5	X	74.09870	99.29643	323.97296	10.10039	0.0840915	0.18549008	3.0450114	20	1 23.5	19.5
334924 2003 <i>YU</i> ₁₃₄	16.4	X	17.76636	65.74567	73.90898	13.15796	0.0754351	0.24690887	2.5163918	20	1 27.1	19.5
334925 2003 <i>YP</i> ₁₄₅	16.5	X	1.12141	80.61483	61.74519	11.37395	0.1041517	0.24363714	2.5388696	20	—	—
334926 2004 <i>AO</i> ₃	15.5	X	294.50047	232.49306	323.58775	11.39542	0.1535283	0.18030839	3.1030737	20	—	—
334927 2004 <i>AR</i> ₂₂	16.2	X	149.01616	90.52365	296.83845	14.39067	0.1140354	0.19261025	2.9694986	20	3 2.9	20.9
334928 2004 <i>AZ</i> ₂₃	15.5	X	273.64547	217.38148	310.69688	7.9521	0.0540022	0.17403265	3.1772317	20	—	—
334929 2004 <i>BP</i> ₄	15.4	X	274.41422	86.11194	132.25888	10.83239	0.0500053	0.17993387	3.1073781	20	1 1.9	20.0
334930 2004 <i>BD</i> ₉	15.7	X	25.45526	164.23923	342.22678	13.37768	0.1668533	0.18758368	3.0223124	20	2 27.7	19.0
334931 2004 <i>BY</i> ₃₀	15.8	X	37.23182	141.88198	334.83551	8.45788	0.1335118	0.18439423	3.0570637	20	2 9.0	19.4
334932 2004 <i>BD</i> ₃₃	17.3	X	179.51947	295.67701	326.40476	3.68186	0.0850409	0.29295807	2.2452554	20	—	—
334933 2004 <i>BB</i> ₃₄	15.8	X	164.59741	63.95384	309.15509	14.22908	0.0910639	0.19132327	2.9828004	20	3 1.6	20.6
334934 2004 <i>BB</i> ₃₉	15.4	X	146.53925	84.05117	297.23525	10.38447	0.0234020	0.19100714	2.9860906	20	2 17.1	19.8
334935 2004 <i>BG</i> ₅₀	15.4	X	289.04170	40.83679	121.52190	23.00288	0.0333724	0.17471021	3.1690119	20	—	—
334936 2004 <i>BX</i> ₅₄	17.0	X	323.79625	318.22089	140.38849	12.23366	0.1459225	0.23130088	2.6283581	20	—	—
334937 2004 <i>BE</i> ₅₅	17.2	X	152.73651	67.04368	134.75676	7.88817	0.0808708	0.27755149	2.3275928	20	10 30.5	20.5
334938 2004 <i>BL</i> ₇₅	15.4	X	48.13436	121.20398	294.34134	11.40954	0.1596819	0.17926566	3.1150951	20	—	—
334939 2004 <i>BU</i> ₈₉	15.1	X	52.70680	312.51458	155.29876	21.38540	0.1973765	0.18550799	3.0448154	20	2 29.6	18.6
334940 2004 <i>BC</i> ₉₈	17.3	X	136.36987	304.11906	339.04236	6.72962	0.1119665	0.28294278	2.2979310	20	—	—
334941 2004 <i>BF</i> ₁₀₅	16.0	X	87.65743	312.97877	138.21835	9.78108	0.1668355	0.19077272	2.9885363	20	3 29.3	20.1
334942 2004 <i>BG</i> ₁₀₉	15.1	X	329.84467	165.89393	351.25492	17.33434	0.1885963	0.17760017	3.1345399	20	—	—
334943 2004 <i>BX</i> ₁₁₁	15.2	X	35.35336	158.14476	313.16763	16.92312	0.1754642	0.18200129	3.0838015	20	1 31.7	18.6
334944 2004 <i>BU</i> ₁₁₄	15.8	X	29.23679	174.84008	300.42429	7.80004	0.2428333	0.18202040	3.0835856	20	1 26.6	18.6
334945 2004 <i>BK</i> ₁₅₆	17.4	X	126.22734	30.45044	316.10702	5.51301	0.2005471	0.30148126	2.2027363	20	—	—
334946 2004 <i>CC</i> ₁₀	17.4	X	16.09043	121.04891	334.04693	6.02415	0.1537412	0.29973107	2.2113027	20	—	—
334947 2004 <i>CB</i> ₂₇	16.7	X	350.38778	5.03297	338.43665	6.60656	0.3404214	0.27893121	2.3199109	20	11 13.9	18.3
334948 2004 <i>CD</i> ₃₆	15.7	X	354.71062	51.91788	109.97144	11.91252	0.1221144	0.18174848	3.0866604	20	1 27.8	19.5
334949 2004 <i>CS</i> ₄₃	15.7	X	56.59521	89.38789	337.65537	10.39483	0.1555464	0.17885449	3.1198675	20	1 12.6	19.5
334950 2004 <i>CS</i> ₅₃	15.5	X	55.12548	152.82188	282.59584	8.31612	0.1311799	0.18164199	3.0878667	20	1 15.0	19.2
334951 2004 <i>CK</i> ₇₁	17.6	X	177.05117	80.88575	124.61594	3.56668	0.1930133	0.27922661	2.3182745	20	11 20.6	21.1
334952 2004 <i>CY</i> ₇₅	16.0	X	321.62349									

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
334961 2004 CP ₁₃₀	15.4	X	3.96364	134.60498	338.15215	15.74462	0.0573521	0.17483845	3.1674620	20	—	—
334962 2004 DT ₂	17.6	X	199.50395	131.31018	61.81098	2.70719	0.1807691	0.28140994	2.3062680	20	11 27.7	20.6
334963 2004 DU ₁₆	17.3	X	1.25396	244.11720	222.23086	6.35201	0.0586830	0.29662286	2.2267236	20	—	—
334964 2004 DS ₄₃	17.7	X	196.11248	63.07113	133.18079	4.37640	0.1872144	0.27930242	2.3178549	20	11 28.0	21.0
334965 2004 DY ₄₉	16.2	X	330.56162	58.53006	147.65821	8.44853	0.2263414	0.18235910	3.0797662	20	1 31.0	20.1
334966 2004 DK ₅₁	17.2	X	174.92625	223.70005	2.97094	6.33599	0.0630867	0.28102434	2.3083771	20	12 26.9	20.4
334967 2004 DE ₅₉	17.6	X	185.16435	157.31798	50.73124	3.05572	0.1628809	0.27907562	2.3191105	20	12 2.9	21.0
334968 2004 DY ₆₄	17.2	X	234.04042	37.34058	172.69104	3.88684	0.0896617	0.28886809	2.2663988	20	—	—
334969 2004 DY ₇₈	15.3	X	47.99894	240.81033	160.75213	27.32097	0.2703825	0.17559469	3.1583612	20	—	—
334970 2004 EO ₅	15.7	X	20.17077	319.39080	156.67672	9.13582	0.0678262	0.17689964	3.1428097	20	1 11.1	19.9
334971 2004 ED ₈	17.4	X	126.27678	245.34335	328.36193	4.55041	0.1741207	0.26877651	2.3779817	20	10 12.8	21.2
334972 2004 EZ ₁₉	17.1	X	227.20998	88.31739	96.33382	5.43074	0.1260422	0.28174017	2.3044654	20	12 28.8	19.5
334973 2004 EM ₃₀	15.9	X	68.16502	95.60736	322.10147	4.97620	0.1441316	0.17661237	3.1462168	20	1 16.5	19.8
334974 2004 EB ₃₄	16.9	X	238.80481	166.97762	348.29625	6.42657	0.1716592	0.28089899	2.3090638	20	12 12.7	19.7
334975 2004 EL ₄₀	17.9	X	119.87707	48.65010	174.45265	2.76882	0.2062886	0.26892128	2.3771282	20	10 22.5	21.7
334976 2004 EO ₅₀	18.5	X	93.53748	86.19648	165.69944	21.71257	0.0850872	0.39281114	1.8464895	20	11 22.4	21.2
334977 2004 ED ₅₂	18.1	X	2.95586	27.91812	70.65570	3.11144	0.1185622	0.29354124	2.2422806	20	—	—
334978 2004 EE ₈₀	15.3	X	0.38468	339.67220	148.51883	18.18740	0.2274551	0.17811194	3.1285327	20	—	—
334979 2004 EJ ₈₅	16.7	X	103.17565	228.98922	35.31166	7.60356	0.1119779	0.27328024	2.3517829	20	11 22.1	20.1
334980 2004 FV ₈	15.8	X	63.07680	140.16463	34.84200	9.89577	0.1461574	0.19116914	2.9844034	20	6 4.3	19.8
334981 2004 FL ₁₄	16.2	X	166.14459	294.96477	15.62381	24.93863	0.2237362	0.28634514	2.2796920	20	—	—
334982 2004 FM ₁₄	17.0	X	192.95172	181.71760	9.90534	5.04597	0.2032316	0.27582770	2.3372803	20	11 14.6	20.6
334983 2004 FD ₂₉	16.7	X	148.22235	153.13781	50.15690	6.96976	0.0905204	0.27069624	2.3667255	20	10 24.1	20.1
334984 2004 FF ₃₄	17.3	X	327.64747	295.36662	166.10532	9.42421	0.1379797	0.28805692	2.2706516	20	—	—
334985 2004 FT ₄₉	17.5	X	306.78015	237.45186	264.60974	1.33150	0.1542336	0.29019980	2.2594599	20	—	—
334986 2004 FB ₅₀	17.5	X	154.38986	259.41989	316.94803	1.30319	0.1661040	0.27320100	2.3522376	20	11 12.5	21.2
334987 2004 FR ₅₅	17.7	X	333.37460	126.82690	103.82618	4.31134	0.0861662	0.30621391	2.1799813	20	3 14.1	19.8
334988 2004 FX ₆₇	17.2	X	79.92157	129.68137	108.89576	4.50114	0.2530361	0.26132245	2.4229897	20	10 10.9	21.0
334989 2004 FT ₈₉	17.6	X	217.81456	50.15130	128.70863	5.66538	0.1376988	0.27976187	2.3153165	20	12 6.8	20.7
334990 2004 FN ₉₂	17.9	X	268.45442	173.36677	356.34772	2.83031	0.1677176	0.28689973	2.2767532	20	—	—
334991 2004 FW ₉₆	15.7	X	349.66920	75.17099	141.64374	14.14800	0.1047931	0.18567012	3.0430427	20	4 4.4	19.6
334992 2004 FY ₁₁₁	16.8	X	252.28648	285.57751	238.38691	8.66750	0.1325803	0.28272200	2.2991271	20	—	—
334993 2004 FR ₁₃₄	15.5	X	36.16203	258.53322	191.42457	11.09716	0.1037540	0.17453998	3.1710720	20	1 2.7	19.6
334994 2004 FA ₁₃₅	15.6	X	7.51060	115.59276	351.74509	14.39285	0.0401704	0.17319391	3.1874813	20	—	—
334995 2004 FR ₁₃₅	15.7	X	40.62079	277.69284	188.09710	16.08540	0.0870825	0.17720851	3.1391567	20	1 25.8	20.0
334996 2004 FD ₁₄₁	17.2	X	124.63273	214.91649	359.64653	6.28120	0.1548654	0.26729628	2.3867528	20	10 12.2	20.9
334997 2004 GA ₈	17.1	X	253.51877	320.04672	199.25922	4.90690	0.0988164	0.28136232	2.3065282	20	—	—
334998 2004 GB ₈	17.8	X	165.35810	232.23338	334.98535	2.12955	0.1368845	0.27309566	2.3528425	20	11 12.5	21.3
334999 2004 GP ₁₅	17.0	X	22.08371	82.65459	190.62062	22.83138	0.1587933	0.37668167	1.8988313	20	9 13.5	18.5
335000 2004 GW ₃₈	16.9	X	74.93304	243.75948	31.14459	5.04602	0.2161661	0.26486364	2.4013446	20	11 14.6	20.6
335001 2004 GF ₅₂	17.0	X	69.53303	142.99194	193.15302	6.49177	0.1277563	0.27696240	2.3308921	20	—	—
335002 2004 GY ₅₅	15.7	X	45.64393	139.77304	330.37798	2.71843	0.1472978	0.17805226	3.1292317	20	2 15.7	19.3
335003 2004 GG ₅₆	17.9	X	208.10355	323.54306	238.87397	2.04953	0.1101154	0.27960193	2.3161994	20	12 28.8	20.6
335004 2004 GL ₆₄	17.3	X	127.82781	226.21327	4.08822	6.03700	0.0594739	0.27063350	2.3670913	20	11 2.1	20.6
335005 2004 HJ ₄	17.2	X	196.68300	110.50360	59.73529	4.88963	0.1643527	0.27404508	2.3474051	20	10 27.9	20.7
335006 2004 HK ₈	16.9	X	64.97393	228.41202	57.91998	8.11838	0.2067189	0.26512399	2.3997723	20	11 19.1	20.3
335007 2004 HR ₂₀	17.2	X	39.07129	257.23601	41.57977	5.85074	0.2164422	0.26288001	2.4134094	20	11 6.8	20.3
335008 2004 HV ₃₃	16.9	X	142.77899	54.91623	127.70768	5.20919	0.1337234	0.26419840	2.4053739	20	9 21.4	20.5
335009 2004 HO ₃₅	17.5	X	111.69195	252.04500	9.39452	2.12932	0.1799905	0.26922007	2.3753690	20	11 29.6	21.2
335010 2004 HN ₃₇	16.1	X	47.57386	212.36921	82.92892	12.80133	0.2760758	0.26233121	2.4167742	20	11 22.2	19.6
335011 2004 HB ₅₁	16.6	X	222.68388	254.86106	289.35330	12.29985	0.0847241	0.27939941	2.3173185	20	12 28.3	19.2
335012 2004 HX ₅₂	16.8	X	87.50237	266.29118	312.65912	5.34508	0.1621268	0.26060310	2.4274465	20	9 9.5	20.2
335013 2004 HW ₇₆	18.0	X	40.07774	263.11970	53.80220	2.11129	0.1890917	0.26681471	2.3896238	20	11 28.8	20.9
335014 2004 JJ	17.4	X	141.25245	357.86219	233.48449	6.09019	0.0883570	0.26896646	2.3768620	20	11 20.2	20.7
335015 2004 JK ₃₁	17.0	X	40.39536	91.52905	205.04807	6.12433	0.2143535	0.25870669	2.4392947	20	11 5.2	20.1
335016 2004 KJ ₆	16.4	X	11.76989	263.57297	72.52856	7.80383	0.3293403	0.25768255	2.4457536	20	12 6.7	19.2
335017 2004 LA ₈	16.5	X	324.50960	199.94927	108.92333	13.29570	0.2775371	0.24290242	2.5439866	20	6 1.4	18.8
335018 2004 NF ₁₂	16.9	X	22.56499	208.10746	100.80376	9.66915	0.2563110	0.25301500	2.4757409	20	11 6.2	19.9
335019 2004 NC ₁₆	17.1	X	120.59627	279.56068	294.09874	17.56246	0.0997527	0.38011368	1.8873845	20	10 12.8	20.0
335020 2004 NN ₁₉	17.1	X	40.19184	337.63885	282.28288	17.74053	0.0563581	0.37370625	1.9088969	20	8 24.2	19.3
335021 2004 OP ₃	16.5	X	303.10610	38.37812	290.54101	5.68058	0.1081882	0.24215041	2.5492509	20	6 16.2	19.5
335022 2004 OV ₁₀	17.1	X	195.14576	139.51445	308.85428	19.57231	0.0780865	0.36871298	1.9260923	20	7 22.0	19.1
335023 2004 PM ₁	16.8	X	93.50150	208.98710	321.52142	17.84762	0.0643052	0.36607269	1.9353425	20	7 10.5	19.0
335024 2004 PD ₂₀	17.9	X	314.22593	312.78840	16.06075	7.80512	0.3042563	0.36548770	1.9374070	20	5 31.2	18.7
335025 2004 PA ₂₂	17.1	X	94.23090	20.51483	305.10696	6.08729	0.1838482	0.26709060	2.3879780	20	—	—
335026 2004 PY ₅₃	17.3	X	341.44717	339.74363	339.33303	8.16300	0.2454713	0.24625736	2.5208281	20	8 11.6	18.8
335027 2004 PM ₆₁	17.3	X	97.76179	35.24572	156.62681	23.56772	0.0828255	0.36678507	1.9328357	20	8 9.8	19.3
335028 2004 PU ₉₂	17.4	X	350.87991	323.11695	333.26230	9.40696	0.2148015	0.24222299	2.5487416	20	7 28.9	19.4
335029 2004 QU	17.3	X	293.55953	33.27705	329.14507	20.16621	0.1079129	0.36398555	1.9427338	20	8 6.6	18.7
335030 2004 QN ₁₀	17.1	X	306.72330	305.29361	68.72968	6.83425	0.2820299	0.24391036	2.5369732	20	8 4.4	19.3
335031 2004 QJ ₁₇	16.8	X	243.24349	161.98946	230.82632	20.31952	0.0926142	0.36244520	1.9482341	20	6 24.4	19.2
335032 2004 QZ ₂₅	17.3	X	7.28608	58.66377	185.59797	22.16559	0.0593769	0.36039412	1.9556190	20	6 6.4	19.6
335033 2004 QA ₂₉	16.8	X	323.61330	282.63566	60.56180	8.09357	0.2179122	0.24489713	2.5301538	20	8 6.6	19.0
335034 2004 RX ₁	17.4	X	250.87754	145.51006	234.4							

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335041 2004 <i>RG</i> ₅₇	16.5	X	276.40881	21.52303	329.46461	11.33011	0.0905415	0.23664485	2.5886381	20	6 9.3	20.2
335042 2004 <i>RB</i> ₆₂	17.0	X	302.31009	220.68813	173.18875	2.88340	0.1384887	0.24633561	2.5202943	20	9 15.9	19.6
335043 2004 <i>RC</i> ₇₉	17.3	X	346.52641	302.24023	17.03294	3.95168	0.2907021	0.24392788	2.5368517	20	8 30.1	18.5
335044 2004 <i>RE</i> ₉₃	17.0	X	278.64856	151.28987	250.24205	5.05839	0.2596475	0.24256612	2.5463375	20	7 25.4	20.2
335045 2004 <i>RW</i> ₉₆	16.0	X	359.34102	317.89548	316.52887	12.70540	0.1552467	0.23979082	2.5659470	20	7 10.5	18.5
335046 2004 <i>RH</i> ₉₈	17.3	X	0.14060	110.83426	184.87634	13.03428	0.2917148	0.24595148	2.5229177	20	8 26.9	19.1
335047 2004 <i>RS</i> ₁₀₀	16.0	X	199.39810	135.35374	335.99340	14.55501	0.0410135	0.24286309	2.5442613	20	8 21.9	19.3
335048 2004 <i>RW</i> ₁₀₃	16.2	X	295.44149	354.36859	337.65271	14.63090	0.1167686	0.23595890	2.5936526	20	6 4.9	19.8
335049 2004 <i>RZ</i> ₁₀₇	17.8	X	2.85669	112.96817	187.27339	5.80955	0.2385559	0.24530914	2.5273200	20	9 4.7	19.8
335050 2004 <i>RY</i> ₁₀₈	16.0	X	160.27022	181.18881	332.83762	11.43267	0.1464162	0.24452092	2.5327483	20	8 28.5	20.1
335051 2004 <i>RD</i> ₁₀₉	17.0	X	281.30167	347.67854	60.83906	3.20468	0.1983982	0.24517764	2.5282236	20	8 22.9	19.8
335052 2004 <i>RA</i> ₁₁₀	16.0	X	273.75633	74.33349	305.02642	27.31632	0.4085474	0.23310744	2.6147607	20	5 29.9	20.7
335053 2004 <i>RJ</i> ₁₁₀	17.0	X	177.94296	257.95034	206.47356	20.69045	0.0975815	0.36264105	1.9475326	20	7 14.9	20.0
335054 2004 <i>RI</i> ₁₃₆	17.1	X	311.41591	88.86499	268.00826	9.34704	0.2088309	0.24268035	2.5455383	20	7 25.8	19.6
335055 2004 <i>RD</i> ₁₄₃	16.9	X	277.79215	60.78567	314.69147	11.10459	0.1716471	0.23862773	2.5742780	20	7 4.8	20.2
335056 2004 <i>RR</i> ₁₅₀	17.0	X	306.39714	145.02969	250.10864	3.66696	0.1387033	0.24765470	2.5113370	20	9 23.7	19.6
335057 2004 <i>RR</i> ₁₅₆	16.9	X	331.29570	21.85159	295.06470	3.60293	0.1404528	0.24086503	2.5583122	20	7 15.7	19.4
335058 2004 <i>RK</i> ₁₆₈	16.5	X	289.77026	101.88733	262.72374	8.62298	0.1603919	0.24173250	2.5521882	20	7 7.1	19.6
335059 2004 <i>RK</i> ₁₆₉	17.1	X	257.23189	352.86241	27.25336	3.61302	0.1830609	0.23631647	2.5910357	20	6 10.9	20.7
335060 2004 <i>RI</i> ₁₈₅	16.8	X	276.09802	208.10182	210.78509	7.23455	0.1586879	0.24407751	2.5358149	20	8 31.4	19.9
335061 2004 <i>RZ</i> ₁₉₁	16.6	X	290.67082	186.76415	188.76213	16.95393	0.1418773	0.24039342	2.5616571	20	7 24.7	20.0
335062 2004 <i>RZ</i> ₂₀₀	16.4	X	289.28640	134.95799	235.81149	11.30609	0.1389095	0.23663973	2.5886754	20	6 14.9	19.8
335063 2004 <i>RV</i> ₂₁₇	16.9	X	266.49024	177.22856	204.82930	21.34908	0.0801965	0.36249670	1.9480496	20	7 14.1	19.5
335064 2004 <i>RC</i> ₂₂₀	17.0	X	315.99863	42.78990	315.42701	13.45399	0.2968190	0.24171316	2.5523243	20	7 28.0	18.9
335065 2004 <i>RF</i> ₂₂₁	16.2	X	233.31866	147.99355	254.17150	12.32756	0.2493404	0.23046615	2.6347007	20	6 8.5	20.6
335066 2004 <i>RD</i> ₂₂₃	16.1	X	334.36882	255.67618	74.96349	14.91527	0.1337267	0.24291613	2.5438909	20	8 20.1	19.0
335067 2004 <i>RH</i> ₂₂₄	16.4	X	242.69665	234.15943	194.62209	14.61056	0.1488924	0.23852284	2.5750326	20	7 30.3	20.3
335068 2004 <i>RP</i> ₂₅₃	17.1	X	282.52929	308.13254	76.99452	4.91680	0.2270309	0.24103475	2.5571112	20	7 15.3	20.2
335069 2004 <i>RD</i> ₂₇₆	16.6	X	226.60513	238.43408	171.35098	4.16607	0.0720731	0.23858826	2.5745619	20	6 28.2	20.3
335070 2004 <i>RE</i> ₂₈₉	17.4	X	272.33221	106.44064	296.70206	17.67594	0.1903939	0.36790706	1.9289041	20	8 22.4	19.2
335071 2004 <i>RB</i> ₂₉₀	16.3	X	251.57378	11.19049	23.75223	5.49214	0.3925508	0.23022655	2.6365284	20	6 1.6	20.9
335072 2004 <i>RS</i> ₂₉₀	16.9	X	244.79592	212.50834	182.02592	3.86242	0.1713731	0.23703752	2.5857785	20	6 17.9	20.8
335073 2004 <i>RT</i> ₂₉₃	16.1	X	4.52369	29.55270	261.90552	12.56064	0.1886118	0.24327969	2.5413559	20	8 12.6	18.7
335074 2004 <i>RT</i> ₃₁₆	17.4	X	325.24979	49.65668	316.60691	2.83847	0.1788258	0.24592302	2.5231123	20	9 16.4	19.6
335075 2004 <i>RD</i> ₃₂₃	16.2	X	342.54033	75.99483	221.76975	13.59626	0.2103990	0.23945294	2.5683602	20	7 2.8	18.6
335076 2004 <i>RV</i> ₃₂₃	16.0	X	322.91766	339.30931	335.46813	11.58279	0.1882539	0.23721552	2.5844848	20	6 19.4	18.9
335077 2004 <i>RF</i> ₃₂₅	16.7	X	291.33131	37.14467	352.12091	7.94765	0.2422797	0.23961238	2.5672215	20	8 4.1	19.5
335078 2004 <i>RD</i> ₃₃₇	18.7	X	309.50160	160.51844	214.33439	1.65928	0.2450849	0.24243325	2.5472678	20	8 15.4	20.9
335079 2004 <i>RU</i> ₃₄₃	17.1	X	333.74609	22.73493	290.15477	8.06033	0.1382154	0.24107917	2.5567970	20	7 14.5	19.5
335080 2004 <i>SN</i>	17.1	X	298.89215	255.23761	77.93912	5.23828	0.2649931	0.23699883	2.5860599	20	5 20.5	20.3
335081 2004 <i>SW</i> ₉	17.2	X	312.67739	37.58212	337.95081	19.87729	0.0733330	0.37501871	1.9044406	20	9 30.1	18.9
335082 2004 <i>SZ</i> ₁₅	17.0	X	320.72847	257.75936	65.03812	5.09313	0.3332368	0.24150888	2.5537634	20	5 31.6	18.8
335083 2004 <i>SF</i> ₂₈	17.6	X	251.04272	263.18031	151.31003	4.36748	0.2225671	0.23898921	2.5716816	20	7 14.5	21.3
335084 2004 <i>SC</i> ₃₇	17.2	X	275.05696	161.45653	222.13433	4.70588	0.0852252	0.24110862	2.5565889	20	7 23.7	20.4
335085 2004 <i>SS</i> ₃₉	17.9	X	292.32264	325.13512	23.81456	2.95600	0.2973774	0.23786363	2.5797880	20	5 26.4	21.2
335086 2004 <i>SM</i> ₄₁	16.8	X	264.56910	358.20389	35.07398	5.86340	0.2164025	0.23639155	2.5904870	20	7 3.6	20.4
335087 2004 <i>TE</i> ₁₁	17.0	X	231.74501	188.28295	243.50554	21.10684	0.0639928	0.36403981	1.9425407	20	8 5.9	19.8
335088 2004 <i>TW</i> ₃₅	17.4	X	309.99993	293.25605	8.13056	3.24732	0.1760188	0.23245663	2.6196388	20	5 6.8	20.5
335089 2004 <i>TY</i> ₄₆	16.6	X	268.91308	1.16979	23.77507	4.69415	0.0830400	0.23517617	2.5994044	20	7 19.4	20.1
335090 2004 <i>TB</i> ₅₂	16.7	X	258.23493	177.26018	220.22679	9.69950	0.1125493	0.23435461	2.6054758	20	7 13.8	20.4
335091 2004 <i>TE</i> ₆₀	17.4	X	283.59304	209.18496	193.75396	5.75918	0.2772945	0.24106102	2.5569254	20	7 31.4	20.4
335092 2004 <i>TC</i> ₆₃	16.7	X	230.77007	232.69243	204.24725	7.39792	0.1740497	0.23601375	2.5932507	20	7 25.9	20.8
335093 2004 <i>TD</i> ₇₅	17.7	X	269.29820	335.73105	36.81221	2.01824	0.1509883	0.23350786	2.6117707	20	6 20.6	21.0
335094 2004 <i>TJ</i> ₇₈	16.5	X	265.91800	100.88087	302.19809	11.79599	0.2378743	0.23759513	2.5817312	20	7 10.7	20.0
335095 2004 <i>TN</i> ₈₀	17.2	X	286.60265	178.22813	223.72835	4.03900	0.1950798	0.24203590	2.5500549	20	8 18.6	20.2
335096 2004 <i>TX</i> ₈₅	17.0	X	333.65121	149.16186	194.92743	3.88479	0.0520217	0.24261270	2.5460115	20	9 1.4	20.0
335097 2004 <i>TN</i> ₈₆	16.8	X	339.93409	101.17027	192.73160	14.14417	0.1396322	0.23705324	2.5856642	20	6 26.1	19.8
335098 2004 <i>TZ</i> ₉₁	16.8	X	328.67933	316.40689	9.49063	4.90315	0.0671817	0.23720593	2.5845545	20	7 30.8	19.8
335099 2004 <i>TV</i> ₉₃	16.8	X	302.36908	151.17254	212.04012	3.45271	0.1684868	0.23929306	2.5695041	20	7 25.0	19.6
335100 2004 <i>TF</i> ₁₂₈	16.8	X	276.25179	293.08083	76.35084	5.99002	0.2492657	0.23653967	2.5894054	20	6 10.4	20.1
335101 2004 <i>TR</i> ₁₄₂	17.2	X	251.16533	230.29370	201.83328	6.20893	0.0940492	0.24052584	2.5607168	20	8 24.5	20.7
335102 2004 <i>TF</i> ₁₄₇	16.8	X	226.75498	74.60824	308.68096	2.73323	0.0941378	0.22917278	2.6446042	20	5 21.2	20.6
335103 2004 <i>TJ</i> ₁₄₇	16.8	X	38.86278	352.00192	250.79361	3.49243	0.1138185	0.23605278	2.5929649	20	7 29.0	19.9
335104 2004 <i>TL</i> ₁₄₉	16.8	X	201.56322	173.92807	216.03171	5.60524	0.0370035	0.22594267	2.6697497	20	5 5.1	20.5
335105 2004 <i>TJ</i> ₁₅₀	17.6	X	269.82859	191.00232	217.50377	3.41074	0.0796320	0.24057961	2.5603353	20	8 20.9	20.8
335106 2004 <i>TL</i> ₁₅₈	16.8	X	301.21559	281.14294	16.53239	6.07169	0.1094547	0.22666488	2.6640757	20	4 28.7	20.3
335107 2004 <i>TN</i> ₁₆₅	17.6	X	289.29629	151.76276	203.25377	7.25326	0.2006240	0.23785531	2.5798482	20	6 16.4	20.9
335108 2004 <i>TR</i> ₁₆₅	16.6	X	129.70508	338.17988	205.81493	6.33785	0.1084765	0.24207818	2.5497579	20	9 2.3	20.5
335109 2004 <i>TN</i> ₁₆₆	17.5	X	266.53602	42.93253	349.23589	3.32209	0.0986783	0.23850663	2.5751493	20	7 23.4	20.7
335110 2004 <i>TE</i> ₁₆₈	16.8	X	254.07228	290.64708	139.14407	2.99737	0.1714497	0.23974541	2.5662710	20	8 15.5	20.3
335111 2004 <i>TU</i> ₁₆₈												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335121 2004 <i>TS</i> ₂₆₆	17.0	X	234.04188	201.23922	216.49529	3.92691	0.1501192	0.23316123	2.6143586	20	7 8.2	21.0
335122 2004 <i>TC</i> ₂₆₇	16.1	X	228.00130	203.70696	210.38865	14.43423	0.1096915	0.23187451	2.6240215	20	6 29.6	20.3
335123 2004 <i>TF</i> ₂₇₂	16.9	X	284.52528	92.76042	313.65282	2.70709	0.1390354	0.23989109	2.5652319	20	8 31.9	19.7
335124 2004 <i>TR</i> ₂₇₈	17.0	X	274.31065	141.81660	207.32634	8.70999	0.1671690	0.23082752	2.6319502	20	5 24.7	20.6
335125 2004 <i>TZ</i> ₂₈₂	17.4	X	336.83054	131.64243	198.24451	11.66064	0.2638582	0.24228656	2.5482958	20	8 8.3	19.4
335126 2004 <i>TB</i> ₂₈₅	16.5	X	252.86870	108.04942	303.36241	12.08727	0.2628787	0.23557525	2.5964678	20	7 8.8	20.5
335127 2004 <i>TX</i> ₂₈₆	17.3	X	269.83133	358.55585	12.71602	3.03856	0.1262973	0.23503816	2.6004218	20	6 23.5	20.7
335128 2004 <i>TO</i> ₂₉₃	16.5	X	102.54811	308.60927	224.51921	8.58331	0.0708871	0.22972026	2.6404008	20	7 13.7	20.3
335129 2004 <i>TW</i> ₂₉₉	16.0	X	336.31703	45.87317	261.68476	10.72560	0.1895797	0.23713467	2.5850722	20	7 6.3	18.3
335130 2004 <i>TQ</i> ₃₁₆	17.0	X	180.27634	271.69279	189.68855	6.31242	0.1412252	0.23209537	2.6223565	20	7 9.9	21.3
335131 2004 <i>TV</i> ₃₂₄	17.3	X	272.76012	150.02286	252.25155	3.29756	0.1997657	0.23800906	2.5787371	20	7 28.1	20.7
335132 2004 <i>TH</i> ₃₄₅	16.9	X	322.16511	259.14389	109.58607	8.06319	0.2576237	0.24402590	2.5361723	20	9 12.6	18.7
335133 2004 <i>TW</i> ₃₄₈	16.2	X	288.63896	268.70984	50.86326	13.58516	0.1790094	0.22852917	2.6495673	20	5 2.3	19.6
335134 2004 <i>UH</i> ₂	16.9	X	313.48893	232.44991	89.18838	5.16339	0.2784632	0.23914671	2.5705523	20	5 26.2	19.4
335135 2004 <i>UG</i> ₄	16.9	X	279.02456	141.98152	242.04700	19.46469	0.1051546	0.36358788	1.9441501	20	7 31.2	19.2
335136 2004 <i>VK</i> ₈	16.4	X	249.54159	320.67942	95.00165	4.61512	0.1769526	0.23411124	2.6072812	20	7 20.9	20.0
335137 2004 <i>VH</i> ₁₄	16.4	X	216.55617	194.89389	179.72680	3.56920	0.1854851	0.22307748	2.6925611	20	4 25.5	20.8
335138 2004 <i>VT</i> ₂₃	16.8	X	237.84155	167.33545	249.11657	1.40668	0.2299340	0.23158706	2.6261923	20	7 2.6	20.8
335139 2004 <i>VX</i> ₂₆	16.8	X	255.50674	129.13938	300.61417	4.56809	0.2224006	0.23680806	2.5874486	20	8 8.8	20.5
335140 2004 <i>VO</i> ₂₇	16.6	X	214.39275	84.86401	314.02884	11.47502	0.1832314	0.22887364	2.6469081	20	5 20.3	21.2
335141 2004 <i>VZ</i> ₃₈	17.0	X	308.91868	79.45108	218.98744	4.56483	0.0616934	0.22540121	2.6740235	20	5 20.1	20.4
335142 2004 <i>VW</i> ₇₀	17.2	X	276.57026	194.30078	163.80681	1.60224	0.2861157	0.23326307	2.6135976	20	5 21.9	20.8
335143 2004 <i>VS</i> ₇₈	16.9	X	300.46014	214.65109	143.10693	3.44233	0.2623306	0.23815810	2.5776611	20	6 27.7	19.7
335144 2004 <i>VP</i> ₈₂	17.2	X	214.99065	90.93485	350.73792	4.66757	0.2646902	0.23049543	2.6344776	20	7 12.2	21.7
335145 2004 <i>VR</i> ₈₈	16.6	X	13.88030	282.23630	300.31305	3.09874	0.0389691	0.22189150	2.7021468	20	5 13.1	19.9
335146 2004 <i>WM</i> ₁₂	16.6	X	239.71396	253.06975	144.07416	13.11593	0.2705441	0.23047011	2.6346705	20	6 8.2	21.2
335147 2004 <i>XF</i> ₅	17.2	X	236.59483	105.47976	318.39732	2.03170	0.2563741	0.23186792	2.6240711	20	7 8.6	21.5
335148 2004 <i>XZ</i> ₂₅	16.9	X	204.96863	99.71513	306.61154	6.83011	0.2772236	0.22301248	2.6930842	20	5 19.1	21.9
335149 2004 <i>XS</i> ₃₀	17.2	X	237.75143	90.07704	277.87870	16.74200	0.0874278	0.34760204	2.0033085	20	5 9.1	20.0
335150 2004 <i>XU</i> ₃₁	16.1	X	256.23292	122.83248	288.01651	5.82248	0.3499214	0.23258162	2.6187002	20	6 30.4	20.1
335151 2004 <i>XH</i> ₄₅	16.5	X	189.49028	185.93278	253.16612	4.34344	0.2830194	0.22280804	2.6947314	20	6 18.0	21.4
335152 2004 <i>XA</i> ₄₉	16.4	X	256.97100	313.55989	81.55234	14.83020	0.2696267	0.23051612	2.6343199	20	6 19.5	20.5
335153 2004 <i>XL</i> ₅₀	17.1	X	244.93055	138.04757	285.14107	2.97444	0.2179553	0.23357500	2.6112702	20	7 19.9	21.1
335154 2004 <i>XG</i> ₅₉	16.5	X	275.30521	61.20528	300.30228	10.45913	0.3053046	0.22913691	2.6448802	20	5 19.9	20.7
335155 2004 <i>XM</i> ₆₁	16.6	X	219.05744	348.24004	50.16289	8.88280	0.2319157	0.22686621	2.6624993	20	5 23.1	21.0
335156 2004 <i>XH</i> ₆₄	16.4	X	246.38302	113.94987	272.66006	10.72184	0.1553980	0.22755282	2.6571408	20	6 10.9	20.2
335157 2004 <i>XU</i> ₇₃	16.1	X	197.04950	333.51974	101.39649	9.54878	0.2831655	0.22613423	2.6682418	20	6 23.4	20.8
335158 2004 <i>XP</i> ₈₃	16.5	X	217.25336	131.64279	291.00409	3.04478	0.1888733	0.22603201	2.6690603	20	6 24.4	20.7
335159 2004 <i>XU</i> ₉₁	17.7	X	266.76987	56.39356	313.01812	0.70378	0.2061426	0.22946501	2.6423584	20	6 4.9	21.4
335160 2004 <i>XD</i> ₉₂	16.8	X	258.06463	287.60641	74.44652	3.85922	0.2064752	0.22684028	2.6627022	20	5 17.1	20.8
335161 2004 <i>XB</i> ₉₂	16.2	X	257.45251	55.28479	317.05563	6.63605	0.1451802	0.22817658	2.6522961	20	6 5.5	20.1
335162 2004 <i>XG</i> ₁₀₀	16.3	X	217.11260	321.83008	57.18819	6.59346	0.0428980	0.22369244	2.6876240	20	5 9.6	20.1
335163 2004 <i>XZ</i> ₁₀₂	15.3	X	133.48775	159.58834	295.19662	34.76345	0.1595951	0.21414778	2.7669012	20	5 15.0	20.3
335164 2004 <i>XT</i> ₁₀₅	15.9	X	243.47933	108.63075	279.78692	10.18950	0.0982097	0.22839272	2.6506225	20	6 17.1	19.7
335165 2004 <i>XK</i> ₁₁₆	16.7	X	32.40609	224.39138	316.05894	3.05777	0.1315486	0.21121206	2.7924811	20	4 20.1	19.9
335166 2004 <i>XV</i> ₁₂₄	15.8	X	277.00371	99.72401	267.97547	14.24528	0.1985215	0.23172517	2.6251487	20	6 16.8	19.3
335167 2004 <i>XR</i> ₁₅₄	17.0	X	267.39370	305.21298	73.45806	5.19326	0.3004455	0.23124899	2.6287512	20	6 5.5	20.9
335168 2004 <i>XL</i> ₁₆₄	16.6	X	304.39299	228.44811	98.81421	15.21619	0.2703659	0.23242234	2.6198965	20	5 23.5	19.8
335169 2004 <i>XO</i> ₁₇₁	16.4	X	270.75159	96.79659	232.29155	10.14589	0.1386449	0.22714186	2.6603449	20	4 25.9	20.2
335170 2004 <i>XQ</i> ₁₇₄	16.5	X	214.80747	115.48492	277.20920	11.38015	0.0366710	0.22174519	2.7033353	20	5 23.9	20.4
335171 2004 <i>YK</i> ₃	17.1	X	231.62978	292.74714	139.35403	6.69781	0.2631548	0.23162028	2.6259412	20	7 13.3	21.4
335172 2004 <i>YS</i> ₉	16.8	X	280.68394	246.09071	99.66052	3.32513	0.2211405	0.23066008	2.6331783	20	5 20.0	20.5
335173 2004 <i>YS</i> ₁₈	16.3	X	241.72743	119.75535	282.83433	2.49520	0.2288619	0.22632688	2.6667274	20	6 18.6	20.6
335174 2005 <i>AB</i> ₂₆	16.2	X	173.13625	298.01686	124.95664	5.74440	0.1212396	0.21537307	2.7563971	20	5 17.3	20.6
335175 2005 <i>AY</i> ₃₃	16.4	X	156.00099	275.25469	139.36646	5.66536	0.1549568	0.21222294	2.7836065	20	4 22.4	20.9
335176 2005 <i>AK</i> ₄₆	16.2	X	170.65517	275.52162	126.81019	9.94006	0.2143752	0.21369233	2.7708314	20	4 24.4	21.1
335177 2005 <i>AY</i> ₅₅	16.8	X	204.72238	273.55309	94.36666	1.83721	0.0872994	0.21057336	2.7981249	20	4 10.2	21.1
335178 2005 <i>AB</i> ₆₄	13.7	X	117.04574	201.45559	268.28477	2.36307	0.0430188	0.08286160	5.2107530	20	5 9.4	20.7
335179 2005 <i>AD</i> ₇₇	16.0	X	215.80404	93.17625	321.47558	16.94421	0.1891645	0.22088356	2.7103609	20	6 13.1	20.7
335180 2005 <i>BT</i> ₄	16.2	X	234.96973	99.83245	308.60745	10.11953	0.1880691	0.22541316	2.6739290	20	6 24.2	20.4
335181 2005 <i>BM</i> ₉	16.8	X	228.90442	61.92946	343.13244	6.72460	0.3271188	0.22480093	2.6787817	20	6 1.9	21.6
335182 2005 <i>BR</i> ₁₁	15.8	X	208.84150	79.59589	130.55959	15.02328	0.2300668	0.17470982	3.1690166	20	12 6.4	21.2
335183 2005 <i>BP</i> ₄₈	16.4	X	138.32104	307.06744	161.36094	8.65641	0.2675406	0.21524556	2.7574855	20	6 16.5	21.3
335184 2005 <i>BM</i> ₄₉	13.3	X	238.24146	39.32643	305.81905	9.84846	0.0616164	0.08127996	5.2781340	20	4 20.8	20.6
335185 2005 <i>CD</i> ₄	15.7	X	153.96744	122.87360	328.55590	33.88616	0.2572852	0.21476197	2.7616234	20	6 6.2	21.2
335186 2005 <i>CF</i> ₁₄	12.8	X	214.93165	65.14377	322.28153	36.70348	0.0322500	0.08321772	5.1958769	20	5 7.9	20.3
335187 2005 <i>CG</i> ₅₀	16.2	X	279.36497	227.89062	330.55214	9.42353	0.1895756	0.18482743	3.0522851	20	—	—
335188 2005 <i>CH</i> ₅₇	16.2	X	312.67378	200.49861	323.56650	4.06159	0.1975885	0.18728102	3.0255676	20	—	—
335189 2005 <i>CW</i> ₆₅	15.7	X	197.84793	75.22751	139.23576	13.04737	0.1588772	0.17158424	3.2073851	20	12 6.4	21.0
335190 2005 <i>CQ</i> ₈₀	15.4	X	245.99598	238.80992	295.64579	25.21421	0.1992752	0.17631234	3.1497850	20	12 2.6	20.3
335191 2005 <i>EO</i>	15.2	X	285.47042	212.01302	340.52871</							

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335201 2005 EC ₉₄	15.6	X	216.45010	93.82188	134.16706	10.93669	0.0668110	0.17843393	3.1247678	20	—	—
335202 2005 EH ₁₃₄	16.7	X	198.75157	218.17521	166.65391	9.95777	0.2291923	0.20990336	2.8040761	20	4 24.0	21.6
335203 2005 EO ₁₃₈	15.5	X	226.01125	60.74593	161.18618	27.03029	0.1363025	0.17607312	3.1526373	20	—	—
335204 2005 ED ₁₄₂	15.5	X	322.88766	206.38454	311.13828	10.83094	0.1055128	0.18649310	3.0340835	20	—	—
335205 2005 ER ₁₄₅	18.1	X	170.82029	275.60478	15.11857	5.26138	0.1982001	0.30587367	2.1815976	20	—	—
335206 2005 EU ₁₅₀	16.1	X	337.46824	33.03002	122.36656	3.83159	0.0618498	0.18442846	3.0566855	20	—	—
335207 2005 EF ₁₆₃	18.1	X	165.13527	137.80414	164.00045	6.18800	0.1919612	0.30724359	2.1751080	20	—	—
335208 2005 EF ₁₆₉	14.9	X	283.45181	18.35025	138.65989	28.67649	0.1387206	0.17570550	3.1570332	20	—	—
335209 2005 EH ₁₇₅	16.0	X	207.11188	288.91227	348.69336	12.42078	0.0033959	0.18407803	3.0605636	20	—	—
335210 2005 EO ₁₈₂	16.3	X	71.87864	150.78772	330.06327	5.06259	0.2014540	0.19985931	2.8972532	20	4 13.8	20.0
335211 2005 EH ₂₀₃	15.6	X	212.14421	74.66338	197.85915	9.38733	0.0340443	0.17908723	3.1171638	20	—	—
335212 2005 EW ₂₁₇	16.6	X	26.74952	64.62363	63.97000	2.60979	0.0633132	0.18880538	3.0092607	20	2 4.3	20.4
335213 2005 EE ₂₂₃	15.4	X	186.80744	94.96172	139.13525	16.80590	0.1089858	0.16968500	3.2312737	20	12 21.1	20.6
335214 2005 EN ₂₃₃	15.5	X	259.97870	58.69537	135.55633	13.87553	0.1134909	0.17927156	3.1150268	20	—	—
335215 2005 EJ ₂₅₆	14.9	X	246.90922	275.93939	233.39900	15.89228	0.2210210	0.17919313	3.1159357	20	12 30.9	19.2
335216 2005 EN ₂₈₆	15.6	X	254.30145	46.55679	148.23526	27.14260	0.1724831	0.17578639	3.1560646	20	—	—
335217 2005 FL ₁₁	15.9	X	345.02601	319.65910	217.66489	9.11789	0.0263134	0.18653885	3.0335875	20	2 5.9	20.2
335218 2005 GB ₆	15.7	X	300.21533	32.93048	145.01933	5.07272	0.0897463	0.17982830	3.1085941	20	—	—
335219 2005 GQ ₁₁	17.7	X	214.52662	91.50794	121.23398	6.26483	0.1326607	0.30113994	2.2044004	20	—	—
335220 2005 GB ₂₇	17.9	X	196.26348	60.62201	158.44289	7.29603	0.3338568	0.29663663	2.2265646	20	12 14.6	21.6
335221 2005 GP ₂₈	15.6	X	277.95368	5.35250	215.70385	7.79470	0.0506051	0.18336826	3.0684562	20	1 7.2	20.1
335222 2005 GY ₃₇	15.5	X	240.71393	231.70580	313.64307	9.92600	0.1291677	0.17289756	3.1911225	20	12 18.0	20.1
335223 2005 GG ₄₇	16.0	X	262.53060	5.74380	191.84623	12.37693	0.0585641	0.17836960	3.1255191	20	—	—
335224 2005 GT ₄₈	18.2	X	156.24897	263.89791	37.53120	4.72053	0.1847376	0.30246232	2.1979705	20	—	—
335225 2005 GE ₇₃	15.6	X	242.83473	84.81804	141.01376	9.55099	0.1309428	0.17728439	3.1382610	20	—	—
335226 2005 GS ₈₁	16.5	X	320.22456	164.60591	16.52049	4.29176	0.1552258	0.18913146	3.0058009	20	—	—
335227 2005 GW ₈₈	15.8	X	55.79825	205.20069	209.96717	8.02646	0.0638735	0.17828140	3.1265499	20	—	—
335228 2005 GH ₁₀₁	15.7	X	178.55437	305.49369	26.73173	11.06464	0.0308380	0.18526432	3.0474846	20	2 3.5	20.3
335229 2005 GY ₁₀₉	17.5	X	244.14306	25.27105	206.83510	8.34906	0.0887223	0.30817729	2.1707124	20	—	—
335230 2005 GM ₁₁₃	15.9	X	233.46307	56.07377	172.89923	17.57823	0.0846946	0.18148795	3.0896137	20	—	—
335231 2005 GG ₁₃₆	15.5	X	318.08485	309.31841	199.67373	20.54228	0.1316868	0.17763072	3.1341805	20	—	—
335232 2005 GT ₁₃₈	15.6	X	155.53426	298.13689	38.57902	11.38115	0.1280020	0.18050258	3.1008477	20	1 21.7	20.6
335233 2005 GS ₁₄₃	18.5	X	143.25687	104.34871	175.43845	7.69737	0.2200381	0.29457812	2.2370159	20	—	—
335234 2005 GM ₁₆₁	16.1	X	289.05312	21.83566	161.90464	10.85497	0.2105955	0.17993136	3.1074070	20	—	—
335235 2005 GA ₁₇₀	17.8	X	243.55186	34.34466	211.02133	5.39768	0.1220486	0.30981122	2.1630736	20	—	—
335236 2005 GF ₁₉₀	17.0	X	157.24407	18.46032	26.63433	1.88088	0.1018985	0.20381556	2.8596386	20	4 6.9	21.3
335237 2005 GZ ₁₉₄	16.7	X	194.81950	318.43734	15.07588	1.75531	0.0786545	0.19479929	2.9472104	20	2 19.2	21.2
335238 2005 GJ ₂₀₇	15.8	X	173.25188	144.31071	136.54366	24.70003	0.0581191	0.17487307	3.1670440	20	—	—
335239 2005 HE ₉	15.9	X	286.29726	349.01746	211.78228	8.80454	0.0283934	0.17836884	3.1255280	20	—	—
335240 2005 JQ ₉₅	15.5	X	119.75950	151.10363	191.09063	9.11333	0.0891722	0.17917124	3.1161894	20	—	—
335241 2005 JU ₉₅	17.9	X	174.82461	103.47061	195.97285	4.43063	0.0291895	0.30563413	2.1827373	20	—	—
335242 2005 JJ ₁₁₄	16.0	X	223.72415	76.87546	205.25997	16.23382	0.0532933	0.18337816	3.0683459	20	1 17.2	20.9
335243 2005 JH ₁₂₂	15.8	X	295.34886	275.77005	263.12771	15.55156	0.1753547	0.18105274	3.0945629	20	—	—
335244 2005 KA ₄	15.3	X	302.99093	112.05898	52.05198	10.64532	0.0244823	0.17577543	3.1561958	20	—	—
335245 2005 KS ₄	17.7	X	191.61774	142.35057	92.65391	7.23832	0.0469255	0.29674441	2.2261154	20	—	—
335246 2005 LL	16.7	X	259.89054	163.79284	36.97590	3.56659	0.0729410	0.17494710	3.1661504	20	—	—
335247 2005 LZ	17.6	X	147.24257	336.41045	315.65141	5.57853	0.1983060	0.29568826	2.2314132	20	—	—
335248 2005 LX ₇	16.2	X	162.42096	152.09135	106.26083	23.68925	0.2238482	0.29273650	2.2463881	20	—	—
335249 2005 LE ₃₅	18.2	X	139.77819	78.58263	226.66486	2.67102	0.1513858	0.29227609	2.2487466	20	—	—
335250 2005 LN ₄₁	18.2	X	130.22348	21.08552	286.13794	3.53876	0.1641819	0.29077181	2.2564958	20	—	—
335251 2005 LW ₄₇	18.0	X	101.16121	182.36035	115.76515	3.14550	0.1973929	0.28418136	2.2912492	20	—	—
335252 2005 LZ ₅₁	17.8	X	85.68072	47.59373	278.23754	3.76602	0.2735273	0.28354903	2.2946543	20	—	—
335253 2005 MN ₄	15.9	X	341.80593	319.52256	108.20618	11.90754	0.1818529	0.18283402	3.0744307	20	1 5.1	19.9
335254 2005 MG ₂₀	17.1	X	91.62680	208.72234	218.03558	3.49104	0.1907839	0.28452928	2.2893810	20	—	—
335255 2005 MB ₃₀	17.3	X	98.26776	8.22367	258.37454	5.04655	0.0990881	0.27691004	2.3311859	20	11 20.4	20.5
335256 2005 MD ₃₄	17.6	X	114.02961	282.07508	350.81832	5.65149	0.1834402	0.28205495	2.3027506	20	12 18.0	21.3
335257 2005 MK ₃₈	17.0	X	332.29581	162.80217	296.01244	6.96907	0.0695217	0.28709940	2.2757212	20	—	—
335258 2005 ML ₄₁	17.8	X	82.72594	213.22255	110.94385	3.57864	0.2177473	0.28249288	2.3003701	20	—	—
335259 2005 MY ₄₁	17.6	X	103.98135	165.84142	152.58150	7.64032	0.2395022	0.28580682	2.2825536	20	—	—
335260 2005 MA ₄₉	17.5	X	67.48418	179.29179	144.00431	7.21172	0.1265454	0.27977522	2.3152429	20	—	—
335261 2005 MZ ₅₁	17.6	X	126.58715	272.87087	13.60642	1.08134	0.1941687	0.28667708	2.2779319	20	—	—
335262 2005 MU ₅₃	18.2	X	95.83654	185.38992	121.51268	1.08736	0.2119560	0.28122741	2.3072658	20	—	—
335263 2005 MX ₅₃	18.1	X	82.98589	145.49862	163.73147	1.28435	0.2426622	0.28045916	2.3114773	20	—	—
335264 2005 MQ ₅₄	17.7	X	72.45909	200.98442	138.38811	3.05714	0.2050071	0.28213012	2.3023415	20	—	—
335265 2005 NA ₃	17.6	X	109.20326	201.66081	143.23496	2.49369	0.1844742	0.29162750	2.2520796	20	—	—
335266 2005 NW ₆	17.1	X	187.67638	65.19046	123.67319	23.24901	0.2110343	0.28339761	2.2954716	20	11 16.9	21.2
335267 2005 NV ₈	18.3	X	121.57969	353.19977	281.65543	3.13180	0.2279208	0.28376766	2.2934755	20	12 27.3	21.9
335268 2005 NZ ₉	18.3	X	106.13147	115.62346	151.37776	2.26551	0.2080751	0.27996867	2.3141762	20	12 4.9	22.1
335269 2005 NP ₁₁	17.0	X	201.00214	137.47603	96.65058	7.63022	0.1269802	0.29693762	2.2251497	20	—	—
335270 2005 NZ ₁₆	17.6	X	104.45571	120.39745	127.11770	6.56689	0.1937420	0.27755290	2.3275849	20	11 10.7	21.3
335271 2005 NC ₁₇	17.2	X	112.74559	303.88625	20.59888	5.86910	0.2782760	0.28786303	2.2716711	20	—	—
335272 2005 NR ₁₉	17.6	X	44.66077	244.61412	148.02508	3.71931	0.1283315	0.28690376	2.2767319	20	—	—
335273 2005 NW ₂₁	17.6	X	61.34147	71.63078	280.58474	5.88488	0.1339858	0.28317460	2.2966766	20	—	—
335274 2005 NH ₂₂	16.8	X	323.50978	189.22992	283.96896	8.12646	0.0634340	0.28834522	2.2691378	20	—	—
335275 2005 NX ₂₈	17.8	X	61.87605	190.26578	171.08968	4.32979	0.1976142	0.28331591	2.2959129	20	—	—
335276 2005 NR<												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335281 2005 NG ₁₂₃	17.7	X	110.29512	64.79955	238.45780	5.09952	0.1740107	0.28451470	2.2894592	20	—	—
335282 2005 OV ₆	17.4	X	91.13375	338.78366	339.35342	8.36225	0.2283121	0.28194134	2.3033691	20	—	—
335283 2005 OJ ₉	17.4	X	110.84842	327.29753	316.20994	8.90575	0.3044706	0.28343865	2.2952500	20	12 30.9	21.6
335284 2005 ON ₁₀	17.2	X	78.07876	236.70193	108.42507	7.48775	0.1650098	0.28343233	2.2952841	20	—	—
335285 2005 OY ₁₂	17.4	X	133.74132	283.15548	346.56130	6.64227	0.1741352	0.28231520	2.3013351	20	—	—
335286 2005 OX ₁₅	17.5	X	55.71217	209.69430	161.03023	6.61529	0.1697743	0.28292251	2.2980407	20	—	—
335287 2005 OE ₂₀	16.9	X	20.57366	35.52537	329.27926	6.12601	0.1397843	0.27591320	2.3367974	20	—	—
335288 2005 OO ₂₂	17.9	X	108.06884	302.10828	350.50863	1.58776	0.2395404	0.28375213	2.2935592	20	—	—
335289 2005 OT ₂₆	17.7	X	63.26559	179.91297	174.86769	5.71872	0.2644704	0.28175857	2.3043651	20	—	—
335290 2005 OE ₃₁	17.3	X	46.75573	109.94349	250.11645	7.95485	0.2660142	0.27930186	2.3178580	20	—	—
335291 2005 PG ₁	16.7	X	75.34962	331.40169	338.80287	9.27569	0.1480068	0.27855953	2.3219741	20	12 27.1	20.2
335292 2005 Larrey	17.9	X	45.97548	12.32696	319.53378	2.29714	0.1980245	0.27620917	2.3351278	20	12 28.1	21.0
335293 2005 PL ₈	17.6	X	96.84794	178.55535	103.95261	6.52697	0.1619855	0.27878915	2.3206990	20	12 13.8	21.2
335294 2005 PL ₁₁	17.9	X	68.31933	171.10696	140.21751	6.13156	0.2481434	0.27757737	2.3274481	20	12 28.7	21.6
335295 2005 PV ₁₉	17.1	X	20.20048	239.27142	161.00450	2.87441	0.2155919	0.28053771	2.3110458	20	—	—
335296 2005 QG ₆	17.6	X	75.88348	148.03811	190.74223	1.09594	0.2048934	0.28115867	2.3076418	20	—	—
335297 2005 QJ ₈	17.4	X	37.62960	160.56291	129.44179	1.98896	0.2258552	0.28061131	2.3106417	20	—	—
335298 2005 QE ₁₀	17.5	X	40.49443	136.49916	281.32958	3.28640	0.1707338	0.28664850	2.2780833	20	—	—
335299 2005 QV ₁₀	17.6	X	84.55012	54.25202	272.12102	4.91201	0.1952574	0.28211417	2.3024283	20	—	—
335300 2005 QG ₁₁	17.5	X	54.61417	33.38437	324.90503	9.33643	0.2492520	0.27948833	2.3168270	20	—	—
335301 2005 QU ₁₁	16.8	X	108.38791	303.84189	335.37905	23.57966	0.1862983	0.28099189	2.3085548	20	12 23.7	21.0
335302 2005 QN ₁₃	17.2	X	33.89801	22.60304	319.83492	3.30137	0.2087403	0.27398798	2.3477312	20	12 29.3	20.2
335303 2005 QL ₁₅	17.5	X	128.25970	79.82328	185.91444	4.26643	0.2334798	0.28170419	2.3046616	20	12 21.1	21.4
335304 2005 QL ₂₅	17.3	X	92.81451	153.88140	148.79179	6.17810	0.1382065	0.27718834	2.3296253	20	—	—
335305 2005 QZ ₂₉	17.4	X	64.51913	167.65421	188.01795	6.21938	0.2516337	0.28121501	2.3073336	20	—	—
335306 2005 QK ₃₀	17.8	X	98.81962	168.18529	151.18877	5.54966	0.2415163	0.28377467	2.2934378	20	—	—
335307 2005 QS ₃₃	17.4	X	88.53994	59.95986	273.35300	0.42472	0.1775213	0.28329057	2.2960498	20	—	—
335308 2005 QS ₃₆	18.1	X	36.26408	93.11268	304.59466	4.10286	0.2159568	0.27980788	2.3150627	20	—	—
335309 2005 QM ₃₇	16.9	X	25.30055	199.35258	163.49352	5.90133	0.2003164	0.27340517	2.3510664	20	—	—
335310 2005 QO ₃₇	17.3	X	35.74704	239.05284	151.95686	7.72547	0.2106529	0.27874563	2.3209405	20	—	—
335311 2005 QX ₃₉	17.4	X	103.44414	354.81103	303.25777	7.91557	0.2351371	0.28214165	2.3022788	20	—	—
335312 2005 QA ₄₄	18.0	X	78.65703	116.19867	152.53569	3.87351	0.1729904	0.27198563	2.3592398	20	11 9.7	21.4
335313 2005 QS ₄₅	17.3	X	44.99661	335.94090	42.11472	2.88574	0.2246434	0.27970338	2.3156393	20	—	—
335314 2005 QM ₅₃	17.2	X	70.49161	193.60766	149.35297	6.38030	0.1897084	0.28089367	2.3090930	20	—	—
335315 2005 QH ₅₄	17.5	X	79.68817	73.07641	269.95897	1.03293	0.1854673	0.28211621	2.3024172	20	—	—
335316 2005 QZ ₇₀	17.2	X	19.97583	246.92522	129.74398	4.06224	0.2234390	0.27431059	2.3458901	20	—	—
335317 2005 QH ₇₄	16.5	X	23.33880	21.98387	345.80456	6.73764	0.1205383	0.27381449	2.3487228	20	—	—
335318 2005 QY ₇₉	17.1	X	59.03975	78.54338	289.73073	8.20374	0.1971143	0.28179931	2.3041430	20	—	—
335319 2005 QH ₈₃	17.5	X	3.14611	56.09806	315.15688	4.77852	0.1967040	0.27134209	2.3629685	20	12 23.9	20.0
335320 2005 QR ₈₃	17.2	X	34.67557	46.61651	335.58061	5.22826	0.2324250	0.27696021	2.3309044	20	—	—
335321 2005 QO ₉₁	17.8	X	53.84021	84.55519	291.33477	1.08648	0.2305199	0.28260273	2.2997739	20	—	—
335322 2005 QS ₁₀₄	17.7	X	95.19068	37.38623	254.30644	3.05162	0.1264882	0.27714559	2.3298649	20	12 21.2	21.1
335323 2005 QV ₁₀₈	17.2	X	346.61050	261.33231	166.31379	22.21121	0.3210841	0.27364289	2.3497046	20	—	—
335324 2005 QN ₁₁₀	17.7	X	51.67320	138.89175	211.48436	2.11029	0.1838026	0.27727991	2.3291124	20	—	—
335325 2005 QK ₁₂₄	17.6	X	26.18603	260.06296	141.61731	2.38988	0.1924622	0.27979383	2.3151402	20	—	—
335326 2005 QX ₁₃₂	17.9	X	19.64315	26.20111	35.54847	3.02285	0.2467173	0.28062977	2.3105403	20	—	—
335327 2005 QF ₁₃₅	17.1	X	301.62461	94.83947	3.49219	7.03655	0.0410672	0.27537502	2.3398410	20	12 31.0	19.8
335328 2005 QT ₁₄₃	18.0	X	90.11367	300.36415	240.20940	4.19835	0.2221342	0.27871818	2.3210928	20	12 7.7	21.7
335329 2005 QM ₁₅₅	17.2	X	51.88568	184.50882	115.95737	8.28809	0.0886008	0.27133537	2.3630075	20	11 11.5	20.3
335330 2005 QG ₁₇₆	17.9	X	87.63852	75.59830	222.34213	1.65022	0.1835536	0.27580676	2.3373986	20	12 24.6	21.6
335331 2005 QO ₁₈₈	17.8	X	52.23038	173.80785	146.54259	1.72393	0.2034163	0.27407305	2.3472454	20	12 20.2	21.1
335332 2005 RD	17.0	X	185.24567	1.93799	212.02511	6.46167	0.0687137	0.27985229	2.3148178	20	12 21.2	20.1
335333 2005 RR ₁₁	17.7	X	95.28072	163.24803	164.16917	5.86010	0.1909334	0.28401055	2.2921678	20	—	—
335334 2005 RV ₂₁	17.6	X	91.54356	288.80094	28.53238	2.99345	0.2364586	0.28093238	2.3088808	20	—	—
335335 2005 RW ₂₁	17.5	X	23.17724	31.46368	355.18228	2.64221	0.1601310	0.27759524	2.3273483	20	—	—
335336 2005 RZ ₂₂	17.3	X	44.26412	175.71876	196.71645	6.11843	0.2173149	0.27985233	2.3148175	20	—	—
335337 2005 SM	17.3	X	40.69214	354.79223	335.69960	6.87420	0.1336252	0.27116447	2.3640003	20	12 9.9	20.4
335338 2005 SS ₈	17.5	X	9.84670	230.62860	126.95922	2.26331	0.1987792	0.26803757	2.3823502	20	12 14.6	20.1
335339 2005 SK ₁₀	16.2	X	48.30582	254.27938	69.57554	23.18762	0.2762051	0.27217251	2.3581597	20	12 26.2	20.0
335340 2005 SR ₁₉	16.9	X	57.26397	284.03268	40.89118	6.65377	0.1266736	0.27193845	2.3595126	20	12 21.9	20.2
335341 2005 SX ₁₉	17.2	X	355.58960	348.21342	55.17893	4.45778	0.1811254	0.27202293	2.3590241	20	—	—
335342 2005 SB ₂₃	17.8	X	50.64715	261.97900	54.27847	2.95182	0.2200817	0.27231588	2.3573319	20	12 14.7	21.2
335343 2005 SD ₃₅	17.9	X	74.56069	180.31520	148.16053	3.29346	0.2255260	0.27716894	2.3297340	20	—	—
335344 2005 SV ₃₆	16.7	X	67.59075	312.80882	11.67758	7.09091	0.1399964	0.27518964	2.3408917	20	—	—
335345 2005 SB ₃₉	17.4	X	60.37838	295.02857	14.11502	2.54721	0.2218706	0.27246686	2.3564610	20	12 15.6	21.0
335346 2005 SR ₄₅	17.2	X	33.73167	357.61664	0.71966	3.76409	0.1522315	0.27269955	2.3551203	20	—	—
335347 2005 SW ₄₆	17.6	X	281.37166	143.92234	308.93268	1.89610	0.1585542	0.26538712	2.3981857	20	11 5.0	20.0
335348 2005 SQ ₄₉	17.6	X	10.82696	168.00623	180.03359	1.30841	0.1959753	0.26684878	2.3894204	20	12 2.1	20.1
335349 2005 SL ₅₃	17.7	X	6.79960	105.98312	318.29479	1.06771	0.2179315	0.27738251	2.3285380	20	—	—
335350 2005 SZ ₅₃	17.6	X	2.49019	219.38744	182.86070	1.27383	0.1808330	0.27264622	2.3554274	20	—	—
335351 2005 SU ₆₄	17.2	X	105.80914	59.82720	242.95698	3.12339	0.1805974	0.28021632	2.3128125	20	—	—
335352 2005 SN ₆₆	17.0	X	56.87628	337.28736	8.47241	4.83108	0.2173568	0.27626796	2.3347965	20	—	—
335353 2005 SO ₆₇	17.5	X	109.25363	268.73142	7.73023	3.29752	0.1833590	0.27573377	2.3378111	20	12 17.2	21.2
335354 2005 SB ₆₈	17.1	X	308.05968	221.96812	219.69569	4.38560	0.1899135	0.26878182	2.3779504	20	12 15.7	18.9
335355 2005 SW ₇₁	17.0	X	337.80653	326.78582	91.55835	2.23851	0.1770888	0.27030624	2.3690015	20	—	—
335356 200												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335361 2005 SK ₁₁₂	16.8	X	78.69915	9.84827	308.48362	6.68285	0.1327562	0.27608493	2.3358283	20	—	—
335362 2005 SD ₁₁₃	16.8	X	62.44943	10.78682	316.73240	6.81483	0.1298111	0.27398271	2.3477613	20	—	—
335363 2005 SD ₁₁₇	17.1	X	347.55024	312.74831	94.37854	3.38706	0.1840287	0.27240854	2.3567973	20	—	—
335364 2005 SS ₁₂₄	17.4	X	49.12049	126.55756	216.39205	2.71800	0.1746728	0.27369655	2.3493975	20	—	—
335365 2005 SM ₁₃₃	17.1	X	20.92496	190.56494	204.52325	4.98965	0.2181151	0.27430527	2.3459205	20	—	—
335366 2005 SK ₁₄₅	15.5	X	22.88048	228.26261	58.76248	3.73507	0.1624883	0.12616425	3.9371186	20	8 28.2	20.4
335367 2005 ST ₁₄₅	17.3	X	96.29999	152.21366	107.28220	2.96363	0.1894387	0.27008201	2.3703125	20	11 15.4	21.1
335368 2005 SX ₁₄₇	17.1	X	323.68133	213.73058	191.25520	8.90745	0.2008755	0.26519145	2.3993653	20	11 24.6	19.0
335369 2005 SX ₁₅₀	17.7	X	337.91665	35.49964	35.25304	3.36293	0.1844946	0.27188637	2.3598139	20	—	—
335370 2005 SW ₁₅₃	18.0	X	84.59883	70.17281	209.47489	5.44301	0.2189145	0.27284744	2.3542692	20	12 1.8	21.7
335371 2005 SP ₁₆₃	16.7	X	346.91951	333.93759	63.21535	4.12927	0.2384708	0.26851324	2.3795358	20	—	—
335372 2005 SE ₁₆₇	17.5	X	354.96172	272.86936	145.79342	7.49673	0.2558788	0.27298788	2.3534617	20	—	—
335373 2005 SY ₁₇₀	17.3	X	143.33666	14.51177	210.78881	6.95184	0.0660130	0.26945088	2.3740124	20	11 15.8	20.6
335374 2005 SZ ₁₈₂	18.2	X	46.10400	350.32415	293.03384	1.29718	0.1769145	0.26334034	2.4105961	20	10 19.7	21.1
335375 2005 SS ₁₈₃	17.6	X	351.73800	141.57562	270.69671	0.77098	0.1703922	0.27212227	2.3584499	20	—	—
335376 2005 SA ₁₉₃	17.1	X	20.70665	329.64629	61.29687	1.99375	0.2477050	0.27153339	2.3618586	20	—	—
335377 2005 SM ₂₀₈	17.3	X	30.08254	132.21495	252.71683	3.98140	0.1579341	0.27576872	2.3376135	20	—	—
335378 2005 SM ₂₁₀	17.0	X	304.47199	171.24987	289.62816	4.02681	0.0881262	0.27368889	2.3494413	20	—	—
335379 2005 SK ₂₁₄	16.8	X	95.54212	28.73246	275.03625	7.35469	0.2755844	0.27930735	2.3178276	20	—	—
335380 2005 SO ₂₁₄	17.1	X	327.40829	161.74196	243.14031	5.25707	0.1948703	0.26552820	2.3973363	20	12 1.6	18.8
335381 2005 SA ₂₃₂	17.9	X	45.61916	301.60189	15.18185	1.55060	0.1971573	0.26792491	2.3830180	20	12 6.3	21.2
335382 2005 SR ₂₃₃	17.6	X	74.85803	54.35032	231.97635	0.58385	0.1715775	0.26679766	2.3897256	20	11 25.7	21.2
335383 2005 SG ₂₃₄	17.0	X	0.79442	173.04416	239.17326	5.49619	0.1499312	0.27544299	2.3394561	20	—	—
335384 2005 SQ ₂₅₃	17.0	X	76.80736	49.71682	267.69964	5.38562	0.1526233	0.27601454	2.3362254	20	—	—
335385 2005 SY ₂₅₆	17.3	X	320.71705	28.06483	36.98774	5.96275	0.2032616	0.26948266	2.3738258	20	12 20.2	19.0
335386 2005 SN ₂₆₃	17.8	X	63.02073	137.73264	189.53717	6.55502	0.2269758	0.27691889	2.3311363	20	—	—
335387 2005 SE ₂₇₈	17.5	X	26.60729	108.04933	228.13889	6.32226	0.1220120	0.26719859	2.3873345	20	11 27.2	20.2
335388 2005 SM ₂₈₁	16.9	X	286.45229	160.06794	117.31193	3.21089	0.1631173	0.21633019	2.7482609	20	3 9.0	20.8
335389 2005 TV ₂	17.0	X	307.12788	161.91322	314.11253	4.26225	0.1124306	0.27685582	2.3314903	20	—	—
335390 2005 TW ₂	17.1	X	294.87303	117.61449	348.87804	7.31760	0.0508197	0.27397180	2.3478236	20	12 31.7	19.8
335391 2005 TY ₃	17.8	X	31.32165	231.78271	119.43761	5.97994	0.2458650	0.27231013	2.3573651	20	—	—
335392 2005 TF ₅	17.5	X	42.38730	101.24968	242.26195	5.46525	0.1402613	0.27209706	2.3585956	20	12 30.3	20.6
335393 2005 TC ₇	17.2	X	84.56073	71.72588	236.68480	5.24556	0.1630722	0.27453130	2.3446326	20	—	—
335394 2005 TZ ₁₃	17.5	X	359.23000	204.72333	168.00918	1.75899	0.0908820	0.26985336	2.3716513	20	12 2.9	20.1
335395 2005 TU ₁₄	16.7	X	47.74536	311.19711	57.09452	7.24219	0.1223441	0.27922468	2.3182851	20	—	—
335396 2005 TA ₁₇	17.4	X	64.54767	304.02104	21.68039	2.51399	0.2305809	0.27619920	2.3351840	20	—	—
335397 2005 TE ₁₈	17.4	X	51.73747	297.49838	54.69309	3.33513	0.2149989	0.27588767	2.3369416	20	—	—
335398 2005 TF ₁₈	17.6	X	10.77945	253.75856	143.34952	2.54587	0.1997585	0.27360866	2.3499006	20	—	—
335399 2005 TM ₂₁	17.6	X	6.00514	290.65521	60.24356	2.19415	0.1965070	0.26716903	2.3875106	20	11 28.2	19.8
335400 2005 TY ₂₁	17.2	X	51.71907	288.92081	40.38090	6.49438	0.1892364	0.27396001	2.3478910	20	12 29.5	20.6
335401 2005 TM ₂₇	17.5	X	41.23920	314.70029	44.54458	6.51093	0.2348440	0.27428990	2.3460081	20	—	—
335402 2005 TS ₂₇	17.1	X	359.73494	239.04371	158.09946	2.43016	0.2076947	0.27062474	2.3671424	20	—	—
335403 2005 TB ₇₇	16.9	X	12.91168	31.15762	3.66234	2.56006	0.2039608	0.27239818	2.3568571	20	—	—
335404 2005 TE ₈₆	16.8	X	61.79791	63.38289	232.64005	7.95673	0.1776912	0.26962168	2.3730097	20	11 25.8	20.2
335405 2005 TW ₉₈	17.0	X	105.72733	324.58796	321.54980	7.92917	0.2019199	0.27811924	2.3244241	20	12 27.6	20.8
335406 2005 TZ ₉₈	17.0	X	44.91271	164.38839	223.63439	6.47344	0.1067903	0.28088383	2.3091469	20	—	—
335407 2005 TC ₁₀₈	17.8	X	88.29627	346.98444	299.02291	3.40511	0.1991241	0.27393562	2.3480304	20	12 11.0	21.5
335408 2005 TM ₁₀₈	17.8	X	94.60048	67.10385	218.44620	8.13432	0.1707183	0.27437114	2.3455450	20	12 14.8	21.5
335409 2005 TP ₁₁₅	17.8	X	111.56698	282.46175	331.06410	1.83268	0.1445397	0.27030546	2.3690061	20	11 18.5	21.3
335410 2005 TZ ₁₂₃	17.9	X	48.48482	103.42354	209.91779	8.53325	0.2047490	0.26946247	2.3739443	20	12 6.9	21.3
335411 2005 TZ ₁₂₉	17.3	X	57.41807	244.66684	30.96938	11.03902	0.2394209	0.26397288	2.4067437	20	10 31.4	20.7
335412 2005 TU ₁₃₁	17.5	X	34.11010	189.99307	191.11884	5.06440	0.1328897	0.27505005	2.3416837	20	—	—
335413 2005 TG ₁₆₉	17.6	X	297.32846	90.47218	344.94885	2.14792	0.0725109	0.26568498	2.3963930	20	11 16.8	20.3
335414 2005 TO ₁₉₃	16.5	X	243.54318	166.21293	270.12288	12.65051	0.1143024	0.24519833	2.5280813	20	8 14.1	20.2
335415 2005 UT ₁	17.4	X	296.22319	257.46624	212.47535	5.74307	0.1310425	0.26956043	2.3733691	20	—	—
335416 2005 UR ₁₂	17.2	X	65.40480	268.03557	99.71887	3.40896	0.2527991	0.27966258	2.3158645	20	—	—
335417 2005 UH ₁₆	17.0	X	331.78994	309.73377	68.26040	2.19509	0.1977593	0.26254312	2.4154736	20	10 29.0	18.5
335418 2005 UO ₁₆	17.5	X	355.50915	313.83896	73.77806	2.02981	0.1937561	0.26842241	2.3800726	20	—	—
335419 2005 UU ₂₆	17.2	X	6.01848	138.20365	272.00152	1.56200	0.2380427	0.27292558	2.3538199	20	—	—
335420 2005 UA ₄₀	16.9	X	29.65189	229.51788	69.24740	2.26507	0.1738055	0.25774419	2.4453637	20	10 17.9	19.8
335421 2005 UJ ₄₂	17.6	X	32.63245	171.91391	216.79139	1.45675	0.1733935	0.27551044	2.3390742	20	—	—
335422 2005 UO ₄₈	17.4	X	4.90307	93.35116	300.90739	1.59426	0.2017347	0.27092462	2.3653953	20	—	—
335423 2005 UR ₄₉	17.5	X	16.61464	299.82407	41.85708	5.99326	0.2580052	0.26586183	2.3953302	20	12 11.1	20.3
335424 2005 UN ₅₂	16.9	X	48.36604	79.95163	263.76202	4.49827	0.2440189	0.27303175	2.3532096	20	—	—
335425 2005 UJ ₅₅	17.7	X	36.29355	70.44204	312.94422	1.74962	0.2121446	0.27488168	2.3426398	20	—	—
335426 2005 UA ₆₁	17.6	X	42.78217	71.68700	219.64204	1.86218	0.1535324	0.25938596	2.4350343	20	10 22.3	20.6
335427 2005 UG ₇₂	17.1	X	15.33754	33.91295	339.20696	7.22162	0.1946555	0.27023199	2.3694354	20	—	—
335428 2005 UB ₈₅	17.4	X	300.08941	273.93589	176.01213	1.99172	0.1417376	0.26662496	2.3907574	20	12 11.0	19.4
335429 2005 UC ₈₇	17.4	X	27.05264	87.16171	206.05135	10.19516	0.1766566	0.25974198	2.4328086	20	10 4.8	20.1
335430 2005 TO ₈₇	17.2	X	16.12641	212.34800	165.05209	1.77237	0.1187670	0.27053178	2.3676847	20	—	—
335431 2005 UT ₉₉	17.6	X	19.81084	221.65095	122.54195	3.51090	0.2108308	0.26648417	2.3915994	20	12 12.4	20.4
335432 2005 UA ₁₆₂	17.3	X	55.97405	232.93681	125.43800	4.45138	0.2267042	0.27701632	2.3305897	20	—	—
335433 2005 UW ₁₆₃	17.6	X	278.69966	183.98281	290.18647	1.61790	0.1479964	0.26670177	2.3902984	20	12 4.3	19.9
335434 2005 UY ₁₇₀	17.1	X	290.60994	51.78606	24.15508	3.55438	0.0657192	0.26234456	2.4166922	20	11 6.5	19.9
335435 2005 UZ ₂₀₇	17.8	X	33.29440	171.17154	156							

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335441 2005 <i>US</i> ₃₀₄	17.6	X	297.19703	318.15484	122.99867	5.83328	0.2012477	0.26255178	2.4154204	20	11 17.4	19.5
335442 2005 <i>UH</i> ₃₁₁	16.6	X	89.97037	8.41557	219.16636	14.10705	0.0611406	0.25701301	2.4499994	20	9 8.2	20.1
335443 2005 <i>UZ</i> ₃₁₆	17.7	X	108.99846	44.27035	268.96343	2.38224	0.2142472	0.28556362	2.2838494	20	—	—
335444 2005 <i>UY</i> ₃₅₀	16.8	X	20.26830	123.49276	251.30525	6.84015	0.1256569	0.27168019	2.3610077	20	—	—
335445 2005 <i>UV</i> ₃₅₄	16.7	X	265.72624	157.68544	284.63897	6.65349	0.1135395	0.25858460	2.4400625	20	9 26.3	19.8
335446 2005 <i>US</i> ₃₉₂	17.9	X	26.82028	284.64237	80.98157	2.53778	0.0809181	0.27232528	2.3572777	20	12 31.8	20.7
335447 2005 <i>UM</i> ₃₉₃	17.1	X	34.82669	200.85875	164.97626	6.99860	0.1702409	0.27227975	2.3575404	20	—	—
335448 2005 <i>UH</i> ₃₉₇	17.9	X	22.84434	276.18553	110.55110	2.21483	0.1937435	0.27284608	2.3542770	20	—	—
335449 2005 <i>UM</i> ₄₂₁	17.9	X	68.96425	58.15480	229.80189	3.79626	0.2292450	0.26773257	2.3841592	20	11 27.7	21.4
335450 2005 <i>UO</i> ₄₃₁	17.6	X	247.85901	254.83745	203.69149	4.41859	0.0713296	0.25712390	2.4492949	20	10 3.0	20.6
335451 2005 <i>UR</i> ₄₅₄	17.2	X	56.54562	281.93252	64.04092	8.25610	0.2951124	0.27516703	2.3410200	20	—	—
335452 2005 <i>UD</i> ₄₅₆	14.7	X	267.84788	163.53961	296.42564	7.48713	0.2340488	0.12593268	3.9419438	20	9 13.9	20.4
335453 2005 <i>UC</i> ₅₀₈	15.3	X	12.78230	88.87312	203.36596	13.69723	0.2237610	0.12488510	3.9639573	20	8 17.4	20.1
335454 2005 <i>UL</i> ₅₀₈	17.6	X	89.16849	115.46421	222.07219	1.85963	0.1454461	0.27471556	2.3435841	20	—	—
335455 2005 <i>UO</i> ₅₁₈	15.8	X	348.83755	209.42754	103.19026	10.01535	0.1755133	0.12299658	4.0044299	20	7 29.1	19.9
335456 2005 <i>UX</i> ₅₂₀	18.2	X	61.66589	79.88244	192.31514	4.58242	0.1924014	0.26682374	2.3895699	20	10 27.8	21.6
335457 2005 <i>VB</i> ₃	17.2	X	4.11253	290.20046	92.74677	2.34322	0.1379852	0.26863997	2.3787874	20	12 31.1	19.7
335458 2005 <i>VB</i> ₆	17.5	X	349.87895	220.60117	170.71532	5.19844	0.2363266	0.26715272	2.3876077	20	—	—
335459 2005 <i>VZ</i> ₂₇	17.1	X	246.53704	151.17086	3.90280	2.70784	0.0259731	0.27051599	2.3677768	20	12 27.8	19.8
335460 2005 <i>VY</i> ₃₈	16.5	X	279.08132	28.28040	70.95302	12.74864	0.1653307	0.26186238	2.4196579	20	11 11.9	18.9
335461 2005 <i>VB</i> ₆₁	17.6	X	27.32958	276.39833	76.66969	6.92321	0.2368266	0.27010246	2.3701929	20	—	—
335462 2005 <i>VC</i> ₈₇	17.8	X	19.57662	158.44551	134.17298	1.42858	0.1956927	0.25659903	2.4526338	20	9 25.6	20.3
335463 2005 <i>VH</i> ₈₉	17.5	X	56.42134	167.63226	122.35812	4.76562	0.0837652	0.25969201	2.4331207	20	10 30.3	20.6
335464 2005 <i>VY</i> ₁₁₈	16.2	X	60.93985	78.33602	286.02192	20.82444	0.2000972	0.27841926	2.3227539	20	—	—
335465 2005 <i>VY</i> ₁₃₅	16.9	X	43.76157	53.10463	256.32489	6.27723	0.1559352	0.26145157	2.4221919	20	11 17.1	19.9
335466 2005 <i>WQ</i>	17.4	X	319.12599	358.85499	70.74757	2.29744	0.1671431	0.26476872	2.4019185	20	12 19.3	19.2
335467 2005 <i>WB</i> ₂₇	17.4	X	2.44947	350.09606	336.24420	0.72106	0.1951055	0.25709381	2.4494861	20	10 12.9	19.5
335468 2005 <i>WU</i> ₃₅	17.2	X	340.95769	137.22370	246.04274	5.62816	0.1562149	0.26119756	2.4237620	20	11 21.4	19.3
335469 2005 <i>WB</i> ₆₃	16.1	X	102.82844	248.30204	265.31663	12.45239	0.1190999	0.23513044	2.5997413	20	6 25.9	19.7
335470 2005 <i>WU</i> ₆₃	16.6	X	322.87533	270.26010	143.43441	14.52122	0.1426852	0.26428498	2.4048485	20	12 4.8	19.2
335471 2005 <i>WX</i> ₆₈	16.7	X	73.42763	294.10286	249.77953	12.45750	0.0888488	0.23691188	2.5866926	20	6 23.8	20.0
335472 2005 <i>WW</i> ₉₈	17.5	X	335.76164	69.76581	345.32810	1.39306	0.1308604	0.26608200	2.3940087	20	12 27.7	19.6
335473 2005 <i>WE</i> ₉₄	18.2	X	0.76031	164.77334	239.97347	0.82741	0.1772356	0.26839274	2.3802480	20	—	—
335474 2005 <i>WS</i> ₉₄	17.1	X	351.68566	275.99515	95.04076	4.20245	0.2031752	0.26200681	2.4187687	20	12 1.7	19.2
335475 2005 <i>WD</i> ₉₆	17.4	X	348.66857	250.14958	85.25726	2.44860	0.2021255	0.25475368	2.4644636	20	9 28.9	19.2
335476 2005 <i>WB</i> ₉₉	16.4	X	91.62243	293.34100	251.99282	13.00750	0.1373729	0.23920810	2.5701125	20	7 23.9	20.2
335477 2005 <i>WL</i> ₁₀₃	17.2	X	2.07420	278.54367	97.06790	6.25720	0.1863230	0.26715229	2.3876104	20	12 25.1	19.8
335478 2005 <i>WR</i> ₁₁₂	17.1	X	212.26960	189.95353	260.88720	4.88573	0.0891210	0.24218013	2.5490423	20	8 2.4	20.7
335479 2005 <i>WA</i> ₁₁₄	17.7	X	247.21913	274.44321	182.84948	0.71773	0.1561911	0.25810127	2.4431078	20	9 17.6	20.9
335480 2005 <i>WY</i> ₁₂₉	17.7	X	8.44524	314.07825	65.26413	2.97226	0.1747876	0.26718635	2.3874074	20	—	—
335481 2005 <i>WJ</i> ₁₃₈	17.4	X	295.54510	196.07910	250.45644	2.51215	0.0957587	0.26296334	2.4128996	20	11 28.2	19.6
335482 2005 <i>WC</i> ₁₄₀	17.2	X	268.98652	353.36339	39.05421	1.29273	0.1259213	0.24536126	2.5269620	20	7 22.9	20.3
335483 2005 <i>WF</i> ₁₄₄	17.1	X	235.10536	334.41590	141.68774	5.81686	0.1707269	0.25516679	2.4618029	20	9 27.2	20.5
335484 2005 <i>WZ</i> ₁₄₉	17.4	X	23.29808	25.18984	1.70572	2.62209	0.2436575	0.27102400	2.3648170	20	—	—
335485 2005 <i>WD</i> ₁₅₄	17.4	X	344.56072	304.08171	64.31534	5.92050	0.2021509	0.25994233	2.4315584	20	11 12.2	19.3
335486 2005 <i>WO</i> ₁₇₇	16.0	X	33.37625	303.46066	280.62651	13.74573	0.1408602	0.23222874	2.6213523	20	6 27.3	18.9
335487 2005 <i>WF</i> ₁₉₄	16.8	X	10.29093	295.66848	57.57306	8.08379	0.1259725	0.26354761	2.4093321	20	11 25.7	19.5
335488 2005 <i>WZ</i> ₂₀₃	16.2	X	22.03483	318.67087	329.65782	9.36198	0.0604730	0.23266591	2.6180677	20	7 9.7	19.4
335489 2005 <i>WL</i> ₂₁₀	18.5	X	348.20312	34.52996	393.93785	1.35303	0.1885948	0.26528921	2.3987758	20	12 28.1	20.6
335490 2005 <i>XG</i> ₅	13.0	X	154.19557	95.32337	344.21266	32.83098	0.0316133	0.08262249	5.2208019	20	4 27.5	20.5
335491 2005 <i>XR</i> ₂₄	17.0	X	133.57247	233.83252	277.05640	19.16468	0.0556136	0.37609627	1.9008012	20	7 27.6	19.3
335492 2005 <i>XC</i> ₅₁	16.5	X	341.36135	9.09574	305.69048	8.68723	0.1053114	0.24396978	2.5365613	20	8 2.8	19.0
335493 2005 <i>XU</i> ₅₅	17.2	X	19.31608	77.89443	269.96717	4.05398	0.1440027	0.26269054	2.4145698	20	12 4.5	20.1
335494 2005 <i>XS</i> ₈₆	17.2	X	316.65203	357.90588	31.03472	1.75324	0.1822222	0.25564707	2.4587186	20	10 7.1	19.2
335495 2005 <i>XZ</i> ₁₁₄	16.6	X	144.17234	243.51883	281.53440	6.58331	0.0701101	0.24580000	2.5239542	20	8 22.6	20.3
335496 2005 <i>XK</i> ₁₁₅	16.7	X	339.65957	343.93082	305.76020	3.55395	0.0698150	0.23047243	2.6346529	20	6 24.1	19.7
335497 2005 <i>YK</i> ₅	16.9	X	3.70978	294.13061	22.80518	2.64785	0.1938938	0.25335583	2.4735201	20	9 30.6	18.9
335498 2005 <i>YX</i> ₁₆	17.1	X	127.12870	87.15616	115.76164	21.98179	0.0723917	0.38080689	1.8850933	20	10 28.3	20.0
335499 2005 <i>YB</i> ₂₈	17.2	X	329.23486	14.93132	345.14277	2.29778	0.2597785	0.25181306	2.4836128	20	9 16.6	18.6
335500 2005 <i>YQ</i> ₂₉	17.4	X	356.46521	202.52427	116.38300	2.29774	0.1708142	0.25411182	2.4686118	20	9 16.1	19.6
335501 2005 <i>YX</i> ₄₉	16.7	X	337.86866	197.13530	169.23843	5.51375	0.1927474	0.25418596	2.4681317	20	10 22.7	18.6
335502 2005 <i>YF</i> ₅₃	16.3	X	333.02331	199.70771	112.40447	12.95063	0.1871726	0.23727615	2.5840445	20	7 7.5	18.6
335503 2005 <i>YJ</i> ₅₅	16.4	X	132.59796	198.14566	300.25349	13.92075	0.1893727	0.23364111	2.6107776	20	7 15.3	20.6
335504 2005 <i>YN</i> ₆₅	16.8	X	340.82427	34.36328	294.45502	5.50521	0.1152179	0.24564887	2.5249892	20	8 21.9	19.3
335505 2005 <i>YZ</i> ₇₂	17.0	X	19.15224	299.97623	42.93081	1.78163	0.2086637	0.25940152	2.4349369	20	12 7.1	19.7
335506 2005 <i>YR</i> ₉₃	16.6	X	230.11748	189.54131	259.94418	10.33634	0.0600325	0.24488314	2.5302502	20	8 22.7	20.2
335507 2005 <i>YF</i> ₁₁₄	17.0	X	327.77106	264.34382	76.00209	4.19304	0.0585947	0.24336189	2.5407836	20	8 20.7	19.9
335508 2005 <i>YJ</i> ₁₄₂	16.9	X	282.71868	324.85198	354.25802	1.88087	0.0812875	0.23120462	2.6290875	20	5 6.8	20.4
335509 2005 <i>YB</i> ₁₄₃	13.5	X	282.45882	333.89964	317.83841	17.67831	0.0795086	0.08439007	5.1476437	20	4 1.7	20.5
335510 2005 <i>YO</i> ₁₄₄	17.6	X	94.08876	302.19110	298.88220	16.55129	0.0396601	0.38278057	1.8786078	20	10 17.4	20.2
335511 2005 <i>YA</i> ₁₄₅	17.7	X	297.93161	323.35973	97.13566	3.69297	0.1678824	0.25387995	2.4701147			

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335521 2005 YB ₂₅₇	15.9	X	57.68786	258.50871	278.50941	11.40717	0.1055199	0.22511880	2.6762594	20	5 24.2	19.3
335522 2005 YA ₂₆₈	16.6	X	216.76207	131.42026	294.99185	11.03249	0.0521175	0.23690960	2.5867092	20	7 11.2	20.0
335523 2006 AY ₁₃	17.0	X	78.91060	42.66387	128.15295	4.82588	0.0658748	0.22789811	2.6544562	20	6 10.8	20.4
335524 2006 AK ₂₃	16.8	X	322.05047	213.19487	112.34955	8.28512	0.2425850	0.24028766	2.5624087	20	6 26.2	19.0
335525 2006 AZ ₂₃	16.5	X	238.31923	108.40507	309.42190	21.68290	0.1160596	0.23933201	2.5692253	20	7 20.9	20.1
335526 2006 AD ₂₅	16.7	X	76.70972	281.55915	294.29334	7.67107	0.1109822	0.23804167	2.5785015	20	8 14.0	20.2
335527 2006 AV ₂₇	16.9	X	254.88261	131.70208	303.29257	4.65507	0.0993536	0.24410002	2.5356589	20	9 2.6	20.2
335528 2006 AN ₃₁	16.0	X	21.28087	249.86670	296.79640	12.98044	0.0550796	0.22292271	2.6938072	20	3 29.6	19.7
335529 2006 AE ₅₇	17.0	X	44.89670	211.16723	2.66982	0.91047	0.0667694	0.23253057	2.6190835	20	6 20.9	20.0
335530 2006 AH ₅₉	16.5	X	308.67479	287.16537	296.31544	6.34805	0.1664320	0.21188557	2.7865604	20	1 26.9	20.3
335531 2006 AA ₇₂	17.0	X	337.16770	225.99345	150.56940	2.53659	0.2020320	0.25345951	2.4728456	20	11 6.2	19.0
335532 2006 AT ₈₁	15.6	X	133.40628	168.55663	333.14656	33.06663	0.1507787	0.23098654	2.6307420	20	7 29.6	20.2
335533 2006 AH ₈₃	15.6	X	68.78643	232.80162	113.43189	13.20479	0.1870076	0.22649580	2.6654014	20	7 8.7	19.2
335534 2006 AA ₈₆	16.2	X	132.87996	3.57111	116.47746	12.98947	0.1352054	0.22892339	2.6465246	20	6 18.3	20.4
335535 2006 AW ₉₃	16.2	X	201.49725	71.94925	332.72473	11.42144	0.0798040	0.22617075	2.6679545	20	5 26.1	20.4
335536 2006 AJ ₁₀₀	16.6	X	320.61522	16.19653	312.88688	10.20308	0.1130654	0.23717805	2.5847570	20	7 17.2	19.5
335537 2006 AV ₁₀₅	13.2	X	228.57559	36.77715	311.17990	5.51266	0.0217225	0.08253053	5.2246793	20	4 19.1	20.3
335538 2006 BK ₂	16.4	X	166.05952	126.34176	306.25976	8.03915	0.0388403	0.22751297	2.6574511	20	5 15.3	20.3
335539 2006 BT ₅	17.1	X	352.36660	52.70388	320.10956	33.82977	0.0818293	0.38743788	1.8635226	20	—	—
335540 2006 BY ₅	16.8	X	302.07099	165.23264	246.53796	4.91980	0.1643385	0.25354598	2.4722833	20	10 9.2	19.0
335541 2006 BC ₃₂	16.5	X	44.55725	229.18480	323.18996	10.64741	0.1323355	0.22262309	2.6962237	20	5 27.6	19.9
335542 2006 BL ₃₃	16.3	X	217.79258	317.86614	170.77482	12.59609	0.1427445	0.23948371	2.5681402	20	8 15.2	20.1
335543 2006 BO ₄₃	17.6	X	311.63150	227.62757	146.16540	23.57309	0.0722756	0.37996793	1.8878671	20	10 17.7	19.5
335544 2006 BK ₆₂	17.2	X	82.24681	224.17920	346.15411	20.16071	0.0442094	0.37176605	1.9155327	20	8 25.5	19.1
335545 2006 BA ₆₉	16.9	X	93.61888	159.62577	7.85556	4.83161	0.0711682	0.22938437	2.6429777	20	6 26.7	20.5
335546 2006 BT ₇₈	16.9	X	285.71527	312.33766	337.03363	6.52910	0.0650092	0.21871139	2.7282769	20	4 2.5	20.6
335547 2006 BA ₉₀	17.4	X	149.25594	2.02052	125.47201	3.68493	0.0562554	0.23259500	2.6185998	20	7 10.3	20.9
335548 2006 BP ₉₈	15.3	X	268.06553	39.65401	343.99984	32.37663	0.1943041	0.23398336	2.6082311	20	7 8.1	19.6
335549 2006 BC ₁₁₄	17.4	X	273.43229	287.62354	108.21617	2.53337	0.0892770	0.24124000	2.5556606	20	8 8.9	20.7
335550 2006 BX ₁₂₃	16.6	X	303.68747	165.78285	144.39196	3.79824	0.1688408	0.22413959	2.6840483	20	5 12.9	19.8
335551 2006 BZ ₁₂₅	16.1	X	228.54724	263.53311	152.44273	22.41252	0.0491222	0.23268249	2.6179433	20	7 11.8	20.1
335552 2006 BS ₁₂₉	16.4	X	331.69390	74.70149	142.42889	13.33665	0.1506901	0.21194238	2.7860624	20	2 23.7	19.6
335553 2006 BK ₁₃₃	16.7	X	199.66151	66.10784	317.36883	4.46231	0.0859390	0.22064188	2.7123397	20	4 20.9	20.9
335554 2006 BO ₁₄₂	16.0	X	300.44356	324.08858	325.86635	12.54584	0.1016017	0.22143229	2.7058813	20	4 13.1	19.8
335555 2006 BG ₁₄₉	16.0	X	267.99798	72.55252	296.52164	29.59562	0.0672505	0.23612690	2.5924222	20	7 1.6	19.6
335556 2006 BV ₁₅₇	16.5	X	206.23580	18.85219	349.40395	6.31851	0.0306629	0.21755623	2.7379259	20	4 10.8	20.5
335557 2006 BQ ₁₉₃	14.2	X	290.59214	96.99091	121.29521	2.47251	0.0569727	0.08619154	5.0756651	20	5 12.8	20.8
335558 2006 BC ₁₉₄	13.8	X	265.68493	156.07010	154.11601	12.44987	0.0657240	0.08258370	5.2224365	20	4 17.9	20.8
335559 2006 BL ₂₂₀	17.0	X	91.75612	193.11515	345.38356	3.69007	0.0341976	0.23151949	2.6267033	20	7 4.1	20.5
335560 2006 BU ₂₂₈	16.9	X	264.87826	237.55606	103.83404	5.63601	0.1586601	0.23017655	2.6369101	20	5 5.4	20.7
335561 2006 BU ₂₄₉	12.9	X	277.96783	349.77146	305.83330	9.58269	0.0612419	0.08388071	5.1684620	20	4 7.7	19.9
335562 2006 BP ₂₅₂	17.3	X	249.73918	123.32720	315.74110	5.14426	0.1172694	0.24397790	2.5365050	20	8 29.9	20.5
335563 2006 BQ ₂₅₃	16.1	X	244.54699	346.52214	321.63955	5.88765	0.0505421	0.21496632	2.7598730	20	3 10.1	20.1
335564 2006 BL ₂₆₂	16.9	X	307.09731	257.63472	350.62711	3.81486	0.1497721	0.21173506	2.7878807	20	2 28.4	20.6
335565 2006 BO ₂₆₇	16.1	X	39.13792	222.82777	349.15545	10.69222	0.2058724	0.22346813	2.6894222	20	6 30.9	19.2
335566 2006 CJ ₁	16.6	X	324.30339	294.52385	315.48149	10.66208	0.1595213	0.21884706	2.7271493	20	3 18.7	20.1
335567 2006 CK ₅	12.8	X	273.08082	331.14686	334.58761	27.07951	0.0748745	0.08181971	5.2548956	20	4 2.6	20.1
335568 2006 CG ₂₀	16.4	X	292.75641	0.28465	304.53078	11.06379	0.1370193	0.22555479	2.6728095	20	4 17.6	20.2
335569 2006 CR ₂₂	16.3	X	152.63016	122.84029	345.94436	12.90777	0.2212723	0.22935902	2.6431724	20	6 27.4	21.0
335570 2006 CB ₃₉	16.4	X	210.14334	192.75192	274.96929	3.90507	0.0789129	0.23919941	2.5701747	20	8 23.1	20.0
335571 2006 CB ₄₀	16.2	X	52.90599	195.08372	344.57812	13.46239	0.1321773	0.22004524	2.7172404	20	5 20.9	19.8
335572 2006 CC ₄₇	16.5	X	174.85518	348.46153	128.91858	7.31040	0.1318870	0.23659624	2.5889927	20	7 26.4	20.5
335573 2006 CQ ₄₇	16.9	X	306.45956	229.53418	125.31901	3.28084	0.1029334	0.23913360	2.5706462	20	7 30.6	19.5
335574 2006 CJ ₅₁	13.3	X	246.93764	184.77180	143.09334	7.77573	0.0478199	0.08442851	5.1460813	20	4 18.8	20.3
335575 2006 DH ₂	16.4	X	130.58306	111.11219	333.17768	2.30698	0.0796021	0.22015179	2.7163636	20	4 23.0	20.2
335576 2006 DC ₄	16.4	X	62.05125	169.37790	347.32622	6.00082	0.0616768	0.21778618	2.7359984	20	4 25.2	20.0
335577 2006 DE ₄	16.3	X	80.76085	10.65280	159.11434	5.36976	0.1755236	0.22323479	2.6912960	20	6 28.1	20.0
335578 2006 DK ₁₃	16.2	X	173.99564	163.44933	292.01002	7.12450	0.0930974	0.23055327	2.6340369	20	6 27.4	20.2
335579 2006 DK ₂₀	17.4	X	210.76127	315.26721	108.14053	3.36796	0.0316986	0.23122203	2.6289555	20	6 30.7	20.8
335580 2006 DQ ₂₂	16.6	X	57.26478	199.26267	358.30074	6.43192	0.0268995	0.22433732	2.6824710	20	6 9.9	20.3
335581 2006 DM ₂₃	16.4	X	205.57737	28.94485	354.67462	6.34541	0.0677335	0.22117265	2.7079986	20	4 28.0	20.5
335582 2006 DJ ₂₉	16.6	X	188.92606	330.80329	103.77213	3.94853	0.0919819	0.23061612	2.6335584	20	6 16.2	20.5
335583 2006 DR ₄₀	16.5	X	18.09639	88.79954	141.73899	11.78828	0.0301328	0.22290256	2.6939696	20	6 2.6	20.2
335584 2006 DL ₄₁	17.1	X	107.00624	255.25099	246.79817	7.56356	0.1521149	0.29472376	2.2362788	20	6 20.9	20.0
335585 2006 DC ₅₇	16.6	X	178.83511	270.75604	170.62397	6.43259	0.0881141	0.22578850	2.6709648	20	6 14.3	20.7
335586 2006 DF ₆₁	16.5	X	219.91052	288.81776	351.01623	6.60113	0.0770872	0.19724981	2.9227499	20	1 12.6	20.9
335587 2006 DG ₆₆	15.9	X	310.77863	155.88253	82.51012	10.69486	0.0900589	0.21165958	2.7885436	20	3 5.6	19.8
335588 2006 DU ₆₇	15.5	X	12.38370	241.29178	328.72161	12.43457	0.1230563	0.21641513	2.7475418	20	4 19.4	18.9
335589 2006 DF ₈₈	16.4	X	314.25480	274.27241	352.05268	9.46449	0.0789095	0.21512178	2.7585432	20	4 8.8	20.1
335590 2006 DV ₁₂₃	16.4	X	237.09190	237.68665	165.53486	13.83731	0.0802092	0.23117078	2.6293441	20	6 30.9	20.3
335591 2006 DY ₁₃₁	17.0	X	202.95722	48.76620	54.66667	3.49753	0.1677470	0.23775576	2.5805682	20	8 5.1	21.1
335592 2006 DE ₁₃₃	17.0	X	226.60264	237.88029	128.67466	6.81332	0.0826991	0.22182087	2.7027204	20	5 3.9	21.0
335593 2006 DM ₁₄₀	16.2	X	342.15299	90.14959	133.55014</							

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>		
335601	2006	EX ₁₇	16.8	X	228.66509	224.40704	176.34328	11.85964	0.1596682	0.22742930	2.6581028	20	6 10.8	21.1
335602	2006	EO ₂₀	16.6	X	288.85967	40.37303	337.72560	13.96004	0.0110921	0.23837569	2.5760922	20	8 19.4	19.8
335603	2006	EY ₂₃	16.6	X	184.18142	16.93219	339.69832	5.06775	0.0190141	0.21145150	2.7903726	20	3 2.8	20.3
335604	2006	EH ₃₃	16.7	X	197.35480	239.68425	180.74593	12.35591	0.1111239	0.22649554	2.6654034	20	6 7.2	21.0
335605	2006	EW ₃₄	16.7	X	66.94135	143.11783	17.39050	8.44671	0.1072915	0.21771467	2.7365975	20	5 14.4	20.2
335606	2006	EK ₄₂	16.2	X	226.90720	41.88519	301.95672	3.92836	0.0505184	0.21376993	2.7701608	20	4 3.2	20.2
335607	2006	EW ₄₂	16.3	X	247.16046	132.81700	211.02231	5.81841	0.0128990	0.21776595	2.7361678	20	5 4.6	19.9
335608	2006	EN ₅₂	16.6	X	348.92614	87.78870	154.22861	11.10273	0.0828674	0.22148561	2.7054471	20	5 5.4	20.0
335609	2006	EA ₅₃	16.9	X	308.14604	265.01358	4.66519	3.72599	0.0573089	0.21418671	2.7665660	20	4 10.1	20.6
335610	2006	EL ₆₃	16.7	X	38.07425	190.36441	352.01411	12.45580	0.1119107	0.21499201	2.7596532	20	4 26.6	20.2
335611	2006	EW ₇₁	16.4	X	245.86395	296.60319	25.59820	4.01037	0.0925717	0.21132474	2.7914884	20	3 27.8	20.5
335612	2006	EN ₇₄	16.3	X	144.15363	116.52358	338.46244	9.89566	0.1277546	0.22236929	2.6982748	20	5 24.6	20.6
335613	2006	FM ₉	15.4	X	224.09091	251.71073	115.18967	23.92508	0.3148878	0.18354529	3.0664829	20	12 6.0	20.8
335614	2006	FG ₁₅	16.8	X	313.01067	87.57520	394.06568	0.65992	0.0540354	0.21973977	2.7197580	20	5 3.9	20.1
335615	2006	FF ₁₈	16.4	X	115.57632	286.42518	192.05248	6.86621	0.0973187	0.21659686	2.7460047	20	5 24.0	20.3
335616	2006	FG ₃₃	16.4	X	24.46127	1.16542	209.20282	7.87087	0.0790143	0.21361154	2.7715300	20	5 16.8	19.7
335617	2006	FW ₄₂	16.2	X	216.27116	350.71150	38.81850	8.75585	0.1684855	0.21814271	2.7330165	20	5 12.9	20.5
335618	2006	GE ₁₁	16.7	X	266.10802	151.42185	114.12092	3.11033	0.0149502	0.20323784	2.8650552	20	2 19.6	20.7
335619	2006	GJ ₂₁	16.6	X	248.53772	42.98399	0.02431	9.85170	0.1644947	0.23139362	2.6276557	20	7 5.6	20.6
335620	2006	GZ ₂₆	15.8	X	151.71292	247.69172	34.17193	25.95231	0.3275209	0.17579159	3.1560024	20	—	—
335621	2006	GA ₃₇	16.7	X	113.89994	54.47156	48.55605	4.54533	0.0602447	0.21306045	2.7763070	20	4 26.5	20.5
335622	2006	HM ₄	16.2	X	244.50969	136.45036	103.22721	2.83431	0.1678131	0.19051832	2.9911961	20	—	—
335623	2006	HZ ₄	16.5	X	158.77503	281.77102	201.36278	7.38660	0.0927870	0.22593083	2.6698429	20	7 14.9	20.6
335624	2006	HW ₂₆	16.0	X	178.92091	169.44910	135.69251	9.55404	0.1613106	0.18533450	3.0467152	20	1 5.3	21.0
335625	2006	HD ₂₇	16.2	X	279.16335	51.17865	170.76394	9.80806	0.2411525	0.19268038	2.9687780	20	—	—
335626	2006	HC ₅₁	16.0	X	357.83468	343.95909	243.09804	11.17346	0.0878688	0.21173655	2.7878677	20	4 23.5	19.4
335627	2006	HH ₆₂	16.7	X	276.05665	147.90111	86.67108	3.19706	0.0562796	0.19561945	2.9389669	20	1 20.1	20.9
335628	2006	HW ₆₉	15.5	X	154.73721	249.17359	52.07596	14.84236	0.3016091	0.17746552	3.1361252	20	—	—
335629	2006	HF ₁₅₃	15.7	X	224.46721	94.73015	138.28412	10.36720	0.0585182	0.18417098	3.0595338	20	—	—
335630	2006	JM ₃	16.3	X	284.90514	199.50728	37.28081	1.55680	0.0763900	0.19791296	2.9162173	20	1 30.3	20.5
335631	2006	JY ₁₁	15.9	X	127.68202	186.68769	129.42229	6.40735	0.1787050	0.17684163	3.1434970	20	—	—
335632	2006	JY ₁₅	16.1	X	183.06069	333.64068	40.07225	2.52166	0.0903820	0.20445126	2.8537080	20	3 26.1	20.4
335633	2006	JN ₂₀	16.0	X	142.76909	243.19079	86.59721	15.25106	0.1947813	0.18248454	3.0783547	20	1 4.6	20.8
335634	2006	JR ₂₀	16.2	X	186.73723	144.03680	182.18890	11.80552	0.0662580	0.19287079	2.9668237	20	1 30.3	20.9
335635	2006	JB ₂₈	16.2	X	167.85597	149.81791	196.21288	16.56282	0.2469155	0.18948127	3.0021003	20	2 11.5	21.6
335636	2006	JZ ₃₅	16.5	X	184.99629	186.96331	124.43188	3.39960	0.2748596	0.18572283	3.0424669	20	1 20.7	22.0
335637	2006	KP ₆	16.4	X	128.82121	258.14227	69.02344	0.30020	0.1572413	0.17968738	3.1102191	20	—	—
335638	2006	KQ ₁₉	15.8	X	147.26752	241.94853	124.07951	5.19851	0.1534094	0.19213354	2.9744084	20	2 15.6	20.4
335639	2006	KR ₁₉	15.7	X	163.61564	100.52578	214.75116	15.39709	0.2857980	0.18095813	3.0956414	20	1 8.7	21.4
335640	2006	KD ₂₈	16.5	X	143.36149	209.95760	232.39745	12.43432	0.1688735	0.21125256	2.7921241	20	5 13.3	20.8
335641	2006	KC ₃₂	16.4	X	233.53404	284.31510	8.22244	1.58441	0.0641981	0.19643609	2.9308158	20	2 10.8	20.8
335642	2006	KH ₃₆	17.0	X	204.48596	98.32911	176.96282	13.74943	0.1928557	0.18703705	3.0281981	20	—	—
335643	2006	KM ₄₃	16.7	X	201.78357	97.27184	165.37453	1.61349	0.1607923	0.18296472	3.0729664	20	—	—
335644	2006	KQ ₅₂	16.1	X	188.47351	95.40551	222.15908	12.08775	0.1714068	0.18879522	3.0093686	20	1 24.1	21.3
335645	2006	KP ₅₅	16.0	X	164.06926	107.88675	173.25453	16.61873	0.2109089	0.17648197	3.1477664	20	—	—
335646	2006	KC ₆₄	16.3	X	137.28271	250.40984	94.32891	10.14292	0.1137308	0.18664606	3.0324257	20	1 7.9	20.8
335647	2006	KU ₆₉	16.5	X	205.16543	109.18837	204.51587	10.76177	0.1478184	0.19236538	2.9720180	20	2 2.5	21.5
335648	2006	KB ₁₁₁	16.4	X	182.39825	63.48302	249.63653	8.62141	0.0611693	0.18994326	2.9972304	20	1 11.4	21.0
335649	2006	KG ₁₁₉	16.2	X	175.95804	166.13882	168.56411	10.05859	0.0753013	0.19134881	2.9825349	20	1 30.5	20.9
335650	2006	LE ₃	15.8	X	92.73632	224.73920	139.43731	13.35553	0.0396518	0.18302352	3.0723082	20	—	—
335651	2006	OK	15.6	X	156.72539	359.18403	300.60896	14.25943	0.2243936	0.17294257	3.1905688	20	—	—
335652	2006	OF ₁₁	15.6	X	200.39997	314.11735	314.21207	13.45685	0.2223548	0.17649154	3.1476526	20	—	—
335653	2006	PU ₁	15.3	X	132.00458	82.29673	279.54858	18.84741	0.2145273	0.17664374	3.1458442	20	1 29.3	20.5
335654	2006	PY ₃	15.0	X	134.61127	1.28566	334.29187	28.40313	0.1629329	0.17229841	3.1985161	20	1 9.8	20.3
335655	2006	PE ₂₉	15.5	X	163.90173	159.55157	135.98913	18.14093	0.1932136	0.17320474	3.1873484	20	—	—
335656	2006	QL ₅	15.0	X	176.22251	319.38023	331.57609	21.99711	0.1397026	0.17094877	3.2153288	20	—	—
335657	2006	QU ₁₉	14.9	X	147.47032	175.46497	157.86187	22.30744	0.1977431	0.17388954	3.1789748	20	1 13.8	20.3
335658	2006	QC ₆₉	16.3	X	105.85514	347.01170	110.39606	1.59620	0.1795040	0.18379801	3.0636714	20	4 26.8	20.8
335659	2006	RZ ₂₅	15.5	X	88.87191	247.43120	169.42111	19.15610	0.2090098	0.17295648	3.1903977	20	2 20.7	20.0
335660	2006	SX ₁	15.2	X	75.96000	39.04064	285.38881	10.62732	0.0464428	0.15336736	3.4565864	20	12 6.2	20.3
335661	2006	SE ₆₃	15.8	X	180.82108	319.32076	19.29304	9.91801	0.0784421	0.17728250	3.1382833	20	2 16.3	20.7
335662	2006	SZ ₁₂₈	15.3	X	132.32303	152.95798	254.13578	11.04193	0.2759209	0.17451678	3.1713531	20	3 27.1	20.8
335663	2006	SP ₁₃₅	15.0	X	77.66871	91.19150	277.38096	7.34401	0.0992976	0.16149635	3.3395984	20	—	—
335664	2006	SK ₁₃₉	17.7	X	100.06325	274.47137	104.74185	6.29321	0.1582520	0.30892652	2.1672013	20	—	—
335665	2006	SA ₁₅₂	15.9	X	146.86201	139.33077	129.32111	5.10480	0.0392842	0.17026193	3.2239701	20	1 27.3	20.6
335666	2006	SQ ₁₇₁	15.2	X	44.31299	177.28318	191.59140	6.01977	0.1388394	0.15435649	3.4418038	20	—	—
335667	2006	SM ₂₁₃	18.1	X	95.03338	56.97061	348.82298	1.59749	0.1315554	0.31412250	2.1432361	20	1 10.6	20.0
335668	2006	ST ₃₇₂	18.7	X	149.66889	52.91014	301.98067	3.35134	0.1293043	0.31525271	2.1381106	20	1 16.2	21.2
335669	2006	TS ₁₇	18.3	X	125.76246	272.45005	93.39108	2.07814	0.1442245	0.31128901	2.1562223	20	1 3.0	20.4
335670	2006	TH ₂₂	17.8	X	99.39396	229.03092	182.95403	3.13746	0.1196125	0.31221291</				

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335681 2006 VA ₅₉	17.5	X	165.61708	93.79546	219.03277	6.03551	0.2122905	0.30832965	2.1699973	20	—	—
335682 2006 VZ ₅₉	17.2	X	160.83188	189.95619	72.65260	10.59292	0.1694941	0.29389506	2.2404806	20	—	—
335683 2006 VL ₆₃	17.6	X	112.32577	128.98942	241.46612	5.88844	0.0986785	0.30507374	2.1854095	20	—	—
335684 2006 VA ₁₀₁	17.1	X	31.08829	321.38535	85.90362	7.01782	0.0750058	0.29687075	2.2254838	20	—	—
335685 2006 VL ₁₀₁	17.5	X	8.54119	182.99378	236.45902	6.59272	0.0568206	0.29089498	2.2558587	20	—	—
335686 2006 VU ₁₆₉	17.1	X	119.50367	336.55472	242.39693	5.01581	0.1031399	0.27171359	2.3608142	20	10 10.7	20.5
335687 2006 WD ₃₉	17.2	X	317.95865	216.30733	101.24174	3.17942	0.2211877	0.26629407	2.3927375	20	6 8.4	19.3
335688 2006 WG ₅₆	17.0	X	208.23995	232.35644	301.03385	5.53520	0.0545170	0.27212554	2.3584310	20	11 25.6	20.1
335689 2006 WQ ₁₀₂	17.8	X	153.61274	65.27108	245.82939	5.25985	0.1997050	0.30365593	2.1922069	20	—	—
335690 2006 WZ ₁₂₈	18.0	X	113.36310	350.24569	8.13862	1.86019	0.1913554	0.30455701	2.1878808	20	—	—
335691 2006 WK ₁₅₃	17.7	X	7.67050	137.80691	297.49072	5.83875	0.0907917	0.28911772	2.2650940	20	—	—
335692 2006 WA ₁₅₅	17.5	X	172.07783	11.10130	236.00464	6.33609	0.0335074	0.29158473	2.2522998	20	—	—
335693 2006 WO ₁₆₈	18.4	X	69.59219	188.16934	237.84697	5.38880	0.0710001	0.30629150	2.1796132	20	—	—
335694 2006 WC ₁₉₃	18.4	X	115.65739	156.87123	235.62640	4.49648	0.1118174	0.30877644	2.1679035	20	1 20.1	20.8
335695 2006 WA ₂₀₄	17.6	X	32.64259	117.07092	291.611209	6.37688	0.1173433	0.28974913	2.2618022	20	—	—
335696 2006 WZ ₂₀₅	16.8	X	117.43731	104.13828	102.74544	7.60044	0.0599492	0.26088202	2.4257160	20	9 23.9	20.2
335697 2006 XL ₁	18.1	X	156.96222	46.40495	280.09917	3.28867	0.1337017	0.30666630	2.1778369	20	—	—
335698 2006 XH ₁₉	18.2	X	25.71489	277.07619	165.46036	1.16377	0.1516247	0.29633985	2.2281411	20	—	—
335699 2006 XU ₅₁	17.4	X	112.05165	202.70750	90.18739	6.72463	0.1484167	0.28891602	2.2661482	20	—	—
335700 2006 XG ₆₉	17.1	X	290.33223	126.72980	331.23940	6.88587	0.0634339	0.2775510	2.3215391	20	12 11.7	19.7
335701 2006 YC ₁₀	17.6	X	51.72020	308.81580	100.77216	5.25682	0.1353056	0.29758632	2.2219148	20	—	—
335702 2006 YM ₁₅	17.6	X	322.56167	345.03365	132.68328	5.58355	0.1222741	0.29133479	2.2535878	20	—	—
335703 2006 YD ₃₆	16.8	X	176.29159	78.63898	89.53442	8.71577	0.0476669	0.26702745	2.3883544	20	10 14.9	20.1
335704 2006 YX ₅₃	16.9	X	142.80582	42.91575	121.37129	6.60344	0.0861788	0.25692475	2.4505605	20	8 25.9	20.4
335705 2007 AS	16.1	X	120.85334	340.91077	292.27935	23.51714	0.1299384	0.27689731	2.3312574	20	12 25.5	19.8
335706 2007 AS ₃	17.4	X	351.59730	350.08623	82.45025	4.32187	0.1494509	0.28605421	2.2812374	20	—	—
335707 2007 AG ₄	17.3	X	42.26333	96.74344	324.16975	6.43608	0.1422612	0.29509626	2.2343965	20	—	—
335708 2007 AM ₂₈	17.5	X	135.57512	2.00810	199.15830	1.19610	0.1362340	0.26199011	2.4188715	20	10 5.8	21.2
335709 2007 BB ₁₀	17.6	X	46.47827	356.61868	357.50365	4.53949	0.1239656	0.27929553	2.3178930	20	—	—
335710 2007 BZ ₄₁	17.3	X	178.70312	260.89534	321.26809	7.27944	0.0700563	0.27446679	2.3439753	20	12 23.2	20.5
335711 2007 BT ₄₈	16.7	X	303.60085	302.42122	113.62967	6.62122	0.0982184	0.26823711	2.3811686	20	11 2.7	19.2
335712 2007 BO ₇₅	18.3	X	359.94159	108.63096	342.49344	2.63666	0.1588478	0.29067542	2.2569945	20	—	—
335713 2007 CK ₄	17.0	X	74.61047	268.52602	326.43278	7.27978	0.0651879	0.25590642	2.4570572	20	9 2.5	20.1
335714 2007 CT ₄	18.1	X	343.90891	222.59177	235.64777	1.22611	0.0517283	0.28514352	2.2860920	20	—	—
335715 2007 CL ₆	18.0	X	34.04253	310.75483	105.63145	3.89220	0.1479630	0.29236032	2.2483147	20	—	—
335716 2007 CV ₇	17.4	X	201.66502	67.37814	128.86061	7.67073	0.0485816	0.27722077	2.3294436	20	12 21.1	20.3
335717 2007 CF ₁₇	17.6	X	348.28072	91.71220	11.11240	2.71842	0.1114349	0.28696553	2.2764052	20	—	—
335718 2007 CD ₂₀	16.6	X	119.97862	99.41744	124.81468	7.36056	0.0737546	0.26399628	2.4066015	20	10 20.8	20.1
335719 2007 CZ ₂₄	17.0	X	219.49430	231.89320	288.82547	5.08257	0.1374070	0.27074861	2.3664203	20	11 10.3	20.1
335720 2007 CO ₃₈	17.9	X	138.41145	290.58305	288.00981	1.85222	0.1484053	0.26399971	2.4065806	20	10 30.2	21.6
335721 2007 CJ ₄₁	17.7	X	137.31976	233.44192	330.97570	6.17857	0.1144960	0.26087388	2.4257665	20	10 8.6	21.3
335722 2007 CS ₅₃	17.1	X	330.22562	105.09974	355.76611	8.48185	0.1242245	0.28289453	2.2981922	20	—	—
335723 2007 CJ ₅₉	16.6	X	220.06944	208.55797	260.81333	5.22380	0.0698611	0.26098800	2.4250593	20	9 9.0	19.8
335724 2007 CZ ₆₂	17.0	X	232.75464	168.59307	342.40996	7.05813	0.0548301	0.27217522	2.3581440	20	11 27.4	20.0
335725 2007 DP ₁₁	17.7	X	245.44115	170.09225	326.21222	2.03906	0.1228535	0.27075917	2.3663588	20	11 15.2	20.6
335726 2007 DU ₁₅	16.9	X	335.29026	93.29006	6.88710	6.58953	0.0653026	0.28273056	2.2990807	20	—	—
335727 2007 DE ₂₉	16.5	X	352.58248	284.43107	351.20886	14.98462	0.1139891	0.24157296	2.5533117	20	6 27.1	19.6
335728 2007 DX ₃₂	17.1	X	356.84905	203.04339	11.72474	3.43112	0.1890698	0.22938005	2.6430109	20	3 29.9	19.6
335729 2007 DG ₃₆	17.4	X	14.65504	41.18315	235.00699	4.12780	0.2126356	0.24477607	2.5309880	20	8 18.9	19.8
335730 2007 DL ₃₆	13.5	X	205.56636	2.91123	5.58034	6.83545	0.0575572	0.08239007	5.2306155	20	4 16.8	20.7
335731 2007 DS ₄₅	17.7	X	30.65657	297.89336	134.83454	7.91487	0.1281132	0.29414023	2.2392355	20	—	—
335732 2007 DG ₅₀	17.6	X	207.10459	90.71702	67.25225	2.29819	0.1128155	0.26693065	2.3889318	20	10 27.5	20.9
335733 2007 DR ₆₀	15.6	X	59.56207	258.70624	320.02019	14.77115	0.2148321	0.23825216	2.5769826	20	8 13.2	18.8
335734 2007 DE ₈₂	17.7	X	164.14048	353.38101	174.48518	1.37534	0.1237184	0.25745854	2.4471721	20	9 20.9	21.3
335735 2007 DS ₈₆	16.8	X	83.51905	288.72048	331.39338	6.34108	0.0815424	0.26128453	2.4232242	20	10 19.1	20.1
335736 2007 DA ₉₁	17.8	X	12.92809	84.01210	337.32810	4.43884	0.2053318	0.28556678	2.2838326	20	—	—
335737 2007 DB ₁₀₂	16.9	X	30.87071	185.75434	138.78616	7.42591	0.0981269	0.26495333	2.4008026	20	11 15.3	19.9
335738 2007 DA ₁₁₁	17.3	X	19.94318	252.69094	348.60422	5.97004	0.1324739	0.23884275	2.5273282	20	6 27.6	20.1
335739 2007 DD ₁₁₆	13.7	X	18.55764	230.03178	342.51811	1.52899	0.0449000	0.08416554	5.1567947	20	5 11.1	20.2
335740 2007 EJ ₂	17.0	X	353.09746	112.75501	173.31968	10.76745	0.2540928	0.24010276	2.5637240	20	7 13.3	18.9
335741 2007 EH ₇	17.4	X	67.24725	88.75470	186.07311	0.67216	0.1468609	0.25642512	2.4537426	20	10 29.5	20.6
335742 2007 EW ₁₁	17.3	X	255.56790	17.97009	127.81699	3.11335	0.1703192	0.27406317	2.3473018	20	12 8.7	19.6
335743 2007 EY ₁₃	17.0	X	338.36186	154.59595	184.80065	6.90806	0.1248690	0.25069021	2.4910234	20	9 3.9	19.5
335744 2007 EQ ₁₆	17.0	X	9.11230	104.22309	119.80104	2.88299	0.1726100	0.23195970	2.6233789	20	5 12.1	19.3
335745 2007 EW ₂₂	17.0	X	89.20851	268.40931	357.57468	4.15269	0.0596764	0.26001527	2.4311036	20	11 1.7	20.3
335746 2007 EJ ₂₆	18.3	X	205.14127	224.40208	176.35799	29.03803	0.2688590	0.46863849	1.6415121	20	5 14.5	21.3
335747 2007 EA ₃₉	17.0	X	349.37866	310.41981	127.45213	4.16532	0.1809133	0.28012528	2.3133136	20	—	—
335748 2007 EH ₄₄	17.6	X	303.72861	228.32068	229.42886	1.73775	0.1697952	0.27348679	2.3505987	20	—	—
335749 2007 ER ₄₇	17.1	X	49.25096	119.88350	168.71065	4.10962	0.0621028	0.25445302	2.4664046	20	10 13.4	20.1
335750 2007 EH ₄₉	17.2	X	24.12458	99.25398	134.37455	5.51141	0.1891296	0.24032044	2.5621757	20	6 30.7	19.5
335751 2007 ER ₅₂	17.8	X	348.12922	243.01503	197.33173	4.73619	0.0968867	0.27862732	2.3215974	20	—	—
335752 2007 ET ₅₅	17.0	X	93.13329	71.45869	162.68442	14.59104	0.0837550	0.25338346	2.4733403	20	9 30.6	20.4
335753 2007 EO ₇₃	17.3	X	337.07127	305.73241	7.91495	3.54104	0.1657194	0.24560413	2.5252959	20	7 23.1	19.5
335754 2007 EQ ₇₃	17.1	X	63.10949	278.58672	5.28161	4.84733	0.0971744	0.25790992	2.4443160	20	10 28.7	20.2
33575												

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335761 2007 EJ ₁₀₄	17.2	X	311.12276	288.48361	0.24241	12.17633	0.2518378	0.23132358	2.6281861	20	4 6.3	20.4
335762 2007 EV ₁₁₃	16.6	X	151.70414	48.95871	114.56080	8.18440	0.0745022	0.25295691	2.4761200	20	9 4.7	20.2
335763 2007 ET ₁₁₆	16.7	X	94.31734	57.49421	145.44438	5.08142	0.1151290	0.24398348	2.5364663	20	8 21.7	20.1
335764 2007 ET ₁₁₇	16.8	X	316.70994	135.90976	99.05216	2.75125	0.1779224	0.22016323	2.7162695	20	2 19.6	20.3
335765 2007 EX ₁₁₉	17.4	X	331.21704	118.39093	157.61607	4.56885	0.1784942	0.22948090	2.6422365	20	5 10.4	20.2
335766 2007 EC ₁₄₁	13.8	X	300.31233	95.53602	193.48534	21.95595	0.0944593	0.08149904	5.2686706	20	4 28.0	20.6
335767 2007 EV ₁₄₅	13.8	X	213.62404	270.77162	87.67067	3.35802	0.0567433	0.08238813	5.2306978	20	4 16.3	20.9
335768 2007 EH ₁₅₀	17.5	X	1.83611	144.82233	129.75510	4.42880	0.1756834	0.24021413	2.5629316	20	7 14.9	19.7
335769 2007 ET ₁₅₁	17.4	X	342.01789	162.00624	140.53722	6.14751	0.0791865	0.24495663	2.5297440	20	7 16.9	20.2
335770 2007 EP ₁₅₆	16.8	X	342.68690	307.89217	270.95494	3.59556	0.2623421	0.22353067	2.6889205	20	2 23.3	19.4
335771 2007 EF ₁₆₁	15.5	X	328.05778	222.94505	39.93295	14.44184	0.1020571	0.22668994	2.6638793	20	4 25.2	18.5
335772 2007 EA ₁₆₆	18.0	X	107.45965	181.67866	222.09481	1.94217	0.3477543	0.30492188	2.1861350	20	3 2.9	20.6
335773 2007 ER ₁₇₈	17.1	X	98.09773	27.27807	209.98946	5.90752	0.0975040	0.25171875	2.4842331	20	10 8.6	20.5
335774 2007 EY ₁₇₈	16.5	X	298.74105	247.82744	352.90669	6.34317	0.2520274	0.21678413	2.7444231	20	1 26.5	20.5
335775 2007 EH ₁₈₀	16.3	X	358.92697	277.95501	357.99562	11.92879	0.1560780	0.23678627	2.5876073	20	7 12.9	19.0
335776 2007 EU ₁₈₀	16.3	X	341.40303	230.27674	2.27456	12.99447	0.1655780	0.22565074	2.6720518	20	3 26.7	19.1
335777 2007 EA ₁₉₃	16.0	X	30.29982	217.46883	346.85677	12.42505	0.3171545	0.23194981	2.6234535	20	5 25.1	18.9
335778 2007 EQ ₂₀₃	17.1	X	42.97140	45.53282	159.35467	8.09025	0.1119860	0.23806581	2.5783272	20	6 12.4	20.2
335779 2007 EE ₂₁₄	17.4	X	329.06909	306.83659	10.33830	3.18664	0.0922801	0.24336687	2.5407489	20	7 16.5	20.2
335780 2007 ED ₂₁₆	16.6	X	346.02149	262.26399	334.92433	11.90601	0.2260193	0.22911635	2.6450384	20	3 29.7	19.3
335781 2007 EN ₂₁₈	17.8	X	354.50768	290.62724	350.24141	4.69379	0.1858209	0.23970313	2.5665727	20	7 9.4	20.1
335782 2007 FR ₄	17.9	X	324.86380	101.27105	351.23503	1.71668	0.1819453	0.27944913	2.3170436	20	—	—
335783 2007 FR ₁₀	16.9	X	276.58492	324.14565	340.79751	4.65838	0.1467543	0.22477825	2.6789618	20	3 31.2	20.8
335784 2007 FP ₁₅	16.8	X	33.68462	36.56550	181.08908	12.71766	0.1813879	0.23772311	2.5808045	20	6 23.9	19.8
335785 2007 FJ ₁₉	17.1	X	36.58657	122.63908	181.89359	5.73445	0.1369828	0.25521960	2.4614633	20	10 29.8	20.0
335786 2007 FM ₃₃	17.9	X	246.40683	297.72981	188.12624	1.02119	0.1310232	0.26670191	2.3902975	20	10 31.8	20.6
335787 2007 FQ ₄₇	16.6	X	341.76805	112.88320	147.56498	7.80236	0.2115754	0.22819290	2.6521696	20	5 6.3	19.1
335788 2007 GJ	16.6	X	339.90344	31.62622	205.39701	8.85798	0.1570351	0.22620777	2.6676635	20	3 31.0	19.6
335789 2007 GN ₁₃	14.0	X	28.65031	23.87541	170.38879	13.57976	0.0508827	0.08276689	5.2147276	20	5 6.5	20.8
335790 2007 GN ₃₇	16.5	X	297.81814	270.95053	53.01110	6.13372	0.1710388	0.23226033	2.6211147	20	5 21.0	19.5
335791 2007 GK ₄₆	16.5	X	303.80325	211.57044	52.00535	5.72750	0.1161474	0.22090111	2.7102173	20	3 21.2	20.1
335792 2007 GN ₅₁	16.3	X	8.79981	142.78339	107.05416	14.01707	0.1961195	0.23297902	2.6157215	20	6 22.7	18.5
335793 2007 GF ₅₉	17.0	X	262.00132	76.32991	253.06507	2.77300	0.1202972	0.22630031	2.6669362	20	4 18.5	20.9
335794 2007 GQ ₅₉	17.2	X	327.76617	257.88496	20.60372	3.75254	0.1993638	0.22793404	2.6541772	20	5 1.9	19.7
335795 2007 GT ₆₀	17.2	X	347.81030	60.52999	232.17702	7.11866	0.1376320	0.23594584	2.5937483	20	7 10.2	19.8
335796 2007 GN ₇₃	16.5	X	351.29327	95.10396	161.95403	9.22391	0.1054698	0.23044083	2.6348937	20	5 28.0	19.6
335797 2007 HJ ₁	16.5	X	340.92703	62.91395	200.85571	12.35045	0.2311422	0.22988100	2.6391698	20	5 5.1	18.8
335798 2007 HM ₁₅	16.9	X	137.19781	31.37281	115.69973	7.38663	0.0943897	0.24102532	2.5517779	20	7 25.3	20.6
335799 Zongliu	16.3	X	297.61946	238.09355	60.79706	13.67400	0.2029605	0.22451712	2.6810386	20	4 17.2	19.9
335800 2007 HM ₂₄	16.9	X	286.21839	63.36144	207.27131	10.37342	0.3573752	0.21459837	2.7630268	20	2 3.1	21.6
335801 2007 HK ₄₁	15.6	X	18.91434	179.86643	69.39698	14.43579	0.1074773	0.23289117	2.6163793	20	7 4.1	18.6
335802 2007 HF ₄₆	16.2	X	92.18510	61.80980	122.95033	14.30952	0.0908287	0.24200092	2.5503006	20	7 21.7	19.5
335803 2007 HK ₅₉	16.9	X	313.59128	71.19697	209.88156	12.12907	0.1833522	0.22574089	2.6713404	20	4 13.7	20.0
335804 2007 HW ₆₆	16.6	X	19.46241	65.45886	194.99907	11.24625	0.1359265	0.23419761	2.6066401	20	7 22.3	19.7
335805 2007 HA ₈₂	16.5	X	232.35529	265.10480	110.23732	7.22581	0.1622999	0.22848078	2.6499414	20	5 14.1	20.7
335806 2007 HA ₈₄	16.2	X	308.18872	101.16029	197.37298	12.77130	0.2019281	0.22611439	2.6683978	20	4 28.2	19.4
335807 2007 HE ₉₇	16.4	X	10.12223	117.42256	138.77800	9.97186	0.0860144	0.23458631	2.6037599	20	6 27.5	19.5
335808 2007 JG	16.6	X	298.06427	154.28433	119.55531	14.14295	0.1295184	0.21929798	2.7234096	20	3 28.5	20.5
335809 2007 JG ₄	16.6	X	160.48477	261.83518	232.03857	12.42636	0.0989416	0.24170323	2.5523942	20	7 29.1	20.8
335810 2007 JR ₄	16.2	X	274.89536	253.70896	64.91031	12.83375	0.2538396	0.22095527	2.7097744	20	4 9.7	20.5
335811 2007 JE ₅	16.5	X	331.79547	76.68237	202.48816	10.33337	0.2101191	0.23131662	2.6282388	20	5 11.5	19.0
335812 2007 JR ₁₀	16.7	X	349.33918	30.04204	236.62119	3.27231	0.2026794	0.22931502	2.6435374	20	6 1.1	18.7
335813 2007 JZ ₁₁	16.3	X	344.49497	144.92492	103.77189	14.76467	0.0734069	0.22584339	2.6705321	20	5 10.2	19.8
335814 2007 JA ₁₂	16.7	X	293.56996	221.07370	116.41746	13.57194	0.1922560	0.22934963	2.6432446	20	6 2.4	20.2
335815 2007 JS ₁₇	16.4	X	284.04570	184.89868	149.60408	12.06916	0.1838385	0.22610856	2.6684437	20	5 17.9	20.2
335816 2007 JT ₁₇	16.7	X	59.19992	13.64138	180.10071	12.94557	0.2062466	0.23186366	2.6241033	20	7 5.6	20.2
335817 2007 JU ₁₇	16.3	X	267.43100	130.26939	142.62771	11.80093	0.2260054	0.21102254	2.7941528	20	2 5.2	20.8
335818 2007 JV ₁₇	16.7	X	278.46376	222.44539	136.45800	14.37494	0.1843016	0.22954972	2.6417084	20	6 11.2	20.4
335819 2007 JO ₁₈	17.4	X	341.25996	130.00241	130.33194	4.63680	0.1737422	0.22619836	2.6677375	20	5 8.2	20.1
335820 2007 JB ₂₀	17.0	X	304.45295	178.55866	143.21304	6.65934	0.1309223	0.22970001	2.6405560	20	6 5.5	20.2
335821 2007 JD ₃₂	16.6	X	292.14479	191.50819	90.24518	4.72503	0.0923680	0.22126527	2.7072428	20	4 1.8	20.2
335822 2007 JR ₄₀	16.6	X	279.61112	117.62320	217.15004	13.82937	0.1225247	0.22836649	2.6508255	20	5 18.9	20.2
335823 2007 JU ₄₂	15.9	X	45.30572	251.93495	322.17075	12.12642	0.1493758	0.23429662	2.6059057	20	7 6.8	19.0
335824 2007 KN ₇	16.0	X	344.58699	347.44345	246.99824	12.83047	0.1982704	0.22458645	2.6804869	20	3 26.4	19.0
335825 2007 LN ₃	16.2	X	108.32981	276.52056	225.10117	10.60799	0.1314395	0.23146602	2.6271077	20	6 17.8	20.1
335826 2007 LD ₄	16.8	X	258.26497	137.84791	198.57602	5.87741	0.0767858	0.22309633	2.6924094	20	4 30.6	20.6
335827 2007 LJ ₅	16.4	X	126.82500	338.58153	206.85788	4.57243	0.0722540	0.24318960	2.5419834	20	8 30.4	20.0
335828 2007 LS ₅	16.6	X	266.44815	250.11873	95.86958	14.04477	0.2125812	0.22392304	2.6857785	20	5 9.4	20.8
335829 2007 LD ₆	16.7	X	261.63971	186.43969	163.50043	15.74855	0.1343696	0.22559019	2.6725299	20	5 17.8	20.8
335830 2007 LY ₇	16.9	X	336.99002	80.00926	184.28633	11.32308	0.1463841	0.22168803	2.7037999	20	4 11.0	20.0
335831 2007 LH ₉	16.7	X	287.97714	112.22454	231.79543	14.20811	0.1839988	0.22844864	2.6501899	20	6 1.8	20.1
335832 2007 LJ ₉	17.0	X	268.87355	187.98770	739.72127	4.87545	0.1248885	0.22277017	2.6950368	20	4 26.9	20.8
335833 2007 LW ₁₆	16.7	X	166.71908	16.14290	75.48797	3.56612	0.039720					

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335841 2007 MG ₄	16.3	X	171.86736	291.95550	204.06268	7.21940	0.1535184	0.24353708	2.5395649	20	8 14.3	20.5
335842 2007 MP ₅	17.1	X	238.15557	54.96491	284.27631	3.96612	0.1306260	0.21132391	2.7914957	20	4 3.5	21.4
335843 2007 MN ₆	15.9	X	256.42330	324.34830	304.64593	15.26848	0.2277691	0.20375436	2.8602112	20	1 23.6	20.5
335844 2007 MX ₈	16.5	X	288.60468	160.16753	156.74690	11.89657	0.2094777	0.22466651	2.6798500	20	4 26.8	20.3
335845 2007 MP ₁₆	16.6	X	299.07823	357.31408	100.58676	13.36977	0.0303059	0.26212135	2.4180640	20	12 22.3	19.5
335846 2007 MW ₂₁	16.2	X	353.49390	142.83418	171.71760	16.31876	0.1032501	0.24006217	2.5640130	20	8 22.9	19.1
335847 2007 OJ ₁₀	16.2	X	179.21466	337.80036	338.36223	15.54861	0.1328008	0.18805585	3.0172513	20	1 20.5	21.2
335848 2007 PP ₂₄	15.5	X	126.93948	43.56455	312.54294	10.38826	0.1579419	0.18478196	3.0527858	20	1 16.6	20.0
335849 2007 PQ ₄₆	16.2	X	134.10160	353.81776	138.96713	1.32022	0.0384315	0.17758287	3.1347434	20	—	—
335850 2007 QO ₅	16.1	X	103.33181	84.67277	310.37343	7.18518	0.3523260	0.18221765	3.0813599	20	2 27.5	20.9
335851 2007 QZ ₁₁	15.4	X	176.57392	18.98157	305.18513	13.79105	0.0901469	0.18957344	3.0011271	20	1 21.7	20.1
335852 2007 QJ ₁₇	15.5	X	306.47876	158.93313	338.29804	15.07593	0.0780578	0.17412185	3.1761465	20	—	—
335853 Valléeadoeste	16.1	X	87.65262	168.22690	223.67189	4.07055	0.1601627	0.17635853	3.1492350	20	1 13.1	20.2
335854 2007 RT ₈	17.8	X	203.21182	201.06948	281.04495	20.03788	0.0295931	0.38117224	1.8838885	20	9 17.2	20.4
335855 2007 RD ₁₆	15.5	X	293.96003	212.32661	333.78416	10.69793	0.0896527	0.18209077	3.0827911	20	—	—
335856 2007 RH ₁₆	16.0	X	200.64940	70.58968	170.05041	15.71702	0.0440534	0.17207184	3.2013232	20	—	—
335857 2007 OJ ₁₈	16.0	X	178.09562	116.75521	194.13888	15.87407	0.1542920	0.18896754	3.0075388	20	1 8.4	21.2
335858 2007 RB ₂₃	16.2	X	152.51983	33.75968	302.69103	4.86219	0.1269043	0.18647109	3.0343223	20	1 15.1	20.8
335859 2007 RE ₄₃	15.7	X	170.40201	340.73285	339.92016	11.83096	0.0967672	0.18485004	3.0520362	20	1 14.6	20.5
335860 2007 RQ ₄₅	15.9	X	151.33459	12.41541	265.70850	4.02012	0.1644952	0.17406138	3.1768821	20	—	—
335861 2007 RV ₅₁	15.7	X	107.41018	50.72738	329.56458	8.77023	0.1227619	0.18122869	3.0925596	20	1 20.0	20.1
335862 2007 RK ₅₂	16.1	X	172.88931	49.30780	206.20179	14.06231	0.1616562	0.17248701	3.1961841	20	12 27.5	21.5
335863 2007 RR ₅₂	15.9	X	114.09141	105.76010	286.85439	4.42582	0.1799818	0.18410337	3.0602828	20	2 15.5	20.4
335864 2007 RG ₅₃	15.8	X	85.19860	113.45577	311.55496	4.97658	0.1980673	0.18246315	3.0785953	20	2 23.6	19.8
335865 2007 RM ₅₄	16.3	X	152.71543	346.04964	331.85587	7.69753	0.0963116	0.18151742	3.0892793	20	1 1.1	21.4
335866 2007 RX ₅₄	16.3	X	95.15959	101.27406	284.63629	4.41387	0.1563309	0.17946719	3.1127627	20	1 15.1	20.4
335867 2007 RL ₅₅	15.8	X	146.00613	329.71825	340.64927	10.48499	0.1111071	0.17709735	3.1404702	20	—	—
335868 2007 RP ₆₈	16.0	X	250.38511	247.29884	39.46884	2.60201	0.0902265	0.19715628	2.9236742	20	2 20.3	20.4
335869 2007 RZ ₉₇	16.5	X	167.87314	146.03903	164.50146	8.52720	0.1232653	0.18065592	3.0990928	20	—	—
335870 2007 RQ ₁₀₂	16.3	X	148.42996	352.34568	348.20179	10.40844	0.0422504	0.18631226	3.0360466	20	1 9.1	20.8
335871 2007 RG ₁₀₉	16.4	X	95.84019	235.24906	208.47588	1.59295	0.2261063	0.18789736	3.0189477	20	4 3.8	20.7
335872 2007 RY ₁₁₄	16.2	X	82.93922	86.69781	317.92951	3.82981	0.1519698	0.17975875	3.1093959	20	1 21.7	20.3
335873 2007 RG ₁₁₅	15.6	X	49.37435	237.51854	196.71762	15.36507	0.0453961	0.17981287	3.1087719	20	—	—
335874 2007 RW ₁₁₇	15.8	X	55.88855	208.52398	192.68364	10.66051	0.0857420	0.17421960	3.1749584	20	—	—
335875 2007 RL ₁₁₈	16.1	X	45.86483	61.69320	17.03020	2.44075	0.1468726	0.17563083	3.1579279	20	1 7.8	19.8
335876 2007 RP ₁₂₆	15.9	X	221.61109	79.45650	187.83573	11.16999	0.1776664	0.18560139	3.0437939	20	—	—
335877 2007 RC ₁₂₈	16.3	X	171.87573	301.01572	68.51086	1.38419	0.1768849	0.19267803	2.9688022	20	3 13.9	21.1
335878 2007 RB ₁₂₉	15.9	X	36.86554	275.58975	171.54182	5.20296	0.1150283	0.17690754	3.1427161	20	—	—
335879 2007 RX ₁₃₀	16.2	X	83.73279	213.29977	188.16048	11.76538	0.0778978	0.17802455	3.1295565	20	1 7.3	20.6
335880 2007 RL ₁₃₃	15.7	X	52.83767	249.40429	188.29882	15.87411	0.2249594	0.17950732	3.1122987	20	1 22.2	19.4
335881 2007 RF ₁₄₆	15.9	X	170.86925	301.30914	12.63087	6.06220	0.1469456	0.18524163	3.0477335	20	1 8.7	20.8
335882 2007 RC ₁₅₂	16.2	X	102.61735	188.51477	177.65622	13.79641	0.0439613	0.18146450	3.0898799	20	—	—
335883 2007 RW ₁₆₃	16.2	X	228.78194	52.85252	187.93227	10.09109	0.0384318	0.18241441	3.0791436	20	—	—
335884 2007 RO ₁₆₅	16.2	X	197.38277	117.80874	203.89416	4.36896	0.1152989	0.19284244	2.9671145	20	2 6.4	20.9
335885 2007 RE ₁₇₀	15.8	X	111.38042	252.94017	155.45026	10.35507	0.0932284	0.18987264	2.9979735	20	2 20.5	20.1
335886 2007 RA ₁₇₃	15.8	X	179.44614	322.68000	26.37239	9.75546	0.0758861	0.19076287	2.9886392	20	2 25.9	20.4
335887 2007 RD ₁₇₃	16.2	X	192.11454	119.59394	163.37662	8.55623	0.1304409	0.18130651	3.0916747	20	—	—
335888 2007 RO ₁₈₈	16.4	X	157.10659	203.12541	146.64456	4.21045	0.1252536	0.18904635	3.0067029	20	2 3.1	21.0
335889 2007 RF ₁₉₀	18.3	X	327.52726	62.91363	329.05861	18.80351	0.1296578	0.38725727	1.8641020	20	12 26.9	20.1
335890 2007 RQ ₁₉₀	16.1	X	142.58340	112.18636	187.15264	10.97128	0.1361003	0.17510867	3.1642026	20	—	—
335891 2007 RE ₁₉₂	15.6	X	64.19488	235.79893	174.36820	9.95589	0.1455934	0.17919405	3.1159250	20	1 11.1	19.7
335892 2007 RH ₂₀₇	15.5	X	65.31032	224.71605	177.48126	18.53528	0.0765646	0.17598015	3.1537476	20	—	—
335893 2007 RT ₂₀₇	16.3	X	132.99481	350.63354	35.37234	3.04792	0.2328051	0.18747333	3.0234982	20	3 4.7	21.1
335894 2007 RO ₂₁₅	16.3	X	75.19830	105.58310	329.68322	3.24358	0.1266884	0.18388093	3.0627502	20	2 13.3	20.1
335895 2007 RB ₂₁₈	16.0	X	142.45994	301.17947	67.53270	2.64220	0.1770885	0.18225454	3.0809441	20	2 17.7	20.9
335896 2007 RC ₂₁₉	16.5	X	183.84180	37.99250	283.58446	1.10985	0.0385144	0.18597757	3.0396880	20	1 23.8	20.8
335897 2007 RO ₂₂₆	15.6	X	182.20202	253.59040	15.72395	10.79391	0.0469554	0.17509787	3.1643327	20	—	—
335898 2007 RG ₂₂₇	16.4	X	220.92372	190.00659	64.10788	3.08669	0.1946717	0.18365995	3.0652065	20	—	—
335899 2007 RN ₂₃₁	16.3	X	120.04042	320.52270	33.95020	1.37203	0.1967048	0.18074693	3.0980524	20	1 11.9	21.0
335900 2007 RR ₂₄₇	15.5	X	129.70474	71.74580	299.09745	15.53784	0.1717208	0.18512391	3.0490254	20	2 3.8	20.2
335901 2007 RE ₂₆₈	16.3	X	193.08069	247.90638	89.05396	2.18377	0.1742015	0.19333495	2.9620733	20	2 22.9	21.1
335902 2007 RQ ₂₈₅	15.7	X	140.12689	256.59894	89.30600	12.98933	0.1833933	0.18278628	3.0749661	20	1 20.5	20.6
335903 2007 RM ₂₉₁	15.7	X	144.69504	55.35471	281.75628	9.02665	0.1716553	0.18217293	3.0818641	20	1 12.4	20.4
335904 2007 RF ₂₉₅	15.8	X	12.26684	263.25702	193.60055	18.90728	0.1657967	0.17261227	3.1946376	20	—	—
335905 2007 RS ₃₀₀	16.7	X	128.15278	194.39944	181.21476	4.86260	0.1668407	0.18456098	3.0552222	20	2 8.6	21.4
335906 2007 RV ₃₁₀	15.6	X	148.27826	82.96616	283.00093	8.07847	0.0809431	0.18834882	3.0141217	20	2 7.6	20.2
335907 2007 RD ₃₁₂	15.9	X	123.95749	169.76218	179.52080	11.36556	0.1172256	0.18041154	3.1018909	20	—	—
335908 2007 RS ₃₁₃	15.5	X	141.51466	50.30497	313.52740	10.05016	0.1445013	0.18602456	3.0391761	20	2 6.4	20.2
335909 2007 RH ₃₁₅	15.9	X	104.81564	184.38098	210.06650	8.62377	0.0467240	0.18481156	3.0524599	20	1 19.2	20.3
335910 2007 RS ₃₁₅	15.7	X	96.50621	221.04750	176.05090	16.91480	0.0815628	0.18379176	3.0637408	20	1 17.3	20.2
335911 2007 RC ₃₁₈	16.0	X	92.26031	201.97719	198.21814	8.79475	0.1356754	0.18439927	3.0570080	20	1 22.9	20.2
335912 2007 RP ₃₁₈	16.6	X	146.93499	228.19251	157.46041	2.64504	0.1265380	0.19146381	2.9813405	20	3 6.7	21.1
335913 2007 RK ₃₂₀	15.6	X	64.96791	36.33995	344.59107	8.50095	0.0844393	0.17336561	3.1853763	20	—	—
335914 2007 RR ₃₂₁	15.5	X	19.94410									

ELEMENTS AND OPPOSITION DATES IN 2020

ECLIPTIC AND EQUINOX 2000.0, EPOCH 2020 MAY 31.0 TT

Planet	<i>H</i>	<i>G</i>	<i>M</i>	ω	Ω	<i>i</i>	<i>e</i>	μ	<i>a</i>	TE	Oppos.	<i>V</i>
335921 2007 SH ₂₁	15.3	X	105.87338	83.22158	277.58712	7.96868	0.0717680	0.17665425	3.1457195	20	—	—
335922 2007 SJ ₂₃	15.9	X	147.52348	47.90549	275.13788	6.03267	0.2658042	0.17870275	3.1216333	20	1 7.2	21.1
335923 2007 TF ₃	15.8	X	154.09738	5.13800	358.46204	10.26582	0.1264286	0.18818662	3.0158534	20	2 19.6	20.5
335924 2007 TO ₁₁	16.7	X	110.57097	240.09219	189.37532	7.24504	0.3936468	0.18425756	3.0585753	20	4 20.1	22.0
335925 2007 TF ₁₃	16.2	X	158.58515	281.69681	61.19944	2.06823	0.1668450	0.18420807	3.0591231	20	1 31.9	21.2
335926 2007 TG ₁₃	16.2	X	138.06832	4.35262	10.74845	5.32866	0.2041572	0.18444505	3.0565022	20	2 23.7	21.0
335927 2007 TX ₁₆	15.4	X	127.81966	27.57271	340.32923	15.80201	0.1290921	0.18231416	3.0802723	20	1 31.4	20.1
335928 2007 TL ₁₇	16.0	X	129.67753	76.14701	343.52533	12.51426	0.1510847	0.19111683	2.9849480	20	3 28.7	20.7
335929 2007 TC ₂₀	16.1	X	135.85119	55.70427	315.50580	1.12106	0.2367759	0.18326800	3.0695753	20	2 18.5	21.1
335930 2007 TW ₂₀	16.2	X	132.72822	87.11124	253.75586	0.30008	0.1764601	0.17592907	3.1543580	20	1 7.1	21.0
335931 2007 TW ₂₃	17.9	X	308.54583	136.69292	207.02741	21.87376	0.0421430	0.37070019	1.9192027	20	7 30.5	20.3
335932 2007 TG ₃₁	15.8	X	136.81726	326.91491	36.29378	12.24492	0.2387218	0.18167207	3.0875259	20	2 15.9	21.0
335933 2007 TV ₃₁	15.8	X	98.84180	258.24415	122.63275	16.84109	0.2664094	0.17920507	3.1157972	20	1 29.3	20.2
335934 2007 TE ₃₃	16.6	X	115.60585	233.02446	160.67246	0.97964	0.1855387	0.18134515	3.0912354	20	2 20.6	21.3
335935 2007 TF ₃₇	15.9	X	179.00838	117.84509	190.44340	10.90707	0.1118048	0.18304872	3.0720263	20	1 5.9	20.9
335936 2007 TU ₅₀	16.1	X	185.24136	5.67623	323.47422	0.62768	0.2516050	0.18909648	3.0061715	20	2 8.9	21.4
335937 2007 TB ₅₂	15.6	X	349.92821	294.99187	215.00185	15.12132	0.1632007	0.17537104	3.1610459	20	—	—
335938 2007 TL ₅₄	16.4	X	105.95390	344.92811	56.52564	2.29317	0.0630903	0.18056792	3.1000996	20	2 3.8	20.7
335939 2007 TW ₅₄	15.5	X	135.98626	125.46411	221.95408	10.75440	0.1224870	0.17737499	3.1371922	20	1 9.9	20.4
335940 2007 TR ₆₀	15.5	X	42.50298	161.23550	181.39799	23.08544	0.2998947	0.17654796	3.1469819	20	1 16.7	18.9
335941 2007 TO ₆₁	15.8	X	115.78270	221.28865	155.07871	1.64157	0.1812300	0.17917001	3.1162037	20	1 30.9	20.5
335942 2007 TC ₆₂	16.0	X	139.34024	150.65987	210.48820	10.37942	0.0852587	0.18085131	3.0968603	20	1 24.1	20.7
335943 2007 TO ₆₆	16.1	X	110.79918	72.58885	326.45339	9.09514	0.1204308	0.18387370	3.0628306	20	2 13.4	20.3
335944 2007 TJ ₆₇	15.9	X	107.98338	236.21590	181.79032	10.49014	0.0933025	0.18513858	3.0488643	20	2 27.4	20.3
335945 2007 TQ ₆₇	15.5	X	108.28740	118.61457	260.01963	9.92432	0.0880589	0.18009827	3.1054868	20	1 11.6	20.0
335946 2007 TF ₇₁	17.6	X	97.92244	320.74061	212.36699	20.73462	0.0615418	0.36650356	1.9338253	20	7 10.7	20.3
335947 2007 TY ₇₇	15.6	X	103.26382	208.43648	223.73323	9.33930	0.2644389	0.18346667	3.0673589	20	3 31.9	20.4
335948 2007 TT ₈₈	15.6	X	71.89923	180.33020	225.57679	28.66632	0.1641436	0.17521151	3.1629643	20	1 2.8	20.1
335949 2007 TF ₉₁	16.2	X	108.80788	228.68086	178.06817	5.90976	0.1773619	0.18157517	3.0886242	20	2 26.9	20.7
335950 2007 TR ₉₁	16.1	X	106.41549	185.83535	184.97425	3.86264	0.1325504	0.17842714	3.1248471	20	1 10.8	20.6
335951 2007 TB ₉₃	16.8	X	155.61327	118.26702	194.78710	15.01111	0.3621090	0.18074163	3.0981130	20	1 6.1	22.6
335952 2007 TD ₉₄	15.8	X	87.02399	161.64873	189.03373	28.30672	0.1642883	0.17305862	3.1891423	20	—	—
335953 2007 TG ₉₄	16.0	X	95.06835	122.62305	262.03339	3.99600	0.1492956	0.17881809	3.1202909	20	1 12.3	20.1
335954 2007 TB ₁₀₇	15.7	X	92.04043	31.15169	10.33010	5.16547	0.1415623	0.17935929	3.1140109	20	1 29.7	20.0
335955 2007 TS ₁₀₈	15.4	X	146.04963	346.73264	0.40439	9.46145	0.0890700	0.18162443	3.0880658	20	1 20.5	20.1
335956 2007 TP ₁₂₀	16.4	X	144.25816	301.77398	55.12259	0.82545	0.1940847	0.18247941	3.0784125	20	2 6.3	21.3
335957 2007 TL ₁₂₁	16.4	X	69.68430	298.29766	100.82545	2.60253	0.1706378	0.17788649	3.1311755	20	—	—
335958 2007 TP ₁₃₉	15.6	X	344.23686	272.09854	225.57278	8.23389	0.0536138	0.17432372	3.1736940	20	—	—
335959 2007 TZ ₁₄₅	16.0	X	128.33840	188.65933	194.26907	11.92785	0.1238318	0.18442531	3.0567203	20	2 10.8	20.8
335960 2007 TW ₁₅₀	15.6	X	164.34179	116.22206	220.69046	8.43466	0.1529430	0.18626228	3.0365896	20	1 26.0	20.6
335961 2007 TB ₁₅₂	16.4	X	124.60845	123.06745	262.80316	4.39847	0.1864077	0.18560188	3.0437885	20	2 18.4	21.1
335962 2007 TE ₁₅₂	16.0	X	155.98666	36.82635	293.52165	4.06462	0.0836219	0.18156665	3.0887208	20	1 8.3	20.6
335963 2007 TC ₁₅₄	15.7	X	68.00578	209.63970	225.17856	9.45973	0.1324669	0.18016278	3.1047455	20	1 31.4	19.9
335964 2007 TM ₁₅₇	16.4	X	175.60072	19.39469	303.82572	1.88171	0.2203951	0.18658174	3.0331226	20	1 25.5	21.5
335965 2007 TF ₁₆₂	16.5	X	178.44321	163.10408	156.59728	2.08531	0.2213019	0.18610377	3.0383137	20	1 23.5	21.6
335966 2007 TO ₁₆₈	15.8	X	68.81849	126.57221	267.31271	4.66751	0.1596532	0.17222002	3.1994866	20	—	—
335967 2007 TA ₁₆₉	15.4	X	161.28164	269.23053	10.31621	15.21944	0.2164529	0.17388697	3.1790061	20	—	—
335968 2007 TW ₁₇₁	15.0	X	157.79990	253.77948	42.31718	16.40637	0.2161622	0.17694782	3.1422391	20	—	—
335969 2007 TM ₁₇₄	16.0	X	59.07042	232.87417	200.03784	10.15717	0.1317598	0.17903398	3.1177820	20	1 16.9	20.0
335970 2007 TW ₁₈₃	15.8	X	149.85220	287.21781	60.69944	9.92700	0.2759476	0.18229774	3.0804572	20	2 9.7	21.2
335971 2007 TP ₁₉₆	16.2	X	138.00161	93.65675	213.48337	12.77986	0.1966591	0.17066388	3.2189060	20	—	—
335972 2007 TK ₁₉₇	15.9	X	109.77110	167.37303	157.27278	9.88227	0.0710800	0.17380808	3.1799680	20	—	—
335973 2007 TY ₂₀₇	15.0	X	180.06153	228.00677	56.86266	18.33851	0.2171712	0.17934173	3.1142142	20	—	—
335974 2007 TE ₂₁₇	16.1	X	101.33597	90.97183	260.49538	4.39033	0.1407643	0.16953499	3.2331795	20	—	—
335975 2007 TV ₂₂₂	15.8	X	162.33587	328.23938	12.06615	14.75032	0.1577809	0.18350520	3.0669295	20	2 5.8	20.9
335976 2007 TJ ₂₂₄	16.0	X	308.57390	303.44370	317.19838	8.19749	0.1054945	0.21062171	2.7976967	20	3 20.0	19.8
335977 2007 TB ₂₂₅	16.2	X	160.54471	208.32531	144.01314	13.04586	0.2440703	0.18871556	3.0102154	20	2 17.1	21.3
335978 2007 TG ₂₂₆	15.5	X	52.70207	138.25005	299.44482	5.66346	0.1850860	0.17659584	3.1464131	20	1 21.1	19.1
335979 2007 TM ₂₂₆	16.4	X	95.34046	304.66221	79.84557	1.99213	0.1106485	0.17544689	3.1601348	20	1 8.3	20.7
335980 2007 TV ₂₃₇	15.9	X	172.45530	10.15684	292.64674	3.58195	0.0662420	0.18251357	3.0780283	20	—	—
335981 2007 TZ ₂₃₉	16.0	X	80.66451	216.32389	180.44199	2.09718	0.1998693	0.17612067	3.1520698	20	1 15.7	20.0
335982 2007 TD ₂₄₀	15.7	X	128.83476	319.38496	28.12184	9.96552	0.0761911	0.17699721	3.1416546	20	—	—
335983 2007 TH ₂₄₀	15.9	X	130.52462	146.13467	193.89763	9.13061	0.1367160	0.17721304	3.1391032	20	—	—
335984 2007 TK ₂₄₇	15.5	X	93.85771	105.80143	286.67613	10.59826	0.1641240	0.18057333	3.1000378	20	1 21.5	19.8
335985 2007 TD ₂₄₈	15.4	X	185.15605	20.99730	302.84896	9.14192	0.1125306	0.18677821	3.0309952	20	1 30.0	20.2
335986 2007 TF ₂₅₅	15.5	X	63.38357	208.02216	230.94925	8.73463	0.0596764	0.17996320	3.1070405	20	1 22.5	19.8
335987 2007 TV ₂₆₆	16.8	X	129.02807	316.55442	53.59147	0.37560	0.2379231	0.18247647	3.0784455	20	2 11.8	21.5
335988 2007 TK ₂₇₃	16.0	X	163.00614	84.48491	212.70053	9.20650	0.1069518	0.17659346	3.1464413	20	—	—
335989 2007 TW ₂₇₅	15.7	X	214.16609	303.66952	3.56348	9.82926	0.0657402	0.18856677	3.0117987	20	2 11.4	20.3
335990 2007 TE ₃₀₂	16.4	X	77.16889	197.07900	240.29823	1.71789	0.0759251	0.18086673	3.0966842	20	2 11.4	20.4
335991 2007 TR ₃₀₇	16.6	X	193.07985	264.20587	50.27712	1.05043	0.2112201	0.18851244	3.0123773	20	1 28.7	21.8
335992 2007 TG ₃₂₀	16.0	X	164.69797	116.48189	213.68198	11.73468	0.1688865	0.18605649	3.0388284	20	1 19.2	21.1
335993 2007 TY ₃₂₉	16.0	X	187.04961	11.10921	267.05320	3.61171	0.1360920	0.17345531	3.1842780	20	—	—
335994 2007 TA ₃₅₄	16.2	X</										