

EPHEMERIDES

1 24.9

1 25.0

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>145571</b>	2006 OY <sub>11</sub>		1 24.9 145°38	2°7/27.5	17		<b>241803</b>	2001 QG <sub>274</sub>		1 25.0 148°57	1°4/23.9	18	
12 23	8 47.02	+ 6 1.9	3.109	3.885	10.0	21.1	12 23	8 49.51	+21 56.8	2.585	3.411	10.3	21.1
1 2	8 41.88	+ 6 25.3	3.029	3.896	7.7	20.9	1 2	8 44.03	+22 39.2	2.512	3.417	7.5	20.9
1 12	8 35.47	+ 6 59.8	2.975	3.907	5.3	20.8	1 12	8 36.87	+23 24.8	2.465	3.423	4.4	20.7
1 22	8 28.26	+ 7 43.9	2.951	3.917	3.2	20.6	1 22	8 28.63	+24 9.6	2.448	3.429	1.6	20.5
2 1	8 20.84	+ 8 35.2	2.958	3.926	3.0	20.6	2 1	8 20.09	+24 49.7	2.462	3.434	3.1	20.7
2 11	8 13.82	+ 9 30.6	2.996	3.936	5.0	20.8	2 11	8 12.11	+25 22.1	2.506	3.439	6.3	20.9
2 21	8 7.78	+10 26.7	3.064	3.944	7.4	20.9	2 21	8 5.43	+25 45.3	2.578	3.444	9.2	21.1
3 2	8 3.14	+11 20.7	3.158	3.952	9.6	21.1	3 2	8 0.61	+25 58.9	2.674	3.448	11.7	21.2
<b>54588</b>	2000 QE <sub>192</sub>		1 24.9 286°00	7°7/19.9	18		<b>432049</b>	2008 XS <sub>36</sub>		1 25.0 47°87	5°1/21.6	18	
12 23	8 56.25	+42 31.1	2.322	3.135	11.8	18.7	12 23	8 51.57	+31 27.1	2.069	2.907	12.1	21.1
1 2	8 49.58	+43 28.7	2.252	3.126	9.7	18.6	1 2	8 46.09	+32 36.7	2.005	2.911	9.1	20.9
1 12	8 40.36	+44 15.0	2.206	3.116	8.1	18.5	1 12	8 38.30	+33 43.3	1.967	2.914	6.3	20.8
1 22	8 29.45	+44 43.0	2.187	3.107	7.7	18.4	1 22	8 29.00	+34 39.8	1.957	2.918	5.1	20.7
2 1	8 18.08	+44 47.8	2.196	3.097	8.7	18.5	2 1	8 19.28	+35 20.4	1.976	2.923	6.5	20.8
2 11	8 7.65	+44 28.0	2.230	3.088	10.7	18.6	2 11	8 10.37	+35 42.0	2.022	2.927	9.3	21.0
2 21	7 59.27	+43 46.4	2.289	3.079	12.9	18.7	2 21	8 3.29	+35 44.9	2.093	2.931	12.2	21.2
3 2	7 53.69	+42 47.4	2.367	3.069	14.9	18.8	3 2	7 58.73	+35 31.5	2.185	2.935	14.7	21.4
<b>90263</b>	2003 CO		1 24.9 270°13	3°9/27.3	17		<b>108301</b>	2001 JK		1 25.0 188°58	4°0/22.3	18	
12 23	8 48.11	+ 6 14.1	2.533	3.318	11.7	20.0	12 23	8 52.03	+29 56.3	2.314	3.146	11.2	19.7
1 2	8 43.06	+ 5 53.1	2.434	3.303	9.3	19.8	1 2	8 46.20	+30 50.3	2.242	3.146	8.3	19.5
1 12	8 36.35	+ 5 43.6	2.359	3.288	6.6	19.6	1 12	8 38.28	+31 42.4	2.195	3.145	5.6	19.3
1 22	8 28.50	+ 5 45.5	2.312	3.273	4.4	19.5	1 22	8 29.00	+32 26.7	2.178	3.145	4.0	19.2
2 1	8 20.25	+ 5 58.1	2.294	3.258	4.3	19.4	2 1	8 19.31	+32 58.5	2.190	3.144	5.4	19.3
2 11	8 12.40	+ 6 18.9	2.306	3.243	6.5	19.6	2 11	8 10.32	+33 15.0	2.231	3.142	8.2	19.5
2 21	8 5.70	+ 6 45.3	2.346	3.227	9.3	19.7	2 21	8 2.94	+33 16.2	2.298	3.141	11.0	19.7
3 2	8 0.74	+ 7 14.0	2.411	3.212	12.0	19.9	3 2	7 57.84	+33 3.7	2.387	3.139	13.5	19.9
<b>396803</b>	2004 PS <sub>46</sub>		1 24.9 116°53	2°7/26.5	18		<b>487958</b>	2015 TS <sub>281</sub>		1 25.0 221°21	0°9/24.7	18	
12 23	8 53.87	+ 9 53.4	1.709	2.519	15.5	21.2	12 23	8 56.11	+19 59.3	1.445	2.285	16.2	21.8
1 2	8 47.70	+10 14.3	1.645	2.536	11.7	21.0	1 2	8 50.03	+20 16.3	1.371	2.282	11.9	21.5
1 12	8 39.18	+10 50.8	1.605	2.552	7.5	20.8	1 12	8 40.89	+20 40.3	1.319	2.279	7.0	21.2
1 22	8 29.17	+11 39.8	1.591	2.568	3.5	20.6	1 22	8 29.66	+21 6.1	1.294	2.276	1.7	20.9
2 1	8 18.82	+12 36.3	1.607	2.583	3.8	20.6	2 1	8 17.79	+21 27.9	1.296	2.273	4.2	21.0
2 11	8 9.41	+13 34.5	1.651	2.597	7.8	20.9	2 11	8 6.98	+21 41.5	1.325	2.269	9.5	21.3
2 21	8 1.94	+14 29.4	1.722	2.611	11.7	21.2	2 21	7 58.60	+21 45.3	1.378	2.265	14.2	21.6
3 2	7 57.10	+15 17.6	1.816	2.625	15.1	21.4	3 2	7 53.53	+21 39.5	1.453	2.261	18.2	21.8
<b>162798</b>	2000 YV <sub>79</sub>		1 24.9 37°44	0°8/24.6	18		<b>405076</b>	2001 UP <sub>72</sub>		1 25.0 67°95	1°5/24.1	18	
12 23	8 51.34	+17 55.1	1.223	2.076	17.6	19.2	12 23	8 51.50	+18 46.4	1.677	2.515	14.4	20.4
1 2	8 46.62	+18 40.7	1.171	2.090	12.9	19.0	1 2	8 46.13	+20 0.0	1.621	2.533	10.5	20.2
1 12	8 38.84	+19 38.1	1.142	2.104	7.4	18.7	1 12	8 38.34	+21 22.4	1.590	2.551	6.0	20.0
1 22	8 29.11	+20 39.9	1.136	2.119	1.7	18.4	1 22	8 29.02	+22 46.4	1.587	2.569	1.8	19.8
2 1	8 19.00	+21 37.8	1.157	2.135	4.4	18.6	2 1	8 19.34	+24 4.2	1.613	2.587	4.0	20.0
2 11	8 10.19	+22 25.1	1.203	2.151	9.8	19.0	2 11	8 10.61	+25 9.5	1.667	2.606	8.4	20.3
2 21	8 3.98	+22 58.3	1.272	2.168	14.5	19.3	2 21	8 3.88	+25 59.4	1.747	2.624	12.2	20.5
3 2	8 1.10	+23 16.8	1.362	2.185	18.4	19.6	3 2	7 59.84	+26 33.4	1.849	2.642	15.4	20.8
<b>451451</b>	2011 SH <sub>205</sub>		1 24.9 47°67	1°4/24.3	18		<b>489581</b>	2007 TB <sub>100</sub>		1 25.0 73°41	0°2/25.1	18	
12 23	8 53.18	+19 34.7	1.249	2.101	17.4	20.8	12 23	8 49.80	+16 47.0	2.187	3.010	12.0	21.8
1 2	8 47.85	+20 21.3	1.202	2.120	12.7	20.6	1 2	8 44.33	+17 14.7	2.128	3.031	8.8	21.6
1 12	8 39.49	+21 16.9	1.177	2.140	7.3	20.3	1 12	8 37.05	+17 49.3	2.094	3.051	5.1	21.5
1 22	8 29.25	+22 13.6	1.177	2.160	2.0	20.1	1 22	8 28.69	+18 27.4	2.089	3.071	1.2	21.2
2 1	8 18.72	+23 3.6	1.204	2.180	4.6	20.3	2 1	8 20.12	+19 4.9	2.113	3.091	2.7	21.4
2 11	8 9.60	+23 41.0	1.256	2.201	9.8	20.6	2 11	8 12.29	+19 38.5	2.168	3.111	6.4	21.6
2 21	8 3.11	+24 3.8	1.332	2.223	14.3	21.0	2 21	8 5.98	+20 6.0	2.250	3.131	9.7	21.9
3 2	7 59.96	+24 12.5	1.428	2.245	18.0	21.3	3 2	8 1.72	+20 26.0	2.355	3.151	12.4	22.1
<b>60292</b>	1999 XO <sub>143</sub>		1 24.9 356°31	9°8/28.1	18		<b>285585</b>	2000 QU <sub>70</sub>		1 25.0 144°54	2°2/26.4	18	
12 23	8 47.24	+ 3 24.7	0.991	1.827	22.2	17.7	12 23	8 52.91	+ 9 38.6	1.926	2.730	14.2	20.9
1 2	8 44.18	+ 2 1.7	0.928	1.821	18.2	17.4	1 2	8 46.90	+10 20.9	1.853	2.741	10.8	20.7
1 12	8 37.74	+ 1 4.8	0.882	1.816	13.9	17.1	1 12	8 38.73	+11 18.8	1.805	2.752	6.8	20.5
1 22	8 28.92	+ 0 39.4	0.856	1.813	10.5	16.9	1 22	8 29.13	+12 28.6	1.784	2.761	3.0	20.3
2 1	8 19.33	+ 0 47.3	0.851	1.812	10.1	16.9	2 1	8 19.12	+13 44.7	1.794	2.771	3.3	20.3
2 11	8 10.89	+ 1 23.9	0.868	1.813	13.1	17.0	2 11	8 9.86	+15 1.0	1.834	2.779	7.2	20.6
2 21	8 5.16	+ 2 19.9	0.904	1.815	17.3	17.3	2 21	8 2.29	+16 12.1	1.902	2.787	11.0	20.8
3 2	8 3.15	+ 3 24.9	0.958	1.818	21.5	17.6	3 2	7 57.10	+17 14.5	1.993	2.794	14.2	21.0
<b>346930</b>	2010 AA <sub>35</sub>		1 25.0 41°41	1°6/25.7	17		<b>125861</b>	2001 XE <sub>190</sub>		1 25.0 30°97	0°7/25.4	18	
12 23	8 52.16	+13 27.8	1.031	1.886	20.1	20.4	12 23	8 49.50	+14 46.2	1.686	2.518	14.6	19.8
1 2	8 47.43	+13 54.5	0.988	1.904	14.9	20.2	1 2	8 44.71	+15 19.7	1.616	2.522	10.8	19.5
1 12	8 39.37	+14 40.0	0.964	1.924	9.0	19.9	1 12	8 37.56	+16 5.4	1.570	2.527	6.5	19.3
1 22	8 29.24	+15 38.0	0.963	1.944	2.9	19.7	1 22	8 28.86	+16 58.9	1.550	2.532	1.8	19.0
2 1	8 18.80	+16 40.0	0.986	1.966	4.3	19.8	2 1	8 19.72	+17 54.7	1.558	2.537	3.3	19.1
2 11	8 9.93	+17 37.4	1.034	1.987	10.1	20.2	2 11	8 11.41	+18 47.0	1.595	2.543	7.8	19.4
2 21	8 3.96	+18 24.7	1.104	2.010	15.2	20.6	2 21	8 4.95	+19 31.9	1.657	2.548	12.0	19.7
3 2	8 1.61	+18 59.1	1.193	2.033	19.4	20.9	3 2	8 1.07	+20 6.9	1.742	2.555	15.4	19.9
<b>278783</b>	2008 SS <sub>183</sub>		1 25.0 177°95	1°2/24.3	18		<b>321962</b>	2010 UK <sub>16</sub>		1 25.0 97°74	1°4/25.8	18	
12 23	8 50.45	+21 1.1	2.207	3.036	11.7	21.3	12 23	8 52.89	+13 9.0	1.922	2.737	13.8	21.3

EPHEMERIDES

1 25.0

1 25.0

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>11277</b>	Ballard		1 25.0 199°51	9°0/29.4	18		<b>428411</b>	2007 TV <sub>96</sub>		1 25.0 46°57	3°9/27.6	18	
12 23	8 54.13	- 6 50.9	2.258	2.969	15.1	18.1	12 23	8 47.51	+ 6 1.2	2.108	2.904	13.4	21.2
1 2	8 47.65	- 8 1.3	2.168	2.965	13.0	17.9	1 2	8 42.81	+ 6 2.6	2.033	2.910	10.5	21.0
1 12	8 39.15	- 8 52.4	2.101	2.961	11.0	17.8	1 12	8 36.29	+ 6 19.3	1.982	2.916	7.3	20.8
1 22	8 29.26	- 9 20.7	2.059	2.955	9.4	17.6	1 22	8 28.59	+ 6 50.3	1.957	2.923	4.5	20.7
2 1	8 18.85	- 9 24.5	2.044	2.949	9.1	17.6	2 1	8 20.56	+ 7 32.8	1.961	2.929	4.3	20.7
2 11	8 8.95	- 9 5.3	2.057	2.942	10.2	17.7	2 11	8 13.16	+ 8 22.7	1.993	2.936	6.9	20.9
2 21	8 0.46	- 8 27.2	2.095	2.934	12.1	17.8	2 21	8 7.16	+ 9 15.4	2.053	2.943	10.1	21.1
3 2	7 54.07	- 7 36.0	2.156	2.925	14.3	17.9	3 2	8 3.18	+10 6.9	2.137	2.950	12.9	21.3
<b>65293</b>	2002 JM <sub>18</sub>		1 25.0 168°67	0°1/24.9	18		<b>92445</b>	2000 KL <sub>5</sub>		1 25.0 164°85	4°4/22.3	18	
12 23	8 53.42	+17 4.8	2.100	2.919	12.6	20.5	12 23	8 56.84	+28 3.3	1.886	2.719	13.3	20.3
1 2	8 47.20	+17 38.4	2.023	2.924	9.3	20.3	1 2	8 50.13	+29 19.6	1.819	2.725	9.9	20.1
1 12	8 38.89	+18 19.8	1.971	2.928	5.4	20.0	1 12	8 40.79	+30 35.9	1.777	2.730	6.4	19.9
1 22	8 29.18	+19 5.0	1.949	2.931	1.3	19.8	1 22	8 29.68	+31 44.2	1.765	2.734	4.4	19.8
2 1	8 19.08	+19 49.4	1.956	2.934	3.0	19.9	2 1	8 18.05	+32 37.1	1.781	2.737	6.2	19.9
2 11	8 9.66	+20 28.8	1.995	2.936	7.0	20.2	2 11	8 7.30	+33 10.5	1.827	2.740	9.5	20.1
2 21	8 1.87	+21 0.6	2.060	2.937	10.6	20.4	2 21	7 58.63	+33 24.4	1.897	2.742	12.9	20.3
3 2	7 56.38	+21 23.7	2.149	2.938	13.7	20.6	3 2	7 52.83	+33 21.0	1.989	2.744	15.8	20.5
<b>229691</b>	2007 DX <sub>78</sub>		1 25.0 351°38	3°4/23.8	18		<b>415105</b>	2012 CF <sub>23</sub>		1 25.0 253°30	0°8/25.3	18	
12 23	8 55.37	+24 50.0	1.214	2.071	17.5	20.3	12 23	8 55.12	+17 40.6	1.809	2.635	14.1	20.7
1 2	8 49.99	+25 21.2	1.149	2.069	13.0	20.0	1 2	8 48.77	+17 22.9	1.725	2.628	10.5	20.4
1 12	8 41.08	+25 55.3	1.105	2.067	7.8	19.7	1 12	8 39.96	+17 10.5	1.666	2.622	6.3	20.2
1 22	8 29.76	+26 24.2	1.086	2.065	3.6	19.5	1 22	8 29.49	+17 1.4	1.633	2.615	1.8	19.9
2 1	8 17.78	+26 40.3	1.092	2.064	6.0	19.6	2 1	8 18.52	+16 53.0	1.631	2.609	3.3	20.0
2 11	8 7.14	+26 39.6	1.123	2.064	11.2	19.9	2 11	8 8.37	+16 43.5	1.657	2.602	7.8	20.2
2 21	7 59.41	+26 22.5	1.176	2.063	16.1	20.2	2 21	8 0.13	+16 31.7	1.709	2.595	12.0	20.5
3 2	7 55.49	+25 51.9	1.248	2.064	20.2	20.5	3 2	7 54.56	+16 17.1	1.785	2.588	15.5	20.7
<b>90581</b>	2004 HJ <sub>6</sub>		1 25.0 282°58	2°1/23.5	17		<b>215901</b>	2005 GA <sub>130</sub>		1 25.0 307°24	4°0/22.9	18	
12 23	8 49.18	+23 48.9	2.400	3.232	10.8	20.0	12 23	8 52.61	+25 44.0	1.548	2.396	14.8	20.3
1 2	8 44.13	+24 31.3	2.305	3.214	7.9	19.8	1 2	8 47.53	+26 48.8	1.473	2.389	11.0	20.0
1 12	8 37.13	+25 17.0	2.237	3.195	4.8	19.6	1 12	8 39.51	+27 57.3	1.423	2.381	6.8	19.8
1 22	8 28.79	+26 1.3	2.198	3.177	2.2	19.4	1 22	8 29.42	+29 1.1	1.398	2.374	4.1	19.6
2 1	8 19.93	+26 39.8	2.188	3.158	3.8	19.5	2 1	8 18.63	+29 51.9	1.401	2.367	6.2	19.7
2 11	8 11.54	+27 8.9	2.209	3.139	7.1	19.6	2 11	8 8.74	+30 24.2	1.431	2.360	10.4	19.9
2 21	8 4.50	+27 27.1	2.256	3.120	10.4	19.8	2 21	8 1.12	+30 36.9	1.484	2.353	14.5	20.1
3 2	7 59.50	+27 34.1	2.326	3.101	13.2	20.0	3 2	7 56.68	+30 31.8	1.558	2.347	18.0	20.4
<b>325068</b>	2008 CX <sub>213</sub>		1 25.0 239°94	6°0/28.9	18		<b>205578</b>	2001 TE <sub>55</sub>		1 25.0 174°56	0°6/25.4	17	
12 23	8 48.89	+ 0 24.7	1.921	2.695	15.3	21.2	12 23	8 49.20	+16 15.5	2.663	3.477	10.4	21.1
1 2	8 44.08	+ 0 28.4	1.833	2.690	12.5	21.0	1 2	8 43.75	+16 26.5	2.581	3.478	7.7	20.9
1 12	8 37.18	+ 0 54.0	1.768	2.684	9.4	20.8	1 12	8 36.73	+16 43.4	2.525	3.480	4.6	20.7
1 22	8 28.82	+ 1 41.7	1.728	2.679	6.7	20.6	1 22	8 28.69	+17 3.9	2.499	3.481	1.3	20.5
2 1	8 19.94	+ 2 49.0	1.715	2.673	6.2	20.6	2 1	8 20.37	+17 25.3	2.504	3.481	2.3	20.6
2 11	8 11.63	+ 4 10.3	1.731	2.668	8.3	20.7	2 11	8 12.56	+17 45.4	2.539	3.482	5.6	20.8
2 21	8 4.84	+ 5 38.7	1.774	2.662	11.5	20.9	2 21	8 5.96	+18 2.1	2.602	3.482	8.6	21.0
3 2	8 0.31	+ 7 7.5	1.840	2.656	14.6	21.1	3 2	8 1.09	+18 14.4	2.691	3.482	11.2	21.2
<b>489891</b>	2008 HV <sub>68</sub>		1 25.0 150°54	1°5/26.2	17		<b>278873</b>	2008 TH <sub>62</sub>		1 25.0 12°40	0°4/25.3	18	
12 23	8 50.37	+11 56.8	2.970	3.764	10.0	23.5	12 23	8 49.90	+16 37.2	2.037	2.863	12.7	21.4
1 2	8 44.38	+12 12.2	2.892	3.776	7.5	23.3	1 2	8 44.70	+16 53.8	1.960	2.864	9.4	21.2
1 12	8 36.99	+12 35.3	2.842	3.788	4.7	23.2	1 12	8 37.46	+17 18.2	1.907	2.864	5.6	20.9
1 22	8 28.72	+13 4.3	2.822	3.800	2.0	23.0	1 22	8 28.89	+17 47.3	1.882	2.864	1.5	20.7
2 1	8 20.24	+13 36.7	2.834	3.810	2.4	23.0	2 1	8 19.93	+18 17.2	1.887	2.865	2.9	20.8
2 11	8 12.24	+14 9.9	2.878	3.820	5.1	23.2	2 11	8 11.65	+18 44.4	1.920	2.865	6.9	21.0
2 21	8 5.34	+14 41.5	2.951	3.829	7.8	23.4	2 21	8 4.94	+19 6.4	1.980	2.866	10.6	21.2
3 2	8 0.01	+15 9.9	3.051	3.837	10.1	23.6	3 2	8 0.46	+19 21.9	2.064	2.866	13.7	21.4
<b>177631</b>	2004 JM <sub>44</sub>		1 25.0 289°14	2°2/26.2	18		<b>127831</b>	2003 FQ <sub>94</sub>		1 25.0 201°50	2°8/23.4	18	
12 23	8 50.04	+11 53.8	1.740	2.562	14.7	20.4	12 23	8 54.68	+23 15.9	1.735	2.572	14.0	20.1
1 2	8 45.24	+12 4.6	1.649	2.547	11.2	20.1	1 2	8 48.72	+24 19.3	1.659	2.570	10.3	19.9
1 12	8 38.01	+12 29.3	1.580	2.532	7.1	19.8	1 12	8 40.07	+25 28.1	1.608	2.567	6.2	19.7
1 22	8 29.04	+13 5.9	1.539	2.517	3.0	19.5	1 22	8 29.55	+26 34.9	1.584	2.563	2.9	19.4
2 1	8 19.40	+13 50.2	1.525	2.502	3.6	19.6	2 1	8 18.39	+27 32.2	1.590	2.559	5.0	19.6
2 11	8 10.36	+14 37.3	1.539	2.487	8.0	19.8	2 11	8 8.05	+28 14.6	1.624	2.555	9.2	19.8
2 21	8 3.06	+15 22.4	1.579	2.472	12.3	20.0	2 21	7 59.77	+28 40.3	1.683	2.550	13.2	20.0
3 2	7 58.35	+16 2.0	1.641	2.458	16.1	20.2	3 2	7 54.39	+28 50.2	1.764	2.544	16.6	20.2
<b>333000</b>	2011 HL <sub>37</sub>		1 25.0 59°83	3°5/27.4	18		<b>258113</b>	2001 QY <sub>228</sub>		1 25.0 162°10	3°1/26.9	18	
12 23	8 47.97	+ 6 48.0	2.029	2.828	13.7	20.5	12 23	8 51.39	+ 8 5.9	2.355	3.145	12.4	21.6
1 2	8 43.21	+ 7 1.3	1.955	2.835	10.7	20.3	1 2	8 45.47	+ 8 8.9	2.275	3.152	9.5	21.4
1 12	8 36.54	+ 7 30.6	1.904	2.843	7.2	20.1	1 12	8 37.78	+ 8 24.1	2.220	3.158	6.4	21.2
1 22	8 28.65	+ 8 14.0	1.881	2.850	4.2	19.9	1 22	8 28.95	+ 8 50.3	2.193	3.163	3.6	21.0
2 1	8 20.41	+ 9 8.1	1.886	2.857	4.0	19.9	2 1	8 19.80	+ 9 24.8	2.197	3.168	3.6	21.1
2 11	8 12.82	+10 7.9	1.920	2.865	6.9	20.1	2 11	8 11.23	+10 4.4	2.231	3.172	6.4	21.2
2 21	8 6.70	+11 8.7	1.981	2.873	10.3	20.3	2 21	8 4.01	+10 45.3	2.293	3.175	9.5	21.4
3 2	8 2.69	+12 6.0	2.066	2.880	13.3	20.5	3 2	7 58.74	+11 24.6	2.380	3.178	12.3	21.6
<b>193415</b>	2000 WB <sub>67</sub>		1 25.0 11°11	21°7/ 5.1	17		<b>415752</b>	2000 OB <sub>22</sub>		1 25.0 77°23	3°6/27.9	18	
12 23	8 49.39	-18 30.8	1.023	1.751	28.6	20.0	12 23	8 54.38	+ 4 2.8	2.287	3.055	13.3	21.9
1 2	8 4												

EPHEMERIDES

1 25.0

1 25.0

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>28610</b>	2000 <i>EM</i> <sub>158</sub>		1 25.0 199°31	1.7°/24.2	18		<b>358626</b>	2007 <i>VY</i> <sub>153</sub>		1 25.0 184°30	3.5°/26.9	18	
12 23	8 56.48	+24 22.4	2.390	3.209	11.3	18.0	12 23	8 52.80	+ 8 40.9	1.879	2.681	14.6	21.9
1 2	8 49.29	+24 32.2	2.304	3.206	8.3	17.8	1 2	8 46.95	+ 8 37.7	1.798	2.682	11.3	21.7
1 12	8 40.05	+24 42.1	2.245	3.201	4.9	17.6	1 12	8 38.86	+ 8 49.0	1.740	2.682	7.5	21.5
1 22	8 29.50	+24 48.4	2.215	3.196	1.9	17.4	1 22	8 29.27	+ 9 13.6	1.709	2.681	4.1	21.3
2 1	8 18.57	+24 48.0	2.218	3.190	3.5	17.5	2 1	8 19.19	+ 9 48.4	1.707	2.680	4.2	21.3
2 11	8 8.34	+24 39.3	2.251	3.183	6.9	17.7	2 11	8 9.82	+10 29.4	1.735	2.678	7.7	21.5
2 21	7 59.70	+24 22.2	2.312	3.176	10.2	17.9	2 21	8 2.15	+11 12.1	1.788	2.676	11.4	21.7
3 2	7 53.30	+23 57.9	2.397	3.168	13.0	18.1	3 2	7 56.91	+11 52.7	1.866	2.674	14.8	21.9
<b>466226</b>	2012 <i>TY</i> <sub>138</sub>		1 25.0 150°67	0°1/24.9	17		<b>99918</b>	1998 <i>SQ</i> <sub>2</sub>		1 25.0 128°07	1°2/25.6	18	
12 23	8 48.78	+17 41.4	2.836	3.651	9.8	22.0	12 23	8 56.96	+15 36.0	2.289	3.093	12.2	19.7
1 2	8 43.36	+18 10.3	2.760	3.659	7.2	21.8	1 2	8 49.42	+15 24.6	2.221	3.113	9.0	19.5
1 12	8 36.47	+18 44.3	2.711	3.667	4.2	21.7	1 12	8 40.01	+15 19.2	2.181	3.132	5.5	19.3
1 22	8 28.63	+19 20.5	2.691	3.674	1.0	21.4	1 22	8 29.49	+15 17.7	2.170	3.150	1.9	19.1
2 1	8 20.55	+19 56.0	2.703	3.680	2.3	21.5	2 1	8 18.80	+15 18.1	2.191	3.167	2.8	19.2
2 11	8 12.95	+20 28.0	2.746	3.687	5.4	21.8	2 11	8 8.93	+15 18.6	2.243	3.184	6.3	19.5
2 21	8 6.50	+20 54.6	2.818	3.692	8.2	22.0	2 21	8 0.69	+15 17.7	2.323	3.200	9.6	19.7
3 2	8 1.68	+21 14.7	2.915	3.698	10.6	22.1	3 2	7 54.63	+15 14.8	2.429	3.215	12.4	19.9
<b>467804</b>	2010 <i>BL</i> <sub>77</sub>		1 25.0 264°28	2°9/26.6	17		<b>126220</b>	2002 <i>AS</i> <sub>48</sub>		1 25.0 115°29	1°5/25.8	18	
12 23	8 50.17	+ 9 49.6	2.618	3.411	11.2	21.0	12 23	8 51.70	+14 24.9	1.936	2.756	13.5	20.1
1 2	8 44.60	+ 9 28.2	2.512	3.391	8.7	20.8	1 2	8 46.06	+14 24.9	1.861	2.760	10.1	19.9
1 12	8 37.32	+ 9 15.4	2.431	3.370	5.8	20.6	1 12	8 38.28	+14 34.2	1.810	2.764	6.2	19.7
1 22	8 28.87	+ 9 10.9	2.379	3.349	3.3	20.4	1 22	8 29.12	+14 50.2	1.787	2.767	2.2	19.4
2 1	8 19.96	+ 9 13.5	2.357	3.328	3.5	20.4	2 1	8 19.58	+15 10.0	1.793	2.770	3.1	19.5
2 11	8 11.44	+ 9 21.5	2.367	3.306	6.2	20.5	2 11	8 10.80	+15 30.2	1.828	2.774	7.1	19.7
2 21	8 4.05	+ 9 32.7	2.404	3.284	9.2	20.7	2 21	8 3.70	+15 48.2	1.889	2.777	10.9	20.0
3 2	7 58.42	+ 9 45.2	2.466	3.262	12.0	20.9	3 2	7 58.96	+16 2.2	1.974	2.780	14.1	20.2
<b>103067</b>	1999 <i>XA</i> <sub>143</sub>		1 25.0 328°08	8°8/18.6	17 R		<b>269384</b>	2009 <i>QX</i> <sub>2</sub>		1 25.0 103°92	0°7/24.7	18	
12 23	8 56.66	+ 4 12.6	0.737	1.586	26.6	18.3	12 23	8 53.42	+20 18.5	1.892	2.722	13.3	21.0
1 2	8 56.78	+ 9 18.0	0.581	1.501	21.5	17.6	1 2	8 47.37	+20 30.7	1.822	2.729	9.8	20.8
1 12	8 51.15	+18 25.5	0.448	1.414	13.2	16.6	1 12	8 39.05	+20 47.4	1.776	2.735	5.7	20.6
1 22	8 34.89	+33 55.3	0.350	1.325	10.9	15.8	1 22	8 29.30	+21 4.8	1.759	2.742	1.4	20.3
2 1	7 52.35	+55 38.1	0.306	1.235	30.9	16.0	2 1	8 19.21	+21 18.9	1.771	2.748	3.3	20.5
2 11	5 32.35	+74 23.1	0.322	1.145	53.3	16.6	2 11	8 9.99	+21 27.0	1.812	2.754	7.5	20.7
2 21	0 58.32	+75 7.5	0.377	1.056	69.5	17.2	2 21	8 2.61	+21 28.0	1.879	2.760	11.3	21.0
3 2	23 12.96	+67 4.8	0.445	0.971	79.4	17.8	3 2	7 57.75	+21 21.7	1.969	2.766	14.5	21.2
<b>33430</b>	1999 <i>EH</i>		1 25.0 5°57	0°6/24.8	18		<b>235717</b>	2004 <i>TQ</i> <sub>127</sub>		1 25.0 162°57	0°9/25.5	18	
12 23	8 53.22	+19 34.7	1.265	2.117	17.3	18.4	12 23	8 54.74	+14 54.6	1.947	2.763	13.6	21.9
1 2	8 48.16	+19 45.6	1.199	2.117	12.8	18.1	1 2	8 48.30	+15 17.3	1.872	2.770	10.1	21.7
1 12	8 39.92	+20 4.6	1.155	2.117	7.5	17.8	1 12	8 39.61	+15 49.8	1.822	2.776	6.1	21.5
1 22	8 29.53	+20 26.5	1.135	2.118	1.8	17.4	1 22	8 29.44	+16 28.5	1.799	2.781	1.8	21.2
2 1	8 18.57	+20 45.6	1.141	2.119	4.3	17.6	2 1	8 18.87	+17 9.0	1.808	2.785	3.0	21.3
2 11	8 8.81	+20 57.3	1.173	2.122	9.9	17.9	2 11	8 9.06	+17 46.9	1.845	2.789	7.3	21.6
2 21	8 1.65	+20 59.8	1.228	2.124	14.8	18.2	2 21	8 1.02	+18 19.3	1.910	2.792	11.1	21.8
3 2	7 57.95	+20 53.0	1.302	2.128	19.0	18.5	3 2	7 55.44	+18 44.4	1.999	2.794	14.4	22.0
<b>328585</b>	2009 <i>SM</i> <sub>46</sub>		1 25.0 211°03	8°0/29.9	18		<b>452326</b>	2000 <i>SY</i> <sub>129</sub>		1 25.0 160°29	1°6/25.9	18	
12 23	8 49.12	- 4 51.8	2.138	2.876	15.1	21.1	12 23	8 53.15	+13 43.7	2.533	3.335	11.3	21.4
1 2	8 44.06	- 5 27.4	2.053	2.873	12.8	20.9	1 2	8 46.63	+13 37.1	2.453	3.342	8.4	21.3
1 12	8 37.09	- 5 41.8	1.988	2.870	10.5	20.7	1 12	8 38.42	+13 37.4	2.400	3.349	5.2	21.1
1 22	8 28.83	- 5 33.1	1.949	2.867	8.6	20.6	1 22	8 29.14	+13 43.1	2.377	3.355	2.1	20.9
2 1	8 20.12	- 5 1.2	1.935	2.864	8.0	20.6	2 1	8 19.59	+13 52.2	2.384	3.361	2.7	20.9
2 11	8 11.94	- 4 9.4	1.949	2.860	9.2	20.6	2 11	8 10.65	+14 2.4	2.423	3.365	5.9	21.1
2 21	8 5.15	- 3 3.1	1.989	2.856	11.5	20.8	2 21	8 3.05	+14 12.1	2.491	3.370	9.0	21.3
3 2	8 0.41	- 1 48.6	2.053	2.852	13.9	20.9	3 2	7 57.34	+14 19.8	2.584	3.373	11.7	21.5
<b>329705</b>	2003 <i>UB</i> <sub>298</sub>		1 25.0 205°57	0°1/25.1	18		<b>417285</b>	2006 <i>BH</i> <sub>2</sub>		1 25.0 300°02	0°8/24.7	17	
12 23	8 50.24	+17 41.8	2.116	2.942	12.3	21.5	12 23	8 53.95	+21 48.5	1.867	2.700	13.4	20.6
1 2	8 44.91	+17 59.8	2.037	2.941	9.0	21.3	1 2	8 47.98	+21 41.8	1.778	2.686	9.9	20.3
1 12	8 37.58	+18 24.6	1.983	2.941	5.3	21.1	1 12	8 39.56	+21 37.2	1.713	2.672	5.8	20.1
1 22	8 28.94	+18 52.8	1.958	2.940	1.3	20.8	1 22	8 29.46	+21 31.5	1.676	2.659	1.5	19.7
2 1	8 19.92	+19 20.7	1.962	2.940	2.9	20.9	2 1	8 18.82	+21 21.7	1.668	2.645	3.5	19.9
2 11	8 11.56	+19 45.0	1.996	2.940	6.8	21.2	2 11	8 8.93	+21 5.7	1.689	2.632	7.9	20.1
2 21	8 4.73	+20 3.4	2.056	2.939	10.4	21.4	2 21	8 0.91	+20 43.3	1.737	2.619	12.0	20.3
3 2	8 0.09	+20 15.0	2.140	2.939	13.4	21.6	3 2	7 55.54	+20 15.4	1.806	2.606	15.5	20.5
<b>351513</b>	2005 <i>SH</i> <sub>43</sub>		1 25.0 122°15	3°7/23.5	18		<b>392212</b>	2009 <i>TS</i> <sub>41</sub>		1 25.0 126°59	1°4/24.4	17	
12 23	8 59.32	+26 38.4	1.537	2.377	15.4	20.9	12 23	8 56.97	+19 38.4	1.476	2.313	16.1	21.7
1 2	8 52.17	+27 18.4	1.478	2.388	11.4	20.6	1 2	8 50.50	+20 27.8	1.415	2.325	11.7	21.5
1 12	8 42.04	+27 57.9	1.443	2.400	7.0	20.4	1 12	8 41.12	+21 25.6	1.377	2.337	6.8	21.2
1 22	8 30.00	+28 29.4	1.434	2.411	3.8	20.2	1 22	8 29.82	+22 24.6	1.366	2.348	1.9	21.0
2 1	8 17.60	+28 46.7	1.454	2.421	5.8	20.4	2 1	8 18.07	+23 17.4	1.383	2.359	4.4	21.2
2 11	8 6.51	+28 47.0	1.501	2.431	9.9	20.7	2 11	8 7.47	+23 58.3	1.428	2.369	9.3	21.5
2 21	7 57.99	+28 31.5	1.573	2.441	13.9	20.9	2 21	7 59.30	+24 25.0	1.498	2.378	13.7	21.7
3 2	7 52.77	+28 3.3	1.665	2.450	17.3	21.2	3 2	7 54.34	+24 38.0	1.589	2.387	17.3	22.0
<b>206241</b>	Dubois		1 25.0 32°12	0°6/25.4	18		<b>31025</b>	1996 <i>GR</i>		1 25.0 314°36	1°1/24.6	18	
12 23	8 48.05	+15 9.3	1.858	2.689	13.5	20.2	12						

EPHEMERIDES

1 25.0

1 25.1

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>377538</b>	2005 <i>GH</i> <sub>178</sub>		1 25.0	21°00	2°6/26.6	18	<b>406093</b>	2006 <i>UD</i> <sub>259</sub>		1 25.1	73°08	2°3/26.2	18
12 23	8 47.48	+10 3.5	1.871	2.687	14.0	20.4	12 23	8 53.00	+11 54.4	1.643	2.463	15.5	21.8
1 2	8 43.04	+10 19.4	1.798	2.692	10.7	20.2	1 2	8 47.13	+12 1.0	1.587	2.484	11.6	21.6
1 12	8 36.55	+10 49.7	1.749	2.697	6.9	20.0	1 12	8 38.93	+12 21.0	1.553	2.504	7.3	21.4
1 22	8 28.73	+11 32.1	1.726	2.702	3.3	19.8	1 22	8 29.30	+12 51.5	1.546	2.525	3.1	21.2
2 1	8 20.52	+12 22.5	1.732	2.708	3.5	19.8	2 1	8 19.43	+13 28.0	1.568	2.545	3.6	21.3
2 11	8 13.02	+13 15.9	1.766	2.714	7.1	20.0	2 11	8 10.57	+14 6.0	1.618	2.565	7.7	21.5
2 21	8 7.11	+14 7.8	1.826	2.721	10.8	20.3	2 21	8 3.72	+14 41.5	1.693	2.585	11.7	21.8
3 2	8 3.45	+14 54.4	1.910	2.728	14.1	20.5	3 2	7 59.50	+15 11.6	1.791	2.605	15.0	22.1
<b>40642</b>	1999 <i>RW</i> <sub>181</sub>		1 25.0	57°90	0°8/25.5	18	<b>118827</b>	2000 <i>SY</i> <sub>159</sub>		1 25.1	138°72	10°9/2.8	18
12 23	8 50.28	+15 19.4	1.841	2.668	13.8	19.2	12 23	8 50.14	-17 10.0	2.409	3.050	15.8	20.2
1 2	8 45.10	+15 41.1	1.773	2.677	10.2	19.0	1 2	8 44.63	-18 4.2	2.337	3.061	14.3	20.1
1 12	8 37.75	+16 12.7	1.729	2.685	6.1	18.8	1 12	8 37.36	-18 33.0	2.283	3.071	12.7	20.0
1 22	8 29.01	+16 50.6	1.712	2.694	1.8	18.5	1 22	8 28.94	-18 33.1	2.250	3.081	11.5	19.9
2 1	8 19.92	+17 30.2	1.725	2.703	3.0	18.7	2 1	8 20.18	-18 3.6	2.242	3.090	10.9	19.9
2 11	8 11.63	+18 7.3	1.765	2.712	7.3	18.9	2 11	8 11.99	-17 7.1	2.258	3.099	11.2	19.9
2 21	8 5.09	+18 38.8	1.833	2.721	11.1	19.2	2 21	8 5.13	-15 48.8	2.298	3.107	12.2	20.0
3 2	8 0.94	+19 2.7	1.922	2.731	14.4	19.4	3 2	8 0.20	-14 15.8	2.361	3.115	13.6	20.1
<b>455108</b>	2015 <i>UN</i> <sub>83</sub>		1 25.0	129°62	0°3/25.2	18	<b>62422</b>	2000 <i>SK</i> <sub>184</sub>		1 25.1	204°63	1°5/25.9	18
12 23	8 56.29	+16 7.6	1.727	2.550	14.8	22.0	12 23	8 52.51	+12 30.1	1.780	2.598	14.6	20.1
1 2	8 49.57	+16 39.9	1.664	2.566	10.9	21.8	1 2	8 46.97	+13 3.5	1.697	2.595	11.0	19.9
1 12	8 40.39	+17 22.0	1.625	2.581	6.4	21.6	1 12	8 39.02	+13 51.2	1.638	2.591	6.8	19.6
1 22	8 29.64	+18 9.0	1.613	2.595	1.6	21.3	1 22	8 29.38	+14 49.4	1.607	2.587	2.4	19.4
2 1	8 18.54	+18 55.5	1.631	2.609	3.3	21.5	2 1	8 19.17	+15 52.8	1.605	2.583	3.3	19.4
2 11	8 8.43	+19 36.6	1.679	2.622	7.9	21.8	2 11	8 9.64	+16 55.4	1.631	2.578	7.8	19.7
2 21	8 0.37	+20 9.4	1.752	2.634	11.9	22.0	2 21	8 1.90	+17 52.2	1.684	2.572	12.0	19.9
3 2	7 55.06	+20 32.6	1.849	2.646	15.3	22.3	3 2	7 56.75	+18 40.1	1.760	2.566	15.6	20.1
<b>349185</b>	2007 <i>RN</i> <sub>130</sub>		1 25.0	133°40	0°4/25.4	18	<b>138798</b>	2000 <i>TA</i> <sub>13</sub>		1 25.1	162°09	2°1/26.5	18
12 23	8 49.47	+16 10.0	2.683	3.495	10.4	22.2	12 23	8 47.57	+11 1.7	2.486	3.291	11.3	20.2
1 2	8 43.92	+16 31.1	2.610	3.507	7.6	22.1	1 2	8 42.70	+11 9.3	2.403	3.292	8.6	20.0
1 12	8 36.82	+16 58.4	2.564	3.518	4.5	21.9	1 12	8 36.22	+11 26.8	2.346	3.292	5.5	19.8
1 22	8 28.78	+17 29.1	2.547	3.529	1.2	21.6	1 22	8 28.69	+11 52.6	2.316	3.292	2.6	19.6
2 1	8 20.49	+18 0.4	2.562	3.540	2.3	21.7	2 1	8 20.84	+12 24.1	2.317	3.293	2.9	19.6
2 11	8 12.76	+18 29.4	2.608	3.550	5.5	22.0	2 11	8 13.50	+12 58.2	2.348	3.293	5.9	19.8
2 21	8 6.24	+18 54.1	2.682	3.560	8.4	22.2	2 21	8 7.37	+13 32.0	2.407	3.293	8.9	20.0
3 2	8 1.44	+19 13.3	2.781	3.569	10.9	22.4	3 2	8 3.00	+14 3.1	2.490	3.294	11.6	20.2
<b>400239</b>	2007 <i>HA</i> <sub>85</sub>		1 25.0	216°40	2°4/23.7	18	<b>154052</b>	2002 <i>CX</i> <sub>122</sub>		1 25.1	344°68	1°1/25.6	18
12 23	8 55.61	+22 47.2	1.774	2.608	13.9	22.0	12 23	8 48.31	+14 54.6	1.494	2.335	15.7	20.1
1 2	8 49.41	+23 38.5	1.692	2.601	10.3	21.8	1 2	8 44.25	+15 11.2	1.416	2.327	11.7	19.8
1 12	8 40.52	+24 35.1	1.635	2.593	6.1	21.5	1 12	8 37.58	+15 40.8	1.361	2.319	7.1	19.5
1 22	8 29.73	+25 30.4	1.605	2.585	2.6	21.3	1 22	8 29.07	+16 19.8	1.331	2.313	2.2	19.2
2 1	8 18.26	+26 17.6	1.605	2.576	4.7	21.4	2 1	8 19.96	+17 3.0	1.328	2.307	3.6	19.3
2 11	8 7.57	+26 51.7	1.634	2.567	9.0	21.6	2 11	8 11.65	+17 44.8	1.351	2.302	8.6	19.6
2 21	7 58.89	+27 11.1	1.688	2.557	13.0	21.8	2 21	8 5.37	+18 20.8	1.399	2.298	13.2	19.8
3 2	7 53.09	+27 16.3	1.764	2.546	16.5	22.0	3 2	8 1.94	+18 48.1	1.467	2.295	17.1	20.0
<b>101432</b>	Adamwest		1 25.0	94°95	6°9/20.7	18	<b>399515</b>	2002 <i>VT</i> <sub>86</sub>		1 25.1	48°27	8°8/28.9	18
12 23	8 59.22	+35 14.5	1.879	2.708	13.5	19.7	12 23	8 53.47	+ 0 6.5	1.409	2.196	19.3	20.4
1 2	8 51.87	+36 54.9	1.841	2.735	10.4	19.6	1 2	8 47.65	- 1 2.9	1.361	2.220	15.8	20.3
1 12	8 41.78	+38 26.8	1.828	2.762	7.9	19.5	1 12	8 39.30	- 1 46.9	1.334	2.246	12.2	20.1
1 22	8 29.97	+39 40.7	1.844	2.788	7.0	19.5	1 22	8 29.42	- 2 3.2	1.330	2.271	9.5	20.0
2 1	8 17.87	+40 29.9	1.887	2.814	8.3	19.6	2 1	8 19.35	- 1 52.2	1.351	2.298	8.9	20.1
2 11	8 6.98	+40 52.4	1.958	2.839	10.8	19.8	2 11	8 10.46	- 1 19.0	1.397	2.324	10.8	20.2
2 21	7 58.46	+40 50.7	2.053	2.863	13.4	20.0	2 21	8 3.80	- 0 30.7	1.467	2.351	13.7	20.5
3 2	7 53.02	+40 29.7	2.168	2.887	15.7	20.2	3 2	8 0.00	+ 0 24.9	1.558	2.377	16.7	20.7
<b>90070</b>	2002 <i>VN</i> <sub>79</sub>		1 25.0	329°53	3°3/26.5	18	<b>405990</b>	2006 <i>SG</i> <sub>294</sub>		1 25.1	73°73	1°6/24.3	18
12 23	8 47.89	+10 40.2	1.393	2.228	17.0	18.7	12 23	8 56.19	+21 48.7	1.625	2.461	14.9	21.9
1 2	8 44.16	+10 38.2	1.307	2.211	13.1	18.4	1 2	8 49.52	+22 15.8	1.576	2.486	10.8	21.7
1 12	8 37.63	+10 53.7	1.243	2.195	8.6	18.1	1 12	8 40.33	+22 46.5	1.551	2.511	6.3	21.5
1 22	8 29.08	+11 25.4	1.203	2.180	4.2	17.8	1 22	8 29.66	+23 15.4	1.553	2.535	2.0	21.3
2 1	8 19.73	+12 9.5	1.189	2.166	4.5	17.7	2 1	8 18.84	+23 37.4	1.585	2.560	4.0	21.5
2 11	8 11.11	+12 59.8	1.200	2.153	9.2	18.0	2 11	8 9.24	+23 49.5	1.644	2.584	8.4	21.8
2 21	8 4.56	+13 50.4	1.235	2.140	14.1	18.2	2 21	8 1.89	+23 51.1	1.729	2.608	12.2	22.1
3 2	8 1.05	+14 36.1	1.291	2.129	18.4	18.4	3 2	7 57.40	+23 43.1	1.835	2.631	15.4	22.4
<b>500235</b>	2012 <i>JH</i> <sub>16</sub>		1 25.0	206°24	3°3/27.8	17	<b>426605</b>	2013 <i>SW</i> <sub>40</sub>		1 25.1	140°66	1°9/26.2	18
12 23	8 48.98	+ 4 26.1	2.690	3.462	11.5	22.5	12 23	8 50.69	+11 57.2	2.179	2.988	12.6	21.9
1 2	8 43.67	+ 4 56.4	2.592	3.455	9.0	22.4	1 2	8 45.13	+12 9.2	2.103	2.995	9.5	21.7
1 12	8 36.77	+ 5 41.5	2.521	3.449	6.3	22.2	1 12	8 37.70	+12 31.8	2.053	3.001	6.0	21.5
1 22	8 28.80	+ 6 40.0	2.478	3.441	3.9	22.0	1 22	8 29.06	+13 2.8	2.030	3.008	2.5	21.3
2 1	8 20.43	+ 7 48.8	2.466	3.433	3.6	22.0	2 1	8 20.09	+13 38.8	2.037	3.014	3.0	21.3
2 11	8 12.45	+ 9 3.7	2.485	3.425	5.9	22.1	2 11	8 11.76	+14 16.3	2.074	3.020	6.5	21.6
2 21	8 5.55	+10 20.1	2.534	3.416	8.7	22.3	2 21	8 4.89	+14 51.9	2.139	3.025	9.9	21.8
3 2	8 0.31	+11 33.9	2.609	3.406	11.3	22.4	3 2	8 0.10	+15 23.2	2.228	3.030	12.9	22.0
<b>456440</b>	2006 <i>VY</i> <sub>59</sub>		1 25.0	19°84	0°1/25.0	16	<b>394379</b>	2007 <i>DO</i> <sub>111</sub>		1 25.1	194°60	3°6/23.4	18
12 23	8 50.49	+17 10.2	1.496	2.339	15.6	21.5	1						

EPHEMERIDES

1 25.1

1 25.1

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>454176</b>	2013 GC <sub>24</sub>		1 25.1 343°47	4.4/26.9	18		<b>208275</b>	2000 YA <sub>94</sub>		1 25.1 26°91	0.8/25.4	18	
12 23	8 50.90	+ 8 46.2	1.414	2.238	17.4	21.2	12 23	8 51.29	+15 55.8	1.220	2.070	17.9	20.0
1 2	8 46.20	+ 8 28.8	1.339	2.234	13.5	21.0	1 2	8 46.69	+16 9.6	1.163	2.079	13.3	19.8
1 12	8 38.74	+ 8 29.4	1.285	2.231	9.1	20.7	1 12	8 39.05	+16 36.5	1.128	2.088	7.9	19.5
1 22	8 29.37	+ 8 47.3	1.255	2.228	5.2	20.5	1 22	8 29.44	+17 11.8	1.116	2.098	2.2	19.2
2 1	8 19.38	+ 9 19.6	1.252	2.225	5.2	20.5	2 1	8 19.38	+17 49.3	1.130	2.109	4.0	19.4
2 11	8 10.27	+10 1.0	1.274	2.223	9.2	20.7	2 11	8 10.57	+18 23.1	1.169	2.121	9.5	19.7
2 21	8 3.30	+10 45.9	1.321	2.221	13.7	20.9	2 21	8 4.31	+18 49.2	1.232	2.134	14.3	20.0
3 2	7 59.33	+11 28.9	1.388	2.220	17.7	21.2	3 2	8 1.36	+19 5.8	1.314	2.147	18.4	20.3
<b>32163</b>	Claireburch		1 25.1 150°23	1°5/25.9	18		<b>384817</b>	2012 RD <sub>5</sub>		1 25.1 76°02	1°9/26.3	18	
12 23	8 53.98	+12 48.2	1.780	2.596	14.7	18.7	12 23	8 48.85	+11 45.8	2.301	3.109	12.0	21.2
1 2	8 47.93	+13 15.5	1.707	2.604	11.0	18.5	1 2	8 43.64	+11 57.9	2.235	3.126	9.0	21.0
1 12	8 39.51	+13 55.9	1.659	2.611	6.7	18.3	1 12	8 36.76	+12 20.1	2.195	3.143	5.7	20.8
1 22	8 29.52	+14 45.5	1.638	2.618	2.4	18.0	1 22	8 28.84	+12 50.1	2.182	3.160	2.5	20.7
2 1	8 19.09	+15 39.3	1.646	2.624	3.3	18.1	2 1	8 20.71	+13 24.9	2.200	3.177	2.8	20.7
2 11	8 9.48	+16 31.8	1.684	2.630	7.6	18.4	2 11	8 13.22	+14 1.0	2.248	3.193	6.0	21.0
2 21	8 1.74	+17 19.0	1.748	2.635	11.7	18.6	2 21	8 7.11	+14 35.3	2.323	3.210	9.2	21.2
3 2	7 56.59	+17 58.1	1.835	2.639	15.1	18.9	3 2	8 2.89	+15 5.7	2.423	3.227	11.9	21.4
<b>93474</b>	2000 TU <sub>14</sub>		1 25.1 161°07	0°8/24.6	18		<b>125965</b>	2001 YX <sub>7</sub>		1 25.1 146°82	0°2/25.1	18	
12 23	8 52.26	+20 3.7	2.101	2.928	12.3	20.7	12 23	8 57.17	+18 6.8	1.751	2.576	14.5	20.4
1 2	8 46.43	+20 28.9	2.025	2.931	9.0	20.5	1 2	8 50.27	+18 11.6	1.681	2.584	10.7	20.2
1 12	8 38.53	+20 59.1	1.975	2.934	5.2	20.2	1 12	8 40.86	+18 22.9	1.635	2.592	6.3	19.9
1 22	8 29.27	+21 30.2	1.954	2.936	1.4	20.0	1 22	8 29.85	+18 37.0	1.617	2.599	1.5	19.6
2 1	8 19.64	+21 58.1	1.962	2.938	3.2	20.1	2 1	8 18.46	+18 50.2	1.628	2.606	3.3	19.8
2 11	8 10.73	+22 19.7	2.000	2.940	7.1	20.4	2 11	8 8.05	+18 59.3	1.669	2.612	7.9	20.1
2 21	8 3.44	+22 33.2	2.065	2.942	10.6	20.6	2 21	7 59.70	+19 2.8	1.735	2.618	12.0	20.3
3 2	7 58.42	+22 38.2	2.153	2.943	13.6	20.8	3 2	7 54.13	+19 0.4	1.825	2.623	15.4	20.5
<b>174472</b>	2003 AX <sub>12</sub>		1 25.1 340°08	1°3/23.9	18		<b>336691</b>	2010 AW <sub>79</sub>		1 25.1 195°14	0°3/25.2	18	
12 23	8 48.40	+16 14.5	1.969	2.799	12.9	18.6	12 23	8 51.78	+18 2.7	2.487	3.303	11.0	20.8
1 2	8 43.94	+18 5.5	1.885	2.792	9.5	18.3	1 2	8 45.79	+18 1.3	2.402	3.301	8.1	20.6
1 12	8 37.27	+20 11.2	1.827	2.786	5.5	18.1	1 12	8 38.04	+18 4.2	2.344	3.300	4.8	20.4
1 22	8 29.02	+22 24.1	1.798	2.780	1.6	17.8	1 22	8 29.17	+18 9.3	2.315	3.297	1.2	20.1
2 1	8 20.11	+24 34.7	1.801	2.775	3.8	18.0	2 1	8 19.97	+18 14.2	2.317	3.295	2.5	20.2
2 11	8 11.69	+26 34.3	1.835	2.770	8.0	18.2	2 11	8 11.36	+18 17.1	2.350	3.292	6.0	20.4
2 21	8 4.78	+28 16.8	1.896	2.766	11.8	18.4	2 21	8 4.09	+18 16.6	2.411	3.289	9.2	20.6
3 2	8 0.22	+29 39.6	1.981	2.762	15.0	18.6	3 2	7 58.75	+18 12.1	2.496	3.286	12.0	20.8
<b>431605</b>	2007 VS <sub>232</sub>		1 25.1 194°06	3°9/27.6	17		<b>234474</b>	2001 ST <sub>283</sub>		1 25.1 97°97	2°3/26.8	18	
12 23	8 48.28	+ 5 43.1	2.495	3.278	11.9	21.2	12 23	8 48.11	+ 9 10.1	2.347	3.148	12.1	20.6
1 2	8 43.21	+ 5 27.6	2.410	3.278	9.4	21.0	1 2	8 43.14	+ 9 35.9	2.275	3.159	9.2	20.4
1 12	8 36.52	+ 5 24.6	2.349	3.277	6.7	20.8	1 12	8 36.50	+10 14.1	2.227	3.170	6.0	20.2
1 22	8 28.79	+ 5 33.7	2.315	3.276	4.4	20.7	1 22	8 28.80	+11 2.4	2.207	3.181	3.0	20.0
2 1	8 20.73	+ 5 53.6	2.311	3.275	4.2	20.7	2 1	8 20.82	+11 57.3	2.217	3.192	3.0	20.1
2 11	8 13.16	+ 6 21.5	2.337	3.274	6.4	20.8	2 11	8 13.41	+12 54.5	2.258	3.203	6.0	20.3
2 21	8 6.78	+ 6 54.3	2.390	3.272	9.1	21.0	2 21	8 7.30	+13 50.1	2.327	3.214	9.1	20.5
3 2	8 2.15	+ 7 28.8	2.468	3.271	11.7	21.1	3 2	8 3.03	+14 40.9	2.420	3.225	11.9	20.7
<b>110425</b>	2001 TB <sub>24</sub>		1 25.1 36°75	2°8/26.3	18		<b>164418</b>	2006 BU <sub>90</sub>		1 25.1 288°85	2°4/26.3	18	
12 23	8 51.34	+11 48.6	1.591	2.416	15.7	19.6	12 23	8 50.86	+11 4.7	1.482	2.309	16.5	19.9
1 2	8 46.14	+11 37.8	1.524	2.423	11.9	19.4	1 2	8 46.32	+11 26.4	1.391	2.292	12.7	19.6
1 12	8 38.50	+11 40.3	1.479	2.430	7.6	19.1	1 12	8 38.96	+12 6.7	1.323	2.276	8.1	19.3
1 22	8 29.28	+11 54.3	1.461	2.438	3.6	18.9	1 22	8 29.49	+13 2.7	1.280	2.259	3.4	18.9
2 1	8 19.67	+12 16.5	1.469	2.446	4.0	18.9	2 1	8 19.14	+14 9.2	1.264	2.242	4.0	18.9
2 11	8 10.98	+12 42.9	1.505	2.454	8.1	19.2	2 11	8 9.43	+15 18.7	1.274	2.225	9.0	19.2
2 21	8 4.27	+13 9.5	1.567	2.463	12.2	19.5	2 21	8 1.74	+16 24.7	1.310	2.208	14.0	19.4
3 2	8 0.26	+13 33.1	1.650	2.471	15.8	19.7	3 2	7 57.08	+17 22.0	1.366	2.192	18.2	19.6
<b>94474</b>	2001 TR <sub>189</sub>		1 25.1 214°74	2°6/26.1	18		<b>271759</b>	2004 SE <sub>3</sub>		1 25.1 128°90	2°0/26.3	18	
12 23	8 54.73	+12 33.5	1.643	2.462	15.6	19.8	12 23	8 50.72	+12 0.6	2.097	2.907	13.0	21.0
1 2	8 48.74	+12 22.6	1.562	2.458	11.8	19.5	1 2	8 45.23	+12 7.2	2.021	2.914	9.8	20.8
1 12	8 40.11	+12 23.8	1.503	2.454	7.5	19.3	1 12	8 37.81	+12 24.6	1.971	2.920	6.2	20.6
1 22	8 29.69	+12 35.2	1.472	2.450	3.3	19.0	1 22	8 29.13	+12 50.6	1.948	2.925	2.7	20.4
2 1	8 18.68	+12 53.9	1.468	2.445	4.0	19.0	2 1	8 20.11	+13 22.1	1.955	2.931	3.1	20.4
2 11	8 8.50	+13 16.0	1.493	2.440	8.4	19.3	2 11	8 11.76	+13 55.4	1.991	2.937	6.7	20.6
2 21	8 0.31	+13 38.0	1.544	2.434	12.7	19.5	2 21	8 4.93	+14 27.4	2.054	2.942	10.2	20.9
3 2	7 54.96	+13 57.1	1.616	2.429	16.5	19.8	3 2	8 0.24	+14 55.6	2.142	2.947	13.2	21.1
<b>47012</b>	1998 UZ <sub>26</sub>		1 25.1 112°30	1°3/25.9	18		<b>460723</b>	2014 VN <sub>8</sub>		1 25.1 163°42	2°9/26.7	18	
12 23	8 53.54	+13 11.9	2.067	2.877	13.2	19.6	12 23	8 50.72	+ 9 54.5	1.980	2.787	13.7	21.0
1 2	8 47.18	+13 38.8	2.005	2.899	9.8	19.5	1 2	8 45.37	+ 9 53.5	1.901	2.788	10.5	20.8
1 12	8 38.86	+14 16.1	1.969	2.921	5.9	19.3	1 12	8 37.96	+10 5.5	1.845	2.790	6.9	20.6
1 22	8 29.34	+15 0.2	1.961	2.942	2.1	19.0	1 22	8 29.18	+10 28.9	1.817	2.791	3.6	20.4
2 1	8 19.58	+15 46.8	1.984	2.962	2.9	19.1	2 1	8 19.99	+11 0.7	1.818	2.792	3.7	20.4
2 11	8 10.63	+16 31.8	2.037	2.982	6.7	19.4	2 11	8 11.47	+11 37.2	1.847	2.793	7.1	20.6
2 21	8 3.33	+17 11.9	2.118	3.001	10.1	19.7	2 21	8 4.53	+12 14.4	1.904	2.793	10.7	20.8
3 2	7 58.27	+17 45.1	2.223	3.019	13.1	19.9	3 2	7 59.83	+12 49.1	1.984	2.794	13.9	21.0
<b>280783</b>	2005 SV <sub>139</sub>		1 25.1 150°04	1°5/25.8	18		<b>268530</b>	2005 YN <sub>264</sub>		1 25.1 305°23	1°3/24.5	18	
12 23	8 55.20	+13 11.4	1.685	2.503	15.3	21.8	12 23	8 52.54	+21 57.1	1.801	2.639	13.6	20.5
1 2													

EPHEMERIDES

1 25.1

1 25.1

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>222248</b>	2000 <i>OA</i> <sub>58</sub>		1 25.1 134°57	0°5/24.7	18		<b>517198</b>	2013 <i>UU</i> <sub>18</sub>		1 25.1 345°48	4°1/27.1	18	
12 23	8 53.42	+19 35.4	2.477	3.293	11.0	21.8	12 23	8 49.13	+ 8 11.5	1.920	2.726	14.2	20.4
1 2	8 46.91	+19 58.6	2.409	3.309	8.0	21.7	1 2	8 44.29	+ 7 43.1	1.838	2.722	11.1	20.2
1 12	8 38.65	+20 25.7	2.368	3.325	4.7	21.5	1 12	8 37.37	+ 7 27.8	1.779	2.718	7.6	20.0
1 22	8 29.32	+20 53.4	2.357	3.339	1.1	21.2	1 22	8 29.07	+ 7 25.6	1.746	2.714	4.7	19.8
2 1	8 19.76	+21 18.4	2.377	3.353	2.7	21.4	2 1	8 20.34	+ 7 35.2	1.742	2.711	4.7	19.8
2 11	8 10.89	+21 38.1	2.428	3.367	6.1	21.6	2 11	8 12.24	+ 7 53.8	1.765	2.708	7.6	19.9
2 21	8 3.46	+21 51.2	2.508	3.380	9.2	21.9	2 21	8 5.71	+ 8 17.7	1.815	2.706	11.1	20.1
3 2	7 58.01	+21 57.3	2.612	3.392	11.8	22.1	3 2	8 1.43	+ 8 43.4	1.887	2.704	14.3	20.3
<b>182588</b>	2001 <i>TA</i> <sub>226</sub>		1 25.1 129°00	0°2/25.2	18		<b>403278</b>	2009 <i>AV</i> <sub>46</sub>		1 25.1 195°65	1°0/24.5	18	
12 23	8 51.82	+15 0.9	2.123	2.939	12.6	20.1	12 23	8 53.56	+19 0.5	1.715	2.548	14.4	21.7
1 2	8 46.05	+15 56.9	2.053	2.953	9.3	19.9	1 2	8 47.89	+19 45.8	1.638	2.547	10.6	21.5
1 12	8 38.30	+17 3.1	2.010	2.965	5.5	19.7	1 12	8 39.65	+20 39.8	1.586	2.545	6.2	21.2
1 22	8 29.26	+18 14.7	1.995	2.978	1.4	19.5	1 22	8 29.64	+21 36.9	1.561	2.544	1.6	20.9
2 1	8 19.87	+19 26.1	2.012	2.990	2.8	19.6	2 1	8 19.06	+22 30.5	1.565	2.542	3.8	21.1
2 11	8 11.16	+20 32.1	2.059	3.001	6.8	19.9	2 11	8 9.28	+23 15.2	1.598	2.539	8.4	21.3
2 21	8 3.99	+21 28.9	2.133	3.012	10.3	20.1	2 21	8 1.47	+23 48.2	1.656	2.536	12.6	21.6
3 2	7 59.02	+22 14.9	2.232	3.022	13.2	20.3	3 2	7 56.44	+24 8.6	1.736	2.533	16.1	21.8
<b>234421</b>	2001 <i>RV</i> <sub>94</sub>		1 25.1 88°31	1°6/24.5	17		<b>258223</b>	2001 <i>TH</i> <sub>61</sub>		1 25.1 67°03	8°5/20.3	18	
12 23	8 58.85	+21 50.2	1.465	2.302	16.1	20.6	12 23	8 57.90	+38 34.5	1.676	2.510	14.6	19.8
1 2	8 51.74	+22 10.6	1.413	2.323	11.8	20.4	1 2	8 51.36	+40 7.8	1.635	2.527	11.7	19.7
1 12	8 41.77	+22 34.9	1.384	2.344	6.8	20.2	1 12	8 41.72	+41 29.4	1.618	2.545	9.3	19.6
1 22	8 30.08	+22 57.3	1.382	2.364	2.1	19.9	1 22	8 30.11	+42 29.1	1.627	2.562	8.6	19.6
2 1	8 18.18	+23 12.4	1.409	2.384	4.3	20.1	2 1	8 18.15	+43 0.0	1.662	2.580	9.9	19.7
2 11	8 7.66	+23 17.4	1.462	2.404	9.0	20.4	2 11	8 7.57	+43 0.9	1.722	2.598	12.4	19.9
2 21	7 59.69	+23 12.0	1.541	2.423	13.3	20.7	2 21	7 59.67	+42 35.4	1.804	2.615	15.0	20.1
3 2	7 54.92	+22 57.6	1.641	2.442	16.8	21.0	3 2	7 55.17	+41 49.8	1.906	2.633	17.3	20.3
<b>186561</b>	2002 <i>YA</i> <sub>7</sub>		1 25.1 348°09	1°4/24.3	18		<b>465433</b>	2008 <i>RE</i> <sub>62</sub>		1 25.1 91°27	0°8/25.5	18	
12 23	8 51.49	+20 26.1	1.681	2.521	14.3	20.3	12 23	8 50.64	+15 29.9	2.039	2.861	12.8	21.7
1 2	8 46.39	+21 6.9	1.608	2.520	10.5	20.1	1 2	8 45.24	+15 47.0	1.968	2.869	9.5	21.5
1 12	8 38.76	+21 54.7	1.558	2.519	6.1	19.8	1 12	8 37.85	+16 12.7	1.922	2.877	5.7	21.3
1 22	8 29.41	+22 44.0	1.536	2.518	1.8	19.6	1 22	8 29.18	+16 43.9	1.903	2.885	1.7	21.0
2 1	8 19.53	+23 28.6	1.541	2.517	4.0	19.7	2 1	8 20.18	+17 16.8	1.914	2.893	2.8	21.1
2 11	8 10.49	+24 3.7	1.575	2.516	8.5	20.0	2 11	8 11.89	+17 47.6	1.955	2.901	6.8	21.4
2 21	8 3.41	+24 26.7	1.633	2.516	12.6	20.2	2 21	8 5.20	+18 13.8	2.022	2.908	10.4	21.6
3 2	7 59.10	+24 37.4	1.713	2.515	16.1	20.4	3 2	8 0.72	+18 33.7	2.113	2.916	13.4	21.8
<b>402265</b>	2005 <i>QD</i> <sub>157</sub>		1 25.1 96°11	5°9/22.5	18		<b>302978</b>	2003 <i>UO</i> <sub>336</sub>		1 25.1 216°12	1°2/25.7	18	
12 23	9 1.12	+35 40.8	1.963	2.787	13.2	20.4	12 23	8 52.59	+14 26.3	1.662	2.489	15.0	21.7
1 2	8 53.01	+36 15.9	1.913	2.806	10.2	20.2	1 2	8 47.17	+14 44.1	1.585	2.488	11.3	21.5
1 12	8 42.35	+36 41.6	1.887	2.825	7.3	20.1	1 12	8 39.22	+15 14.0	1.530	2.486	6.8	21.2
1 22	8 30.20	+36 51.3	1.890	2.844	5.9	20.0	1 22	8 29.54	+15 52.4	1.502	2.484	2.2	20.9
2 1	8 17.96	+36 41.0	1.921	2.863	7.1	20.1	2 1	8 19.31	+16 34.4	1.503	2.481	3.4	21.0
2 11	8 7.03	+36 10.7	1.980	2.881	9.7	20.3	2 11	8 9.88	+17 15.0	1.531	2.479	8.1	21.3
2 21	7 58.47	+35 23.7	2.065	2.899	12.5	20.5	2 21	8 2.39	+17 50.3	1.586	2.477	12.4	21.5
3 2	7 52.86	+34 24.7	2.172	2.916	14.9	20.7	3 2	7 57.64	+18 17.9	1.662	2.474	16.1	21.7
<b>225996</b>	2002 <i>DO</i> <sub>6</sub>		1 25.1 33°83	4°1/27.8	18		<b>31639</b>	Bodoni		1 25.1 335°09	1°4/24.6	18	
12 23	8 48.28	+ 5 10.7	1.800	2.600	15.2	20.0	12 23	8 53.75	+21 27.5	1.278	2.131	17.1	18.3
1 2	8 43.76	+ 5 36.5	1.724	2.604	11.9	19.8	1 2	8 48.75	+21 39.5	1.205	2.124	12.6	18.0
1 12	8 37.10	+ 6 22.5	1.671	2.607	8.2	19.6	1 12	8 40.46	+21 57.5	1.154	2.117	7.4	17.7
1 22	8 29.00	+ 7 26.7	1.643	2.611	4.9	19.4	1 22	8 29.88	+22 15.7	1.128	2.110	2.1	17.3
2 1	8 20.46	+ 8 44.5	1.644	2.615	4.5	19.4	2 1	8 18.58	+22 28.3	1.127	2.104	4.6	17.5
2 11	8 12.60	+10 9.2	1.673	2.620	7.6	19.6	2 11	8 8.41	+22 31.1	1.152	2.099	10.2	17.8
2 21	8 6.37	+11 33.9	1.729	2.624	11.3	19.8	2 21	8 0.86	+22 22.9	1.200	2.095	15.2	18.0
3 2	8 2.48	+12 53.1	1.808	2.629	14.6	20.0	3 2	7 56.86	+22 4.7	1.267	2.091	19.5	18.3
<b>314771</b>	2006 <i>SD</i> <sub>367</sub>		1 25.1 69°35	0°4/25.2	18		<b>344130</b>	1999 <i>XW</i> <sub>235</sub>		1 25.1 63°19	2°7/23.1	18	
12 23	8 57.61	+18 59.4	1.609	2.439	15.3	19.9	12 23	8 49.24	+25 40.9	2.415	3.248	10.7	20.5
1 2	8 50.55	+18 40.9	1.553	2.459	11.2	19.7	1 2	8 44.03	+26 34.1	2.356	3.264	7.8	20.4
1 12	8 40.96	+18 27.5	1.521	2.478	6.6	19.5	1 12	8 37.06	+27 28.1	2.324	3.280	4.8	20.2
1 22	8 29.88	+18 16.2	1.516	2.498	1.7	19.2	1 22	8 28.99	+28 17.7	2.321	3.296	2.7	20.1
2 1	8 18.65	+18 4.6	1.539	2.518	3.4	19.4	2 1	8 20.66	+28 58.8	2.348	3.313	4.1	20.2
2 11	8 8.64	+17 50.9	1.591	2.537	8.0	19.7	2 11	8 13.01	+29 28.3	2.405	3.329	7.0	20.4
2 21	8 0.90	+17 34.4	1.670	2.557	12.1	20.0	2 21	8 6.79	+29 45.5	2.488	3.345	9.8	20.6
3 2	7 56.04	+17 15.2	1.770	2.576	15.5	20.2	3 2	8 2.55	+29 51.0	2.594	3.362	12.2	20.8
<b>294314</b>	2007 <i>VC</i> <sub>49</sub>		1 25.1 261°81	1°6/24.4	18		<b>274683</b>	2008 <i>UA</i> <sub>20</sub>		1 25.1 164°16	4°7/28.1	18	
12 23	8 55.02	+21 56.7	1.735	2.570	14.1	20.7	12 23	8 48.81	+ 3 33.4	2.285	3.062	13.1	21.1
1 2	8 49.09	+22 19.2	1.646	2.555	10.5	20.4	1 2	8 43.75	+ 3 24.0	2.202	3.064	10.4	20.9
1 12	8 40.44	+22 46.4	1.581	2.540	6.2	20.1	1 12	8 36.95	+ 3 30.0	2.143	3.066	7.6	20.7
1 22	8 29.85	+23 13.1	1.543	2.525	2.0	19.8	1 22	8 28.99	+ 3 51.2	2.111	3.067	5.2	20.6
2 1	8 18.54	+23 34.2	1.534	2.509	4.1	19.9	2 1	8 20.68	+ 4 25.8	2.108	3.069	4.9	20.6
2 11	8 7.97	+23 45.7	1.553	2.493	8.8	20.1	2 11	8 12.90	+ 5 10.4	2.134	3.070	7.0	20.7
2 21	7 59.39	+23 46.3	1.597	2.476	13.1	20.4	2 21	8 6.43	+ 6 0.6	2.187	3.071	9.8	20.9
3 2	7 53.72	+23 36.6	1.664	2.460	16.8	20.6	3 2	8 1.86	+ 6 52.3	2.265	3.072	12.5	21.1
<b>102065</b>	1999 <i>RC</i> <sub>136</sub>		1 25.1 142°31	0°1/25.1	18		<b>297406</b>	2000 <i>QF</i> <sub>245</sub>		1 25.1 125°97	0°3/25.2	18	
12 23	8 54.03	+16 55.1	1.932	2.754	13.5								

EPHEMERIDES

1 25.1

1 25.1

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>273434</b>	2006 <i>WG</i> <sub>139</sub>		1 25.1 146°60	0°1/25.1 18			<b>343240</b>	2009 <i>WB</i> <sub>189</sub>		1 25.1 96°55	4°3/23.1 17		
12 23	8 56.18	+16 51.3	1.467	2.301	16.3	21.7	12 23	8 59.87	+26 1.5	1.403	2.246	16.4	21.4
1 2	8 50.05	+17 21.0	1.399	2.307	12.1	21.5	1 2	8 52.80	+27 10.8	1.356	2.268	12.0	21.2
1 12	8 41.00	+18 1.8	1.354	2.312	7.1	21.2	1 12	8 42.57	+28 20.8	1.332	2.289	7.4	21.0
1 22	8 30.01	+18 48.3	1.335	2.318	1.7	20.9	1 22	8 30.38	+29 21.7	1.335	2.310	4.3	20.8
2 1	8 18.48	+19 34.1	1.344	2.322	3.8	21.0	2 1	8 17.89	+30 5.4	1.366	2.331	6.4	21.0
2 11	8 8.00	+20 13.5	1.381	2.327	9.0	21.3	2 11	8 6.87	+30 28.1	1.424	2.351	10.6	21.3
2 21	7 59.86	+20 43.2	1.443	2.331	13.6	21.6	2 21	7 58.63	+30 30.6	1.505	2.371	14.5	21.6
3 2	7 54.90	+21 2.1	1.525	2.334	17.5	21.9	3 2	7 53.87	+30 16.7	1.607	2.389	17.8	21.9
<b>400548</b>	2008 <i>UF</i> <sub>286</sub>		1 25.1 54°73	2°9/26.4 18			<b>237726</b>	2001 <i>WT</i> <sub>26</sub>		1 25.1 143°07	2°9/22.9 18		
12 23	8 52.56	+10 51.5	1.302	2.134	18.1	21.0	12 23	8 50.53	+27 24.3	2.719	3.546	9.8	20.9
1 2	8 47.45	+11 3.0	1.244	2.146	13.7	20.7	1 2	8 44.89	+28 13.5	2.650	3.554	7.2	20.7
1 12	8 39.47	+11 32.9	1.207	2.159	8.7	20.5	1 12	8 37.57	+29 2.3	2.608	3.561	4.6	20.5
1 22	8 29.63	+12 17.9	1.194	2.172	3.9	20.2	1 22	8 29.17	+29 46.1	2.596	3.568	2.9	20.4
2 1	8 19.37	+13 11.9	1.208	2.186	4.3	20.3	2 1	8 20.47	+30 21.1	2.614	3.575	4.1	20.5
2 11	8 10.26	+14 8.0	1.248	2.199	9.1	20.6	2 11	8 12.35	+30 44.8	2.663	3.581	6.7	20.7
2 21	8 3.55	+15 0.1	1.312	2.213	13.7	20.9	2 21	8 5.53	+30 56.5	2.739	3.587	9.3	20.9
3 2	7 59.99	+15 44.2	1.397	2.227	17.6	21.2	3 2	8 0.58	+30 57.0	2.838	3.593	11.5	21.1
<b>293389</b>	2007 <i>EV</i> <sub>45</sub>		1 25.1 187°97	2°8/26.7 18			<b>296199</b>	2009 <i>BH</i> <sub>187</sub>		1 25.1 98°42	3°2/23.2 18		
12 23	8 49.73	+ 9 43.2	1.960	2.769	13.8	20.8	12 23	8 53.08	+28 45.1	2.328	3.158	11.2	20.6
1 2	8 44.71	+ 9 50.6	1.880	2.769	10.6	20.6	1 2	8 46.94	+29 11.2	2.259	3.164	8.3	20.4
1 12	8 37.64	+10 11.8	1.824	2.769	6.9	20.3	1 12	8 38.82	+29 35.0	2.217	3.170	5.3	20.3
1 22	8 29.18	+10 44.9	1.795	2.769	3.5	20.1	1 22	8 29.47	+29 51.8	2.204	3.176	3.3	20.1
2 1	8 20.30	+11 26.6	1.794	2.769	3.6	20.1	2 1	8 19.85	+29 58.3	2.220	3.182	4.6	20.2
2 11	8 12.06	+12 12.5	1.822	2.769	7.1	20.3	2 11	8 11.01	+29 52.6	2.266	3.188	7.5	20.4
2 21	8 5.37	+12 58.3	1.878	2.769	10.8	20.6	2 21	8 3.79	+29 35.3	2.338	3.194	10.4	20.6
3 2	8 0.93	+13 40.5	1.956	2.769	14.0	20.8	3 2	7 58.80	+29 8.1	2.433	3.200	12.9	20.8
<b>404168</b>	2013 <i>CF</i> <sub>77</sub>		1 25.1 283°18	1°3/25.7 18			<b>245813</b>	2006 <i>JE</i> <sub>2</sub>		1 25.1 276°08	0°8/25.5 18		
12 23	8 52.29	+14 18.7	1.549	2.380	15.7	21.4	12 23	8 53.23	+15 50.0	1.604	2.435	15.3	21.2
1 2	8 47.33	+14 33.9	1.457	2.362	11.9	21.1	1 2	8 47.95	+16 2.1	1.512	2.418	11.5	20.9
1 12	8 39.56	+15 2.7	1.388	2.344	7.3	20.8	1 12	8 39.90	+16 25.4	1.444	2.401	7.0	20.6
1 22	8 29.72	+15 41.8	1.345	2.326	2.4	20.4	1 22	8 29.82	+16 56.3	1.401	2.383	2.0	20.3
2 1	8 19.01	+16 26.2	1.329	2.308	3.7	20.5	2 1	8 18.92	+17 30.1	1.387	2.366	3.6	20.3
2 11	8 8.95	+17 10.3	1.340	2.289	8.9	20.7	2 11	8 8.70	+18 1.9	1.400	2.348	8.7	20.6
2 21	8 0.90	+17 49.3	1.377	2.271	13.7	21.0	2 21	8 0.46	+18 28.1	1.439	2.330	13.4	20.8
3 2	7 55.83	+18 20.3	1.434	2.253	17.9	21.2	3 2	7 55.16	+18 46.7	1.499	2.312	17.5	21.0
<b>188142</b>	2002 <i>EC</i> <sub>42</sub>		1 25.1 17°53	1°2/25.7 18			<b>6832</b>	Kawabata		1 25.1 268°27	0°8/24.6 18		
12 23	8 51.07	+15 18.4	1.747	2.575	14.3	19.9	12 23	8 49.05	+20 10.4	2.521	3.346	10.6	18.3
1 2	8 45.89	+15 21.5	1.673	2.577	10.7	19.6	1 2	8 43.97	+20 36.6	2.428	3.332	7.8	18.1
1 12	8 38.39	+15 34.2	1.623	2.579	6.5	19.4	1 12	8 37.13	+21 7.3	2.361	3.319	4.5	17.9
1 22	8 29.37	+15 53.7	1.600	2.582	2.1	19.1	1 22	8 29.09	+21 39.3	2.323	3.305	1.2	17.6
2 1	8 19.92	+16 16.3	1.606	2.584	3.2	19.2	2 1	8 20.62	+22 9.1	2.316	3.292	2.8	17.7
2 11	8 11.29	+16 38.3	1.639	2.587	7.6	19.5	2 11	8 12.61	+22 33.7	2.339	3.278	6.3	17.9
2 21	8 4.49	+16 56.8	1.698	2.590	11.7	19.7	2 21	8 5.85	+22 51.2	2.389	3.264	9.5	18.1
3 2	8 0.23	+17 10.0	1.780	2.594	15.1	20.0	3 2	8 0.96	+23 1.0	2.463	3.250	12.2	18.3
<b>499650</b>	2010 <i>VM</i> <sub>83</sub>		1 25.1 89°76	1°7/23.6 17			<b>106623</b>	2000 <i>WT</i> <sub>124</sub>		1 25.1 35°36	19°2/28.6 18		
12 23	8 47.11	+24 44.7	3.277	4.101	8.4	21.4	12 23	8 59.87	- 6 44.0	0.908	1.695	27.5	18.1
1 2	8 42.08	+25 17.8	3.214	4.118	6.1	21.3	1 2	8 53.71	-10 29.2	0.866	1.705	24.4	17.9
1 12	8 35.77	+25 51.4	3.179	4.135	3.6	21.1	1 12	8 43.56	-13 38.4	0.840	1.715	21.5	17.7
1 22	8 28.70	+26 22.4	3.174	4.152	1.7	21.0	1 22	8 30.70	-15 55.3	0.832	1.727	19.6	17.7
2 1	8 21.45	+26 48.3	3.201	4.169	2.9	21.1	2 1	8 17.15	-17 9.2	0.843	1.740	19.3	17.7
2 11	8 14.69	+27 7.2	3.258	4.185	5.2	21.3	2 11	8 5.22	-17 21.6	0.872	1.754	20.6	17.8
2 21	8 8.95	+27 18.4	3.343	4.202	7.5	21.5	2 21	7 56.68	-16 44.2	0.917	1.768	22.8	18.0
3 2	8 4.66	+27 21.8	3.453	4.218	9.5	21.6	3 2	7 52.49	-15 33.4	0.976	1.783	25.2	18.3
<b>393657</b>	2004 <i>RS</i> <sub>9</sub>		1 25.1 157°36	9°7/31.4 18			<b>319825</b>	2006 <i>VQ</i> <sub>110</sub>		1 25.1 66°62	4°0/23.1 18		
12 23	8 53.70	-10 32.3	2.202	2.893	16.0	22.8	12 23	8 54.54	+27 37.7	1.738	2.579	13.8	21.2
1 2	8 47.39	-11 20.7	2.125	2.903	13.9	22.6	1 2	8 48.66	+28 25.1	1.670	2.580	10.3	20.9
1 12	8 39.11	-11 45.1	2.070	2.912	11.9	22.5	1 12	8 40.13	+29 12.1	1.626	2.581	6.5	20.7
1 22	8 29.54	-11 42.7	2.037	2.920	10.2	22.4	1 22	8 29.82	+29 51.8	1.609	2.582	4.0	20.6
2 1	8 19.58	-11 13.0	2.032	2.927	9.7	22.4	2 1	8 19.04	+30 18.0	1.620	2.583	5.8	20.7
2 11	8 10.23	-10 19.0	2.052	2.933	10.4	22.5	2 11	8 9.23	+30 27.4	1.659	2.585	9.5	20.9
2 21	8 2.38	- 9 6.5	2.099	2.939	12.1	22.6	2 21	8 1.55	+30 20.3	1.722	2.586	13.1	21.1
3 2	7 56.65	- 7 42.8	2.169	2.943	14.1	22.7	3 2	7 56.78	+29 59.0	1.807	2.587	16.3	21.3
<b>50937</b>	2000 <i>GP</i> <sub>69</sub>		1 25.1 350°04	2°3/26.4 18			<b>252018</b>	2000 <i>HP</i> <sub>67</sub>		1 25.1 291°46	8°1/20.1 18		
12 23	8 48.57	+11 36.2	1.931	2.749	13.6	18.7	12 23	8 55.68	+36 23.6	1.692	2.531	14.3	20.0
1 2	8 43.91	+11 38.8	1.851	2.746	10.3	18.5	1 2	8 50.16	+37 55.5	1.615	2.514	11.4	19.7
1 12	8 37.19	+11 53.5	1.794	2.744	6.6	18.3	1 12	8 41.38	+39 21.9	1.562	2.497	8.9	19.6
1 22	8 29.09	+12 18.3	1.764	2.742	3.0	18.0	1 22	8 30.20	+40 32.1	1.536	2.480	8.2	19.5
2 1	8 20.56	+12 50.2	1.763	2.740	3.4	18.1	2 1	8 18.10	+41 16.6	1.535	2.463	9.8	19.5
2 11	8 12.68	+13 25.2	1.791	2.739	7.1	18.3	2 11	8 6.88	+41 31.1	1.560	2.446	12.8	19.7
2 21	8 6.36	+13 59.6	1.844	2.738	10.8	18.5	2 21	7 58.10	+41 17.0	1.607	2.429	16.0	19.8
3 2	8 2.29	+14 30.4	1.921	2.737	14.1	18.7	3 2	7 52.81	+40 39.3	1.673	2.413	18.9	20.0
<b>373654</b>	2002 <i>QW</i> <sub>12</sub>		1 25.1 80°45	3°0/27.1 18			<b>228145</b>	2009 <i>RU</i> <sub>51</sub>		1 25.1 60°18	2°4/24.2 17		
12 23	8 49.60	+ 8 11.1	2.172	2.970	13.0	21.3							

EPHEMERIDES

1 25.1

1 25.1

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>213888</b>	2003 <i>SS</i> <sub>288</sub>		1 25.1 149°02	0°5/25.4	18		<b>445310</b>	2010 <i>EP</i> <sub>87</sub>		1 25.1 253°44	4°8/22.8	18	
12 23	8 53.20	+15 7.9	1.837	2.659	14.0	21.1	12 23	8 56.80	+28 31.5	1.556	2.399	15.1	21.2
1 2	8 47.39	+15 44.4	1.765	2.666	10.4	20.9	1 2	8 50.78	+29 26.0	1.481	2.392	11.3	20.9
1 12	8 39.27	+16 31.9	1.717	2.672	6.2	20.7	1 12	8 41.62	+30 20.3	1.430	2.385	7.3	20.7
1 22	8 29.62	+17 25.9	1.696	2.678	1.7	20.4	1 22	8 30.28	+31 5.7	1.406	2.377	4.9	20.5
2 1	8 19.52	+18 21.1	1.705	2.683	3.1	20.5	2 1	8 18.22	+31 34.5	1.408	2.370	6.8	20.6
2 11	8 10.21	+19 12.1	1.743	2.688	7.5	20.8	2 11	8 7.19	+31 42.6	1.438	2.362	10.8	20.8
2 21	8 2.70	+19 55.5	1.808	2.693	11.5	21.0	2 21	7 58.59	+31 30.6	1.491	2.354	14.8	21.1
3 2	7 57.70	+20 29.1	1.896	2.697	14.8	21.3	3 2	7 53.37	+31 2.0	1.565	2.346	18.3	21.3
<b>472474</b>	2015 <i>BD</i> <sub>468</sub>		1 25.1 232°61	0°1/25.2	17		<b>110076</b>	2001 <i>SW</i> <sub>113</sub>		1 25.1 76°01	0°5/25.4	18	
12 23	8 48.47	+16 15.4	2.429	3.249	11.1	21.3	12 23	8 52.99	+16 39.0	1.737	2.566	14.4	20.2
1 2	8 43.56	+16 55.9	2.343	3.244	8.2	21.1	1 2	8 47.24	+16 52.7	1.673	2.578	10.6	19.9
1 12	8 36.90	+17 44.6	2.282	3.239	4.8	20.9	1 12	8 39.17	+17 15.1	1.634	2.591	6.3	19.7
1 22	8 29.05	+18 38.0	2.251	3.233	1.2	20.6	1 22	8 29.63	+17 42.3	1.621	2.603	1.7	19.4
2 1	8 20.78	+19 31.9	2.250	3.228	2.6	20.7	2 1	8 19.77	+18 10.0	1.637	2.616	3.2	19.6
2 11	8 13.00	+20 22.3	2.279	3.222	6.2	20.9	2 11	8 10.83	+18 34.4	1.682	2.628	7.6	19.9
2 21	8 6.47	+21 6.2	2.336	3.216	9.4	21.1	2 21	8 3.82	+18 53.1	1.752	2.641	11.6	20.1
3 2	8 1.81	+21 41.7	2.418	3.210	12.3	21.3	3 2	7 59.40	+19 4.7	1.845	2.653	14.9	20.4
<b>424984</b>	2009 <i>BE</i> <sub>161</sub>		1 25.1 291°36	2°2/26.6	17		<b>104421</b>	2000 <i>FG</i> <sub>59</sub>		1 25.1 206°32	6°8/20.5	18	
12 23	8 47.37	+10 15.4	2.273	3.080	12.2	21.3	12 23	8 56.77	+36 5.5	2.048	2.876	12.6	19.3
1 2	8 42.84	+10 38.1	2.181	3.071	9.3	21.0	1 2	8 50.35	+37 31.2	1.979	2.872	9.9	19.1
1 12	8 36.52	+11 13.3	2.115	3.061	6.0	20.8	1 12	8 41.20	+38 50.9	1.936	2.868	7.6	19.0
1 22	8 28.96	+11 59.0	2.076	3.052	2.8	20.6	1 22	8 30.17	+39 55.9	1.920	2.863	6.9	18.9
2 1	8 20.96	+12 51.8	2.067	3.043	3.0	20.6	2 1	8 18.50	+40 39.1	1.933	2.858	8.2	19.0
2 11	8 13.43	+13 47.3	2.088	3.034	6.3	20.8	2 11	8 7.67	+40 57.4	1.973	2.853	10.8	19.1
2 21	8 7.17	+14 41.5	2.136	3.025	9.7	21.0	2 21	7 58.90	+40 52.0	2.036	2.847	13.5	19.3
3 2	8 2.83	+15 31.0	2.208	3.017	12.8	21.2	3 2	7 53.05	+40 26.9	2.120	2.841	15.9	19.5
<b>497095</b>	2004 <i>AB</i> <sub>7</sub>		1 25.1 192°12	0°1/25.1	17		<b>304115</b>	2006 <i>JY</i> <sub>23</sub>		1 25.1 226°24	2°9/26.5	18	
12 23	8 52.21	+19 1.6	2.300	3.121	11.6	20.9	12 23	8 53.39	+11 1.8	1.730	2.543	15.1	20.8
1 2	8 46.27	+18 57.0	2.219	3.120	8.5	20.7	1 2	8 47.73	+10 54.4	1.646	2.538	11.6	20.5
1 12	8 38.44	+18 56.3	2.163	3.120	5.0	20.5	1 12	8 39.61	+11 0.2	1.585	2.533	7.5	20.3
1 22	8 29.41	+18 57.1	2.137	3.120	1.2	20.2	1 22	8 29.78	+11 17.7	1.551	2.527	3.7	20.0
2 1	8 20.05	+18 57.0	2.141	3.119	2.7	20.3	2 1	8 19.37	+11 44.0	1.546	2.521	4.0	20.0
2 11	8 11.35	+18 54.2	2.175	3.118	6.4	20.5	2 11	8 9.69	+12 15.0	1.568	2.515	8.1	20.2
2 21	8 4.12	+18 47.7	2.237	3.118	9.8	20.8	2 21	8 1.85	+12 46.6	1.617	2.508	12.2	20.5
3 2	7 58.97	+18 37.0	2.323	3.117	12.7	20.9	3 2	7 56.66	+13 15.7	1.688	2.502	15.8	20.7
<b>495454</b>	2014 <i>TB</i> <sub>22</sub>		1 25.1 123°66	2°2/23.8	18		<b>113603</b>	2002 <i>TR</i> <sub>52</sub>		1 25.1 83°21	0°9/25.6	18	
12 23	8 54.13	+23 22.3	1.975	2.807	12.8	21.6	12 23	8 54.05	+14 56.2	1.738	2.561	14.7	19.8
1 2	8 47.95	+24 5.1	1.910	2.818	9.3	21.4	1 2	8 47.91	+15 19.2	1.683	2.584	10.8	19.6
1 12	8 39.53	+24 50.6	1.871	2.829	5.5	21.2	1 12	8 39.49	+15 52.6	1.652	2.607	6.5	19.4
1 22	8 29.68	+25 33.4	1.860	2.839	2.3	21.0	1 22	8 29.70	+16 32.0	1.648	2.630	1.9	19.1
2 1	8 19.49	+26 8.2	1.878	2.849	4.1	21.1	2 1	8 19.68	+17 12.8	1.674	2.652	3.1	19.3
2 11	8 10.15	+26 31.7	1.926	2.859	7.8	21.4	2 11	8 10.66	+17 50.4	1.728	2.675	7.5	19.6
2 21	8 2.63	+26 42.9	2.000	2.868	11.3	21.6	2 21	8 3.59	+18 21.8	1.809	2.696	11.3	19.8
3 2	7 57.61	+26 42.7	2.097	2.877	14.3	21.8	3 2	7 59.09	+18 45.4	1.912	2.718	14.6	20.1
<b>41816</b>	2000 <i>WN</i> <sub>38</sub>		1 25.1 155°90	2°9/26.7	18		<b>28081</b>	Carriehudson		1 25.1 176°66	5°3/27.4	18	
12 23	8 52.14	+ 9 38.4	1.700	2.513	15.4	19.7	12 23	8 54.96	+ 6 19.1	1.620	2.419	16.7	19.5
1 2	8 46.76	+ 9 54.7	1.624	2.516	11.8	19.5	1 2	8 48.93	+ 5 50.3	1.542	2.421	13.1	19.2
1 12	8 38.98	+10 27.5	1.571	2.518	7.7	19.2	1 12	8 40.32	+ 5 38.9	1.487	2.422	9.3	19.0
1 22	8 29.58	+11 14.0	1.545	2.521	3.7	19.0	1 22	8 29.96	+ 5 45.0	1.458	2.422	5.9	18.8
2 1	8 19.68	+12 9.8	1.547	2.523	3.9	19.0	2 1	8 19.04	+ 6 7.1	1.456	2.423	5.8	18.8
2 11	8 10.55	+13 9.0	1.577	2.525	7.9	19.3	2 11	8 8.96	+ 6 41.0	1.481	2.423	9.0	19.0
2 21	8 3.27	+14 6.3	1.634	2.527	12.0	19.5	2 21	8 0.87	+ 7 21.5	1.533	2.422	12.9	19.2
3 2	7 58.59	+14 57.5	1.713	2.528	15.6	19.7	3 2	7 55.57	+ 8 3.6	1.606	2.421	16.4	19.4
<b>420928</b>	2013 <i>NC</i> <sub>18</sub>		1 25.1 149°50	0°4/25.4	18		<b>114559</b>	2003 <i>BD</i> <sub>52</sub>		1 25.1 169°57	0°2/25.0	18	
12 23	8 50.81	+15 11.8	2.088	2.908	12.7	21.8	12 23	8 55.35	+19 33.8	2.244	3.061	12.0	19.6
1 2	8 45.44	+15 54.0	2.012	2.912	9.4	21.6	1 2	8 48.60	+19 33.1	2.164	3.065	8.8	19.4
1 12	8 38.06	+16 46.3	1.961	2.917	5.6	21.3	1 12	8 39.84	+19 35.9	2.111	3.068	5.2	19.2
1 22	8 29.34	+17 44.5	1.939	2.921	1.5	21.1	1 22	8 29.80	+19 39.4	2.088	3.070	1.2	18.9
2 1	8 20.22	+18 43.6	1.947	2.925	2.8	21.2	2 1	8 19.44	+19 41.2	2.095	3.072	2.8	19.0
2 11	8 11.73	+19 38.8	1.985	2.929	6.8	21.4	2 11	8 9.80	+19 39.1	2.133	3.074	6.6	19.3
2 21	8 4.78	+20 26.6	2.050	2.933	10.4	21.7	2 21	8 1.77	+19 32.3	2.198	3.075	10.1	19.5
3 2	8 0.02	+21 5.0	2.139	2.936	13.5	21.9	3 2	7 55.95	+19 20.8	2.288	3.075	13.0	19.7
<b>306285</b>	2011 <i>SW</i> <sub>26</sub>		1 25.1 104°92	0°9/25.6	18		<b>405023</b>	2001 <i>QO</i> <sub>130</sub>		1 25.1 101°19	0°6/24.9	18	
12 23	8 54.93	+15 0.3	1.615	2.441	15.5	20.8	12 23	8 57.07	+20 35.6	1.960	2.783	13.2	20.8
1 2	8 48.78	+15 22.6	1.554	2.456	11.5	20.6	1 2	8 49.91	+20 38.0	1.901	2.804	9.7	20.6
1 12	8 40.11	+15 56.1	1.515	2.471	6.9	20.4	1 12	8 40.58	+20 43.5	1.867	2.824	5.6	20.4
1 22	8 29.84	+16 36.6	1.504	2.485	2.0	20.1	1 22	8 29.96	+20 48.9	1.861	2.844	1.4	20.1
2 1	8 19.21	+17 18.8	1.521	2.499	3.4	20.2	2 1	8 19.18	+20 50.9	1.886	2.863	3.1	20.3
2 11	8 9.60	+17 57.7	1.566	2.513	8.0	20.5	2 11	8 9.40	+20 47.7	1.940	2.882	7.2	20.6
2 21	8 2.10	+18 29.9	1.638	2.526	12.2	20.8	2 21	8 1.53	+20 38.7	2.022	2.900	10.8	20.8
3 2	7 57.39	+18 53.8	1.731	2.539	15.7	21.1	3 2	7 56.16	+20 24.3	2.127	2.918	13.8	21.1
<b>30446</b>	2000 <i>NO</i> <sub>2</sub>		1 25.1 190°25	1°7/26.1	18		<b>404273</b>	2013 <i>EX</i> <sub>85</sub>		1 25.1 272°10	0°1/25.2	17	
12 23	8 51.52	+12 39.9	2.163	2.973	12.6	18.7</							



EPHEMERIDES

1 25.1

1 25.1

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>320161</b>	2007 <i>FU</i> <sub>48</sub>		1 25.1 227°90	0.7/24.8	18		<b>432147</b>	2009 <i>BF</i> <sub>104</sub>		1 25.1 244°36	1.1/24.4	17	
12 23	8 51.53	+19 19.8	1.969	2.800	12.9	21.9	12 23	8 50.93	+22 16.9	2.526	3.350	10.6	21.3
1 2	8 46.14	+19 46.8	1.891	2.798	9.5	21.6	1 2	8 45.32	+22 30.7	2.439	3.343	7.7	21.1
1 12	8 38.56	+20 20.1	1.838	2.797	5.5	21.4	1 12	8 37.94	+22 46.7	2.379	3.337	4.5	20.9
1 22	8 29.52	+20 55.5	1.813	2.796	1.4	21.1	1 22	8 29.39	+23 1.7	2.348	3.329	1.4	20.7
2 1	8 20.03	+21 28.6	1.817	2.794	3.2	21.2	2 1	8 20.49	+23 12.8	2.347	3.322	2.9	20.8
2 11	8 11.25	+21 55.4	1.850	2.793	7.4	21.5	2 11	8 12.13	+23 17.8	2.377	3.315	6.3	21.0
2 21	8 4.15	+22 14.0	1.910	2.791	11.1	21.7	2 21	8 5.11	+23 15.8	2.435	3.307	9.4	21.2
3 2	7 59.42	+22 23.6	1.992	2.790	14.3	21.9	3 2	8 0.00	+23 6.9	2.516	3.300	12.1	21.3
<b>11287</b>	1990 <i>SX</i>		1 25.1 107°92	2.5/23.6	18		<b>180999</b>	2005 <i>NE</i> <sub>39</sub>		1 25.1 206°67	1.8/24.1	18	
12 23	8 53.48	+27 7.7	2.525	3.350	10.6	18.0	12 23	8 54.18	+22 41.1	2.104	2.932	12.3	21.2
1 2	8 47.03	+27 29.5	2.463	3.366	7.7	17.8	1 2	8 48.05	+23 14.6	2.022	2.928	9.0	21.0
1 12	8 38.82	+27 49.7	2.427	3.381	4.8	17.7	1 12	8 39.70	+23 51.5	1.965	2.923	5.3	20.7
1 22	8 29.54	+28 4.6	2.420	3.396	2.6	17.6	1 22	8 29.84	+24 27.0	1.937	2.917	2.0	20.5
2 1	8 20.09	+28 11.2	2.444	3.410	3.9	17.7	2 1	8 19.50	+24 56.4	1.939	2.911	3.8	20.6
2 11	8 11.38	+28 7.8	2.498	3.424	6.7	17.9	2 11	8 9.84	+25 16.3	1.970	2.905	7.6	20.8
2 21	8 4.18	+27 54.8	2.580	3.438	9.5	18.1	2 21	8 1.84	+25 25.5	2.028	2.898	11.1	21.0
3 2	7 59.02	+27 33.3	2.686	3.452	11.9	18.3	3 2	7 56.23	+25 24.3	2.110	2.891	14.2	21.2
<b>76833</b>	2000 <i>SQ</i> <sub>232</sub>		1 25.1 314°02	21.9/1.9	18		<b>238395</b>	2004 <i>EP</i> <sub>5</sub>		1 25.1 312°96	2.6/26.9	18	
12 23	8 51.16	-18 16.1	1.109	1.826	27.4	19.5	12 23	8 47.42	+ 8 48.1	2.247	3.049	12.5	20.5
1 2	8 47.38	-20 59.9	1.045	1.816	25.6	19.3	1 2	8 42.89	+ 9 9.0	2.161	3.046	9.6	20.3
1 12	8 40.07	-23 3.9	0.994	1.807	23.8	19.1	1 12	8 36.58	+ 9 43.5	2.100	3.043	6.3	20.1
1 22	8 30.03	-24 14.5	0.957	1.797	22.5	19.0	1 22	8 29.08	+10 29.6	2.066	3.039	3.3	19.9
2 1	8 18.77	-24 21.2	0.935	1.789	21.9	18.9	2 1	8 21.17	+11 23.9	2.061	3.036	3.3	19.9
2 11	8 8.30	-23 23.3	0.929	1.781	22.3	18.9	2 11	8 13.76	+12 22.1	2.087	3.033	6.4	20.1
2 21	8 0.44	-21 29.9	0.939	1.773	23.7	18.9	2 21	8 7.65	+13 19.8	2.140	3.030	9.7	20.3
3 2	7 56.47	-18 56.8	0.963	1.767	25.7	19.0	3 2	8 3.46	+14 13.3	2.217	3.027	12.6	20.5
<b>6978</b>	Hironaka		1 25.1 210°00	2.2/23.9	18		<b>192597</b>	1999 <i>CW</i> <sub>95</sub>		1 25.1 8°11	1.8/24.3	18	
12 23	8 55.39	+24 33.5	2.152	2.979	12.1	18.2	12 23	8 46.03	+20 37.0	1.256	2.120	16.6	18.8
1 2	8 48.89	+24 59.9	2.068	2.973	8.9	17.9	1 2	8 42.96	+21 16.1	1.200	2.124	12.1	18.6
1 12	8 40.15	+25 27.5	2.010	2.967	5.3	17.7	1 12	8 37.02	+22 3.6	1.165	2.129	7.0	18.3
1 22	8 29.92	+25 51.6	1.981	2.960	2.3	17.5	1 22	8 29.21	+22 52.6	1.155	2.137	2.2	18.0
2 1	8 19.21	+26 8.1	1.982	2.953	4.0	17.6	2 1	8 20.94	+23 35.8	1.169	2.146	4.6	18.2
2 11	8 9.21	+26 14.1	2.013	2.945	7.6	17.8	2 11	8 13.80	+24 7.6	1.209	2.158	9.7	18.5
2 21	8 0.90	+26 9.3	2.071	2.937	11.1	18.0	2 21	8 9.00	+24 25.2	1.271	2.171	14.2	18.8
3 2	7 55.01	+25 54.6	2.152	2.928	14.1	18.2	3 2	8 7.29	+24 28.6	1.353	2.185	18.0	19.1
<b>142767</b>	2002 <i>UU</i> <sub>5</sub>		1 25.1 177°08	3.1/23.3	18		<b>472749</b>	2015 <i>FY</i> <sub>101</sub>		1 25.1 296°80	0.8/24.7	17	
12 23	8 53.43	+24 17.5	1.814	2.652	13.5	20.4	12 23	8 51.35	+21 15.7	2.219	3.047	11.7	21.4
1 2	8 47.82	+25 21.8	1.742	2.653	9.9	20.2	1 2	8 45.91	+21 21.2	2.125	3.031	8.6	21.1
1 12	8 39.68	+26 30.0	1.695	2.653	6.0	19.9	1 12	8 38.43	+21 29.7	2.056	3.014	5.1	20.9
1 22	8 29.82	+27 35.0	1.676	2.653	3.2	19.8	1 22	8 29.55	+21 38.1	2.015	2.997	1.4	20.6
2 1	8 19.42	+28 29.8	1.686	2.654	5.1	19.9	2 1	8 20.17	+21 43.4	2.004	2.980	3.1	20.7
2 11	8 9.82	+29 9.5	1.725	2.654	8.9	20.1	2 11	8 11.35	+21 43.3	2.023	2.964	6.9	20.9
2 21	8 2.16	+29 32.7	1.788	2.653	12.6	20.3	2 21	8 4.02	+21 36.6	2.068	2.948	10.5	21.1
3 2	7 57.23	+29 40.2	1.874	2.653	15.8	20.5	3 2	7 58.86	+21 23.4	2.137	2.931	13.6	21.3
<b>376486</b>	2012 <i>KU</i> <sub>1</sub>		1 25.1 215°66	1.5/24.2	18		<b>37103</b>	2000 <i>UJ</i> <sub>99</sub>		1 25.1 203°12	2.9/23.4	18	
12 23	8 51.65	+20 59.4	2.062	2.892	12.4	21.6	12 23	8 53.87	+26 28.5	2.177	3.007	11.8	19.7
1 2	8 46.23	+21 46.3	1.981	2.889	9.1	21.4	1 2	8 47.78	+27 5.2	2.099	3.004	8.7	19.5
1 12	8 38.63	+22 38.9	1.926	2.885	5.3	21.2	1 12	8 39.51	+27 42.1	2.046	3.002	5.4	19.3
1 22	8 29.56	+23 32.1	1.900	2.881	1.8	20.9	1 22	8 29.80	+28 14.0	2.023	2.998	3.0	19.1
2 1	8 19.99	+24 20.6	1.903	2.877	3.7	21.0	2 1	8 19.66	+28 36.3	2.029	2.995	4.5	19.2
2 11	8 11.06	+25 0.1	1.935	2.872	7.5	21.3	2 11	8 10.23	+28 46.3	2.064	2.991	7.8	19.4
2 21	8 3.74	+25 28.3	1.995	2.868	11.1	21.5	2 21	8 2.47	+28 43.6	2.126	2.987	11.1	19.6
3 2	7 58.75	+25 44.7	2.077	2.863	14.2	21.7	3 2	7 57.08	+28 29.4	2.211	2.982	13.9	19.8
<b>482811</b>	2013 <i>WR</i> <sub>57</sub>		1 25.1 34°80	7.5/29.4	18		<b>18552</b>	1997 <i>AM</i> <sub>21</sub>		1 25.1 18°50	1.1/24.4	18	
12 23	8 48.88	- 2 22.8	2.112	2.865	14.8	21.1	12 23	8 49.37	+18 5.6	1.628	2.469	14.6	17.5
1 2	8 43.97	- 3 9.4	2.034	2.868	12.4	21.0	1 2	8 44.95	+19 10.3	1.560	2.473	10.7	17.3
1 12	8 37.20	- 3 36.9	1.979	2.872	9.9	20.8	1 12	8 38.04	+20 25.9	1.516	2.476	6.2	17.1
1 22	8 29.21	- 3 43.5	1.948	2.876	8.0	20.7	1 22	8 29.47	+21 45.9	1.498	2.481	1.7	16.8
2 1	8 20.85	- 3 29.0	1.945	2.880	7.5	20.7	2 1	8 20.37	+23 2.3	1.509	2.485	3.9	16.9
2 11	8 13.07	- 2 56.3	1.968	2.884	8.8	20.8	2 11	8 12.09	+24 8.6	1.548	2.491	8.5	17.2
2 21	8 6.70	- 2 10.1	2.017	2.888	11.1	20.9	2 21	8 5.74	+25 0.7	1.612	2.496	12.6	17.5
3 2	8 2.35	- 1 15.9	2.090	2.893	13.6	21.1	3 2	8 2.09	+25 37.2	1.697	2.503	16.1	17.7
<b>166744</b>	2002 <i>TU</i> <sub>298</sub>		1 25.1 333°61	7.9/19.8	18		<b>332333</b>	2007 <i>BE</i> <sub>39</sub>		1 25.1 296°33	1.1/25.7	17	
12 23	8 56.05	+41 39.6	2.176	2.994	12.3	19.7	12 23	8 50.82	+14 56.9	1.756	2.584	14.3	21.0
1 2	8 49.74	+42 50.7	2.115	2.993	10.1	19.6	1 2	8 45.96	+15 9.7	1.666	2.569	10.7	20.7
1 12	8 40.79	+43 50.8	2.078	2.991	8.4	19.4	1 12	8 38.66	+15 33.5	1.599	2.555	6.6	20.5
1 22	8 30.09	+44 32.2	2.069	2.990	8.0	19.4	1 22	8 29.64	+16 5.3	1.560	2.541	2.1	20.1
2 1	8 18.93	+44 49.4	2.086	2.989	9.0	19.5	2 1	8 19.96	+16 40.9	1.548	2.527	3.3	20.2
2 11	8 8.74	+44 41.0	2.129	2.988	11.0	19.6	2 11	8 10.90	+17 15.8	1.565	2.513	7.9	20.4
2 21	8 0.67	+44 9.4	2.195	2.987	13.3	19.8	2 21	8 3.60	+17 46.2	1.607	2.499	12.2	20.7
3 2	7 55.48	+43 19.4	2.281	2.986	15.3	19.9	3 2	7 58.90	+18 9.9	1.672	2.486	15.9	20.9
<b>275659</b>	2000 <i>KC</i> <sub>25</sub>		1 25.1 150°86	4.6/21.2	18		<b>79995</b>	1999 <i>FB</i> <sub>15</sub>		1 25.1 223°82	5.7/29.5	18	
12 23	8 52.56	+34 37.9	2.952	3.772	9.3	21.6	12 23	8 47.20</					

EPHEMERIDES

1 25.1

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>463481</b>	2013 <i>QK</i> <sub>5</sub>		1 25.1 190°81	2°7/27.0	18		<b>406072</b>	2006 <i>UR</i> <sub>108</sub>		1 25.1 106°08	4°3/22.6	18	
12 23	8 49.72	+ 8 17.4	2.116	2.916	13.2	21.6	12 23	8 55.97	+28 27.6	1.896	2.730	13.1	21.6
1 2	8 44.67	+ 8 45.2	2.032	2.915	10.2	21.4	1 2	8 49.49	+29 36.8	1.841	2.748	9.7	21.5
1 12	8 37.67	+ 9 28.1	1.972	2.914	6.7	21.2	1 12	8 40.56	+30 44.6	1.813	2.764	6.3	21.3
1 22	8 29.36	+10 23.9	1.939	2.913	3.4	21.0	1 22	8 30.08	+31 43.4	1.812	2.781	4.4	21.2
2 1	8 20.61	+11 28.5	1.937	2.912	3.4	21.0	2 1	8 19.26	+32 26.9	1.841	2.797	5.9	21.3
2 11	8 12.41	+12 36.7	1.964	2.910	6.7	21.2	2 11	8 9.43	+32 51.9	1.897	2.813	9.1	21.5
2 21	8 5.63	+13 43.6	2.019	2.908	10.2	21.4	2 21	8 1.65	+32 58.9	1.980	2.828	12.3	21.8
3 2	8 0.93	+14 45.1	2.098	2.906	13.3	21.6	3 2	7 56.59	+32 50.2	2.083	2.843	15.0	22.0
<b>83894</b>	2001 <i>UY</i> <sub>141</sub>		1 25.1 193°65	0°3/25.3	17		<b>323482</b>	2004 <i>NC</i> <sub>28</sub>		1 25.1 190°11	1°0/25.8	16	
12 23	8 49.08	+16 50.5	2.671	3.486	10.3	20.5	12 23	8 51.31	+14 0.2	2.575	3.381	11.0	22.2
1 2	8 43.86	+17 11.3	2.586	3.485	7.6	20.3	1 2	8 45.54	+14 20.9	2.488	3.379	8.2	22.0
1 12	8 37.05	+17 38.0	2.528	3.483	4.5	20.1	1 12	8 38.07	+14 49.8	2.426	3.377	5.0	21.8
1 22	8 29.19	+18 8.1	2.499	3.481	1.2	19.9	1 22	8 29.48	+15 24.4	2.394	3.375	1.7	21.6
2 1	8 21.01	+18 38.6	2.501	3.479	2.3	20.0	2 1	8 20.51	+16 1.6	2.394	3.371	2.4	21.6
2 11	8 13.31	+19 6.6	2.533	3.476	5.6	20.2	2 11	8 12.03	+16 38.1	2.424	3.367	5.8	21.8
2 21	8 6.78	+19 30.2	2.594	3.474	8.6	20.4	2 21	8 4.79	+17 11.3	2.483	3.363	9.0	22.0
3 2	8 1.97	+19 48.0	2.680	3.471	11.2	20.5	3 2	7 59.35	+17 39.5	2.567	3.357	11.7	22.2
<b>376876</b>	2001 <i>VC</i> <sub>56</sub>		1 25.1 83°71	1°0/25.6	15		<b>332940</b>	2011 <i>CH</i> <sub>105</sub>		1 25.1 152°65	1°1/25.8	18	
12 23	8 59.34	+15 40.2	1.506	2.330	16.5	21.4	12 23	8 51.30	+14 42.6	2.216	3.031	12.2	21.7
1 2	8 51.92	+15 48.8	1.460	2.361	12.1	21.2	1 2	8 45.71	+14 54.5	2.139	3.035	9.1	21.5
1 12	8 41.88	+16 7.4	1.437	2.392	7.2	21.0	1 12	8 38.23	+15 14.8	2.086	3.039	5.5	21.3
1 22	8 30.34	+16 31.6	1.441	2.423	2.1	20.8	1 22	8 29.52	+15 40.8	2.062	3.043	1.8	21.0
2 1	8 18.71	+16 56.9	1.474	2.452	3.5	20.9	2 1	8 20.47	+16 9.3	2.069	3.047	2.7	21.1
2 11	8 8.43	+17 19.2	1.535	2.481	8.2	21.3	2 11	8 12.04	+16 37.1	2.105	3.050	6.4	21.3
2 21	8 0.55	+17 36.1	1.622	2.510	12.4	21.6	2 21	8 5.08	+17 1.6	2.169	3.053	9.8	21.5
3 2	7 55.68	+17 46.6	1.731	2.538	15.8	21.9	3 2	8 0.18	+17 21.1	2.256	3.056	12.8	21.7
<b>79517</b>	1998 <i>MD</i>		1 25.1 94°09	0°9/25.6	18		<b>26225</b>	1997 <i>YO</i> <sub>14</sub>		1 25.1 120°78	0°2/25.0	18	
12 23	8 56.83	+15 44.0	1.859	2.675	14.1	19.6	12 23	8 54.85	+18 42.3	2.139	2.958	12.4	18.8
1 2	8 49.76	+15 50.7	1.805	2.703	10.4	19.4	1 2	8 48.25	+19 0.2	2.075	2.976	9.1	18.7
1 12	8 40.53	+16 5.5	1.777	2.731	6.2	19.2	1 12	8 39.66	+19 23.2	2.036	2.993	5.3	18.5
1 22	8 30.02	+16 25.0	1.776	2.757	1.9	19.0	1 22	8 29.85	+19 47.8	2.027	3.009	1.3	18.2
2 1	8 19.36	+16 45.7	1.805	2.783	3.0	19.1	2 1	8 19.80	+20 10.4	2.048	3.025	2.9	18.4
2 11	8 9.75	+17 4.4	1.864	2.809	7.1	19.4	2 11	8 10.57	+20 28.1	2.099	3.040	6.7	18.6
2 21	8 2.07	+17 18.9	1.950	2.834	10.8	19.7	2 21	8 3.00	+20 39.5	2.178	3.055	10.1	18.9
3 2	7 56.92	+17 28.2	2.060	2.858	13.9	19.9	3 2	7 57.69	+20 44.0	2.280	3.069	13.0	19.1
<b>192815</b>	1999 <i>VP</i> <sub>76</sub>		1 25.1 147°12	0°8/25.6	18		<b>367886</b>	2011 <i>WN</i> <sub>24</sub>		1 25.1 0°67	22°3/31.1	18	
12 23	8 50.45	+15 13.0	2.108	2.928	12.6	20.9	12 23	8 53.27	-14 10.6	0.958	1.713	28.5	19.5
1 2	8 45.19	+15 32.8	2.030	2.930	9.3	20.7	1 2	8 49.13	-17 35.1	0.907	1.711	26.3	19.3
1 12	8 37.96	+16 1.4	1.977	2.932	5.6	20.5	1 12	8 41.18	-20 19.6	0.870	1.710	24.2	19.2
1 22	8 29.43	+16 35.9	1.952	2.934	1.7	20.2	1 22	8 30.39	-22 8.3	0.848	1.709	22.8	19.1
2 1	8 20.52	+17 12.3	1.957	2.936	2.8	20.3	2 1	8 18.50	-22 50.1	0.841	1.710	22.3	19.1
2 11	8 12.24	+17 47.1	1.991	2.937	6.7	20.5	2 11	8 7.73	-22 25.0	0.849	1.712	23.0	19.1
2 21	8 5.47	+18 17.1	2.053	2.939	10.3	20.8	2 21	7 59.95	-21 3.9	0.872	1.714	24.5	19.2
3 2	8 0.85	+18 40.7	2.138	2.940	13.3	21.0	3 2	7 56.37	-19 3.5	0.909	1.718	26.5	19.4
<b>32373</b>	2000 <i>QZ</i> <sub>168</sub>		1 25.1 217°59	2°9/27.2	18		<b>393645</b>	2004 <i>PM</i> <sub>32</sub>		1 25.2 149°63	0°1/25.1	18	
12 23	8 47.64	+ 7 49.1	2.597	3.388	11.3	19.8	12 23	8 55.93	+17 7.6	1.988	2.805	13.3	22.4
1 2	8 42.84	+ 7 56.5	2.508	3.384	8.8	19.6	1 2	8 49.27	+17 43.7	1.917	2.817	9.8	22.2
1 12	8 36.47	+ 8 15.7	2.443	3.381	5.9	19.5	1 12	8 40.39	+18 27.9	1.872	2.828	5.7	22.0
1 22	8 29.07	+ 8 45.3	2.407	3.377	3.4	19.3	1 22	8 30.07	+19 15.6	1.856	2.838	1.4	21.7
2 1	8 21.32	+ 9 23.2	2.401	3.372	3.3	19.3	2 1	8 19.36	+20 1.7	1.870	2.847	3.1	21.8
2 11	8 14.01	+10 6.1	2.425	3.368	5.8	19.4	2 11	8 9.45	+20 42.0	1.914	2.856	7.2	22.1
2 21	8 7.83	+10 50.6	2.477	3.364	8.7	19.6	2 21	8 1.31	+21 13.9	1.986	2.863	11.0	22.4
3 2	8 3.31	+11 33.7	2.555	3.359	11.3	19.8	3 2	7 55.62	+21 36.5	2.081	2.870	14.1	22.6
<b>64945</b>	2001 <i>YY</i> <sub>122</sub>		1 25.1 220°78	4°1/23.1	18		<b>384724</b>	2011 <i>JU</i> <sub>8</sub>		1 25.2 183°08	0°6/25.6	17	
12 23	8 57.10	+27 19.5	1.702	2.539	14.2	19.8	12 23	8 49.02	+14 27.5	2.624	3.434	10.7	21.4
1 2	8 50.80	+28 13.1	1.625	2.533	10.6	19.5	1 2	8 43.86	+15 3.8	2.540	3.435	7.9	21.3
1 12	8 41.59	+29 7.5	1.572	2.527	6.8	19.3	1 12	8 37.10	+15 48.5	2.482	3.435	4.8	21.1
1 22	8 30.37	+29 54.9	1.547	2.520	4.2	19.1	1 22	8 29.26	+16 38.7	2.453	3.434	1.4	20.8
2 1	8 18.48	+30 28.2	1.550	2.513	6.0	19.2	2 1	8 21.07	+17 30.7	2.455	3.434	2.3	20.9
2 11	8 7.50	+30 43.4	1.581	2.505	9.9	19.4	2 11	8 13.34	+18 20.8	2.489	3.432	5.7	21.1
2 21	7 58.74	+30 40.4	1.636	2.497	13.8	19.6	2 21	8 6.78	+19 6.1	2.551	3.431	8.7	21.3
3 2	7 53.09	+30 21.7	1.713	2.489	17.2	19.9	3 2	8 1.94	+19 44.5	2.638	3.429	11.4	21.5
<b>288410</b>	2004 <i>DN</i> <sub>33</sub>		1 25.1 244°18	1°9/26.6	17		<b>290758</b>	2005 <i>UH</i> <sub>502</sub>		1 25.2 181°01	3°5/27.3	18	
12 23	8 47.77	+10 20.4	2.643	3.442	10.9	21.0	12 23	8 52.53	+ 7 9.8	2.539	3.318	11.9	21.2
1 2	8 42.98	+10 44.5	2.546	3.431	8.3	20.8	1 2	8 46.39	+ 6 52.3	2.451	3.320	9.3	21.1
1 12	8 36.59	+11 19.4	2.474	3.419	5.4	20.6	1 12	8 38.56	+ 6 45.8	2.389	3.320	6.4	20.9
1 22	8 29.11	+12 3.3	2.432	3.408	2.5	20.4	1 22	8 29.62	+ 6 49.8	2.356	3.320	4.0	20.7
2 1	8 21.23	+12 53.3	2.420	3.396	2.7	20.4	2 1	8 20.33	+ 7 3.2	2.353	3.320	3.9	20.7
2 11	8 13.73	+13 45.6	2.438	3.383	5.7	20.5	2 11	8 11.56	+ 7 23.5	2.381	3.318	6.3	20.9
2 21	8 7.31	+14 36.9	2.486	3.371	8.7	20.7	2 21	8 4.04	+ 7 47.9	2.438	3.316	9.2	21.1
3 2	8 2.56	+15 24.1	2.558	3.358	11.5	20.9	3 2	7 58.35	+ 8 13.7	2.520	3.314	11.8	21.2
<b>216344</b>	2007 <i>XZ</i> <sub>1</sub>		1 25.1 342°52	1°9/24.3	16		<b>235645</b>	2004 <i>RE</i> <sub>106</sub>		1 25.2 156°64	0°6/24.8	18	
12 23	8 50.12	+20 53.3	1.266	2.125	16.9	20.3	12						

EPHEMERIDES

1 25.2

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>340668</b>	2006 RE <sub>37</sub>		1 25.2 147°79	4°2/28.9	18		<b>159229</b>	2005 XQ <sub>24</sub>		1 25.2 53°03	4°8/22.9	18	
12 23	8 47.25	+ 0 57.0	2.960	3.713	11.0	21.7	12 23	8 55.80	+25 36.8	1.199	2.056	17.6	19.3
1 2	8 42.33	+ 1 9.1	2.877	3.721	8.8	21.5	1 2	8 50.33	+26 55.1	1.154	2.073	13.0	19.1
1 12	8 36.09	+ 1 35.4	2.819	3.729	6.6	21.4	1 12	8 41.45	+28 15.7	1.131	2.091	8.0	18.8
1 22	8 29.01	+ 2 15.2	2.789	3.737	4.7	21.3	1 22	8 30.39	+29 27.6	1.133	2.109	4.8	18.7
2 1	8 21.67	+ 3 6.6	2.789	3.744	4.3	21.3	2 1	8 18.93	+30 20.7	1.161	2.127	7.0	18.9
2 11	8 14.75	+ 4 6.2	2.819	3.751	5.7	21.4	2 11	8 9.01	+30 50.2	1.213	2.145	11.5	19.2
2 21	8 8.81	+ 5 10.2	2.879	3.757	7.9	21.5	2 21	8 2.02	+30 56.7	1.288	2.164	15.8	19.5
3 2	8 4.32	+ 6 14.9	2.965	3.763	10.1	21.7	3 2	7 58.71	+30 43.8	1.382	2.183	19.3	19.8
<b>167013</b>	2003 QV <sub>11</sub>		1 25.2 71°37	3°3/23.8	18		<b>151981</b>	2004 HC <sub>11</sub>		1 25.2 193°92	0°2/25.2	18	
12 23	8 57.31	+25 42.1	1.488	2.331	15.6	19.8	12 23	8 57.53	+17 48.1	1.823	2.644	14.2	21.2
1 2	8 50.89	+26 12.9	1.431	2.344	11.5	19.5	1 2	8 50.75	+17 59.6	1.741	2.642	10.5	21.0
1 12	8 41.54	+26 44.0	1.398	2.356	7.0	19.3	1 12	8 41.44	+18 18.2	1.684	2.640	6.2	20.7
1 22	8 30.36	+27 8.6	1.390	2.369	3.4	19.1	1 22	8 30.39	+18 40.2	1.654	2.637	1.6	20.4
2 1	8 18.85	+27 21.0	1.411	2.381	5.3	19.3	2 1	8 18.80	+19 1.4	1.654	2.632	3.3	20.5
2 11	8 8.63	+27 18.6	1.458	2.394	9.6	19.5	2 11	8 8.01	+19 18.2	1.684	2.627	7.9	20.8
2 21	8 0.91	+27 2.1	1.530	2.406	13.7	19.8	2 21	7 59.16	+19 28.7	1.740	2.622	12.1	21.0
3 2	7 56.41	+26 34.1	1.623	2.419	17.1	20.1	3 2	7 53.04	+19 32.3	1.820	2.615	15.6	21.2
<b>298911</b>	2004 TU <sub>89</sub>		1 25.2 169°78	3°1/23.5	18		<b>456960</b>	2008 AU <sub>70</sub>		1 25.2 242°77	1°4/24.6	18	
12 23	8 56.76	+24 45.1	1.792	2.626	13.8	21.4	12 23	8 56.68	+22 50.9	1.923	2.751	13.3	21.2
1 2	8 50.29	+25 38.6	1.722	2.630	10.2	21.1	1 2	8 50.11	+22 54.8	1.836	2.741	9.8	20.9
1 12	8 41.18	+26 34.7	1.676	2.633	6.2	20.9	1 12	8 41.04	+23 0.4	1.773	2.731	5.8	20.7
1 22	8 30.30	+27 26.6	1.658	2.635	3.2	20.7	1 22	8 30.30	+23 3.7	1.739	2.721	1.8	20.4
2 1	8 18.90	+28 7.6	1.669	2.637	5.0	20.8	2 1	8 19.01	+23 1.1	1.735	2.710	3.7	20.5
2 11	8 8.41	+28 33.7	1.709	2.638	9.0	21.1	2 11	8 8.49	+22 50.5	1.759	2.699	7.9	20.7
2 21	7 59.98	+28 44.0	1.774	2.639	12.7	21.3	2 21	7 59.86	+22 31.6	1.811	2.687	11.9	21.0
3 2	7 54.42	+28 40.2	1.862	2.639	15.9	21.5	3 2	7 53.90	+22 5.5	1.885	2.676	15.3	21.2
<b>184159</b>	2004 LW		1 25.2 146°29	4°6/28.6	18		<b>32128</b>	Jayzussman		1 25.2 244°81	4°3/27.2	18	
12 23	8 50.55	+ 1 49.9	2.539	3.299	12.4	21.6	12 23	8 52.98	+ 7 33.8	1.659	2.465	16.0	18.5
1 2	8 44.90	+ 1 53.4	2.461	3.311	9.9	21.4	1 2	8 47.65	+ 7 27.0	1.571	2.455	12.6	18.3
1 12	8 37.66	+ 2 12.5	2.407	3.322	7.3	21.2	1 12	8 39.75	+ 7 37.7	1.504	2.445	8.6	18.0
1 22	8 29.40	+ 2 46.5	2.381	3.333	5.1	21.1	1 22	8 30.02	+ 8 5.2	1.464	2.434	5.0	17.8
2 1	8 20.86	+ 3 33.2	2.385	3.343	4.7	21.1	2 1	8 19.57	+ 8 46.6	1.451	2.423	4.9	17.7
2 11	8 12.86	+ 4 29.0	2.419	3.352	6.5	21.2	2 11	8 9.77	+ 9 37.0	1.466	2.411	8.6	17.9
2 21	8 6.06	+ 5 29.6	2.482	3.360	9.0	21.4	2 21	8 1.82	+10 30.8	1.506	2.400	12.8	18.1
3 2	8 1.02	+ 6 30.7	2.570	3.368	11.5	21.6	3 2	7 56.59	+11 22.8	1.569	2.388	16.6	18.4
<b>425341</b>	2010 AV <sub>124</sub>		1 25.2 307°57	3°5/22.7	18		<b>256364</b>	2006 XW <sub>64</sub>		1 25.2 107°68	0°9/24.6	18	
12 23	8 50.13	+26 26.8	2.084	2.923	11.9	21.0	12 23	8 55.28	+19 34.9	2.166	2.986	12.3	21.4
1 2	8 45.28	+27 30.5	2.003	2.913	8.8	20.8	1 2	8 48.53	+20 17.4	2.111	3.012	8.9	21.2
1 12	8 38.21	+28 36.5	1.948	2.904	5.6	20.6	1 12	8 39.83	+21 4.8	2.081	3.038	5.2	21.0
1 22	8 29.59	+29 38.3	1.921	2.894	3.5	20.5	1 22	8 29.95	+21 52.3	2.081	3.064	1.4	20.8
2 1	8 20.42	+30 30.0	1.923	2.885	5.2	20.5	2 1	8 19.87	+22 35.2	2.113	3.088	3.1	21.0
2 11	8 11.85	+31 7.1	1.953	2.876	8.5	20.7	2 11	8 10.63	+23 10.2	2.174	3.112	6.8	21.3
2 21	8 4.89	+31 28.2	2.009	2.867	11.8	20.9	2 21	8 3.06	+23 35.6	2.264	3.135	10.1	21.5
3 2	8 0.31	+31 34.1	2.087	2.858	14.6	21.1	3 2	7 57.75	+23 51.1	2.377	3.157	12.8	21.7
<b>111789</b>	2002 CQ <sub>236</sub>		1 25.2 292°39	0°1/25.1	18		<b>126945</b>	2002 FE <sub>2</sub>		1 25.2 285°66	2°5/23.8	18	
12 23	8 51.55	+16 15.0	1.513	2.351	15.7	19.3	12 23	8 52.36	+24 19.6	1.943	2.780	12.8	19.9
1 2	8 47.00	+16 56.5	1.422	2.332	11.7	19.0	1 2	8 47.03	+24 56.6	1.855	2.765	9.4	19.7
1 12	8 39.58	+17 52.2	1.353	2.313	7.0	18.7	1 12	8 39.30	+25 36.6	1.793	2.751	5.7	19.4
1 22	8 29.99	+18 57.3	1.311	2.293	1.7	18.3	1 22	8 29.89	+26 14.2	1.758	2.737	2.6	19.2
2 1	8 19.47	+20 4.4	1.296	2.274	3.8	18.4	2 1	8 19.87	+26 43.9	1.752	2.722	4.5	19.3
2 11	8 9.57	+21 6.4	1.308	2.255	9.2	18.7	2 11	8 10.49	+27 2.1	1.774	2.708	8.3	19.5
2 21	8 1.71	+21 57.8	1.344	2.236	14.1	18.9	2 21	8 2.87	+27 7.3	1.822	2.694	12.1	19.7
3 2	7 56.91	+22 35.9	1.402	2.217	18.4	19.1	3 2	7 57.80	+27 0.4	1.892	2.679	15.4	19.9
<b>116213</b>	2003 XS <sub>36</sub>		1 25.2 65°50	4°7/22.3	18		<b>269561</b>	2009 WK <sub>68</sub>		1 25.2 130°00	1°3/25.9	18	
12 23	8 53.17	+30 53.9	2.053	2.888	12.2	19.8	12 23	8 50.72	+13 24.6	2.102	2.917	12.8	21.1
1 2	8 47.40	+31 48.8	1.992	2.896	9.2	19.6	1 2	8 45.39	+13 46.2	2.027	2.923	9.5	20.9
1 12	8 39.35	+32 40.4	1.956	2.905	6.2	19.5	1 12	8 38.12	+14 18.3	1.976	2.928	5.9	20.7
1 22	8 29.84	+33 22.2	1.948	2.913	4.7	19.4	1 22	8 29.56	+14 57.7	1.954	2.934	2.1	20.4
2 1	8 19.98	+33 49.0	1.969	2.921	6.1	19.5	2 1	8 20.65	+15 40.7	1.961	2.939	2.8	20.5
2 11	8 10.99	+33 58.5	2.018	2.929	8.9	19.7	2 11	8 12.38	+16 23.1	1.998	2.945	6.6	20.7
2 21	8 3.86	+33 51.2	2.092	2.938	11.8	19.9	2 21	8 5.61	+17 1.5	2.062	2.950	10.2	21.0
3 2	7 59.24	+33 29.6	2.187	2.946	14.4	20.1	3 2	8 0.99	+17 33.9	2.151	2.954	13.2	21.2
<b>284919</b>	2010 BK <sub>82</sub>		1 25.2 151°72	0°5/25.4	18		<b>105293</b>	2000 QY <sub>49</sub>		1 25.2 122°88	2°7/23.8	18	
12 23	8 51.77	+17 42.0	2.464	3.280	11.1	20.6	12 23	8 55.11	+25 37.4	1.931	2.764	13.0	20.1
1 2	8 45.89	+17 34.5	2.384	3.282	8.2	20.4	1 2	8 48.84	+26 3.1	1.861	2.769	9.6	19.9
1 12	8 38.28	+17 31.3	2.330	3.284	4.9	20.2	1 12	8 40.22	+26 28.9	1.816	2.773	5.8	19.7
1 22	8 29.57	+17 30.5	2.304	3.286	1.3	20.0	1 22	8 30.08	+26 49.8	1.800	2.778	2.8	19.5
2 1	8 20.57	+17 30.2	2.310	3.288	2.5	20.1	2 1	8 19.58	+27 1.4	1.812	2.782	4.4	19.6
2 11	8 12.19	+17 28.6	2.346	3.290	5.9	20.3	2 11	8 9.97	+27 1.2	1.854	2.786	8.1	19.8
2 21	8 5.15	+17 24.4	2.410	3.292	9.1	20.5	2 21	8 2.28	+26 49.3	1.921	2.790	11.7	20.1
3 2	8 0.04	+17 17.0	2.499	3.293	11.9	20.7	3 2	7 57.19	+26 27.3	2.011	2.794	14.7	20.3
<b>197135</b>	2003 UK <sub>240</sub>		1 25.2 51°55	5°8/21.7	18		<b>248814</b>	2006 SD <sub>197</sub>		1 25.2 141°56	8°2/ 2.3	18	
12 23	8 53.98	+33 32.5	1.947	2.783	12.8	19.8	12 23	8 47.34	-14 41.7	3.048	3.695	12.7	21.8
1 2													

EPHEMERIDES

1 25.2

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>327866</b>	2006 YV <sub>35</sub>		1 25.2 252°61	1°1/24.7 18			<b>31836</b>	Poshedly		1 25.2 181°48	1°7/25.9 18		
12 23	8 54.55	+21 42.5	1.920	2.751	13.2	20.7	12 23	8 56.67	+14 3.1	1.757	2.573	14.9	19.4
1 2	8 48.52	+21 51.9	1.837	2.743	9.7	20.4	1 2	8 50.14	+14 2.5	1.678	2.574	11.2	19.2
1 12	8 40.10	+22 4.6	1.777	2.736	5.7	20.2	1 12	8 41.09	+14 12.3	1.623	2.575	6.9	18.9
1 22	8 30.08	+22 16.6	1.746	2.728	1.6	19.9	1 22	8 30.35	+14 29.9	1.595	2.575	2.6	18.6
2 1	8 19.55	+22 24.1	1.744	2.720	3.5	20.0	2 1	8 19.08	+14 51.8	1.596	2.574	3.4	18.7
2 11	8 9.77	+22 24.4	1.771	2.712	7.8	20.3	2 11	8 8.65	+15 14.1	1.627	2.573	7.9	19.0
2 21	8 1.80	+22 16.8	1.825	2.704	11.7	20.5	2 21	8 0.15	+15 34.0	1.684	2.571	12.1	19.2
3 2	7 56.40	+22 1.5	1.901	2.696	15.0	20.7	3 2	7 54.38	+15 49.5	1.763	2.568	15.6	19.4
<b>293337</b>	2007 DZ <sub>86</sub>		1 25.2 219°87	1°4/26.4 17			<b>366751</b>	2004 PF <sub>33</sub>		1 25.2 84°62	2°2/26.7 18		
12 23	8 46.31	+11 45.3	2.912	3.714	9.9	21.1	12 23	8 50.26	+9 12.0	1.934	2.741	14.0	20.6
1 2	8 41.77	+12 10.2	2.823	3.711	7.5	20.9	1 2	8 45.15	+9 57.9	1.866	2.755	10.6	20.4
1 12	8 35.84	+12 43.9	2.761	3.708	4.7	20.8	1 12	8 38.02	+10 59.7	1.823	2.770	6.8	20.2
1 22	8 29.00	+13 24.5	2.727	3.705	2.0	20.6	1 22	8 29.57	+12 13.6	1.807	2.784	3.0	20.0
2 1	8 21.86	+14 9.2	2.725	3.702	2.3	20.6	2 1	8 20.77	+13 33.9	1.821	2.799	3.2	20.1
2 11	8 15.10	+14 54.9	2.754	3.699	5.1	20.8	2 11	8 12.69	+14 54.4	1.865	2.813	6.9	20.3
2 21	8 9.33	+15 38.8	2.811	3.695	7.9	20.9	2 21	8 6.21	+16 9.6	1.936	2.827	10.5	20.6
3 2	8 5.05	+16 18.6	2.894	3.692	10.3	21.1	3 2	8 1.96	+17 15.7	2.031	2.841	13.7	20.8
<b>266399</b>	2007 EA <sub>187</sub>		1 25.2 83°86	0°3/25.4 18			<b>449176</b>	2013 BU <sub>63</sub>		1 25.2 55°99	1°6/24.6 18		
12 23	8 50.87	+15 30.3	1.868	2.694	13.7	20.6	12 23	8 57.04	+21 34.7	1.278	2.126	17.4	21.2
1 2	8 45.74	+16 9.7	1.797	2.701	10.1	20.4	1 2	8 50.92	+21 51.7	1.227	2.142	12.7	20.9
1 12	8 38.42	+16 59.8	1.751	2.708	6.0	20.1	1 12	8 41.66	+22 13.9	1.197	2.158	7.4	20.7
1 22	8 29.66	+17 56.1	1.732	2.714	1.6	19.9	1 22	8 30.47	+22 34.9	1.193	2.175	2.2	20.4
2 1	8 20.49	+18 53.1	1.743	2.721	3.0	20.0	2 1	8 18.98	+22 49.2	1.215	2.192	4.5	20.6
2 11	8 12.05	+19 45.7	1.782	2.728	7.3	20.3	2 11	8 8.95	+22 53.2	1.264	2.209	9.7	21.0
2 21	8 5.33	+20 30.2	1.848	2.735	11.2	20.5	2 21	8 1.64	+22 46.5	1.336	2.227	14.3	21.3
3 2	8 0.99	+21 4.7	1.937	2.741	14.4	20.7	3 2	7 57.76	+22 30.4	1.428	2.244	18.1	21.6
<b>492407</b>	2014 KU <sub>8</sub>		1 25.2 183°21	2°3/23.9 18			<b>447266</b>	2005 UE <sub>348</sub>		1 25.2 278°01	4°4/22.9 18		
12 23	8 57.43	+23 53.2	2.075	2.899	12.6	22.5	12 23	8 54.86	+25 15.0	1.406	2.256	16.0	20.8
1 2	8 50.50	+24 34.7	1.997	2.900	9.2	22.3	1 2	8 49.70	+26 29.8	1.332	2.248	11.9	20.5
1 12	8 41.22	+25 18.6	1.944	2.901	5.5	22.1	1 12	8 41.27	+27 50.4	1.282	2.240	7.4	20.2
1 22	8 30.36	+25 59.4	1.921	2.900	2.4	21.9	1 22	8 30.46	+29 6.7	1.257	2.233	4.4	20.0
2 1	8 19.02	+26 31.9	1.929	2.899	4.2	22.0	2 1	8 18.79	+30 8.8	1.259	2.225	6.7	20.1
2 11	8 8.43	+26 52.7	1.966	2.896	7.9	22.2	2 11	8 8.08	+30 49.9	1.287	2.217	11.2	20.4
2 21	7 59.65	+27 0.9	2.030	2.893	11.4	22.4	2 21	7 59.88	+31 8.5	1.338	2.209	15.6	20.6
3 2	7 53.40	+26 57.5	2.118	2.889	14.5	22.6	3 2	7 55.19	+31 6.8	1.409	2.202	19.4	20.8
<b>175313</b>	2005 MF <sub>15</sub>		1 25.2 187°20	0°7/25.7 18 R			<b>367529</b>	2009 QR <sub>25</sub>		1 25.2 182°70	0°2/25.2 18		
12 23	8 48.57	+15 22.8	2.887	3.696	9.8	21.0	12 23	8 55.16	+18 38.4	2.048	2.869	12.9	21.0
1 2	8 43.41	+15 39.1	2.801	3.696	7.3	20.8	1 2	8 48.73	+18 35.5	1.968	2.869	9.5	20.8
1 12	8 36.80	+16 1.7	2.742	3.695	4.4	20.6	1 12	8 40.13	+18 37.5	1.913	2.869	5.6	20.5
1 22	8 29.25	+16 28.3	2.713	3.694	1.4	20.4	1 22	8 30.11	+18 41.5	1.887	2.869	1.4	20.3
2 1	8 21.41	+16 56.4	2.714	3.692	2.1	20.5	2 1	8 19.70	+18 44.7	1.890	2.868	2.9	20.4
2 11	8 13.99	+17 23.5	2.747	3.691	5.2	20.7	2 11	8 10.03	+18 44.7	1.924	2.867	7.0	20.6
2 21	8 7.65	+17 47.6	2.808	3.688	8.0	20.8	2 21	8 2.07	+18 40.4	1.985	2.866	10.8	20.9
3 2	8 2.87	+18 7.2	2.895	3.686	10.5	21.0	3 2	7 56.49	+18 31.5	2.069	2.865	13.9	21.1
<b>329612</b>	2003 JR <sub>6</sub>		1 25.2 234°54	3°7/22.6 17			<b>381976</b>	2010 FA <sub>86</sub>		1 25.2 62°30	8°2/20.4 18		
12 23	8 53.27	+27 44.6	2.266	3.097	11.4	21.0	12 23	8 58.68	+43 20.6	2.168	2.979	12.6	20.6
1 2	8 47.49	+28 45.7	2.181	3.086	8.5	20.8	1 2	8 51.61	+44 18.8	2.117	2.988	10.4	20.5
1 12	8 39.49	+29 47.7	2.122	3.074	5.5	20.6	1 12	8 41.89	+45 3.7	2.090	2.997	8.7	20.4
1 22	8 29.96	+30 44.4	2.092	3.062	3.7	20.5	1 22	8 30.52	+45 28.0	2.089	3.005	8.2	20.4
2 1	8 19.84	+31 30.1	2.092	3.050	5.2	20.6	2 1	8 18.89	+45 27.1	2.115	3.014	9.1	20.4
2 11	8 10.29	+32 0.9	2.121	3.037	8.3	20.7	2 11	8 8.43	+45 0.8	2.167	3.023	11.0	20.6
2 21	8 2.30	+32 16.0	2.176	3.024	11.4	20.9	2 21	8 0.27	+44 12.5	2.242	3.032	13.1	20.7
3 2	7 56.63	+32 16.4	2.254	3.010	14.1	21.1	3 2	7 55.06	+43 7.6	2.338	3.041	15.0	20.9
<b>417164</b>	2005 WO <sub>50</sub>		1 25.2 142°28	2°5/26.5 18			<b>346857</b>	2009 EF <sub>16</sub>		1 25.2 117°03	2°9/23.3 17		
12 23	8 51.74	+11 7.9	2.011	2.820	13.5	21.9	12 23	8 51.67	+27 45.8	2.463	3.292	10.7	21.1
1 2	8 46.21	+11 4.5	1.934	2.824	10.3	21.7	1 2	8 45.97	+28 18.3	2.391	3.296	7.9	20.9
1 12	8 38.63	+11 12.7	1.881	2.827	6.6	21.5	1 12	8 38.41	+28 49.7	2.346	3.299	5.0	20.8
1 22	8 29.72	+11 30.7	1.855	2.830	3.2	21.3	1 22	8 29.68	+29 15.5	2.330	3.303	3.0	20.6
2 1	8 20.42	+11 55.8	1.858	2.834	3.5	21.3	2 1	8 20.65	+29 32.2	2.343	3.306	4.3	20.7
2 11	8 11.80	+12 24.5	1.891	2.837	7.0	21.6	2 11	8 12.27	+29 37.6	2.386	3.310	7.1	20.9
2 21	8 4.76	+12 53.5	1.950	2.840	10.5	21.8	2 21	8 5.37	+29 31.5	2.456	3.313	9.9	21.1
3 2	7 59.95	+13 19.9	2.034	2.842	13.7	22.0	3 2	8 0.51	+29 15.2	2.550	3.316	12.4	21.3
<b>331383</b>	2012 EE <sub>9</sub>		1 25.2 276°82	1°3/24.4 18			<b>88413</b>	2001 QF <sub>31</sub>		1 25.2 63°58	0°2/25.3 18		
12 23	8 51.85	+20 8.5	1.806	2.642	13.6	20.6	12 23	8 53.80	+16 15.1	1.627	2.457	15.2	18.6
1 2	8 46.75	+20 50.8	1.723	2.632	10.1	20.3	1 2	8 47.91	+16 51.9	1.579	2.485	11.1	18.5
1 12	8 39.19	+21 40.8	1.663	2.623	5.9	20.1	1 12	8 39.65	+17 38.4	1.555	2.513	6.5	18.3
1 22	8 29.90	+22 32.9	1.631	2.613	1.8	19.8	1 22	8 29.98	+18 29.5	1.558	2.541	1.6	18.0
2 1	8 19.98	+23 21.3	1.628	2.603	3.8	19.9	2 1	8 20.11	+19 19.1	1.590	2.568	3.3	18.2
2 11	8 10.73	+24 1.0	1.653	2.594	8.2	20.1	2 11	8 11.34	+20 2.5	1.650	2.596	7.8	18.5
2 21	8 3.29	+24 29.0	1.703	2.584	12.3	20.4	2 21	8 4.63	+20 36.7	1.736	2.624	11.7	18.8
3 2	7 58.47	+24 44.8	1.776	2.574	15.8	20.6	3 2	8 0.59	+21 0.5	1.844	2.651	15.0	19.1
<b>5155</b>	Denisyuk		1 25.2 186°79	2°1/23.6 18			<b>46917</b>	1998 SA		1 25.2 145°01	1°9/26.4 18		
12 23	8 50.46	+24 43.6	2.719	3.544	9.9	18.0	12 23	8 53.27	+11 35.1	2.231	3.033	12.6	19.4
1 2	8 44.96	+25 23.4</											

EPHEMERIDES

1 25.2

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>281357</b>	2007 <i>VF</i> <sub>176</sub>		1 25.2 81°63	4.5/21.7	18		<b>460946</b>	2014 <i>WB</i> <sub>261</sub>		1 25.2 135°49	1.6/24.2	18	
12 23	8 52.63	+30 33.2	2.341	3.172	11.1	20.2	12 23	8 52.10	+20 43.1	1.953	2.785	12.9	21.5
1 2	8 46.77	+31 53.4	2.292	3.194	8.3	20.1	1 2	8 46.68	+21 34.3	1.881	2.789	9.4	21.3
1 12	8 38.92	+33 10.7	2.270	3.216	5.7	20.0	1 12	8 39.02	+22 31.6	1.834	2.793	5.5	21.1
1 22	8 29.81	+34 18.6	2.277	3.238	4.5	19.9	1 22	8 29.87	+23 29.5	1.815	2.797	1.8	20.9
2 1	8 20.40	+35 11.7	2.314	3.259	5.8	20.0	2 1	8 20.28	+24 22.2	1.826	2.801	3.7	21.0
2 11	8 11.75	+35 47.2	2.379	3.281	8.2	20.2	2 11	8 11.42	+25 5.0	1.866	2.804	7.7	21.2
2 21	8 4.72	+36 5.1	2.471	3.302	10.8	20.4	2 21	8 4.26	+25 35.8	1.933	2.807	11.4	21.5
3 2	7 59.91	+36 7.5	2.584	3.322	13.0	20.6	3 2	7 59.53	+25 54.1	2.022	2.811	14.5	21.7
<b>193961</b>	2001 <i>RE</i> <sub>83</sub>		1 25.2 40°26	1.0/24.9	18		<b>127536</b>	2002 <i>XO</i> <sub>26</sub>		1 25.2 221°38	4.9/21.6	18	
12 23	8 57.10	+21 19.4	1.187	2.039	18.2	19.4	12 23	8 52.79	+33 17.5	2.448	3.276	10.8	20.0
1 2	8 51.19	+21 17.3	1.133	2.050	13.4	19.1	1 2	8 47.01	+34 15.7	2.375	3.272	8.3	19.8
1 12	8 41.94	+21 20.2	1.099	2.061	7.8	18.8	1 12	8 39.15	+35 10.0	2.327	3.268	5.9	19.7
1 22	8 30.58	+21 22.9	1.091	2.073	2.0	18.5	1 22	8 29.91	+35 54.5	2.308	3.264	4.9	19.6
2 1	8 18.86	+21 20.6	1.108	2.086	4.4	18.7	2 1	8 20.23	+36 24.2	2.319	3.260	6.1	19.7
2 11	8 8.65	+21 10.5	1.150	2.099	10.0	19.1	2 11	8 11.20	+36 36.8	2.358	3.256	8.5	19.8
2 21	8 1.33	+20 52.5	1.216	2.113	14.9	19.4	2 21	8 3.73	+36 32.6	2.423	3.251	11.0	20.0
3 2	7 57.63	+20 27.6	1.301	2.127	19.0	19.7	3 2	7 58.51	+36 13.6	2.509	3.246	13.3	20.1
<b>30821</b>	Chernetenko		1 25.2 151°56	1.4/25.9	18		<b>285252</b>	1998 <i>FK</i> <sub>14</sub>		1 25.2 348°88	16.7/ 6.1	18	
12 23	8 56.28	+14 16.7	1.906	2.718	14.0	18.8	12 23	8 43.58	-17 28.0	1.238	1.958	24.8	19.8
1 2	8 49.61	+14 24.4	1.833	2.728	10.5	18.6	1 2	8 41.40	-18 26.6	1.164	1.948	22.8	19.6
1 12	8 40.67	+14 41.7	1.785	2.737	6.4	18.3	1 12	8 36.39	-18 40.0	1.104	1.939	20.5	19.4
1 22	8 30.26	+15 5.8	1.765	2.745	2.2	18.1	1 22	8 29.31	-17 59.3	1.059	1.932	18.3	19.2
2 1	8 19.46	+15 32.9	1.774	2.752	3.1	18.2	2 1	8 21.42	-16 20.5	1.033	1.926	16.9	19.1
2 11	8 9.49	+15 59.5	1.814	2.759	7.3	18.4	2 11	8 14.30	-13 48.7	1.026	1.921	16.9	19.1
2 21	8 1.34	+16 22.6	1.881	2.765	11.1	18.7	2 21	8 9.35	-10 37.7	1.039	1.919	18.4	19.1
3 2	7 55.68	+16 40.5	1.971	2.770	14.4	18.9	3 2	8 7.57	- 7 6.3	1.073	1.918	20.8	19.3
<b>506321</b>	2017 <i>OA</i> <sub>9</sub>		1 25.2 228°53	1.0/25.7	17		<b>281726</b>	2008 <i>WF</i> <sub>138</sub>		1 25.2 111°32	3.8/27.5	18	
12 23	8 54.47	+16 22.1	2.296	3.107	12.0	21.9	12 23	8 49.94	+ 6 33.5	2.312	3.100	12.6	20.4
1 2	8 48.11	+16 9.7	2.202	3.097	8.9	21.7	1 2	8 44.64	+ 6 19.6	2.236	3.108	9.9	20.3
1 12	8 39.75	+16 2.8	2.134	3.087	5.4	21.4	1 12	8 37.62	+ 6 18.6	2.184	3.116	6.9	20.1
1 22	8 30.04	+15 59.4	2.096	3.077	1.8	21.2	1 22	8 29.52	+ 6 29.9	2.160	3.124	4.4	19.9
2 1	8 19.88	+15 57.5	2.088	3.066	2.7	21.2	2 1	8 21.11	+ 6 51.7	2.165	3.132	4.2	19.9
2 11	8 10.29	+15 55.4	2.110	3.054	6.5	21.4	2 11	8 13.28	+ 7 21.1	2.199	3.139	6.6	20.1
2 21	8 2.16	+15 51.5	2.161	3.042	10.0	21.6	2 21	8 6.79	+ 7 54.6	2.261	3.147	9.5	20.3
3 2	7 56.15	+15 45.2	2.236	3.030	13.1	21.8	3 2	8 2.18	+ 8 28.8	2.348	3.154	12.2	20.5
<b>414465</b>	2009 <i>HK</i> <sub>95</sub>		1 25.2 191°85	7.0/20.2	18		<b>409908</b>	2006 <i>TF</i> <sub>40</sub>		1 25.2 80°62	13.9/16.8	17	
12 23	9 1.01	+41 16.8	2.532	3.336	11.2	21.9	12 23	9 10.01	+54 59.4	1.753	2.531	16.4	20.9
1 2	8 53.16	+42 24.5	2.464	3.335	9.1	21.8	1 2	9 1.56	+56 53.8	1.727	2.546	14.9	20.8
1 12	8 42.81	+43 22.2	2.421	3.332	7.5	21.7	1 12	8 48.43	+58 21.9	1.722	2.561	14.0	20.8
1 22	8 30.79	+44 2.9	2.407	3.328	7.0	21.6	1 22	8 32.23	+59 12.0	1.738	2.575	14.0	20.9
2 1	8 18.29	+44 21.5	2.422	3.324	8.0	21.7	2 1	8 15.52	+59 17.5	1.777	2.590	14.9	20.9
2 11	8 6.63	+44 16.6	2.464	3.318	9.9	21.8	2 11	8 1.09	+58 40.6	1.836	2.605	16.3	21.1
2 21	7 56.92	+43 50.2	2.531	3.312	12.0	21.9	2 21	7 50.82	+57 29.6	1.913	2.619	17.8	21.2
3 2	7 49.91	+43 6.7	2.620	3.305	14.0	22.1	3 2	7 45.45	+55 54.9	2.006	2.634	19.2	21.4
<b>357373</b>	2003 <i>SO</i> <sub>228</sub>		1 25.2 163°78	0.9/24.7	18		<b>214482</b>	2005 <i>TF</i> <sub>106</sub>		1 25.2 128°39	5.2/29.4	18	
12 23	8 55.66	+20 1.7	2.018	2.841	12.9	22.2	12 23	8 47.01	- 1 3.0	2.863	3.607	11.5	21.0
1 2	8 49.16	+20 31.3	1.944	2.847	9.5	21.9	1 2	8 42.25	- 1 21.4	2.781	3.614	9.5	20.8
1 12	8 40.41	+21 6.2	1.895	2.853	5.5	21.7	1 12	8 36.13	- 1 25.3	2.724	3.620	7.4	20.7
1 22	8 30.20	+21 41.9	1.875	2.857	1.5	21.4	1 22	8 29.15	- 1 14.2	2.693	3.627	5.7	20.6
2 1	8 19.58	+22 13.7	1.885	2.861	3.3	21.6	2 1	8 21.90	- 0 49.1	2.691	3.633	5.3	20.6
2 11	8 9.73	+22 38.2	1.925	2.864	7.4	21.8	2 11	8 15.09	- 0 12.4	2.718	3.639	6.5	20.7
2 21	8 1.64	+22 53.5	1.992	2.867	11.1	22.1	2 21	8 9.28	+ 0 32.4	2.773	3.644	8.4	20.8
3 2	7 55.99	+22 59.7	2.082	2.868	14.2	22.3	3 2	8 4.95	+ 1 21.6	2.853	3.650	10.5	21.0
<b>461730</b>	2005 <i>TU</i> <sub>118</sub>		1 25.2 218°09	4.1/22.8	16		<b>234173</b>	2000 <i>NO</i> <sub>18</sub>		1 25.2 197°13	1.0/24.6	18	
12 23	8 55.76	+29 36.8	2.127	2.957	12.1	22.3	12 23	8 55.58	+19 42.2	2.003	2.826	13.0	21.5
1 2	8 49.39	+30 22.9	2.047	2.950	9.1	22.1	1 2	8 49.25	+20 23.1	1.920	2.823	9.6	21.3
1 12	8 40.63	+31 7.1	1.993	2.944	6.0	21.9	1 12	8 40.58	+21 10.8	1.862	2.820	5.6	21.1
1 22	8 30.27	+31 43.3	1.968	2.936	4.1	21.8	1 22	8 30.29	+22 0.0	1.833	2.815	1.6	20.8
2 1	8 19.40	+32 6.2	1.972	2.929	5.6	21.9	2 1	8 19.44	+22 45.6	1.834	2.810	3.5	20.9
2 11	8 9.26	+32 13.0	2.004	2.921	8.7	22.0	2 11	8 9.26	+23 23.0	1.865	2.804	7.6	21.1
2 21	8 0.93	+32 3.9	2.063	2.912	11.9	22.2	2 21	8 0.81	+23 49.9	1.923	2.797	11.5	21.4
3 2	7 55.14	+31 41.1	2.144	2.903	14.7	22.4	3 2	7 54.85	+24 5.9	2.004	2.789	14.7	21.6
<b>469241</b>	2016 <i>JO</i> <sub>10</sub>		1 25.2 153°01	2.6/23.3	18		<b>105627</b>	2000 <i>SY</i> <sub>4</sub>		1 25.2 145°91	6.4/18.7	18	
12 23	8 50.26	+24 18.3	2.283	3.116	11.3	20.5	12 23	8 57.26	+46 49.7	3.511	4.294	8.8	20.6
1 2	8 45.13	+25 19.2	2.209	3.117	8.2	20.3	1 2	8 49.90	+47 54.4	3.463	4.307	7.5	20.5
1 12	8 38.04	+26 23.1	2.161	3.118	5.0	20.1	1 12	8 40.68	+48 48.2	3.442	4.319	6.6	20.5
1 22	8 29.63	+27 24.4	2.142	3.119	2.6	19.9	1 22	8 30.27	+49 26.5	3.449	4.331	6.5	20.5
2 1	8 20.79	+28 17.9	2.153	3.119	4.2	20.0	2 1	8 19.55	+49 46.1	3.484	4.342	7.1	20.5
2 11	8 12.54	+28 59.6	2.193	3.120	7.4	20.2	2 11	8 9.52	+49 46.4	3.546	4.353	8.3	20.6
2 21	8 5.76	+29 27.9	2.260	3.121	10.5	20.4	2 21	8 0.97	+49 29.0	3.632	4.363	9.6	20.7
3 2	8 1.10	+29 42.9	2.350	3.121	13.2	20.6	3 2	7 54.50	+48 56.9	3.739	4.372	10.8	20.8
<b>35962</b>	1999 <i>LX</i> <sub>9</sub>		1 25.2 167°00	0.9/25.8	18		<b>277154</b>	2005 <i>MM</i> <sub>26</sub>		1 25.2 198°35	2.1/26.3	18	
12 23	8 50.72	+13 38.9	2.073	2.889	12.9	19.2							

EPHEMERIDES

1 25.2

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>374241</b>	2005 <i>GC</i> <sub>108</sub>		1 25.2 38°13	5°6/28.6	18		<b>318848</b>	2005 <i>TK</i> <sub>5</sub>		1 25.2 137°07	4°6/22.7	18	
12 23	8 48.47	+ 2 55.2	1.744	2.537	15.9	20.2	12 23	8 58.10	+32 14.1	2.220	3.044	11.9	21.0
1 2	8 43.95	+ 2 47.8	1.684	2.554	12.7	20.0	1 2	8 50.86	+32 54.7	2.158	3.055	9.0	20.8
1 12	8 37.36	+ 3 0.9	1.645	2.571	9.2	19.8	1 12	8 41.36	+33 30.2	2.122	3.066	6.1	20.6
1 22	8 29.47	+ 3 33.9	1.632	2.590	6.3	19.7	1 22	8 30.47	+33 54.7	2.114	3.077	4.6	20.6
2 1	8 21.29	+ 4 23.7	1.645	2.608	5.8	19.7	2 1	8 19.31	+34 4.0	2.137	3.087	5.8	20.7
2 11	8 13.92	+ 5 24.8	1.686	2.627	8.1	19.9	2 11	8 9.09	+33 56.5	2.189	3.097	8.5	20.8
2 21	8 8.24	+ 6 30.9	1.752	2.647	11.2	20.1	2 21	8 0.76	+33 33.7	2.266	3.106	11.3	21.0
3 2	8 4.85	+ 7 36.3	1.842	2.667	14.2	20.4	3 2	7 54.97	+32 58.6	2.367	3.114	13.8	21.2
<b>434021</b>	2001 <i>SY</i> <sub>3</sub>		1 25.2 120°56	6°3/21.4	18		<b>147598</b>	2004 <i>GT</i> <sub>26</sub>		1 25.2 190°24	3°4/22.8	18	
12 23	9 0.42	+37 36.5	2.257	3.073	12.0	21.7	12 23	8 53.38	+25 36.7	2.084	2.917	12.2	20.4
1 2	8 52.59	+38 37.0	2.208	3.093	9.4	21.6	1 2	8 47.67	+26 51.2	2.009	2.916	9.0	20.1
1 12	8 42.37	+39 28.1	2.185	3.112	7.2	21.5	1 12	8 39.68	+28 8.6	1.960	2.915	5.6	19.9
1 22	8 30.69	+40 3.2	2.190	3.131	6.3	21.5	1 22	8 30.11	+29 21.9	1.940	2.914	3.4	19.8
2 1	8 18.78	+40 17.4	2.224	3.149	7.4	21.6	2 1	8 19.98	+30 24.5	1.950	2.912	5.1	19.9
2 11	8 7.96	+40 10.1	2.286	3.166	9.5	21.7	2 11	8 10.51	+31 11.6	1.989	2.910	8.5	20.1
2 21	7 59.22	+39 43.6	2.374	3.183	11.9	21.9	2 21	8 2.72	+31 41.9	2.054	2.907	11.7	20.3
3 2	7 53.20	+39 2.2	2.483	3.198	14.0	22.1	3 2	7 57.37	+31 56.0	2.141	2.904	14.6	20.5
<b>138756</b>	2000 <i>SC</i> <sub>273</sub>		1 25.2 157°89	10°4/ 5.2	18		<b>468218</b>	2015 <i>BP</i> <sub>98</sub>		1 25.2 275°63	0°3/25.0	17	
12 23	8 47.67	-23 17.4	3.056	3.629	13.8	20.5	12 23	8 50.44	+18 29.6	2.145	2.971	12.1	21.4
1 2	8 42.79	-24 3.6	2.977	3.633	12.8	20.4	1 2	8 45.34	+18 53.6	2.060	2.965	8.9	21.1
1 12	8 36.49	-24 26.9	2.915	3.638	11.8	20.3	1 12	8 38.22	+19 24.3	2.000	2.958	5.3	20.9
1 22	8 29.26	-24 24.7	2.873	3.641	10.9	20.3	1 22	8 29.73	+19 57.9	1.968	2.951	1.3	20.6
2 1	8 21.72	-23 56.0	2.854	3.645	10.4	20.3	2 1	8 20.79	+20 30.4	1.966	2.944	2.9	20.7
2 11	8 14.58	-23 2.2	2.857	3.648	10.5	20.3	2 11	8 12.42	+20 58.4	1.993	2.937	6.8	20.9
2 21	8 8.48	-21 47.4	2.884	3.651	11.0	20.3	2 21	8 5.53	+21 19.5	2.047	2.930	10.5	21.2
3 2	8 3.91	-20 16.9	2.934	3.654	11.9	20.4	3 2	8 0.81	+21 32.6	2.125	2.923	13.5	21.3
<b>7632</b>	Stanislav		1 25.2 48°58	2°9/26.4	18		<b>90681</b>	1981 <i>EG</i> <sub>4</sub>		1 25.2 158°56	1°6/25.9	18	
12 23	8 54.01	+11 54.8	1.242	2.078	18.6	16.8	12 23	8 56.02	+14 21.0	1.800	2.616	14.5	19.5
1 2	8 48.84	+11 50.8	1.181	2.086	14.1	16.6	1 2	8 49.59	+14 19.6	1.725	2.621	10.9	19.3
1 12	8 40.59	+12 3.9	1.141	2.094	8.9	16.3	1 12	8 40.76	+14 27.8	1.674	2.626	6.7	19.0
1 22	8 30.32	+12 31.3	1.125	2.103	3.9	16.0	1 22	8 30.36	+14 43.3	1.651	2.631	2.5	18.8
2 1	8 19.53	+13 8.1	1.134	2.112	4.4	16.1	2 1	8 19.52	+15 2.6	1.657	2.635	3.3	18.8
2 11	8 9.93	+13 48.1	1.169	2.121	9.5	16.4	2 11	8 9.52	+15 22.3	1.692	2.638	7.6	19.1
2 21	8 2.85	+14 25.9	1.228	2.131	14.3	16.7	2 21	8 1.42	+15 39.5	1.754	2.641	11.6	19.3
3 2	7 59.11	+14 57.8	1.307	2.141	18.4	17.0	3 2	7 55.94	+15 52.4	1.838	2.643	15.1	19.6
<b>246789</b>	Pattinson		1 25.2 205°66	0°1/25.2	18		<b>402623</b>	2006 <i>SW</i> <sub>398</sub>		1 25.2 135°14	4°3/22.9	18	
12 23	8 55.33	+18 11.6	2.021	2.841	13.0	21.4	12 23	8 58.81	+30 31.5	2.082	2.908	12.5	22.2
1 2	8 49.00	+18 26.0	1.935	2.836	9.6	21.1	1 2	8 51.46	+31 12.7	2.021	2.921	9.3	22.0
1 12	8 40.40	+18 46.7	1.875	2.831	5.7	20.9	1 12	8 41.75	+31 49.9	1.985	2.934	6.2	21.8
1 22	8 30.26	+19 10.4	1.842	2.825	1.4	20.6	1 22	8 30.58	+32 17.0	1.978	2.945	4.3	21.7
2 1	8 19.60	+19 33.0	1.841	2.818	3.0	20.7	2 1	8 19.13	+32 29.4	2.001	2.957	5.6	21.8
2 11	8 9.61	+19 51.2	1.868	2.811	7.3	20.9	2 11	8 8.66	+32 25.4	2.053	2.968	8.6	22.0
2 21	8 1.32	+20 3.2	1.923	2.803	11.1	21.2	2 21	8 0.20	+32 6.1	2.131	2.978	11.6	22.2
3 2	7 55.46	+20 8.2	2.002	2.795	14.4	21.4	3 2	7 54.38	+31 34.7	2.232	2.987	14.3	22.4
<b>328983</b>	2010 <i>WH</i> <sub>10</sub>		1 25.2 192°63	3°7/26.9	18		<b>218710</b>	2005 <i>UG</i> <sub>20</sub>		1 25.2 181°61	4°9/28.3	18	
12 23	8 52.64	+ 9 0.3	1.876	2.679	14.5	20.9	12 23	8 50.24	+ 3 26.7	2.078	2.858	14.1	20.5
1 2	8 47.05	+ 8 40.4	1.795	2.679	11.3	20.7	1 2	8 45.14	+ 3 23.2	1.995	2.859	11.3	20.3
1 12	8 39.25	+ 8 33.8	1.738	2.678	7.6	20.5	1 12	8 38.08	+ 3 37.1	1.935	2.859	8.2	20.1
1 22	8 29.97	+ 8 39.8	1.707	2.678	4.4	20.3	1 22	8 29.71	+ 4 8.0	1.901	2.859	5.5	19.9
2 1	8 20.23	+ 8 56.5	1.705	2.677	4.4	20.3	2 1	8 20.91	+ 4 53.8	1.895	2.858	5.1	19.9
2 11	8 11.18	+ 9 20.5	1.732	2.676	7.6	20.5	2 11	8 12.67	+ 5 49.9	1.919	2.858	7.4	20.0
2 21	8 3.81	+ 9 48.2	1.785	2.675	11.3	20.7	2 21	8 5.88	+ 6 51.5	1.970	2.857	10.6	20.2
3 2	7 58.82	+10 16.1	1.861	2.673	14.6	20.9	3 2	8 1.18	+ 7 53.3	2.044	2.856	13.5	20.4
<b>492751</b>	2014 <i>QV</i> <sub>151</sub>		1 25.2 123°09	0°8/24.7	18		<b>404188</b>	2013 <i>CD</i> <sub>113</sub>		1 25.2 278°35	1°8/26.1	18	
12 23	8 53.68	+18 33.7	2.065	2.888	12.7	21.5	12 23	8 52.82	+13 8.8	1.557	2.384	15.9	21.5
1 2	8 47.62	+19 24.6	2.000	2.904	9.3	21.3	1 2	8 47.85	+13 21.1	1.466	2.368	12.1	21.2
1 12	8 39.48	+20 22.4	1.961	2.919	5.4	21.1	1 12	8 40.09	+13 48.0	1.397	2.351	7.6	20.9
1 22	8 30.01	+21 22.0	1.951	2.934	1.4	20.9	1 22	8 30.28	+14 26.5	1.354	2.334	2.9	20.6
2 1	8 20.21	+22 18.1	1.972	2.948	3.2	21.0	2 1	8 19.61	+15 12.1	1.338	2.317	3.7	20.6
2 11	8 11.17	+23 6.1	2.022	2.961	7.1	21.3	2 11	8 9.58	+15 58.9	1.350	2.300	8.7	20.9
2 21	8 3.79	+23 43.5	2.100	2.975	10.6	21.5	2 21	8 1.52	+16 41.9	1.387	2.282	13.5	21.1
3 2	7 58.71	+24 9.8	2.201	2.987	13.5	21.8	3 2	7 56.41	+17 17.8	1.445	2.265	17.7	21.3
<b>523522</b>	2017 <i>OC</i> <sub>44</sub>		1 25.2 203°20	1°5/26.2	17		<b>136596</b>	1993 <i>FG</i> <sub>30</sub>		1 25.2 259°48	4°4/28.2	17	
12 23	8 49.98	+12 47.8	2.750	3.551	10.5	22.2	12 23	8 48.06	+ 3 19.4	2.647	3.416	11.7	20.9
1 2	8 44.54	+12 52.7	2.659	3.547	7.9	22.0	1 2	8 43.27	+ 3 10.0	2.543	3.400	9.4	20.7
1 12	8 37.55	+13 5.4	2.595	3.542	5.0	21.8	1 12	8 36.89	+ 3 14.2	2.465	3.384	6.9	20.5
1 22	8 29.54	+13 24.0	2.559	3.537	2.1	21.6	1 22	8 29.42	+ 3 31.9	2.413	3.367	4.9	20.4
2 1	8 21.19	+13 46.6	2.555	3.531	2.5	21.6	2 1	8 21.51	+ 4 2.0	2.391	3.350	4.6	20.3
2 11	8 13.27	+14 10.6	2.581	3.525	5.5	21.8	2 11	8 13.95	+ 4 41.9	2.399	3.333	6.4	20.4
2 21	8 6.47	+14 33.7	2.637	3.519	8.4	22.0	2 21	8 7.44	+ 5 28.0	2.435	3.316	9.0	20.5
3 2	8 1.33	+14 54.1	2.717	3.512	11.0	22.2	3 2	8 2.57	+ 6 16.5	2.495	3.299	11.6	20.7
<b>489988</b>	2008 <i>SP</i> <sub>151</sub>		1 25.2 195°10	2°3/24.2	18		<b>341569</b>	2007 <i>UG</i> <sub>51</sub>		1 25.2 110°28	7°9/17.9	18	
12 23	8 59.13	+23 57.6	1.783	2.612	14.1	22.0	12 23	8 56					

EPHEMERIDES

1 25.2

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>438452</b>	2007 AS <sub>12</sub>		1 25.2	61°75	1°2/25.9	18	<b>467698</b>	2008 WR <sub>53</sub>		1 25.2	75°51	0°5/25.6	18
12 23	9 1.46	- 7 13.9	0.462	1.313	37.0	19.6	12 23	8 50.17	+15 43.1	2.096	2.918	12.5	22.0
1 2	8 56.30	- 1 18.4	0.435	1.347	27.9	19.3	1 2	8 45.11	+16 7.2	2.020	2.921	9.3	21.8
1 12	8 45.74	+ 6 12.0	0.424	1.381	16.8	18.9	1 12	8 38.09	+16 39.9	1.969	2.924	5.6	21.5
1 22	8 31.65	+14 24.2	0.435	1.416	4.9	18.6	1 22	8 29.77	+17 18.1	1.945	2.927	1.6	21.3
2 1	8 17.26	+21 57.9	0.471	1.452	6.8	18.9	2 1	8 21.07	+17 57.7	1.951	2.930	2.7	21.4
2 11	8 6.03	+27 54.7	0.532	1.486	16.1	19.6	2 11	8 13.00	+18 34.7	1.987	2.933	6.7	21.6
2 21	8 0.01	+32 3.3	0.612	1.521	23.3	20.1	2 21	8 6.44	+19 6.3	2.050	2.936	10.2	21.9
3 2	7 59.83	+34 40.8	0.706	1.554	28.3	20.7	3 2	8 2.01	+19 30.7	2.136	2.939	13.3	22.1
<b>285959</b>	2001 RJ <sub>60</sub>		1 25.2	89°89	7°6/21.5	18	<b>185484</b>	2007 DB <sub>85</sub>		1 25.2	229°40	2°6/23.0	17
12 23	9 1.07	+38 30.8	1.845	2.669	13.9	20.8	12 23	8 48.90	+26 15.7	2.730	3.559	9.7	20.4
1 2	8 53.51	+39 33.8	1.800	2.688	11.0	20.6	1 2	8 43.94	+27 8.0	2.651	3.557	7.2	20.2
1 12	8 43.09	+40 25.4	1.779	2.706	8.5	20.5	1 12	8 37.31	+28 1.3	2.600	3.555	4.5	20.0
1 22	8 30.93	+40 57.0	1.784	2.724	7.6	20.5	1 22	8 29.57	+28 51.0	2.579	3.553	2.7	19.9
2 1	8 18.55	+41 3.6	1.817	2.742	8.7	20.6	2 1	8 21.47	+29 33.1	2.587	3.550	4.0	20.0
2 11	8 7.55	+40 44.5	1.877	2.760	11.1	20.8	2 11	8 13.85	+30 4.8	2.626	3.548	6.6	20.1
2 21	7 59.09	+40 3.7	1.960	2.777	13.7	21.0	2 21	8 7.44	+30 24.7	2.692	3.546	9.3	20.3
3 2	7 53.83	+39 6.8	2.064	2.794	16.0	21.2	3 2	8 2.81	+30 33.2	2.781	3.543	11.6	20.5
<b>76775</b>	2000 KT <sub>58</sub>		1 25.2	342°90	0°1/25.1	18	<b>202594</b>	2006 GY <sub>54</sub>		1 25.2	133°42	0°3/25.4	18
12 23	8 48.65	+16 27.5	1.955	2.785	13.0	19.1	12 23	8 50.59	+16 21.1	2.378	3.195	11.4	21.3
1 2	8 44.19	+17 11.8	1.875	2.781	9.6	18.9	1 2	8 45.18	+16 45.5	2.304	3.203	8.4	21.1
1 12	8 37.63	+18 6.4	1.820	2.778	5.7	18.7	1 12	8 38.03	+17 16.9	2.255	3.210	5.0	20.9
1 22	8 29.63	+19 6.7	1.792	2.774	1.4	18.4	1 22	8 29.74	+17 52.3	2.235	3.217	1.3	20.7
2 1	8 21.14	+20 7.3	1.793	2.772	3.0	18.5	2 1	8 21.15	+18 28.2	2.246	3.224	2.5	20.8
2 11	8 13.26	+21 3.1	1.824	2.769	7.2	18.7	2 11	8 13.14	+19 1.2	2.287	3.231	6.1	21.0
2 21	8 6.93	+21 50.2	1.880	2.767	11.0	19.0	2 21	8 6.49	+19 29.0	2.356	3.237	9.3	21.2
3 2	8 2.88	+22 26.6	1.960	2.765	14.3	19.2	3 2	8 1.75	+19 50.2	2.449	3.243	12.1	21.4
<b>48427</b>	1989 SZ <sub>2</sub>		1 25.2	92°92	4°9/28.3	18	<b>287485</b>	2003 BG <sub>9</sub>		1 25.2	50°67	2°7/26.9	18
12 23	8 51.83	+ 3 28.8	1.862	2.646	15.4	18.7	12 23	8 50.51	+ 8 1.2	1.498	2.316	16.9	19.9
1 2	8 46.32	+ 3 35.3	1.798	2.665	12.2	18.5	1 2	8 45.81	+ 8 55.3	1.441	2.335	12.8	19.7
1 12	8 38.75	+ 4 1.3	1.757	2.684	8.7	18.4	1 12	8 38.65	+10 10.6	1.407	2.355	8.2	19.5
1 22	8 29.88	+ 4 45.4	1.742	2.702	5.6	18.2	1 22	8 29.92	+11 42.0	1.398	2.374	3.8	19.3
2 1	8 20.71	+ 5 44.1	1.755	2.720	5.2	18.2	2 1	8 20.82	+13 21.6	1.417	2.394	3.8	19.3
2 11	8 12.33	+ 6 51.7	1.797	2.738	7.7	18.4	2 11	8 12.67	+15 0.5	1.464	2.415	8.0	19.6
2 21	8 5.64	+ 8 2.1	1.866	2.756	10.9	18.6	2 21	8 6.54	+16 31.1	1.537	2.436	12.2	19.9
3 2	8 1.24	+ 9 10.2	1.958	2.773	13.9	18.9	3 2	8 3.12	+17 48.7	1.632	2.456	15.8	20.2
<b>158993</b>	2004 SK <sub>24</sub>		1 25.2	285°53	2°7/23.6	18	<b>454044</b>	2012 GC <sub>3</sub>		1 25.2	4°31	4°5/27.5	18
12 23	8 52.71	+24 48.9	1.946	2.782	12.8	20.4	12 23	8 49.41	+ 6 58.8	1.557	2.371	16.5	20.9
1 2	8 47.23	+25 31.4	1.872	2.781	9.4	20.2	1 2	8 45.09	+ 6 55.1	1.483	2.371	12.9	20.7
1 12	8 39.44	+26 16.1	1.822	2.780	5.7	20.0	1 12	8 38.31	+ 7 10.6	1.430	2.371	8.9	20.5
1 22	8 30.09	+26 57.3	1.800	2.778	2.8	19.8	1 22	8 29.86	+ 7 44.4	1.402	2.372	5.3	20.2
2 1	8 20.26	+27 29.7	1.808	2.777	4.5	19.9	2 1	8 20.88	+ 8 32.9	1.401	2.373	5.0	20.2
2 11	8 11.19	+27 49.7	1.843	2.775	8.2	20.1	2 11	8 12.68	+ 9 30.5	1.426	2.375	8.5	20.4
2 21	8 3.91	+27 56.4	1.905	2.774	11.8	20.3	2 21	8 6.36	+10 30.7	1.477	2.377	12.5	20.7
3 2	7 59.15	+27 50.6	1.989	2.773	14.8	20.5	3 2	8 2.70	+11 28.1	1.549	2.380	16.2	20.9
<b>245009</b>	2004 CP <sub>85</sub>		1 25.2	191°68	3°8/23.1	18	<b>463644</b>	2013 TO <sub>130</sub>		1 25.2	196°52	4°2/22.3	18
12 23	8 55.11	+31 4.0	2.383	3.209	11.1	20.2	12 23	8 54.88	+31 4.2	2.474	3.299	10.8	21.9
1 2	8 48.61	+31 26.1	2.309	3.209	8.3	20.0	1 2	8 48.53	+31 59.3	2.397	3.296	8.1	21.8
1 12	8 40.06	+31 43.9	2.260	3.208	5.5	19.9	1 12	8 40.11	+32 51.7	2.347	3.293	5.6	21.6
1 22	8 30.21	+31 53.0	2.240	3.208	3.8	19.7	1 22	8 30.29	+33 35.9	2.326	3.289	4.2	21.5
2 1	8 20.06	+31 49.8	2.250	3.207	5.0	19.8	2 1	8 20.02	+34 7.0	2.335	3.284	5.5	21.6
2 11	8 10.68	+31 33.1	2.289	3.206	7.7	20.0	2 11	8 10.39	+34 22.3	2.373	3.279	8.0	21.7
2 21	8 2.95	+31 3.9	2.356	3.205	10.6	20.2	2 21	8 2.30	+34 22.0	2.438	3.273	10.7	21.9
3 2	7 57.49	+30 24.4	2.445	3.204	13.1	20.3	3 2	7 56.44	+34 8.0	2.526	3.267	13.1	22.0
<b>200892</b>	2002 AU <sub>22</sub>		1 25.2	0°15	1°8/25.9	18	<b>122054</b>	2000 GD <sub>144</sub>		1 25.2	126°60	3°1/23.7	18
12 23	8 49.49	+14 34.9	1.092	1.949	19.1	19.8	12 23	8 59.07	+25 8.6	1.763	2.594	14.1	20.1
1 2	8 45.99	+14 35.9	1.028	1.945	14.4	19.5	1 2	8 51.94	+25 58.1	1.704	2.610	10.4	19.9
1 12	8 39.19	+14 52.9	0.983	1.943	8.8	19.2	1 12	8 42.20	+26 48.8	1.670	2.626	6.3	19.7
1 22	8 30.09	+15 22.4	0.961	1.943	3.0	18.9	1 22	8 30.80	+27 33.7	1.664	2.641	3.2	19.5
2 1	8 20.29	+15 58.6	0.964	1.944	4.3	18.9	2 1	8 19.06	+28 6.8	1.688	2.656	5.0	19.7
2 11	8 11.65	+16 34.8	0.990	1.946	10.1	19.3	2 11	8 8.40	+28 24.8	1.740	2.669	8.8	19.9
2 21	8 5.67	+17 5.7	1.038	1.949	15.5	19.6	2 21	7 59.94	+28 27.7	1.818	2.682	12.5	20.2
3 2	8 3.27	+17 27.9	1.104	1.954	20.0	19.9	3 2	7 54.39	+28 17.5	1.918	2.695	15.6	20.4
<b>425992</b>	2011 HR <sub>89</sub>		1 25.2	100°98	3°7/27.9	18	<b>377230</b>	2004 AF <sub>6</sub>		1 25.2	14°97	1°5/26.4	18
12 23	8 48.77	+ 5 7.0	2.315	3.099	12.7	21.3	12 23	8 47.46	+10 3.0	1.762	2.582	14.6	19.7
1 2	8 43.83	+ 5 20.6	2.241	3.110	10.0	21.2	1 2	8 43.46	+11 11.1	1.689	2.586	11.0	19.5
1 12	8 37.21	+ 5 49.3	2.191	3.121	7.0	21.0	1 12	8 37.28	+12 37.7	1.639	2.591	6.9	19.3
1 22	8 29.52	+ 6 31.7	2.168	3.132	4.3	20.8	1 22	8 29.61	+14 17.8	1.616	2.596	2.6	19.0
2 1	8 21.53	+ 7 24.8	2.175	3.143	4.0	20.8	2 1	8 21.46	+16 4.0	1.623	2.602	3.1	19.0
2 11	8 14.10	+ 8 24.3	2.212	3.154	6.4	21.0	2 11	8 13.96	+17 47.9	1.658	2.608	7.4	19.3
2 21	8 7.97	+ 9 25.8	2.276	3.164	9.3	21.2	2 21	8 8.12	+19 22.7	1.721	2.615	11.4	19.6
3 2	8 3.68	+10 25.1	2.366	3.175	12.0	21.4	3 2	8 4.64	+20 43.9	1.807	2.623	14.8	19.8
<b>437817</b>	2015 DQ <sub>114</sub>		1 25.2	214°95	4°5/22.3	18	<b>79538</b>	1998 QN <sub>34</sub>		1 25.2	111°92	2°2/24.3	18
12 23	8 53.09	+31 18.6	2.253	3.085	11.4	20.5	12 23	8 59.91	+22 56.6	1.586	2.419	15.3	19.2
1 2	8												

EPHEMERIDES

1 25.2

1 25.2

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>337599</b>	2001 <i>TJ</i> <sub>1</sub>		1 25.2 132°37'	3°6'/27.9	18		<b>10867</b>	Lima		1 25.2 33°95'	0°8'/25.7	18	
12 23	8 48.49	+ 5 6.9	2.666	3.442	11.4	21.4	12 23	8 51.04	+14 27.1	1.764	2.591	14.3	18.3
1 2	8 43.46	+ 5 5.1	2.587	3.451	9.0	21.3	1 2	8 46.11	+14 59.0	1.689	2.592	10.7	18.1
1 12	8 36.94	+ 5 15.8	2.533	3.459	6.4	21.1	1 12	8 38.86	+15 43.2	1.638	2.593	6.5	17.8
1 22	8 29.49	+ 5 38.3	2.506	3.467	4.2	21.0	1 22	8 30.03	+16 35.4	1.613	2.595	2.0	17.5
2 1	8 21.77	+ 6 10.8	2.510	3.475	3.9	21.0	2 1	8 20.72	+17 30.5	1.618	2.597	3.1	17.6
2 11	8 14.53	+ 6 50.2	2.544	3.482	5.9	21.1	2 11	8 12.13	+18 22.9	1.650	2.598	7.6	17.9
2 21	8 8.40	+ 7 33.2	2.606	3.489	8.4	21.3	2 21	8 5.31	+19 8.4	1.709	2.600	11.7	18.2
3 2	8 3.90	+ 8 16.6	2.693	3.496	10.9	21.5	3 2	8 1.01	+19 44.7	1.790	2.602	15.1	18.4
<b>519007</b>	2010 <i>JG</i> <sub>95</sub>		1 25.2 99°73'	3°0'/27.1	18		<b>373154</b>	2012 <i>BY</i> <sub>148</sub>		1 25.2 291°88'	5°8'/29.5	17	
12 23	8 49.98	+ 8 47.7	2.235	3.032	12.7	21.4	12 23	8 49.76	- 1 6.2	1.746	2.517	16.7	21.4
1 2	8 44.78	+ 8 47.3	2.160	3.042	9.8	21.2	1 2	8 45.42	- 0 18.7	1.641	2.497	13.7	21.2
1 12	8 37.81	+ 8 59.3	2.111	3.051	6.5	21.0	1 12	8 38.65	+ 0 59.6	1.558	2.477	10.2	20.9
1 22	8 29.71	+ 9 22.1	2.089	3.060	3.6	20.9	1 22	8 30.04	+ 2 48.4	1.501	2.457	6.9	20.6
2 1	8 21.31	+ 9 53.2	2.096	3.069	3.5	20.9	2 1	8 20.58	+ 5 3.0	1.471	2.437	6.0	20.5
2 11	8 13.51	+10 29.2	2.133	3.078	6.4	21.1	2 11	8 11.51	+ 7 34.0	1.472	2.416	8.7	20.6
2 21	8 7.09	+11 6.6	2.198	3.086	9.5	21.3	2 21	8 4.01	+10 9.8	1.500	2.396	12.6	20.8
3 2	8 2.62	+11 42.2	2.286	3.095	12.4	21.5	3 2	7 59.03	+12 39.5	1.553	2.376	16.5	21.0
<b>62265</b>	2000 <i>SX</i> <sub>88</sub>		1 25.2 189°21'	2°0'/26.4	18		<b>35508</b>	1998 <i>FC</i> <sub>44</sub>		1 25.2 221°70'	3°0'/23.4	18	
12 23	8 51.55	+12 31.7	2.797	3.593	10.5	19.5	12 23	8 54.50	+26 53.6	2.289	3.117	11.4	19.7
1 2	8 45.65	+12 12.0	2.708	3.592	7.9	19.3	1 2	8 48.35	+27 29.8	2.205	3.109	8.5	19.5
1 12	8 38.22	+11 58.8	2.646	3.591	5.1	19.1	1 12	8 40.06	+28 6.0	2.147	3.101	5.3	19.3
1 22	8 29.81	+11 51.3	2.614	3.590	2.4	18.9	1 22	8 30.33	+28 37.1	2.118	3.092	3.0	19.1
2 1	8 21.12	+11 48.3	2.613	3.588	2.7	18.9	2 1	8 20.12	+28 58.7	2.119	3.084	4.5	19.2
2 11	8 12.90	+11 48.2	2.643	3.586	5.5	19.1	2 11	8 10.54	+29 8.0	2.149	3.074	7.7	19.3
2 21	8 5.82	+11 49.5	2.703	3.583	8.3	19.3	2 21	8 2.55	+29 4.7	2.206	3.065	10.8	19.5
3 2	8 0.40	+11 50.8	2.787	3.581	10.8	19.5	3 2	7 56.84	+28 50.0	2.287	3.054	13.6	19.7
<b>289804</b>	2005 <i>JN</i> <sub>146</sub>		1 25.2 235°60'	3°0'/27.7	17		<b>124376</b>	2001 <i>QG</i> <sub>155</sub>		1 25.2 18°82'	2°7'/26.1	18	
12 23	8 48.16	+ 5 55.4	2.994	3.768	10.4	22.5	12 23	8 54.79	+14 31.7	1.172	2.017	18.9	19.2
1 2	8 43.21	+ 6 7.4	2.888	3.753	8.1	22.3	1 2	8 49.65	+13 59.7	1.110	2.020	14.3	19.0
1 12	8 36.84	+ 6 31.1	2.809	3.738	5.7	22.2	1 12	8 41.24	+13 40.2	1.068	2.024	8.9	18.7
1 22	8 29.49	+ 7 5.6	2.758	3.722	3.5	22.0	1 22	8 30.65	+13 31.4	1.050	2.029	3.7	18.4
2 1	8 21.75	+ 7 48.8	2.738	3.706	3.3	22.0	2 1	8 19.52	+13 30.7	1.057	2.035	4.5	18.5
2 11	8 14.32	+ 8 37.9	2.749	3.689	5.4	22.1	2 11	8 9.66	+13 34.4	1.089	2.042	9.9	18.8
2 21	8 7.81	+ 9 29.7	2.789	3.671	8.0	22.2	2 21	8 2.50	+13 39.1	1.144	2.049	14.9	19.1
3 2	8 2.76	+10 20.9	2.855	3.653	10.4	22.4	3 2	7 58.85	+13 42.1	1.218	2.057	19.2	19.4
<b>410719</b>	2009 <i>BJ</i> <sub>67</sub>		1 25.2 262°42'	1°0'/25.7	17		<b>298896</b>	2004 <i>TL</i> <sub>45</sub>		1 25.2 175°68'	1°2'/24.6	18	
12 23	8 53.58	+15 2.3	1.746	2.569	14.6	22.0	12 23	8 56.90	+20 47.8	2.007	2.829	13.0	21.2
1 2	8 48.20	+15 17.7	1.652	2.554	11.0	21.7	1 2	8 50.20	+21 21.0	1.930	2.833	9.6	21.0
1 12	8 40.23	+15 44.4	1.582	2.537	6.7	21.4	1 12	8 41.18	+21 59.1	1.878	2.835	5.6	20.8
1 22	8 30.40	+16 19.2	1.539	2.521	2.1	21.1	1 22	8 30.61	+22 37.2	1.855	2.837	1.7	20.5
2 1	8 19.81	+16 57.5	1.525	2.504	3.3	21.1	2 1	8 19.57	+23 10.4	1.863	2.838	3.5	20.7
2 11	8 9.81	+17 34.5	1.539	2.486	8.1	21.4	2 11	8 9.29	+23 35.1	1.900	2.838	7.6	20.9
2 21	8 1.61	+18 6.5	1.579	2.469	12.5	21.6	2 21	8 0.80	+23 49.6	1.964	2.837	11.3	21.1
3 2	7 56.12	+18 31.1	1.641	2.451	16.4	21.8	3 2	7 54.83	+23 54.2	2.052	2.835	14.5	21.3
<b>204297</b>	2004 <i>PV</i> <sub>61</sub>		1 25.2 137°02'	0°1'/25.2	18		<b>428434</b>	2007 <i>TL</i> <sub>250</sub>		1 25.2 40°96'	4°3'/22.8	18	
12 23	8 55.11	+16 9.8	1.766	2.589	14.5	20.4	12 23	8 53.63	+30 37.8	2.074	2.909	12.2	20.5
1 2	8 49.03	+16 57.6	1.698	2.601	10.7	20.2	1 2	8 47.80	+31 16.2	2.009	2.914	9.1	20.3
1 12	8 40.53	+17 56.1	1.655	2.611	6.3	20.0	1 12	8 39.73	+31 51.0	1.970	2.920	6.1	20.2
1 22	8 30.42	+19 0.0	1.639	2.621	1.5	19.7	1 22	8 30.23	+32 16.7	1.958	2.926	4.3	20.1
2 1	8 19.87	+20 2.8	1.653	2.631	3.3	19.8	2 1	8 20.40	+32 28.7	1.975	2.932	5.6	20.2
2 11	8 10.16	+20 58.8	1.696	2.640	7.8	20.1	2 11	8 11.44	+32 25.0	2.020	2.938	8.6	20.4
2 21	8 2.37	+21 44.5	1.765	2.648	11.8	20.4	2 21	8 4.31	+32 6.5	2.091	2.944	11.6	20.6
3 2	7 57.23	+22 18.5	1.858	2.656	15.2	20.6	3 2	7 59.66	+31 35.5	2.184	2.951	14.2	20.8
<b>10794</b>	Vänge		1 25.2 121°67'	0°7'/24.7	18		<b>22791</b>	Twarog		1 25.2 120°02'	0°6'/24.9	18	
12 23	8 50.41	+20 14.0	2.805	3.623	9.8	18.9	12 23	8 58.46	+17 57.7	1.560	2.388	15.8	19.3
1 2	8 44.81	+20 40.8	2.737	3.638	7.2	18.7	1 2	8 51.67	+18 39.4	1.501	2.406	11.6	19.1
1 12	8 37.71	+21 10.9	2.696	3.652	4.2	18.5	1 12	8 42.13	+19 30.3	1.465	2.423	6.8	18.9
1 22	8 29.69	+21 41.3	2.684	3.667	1.1	18.3	1 22	8 30.84	+20 24.2	1.457	2.440	1.7	18.6
2 1	8 21.45	+22 8.9	2.704	3.680	2.5	18.5	2 1	8 19.18	+21 14.3	1.478	2.456	3.7	18.7
2 11	8 13.76	+22 31.5	2.755	3.694	5.5	18.7	2 11	8 8.63	+21 55.4	1.528	2.471	8.6	19.1
2 21	8 7.26	+22 47.6	2.834	3.707	8.2	18.9	2 21	8 0.39	+22 24.9	1.603	2.485	12.8	19.4
3 2	8 2.44	+22 56.8	2.939	3.719	10.6	19.1	3 2	7 55.17	+22 42.5	1.699	2.498	16.4	19.6
<b>19474</b>	1998 <i>HJ</i> <sub>80</sub>		1 25.2 213°36'	2°2'/23.7	18		<b>239241</b>	2006 <i>SZ</i> <sub>352</sub>		1 25.2 172°10'	1°9'/23.7	18	
12 23	8 50.64	+25 9.9	2.636	3.463	10.1	19.7	12 23	8 50.35	+24 29.3	2.810	3.634	9.6	21.3
1 2	8 45.23	+25 42.8	2.555	3.460	7.4	19.5	1 2	8 44.90	+25 6.9	2.733	3.636	7.0	21.1
1 12	8 38.08	+26 16.6	2.500	3.456	4.5	19.3	1 12	8 37.85	+25 45.8	2.683	3.638	4.2	20.9
1 22	8 29.80	+26 47.5	2.475	3.453	2.2	19.1	1 22	8 29.76	+26 22.3	2.662	3.640	2.0	20.8
2 1	8 21.18	+27 11.8	2.481	3.449	3.6	19.2	2 1	8 21.36	+26 52.9	2.672	3.641	3.3	20.9
2 11	8 13.08	+27 27.1	2.516	3.445	6.5	19.4	2 11	8 13.47	+27 15.0	2.713	3.642	6.1	21.0
2 21	8 6.26	+27 32.6	2.579	3.441	9.3	19.6	2 21	8 6.77	+27 27.8	2.782	3.643	8.8	21.2
3 2	8 1.32	+27 28.6	2.666	3.437	11.8	19.7	3 2	8 1.81	+27 31.3	2.875	3.643	11.1	21.4
<b>380709</b>	2005 <i>MK</i> <sub>19</sub>		1 25.2 269°51'	2°8'/27.3	18		<b>132857</b>	2002 <i>RE</i> <sub>67</sub>		1 25.2 168°15'	3°7'/27.5	18	
12 23	8 48.08	+ 7 51.1	2.387	3.182	12.1	21.0	12 23	8 49.95	+ 6 41.9	2.438	3.		



EPHEMERIDES

1 25.2

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>260006</b>	2004 <i>FX</i> <sub>123</sub>		1 25.2 250°63	1°9/23.9	18		<b>316872</b>	2000 <i>QO</i> <sub>192</sub>		1 25.2 89°88	7°8/21.7	18	
12 23	8 52.44	+20 28.9	1.961	2.792	12.9	20.7	12 23	8 2.42	+40 19.6	1.918	2.736	13.7	20.4
1 2	8 47.22	+21 38.7	1.872	2.779	9.5	20.4	1 2	8 54.49	+41 10.2	1.869	2.751	11.0	20.2
1 12	8 39.61	+22 57.3	1.808	2.766	5.6	20.1	1 12	8 43.72	+41 47.8	1.845	2.766	8.7	20.1
1 22	8 30.27	+24 18.4	1.772	2.753	2.1	19.9	1 22	8 31.23	+42 4.6	1.846	2.781	7.8	20.1
2 1	8 20.22	+25 34.7	1.767	2.739	4.1	20.0	2 1	8 18.57	+41 56.0	1.876	2.796	8.8	20.2
2 11	8 10.69	+26 40.1	1.791	2.725	8.2	20.2	2 11	8 7.31	+41 22.1	1.932	2.811	11.0	20.4
2 21	8 2.79	+27 31.0	1.841	2.711	12.1	20.4	2 21	7 58.61	+40 27.2	2.012	2.825	13.5	20.6
3 2	7 57.38	+28 6.5	1.914	2.697	15.4	20.6	3 2	7 53.12	+39 17.3	2.113	2.840	15.8	20.8
<b>503400</b>	2016 <i>CX</i> <sub>207</sub>		1 25.2 262°98	0°1/25.2	17		<b>393112</b>	2013 <i>BF</i> <sub>8</sub>		1 25.2 142°09	1°5/24.5	18	
12 23	8 52.12	+17 20.3	1.929	2.755	13.3	21.9	12 23	8 59.07	+21 58.3	1.870	2.694	13.7	21.7
1 2	8 46.91	+17 48.9	1.838	2.742	9.9	21.7	1 2	8 51.82	+22 25.1	1.804	2.707	10.1	21.5
1 12	8 39.37	+18 26.6	1.772	2.729	5.9	21.4	1 12	8 42.12	+22 55.2	1.763	2.720	5.9	21.3
1 22	8 30.20	+19 9.2	1.733	2.716	1.5	21.1	1 22	8 30.86	+23 23.5	1.750	2.732	1.9	21.0
2 1	8 20.40	+19 52.0	1.724	2.702	3.1	21.2	2 1	8 19.27	+23 45.3	1.768	2.742	3.8	21.2
2 11	8 11.17	+20 30.4	1.744	2.689	7.5	21.4	2 11	8 8.64	+23 57.5	1.815	2.752	7.9	21.5
2 21	8 3.57	+21 1.2	1.790	2.675	11.6	21.6	2 21	8 0.04	+23 59.4	1.889	2.761	11.7	21.7
3 2	7 58.42	+21 22.8	1.859	2.660	15.1	21.8	3 2	7 54.16	+23 52.0	1.986	2.770	14.8	21.9
<b>60530</b>	2000 <i>ED</i> <sub>48</sub>		1 25.2 76°77	5°8/28.8	18		<b>314759</b>	2006 <i>ST</i> <sub>328</sub>		1 25.2 269°82	2°5/23.9	18	
12 23	8 51.73	+1 59.3	1.716	2.499	16.5	18.7	12 23	8 53.80	+23 5.3	1.742	2.580	13.9	21.0
1 2	8 46.43	+1 56.3	1.654	2.518	13.2	18.6	1 2	8 48.44	+23 50.7	1.658	2.569	10.3	20.7
1 12	8 38.93	+2 15.3	1.614	2.537	9.7	18.4	1 12	8 40.42	+24 41.2	1.599	2.558	6.2	20.4
1 22	8 30.04	+2 55.4	1.600	2.556	6.6	18.3	1 22	8 30.52	+25 30.5	1.567	2.547	2.6	20.2
2 1	8 20.84	+3 53.3	1.612	2.574	6.0	18.4	2 1	8 19.92	+26 12.2	1.564	2.536	4.6	20.3
2 11	8 12.50	+5 2.9	1.653	2.593	8.3	18.3	2 11	8 10.04	+26 41.4	1.588	2.524	8.9	20.5
2 21	8 5.95	+6 17.4	1.720	2.611	11.6	18.7	2 21	8 2.12	+26 56.3	1.638	2.513	13.0	20.7
3 2	8 1.84	+7 30.6	1.809	2.629	14.7	18.9	3 2	7 57.02	+26 57.4	1.709	2.501	16.5	20.9
<b>424956</b>	2008 <i>YK</i> <sub>160</sub>		1 25.2 276°31	2°1/24.0	17		<b>328455</b>	2008 <i>TX</i> <sub>179</sub>		1 25.2 105°86	2°6/27.4	18	
12 23	8 52.93	+25 36.3	2.540	3.365	10.5	21.6	12 23	8 50.23	+7 23.4	2.443	3.231	12.0	21.2
1 2	8 47.06	+25 51.1	2.440	3.344	7.8	21.4	1 2	8 44.82	+7 58.0	2.376	3.251	9.2	21.1
1 12	8 39.26	+26 5.8	2.367	3.323	4.8	21.2	1 12	8 37.81	+8 45.9	2.333	3.271	6.1	20.9
1 22	8 30.15	+26 16.8	2.323	3.302	2.2	21.0	1 22	8 29.79	+9 44.6	2.319	3.291	3.2	20.7
2 1	8 20.55	+26 21.0	2.310	3.280	3.6	21.0	2 1	8 21.52	+10 50.3	2.336	3.310	3.1	20.8
2 11	8 11.44	+26 16.3	2.327	3.258	6.8	21.2	2 11	8 13.83	+11 58.3	2.384	3.329	5.8	21.0
2 21	8 3.68	+26 2.3	2.371	3.237	9.9	21.4	2 21	8 7.42	+13 4.5	2.461	3.347	8.8	21.2
3 2	7 57.94	+25 39.8	2.440	3.214	12.7	21.5	3 2	8 2.80	+14 5.5	2.563	3.365	11.4	21.4
<b>154312</b>	2002 <i>VX</i> <sub>18</sub>		1 25.2 293°41	5°6/27.5	18		<b>160682</b>	2000 <i>DN</i> <sub>39</sub>		1 25.2 230°29	1°5/24.4	18	
12 23	8 53.53	+6 35.7	1.382	2.196	18.3	20.1	12 23	8 53.37	+23 23.1	2.270	3.096	11.5	19.9
1 2	8 48.48	+6 6.0	1.305	2.191	14.5	19.8	1 2	8 47.43	+23 36.0	2.188	3.092	8.5	19.7
1 12	8 40.52	+5 56.1	1.249	2.187	10.2	19.5	1 12	8 39.49	+23 50.5	2.131	3.088	5.0	19.5
1 22	8 30.52	+6 6.6	1.216	2.183	6.4	19.3	1 22	8 30.23	+24 2.8	2.103	3.084	1.8	19.3
2 1	8 19.78	+6 35.6	1.209	2.179	6.2	19.3	2 1	8 20.58	+24 9.6	2.106	3.080	3.3	19.4
2 11	8 9.91	+7 18.0	1.229	2.175	9.8	19.5	2 11	8 11.59	+24 8.8	2.138	3.075	6.9	19.6
2 21	8 2.24	+8 7.4	1.272	2.171	14.2	19.7	2 21	8 4.14	+23 59.9	2.198	3.071	10.2	19.8
3 2	7 57.70	+8 57.6	1.335	2.167	18.2	19.9	3 2	7 58.86	+23 43.4	2.281	3.066	13.1	20.0
<b>267459</b>	2002 <i>EZ</i> <sub>66</sub>		1 25.2 280°98	4°3/27.8	18		<b>57386</b>	2001 <i>RX</i> <sub>71</sub>		1 25.2 165°51	6°2/22.4	18	
12 23	8 49.40	+5 30.0	1.983	2.776	14.2	20.5	12 23	8 54.45	+34 35.3	1.754	2.595	13.8	18.7
1 2	8 44.74	+5 29.6	1.892	2.767	11.3	20.3	1 2	8 48.80	+35 16.1	1.697	2.601	10.6	18.5
1 12	8 38.01	+5 46.0	1.825	2.758	8.0	20.1	1 12	8 40.48	+35 49.3	1.664	2.607	7.7	18.3
1 22	8 29.85	+6 18.7	1.784	2.749	5.0	19.9	1 22	8 30.47	+36 7.6	1.657	2.615	6.2	18.3
2 1	8 21.16	+7 5.3	1.771	2.739	4.7	19.8	2 1	8 20.16	+36 6.1	1.677	2.623	7.5	18.4
2 11	8 12.98	+8 1.2	1.786	2.730	7.5	20.0	2 11	8 10.99	+35 43.7	1.723	2.632	10.3	18.5
2 21	8 6.26	+9 1.3	1.829	2.721	11.0	20.2	2 21	8 4.07	+35 2.9	1.793	2.642	13.4	18.8
3 2	8 1.73	+10 0.7	1.894	2.712	14.2	20.4	3 2	8 0.09	+34 7.9	1.884	2.653	16.1	19.0
<b>81459</b>	2000 <i>GE</i> <sub>132</sub>		1 25.2 69°33	2°5/23.5	18		<b>236922</b>	2007 <i>TA</i> <sub>154</sub>		1 25.3 196°12	2°8/23.6	18	
12 23	8 50.85	+23 39.1	2.117	2.952	12.0	19.5	12 23	8 53.17	+27 11.4	2.400	3.228	11.0	20.2
1 2	8 45.68	+24 38.2	2.053	2.962	8.7	19.3	1 2	8 47.23	+27 38.8	2.322	3.226	8.1	20.0
1 12	8 38.47	+25 40.5	2.014	2.971	5.2	19.1	1 12	8 39.34	+28 5.3	2.271	3.225	5.1	19.8
1 22	8 29.94	+26 40.1	2.003	2.981	2.6	19.0	1 22	8 30.19	+28 26.6	2.249	3.224	2.8	19.7
2 1	8 21.04	+27 31.7	2.023	2.991	4.2	19.1	2 1	8 20.69	+28 39.0	2.257	3.222	4.2	19.8
2 11	8 12.85	+28 11.3	2.071	3.002	7.6	19.3	2 11	8 11.85	+28 40.5	2.294	3.221	7.2	20.0
2 21	8 6.25	+28 37.4	2.146	3.012	10.8	19.5	2 21	8 4.51	+28 30.8	2.359	3.219	10.2	20.2
3 2	8 1.88	+28 50.3	2.243	3.022	13.5	19.7	3 2	7 59.31	+28 11.3	2.447	3.217	12.8	20.3
<b>197366</b>	2003 <i>XQ</i> <sub>21</sub>		1 25.2 356°23	2°9/23.6	18		<b>176903</b>	2002 <i>VR</i> <sub>66</sub>		1 25.3 110°04	0°2/25.3	18	
12 23	8 50.11	+24 25.0	1.729	2.575	13.7	19.7	12 23	8 55.33	+17 3.8	2.000	2.818	13.2	21.3
1 2	8 45.61	+25 10.5	1.657	2.572	10.0	19.5	1 2	8 48.84	+17 27.4	1.939	2.839	9.7	21.1
1 12	8 38.65	+25 59.2	1.610	2.569	6.1	19.3	1 12	8 40.28	+17 58.2	1.904	2.859	5.7	20.9
1 22	8 30.02	+26 45.0	1.589	2.568	3.0	19.1	1 22	8 30.42	+18 32.2	1.896	2.879	1.4	20.7
2 1	8 20.88	+27 21.9	1.596	2.567	4.8	19.2	2 1	8 20.32	+19 5.4	1.920	2.898	2.9	20.8
2 11	8 12.56	+27 45.5	1.631	2.566	8.8	19.4	2 11	8 11.08	+19 34.0	1.973	2.916	6.9	21.1
2 21	8 6.14	+27 54.7	1.690	2.566	12.6	19.6	2 21	8 3.58	+19 56.1	2.053	2.934	10.5	21.4
3 2	8 2.40	+27 50.1	1.770	2.568	15.9	19.9	3 2	7 58.45	+20 10.6	2.157	2.952	13.5	21.6
<b>214480</b>	2005 <i>TH</i> <sub>74</sub>		1 25.2 120°57	5°3/30.2	18		<b>468092</b>	2013 <i>TS</i> <sub>155</sub>		1 25.3 37°87	4°6/22.4	18	
12 23	8 46.71	-3 28.4	3.043	3.770	11.2	20.5	12 23	8 5					

EPHEMERIDES

1 25.3

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>60465</b>	2000 <i>DM</i> <sub>9</sub>		1 25.3 169°47'	0°5'/25.6	18		<b>6641</b>	Bobross		1 25.3 85°30'	1°7'/24.2	18	
12 23	8 50.48	+15 46.7	2.398	3.213	11.4	20.0	12 23	8 53.67	+21 39.9	1.947	2.778	13.0	17.7
1 2	8 45.18	+16 9.2	2.318	3.215	8.4	19.8	1 2	8 47.78	+22 25.4	1.890	2.797	9.5	17.5
1 12	8 38.12	+16 39.3	2.263	3.217	5.1	19.6	1 12	8 39.73	+23 15.1	1.858	2.816	5.5	17.3
1 22	8 29.91	+17 14.0	2.237	3.219	1.4	19.4	1 22	8 30.33	+24 3.3	1.854	2.835	2.0	17.1
2 1	8 21.34	+17 49.9	2.241	3.220	2.5	19.5	2 1	8 20.66	+24 45.0	1.880	2.854	3.7	17.3
2 11	8 13.31	+18 23.6	2.276	3.221	6.0	19.7	2 11	8 11.86	+25 16.5	1.936	2.873	7.5	17.6
2 21	8 6.60	+18 52.7	2.339	3.222	9.3	19.9	2 21	8 4.85	+25 36.2	2.017	2.891	11.0	17.8
3 2	8 1.79	+19 15.5	2.426	3.222	12.1	20.1	3 2	8 0.25	+25 44.6	2.122	2.909	13.9	18.0
<b>108740</b>	2001 <i>OU</i> <sub>38</sub>		1 25.3 131°07'	3°4'/22.8	18		<b>101415</b>	1998 <i>VB</i> <sub>12</sub>		1 25.3 107°08'	2°1'/26.6	18	
12 23	8 53.92	+30 47.0	2.888	3.707	9.5	20.9	12 23	8 54.37	+10 51.9	2.041	2.842	13.6	20.7
1 2	8 47.44	+31 24.4	2.826	3.722	7.1	20.7	1 2	8 48.08	+11 14.2	1.980	2.867	10.2	20.5
1 12	8 39.31	+31 58.6	2.791	3.737	4.8	20.6	1 12	8 39.82	+11 48.7	1.944	2.891	6.5	20.3
1 22	8 30.18	+32 25.2	2.786	3.751	3.4	20.5	1 22	8 30.35	+12 32.4	1.937	2.914	2.8	20.2
2 1	8 20.84	+32 41.3	2.812	3.765	4.4	20.6	2 1	8 20.64	+13 21.2	1.959	2.936	3.1	20.2
2 11	8 12.14	+32 45.3	2.869	3.778	6.7	20.8	2 11	8 11.74	+14 10.5	2.012	2.958	6.6	20.5
2 21	8 4.80	+32 37.5	2.953	3.791	9.0	21.0	2 21	8 4.47	+14 56.5	2.093	2.979	10.1	20.7
3 2	7 59.33	+32 19.4	3.061	3.803	11.0	21.1	3 2	7 59.44	+15 36.7	2.198	2.999	13.0	21.0
<b>238426</b>	2004 <i>GX</i> <sub>15</sub>		1 25.3 258°60'	3°4'/27.7	18		<b>354104</b>	2001 <i>YE</i> <sub>34</sub>		1 25.3 3°31'	0°7'/25.0	18	
12 23	8 47.92	+ 6 22.6	2.426	3.214	12.1	20.7	12 23	8 52.48	+19 10.0	1.162	2.019	18.1	21.0
1 2	8 43.30	+ 6 28.1	2.338	3.210	9.5	20.5	1 2	8 48.18	+19 25.5	1.098	2.018	13.4	20.7
1 12	8 37.03	+ 6 47.1	2.274	3.207	6.6	20.3	1 12	8 40.55	+19 50.9	1.055	2.017	7.9	20.4
1 22	8 29.65	+ 7 18.6	2.238	3.204	4.0	20.1	1 22	8 30.62	+20 20.5	1.035	2.018	2.0	20.0
2 1	8 21.90	+ 8 0.1	2.231	3.201	3.8	20.1	2 1	8 20.03	+20 47.8	1.041	2.020	4.3	20.2
2 11	8 14.61	+ 8 48.3	2.254	3.197	6.2	20.3	2 11	8 10.65	+21 7.1	1.071	2.022	10.2	20.5
2 21	8 8.50	+ 9 39.1	2.305	3.194	9.2	20.4	2 21	8 3.97	+21 16.0	1.123	2.026	15.4	20.8
3 2	8 4.15	+10 28.9	2.381	3.191	11.9	20.6	3 2	8 0.88	+21 13.9	1.194	2.030	19.7	21.1
<b>443400</b>	2014 <i>HV</i> <sub>34</sub>		1 25.3 84°00'	2°7'/26.7	18		<b>366768</b>	2004 <i>RR</i> <sub>211</sub>		1 25.3 105°50'	9°5'/2.9	18	
12 23	8 54.19	+10 7.5	1.391	2.214	17.6	21.3	12 23	8 50.37	-13 58.7	2.283	2.953	15.9	21.4
1 2	8 48.78	+10 32.7	1.330	2.228	13.4	21.0	1 2	8 45.08	-14 8.8	2.213	2.971	14.0	21.3
1 12	8 40.59	+11 16.9	1.291	2.241	8.5	20.8	1 12	8 38.05	-13 52.0	2.163	2.989	12.0	21.2
1 22	8 30.57	+12 16.3	1.277	2.255	3.8	20.5	1 22	8 29.91	-13 6.6	2.135	3.006	10.3	21.1
2 1	8 20.09	+13 24.2	1.290	2.268	4.0	20.6	2 1	8 21.50	-11 53.6	2.132	3.023	9.5	21.1
2 11	8 10.67	+14 33.2	1.331	2.281	8.7	20.9	2 11	8 13.71	-10 17.8	2.157	3.040	9.9	21.1
2 21	8 3.53	+15 36.7	1.396	2.294	13.2	21.2	2 21	8 7.30	- 8 26.2	2.208	3.056	11.2	21.2
3 2	7 59.43	+16 30.7	1.483	2.307	17.1	21.5	3 2	8 2.82	- 6 26.8	2.284	3.071	13.0	21.4
<b>214402</b>	2005 <i>NB</i> <sub>54</sub>		1 25.3 206°06'	0°9'/25.9	17		<b>222335</b>	2000 <i>UO</i> <sub>92</sub>		1 25.3 38°70'	9°0'/21.0	18	
12 23	8 48.55	+14 0.7	2.878	3.683	9.9	21.2	12 23	8 59.76	+40 50.6	1.671	2.499	14.9	19.8
1 2	8 43.56	+14 22.6	2.787	3.679	7.4	21.0	1 2	8 53.09	+41 56.4	1.621	2.507	12.1	19.7
1 12	8 37.10	+14 52.1	2.724	3.674	4.5	20.8	1 12	8 43.17	+42 48.5	1.594	2.515	9.8	19.6
1 22	8 29.66	+15 26.7	2.689	3.670	1.6	20.6	1 22	8 31.22	+43 17.4	1.592	2.524	9.0	19.5
2 1	8 21.90	+16 3.9	2.686	3.664	2.2	20.6	2 1	8 18.91	+43 17.0	1.616	2.533	10.2	19.6
2 11	8 14.53	+16 40.8	2.714	3.659	5.2	20.8	2 11	8 8.06	+42 46.9	1.665	2.543	12.5	19.8
2 21	8 8.19	+17 14.8	2.771	3.653	8.1	21.0	2 21	7 59.99	+41 51.9	1.736	2.553	15.2	20.0
3 2	8 3.41	+17 44.2	2.853	3.646	10.6	21.2	3 2	7 55.44	+40 38.8	1.826	2.563	17.6	20.2
<b>265854</b>	2005 <i>YX</i> <sub>131</sub>		1 25.3 348°89'	0°1'/25.2	18		<b>116251</b>	2003 <i>YV</i> <sub>23</sub>		1 25.3 350°62'	4°5'/22.9	18	
12 23	8 50.66	+17 12.8	1.812	2.644	13.8	20.5	12 23	8 53.89	+30 25.9	1.953	2.790	12.7	19.7
1 2	8 45.86	+17 44.7	1.735	2.642	10.2	20.3	1 2	8 48.23	+31 5.3	1.882	2.788	9.6	19.5
1 12	8 38.77	+18 25.9	1.682	2.640	6.0	20.0	1 12	8 40.16	+31 41.6	1.835	2.786	6.4	19.3
1 22	8 30.12	+19 12.2	1.656	2.639	1.5	19.7	1 22	8 30.48	+32 8.7	1.816	2.784	4.5	19.2
2 1	8 20.97	+19 58.3	1.659	2.637	3.2	19.8	2 1	8 20.37	+32 21.5	1.826	2.783	5.9	19.3
2 11	8 12.52	+20 39.4	1.690	2.637	7.6	20.1	2 11	8 11.12	+32 17.6	1.863	2.782	9.0	19.5
2 21	8 5.81	+21 12.2	1.747	2.636	11.6	20.3	2 21	8 3.79	+31 57.8	1.925	2.782	12.3	19.7
3 2	8 1.58	+21 35.3	1.827	2.635	15.0	20.5	3 2	7 59.10	+31 24.8	2.009	2.781	15.1	19.9
<b>425354</b>	2010 <i>BC</i> <sub>53</sub>		1 25.3 214°69'	4°9'/20.3	17		<b>273408</b>	2006 <i>VY</i> <sub>151</sub>		1 25.3 5°94'	5°2'/27.9	18	
12 23	8 52.73	+34 44.0	2.946	3.766	9.4	21.2	12 23	8 48.24	+ 5 36.6	1.375	2.195	18.0	19.8
1 2	8 46.94	+36 10.4	2.868	3.758	7.3	21.1	1 2	8 44.54	+ 5 34.8	1.305	2.195	14.2	19.6
1 12	8 39.26	+37 33.6	2.819	3.750	5.5	21.0	1 12	8 38.19	+ 5 56.3	1.256	2.196	10.0	19.3
1 22	8 30.24	+38 47.6	2.799	3.742	5.0	20.9	1 22	8 30.03	+ 6 40.3	1.229	2.198	6.1	19.1
2 1	8 20.67	+39 47.3	2.810	3.734	6.1	21.0	2 1	8 21.29	+ 7 42.5	1.229	2.200	5.6	19.1
2 11	8 11.51	+40 29.6	2.850	3.725	8.0	21.1	2 11	8 13.40	+ 8 55.8	1.254	2.204	9.1	19.3
2 21	8 3.60	+40 54.1	2.916	3.715	10.2	21.2	2 21	8 7.57	+10 12.1	1.302	2.209	13.4	19.6
3 2	7 57.62	+41 2.2	3.005	3.705	12.1	21.4	3 2	8 4.61	+11 24.2	1.373	2.214	17.2	19.8
<b>491276</b>	2011 <i>UZ</i> <sub>362</sub>		1 25.3 29°90'	0°6'/25.5	17		<b>193853</b>	2001 <i>QY</i> <sub>115</sub>		1 25.3 119°15'	1°2'/25.8	18	
12 23	8 53.43	+16 35.3	1.372	2.213	16.8	21.5	12 23	8 57.93	+15 26.2	1.638	2.459	15.5	20.4
1 2	8 48.37	+16 47.6	1.307	2.218	12.5	21.3	1 2	8 51.18	+15 28.4	1.574	2.474	11.5	20.2
1 12	8 40.42	+17 11.2	1.265	2.223	7.5	21.0	1 12	8 41.85	+15 40.3	1.534	2.488	7.0	19.9
1 22	8 30.55	+17 41.4	1.247	2.229	2.0	20.7	1 22	8 30.90	+15 58.5	1.521	2.502	2.2	19.7
2 1	8 20.16	+18 13.0	1.256	2.235	3.7	20.8	2 1	8 19.60	+16 19.0	1.536	2.515	3.3	19.8
2 11	8 10.84	+18 40.8	1.291	2.242	8.9	21.1	2 11	8 9.34	+16 38.0	1.581	2.528	8.0	20.1
2 21	8 3.86	+19 1.5	1.351	2.249	13.6	21.4	2 21	8 1.23	+16 53.1	1.651	2.540	12.2	20.3
3 2	8 0.01	+19 13.7	1.431	2.256	17.6	21.7	3 2	7 55.96	+17 2.7	1.744	2.551	15.7	20.6
<b>31360</b>	Huangyihuan		1 25.3 191°17'	0°9'/24.9	18		<b>449219</b>	2013 <i>CQ</i> <sub>92</sub>		1 25.3 49°93'	0°1'/25.3	18	
12 23	8 56.85	+19 34.0	1.662	2.493	14.9	18.8	12 23	8					

EPHEMERIDES

1 25.3

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>369853</b>	2012 <i>JY</i> <sub>52</sub>		1 25.3 100°79	2°4/26.6	18		<b>154299</b>	2002 <i>TF</i> <sub>294</sub>		1 25.3 76°15	3°7/27.1	18	
12 23	8 51.62	+11 9.2	1.968	2.778	13.7	21.1	12 23	8 53.49	+ 8 28.7	1.340	2.162	18.3	20.3
1 2	8 46.28	+11 12.5	1.894	2.784	10.4	20.9	1 2	8 48.44	+ 8 43.9	1.275	2.170	14.1	20.0
1 12	8 38.89	+11 28.0	1.844	2.791	6.7	20.7	1 12	8 40.51	+ 9 20.6	1.231	2.178	9.3	19.8
1 22	8 30.17	+11 53.5	1.821	2.798	3.1	20.5	1 22	8 30.64	+10 15.7	1.211	2.186	4.7	19.5
2 1	8 21.07	+12 25.8	1.828	2.804	3.4	20.5	2 1	8 20.21	+11 23.5	1.218	2.195	4.6	19.5
2 11	8 12.67	+13 1.2	1.863	2.811	6.9	20.7	2 11	8 10.81	+12 35.9	1.252	2.203	9.1	19.8
2 21	8 5.86	+13 35.9	1.926	2.817	10.6	20.9	2 21	8 3.70	+13 45.6	1.310	2.211	13.7	20.1
3 2	8 1.30	+14 7.0	2.012	2.823	13.7	21.2	3 2	7 59.72	+14 47.1	1.389	2.220	17.7	20.4
<b>503322</b>	2016 <i>AV</i> <sub>178</sub>		1 25.3 266°59	3°0/26.5	18		<b>109417</b>	2001 <i>QT</i> <sub>191</sub>		1 25.3 132°72	4°6/28.1	18	
12 23	8 54.00	+11 28.0	1.930	2.737	14.0	21.6	12 23	8 50.66	+ 3 58.8	2.516	3.286	12.2	19.4
1 2	8 48.26	+11 1.8	1.834	2.723	10.8	21.4	1 2	8 45.18	+ 3 26.6	2.436	3.292	9.8	19.3
1 12	8 40.22	+10 45.7	1.763	2.708	7.1	21.1	1 12	8 38.10	+ 3 7.1	2.380	3.298	7.2	19.1
1 22	8 30.54	+10 39.0	1.718	2.693	3.7	20.9	1 22	8 29.98	+ 3 0.6	2.351	3.304	5.1	19.0
2 1	8 20.24	+10 40.4	1.703	2.677	3.9	20.9	2 1	8 21.57	+ 3 6.5	2.353	3.309	4.8	19.0
2 11	8 10.51	+10 47.4	1.717	2.662	7.6	21.0	2 11	8 13.67	+ 3 22.6	2.383	3.315	6.7	19.1
2 21	8 2.39	+10 57.5	1.757	2.646	11.5	21.2	2 21	8 6.99	+ 3 46.0	2.442	3.320	9.2	19.3
3 2	7 56.69	+11 8.0	1.820	2.630	15.0	21.4	3 2	8 2.06	+ 4 13.3	2.525	3.325	11.6	19.4
<b>111156</b>	2001 <i>VR</i> <sub>104</sub>		1 25.3 143°23	2°9/23.5	18		<b>246214</b>	2007 <i>RE</i> <sub>167</sub>		1 25.3 356°10	6°5/22.4	18	
12 23	8 54.87	+25 42.7	2.057	2.888	12.4	19.9	12 23	8 55.45	+35 4.1	1.723	2.562	14.0	19.8
1 2	8 48.75	+26 27.9	1.988	2.894	9.1	19.7	1 2	8 49.75	+35 42.7	1.657	2.559	10.9	19.6
1 12	8 40.38	+27 14.0	1.945	2.901	5.6	19.5	1 12	8 41.20	+36 13.3	1.614	2.556	7.9	19.4
1 22	8 30.55	+27 55.3	1.931	2.907	3.0	19.4	1 22	8 30.80	+36 28.5	1.597	2.554	6.5	19.3
2 1	8 20.33	+28 26.8	1.946	2.913	4.6	19.5	2 1	8 19.95	+36 22.7	1.607	2.553	7.8	19.4
2 11	8 10.90	+28 45.2	1.990	2.918	8.0	19.7	2 11	8 10.22	+35 54.6	1.643	2.553	10.7	19.6
2 21	8 3.24	+28 50.2	2.061	2.923	11.3	19.9	2 21	8 2.82	+35 7.1	1.703	2.553	13.9	19.8
3 2	7 58.04	+28 42.8	2.154	2.928	14.2	20.1	3 2	7 58.51	+34 4.6	1.784	2.554	16.8	20.0
<b>305015</b>	2007 <i>TO</i> <sub>357</sub>		1 25.3 236°78	4°1/23.2	18		<b>327902</b>	2007 <i>CX</i> <sub>38</sub>		1 25.3 72°63	1°6/26.3	18	
12 23	8 57.07	+27 30.9	1.715	2.552	14.2	20.7	12 23	8 51.27	+11 39.8	1.757	2.576	14.7	20.8
1 2	8 50.96	+28 19.8	1.637	2.545	10.6	20.5	1 2	8 46.24	+12 19.9	1.691	2.588	11.1	20.6
1 12	8 41.98	+29 9.2	1.583	2.537	6.8	20.2	1 12	8 38.97	+13 14.8	1.649	2.601	6.9	20.4
1 22	8 31.01	+29 51.5	1.556	2.529	4.2	20.0	1 22	8 30.23	+14 20.3	1.634	2.614	2.6	20.1
2 1	8 19.35	+30 20.1	1.557	2.521	5.9	20.1	2 1	8 21.11	+15 30.4	1.648	2.626	3.1	20.2
2 11	8 8.58	+30 31.0	1.587	2.513	9.8	20.3	2 11	8 12.78	+16 39.1	1.690	2.639	7.3	20.5
2 21	7 59.98	+30 24.2	1.641	2.504	13.7	20.6	2 21	8 6.21	+17 41.1	1.759	2.652	11.3	20.7
3 2	7 54.44	+30 2.2	1.715	2.495	17.0	20.8	3 2	8 2.10	+18 33.4	1.851	2.665	14.6	21.0
<b>90115</b>	2002 <i>XJ</i> <sub>54</sub>		1 25.3 330°38	1°2/24.7	18		<b>440402</b>	2005 <i>NO</i> <sub>41</sub>		1 25.3 83°92	0°8/25.6	17	
12 23	8 53.55	+18 22.9	1.316	2.163	17.0	19.4	12 23	8 57.58	+15 30.8	1.348	2.181	17.5	21.7
1 2	8 48.81	+19 12.7	1.245	2.160	12.6	19.1	1 2	8 51.29	+15 53.0	1.295	2.202	13.0	21.4
1 12	8 40.90	+20 15.2	1.196	2.157	7.4	18.8	1 12	8 42.07	+16 27.6	1.264	2.222	7.7	21.2
1 22	8 30.76	+21 23.1	1.172	2.155	2.0	18.4	1 22	8 31.01	+17 9.4	1.259	2.241	2.2	20.9
2 1	8 19.85	+22 27.9	1.175	2.152	4.4	18.6	2 1	8 19.63	+17 52.1	1.282	2.261	3.7	21.1
2 11	8 9.92	+23 21.8	1.204	2.150	9.9	18.9	2 11	8 9.54	+18 29.8	1.331	2.280	8.9	21.4
2 21	8 2.44	+24 0.7	1.256	2.148	14.9	19.2	2 21	8 1.97	+18 59.4	1.405	2.299	13.5	21.7
3 2	7 58.36	+24 23.8	1.328	2.147	19.0	19.4	3 2	7 57.62	+19 19.3	1.500	2.318	17.3	22.0
<b>290526</b>	2005 <i>UD</i> <sub>45</sub>		1 25.3 7°89	0°6/25.6	18		<b>310948</b>	2003 <i>UM</i> <sub>14</sub>		1 25.3 118°98	4°0/22.8	18	
12 23	8 50.96	+15 26.8	1.697	2.528	14.6	20.6	12 23	8 56.91	+26 28.5	1.859	2.691	13.4	21.3
1 2	8 46.19	+15 52.8	1.623	2.529	10.9	20.3	1 2	8 50.46	+27 48.0	1.802	2.708	9.9	21.1
1 12	8 39.03	+16 30.1	1.572	2.529	6.5	20.1	1 12	8 41.49	+29 8.5	1.770	2.724	6.3	20.9
1 22	8 30.25	+17 14.7	1.548	2.530	1.9	19.8	1 22	8 30.87	+30 21.9	1.767	2.739	4.0	20.8
2 1	8 20.96	+18 1.4	1.552	2.531	3.2	19.9	2 1	8 19.84	+31 21.0	1.794	2.754	5.7	20.9
2 11	8 12.44	+18 45.0	1.584	2.533	7.8	20.2	2 11	8 9.75	+32 1.5	1.849	2.769	9.1	21.2
2 21	8 5.75	+19 21.7	1.642	2.535	12.0	20.4	2 21	8 1.68	+32 23.1	1.930	2.782	12.4	21.4
3 2	8 1.66	+19 49.4	1.721	2.537	15.5	20.7	3 2	7 56.38	+32 27.7	2.033	2.795	15.3	21.6
<b>1996</b>	Adams		1 25.3 109°31	7°3/21.9	18 R		<b>376008</b>	2010 <i>AB</i> <sub>33</sub>		1 25.3 46°27	1°6/24.5	18	
12 23	9 2.54	+38 12.6	1.856	2.678	13.9	15.9	12 23	8 53.90	+22 56.4	1.898	2.732	13.2	20.6
1 2	8 54.71	+39 4.9	1.803	2.691	11.0	15.7	1 2	8 48.07	+23 7.8	1.831	2.739	9.7	20.4
1 12	8 43.97	+39 46.1	1.775	2.704	8.4	15.6	1 12	8 40.00	+23 21.3	1.788	2.746	5.7	20.2
1 22	8 31.44	+40 8.0	1.773	2.717	7.3	15.5	1 22	8 30.49	+23 32.8	1.773	2.754	1.9	20.0
2 1	8 18.66	+40 5.3	1.800	2.729	8.5	15.6	2 1	8 20.66	+23 38.7	1.787	2.762	3.6	20.1
2 11	8 7.24	+39 37.8	1.853	2.741	10.9	15.8	2 11	8 11.70	+23 36.5	1.829	2.770	7.6	20.4
2 21	7 58.36	+38 49.3	1.930	2.753	13.7	16.0	2 21	8 4.60	+23 25.8	1.898	2.778	11.3	20.6
3 2	7 52.73	+37 45.6	2.028	2.764	16.1	16.2	3 2	7 59.98	+23 7.5	1.990	2.787	14.4	20.8
<b>265885</b>	2006 <i>AQ</i> <sub>26</sub>		1 25.3 281°45	1°1/24.6	18		<b>247012</b>	1999 <i>VL</i> <sub>192</sub>		1 25.3 57°96	1°9/26.1	18	
12 23	8 51.49	+19 53.0	1.941	2.773	13.0	20.3	12 23	8 55.21	+14 23.2	1.466	2.296	16.6	19.6
1 2	8 46.42	+20 34.0	1.862	2.770	9.5	20.1	1 2	8 49.40	+14 12.1	1.406	2.309	12.4	19.4
1 12	8 39.11	+21 22.0	1.807	2.766	5.6	19.8	1 12	8 40.91	+14 12.4	1.368	2.322	7.7	19.2
1 22	8 30.27	+22 11.9	1.781	2.763	1.6	19.6	1 22	8 30.73	+14 21.5	1.356	2.336	2.9	18.9
2 1	8 20.91	+22 58.5	1.783	2.759	3.5	19.7	2 1	8 20.20	+14 35.8	1.372	2.350	3.7	19.0
2 11	8 12.22	+23 37.1	1.815	2.756	7.6	19.9	2 11	8 10.77	+14 51.5	1.415	2.365	8.4	19.3
2 21	8 5.19	+24 5.2	1.872	2.752	11.4	20.2	2 21	8 3.59	+15 5.4	1.482	2.379	12.7	19.6
3 2	8 0.56	+24 22.1	1.952	2.749	14.6	20.4	3 2	7 59.36	+15 15.5	1.572	2.394	16.4	19.9
<b>458771</b>	2011 <i>SL</i> <sub>67</sub>		1 25.3 107°58	2°6/24.1	18		<b>64076</b>	2001 <i>SK</i> <sub>279</sub>		1 25.3 67°00	0°9/24.9	18	
12 23	9 0.17	+24 41.4	1.728	2.558	14.4	21.5	12						

EPHEMERIDES

1 25.3

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>111353</b>	2001 XE <sub>109</sub>		1 25.3 341°42	4.4°/23.1	18		<b>3625</b>	Fracastoro		1 25.3 147°64	2°1/26.7	18	
12 23	8 51.60	+24 27.8	1.221	2.083	17.1	18.8	12 23	8 50.00	+11 0.3	2.550	3.349	11.3	16.8
1 2	8 47.75	+25 42.6	1.153	2.075	12.7	18.5	1 2	8 44.75	+11 5.8	2.470	3.355	8.6	16.6
1 12	8 40.49	+27 4.8	1.106	2.067	7.9	18.3	1 12	8 37.89	+11 20.8	2.416	3.360	5.5	16.4
1 22	8 30.74	+28 24.0	1.083	2.061	4.5	18.0	1 22	8 30.01	+11 43.7	2.390	3.365	2.6	16.2
2 1	8 20.09	+29 29.2	1.086	2.055	6.9	18.2	2 1	8 21.82	+12 12.1	2.395	3.370	2.8	16.2
2 11	8 10.51	+30 12.8	1.113	2.050	11.8	18.4	2 11	8 14.15	+12 43.1	2.430	3.375	5.7	16.4
2 21	8 3.59	+30 32.5	1.162	2.046	16.5	18.7	2 21	8 7.68	+13 13.8	2.493	3.379	8.7	16.6
3 2	8 0.38	+30 30.3	1.229	2.043	20.6	18.9	3 2	8 2.95	+13 42.1	2.581	3.383	11.3	16.8
<b>11206</b>	Bibee		1 25.3 351°02	5°2/22.6	18		<b>217770</b>	2000 RB <sub>8</sub>		1 25.3 53°93	2°1/23.9	18	
12 23	8 51.50	+27 39.8	1.388	2.245	15.7	17.5	12 23	8 52.08	+20 35.0	1.653	2.494	14.5	19.6
1 2	8 47.35	+28 49.7	1.321	2.239	11.8	17.3	1 2	8 47.07	+21 46.7	1.596	2.508	10.5	19.4
1 12	8 40.08	+30 1.5	1.277	2.234	7.7	17.0	1 12	8 39.58	+23 5.8	1.563	2.523	6.2	19.2
1 22	8 30.61	+31 5.6	1.258	2.230	5.2	16.9	1 22	8 30.46	+24 24.8	1.557	2.538	2.3	18.9
2 1	8 20.43	+31 53.0	1.265	2.227	7.2	17.0	2 1	8 20.94	+25 36.1	1.580	2.553	4.4	19.1
2 11	8 11.27	+32 18.2	1.296	2.225	11.3	17.2	2 11	8 12.33	+26 33.6	1.631	2.569	8.6	19.4
2 21	8 4.57	+32 20.8	1.351	2.223	15.4	17.4	2 21	8 5.72	+27 14.9	1.707	2.585	12.4	19.7
3 2	8 1.24	+32 3.4	1.424	2.223	19.0	17.7	3 2	8 1.82	+27 39.9	1.805	2.601	15.7	19.9
<b>296049</b>	2009 AV <sub>24</sub>		1 25.3 267°58	0°1/25.3	17		<b>316996</b>	2001 OK <sub>111</sub>		1 25.3 186°62	1°1/26.0	18	
12 23	8 55.43	+18 8.7	1.688	2.518	14.7	21.3	12 23	8 52.33	+13 3.2	2.154	2.963	12.7	21.3
1 2	8 49.76	+18 18.2	1.596	2.501	11.0	21.0	1 2	8 46.81	+13 38.8	2.070	2.963	9.5	21.1
1 12	8 41.34	+18 35.6	1.526	2.484	6.6	20.7	1 12	8 39.29	+14 25.8	2.011	2.962	5.9	20.8
1 22	8 30.93	+18 57.1	1.484	2.466	1.7	20.3	1 22	8 30.40	+15 20.9	1.981	2.961	2.0	20.6
2 1	8 19.72	+19 18.3	1.470	2.448	3.4	20.4	2 1	8 21.03	+16 19.6	1.981	2.959	2.7	20.6
2 11	8 9.17	+19 35.0	1.484	2.430	8.4	20.7	2 11	8 12.22	+17 17.0	2.011	2.957	6.6	20.9
2 21	8 0.56	+19 44.9	1.524	2.412	13.0	20.9	2 21	8 4.86	+18 9.2	2.070	2.954	10.2	21.1
3 2	7 54.83	+19 47.2	1.585	2.393	16.9	21.1	3 2	7 59.64	+18 53.6	2.152	2.951	13.4	21.3
<b>288176</b>	2003 WG <sub>180</sub>		1 25.3 243°02	5°2/21.8	18		<b>291732</b>	2006 JV <sub>42</sub>		1 25.3 254°19	0°3/25.1	18	
12 23	8 56.81	+30 21.5	2.001	2.832	12.7	21.2	12 23	8 54.34	+17 44.3	1.725	2.555	14.5	22.1
1 2	8 50.71	+31 42.7	1.914	2.816	9.7	21.0	1 2	8 48.90	+18 15.0	1.636	2.542	10.8	21.9
1 12	8 41.89	+33 4.1	1.852	2.799	6.7	20.8	1 12	8 40.82	+18 55.5	1.570	2.528	6.4	21.6
1 22	8 31.08	+34 17.4	1.819	2.782	5.2	20.7	1 22	8 30.84	+19 41.2	1.532	2.514	1.6	21.2
2 1	8 19.42	+35 14.7	1.816	2.764	6.8	20.7	2 1	8 20.09	+20 26.5	1.522	2.500	3.5	21.3
2 11	8 8.34	+35 51.0	1.840	2.745	10.0	20.9	2 11	8 9.99	+21 6.0	1.541	2.486	8.3	21.6
2 21	7 59.13	+36 5.7	1.890	2.726	13.3	21.0	2 21	8 1.76	+21 36.3	1.585	2.471	12.7	21.8
3 2	7 52.73	+36 1.1	1.961	2.706	16.3	21.2	3 2	7 56.30	+21 56.1	1.651	2.456	16.5	22.0
<b>188193</b>	2002 QV <sub>51</sub>		1 25.3 209°73	0°6/25.6	18		<b>56909</b>	2000 QP <sub>190</sub>		1 25.3 125°55	0°3/25.1	18	
12 23	8 56.60	+15 10.6	1.747	2.566	14.8	21.7	12 23	8 49.39	+17 13.5	2.691	3.506	10.3	19.9
1 2	8 50.45	+15 40.3	1.661	2.560	11.1	21.4	1 2	8 44.27	+17 59.0	2.618	3.517	7.5	19.8
1 12	8 41.66	+16 21.8	1.598	2.553	6.7	21.2	1 12	8 37.61	+18 50.8	2.571	3.527	4.4	19.6
1 22	8 31.00	+17 11.0	1.563	2.545	1.9	20.8	1 22	8 29.95	+19 45.5	2.555	3.537	1.1	19.3
2 1	8 19.63	+18 2.3	1.558	2.536	3.3	20.9	2 1	8 21.99	+20 39.1	2.569	3.547	2.3	19.5
2 11	8 8.94	+18 50.1	1.581	2.527	8.1	21.2	2 11	8 14.53	+21 28.1	2.615	3.556	5.6	19.7
2 21	8 0.15	+19 30.5	1.631	2.517	12.5	21.4	2 21	8 8.23	+22 10.0	2.689	3.566	8.5	19.9
3 2	7 54.14	+20 1.5	1.704	2.505	16.2	21.6	3 2	8 3.61	+22 43.6	2.788	3.575	11.0	20.1
<b>283143</b>	2008 YO <sub>34</sub>		1 25.3 329°83	1°1/24.4	18		<b>184129</b>	2004 JL <sub>11</sub>		1 25.3 250°10	3°5/27.4	18	
12 23	8 48.65	+17 37.4	1.992	2.823	12.7	20.0	12 23	8 51.13	+ 7 18.3	2.017	2.813	13.9	21.0
1 2	8 44.39	+18 55.7	1.908	2.815	9.3	19.8	1 2	8 46.12	+ 7 26.8	1.922	2.801	10.9	20.7
1 12	8 37.98	+20 25.4	1.849	2.808	5.5	19.5	1 12	8 38.98	+ 7 51.2	1.851	2.789	7.5	20.5
1 22	8 30.06	+22 0.5	1.818	2.801	1.6	19.2	1 22	8 30.35	+ 8 30.2	1.806	2.776	4.3	20.3
2 1	8 21.54	+23 33.7	1.818	2.794	3.5	19.4	2 1	8 21.12	+ 9 20.8	1.791	2.763	4.1	20.2
2 11	8 13.52	+24 58.2	1.847	2.787	7.6	19.6	2 11	8 12.36	+10 18.5	1.804	2.750	7.3	20.4
2 21	8 7.01	+26 9.3	1.903	2.781	11.4	19.8	2 21	8 5.06	+11 18.2	1.845	2.736	10.9	20.6
3 2	8 2.76	+27 5.0	1.982	2.775	14.6	20.0	3 2	7 59.97	+12 15.3	1.909	2.722	14.3	20.8
<b>176682</b>	2002 PU <sub>91</sub>		1 25.3 75°54	1°3/26.0	18		<b>403251</b>	2008 YC <sub>10</sub>		1 25.3 358°38	2°7/23.9	18	
12 23	8 56.55	+13 3.9	1.702	2.517	15.3	20.9	12 23	8 52.99	+21 26.5	1.379	2.229	16.2	20.3
1 2	8 49.89	+13 37.9	1.658	2.554	11.3	20.7	1 2	8 48.35	+22 32.9	1.311	2.228	12.0	20.0
1 12	8 40.97	+14 24.0	1.637	2.590	6.8	20.5	1 12	8 40.65	+23 48.6	1.266	2.227	7.1	19.8
1 22	8 30.74	+15 17.4	1.644	2.625	2.3	20.3	1 22	8 30.80	+25 5.0	1.246	2.226	2.9	19.5
2 1	8 20.39	+16 12.6	1.681	2.660	3.1	20.5	2 1	8 20.24	+26 12.7	1.253	2.226	5.3	19.7
2 11	8 11.14	+17 4.1	1.747	2.694	7.3	20.8	2 11	8 10.66	+27 4.6	1.287	2.227	10.2	19.9
2 21	8 3.92	+17 48.5	1.839	2.727	11.2	21.1	2 21	8 3.45	+27 37.7	1.343	2.227	14.7	20.2
3 2	7 59.30	+18 23.9	1.955	2.760	14.3	21.4	3 2	7 59.55	+27 52.6	1.420	2.228	18.6	20.5
<b>371708</b>	2007 EE <sub>39</sub>		1 25.3 324°37	1°4/24.9	18		<b>272774</b>	2005 YJ <sub>191</sub>		1 25.3 266°72	1°0/24.7	18	
12 23	8 55.30	+23 12.0	1.483	2.327	15.6	19.6	12 23	8 51.93	+20 5.6	2.010	2.840	12.7	21.1
1 2	8 50.00	+22 56.7	1.393	2.306	11.7	19.3	1 2	8 46.73	+20 37.9	1.927	2.834	9.3	20.9
1 12	8 41.62	+22 42.1	1.326	2.286	7.0	19.0	1 12	8 39.33	+21 16.3	1.869	2.827	5.5	20.7
1 22	8 31.03	+22 24.2	1.284	2.266	2.1	18.7	1 22	8 30.43	+21 56.3	1.838	2.820	1.6	20.4
2 1	8 19.61	+21 59.4	1.269	2.247	4.2	18.8	2 1	8 21.01	+22 33.3	1.837	2.814	3.3	20.5
2 11	8 9.06	+21 26.2	1.282	2.229	9.4	19.0	2 11	8 12.21	+23 3.2	1.865	2.807	7.4	20.7
2 21	8 0.81	+20 45.1	1.318	2.211	14.3	19.2	2 21	8 5.02	+23 23.7	1.920	2.800	11.1	20.9
3 2	7 55.82	+19 58.1	1.376	2.195	18.5	19.4	3 2	8 0.17	+23 34.3	1.997	2.793	14.4	21.1
<b>39900</b>	1998 FW <sub>26</sub>		1 25.3 323°19	0°7/25.6	18		<b>202026</b>	2004 RY <sub>54</sub>		1 25.3 67°82	1°3/25.8	18	
12 23	8 51.47	+15 15.1	1.384	2.226	16.7	19.0	12 23	8 56.86	+16 7.0	1.402	2.236	17.0	20.3
1 2													

EPHEMERIDES

1 25.3

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>16241</b>	Dvorsky		1 25.3 312°44	5°1/27.9	18		<b>8404</b>	1995 AN		1 25.3 9°88	14°2/23.5	18	
12 23	8 49.71	+ 5 19.9	1.615	2.420	16.4	18.1	12 23	9 17.06	+46 26.4	0.982	1.816	22.6	16.1
1 2	8 45.50	+ 5 11.9	1.526	2.407	13.1	17.9	1 2	9 8.01	+47 5.8	0.932	1.816	19.1	15.9
1 12	8 38.81	+ 5 24.2	1.460	2.395	9.3	17.6	1 12	8 52.84	+47 15.5	0.899	1.817	15.9	15.7
1 22	8 30.34	+ 5 56.6	1.417	2.383	6.0	17.4	1 22	8 33.87	+46 37.5	0.886	1.818	14.2	15.6
2 1	8 21.16	+ 6 46.8	1.402	2.371	5.5	17.4	2 1	8 14.75	+45 3.3	0.895	1.821	15.2	15.7
2 11	8 12.58	+ 7 49.2	1.413	2.359	8.7	17.5	2 11	7 59.14	+42 40.1	0.926	1.824	18.1	15.9
2 21	8 5.76	+ 8 57.1	1.449	2.348	12.8	17.7	2 21	7 49.03	+39 46.3	0.976	1.827	21.7	16.1
3 2	8 1.58	+10 4.3	1.507	2.338	16.5	17.9	3 2	7 44.86	+36 40.1	1.044	1.831	25.1	16.4
<b>167090</b>	2003 SK <sub>22</sub>		1 25.3 107°54	0°2/25.2	18		<b>343585</b>	2010 FG <sub>101</sub>		1 25.3 168°86	1°8/23.9	17	
12 23	8 56.91	+18 11.5	1.809	2.632	14.2	21.3	12 23	8 50.64	+24 0.0	2.850	3.672	9.6	21.9
1 2	8 50.27	+18 34.5	1.750	2.652	10.4	21.1	1 2	8 45.20	+24 37.5	2.772	3.675	7.0	21.8
1 12	8 41.31	+19 4.5	1.715	2.671	6.1	20.9	1 12	8 38.18	+25 16.6	2.722	3.678	4.2	21.6
1 22	8 30.90	+19 36.8	1.708	2.690	1.5	20.6	1 22	8 30.14	+25 53.6	2.702	3.680	1.9	21.4
2 1	8 20.22	+20 7.0	1.731	2.709	3.1	20.8	2 1	8 21.79	+26 25.1	2.713	3.682	3.2	21.5
2 11	8 10.51	+20 31.2	1.783	2.726	7.5	21.1	2 11	8 13.93	+26 48.6	2.754	3.684	5.9	21.7
2 21	8 2.77	+20 47.7	1.861	2.743	11.3	21.3	2 21	8 7.24	+27 3.0	2.823	3.685	8.6	21.9
3 2	7 57.63	+20 56.0	1.963	2.760	14.5	21.6	3 2	8 2.25	+27 8.3	2.917	3.686	10.9	22.0
<b>313437</b>	2002 RM <sub>8</sub>		1 25.3 122°79	0°5/25.6	18		<b>196217</b>	2003 BR <sub>42</sub>		1 25.3 309°13	3°0/27.5	18	
12 23	8 55.38	+16 6.7	2.005	2.821	13.3	21.5	12 23	8 47.81	+ 7 27.8	2.315	3.110	12.4	20.0
1 2	8 49.00	+16 24.6	1.940	2.837	9.8	21.3	1 2	8 43.39	+ 7 46.1	2.227	3.105	9.6	19.8
1 12	8 40.51	+16 50.4	1.899	2.853	5.9	21.1	1 12	8 37.24	+ 8 18.5	2.163	3.101	6.5	19.6
1 22	8 30.70	+17 20.7	1.886	2.868	1.7	20.9	1 22	8 29.92	+ 9 3.3	2.127	3.097	3.7	19.4
2 1	8 20.59	+17 51.5	1.904	2.882	2.8	21.0	2 1	8 22.19	+ 9 57.6	2.120	3.093	3.5	19.4
2 11	8 11.29	+18 19.3	1.951	2.896	6.9	21.3	2 11	8 14.92	+10 56.9	2.143	3.089	6.2	19.6
2 21	8 3.71	+18 41.6	2.026	2.909	10.5	21.5	2 21	8 8.88	+11 57.0	2.194	3.085	9.4	19.8
3 2	7 58.48	+18 57.2	2.125	2.922	13.6	21.7	3 2	8 4.68	+12 54.0	2.269	3.082	12.3	20.0
<b>422287</b>	2014 SV <sub>155</sub>		1 25.3 111°83	7°5/30.2	18		<b>423147</b>	2004 EX <sub>13</sub>		1 25.3 336°33	6°3/29.9	18	
12 23	8 51.34	- 3 14.6	1.921	2.672	16.1	20.9	12 23	8 46.65	- 1 16.5	1.978	2.746	15.2	20.4
1 2	8 46.15	- 3 34.4	1.849	2.682	13.5	20.8	1 2	8 42.82	- 1 9.3	1.888	2.737	12.5	20.2
1 12	8 38.90	- 3 31.0	1.798	2.693	10.6	20.6	1 12	8 37.04	- 0 39.1	1.820	2.729	9.6	20.0
1 22	8 30.32	- 3 3.3	1.771	2.703	8.3	20.5	1 22	8 29.89	+ 0 14.5	1.776	2.722	7.1	19.8
2 1	8 21.34	- 2 12.9	1.771	2.712	7.6	20.5	2 1	8 22.23	+ 1 29.1	1.760	2.715	6.4	19.8
2 11	8 13.04	- 1 4.5	1.798	2.722	9.0	20.6	2 11	8 15.06	+ 2 59.1	1.771	2.708	8.1	19.9
2 21	8 6.31	+ 0 15.1	1.852	2.731	11.5	20.7	2 21	8 9.28	+ 4 37.5	1.810	2.702	11.0	20.0
3 2	8 1.82	+ 1 38.9	1.929	2.740	14.2	20.9	3 2	8 5.58	+ 6 17.0	1.872	2.697	14.0	20.2
<b>377668</b>	2005 UF <sub>274</sub>		1 25.3 198°21	16°2/29.9	18		<b>109024</b>	2001 QS <sub>8</sub>		1 25.3 289°36	2°2/24.1	18	
12 23	8 58.58	-10 20.5	1.291	2.025	23.4	20.7	12 23	8 53.12	+24 52.2	2.176	3.007	11.8	19.4
1 2	8 52.59	-12 46.0	1.223	2.024	20.9	20.5	1 2	8 47.48	+25 10.8	2.093	2.999	8.7	19.2
1 12	8 43.28	-14 41.2	1.173	2.023	18.4	20.3	1 12	8 39.72	+25 30.2	2.035	2.991	5.3	19.0
1 22	8 31.53	-15 55.6	1.142	2.022	16.7	20.2	1 22	8 30.55	+25 46.3	2.005	2.984	2.3	18.7
2 1	8 18.81	-16 22.0	1.132	2.020	16.2	20.2	2 1	8 20.94	+25 55.3	2.004	2.976	3.8	18.8
2 11	8 6.97	-16 1.0	1.143	2.018	17.3	20.2	2 11	8 11.99	+25 54.8	2.033	2.969	7.4	19.0
2 21	7 57.59	-15 0.9	1.174	2.016	19.4	20.4	2 21	8 4.63	+25 44.3	2.089	2.961	10.8	19.2
3 2	7 51.73	-13 34.1	1.222	2.013	21.9	20.5	3 2	7 59.54	+25 24.8	2.168	2.954	13.7	19.4
<b>463280</b>	2012 HZ <sub>11</sub>		1 25.3 200°33	2°9/27.4	16		<b>236092</b>	2005 MV <sub>10</sub>		1 25.3 254°52	2°0/26.7	17	
12 23	8 50.56	+ 7 34.4	2.516	3.302	11.8	22.4	12 23	8 49.28	+11 8.6	2.453	3.256	11.5	21.2
1 2	8 45.26	+ 7 46.6	2.425	3.298	9.2	22.2	1 2	8 44.41	+11 18.3	2.359	3.246	8.8	21.0
1 12	8 38.28	+ 8 11.3	2.358	3.294	6.2	22.0	1 12	8 37.83	+11 38.2	2.290	3.236	5.7	20.8
1 22	8 30.16	+ 8 47.3	2.320	3.289	3.5	21.9	1 22	8 30.07	+12 6.9	2.249	3.226	2.7	20.6
2 1	8 21.64	+ 9 31.8	2.312	3.284	3.4	21.8	2 1	8 21.89	+12 41.5	2.239	3.215	2.8	20.6
2 11	8 13.56	+10 21.3	2.335	3.278	6.0	22.0	2 11	8 14.13	+13 18.9	2.258	3.205	6.0	20.8
2 21	8 6.65	+11 12.0	2.386	3.272	9.0	22.2	2 21	8 7.56	+13 55.8	2.306	3.194	9.2	20.9
3 2	8 1.51	+12 0.7	2.463	3.265	11.8	22.3	3 2	8 2.80	+14 29.7	2.378	3.183	12.1	21.1
<b>337206</b>	1999 XJ <sub>240</sub>		1 25.3 48°72	5°0/23.7	17		<b>457799</b>	2009 QP <sub>60</sub>		1 25.3 188°62	2°9/27.6	18	
12 23	8 59.61	+27 33.5	1.088	1.947	18.9	20.1	12 23	8 51.40	+ 6 42.0	2.581	3.361	11.7	22.3
1 2	8 53.52	+28 16.3	1.046	1.965	14.0	19.9	1 2	8 45.84	+ 7 5.2	2.490	3.360	9.1	22.1
1 12	8 43.69	+28 57.3	1.024	1.983	8.8	19.6	1 12	8 38.62	+ 7 41.7	2.424	3.358	6.2	21.9
1 22	8 31.54	+29 26.7	1.026	2.002	5.1	19.5	1 22	8 30.29	+ 8 29.9	2.387	3.356	3.5	21.8
2 1	8 19.13	+29 36.7	1.053	2.021	7.1	19.7	2 1	8 21.55	+ 9 26.8	2.381	3.353	3.3	21.7
2 11	8 8.58	+29 25.1	1.104	2.041	11.8	20.0	2 11	8 13.24	+10 28.4	2.406	3.349	5.9	21.9
2 21	8 1.32	+28 54.9	1.176	2.061	16.3	20.3	2 21	8 6.09	+11 30.5	2.460	3.344	8.9	22.1
3 2	7 58.04	+28 10.9	1.268	2.081	20.1	20.6	3 2	8 0.68	+12 29.7	2.540	3.339	11.6	22.3
<b>359026</b>	2008 VD <sub>46</sub>		1 25.3 333°85	7°0/28.5	18		<b>250223</b>	2002 VD <sub>115</sub>		1 25.3 94°61	1°3/26.1	18	
12 23	8 48.99	+ 3 24.5	1.252	2.068	19.6	20.7	12 23	8 54.43	+12 59.5	1.860	2.674	14.2	21.1
1 2	8 45.52	+ 3 3.2	1.173	2.058	15.9	20.4	1 2	8 48.38	+13 30.3	1.802	2.697	10.6	20.9
1 12	8 39.08	+ 3 8.4	1.113	2.047	11.7	20.1	1 12	8 40.19	+14 12.8	1.769	2.720	6.5	20.7
1 22	8 30.47	+ 3 41.7	1.076	2.038	8.0	19.9	1 22	8 30.67	+15 3.2	1.763	2.743	2.3	20.5
2 1	8 21.00	+ 4 40.7	1.062	2.029	7.3	19.8	2 1	8 20.88	+15 56.3	1.786	2.765	2.9	20.6
2 11	8 12.31	+ 5 58.5	1.073	2.022	10.6	20.0	2 11	8 11.96	+16 47.2	1.839	2.786	7.0	20.9
2 21	8 5.83	+ 7 25.5	1.106	2.015	15.0	20.2	2 21	8 4.84	+17 32.3	1.920	2.808	10.8	21.1
3 2	8 2.57	+ 8 52.2	1.160	2.009	19.3	20.4	3 2	8 0.12	+18 9.2	2.023	2.828	13.9	21.4
<b>109681</b>	2001 RO <sub>26</sub>		1 25.3 136°52	0°1/25.4	18		<b>216935</b>	1999 RJ <sub>43</sub>		1 25.3 119°86	4°2/23.3	18	
12 23	8 50.27	+17 11.7	2.439	3.257	11.1	20.1	12 23	8 58.42	+28 23.0	1.740	2.575	14.1	20.9
1													

EPHEMERIDES

1 25.3

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>182670</b>	2001 <i>UA</i> <sub>215</sub>		1 25.3	99°52	0°7/25.7	18	<b>424609</b>	2008 <i>HC</i> <sub>68</sub>		1 25.3	182°00	4°5/22.0	18
12 23	8 52.57	+15 37.2	1.837	2.661	13.9	20.8	12 23	8 54.97	+30 7.3	2.300	3.128	11.4	21.6
1 2	8 47.25	+15 56.0	1.763	2.664	10.4	20.6	1 2	8 48.90	+31 21.5	2.228	3.129	8.6	21.4
1 12	8 39.67	+16 24.6	1.712	2.668	6.2	20.4	1 12	8 40.63	+32 34.5	2.182	3.129	5.8	21.2
1 22	8 30.57	+16 59.4	1.689	2.671	1.8	20.1	1 22	8 30.84	+33 39.5	2.166	3.129	4.5	21.1
2 1	8 21.03	+17 36.1	1.695	2.674	3.0	20.2	2 1	8 20.54	+34 30.5	2.179	3.128	5.8	21.2
2 11	8 12.23	+18 10.2	1.729	2.677	7.3	20.5	2 11	8 10.87	+35 4.0	2.222	3.127	8.5	21.4
2 21	8 5.17	+18 38.7	1.790	2.680	11.3	20.7	2 21	8 2.82	+35 19.6	2.290	3.125	11.4	21.6
3 2	8 0.57	+18 59.9	1.874	2.683	14.7	20.9	3 2	7 57.12	+35 19.1	2.381	3.123	13.8	21.7
<b>182505</b>	2001 <i>SW</i> <sub>245</sub>		1 25.3	157°54	0°9/25.8	18	<b>79170</b>	1993 <i>FT</i> <sub>34</sub>		1 25.3	14°84	7°9/30.8	18
12 23	8 52.98	+15 0.7	2.007	2.825	13.2	21.0	12 23	8 46.53	- 3 42.3	1.769	2.532	16.9	18.5
1 2	8 47.38	+15 19.0	1.930	2.828	9.8	20.8	1 2	8 42.83	- 3 55.4	1.697	2.537	14.1	18.3
1 12	8 39.68	+15 46.7	1.878	2.832	6.0	20.6	1 12	8 37.06	- 3 42.7	1.645	2.543	11.2	18.1
1 22	8 30.57	+16 20.7	1.853	2.835	1.9	20.3	1 22	8 29.93	- 3 3.1	1.616	2.550	8.8	18.0
2 1	8 21.04	+16 56.8	1.859	2.837	2.8	20.4	2 1	8 22.38	- 1 58.5	1.613	2.558	7.9	17.9
2 11	8 12.18	+17 31.2	1.893	2.840	6.9	20.7	2 11	8 15.50	- 0 34.7	1.636	2.566	9.3	18.0
2 21	8 4.94	+18 0.9	1.955	2.842	10.6	20.9	2 21	8 10.18	+ 1 0.5	1.685	2.575	11.9	18.2
3 2	7 59.98	+18 24.1	2.040	2.844	13.8	21.1	3 2	8 7.11	+ 2 39.0	1.757	2.585	14.7	18.4
<b>359142</b>	2009 <i>BP</i> <sub>94</sub>		1 25.3	263°93	0°2/25.4	18	<b>320791</b>	2008 <i>ER</i> <sub>146</sub>		1 25.3	251°57	0°5/25.0	17
12 23	8 54.85	+17 35.8	1.630	2.461	15.1	21.2	12 23	8 52.86	+18 20.4	1.999	2.825	12.9	21.5
1 2	8 49.33	+17 47.4	1.547	2.453	11.3	20.9	1 2	8 47.53	+18 55.6	1.908	2.812	9.6	21.3
1 12	8 41.11	+18 7.8	1.487	2.444	6.7	20.6	1 12	8 39.91	+19 38.8	1.841	2.799	5.7	21.0
1 22	8 30.98	+18 33.0	1.453	2.436	1.8	20.3	1 22	8 30.68	+20 26.0	1.803	2.785	1.4	20.7
2 1	8 20.17	+18 58.4	1.448	2.427	3.4	20.4	2 1	8 20.82	+21 12.0	1.794	2.772	3.2	20.8
2 11	8 10.13	+19 19.7	1.471	2.418	8.4	20.6	2 11	8 11.51	+21 52.2	1.815	2.758	7.4	21.0
2 21	8 2.11	+19 34.2	1.518	2.409	12.9	20.9	2 21	8 3.77	+22 23.6	1.862	2.743	11.4	21.2
3 2	7 56.96	+19 40.9	1.588	2.400	16.7	21.1	3 2	7 58.42	+22 45.0	1.932	2.729	14.8	21.4
<b>226847</b>	2004 <i>SM</i> <sub>45</sub>		1 25.3	83°52	7°1/29.8	18	<b>224442</b>	2005 <i>UB</i> <sub>488</sub>		1 25.3	313°61	7°7/28.1	18
12 23	8 49.76	- 1 58.6	2.003	2.760	15.3	20.3	12 23	8 52.83	+ 1 53.8	1.723	2.503	16.6	19.7
1 2	8 44.99	- 2 20.4	1.924	2.763	12.8	20.1	1 2	8 47.65	+ 0 41.6	1.636	2.493	13.7	19.4
1 12	8 38.26	- 2 21.0	1.866	2.766	10.0	19.9	1 12	8 40.05	- 0 13.7	1.570	2.483	10.6	19.2
1 22	8 30.21	- 1 59.3	1.834	2.769	7.7	19.8	1 22	8 30.73	- 0 48.7	1.530	2.473	8.3	19.1
2 1	8 21.74	- 1 16.5	1.828	2.773	7.1	19.7	2 1	8 20.75	- 1 1.9	1.516	2.464	8.0	19.0
2 11	8 13.85	- 0 16.8	1.849	2.776	8.6	19.8	2 11	8 11.38	- 0 54.8	1.528	2.454	10.1	19.1
2 21	8 7.42	+ 0 54.0	1.897	2.779	11.2	20.0	2 21	8 3.74	- 0 31.6	1.565	2.445	13.2	19.3
3 2	8 3.11	+ 2 9.5	1.969	2.782	13.9	20.2	3 2	7 58.65	+ 0 2.1	1.623	2.437	16.4	19.5
<b>490072</b>	2008 <i>TU</i> <sub>119</sub>		1 25.3	153°22	1°1/25.8	18	<b>315595</b>	2008 <i>CK</i> <sub>131</sub>		1 25.3	45°66	2°1/24.6	18
12 23	8 56.43	+15 30.5	1.562	2.388	15.9	22.0	12 23	8 58.31	+22 55.8	1.249	2.099	17.6	20.1
1 2	8 50.42	+15 36.8	1.489	2.392	11.9	21.8	1 2	8 51.90	+23 14.8	1.212	2.128	12.8	19.9
1 12	8 41.68	+15 53.7	1.440	2.395	7.2	21.5	1 12	8 42.44	+23 37.0	1.197	2.157	7.5	19.7
1 22	8 31.10	+16 17.7	1.417	2.398	2.3	21.2	1 22	8 31.25	+23 55.6	1.206	2.187	2.6	19.5
2 1	8 19.98	+16 44.4	1.422	2.401	3.4	21.3	2 1	8 19.99	+24 5.2	1.242	2.218	4.7	19.7
2 11	8 9.80	+17 9.3	1.455	2.403	8.4	21.6	2 11	8 10.38	+24 3.4	1.304	2.249	9.6	20.1
2 21	8 1.76	+17 29.4	1.513	2.405	12.8	21.9	2 21	8 3.54	+23 50.4	1.390	2.280	13.9	20.4
3 2	7 56.68	+17 42.9	1.593	2.407	16.6	22.1	3 2	8 0.06	+23 28.3	1.497	2.312	17.4	20.7
<b>266111</b>	2006 <i>SQ</i> <sub>274</sub>		1 25.3	139°67	1°8/24.3	18	<b>309853</b>	2009 <i>DX</i> <sub>32</sub>		1 25.3	5°41	0°9/24.9	18
12 23	8 55.05	+22 15.9	1.949	2.779	13.0	21.2	12 23	8 51.95	+18 47.2	1.292	2.143	17.0	20.9
1 2	8 48.99	+22 51.5	1.880	2.786	9.6	21.0	1 2	8 47.64	+19 22.1	1.226	2.143	12.6	20.6
1 12	8 40.65	+23 31.0	1.835	2.792	5.7	20.8	1 12	8 40.27	+20 7.9	1.182	2.143	7.4	20.4
1 22	8 30.81	+24 9.1	1.818	2.799	2.1	20.6	1 22	8 30.80	+20 58.2	1.162	2.144	1.9	20.0
2 1	8 20.57	+24 40.8	1.831	2.805	3.8	20.7	2 1	8 20.67	+21 45.7	1.168	2.146	4.2	20.2
2 11	8 11.14	+25 2.7	1.873	2.811	7.7	21.0	2 11	8 11.60	+22 23.8	1.200	2.149	9.6	20.5
2 21	8 3.50	+25 13.4	1.942	2.816	11.3	21.2	2 21	8 4.96	+22 49.3	1.255	2.152	14.5	20.8
3 2	7 58.37	+25 13.4	2.033	2.821	14.4	21.4	3 2	8 1.61	+23 1.3	1.330	2.157	18.6	21.0
<b>50360</b>	2000 <i>CS</i> <sub>75</sub>		1 25.3	270°26	7°5/29.2	18	<b>366776</b>	2004 <i>TH</i> <sub>136</sub>		1 25.3	83°77	1°0/25.8	18
12 23	8 51.03	- 0 49.6	1.839	2.606	16.2	18.9	12 23	8 54.40	+15 44.6	1.981	2.799	13.4	21.1
1 2	8 46.22	- 1 23.5	1.748	2.595	13.5	18.7	1 2	8 48.27	+15 44.6	1.920	2.818	9.9	20.9
1 12	8 39.16	- 1 36.4	1.678	2.583	10.6	18.5	1 12	8 40.09	+15 52.3	1.883	2.837	6.0	20.7
1 22	8 30.48	- 1 26.1	1.632	2.572	8.1	18.3	1 22	8 30.67	+16 4.9	1.874	2.855	1.9	20.5
2 1	8 21.15	- 0 52.8	1.613	2.560	7.6	18.2	2 1	8 21.02	+16 19.6	1.896	2.874	2.8	20.6
2 11	8 12.35	- 0 0.2	1.620	2.549	9.4	18.3	2 11	8 12.22	+16 33.2	1.946	2.893	6.7	20.9
2 21	8 5.11	+ 1 5.8	1.653	2.537	12.4	18.5	2 21	8 5.14	+16 43.9	2.024	2.911	10.3	21.1
3 2	8 0.24	+ 2 18.3	1.709	2.525	15.5	18.6	3 2	8 0.35	+16 50.5	2.125	2.929	13.3	21.3
<b>301230</b>	2009 <i>BC</i> <sub>19</sub>		1 25.3	80°62	0°7/24.9	18	<b>85361</b>	1995 <i>WO</i> <sub>16</sub>		1 25.3	270°90	4°2/22.4	17
12 23	8 57.43	+19 2.0	1.484	2.319	16.1	21.2	12 23	8 52.81	+31 8.6	2.483	3.311	10.6	20.6
1 2	8 51.06	+19 30.8	1.431	2.340	11.8	20.9	1 2	8 47.25	+31 56.2	2.395	3.295	8.1	20.5
1 12	8 41.95	+20 7.2	1.402	2.361	6.9	20.7	1 12	8 39.63	+32 41.5	2.333	3.280	5.5	20.3
1 22	8 31.14	+20 45.4	1.399	2.382	1.8	20.4	1 22	8 30.60	+33 19.3	2.300	3.264	4.2	20.2
2 1	8 20.05	+21 19.4	1.425	2.402	3.7	20.6	2 1	8 21.05	+33 44.9	2.296	3.247	5.4	20.2
2 11	8 10.18	+21 45.1	1.478	2.423	8.6	21.0	2 11	8 12.04	+33 55.5	2.322	3.231	8.0	20.3
2 21	8 2.66	+22 0.4	1.556	2.443	12.9	21.3	2 21	8 4.47	+33 50.9	2.373	3.215	10.8	20.5
3 2	7 58.18	+22 5.5	1.655	2.463	16.4	21.5	3 2	7 59.06	+33 32.8	2.447	3.198	13.3	20.6
<b>19808</b>	Elainemccall		1 25.3	173°34	0°9/24.8	18	<b>416934</b>	2005 <i>SC</i> <sub>106</sub>		1 25.3	139°15	6°0/21.3	18
12 23	8 52.56	+19 27.6	2.040	2.867	12.6	18.7							

EPHEMERIDES

1 25.3

1 25.3

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>80092</b>	1999 <i>LX</i> <sub>10</sub>		1 25.3 220°65	0°2/25.5	18		<b>498956</b>	2009 <i>BT</i> <sub>87</sub>		1 25.3 289°77	0°7/25.9	17	
12 23	8 49.03	+15 52.4	2.456	3.273	11.1	19.9	12 23	8 48.55	+13 5.7	2.289	3.103	11.9	21.4
1 2	8 44.25	+16 31.9	2.372	3.271	8.2	19.7	1 2	8 44.08	+13 58.4	2.198	3.094	8.9	21.2
1 12	8 37.76	+17 19.7	2.314	3.269	4.9	19.5	1 12	8 37.76	+15 3.3	2.132	3.085	5.4	20.9
1 22	8 30.12	+18 12.3	2.284	3.267	1.3	19.2	1 22	8 30.15	+16 16.8	2.095	3.076	1.7	20.7
2 1	8 22.08	+19 5.8	2.286	3.264	2.4	19.3	2 1	8 22.04	+17 33.9	2.088	3.067	2.5	20.7
2 11	8 14.51	+19 56.1	2.317	3.262	6.0	19.6	2 11	8 14.36	+18 49.1	2.112	3.058	6.3	20.9
2 21	8 8.16	+20 40.2	2.377	3.260	9.2	19.8	2 21	8 7.93	+19 58.0	2.163	3.049	9.8	21.1
3 2	8 3.64	+21 16.2	2.461	3.257	12.0	19.9	3 2	8 3.43	+20 57.6	2.239	3.040	12.8	21.3
<b>181869</b>	1999 <i>CA</i> <sub>129</sub>		1 25.3 353°96	8°4/20.5	18		<b>209390</b>	2004 <i>EV</i> <sub>56</sub>		1 25.3 283°12	11°6/14.9	18	
12 23	8 53.24	+34 25.1	1.393	2.246	15.9	18.9	12 23	9 6.27	+56 56.6	2.419	3.172	13.1	19.9
1 2	8 48.95	+36 7.4	1.333	2.242	12.5	18.7	1 2	8 58.41	+58 25.2	2.365	3.161	12.1	19.8
1 12	8 41.23	+37 44.6	1.296	2.238	9.5	18.5	1 12	8 46.77	+59 34.3	2.334	3.150	11.6	19.7
1 22	8 31.08	+39 4.5	1.284	2.236	8.5	18.5	1 22	8 32.49	+60 14.9	2.325	3.139	11.7	19.7
2 1	8 20.14	+39 56.7	1.297	2.234	10.2	18.6	2 1	8 17.43	+60 21.3	2.339	3.128	12.5	19.8
2 11	8 10.34	+40 16.5	1.333	2.233	13.5	18.7	2 11	8 3.75	+59 53.2	2.374	3.117	13.7	19.8
2 21	8 3.26	+40 5.7	1.391	2.233	16.9	19.0	2 21	7 53.14	+58 55.1	2.429	3.106	15.1	19.9
3 2	7 59.86	+39 30.0	1.466	2.233	20.0	19.2	3 2	7 46.55	+57 34.0	2.500	3.095	16.4	20.0
<b>444373</b>	2005 <i>YL</i> <sub>66</sub>		1 25.3 51°47	2°1/24.5	17		<b>464255</b>	2015 <i>DP</i> <sub>216</sub>		1 25.3 2°05	3°9/27.9	18	
12 23	8 56.81	+21 24.5	1.176	2.029	18.2	21.3	12 23	8 48.37	+ 5 57.7	2.029	2.824	13.9	20.5
1 2	8 51.18	+22 3.8	1.131	2.049	13.3	21.1	1 2	8 44.01	+ 6 6.8	1.947	2.824	10.9	20.3
1 12	8 42.25	+22 49.8	1.107	2.068	7.8	20.9	1 12	8 37.72	+ 6 32.4	1.889	2.824	7.6	20.1
1 22	8 31.26	+23 34.4	1.107	2.089	2.6	20.6	1 22	8 30.13	+ 7 13.4	1.857	2.824	4.6	19.9
2 1	8 19.97	+24 9.9	1.133	2.109	4.9	20.8	2 1	8 22.12	+ 8 6.5	1.854	2.825	4.2	19.9
2 11	8 10.21	+24 31.3	1.185	2.130	10.2	21.2	2 11	8 14.66	+ 9 7.2	1.879	2.825	7.0	20.0
2 21	8 3.29	+24 37.9	1.259	2.152	14.9	21.5	2 21	8 8.62	+10 10.1	1.931	2.826	10.3	20.2
3 2	7 59.93	+24 31.1	1.353	2.173	18.7	21.8	3 2	8 4.65	+11 10.7	2.008	2.827	13.4	20.4
<b>103371</b>	2000 <i>AO</i> <sub>113</sub>		1 25.3 37°68	3°4/26.8	18		<b>375538</b>	2008 <i>UB</i> <sub>201</sub>		1 25.3 66°63	5°2/22.5	18	
12 23	8 53.20	+10 26.0	1.198	2.034	19.1	18.9	12 23	8 55.97	+33 0.1	2.031	2.862	12.5	20.3
1 2	8 48.55	+10 28.3	1.138	2.041	14.6	18.7	1 2	8 49.74	+33 44.3	1.970	2.870	9.5	20.1
1 12	8 40.79	+10 50.6	1.097	2.049	9.5	18.4	1 12	8 41.12	+34 23.0	1.933	2.877	6.7	19.9
1 22	8 30.94	+11 30.3	1.080	2.057	4.5	18.1	1 22	8 30.99	+34 49.8	1.924	2.885	5.2	19.9
2 1	8 20.51	+12 21.7	1.088	2.065	4.6	18.2	2 1	8 20.52	+34 59.9	1.944	2.893	6.4	19.9
2 11	8 11.24	+13 17.3	1.121	2.075	9.6	18.5	2 11	8 11.00	+34 51.7	1.992	2.901	9.2	20.1
2 21	8 4.48	+14 10.4	1.178	2.084	14.5	18.8	2 21	8 3.46	+34 26.7	2.065	2.909	12.1	20.3
3 2	8 1.08	+14 56.0	1.254	2.094	18.7	19.1	3 2	7 58.55	+33 48.0	2.159	2.917	14.6	20.5
<b>61543</b>	2000 <i>QM</i> <sub>64</sub>		1 25.3 29°99	0°3/25.2	18		<b>189431</b>	1998 <i>OV</i> <sub>5</sub>		1 25.3 162°29	1°5/26.1	18	
12 23	8 50.43	+15 52.3	1.626	2.461	14.9	18.3	12 23	8 56.63	+13 18.3	1.759	2.572	14.9	21.0
1 2	8 45.97	+16 51.9	1.558	2.467	11.0	18.1	1 2	8 50.33	+13 36.2	1.684	2.578	11.2	20.8
1 12	8 39.05	+18 4.4	1.514	2.473	6.5	17.9	1 12	8 41.56	+14 6.4	1.632	2.584	6.9	20.5
1 22	8 30.48	+19 23.9	1.497	2.479	1.6	17.6	1 22	8 31.13	+14 45.5	1.609	2.589	2.5	20.3
2 1	8 21.39	+20 42.7	1.508	2.486	3.4	17.7	2 1	8 20.19	+15 28.7	1.614	2.593	3.2	20.3
2 11	8 13.10	+21 53.9	1.547	2.494	8.1	18.0	2 11	8 10.07	+16 11.2	1.649	2.596	7.7	20.6
2 21	8 6.71	+22 52.8	1.611	2.502	12.3	18.3	2 21	8 1.85	+16 49.0	1.710	2.598	11.8	20.9
3 2	8 2.97	+23 37.3	1.698	2.510	15.8	18.5	3 2	7 56.30	+17 19.9	1.795	2.600	15.4	21.1
<b>126388</b>	2002 <i>BS</i> <sub>1</sub>		1 25.3 41°34	1°3/24.6	18		<b>463938</b>	2014 <i>UE</i> <sub>195</sub>		1 25.3 353°49	0°9/25.8	18	
12 23	8 51.86	+19 35.2	1.680	2.519	14.4	20.1	12 23	8 49.30	+14 42.6	1.406	2.249	16.4	20.7
1 2	8 46.96	+20 24.6	1.614	2.525	10.5	19.9	1 2	8 45.51	+15 11.1	1.333	2.244	12.3	20.4
1 12	8 39.60	+21 22.1	1.573	2.532	6.2	19.7	1 12	8 38.96	+15 54.5	1.282	2.240	7.5	20.1
1 22	8 30.61	+22 21.7	1.557	2.540	1.8	19.4	1 22	8 30.50	+16 48.3	1.255	2.237	2.2	19.8
2 1	8 21.16	+23 16.7	1.571	2.547	3.8	19.6	2 1	8 21.39	+17 46.0	1.255	2.235	3.5	19.9
2 11	8 12.55	+24 1.9	1.612	2.555	8.2	19.8	2 11	8 13.12	+18 40.8	1.281	2.234	8.7	20.2
2 21	8 5.87	+24 34.5	1.679	2.563	12.2	20.1	2 21	8 6.95	+19 27.5	1.331	2.233	13.5	20.4
3 2	8 1.85	+24 54.0	1.767	2.571	15.6	20.3	3 2	8 3.75	+20 3.0	1.402	2.234	17.5	20.7
<b>407830</b>	2012 <i>BG</i> <sub>18</sub>		1 25.3 104°25	0°4/25.2	18		<b>251256</b>	2006 <i>VE</i> <sub>90</sub>		1 25.3 83°77	3°3/23.8	18	
12 23	8 57.29	+19 45.5	1.853	2.677	13.9	21.2	12 23	8 58.18	+26 18.6	1.746	2.580	14.1	20.2
1 2	8 50.56	+19 48.8	1.789	2.692	10.2	21.0	1 2	8 51.38	+26 55.6	1.695	2.602	10.4	20.0
1 12	8 41.53	+19 56.6	1.750	2.707	6.0	20.7	1 12	8 42.05	+27 32.1	1.668	2.624	6.4	19.8
1 22	8 31.06	+20 5.3	1.739	2.721	1.5	20.5	1 22	8 31.21	+28 1.7	1.669	2.645	3.4	19.7
2 1	8 20.33	+20 11.6	1.758	2.735	3.1	20.6	2 1	8 20.15	+28 19.3	1.699	2.667	5.0	19.8
2 11	8 10.56	+20 12.9	1.805	2.749	7.4	20.9	2 11	8 10.24	+28 22.7	1.757	2.688	8.7	20.1
2 21	8 2.73	+20 8.3	1.880	2.763	11.2	21.2	2 21	8 2.52	+28 12.4	1.840	2.708	12.2	20.3
3 2	7 57.49	+19 57.9	1.978	2.776	14.4	21.4	3 2	7 57.63	+27 50.8	1.946	2.728	15.2	20.6
<b>132152</b>	2002 <i>CY</i> <sub>298</sub>		1 25.3 148°17	1°0/25.9	18		<b>417251</b>	2005 <i>YS</i> <sub>207</sub>		1 25.3 29°17	0°8/24.9	18	
12 23	8 55.36	+14 13.5	1.981	2.792	13.6	20.6	12 23	8 52.47	+19 49.5	1.690	2.527	14.3	21.4
1 2	8 49.12	+14 38.1	1.908	2.803	10.1	20.4	1 2	8 47.36	+20 12.1	1.622	2.532	10.5	21.1
1 12	8 40.71	+15 12.9	1.860	2.812	6.2	20.2	1 12	8 39.82	+20 41.2	1.579	2.538	6.2	20.9
1 22	8 30.88	+15 54.5	1.840	2.821	2.0	19.9	1 22	8 30.68	+21 12.0	1.562	2.544	1.6	20.6
2 1	8 20.65	+16 38.4	1.851	2.829	2.9	20.0	2 1	8 21.12	+21 39.7	1.573	2.551	3.5	20.8
2 11	8 11.16	+17 20.2	1.891	2.837	7.0	20.3	2 11	8 12.43	+22 0.3	1.612	2.558	8.0	21.0
2 21	8 3.36	+17 56.7	1.959	2.844	10.7	20.5	2 21	8 5.69	+22 11.9	1.677	2.565	12.0	21.3
3 2	7 57.93	+18 25.9	2.051	2.850	13.9	20.7	3 2	8 1.60	+22 14.2	1.763	2.572	15.4	21.5
<b>247592</b>	2002 <i>TB</i> <sub>158</sub>		1 25.3 132°80	4°2/28.3	18		<b>238060</b>	2003 <i>CG</i> <sub>7</sub>		1 25.3 2°54	3°7/23.9	18	
12 23	8 52.46	+ 3 51.3	2.108	2.884									

EPHEMERIDES

1 25.3

1 25.4

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>396970</b>	2005 <i>SE</i> <sub>54</sub>		1 25.3	22°72'	4.1/23.7	18	<b>197102</b>	2003 <i>UC</i> <sub>193</sub>		1 25.3	200°71'	1.7/24.4	18
12 23	8 57.02	+25 54.1	1.258	2.111	17.3	20.5	12 23	8 53.20	+22 56.9	2.264	3.090	11.6	20.5
1 2	8 51.59	+26 39.8	1.196	2.113	12.8	20.3	1 2	8 47.47	+23 23.7	2.183	3.088	8.5	20.3
1 12	8 42.71	+27 27.7	1.157	2.116	8.0	20.0	1 12	8 39.74	+23 52.9	2.129	3.086	5.1	20.1
1 22	8 31.47	+28 8.7	1.141	2.119	4.3	19.8	1 22	8 30.68	+24 20.7	2.103	3.084	1.9	19.9
2 1	8 19.59	+28 34.6	1.152	2.122	6.4	19.9	2 1	8 21.22	+24 42.9	2.108	3.081	3.4	20.0
2 11	8 9.02	+28 41.1	1.188	2.125	11.1	20.2	2 11	8 12.37	+24 56.8	2.142	3.079	6.9	20.2
2 21	8 1.28	+28 28.7	1.246	2.129	15.7	20.5	2 21	8 5.04	+25 1.4	2.204	3.076	10.3	20.4
3 2	7 57.24	+28 0.8	1.324	2.133	19.6	20.7	3 2	7 59.86	+24 56.8	2.288	3.073	13.1	20.6
<b>226914</b>	2004 <i>TC</i> <sub>202</sub>		1 25.3	185°30'	0.9/25.8	18	<b>197555</b>	2004 <i>FR</i> <sub>107</sub>		1 25.3	234°11'	0.5/25.1	18
12 23	8 52.30	+15 25.7	2.246	3.059	12.1	20.8	12 23	8 56.30	+17 45.3	1.740	2.565	14.6	21.6
1 2	8 46.74	+15 35.3	2.163	3.059	9.0	20.6	1 2	8 50.44	+18 24.6	1.649	2.552	10.8	21.3
1 12	8 39.27	+15 52.6	2.106	3.059	5.5	20.4	1 12	8 41.86	+19 14.3	1.582	2.539	6.5	21.0
1 22	8 30.53	+16 15.0	2.078	3.059	1.8	20.1	1 22	8 31.30	+20 9.3	1.542	2.525	1.6	20.7
2 1	8 21.40	+16 39.5	2.079	3.058	2.6	20.2	2 1	8 19.92	+21 3.3	1.532	2.510	3.5	20.8
2 11	8 12.85	+17 2.9	2.111	3.057	6.3	20.4	2 11	8 9.15	+21 50.4	1.551	2.495	8.4	21.0
2 21	8 5.73	+17 22.9	2.170	3.055	9.8	20.6	2 21	8 0.27	+22 27.1	1.596	2.478	12.9	21.2
3 2	8 0.66	+17 38.0	2.253	3.054	12.8	20.8	3 2	7 54.21	+22 52.1	1.663	2.461	16.7	21.5
<b>497649</b>	2006 <i>RL</i> <sub>51</sub>		1 25.3	168°69'	11.1/15.2	18	<b>441610</b>	2008 <i>UZ</i> <sub>290</sub>		1 25.4	50°26'	1.9/26.2	16
12 23	9 12.31	+61 18.1	2.799	3.517	12.3	21.7	12 23	8 55.59	+12 55.0	1.157	1.998	19.3	20.8
1 2	9 2.59	+62 34.0	2.760	3.518	11.5	21.6	1 2	8 50.10	+13 15.5	1.116	2.024	14.4	20.6
1 12	8 49.06	+63 29.0	2.743	3.520	11.1	21.6	1 12	8 41.54	+13 53.3	1.096	2.052	8.8	20.4
1 22	8 33.04	+63 55.5	2.748	3.522	11.2	21.6	1 22	8 31.14	+14 42.9	1.099	2.080	3.2	20.1
2 1	8 16.56	+63 49.3	2.776	3.523	11.8	21.7	2 1	8 20.53	+15 36.8	1.128	2.108	3.9	20.2
2 11	8 1.80	+63 11.1	2.824	3.524	12.7	21.7	2 11	8 11.40	+16 28.0	1.184	2.137	9.2	20.6
2 21	7 50.37	+62 6.1	2.892	3.525	13.7	21.8	2 21	8 4.95	+17 11.4	1.262	2.165	14.0	21.0
3 2	7 43.05	+60 40.9	2.976	3.526	14.6	21.9	3 2	8 1.85	+17 44.3	1.361	2.194	17.9	21.3
<b>224503</b>	2005 <i>WF</i> <sub>28</sub>		1 25.3	2°40'	0.5/25.6	18	<b>58926</b>	1998 <i>MO</i> <sub>1</sub>		1 25.4	12°42'	2.7/26.8	18
12 23	8 52.70	+16 44.9	1.793	2.621	14.1	20.9	12 23	8 50.01	+10 41.5	1.622	2.445	15.6	19.4
1 2	8 47.44	+16 53.1	1.717	2.621	10.5	20.6	1 2	8 45.63	+10 49.1	1.550	2.446	11.9	19.2
1 12	8 39.85	+17 9.6	1.665	2.621	6.3	20.4	1 12	8 38.86	+11 12.1	1.500	2.449	7.7	19.0
1 22	8 30.70	+17 31.2	1.639	2.621	1.8	20.1	1 22	8 30.50	+11 48.3	1.475	2.452	3.6	18.7
2 1	8 21.08	+17 54.1	1.642	2.621	3.0	20.2	2 1	8 21.64	+12 33.5	1.478	2.456	3.8	18.8
2 11	8 12.22	+18 14.5	1.674	2.622	7.5	20.5	2 11	8 13.56	+13 22.2	1.509	2.460	7.8	19.0
2 21	8 5.15	+18 29.9	1.731	2.622	11.5	20.7	2 21	8 7.31	+14 9.5	1.564	2.465	12.0	19.3
3 2	8 0.60	+18 38.9	1.811	2.623	15.0	20.9	3 2	8 3.63	+14 51.4	1.642	2.470	15.6	19.5
<b>136373</b>	2004 <i>EN</i> <sub>55</sub>		1 25.3	320°00'	5.7/22.6	18	<b>340678</b>	2006 <i>RH</i> <sub>67</sub>		1 25.4	205°09'	0.1/25.4	17
12 23	8 59.75	+37 12.9	2.281	3.097	11.8	19.5	12 23	8 51.46	+18 7.1	2.614	3.428	10.6	21.6
1 2	8 52.35	+37 33.0	2.208	3.096	9.3	19.3	1 2	8 45.93	+18 16.4	2.527	3.425	7.8	21.4
1 12	8 42.59	+37 43.7	2.161	3.094	6.9	19.1	1 12	8 38.73	+18 30.4	2.467	3.422	4.6	21.2
1 22	8 31.36	+37 39.6	2.142	3.092	5.7	19.1	1 22	8 30.43	+18 46.7	2.436	3.418	1.2	21.0
2 1	8 19.86	+37 17.0	2.152	3.090	6.7	19.1	2 1	8 21.79	+19 2.6	2.436	3.414	2.3	21.1
2 11	8 9.33	+36 35.7	2.191	3.089	9.0	19.3	2 11	8 13.64	+19 15.8	2.466	3.409	5.7	21.3
2 21	8 0.80	+35 38.5	2.255	3.087	11.6	19.4	2 21	8 6.71	+19 24.8	2.525	3.405	8.8	21.5
3 2	7 54.90	+34 29.5	2.343	3.086	14.0	19.6	3 2	8 1.58	+19 28.8	2.608	3.400	11.5	21.6
<b>153331</b>	2001 <i>OO</i> <sub>46</sub>		1 25.3	143°32'	1.4/26.1	18	<b>459526</b>	2013 <i>EM</i> <sub>125</sub>		1 25.4	334°16'	3.3/23.7	16
12 23	8 55.64	+12 31.4	1.737	2.551	15.1	20.7	12 23	8 52.02	+22 48.1	1.280	2.137	16.8	21.2
1 2	8 49.61	+13 9.1	1.666	2.561	11.3	20.4	1 2	8 48.02	+23 50.0	1.207	2.127	12.4	20.9
1 12	8 41.14	+14 0.9	1.619	2.571	7.0	20.2	1 12	8 40.73	+25 0.6	1.156	2.118	7.5	20.6
1 22	8 31.03	+15 2.6	1.600	2.580	2.4	19.9	1 22	8 31.05	+26 11.0	1.130	2.110	3.5	20.3
2 1	8 20.45	+16 8.1	1.610	2.589	3.2	20.0	2 1	8 20.49	+27 11.4	1.129	2.102	5.9	20.4
2 11	8 10.69	+17 11.4	1.649	2.596	7.7	20.3	2 11	8 10.89	+27 54.4	1.154	2.095	11.0	20.7
2 21	8 2.82	+18 7.7	1.715	2.603	11.8	20.6	2 21	8 3.80	+28 17.2	1.201	2.089	15.8	21.0
3 2	7 57.60	+18 54.2	1.804	2.610	15.3	20.8	3 2	8 0.25	+28 20.6	1.267	2.083	19.9	21.2
<b>211984</b>	2005 <i>AZ</i> <sub>43</sub>		1 25.3	299°06'	1.6/24.6	18	<b>325295</b>	2008 <i>HW</i> <sub>27</sub>		1 25.4	357°29'	3.4/24.0	18
12 23	8 53.97	+20 49.6	1.504	2.347	15.5	20.4	12 23	8 51.48	+24 33.6	1.229	2.091	17.0	20.6
1 2	8 49.01	+21 21.7	1.421	2.334	11.5	20.1	1 2	8 47.57	+25 6.8	1.164	2.086	12.6	20.3
1 12	8 41.11	+22 1.5	1.362	2.322	6.8	19.8	1 12	8 40.38	+25 43.6	1.121	2.083	7.7	20.0
1 22	8 31.09	+22 43.1	1.328	2.310	2.1	19.5	1 22	8 30.93	+26 16.5	1.101	2.080	3.6	19.7
2 1	8 20.26	+23 19.9	1.322	2.298	4.3	19.6	2 1	8 20.82	+26 38.0	1.106	2.080	5.7	19.9
2 11	8 10.24	+23 46.6	1.342	2.287	9.4	19.9	2 11	8 11.87	+26 43.7	1.136	2.080	10.7	20.1
2 21	8 2.39	+24 0.7	1.387	2.275	14.0	20.1	2 21	8 5.54	+26 33.0	1.188	2.082	15.4	20.4
3 2	7 57.68	+24 2.1	1.452	2.264	18.0	20.3	3 2	8 2.71	+26 7.8	1.259	2.085	19.5	20.7
<b>296151</b>	2009 <i>BQ</i> <sub>108</sub>		1 25.3	110°72'	1.1/24.6	18	<b>19796</b>	2000 <i>RX</i> <sub>50</sub>		1 25.4	137°37'	1.3/24.6	18
12 23	8 50.31	+20 53.2	2.427	3.253	10.9	21.0	12 23	8 57.06	+20 30.1	1.941	2.764	13.3	19.4
1 2	8 45.20	+21 24.9	2.351	3.256	8.0	20.8	1 2	8 50.46	+21 10.9	1.875	2.778	9.8	19.2
1 12	8 38.33	+22 0.6	2.301	3.258	4.7	20.6	1 12	8 41.56	+21 57.0	1.834	2.791	5.7	19.0
1 22	8 30.30	+22 36.7	2.279	3.261	1.4	20.3	1 22	8 31.17	+22 43.1	1.822	2.803	1.8	18.8
2 1	8 21.94	+23 9.4	2.288	3.264	2.9	20.5	2 1	8 20.40	+23 23.8	1.840	2.815	3.5	18.9
2 11	8 14.13	+23 35.7	2.327	3.266	6.3	20.7	2 11	8 10.48	+23 55.3	1.887	2.826	7.6	19.2
2 21	8 7.65	+23 53.8	2.393	3.269	9.4	20.9	2 21	8 2.41	+24 15.8	1.962	2.836	11.2	19.4
3 2	8 3.09	+24 3.3	2.483	3.271	12.1	21.1	3 2	7 56.88	+24 25.5	2.059	2.845	14.3	19.6
<b>399434</b>	2001 <i>YM</i> <sub>53</sub>		1 25.3	69°95'	9.5/29.2	18	<b>238432</b>	2004 <i>LZ</i> <sub>8</sub>		1 25.4	173°79'	1.1/25.0	18
12 23	9 0.21	- 3 20.3	1.809	2.547	17.4								



EPHEMERIDES

1 25.4

1 25.4

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>1169</b>	Alwine		1 25.4	38°88'	2°8/26.4	18	<b>262568</b>	2006 VS <sub>35</sub>		1 25.4	35°59'	0°3/25.2	18
12 23	8 54.66	+12 55.7	1.185	2.026	19.0	15.7	12 23	8 53.34	+18 6.9	1.623	2.458	15.0	20.7
1 2	8 49.58	+12 40.2	1.130	2.038	14.4	15.4	1 2	8 48.14	+18 29.9	1.553	2.462	11.0	20.5
1 12	8 41.37	+12 40.3	1.096	2.051	9.1	15.2	1 12	8 40.39	+19 1.5	1.507	2.465	6.5	20.2
1 22	8 31.16	+12 53.8	1.085	2.064	3.9	14.9	1 22	8 30.94	+19 37.1	1.486	2.469	1.6	19.9
2 1	8 20.52	+13 16.1	1.100	2.079	4.4	15.0	2 1	8 20.98	+20 11.5	1.494	2.473	3.4	20.1
2 11	8 11.18	+13 41.9	1.140	2.093	9.5	15.3	2 11	8 11.91	+20 40.1	1.530	2.477	8.1	20.4
2 21	8 4.45	+14 6.7	1.203	2.109	14.3	15.6	2 21	8 4.83	+21 0.2	1.591	2.481	12.4	20.6
3 2	8 1.08	+14 26.9	1.286	2.125	18.4	15.9	3 2	8 0.53	+21 10.9	1.673	2.486	16.0	20.9
<b>108924</b>	2001 PO <sub>19</sub>		1 25.4	212°75'	0°5/24.9	18	<b>166741</b>	2002 TU <sub>293</sub>		1 25.4	162°52'	1°8/24.2	18
12 23	8 50.12	+17 55.3	2.514	3.332	10.8	20.4	12 23	8 52.89	+23 54.1	2.479	3.303	10.8	20.5
1 2	8 45.10	+18 44.1	2.427	3.328	8.0	20.2	1 2	8 47.09	+24 19.3	2.403	3.306	7.9	20.4
1 12	8 38.33	+19 40.1	2.367	3.323	4.7	20.0	1 12	8 39.46	+24 45.9	2.353	3.309	4.7	20.2
1 22	8 30.36	+20 39.3	2.336	3.319	1.2	19.7	1 22	8 30.67	+25 10.0	2.332	3.312	2.0	20.0
2 1	8 21.97	+21 37.4	2.337	3.314	2.6	19.8	2 1	8 21.54	+25 28.3	2.342	3.314	3.3	20.1
2 11	8 14.02	+22 30.1	2.368	3.308	6.1	20.0	2 11	8 13.03	+25 38.5	2.382	3.316	6.5	20.3
2 21	8 7.28	+23 14.7	2.427	3.303	9.3	20.2	2 21	8 5.90	+25 39.6	2.450	3.318	9.5	20.5
3 2	8 2.38	+23 49.7	2.510	3.297	12.0	20.4	3 2	8 0.76	+25 32.3	2.541	3.319	12.1	20.7
<b>209903</b>	2005 MX <sub>48</sub>		1 25.4	191°72'	0°6/24.9	17	<b>116563</b>	2004 BO <sub>83</sub>		1 25.4	342°37'	11°5/19.4	18
12 23	8 49.97	+19 40.8	2.919	3.735	9.5	21.5	12 23	8 59.50	+43 33.4	1.450	2.283	16.6	17.8
1 2	8 44.72	+20 6.8	2.834	3.734	7.0	21.3	1 2	8 53.94	+45 5.4	1.393	2.276	14.0	17.6
1 12	8 37.98	+20 36.8	2.776	3.732	4.1	21.1	1 12	8 44.38	+46 21.8	1.357	2.269	12.0	17.5
1 22	8 30.26	+21 7.8	2.748	3.730	1.1	20.9	1 22	8 32.03	+47 9.7	1.344	2.263	11.6	17.4
2 1	8 22.22	+21 37.0	2.751	3.727	2.3	21.0	2 1	8 18.88	+47 20.0	1.354	2.258	12.9	17.5
2 11	8 14.61	+22 1.9	2.785	3.724	5.4	21.2	2 11	8 7.25	+46 51.1	1.387	2.253	15.4	17.6
2 21	8 8.07	+22 20.8	2.847	3.721	8.1	21.4	2 21	7 58.90	+45 48.5	1.440	2.249	18.2	17.8
3 2	8 3.14	+22 33.0	2.935	3.718	10.6	21.6	3 2	7 54.76	+44 21.2	1.510	2.246	20.8	18.0
<b>12313</b>	1992 EX <sub>10</sub>		1 25.4	287°22'	2°6/23.9	18	<b>390572</b>	2001 HJ <sub>21</sub>		1 25.4	222°95'	2°1/26.5	18
12 23	8 54.01	+25 7.7	1.960	2.794	12.8	19.0	12 23	8 56.33	+11 42.5	1.900	2.705	14.3	22.3
1 2	8 48.42	+25 37.0	1.881	2.788	9.5	18.8	1 2	8 50.21	+11 55.2	1.804	2.693	11.0	22.0
1 12	8 40.47	+26 7.6	1.826	2.783	5.8	18.6	1 12	8 41.63	+12 21.0	1.733	2.681	7.0	21.8
1 22	8 30.93	+26 34.4	1.799	2.777	2.8	18.4	1 22	8 31.29	+12 57.5	1.689	2.667	3.0	21.5
2 1	8 20.89	+26 52.7	1.801	2.771	4.4	18.5	2 1	8 20.23	+13 40.9	1.675	2.653	3.4	21.5
2 11	8 11.58	+26 59.5	1.831	2.766	8.1	18.7	2 11	8 9.70	+14 26.3	1.691	2.637	7.6	21.7
2 21	8 4.05	+26 54.2	1.888	2.760	11.7	18.9	2 21	8 0.85	+15 9.7	1.734	2.621	11.8	21.9
3 2	7 59.05	+26 37.8	1.967	2.754	14.8	19.1	3 2	7 54.51	+15 47.8	1.801	2.604	15.4	22.1
<b>456390</b>	2006 UL <sub>140</sub>		1 25.4	81°58'	7°7/29.2	18	<b>421953</b>	2014 QH <sub>264</sub>		1 25.4	194°49'	3°1/23.4	18
12 23	8 53.48	- 0 19.8	1.765	2.533	16.7	21.5	12 23	8 56.30	+25 13.7	2.063	2.891	12.5	21.6
1 2	8 47.90	- 1 12.2	1.698	2.545	13.8	21.4	1 2	8 50.07	+26 12.6	1.984	2.889	9.2	21.4
1 12	8 40.09	- 1 43.7	1.652	2.556	10.8	21.2	1 12	8 41.47	+27 14.1	1.931	2.886	5.7	21.2
1 22	8 30.82	- 1 52.4	1.630	2.568	8.3	21.1	1 22	8 31.23	+28 11.7	1.907	2.883	3.1	21.0
2 1	8 21.17	- 1 38.4	1.635	2.580	7.8	21.1	2 1	8 20.42	+28 59.3	1.913	2.879	4.8	21.1
2 11	8 12.30	- 1 5.3	1.667	2.592	9.5	21.2	2 11	8 10.27	+29 32.8	1.948	2.874	8.3	21.3
2 21	8 5.19	- 0 18.7	1.724	2.603	12.3	21.4	2 21	8 1.87	+29 50.9	2.010	2.869	11.7	21.5
3 2	8 0.51	+ 0 35.0	1.803	2.615	15.1	21.6	3 2	7 55.98	+29 54.6	2.094	2.863	14.7	21.7
<b>350739</b>	2001 YX <sub>34</sub>		1 25.4	88°70'	1°1/25.9	18	<b>417069</b>	2005 UX <sub>227</sub>		1 25.4	136°56'	2°9/23.6	18
12 23	8 59.14	+15 3.1	1.555	2.376	16.2	21.2	12 23	8 54.33	+25 5.0	1.978	2.811	12.7	21.7
1 2	8 52.12	+15 16.9	1.505	2.405	12.0	21.0	1 2	8 48.60	+25 54.3	1.908	2.815	9.4	21.5
1 12	8 42.54	+15 41.5	1.478	2.432	7.2	20.8	1 12	8 40.55	+26 45.5	1.864	2.820	5.7	21.3
1 22	8 31.42	+16 12.5	1.478	2.460	2.3	20.6	1 22	8 30.98	+27 32.8	1.847	2.824	3.0	21.1
2 1	8 20.11	+16 44.9	1.508	2.486	3.3	20.7	2 1	8 20.96	+28 10.4	1.860	2.828	4.6	21.2
2 11	8 10.01	+17 14.5	1.565	2.512	8.0	21.0	2 11	8 11.71	+28 34.9	1.902	2.832	8.2	21.4
2 21	8 2.19	+17 38.2	1.649	2.538	12.1	21.3	2 21	8 4.25	+28 45.2	1.969	2.835	11.6	21.6
3 2	7 57.27	+17 54.9	1.754	2.563	15.5	21.6	3 2	7 59.29	+28 42.5	2.059	2.839	14.5	21.9
<b>393837</b>	2005 SK <sub>109</sub>		1 25.4	204°56'	2°3/24.3	18	<b>226813</b>	2004 RA <sub>227</sub>		1 25.4	121°61'	0°5/25.1	18
12 23	8 58.55	+22 59.0	1.660	2.493	14.8	21.8	12 23	8 53.66	+19 17.5	2.087	2.910	12.5	20.5
1 2	8 52.15	+23 36.9	1.582	2.489	10.9	21.6	1 2	8 47.86	+19 34.6	2.015	2.918	9.2	20.3
1 12	8 42.87	+24 19.2	1.527	2.485	6.6	21.3	1 12	8 40.01	+19 56.9	1.968	2.925	5.4	20.0
1 22	8 31.58	+24 59.5	1.500	2.480	2.6	21.0	1 22	8 30.82	+20 20.9	1.949	2.931	1.4	19.8
2 1	8 19.63	+25 31.4	1.502	2.475	4.6	21.1	2 1	8 21.29	+20 42.7	1.960	2.938	2.9	19.9
2 11	8 8.55	+25 50.5	1.532	2.469	9.1	21.4	2 11	8 12.48	+20 59.5	2.001	2.945	6.8	20.2
2 21	7 59.64	+25 55.7	1.587	2.463	13.4	21.6	2 21	8 5.29	+21 9.4	2.069	2.951	10.4	20.4
3 2	7 53.80	+25 48.2	1.664	2.456	17.0	21.9	3 2	8 0.35	+21 12.2	2.160	2.957	13.4	20.6
<b>372508</b>	2009 SQ <sub>283</sub>		1 25.4	166°46'	2°0/26.6	18	<b>319072</b>	2005 WY <sub>56</sub>		1 25.4	188°39'	1°3/24.7	18
12 23	8 51.20	+11 11.1	1.982	2.793	13.6	21.1	12 23	8 53.69	+21 8.8	1.986	2.816	12.8	21.4
1 2	8 46.18	+11 32.8	1.902	2.794	10.3	20.9	1 2	8 48.08	+21 35.9	1.909	2.815	9.4	21.2
1 12	8 39.08	+12 7.7	1.846	2.795	6.6	20.7	1 12	8 40.24	+22 7.7	1.857	2.815	5.6	20.9
1 22	8 30.59	+12 53.2	1.818	2.795	2.9	20.4	1 22	8 30.90	+22 39.7	1.833	2.815	1.7	20.7
2 1	8 21.63	+13 45.0	1.818	2.796	3.1	20.4	2 1	8 21.12	+23 7.3	1.838	2.814	3.4	20.8
2 11	8 13.28	+14 38.4	1.848	2.797	6.9	20.7	2 11	8 12.04	+23 27.1	1.873	2.813	7.4	21.0
2 21	8 6.46	+15 29.0	1.905	2.797	10.6	20.9	2 21	8 4.65	+23 37.4	1.933	2.813	11.1	21.3
3 2	8 1.87	+16 13.7	1.986	2.797	13.9	21.1	3 2	7 59.67	+23 38.4	2.017	2.812	14.3	21.5
<b>20000</b>	Varuna		1 25.4	118°61'	0°2/23.5	18 R	<b>3185</b>	Clintford		1 25.4	111°30'	1°9/24.4	18
12 23	8 30.26	+26 52.1	43.141	43.964	0.7	20.1	12 23	8 57.72	+21 32.5	1.717	2.547	14.5	17.8
1 2	8												

EPHEMERIDES

1 25.4

1 25.4

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>218614</b>	2005 <i>PO</i> <sub>12</sub>		1 25.4 267°79	4°3/22.8	17		<b>424698</b>	2008 <i>SL</i> <sub>37</sub>		1 25.4 104°83	0°1/25.4	18	
12 23	8 55.47	+32 47.7	2.529	3.351	10.6	20.6	12 23	8 52.19	+17 28.3	2.180	3.000	12.2	21.8
1 2	8 49.17	+33 15.9	2.441	3.337	8.1	20.4	1 2	8 46.70	+17 52.9	2.110	3.011	9.0	21.6
1 12	8 40.80	+33 39.4	2.378	3.322	5.7	20.2	1 12	8 39.31	+18 24.3	2.066	3.022	5.3	21.4
1 22	8 31.05	+33 53.6	2.345	3.307	4.3	20.1	1 22	8 30.69	+18 58.9	2.050	3.032	1.4	21.2
2 1	8 20.84	+33 54.4	2.341	3.291	5.4	20.2	2 1	8 21.75	+19 32.8	2.064	3.043	2.6	21.3
2 11	8 11.26	+33 40.3	2.366	3.276	7.9	20.3	2 11	8 13.48	+20 2.7	2.108	3.053	6.4	21.5
2 21	8 3.21	+33 12.0	2.419	3.260	10.6	20.5	2 21	8 6.71	+20 26.1	2.180	3.063	9.9	21.8
3 2	7 57.37	+32 31.8	2.494	3.245	13.1	20.6	3 2	8 2.04	+20 42.2	2.275	3.073	12.8	22.0
<b>22899</b>	Alconrad		1 25.4 119°63	0°3/25.5	18		<b>191857</b>	Illésérzsébet		1 25.4 64°62	1°5/24.6	18	
12 23	8 51.90	+16 21.0	2.136	2.955	12.4	18.5	12 23	8 53.88	+22 12.1	1.907	2.739	13.2	20.3
1 2	8 46.54	+16 47.7	2.062	2.962	9.2	18.3	1 2	8 48.20	+22 35.1	1.842	2.750	9.6	20.1
1 12	8 39.23	+17 22.4	2.014	2.969	5.5	18.1	1 12	8 40.28	+23 1.3	1.802	2.760	5.7	19.8
1 22	8 30.64	+18 1.7	1.994	2.976	1.5	17.9	1 22	8 30.95	+23 26.2	1.789	2.770	1.9	19.6
2 1	8 21.69	+18 41.4	2.004	2.983	2.6	18.0	2 1	8 21.29	+23 45.7	1.806	2.781	3.6	19.7
2 11	8 13.38	+19 17.6	2.044	2.989	6.5	18.2	2 11	8 12.48	+23 56.6	1.851	2.792	7.5	20.0
2 21	8 6.57	+19 47.8	2.111	2.996	10.1	18.5	2 21	8 5.47	+23 58.1	1.922	2.802	11.2	20.2
3 2	8 1.89	+20 10.4	2.201	3.002	13.1	18.7	3 2	8 0.92	+23 50.6	2.016	2.813	14.2	20.5
<b>334414</b>	2002 <i>ES</i> <sub>38</sub>		1 25.4 231°39	3°3/27.8	17		<b>118391</b>	1999 <i>JV</i> <sub>117</sub>		1 25.4 144°51	6°9/29.5	18	
12 23	8 50.14	+ 6 8.8	2.160	2.950	13.4	21.5	12 23	8 51.76	- 1 22.1	2.118	2.870	14.8	19.6
1 2	8 45.33	+ 6 36.2	2.069	2.944	10.5	21.3	1 2	8 46.43	- 1 56.7	2.039	2.875	12.3	19.5
1 12	8 38.59	+ 7 20.5	2.002	2.937	7.2	21.1	1 12	8 39.20	- 2 12.4	1.982	2.880	9.6	19.3
1 22	8 30.50	+ 8 19.8	1.962	2.931	4.1	20.9	1 22	8 30.68	- 2 7.7	1.951	2.885	7.5	19.2
2 1	8 21.91	+ 9 30.4	1.951	2.924	3.8	20.8	2 1	8 21.77	- 1 43.3	1.947	2.889	7.0	19.2
2 11	8 13.78	+10 47.0	1.971	2.917	6.7	21.0	2 11	8 13.43	- 1 2.4	1.971	2.893	8.4	19.3
2 21	8 6.99	+12 4.1	2.018	2.909	10.1	21.2	2 21	8 6.51	- 0 9.9	2.021	2.897	10.9	19.4
3 2	8 2.22	+13 16.9	2.090	2.902	13.3	21.4	3 2	8 1.65	+ 0 48.7	2.095	2.900	13.5	19.6
<b>317128</b>	2001 <i>UQ</i> <sub>45</sub>		1 25.4 133°09	2°6/23.8	18		<b>30109</b>	Jaywilson		1 25.4 129°69	4°1/23.2	18	
12 23	8 55.37	+24 42.4	2.111	2.939	12.2	21.0	12 23	8 58.81	+26 16.9	1.641	2.477	14.8	19.1
1 2	8 49.18	+25 30.3	2.045	2.950	9.0	20.8	1 2	8 52.31	+27 26.7	1.581	2.489	10.9	18.9
1 12	8 40.82	+26 19.9	2.005	2.961	5.5	20.6	1 12	8 42.94	+28 37.9	1.545	2.500	6.9	18.6
1 22	8 31.06	+27 5.6	1.994	2.971	2.7	20.5	1 22	8 31.68	+29 42.1	1.537	2.511	4.1	18.5
2 1	8 20.94	+27 42.3	2.013	2.981	4.3	20.6	2 1	8 19.92	+30 31.4	1.558	2.521	5.9	18.6
2 11	8 11.59	+28 6.7	2.061	2.990	7.6	20.8	2 11	8 9.22	+31 1.4	1.606	2.531	9.8	18.9
2 21	8 3.96	+28 18.1	2.136	2.999	10.9	21.0	2 21	8 0.82	+31 12.0	1.679	2.540	13.5	19.1
3 2	7 58.69	+28 17.4	2.233	3.008	13.7	21.2	3 2	7 55.53	+31 5.8	1.773	2.548	16.7	19.4
<b>156186</b>	2001 <i>TE</i> <sub>222</sub>		1 25.4 199°23	2°0/26.3	18		<b>120289</b>	2004 <i>HM</i> <sub>61</sub>		1 25.4 225°96	4°1/27.4	18	
12 23	8 56.58	+12 48.1	1.906	2.713	14.2	20.8	12 23	8 55.12	+ 7 30.0	1.752	2.550	15.6	21.0
1 2	8 50.28	+12 50.9	1.819	2.710	10.8	20.5	1 2	8 49.45	+ 7 24.5	1.661	2.541	12.3	20.8
1 12	8 41.61	+13 4.8	1.757	2.706	6.8	20.3	1 12	8 41.27	+ 7 35.8	1.593	2.531	8.4	20.5
1 22	8 31.31	+13 27.4	1.723	2.701	2.8	20.0	1 22	8 31.29	+ 8 3.1	1.551	2.521	4.9	20.3
2 1	8 20.43	+13 55.5	1.718	2.695	3.3	20.1	2 1	8 20.58	+ 8 43.6	1.538	2.509	4.7	20.2
2 11	8 10.20	+14 25.2	1.743	2.689	7.4	20.3	2 11	8 10.47	+ 9 32.6	1.552	2.498	8.2	20.4
2 21	8 1.71	+14 53.1	1.795	2.682	11.4	20.5	2 21	8 2.11	+10 24.9	1.594	2.485	12.3	20.6
3 2	7 55.71	+15 16.7	1.870	2.674	14.9	20.7	3 2	7 56.37	+11 15.4	1.657	2.472	16.0	20.8
<b>325087</b>	2008 <i>DC</i> <sub>37</sub>		1 25.4 219°66	2°3/24.0	16		<b>427823</b>	2005 <i>JV</i> <sub>69</sub>		1 25.4 82°92	5°2/21.8	18	
12 23	8 56.07	+25 11.3	2.372	3.194	11.3	22.1	12 23	8 54.10	+33 27.6	2.262	3.091	11.5	20.9
1 2	8 49.64	+25 40.6	2.283	3.184	8.3	21.9	1 2	8 48.31	+34 31.7	2.204	3.102	8.8	20.8
1 12	8 41.12	+26 10.9	2.219	3.174	5.1	21.7	1 12	8 40.35	+35 30.9	2.172	3.112	6.3	20.6
1 22	8 31.17	+26 37.5	2.185	3.163	2.4	21.5	1 22	8 30.99	+36 18.8	2.167	3.122	5.2	20.6
2 1	8 20.71	+26 56.6	2.182	3.151	3.9	21.5	2 1	8 21.28	+36 50.5	2.192	3.133	6.4	20.7
2 11	8 10.82	+27 5.2	2.209	3.139	7.2	21.7	2 11	8 12.35	+37 3.6	2.245	3.143	8.8	20.8
2 21	8 2.44	+27 2.9	2.263	3.126	10.4	21.9	2 21	8 5.15	+36 58.8	2.323	3.153	11.4	21.0
3 2	7 56.27	+26 50.5	2.341	3.112	13.3	22.1	3 2	8 0.31	+36 38.8	2.422	3.163	13.7	21.2
<b>376508</b>	2012 <i>KY</i> <sub>48</sub>		1 25.4 151°82	0°7/24.9	18		<b>235977</b>	2005 <i>ER</i> <sub>260</sub>		1 25.4 207°29	1°3/24.6	17	
12 23	8 52.06	+18 44.8	2.148	2.972	12.2	21.5	12 23	8 52.17	+21 50.3	2.270	3.096	11.5	20.6
1 2	8 46.73	+19 24.1	2.072	2.976	9.0	21.3	1 2	8 46.77	+22 16.5	2.190	3.095	8.5	20.4
1 12	8 39.39	+20 10.0	2.022	2.979	5.3	21.0	1 12	8 39.42	+22 46.0	2.137	3.094	5.0	20.2
1 22	8 30.71	+20 58.5	2.000	2.982	1.4	20.8	1 22	8 30.78	+23 15.2	2.112	3.093	1.7	20.0
2 1	8 21.62	+21 44.6	2.008	2.985	3.0	20.9	2 1	8 21.75	+23 40.0	2.117	3.092	3.2	20.1
2 11	8 13.14	+22 24.4	2.045	2.987	6.8	21.1	2 11	8 13.32	+23 57.6	2.151	3.090	6.7	20.3
2 21	8 6.17	+22 55.4	2.110	2.990	10.3	21.4	2 21	8 6.35	+24 6.5	2.213	3.089	10.1	20.5
3 2	8 1.36	+23 16.7	2.198	2.992	13.3	21.6	3 2	8 1.47	+24 6.7	2.298	3.087	12.9	20.7
<b>381888</b>	2010 <i>AT</i> <sub>105</sub>		1 25.4 23°48	1°9/26.6	18		<b>422154</b>	2014 <i>RA</i> <sub>2</sub>		1 25.4 191°35	3°6/23.5	18	
12 23	8 48.91	+11 14.2	1.911	2.728	13.8	20.5	12 23	8 57.49	+26 42.5	1.880	2.712	13.4	21.7
1 2	8 44.55	+11 40.4	1.838	2.733	10.4	20.3	1 2	8 51.15	+27 30.8	1.805	2.711	9.9	21.5
1 12	8 38.15	+12 20.4	1.788	2.738	6.6	20.0	1 12	8 42.23	+28 19.9	1.755	2.710	6.3	21.3
1 22	8 30.40	+13 11.2	1.765	2.743	2.8	19.8	1 22	8 31.54	+29 3.0	1.733	2.708	3.6	21.1
2 1	8 22.24	+14 8.1	1.771	2.750	3.0	19.8	2 1	8 20.29	+29 34.0	1.740	2.705	5.2	21.2
2 11	8 14.73	+15 6.1	1.806	2.756	6.9	20.1	2 11	8 9.87	+29 49.6	1.776	2.703	8.9	21.4
2 21	8 8.76	+16 0.5	1.867	2.763	10.6	20.3	2 21	8 1.42	+29 49.2	1.838	2.699	12.5	21.6
3 2	8 5.00	+16 47.9	1.952	2.770	13.8	20.6	3 2	7 55.75	+29 35.0	1.921	2.696	15.6	21.8
<b>15660</b>	3025 <i>T</i> -2		1 25.4 82°90	0°1/25.3	18		<b>258488</b>	2002 <i>AG</i> <sub>45</sub>		1 25.4 47°49	2°6/26.5	18	
12 23	8 57.27	+16 47.7	1.432	2.265	16.7	18.7	12 23	8 54.06	+12 35.5	1.8			

EPHEMERIDES

1 25.4

1 25.4

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>245956</b>	2006 SW <sub>46</sub>		1 25.4 212°78	0°1/25.3	18		<b>279933</b>	2001 SE <sub>41</sub>		1 25.4 140°49	5°2/29.9	18	
12 23	8 51.48	+18 44.2	2.598	3.414	10.6	20.6	12 23	8 48.84	- 2 11.7	2.871	3.605	11.7	21.7
1 2	8 46.03	+18 54.7	2.511	3.410	7.8	20.4	1 2	8 43.87	- 2 14.0	2.790	3.615	9.7	21.6
1 12	8 38.89	+19 9.6	2.451	3.406	4.6	20.2	1 12	8 37.53	- 2 0.4	2.733	3.625	7.5	21.4
1 22	8 30.65	+19 26.4	2.420	3.402	1.2	19.9	1 22	8 30.31	- 1 31.0	2.703	3.635	5.8	21.3
2 1	8 22.05	+19 42.4	2.420	3.398	2.4	20.0	2 1	8 22.82	- 0 47.3	2.702	3.644	5.3	21.3
2 11	8 13.94	+19 55.1	2.450	3.393	5.8	20.3	2 11	8 15.76	+ 0 7.7	2.730	3.653	6.4	21.4
2 21	8 7.07	+20 3.2	2.508	3.388	8.9	20.4	2 21	8 9.71	+ 1 10.0	2.788	3.661	8.3	21.5
3 2	8 1.99	+20 5.8	2.591	3.383	11.6	20.6	3 2	8 5.15	+ 2 15.4	2.871	3.669	10.4	21.7
<b>61435</b>	2000 QC <sub>19</sub>		1 25.4 220°79	2°3/26.8	18		<b>316241</b>	2010 OX <sub>28</sub>		1 25.4 81°06	1°1/24.9	18	R
12 23	8 51.48	+10 23.9	2.048	2.853	13.4	19.7	12 23	8 58.22	+21 11.2	1.759	2.586	14.3	20.1
1 2	8 46.43	+10 44.4	1.961	2.849	10.3	19.5	1 2	8 51.35	+21 28.6	1.707	2.612	10.5	19.9
1 12	8 39.32	+11 18.5	1.898	2.844	6.6	19.3	1 12	8 42.12	+21 49.8	1.680	2.638	6.1	19.7
1 22	8 30.79	+12 3.8	1.863	2.840	3.1	19.0	1 22	8 31.49	+22 10.0	1.681	2.663	1.8	19.5
2 1	8 21.75	+12 56.5	1.858	2.834	3.2	19.0	2 1	8 20.68	+22 25.1	1.712	2.688	3.5	19.6
2 11	8 13.25	+13 51.8	1.881	2.829	6.8	19.2	2 11	8 10.98	+22 32.3	1.771	2.713	7.7	20.0
2 21	8 6.21	+14 45.2	1.932	2.824	10.5	19.5	2 21	8 3.37	+22 31.0	1.856	2.737	11.4	20.2
3 2	8 1.35	+15 33.4	2.007	2.818	13.8	19.7	3 2	7 58.45	+22 21.8	1.965	2.761	14.5	20.5
<b>287271</b>	2002 TY <sub>156</sub>		1 25.4 202°97	0°7/25.0	18		<b>453391</b>	2009 CQ <sub>35</sub>		1 25.4 109°63	1°8/24.4	18	
12 23	8 53.49	+20 42.8	2.326	3.148	11.5	20.5	12 23	8 55.72	+20 2.7	1.645	2.479	14.9	21.4
1 2	8 47.66	+20 50.4	2.244	3.146	8.5	20.3	1 2	8 49.94	+21 4.1	1.582	2.491	10.9	21.2
1 12	8 39.92	+21 1.2	2.187	3.144	5.0	20.1	1 12	8 41.53	+22 13.5	1.544	2.503	6.4	20.9
1 22	8 30.92	+21 12.2	2.160	3.142	1.3	19.8	1 22	8 31.39	+23 23.7	1.533	2.514	2.1	20.7
2 1	8 21.55	+21 20.4	2.163	3.140	2.8	19.9	2 1	8 20.77	+24 27.2	1.551	2.526	4.1	20.8
2 11	8 12.78	+21 23.7	2.195	3.137	6.4	20.2	2 11	8 11.08	+25 18.4	1.597	2.537	8.6	21.1
2 21	8 5.47	+21 21.0	2.256	3.135	9.8	20.4	2 21	8 3.47	+25 54.6	1.669	2.547	12.6	21.4
3 2	8 0.22	+21 12.1	2.341	3.132	12.6	20.6	3 2	7 58.71	+26 15.8	1.762	2.558	16.0	21.6
<b>375021</b>	2007 GY <sub>51</sub>		1 25.4 73°54	1°0/26.0	18		<b>424911</b>	2008 WF <sub>84</sub>		1 25.4 85°22	2°5/26.8	18	
12 23	8 51.29	+13 58.3	1.938	2.758	13.5	21.2	12 23	8 52.64	+11 17.8	2.198	3.000	12.7	20.9
1 2	8 46.35	+14 25.8	1.861	2.760	10.1	21.0	1 2	8 46.96	+11 2.6	2.128	3.014	9.7	20.8
1 12	8 39.27	+15 4.6	1.808	2.762	6.2	20.8	1 12	8 39.46	+10 57.2	2.083	3.027	6.3	20.6
1 22	8 30.77	+15 51.2	1.783	2.764	2.1	20.5	1 22	8 30.81	+11 0.4	2.065	3.040	3.2	20.4
2 1	8 21.82	+16 41.2	1.787	2.766	2.8	20.6	2 1	8 21.90	+11 10.3	2.078	3.053	3.3	20.4
2 11	8 13.50	+17 29.5	1.819	2.768	7.0	20.8	2 11	8 13.66	+11 24.2	2.120	3.066	6.3	20.7
2 21	8 6.78	+18 12.6	1.879	2.770	10.8	21.1	2 21	8 6.87	+11 39.7	2.190	3.078	9.6	20.9
3 2	8 2.34	+18 47.9	1.962	2.772	14.1	21.3	3 2	8 2.11	+11 54.4	2.284	3.091	12.4	21.1
<b>234162</b>	2000 HM <sub>103</sub>		1 25.4 253°57	3°8/28.2	17		<b>77787</b>	2001 QM <sub>37</sub>		1 25.4 124°38	0°2/25.5	18	
12 23	8 49.10	+ 4 28.1	2.538	3.313	12.0	20.9	12 23	8 52.91	+18 11.7	2.445	3.260	11.2	19.3
1 2	8 44.38	+ 4 37.5	2.436	3.298	9.5	20.8	1 2	8 47.07	+18 14.5	2.370	3.268	8.3	19.1
1 12	8 38.00	+ 5 1.4	2.357	3.283	6.8	20.6	1 12	8 39.49	+18 21.8	2.322	3.276	4.9	18.9
1 22	8 30.45	+ 5 39.3	2.307	3.268	4.4	20.4	1 22	8 30.82	+18 31.3	2.302	3.284	1.3	18.7
2 1	8 22.43	+ 6 29.0	2.286	3.252	4.1	20.3	2 1	8 21.88	+18 40.4	2.313	3.292	2.4	18.8
2 11	8 14.75	+ 7 26.9	2.295	3.236	6.2	20.4	2 11	8 13.55	+18 47.0	2.355	3.299	5.9	19.0
2 21	8 8.16	+ 8 28.8	2.333	3.220	9.1	20.6	2 21	8 6.58	+18 49.7	2.425	3.307	9.1	19.2
3 2	8 3.27	+ 9 30.5	2.396	3.204	11.9	20.7	3 2	8 1.53	+18 48.0	2.519	3.314	11.8	19.4
<b>263710</b>	2008 HZ <sub>33</sub>		1 25.4 20°28	6°9/29.4	18		<b>318740</b>	2005 SA <sub>7</sub>		1 25.4 113°14	0°2/25.5	18	
12 23	8 50.35	- 0 3.8	1.760	2.535	16.5	20.3	12 23	8 55.71	+17 35.0	2.041	2.858	13.0	21.2
1 2	8 45.79	- 0 23.8	1.683	2.536	13.6	20.1	1 2	8 49.35	+17 44.5	1.975	2.874	9.6	21.0
1 12	8 39.01	- 0 21.3	1.626	2.538	10.4	19.9	1 12	8 40.92	+18 0.3	1.935	2.889	5.7	20.8
1 22	8 30.73	+ 0 4.6	1.593	2.540	7.7	19.8	1 22	8 31.19	+18 19.1	1.922	2.904	1.5	20.5
2 1	8 21.94	+ 0 52.3	1.588	2.541	7.0	19.7	2 1	8 21.19	+18 37.4	1.940	2.919	2.7	20.7
2 11	8 13.80	+ 1 56.9	1.609	2.543	8.9	19.9	2 11	8 11.99	+18 52.4	1.988	2.933	6.7	20.9
2 21	8 7.30	+ 3 11.6	1.655	2.546	12.0	20.0	2 21	8 4.50	+19 2.3	2.063	2.947	10.3	21.2
3 2	8 3.18	+ 4 29.3	1.724	2.548	15.1	20.3	3 2	7 59.31	+19 6.4	2.162	2.960	13.3	21.4
<b>186147</b>	2001 UL <sub>20</sub>		1 25.4 72°73	1°7/24.5	18		<b>2495</b>	Noviomagum		1 25.4 145°08	15°9/ 3.9	18	R
12 23	8 54.48	+21 43.9	1.734	2.570	14.1	20.6	12 23	8 55.93	-16 39.8	1.370	2.063	23.9	18.6
1 2	8 48.89	+22 19.5	1.670	2.579	10.4	20.4	1 2	8 50.54	-17 54.5	1.305	2.071	21.6	18.4
1 12	8 40.83	+22 59.9	1.630	2.589	6.1	20.2	1 12	8 42.13	-18 29.1	1.255	2.078	19.2	18.3
1 22	8 31.18	+23 39.5	1.617	2.598	2.1	20.0	1 22	8 31.60	-18 15.9	1.222	2.085	17.1	18.1
2 1	8 21.12	+24 12.8	1.633	2.608	3.9	20.1	2 1	8 20.32	-17 11.9	1.209	2.091	15.9	18.1
2 11	8 11.98	+24 35.9	1.677	2.618	8.2	20.4	2 11	8 9.97	-15 22.1	1.218	2.096	16.2	18.1
2 21	8 4.80	+24 47.4	1.747	2.627	12.0	20.6	2 21	8 1.93	-12 58.8	1.249	2.100	17.8	18.2
3 2	8 0.31	+24 47.7	1.838	2.637	15.3	20.9	3 2	7 57.14	-10 17.2	1.299	2.104	20.1	18.4
<b>409398</b>	2005 EA <sub>207</sub>		1 25.4 314°07	0°1/25.4	16		<b>400200</b>	2007 AG <sub>13</sub>		1 25.4 57°56	0°4/25.2	17	
12 23	8 53.08	+17 47.7	1.441	2.283	16.1	21.4	12 23	8 56.19	+16 51.7	1.488	2.321	16.2	20.5
1 2	8 48.51	+17 59.7	1.357	2.268	12.1	21.1	1 2	8 50.10	+17 42.5	1.449	2.356	11.8	20.3
1 12	8 40.98	+18 21.7	1.294	2.253	7.3	20.8	1 12	8 41.45	+18 43.1	1.433	2.391	6.9	20.1
1 22	8 31.30	+18 49.6	1.257	2.239	1.9	20.4	1 22	8 31.32	+19 46.8	1.443	2.426	1.7	19.8
2 1	8 20.78	+19 18.1	1.246	2.225	3.7	20.5	2 1	8 21.04	+20 46.4	1.482	2.461	3.5	20.0
2 11	8 11.02	+19 42.1	1.262	2.212	9.1	20.7	2 11	8 12.00	+21 36.5	1.549	2.496	8.2	20.4
2 21	8 3.43	+19 58.3	1.302	2.199	14.1	21.0	2 21	8 5.22	+22 14.2	1.642	2.530	12.2	20.7
3 2	7 58.98	+20 5.3	1.362	2.187	18.3	21.2	3 2	8 1.30	+22 39.2	1.756	2.564	15.5	21.0
<b>148049</b>	1998 SU <sub>91</sub>		1 25.4 195°88	1°1/24.9	18		<b>327253</b>	2005 SD <sub>102</sub>		1 25.4 103°23	1°0/24.9	18	
12 23	8 58.79	+20 30.3	1.849	2.672	13.9	20.4	12 23	8 55.26	+20 43.3	1.895	2.724	13.4	21.2

EPHEMERIDES

1 25.4

1 25.4

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>412838</b>	2014 <i>PB</i> <sub>50</sub>		1 25.4 251°08	0°6/25.7	18		<b>417858</b>	2007 <i>JK</i> <sub>11</sub>		1 25.4 311°39	6°5/21.6	18	
12 23	8 56.15	+16 40.9	1.715	2.539	14.8	21.8	12 23	8 54.36	+32 32.6	1.684	2.527	14.1	20.4
1 2	8 50.39	+16 50.3	1.624	2.526	11.1	21.6	1 2	8 49.51	+33 46.3	1.601	2.507	10.9	20.2
1 12	8 41.94	+17 8.9	1.556	2.511	6.7	21.3	1 12	8 41.64	+34 57.9	1.542	2.488	7.9	20.0
1 22	8 31.55	+17 33.2	1.515	2.497	1.9	20.9	1 22	8 31.53	+35 58.3	1.510	2.469	6.5	19.9
2 1	8 20.40	+17 59.0	1.503	2.482	3.3	21.0	2 1	8 20.53	+36 38.7	1.504	2.450	8.2	19.9
2 11	8 9.89	+18 22.0	1.519	2.467	8.2	21.2	2 11	8 10.28	+36 54.4	1.524	2.432	11.5	20.0
2 21	8 1.27	+18 39.3	1.562	2.451	12.7	21.5	2 21	8 2.22	+36 45.6	1.566	2.414	15.1	20.2
3 2	7 55.46	+18 49.5	1.626	2.435	16.6	21.7	3 2	7 57.38	+36 15.8	1.629	2.396	18.3	20.4
<b>167515</b>	2003 <i>YL</i> <sub>138</sub>		1 25.4 166°38	2°5/24.0	18		<b>461718</b>	2005 <i>SW</i> <sub>161</sub>		1 25.4 67°61	7°8/22.0	18	
12 23	8 54.37	+26 16.8	2.350	3.176	11.2	20.4	12 23	9 2.31	+38 43.7	1.718	2.544	14.7	21.3
1 2	8 48.34	+26 37.4	2.274	3.177	8.3	20.2	1 2	8 54.89	+39 37.0	1.672	2.561	11.7	21.2
1 12	8 40.33	+26 57.4	2.224	3.179	5.1	20.0	1 12	8 44.42	+40 17.9	1.650	2.578	9.0	21.1
1 22	8 31.06	+27 12.9	2.203	3.180	2.6	19.8	1 22	8 32.13	+40 38.0	1.653	2.596	7.8	21.0
2 1	8 21.45	+27 20.3	2.212	3.181	3.9	19.9	2 1	8 19.64	+40 32.0	1.684	2.613	9.0	21.1
2 11	8 12.52	+27 17.6	2.251	3.181	7.0	20.1	2 11	8 8.63	+40 0.1	1.740	2.630	11.4	21.3
2 21	8 5.12	+27 4.9	2.317	3.182	10.1	20.3	2 21	8 0.30	+39 6.5	1.821	2.648	14.2	21.5
3 2	7 59.87	+26 43.1	2.406	3.183	12.8	20.5	3 2	7 55.32	+37 57.7	1.921	2.665	16.6	21.7
<b>257744</b>	2000 <i>AD</i> <sub>205</sub>		1 25.4 69°43	4°2/27.3	18		<b>470429</b>	2007 <i>VU</i> <sub>272</sub>		1 25.4 7°33	4°9/28.4	18	
12 23	9 26.17	+ 4 28.4	0.897	1.686	27.6	20.6	12 23	8 49.61	+ 3 44.8	2.274	3.051	13.1	21.4
1 2	9 11.79	+ 5 47.1	0.885	1.762	20.5	20.5	1 2	8 44.82	+ 3 22.4	2.191	3.051	10.6	21.2
1 12	8 53.75	+ 7 34.7	0.894	1.835	12.9	20.3	1 12	8 38.28	+ 3 14.7	2.131	3.051	7.8	21.0
1 22	8 34.28	+ 9 38.4	0.929	1.904	5.9	20.2	1 22	8 30.57	+ 3 21.9	2.097	3.052	5.4	20.9
2 1	8 15.99	+11 42.4	0.993	1.969	5.5	20.4	2 1	8 22.48	+ 3 42.8	2.093	3.052	5.1	20.8
2 11	8 1.08	+13 33.8	1.086	2.032	10.9	20.9	2 11	8 14.90	+ 4 14.6	2.116	3.053	7.0	21.0
2 21	7 50.64	+15 6.0	1.203	2.091	15.8	21.4	2 21	8 8.59	+ 4 53.4	2.167	3.053	9.8	21.1
3 2	7 44.84	+16 18.1	1.341	2.147	19.6	21.8	3 2	8 4.16	+ 5 35.1	2.242	3.054	12.5	21.3
<b>31916</b>	Arnehensel		1 25.4 192°31	1°3/24.8	18		<b>424330</b>	2007 <i>UH</i> <sub>58</sub>		1 25.4 221°34	3°5/22.8	17	
12 23	8 57.11	+20 18.3	1.650	2.482	14.9	20.3	12 23	8 52.72	+28 58.4	2.597	3.423	10.3	21.4
1 2	8 51.08	+20 50.5	1.574	2.481	11.0	20.0	1 2	8 47.14	+29 47.8	2.515	3.416	7.7	21.2
1 12	8 42.31	+21 29.6	1.522	2.480	6.5	19.8	1 12	8 39.68	+30 36.4	2.460	3.410	5.1	21.0
1 22	8 31.63	+22 10.0	1.497	2.479	1.9	19.5	1 22	8 30.94	+31 19.1	2.434	3.403	3.5	20.9
2 1	8 20.34	+22 45.7	1.500	2.477	3.9	19.6	2 1	8 21.76	+31 51.6	2.439	3.396	4.7	21.0
2 11	8 9.90	+23 12.1	1.532	2.474	8.6	19.9	2 11	8 13.10	+32 11.2	2.473	3.389	7.3	21.1
2 21	8 1.56	+23 27.2	1.589	2.471	12.9	20.1	2 21	8 5.79	+32 17.2	2.534	3.381	10.0	21.3
3 2	7 56.15	+23 31.0	1.667	2.468	16.6	20.4	3 2	8 0.48	+32 10.8	2.618	3.373	12.4	21.5
<b>451855</b>	2014 <i>DD</i> <sub>74</sub>		1 25.4 174°40	3°2/23.6	18		<b>152559</b>	Bodenschwingh		1 25.4 118°86	7°1/20.2	18	
12 23	8 58.90	+24 34.9	1.799	2.629	14.0	21.8	12 23	9 0.43	+41 11.1	2.461	3.268	11.4	20.0
1 2	8 52.29	+25 38.3	1.727	2.633	10.3	21.5	1 2	8 52.99	+42 30.3	2.417	3.288	9.3	19.9
1 12	8 42.98	+26 45.3	1.680	2.635	6.3	21.3	1 12	8 43.16	+43 38.7	2.399	3.308	7.6	19.8
1 22	8 31.81	+27 48.2	1.661	2.637	3.3	21.1	1 22	8 31.83	+44 29.3	2.408	3.327	7.1	19.8
2 1	8 20.02	+28 39.8	1.671	2.638	5.1	21.2	2 1	8 20.15	+44 57.4	2.446	3.345	8.1	19.9
2 11	8 9.09	+29 15.3	1.711	2.639	9.0	21.5	2 11	8 9.42	+45 1.8	2.512	3.363	9.8	20.1
2 21	8 0.20	+29 33.6	1.776	2.638	12.8	21.7	2 21	8 0.66	+44 44.8	2.601	3.380	11.8	20.2
3 2	7 54.22	+29 36.3	1.863	2.637	16.0	21.9	3 2	7 54.53	+44 10.8	2.712	3.397	13.5	20.4
<b>142578</b>	2002 <i>TB</i> <sub>88</sub>		1 25.4 33°65	8°9/21.8	18		<b>196598</b>	2003 <i>QK</i> <sub>66</sub>		1 25.4 258°58	3°5/23.5	18	
12 23	8 59.67	+37 34.0	1.358	2.202	16.8	20.1	12 23	8 56.43	+28 45.0	2.215	3.042	11.8	20.2
1 2	8 53.61	+38 41.4	1.313	2.214	13.3	19.9	1 2	8 50.19	+29 14.7	2.124	3.026	8.9	19.9
1 12	8 43.96	+39 36.5	1.290	2.225	10.2	19.7	1 12	8 41.64	+29 42.7	2.058	3.009	5.7	19.7
1 22	8 32.04	+40 8.4	1.290	2.238	8.9	19.7	1 22	8 31.47	+30 3.9	2.020	2.993	3.6	19.5
2 1	8 19.76	+40 9.8	1.316	2.252	10.3	19.8	2 1	8 20.74	+30 13.7	2.013	2.975	4.9	19.6
2 11	8 9.14	+39 40.4	1.365	2.266	13.2	20.0	2 11	8 10.62	+30 9.5	2.035	2.958	8.1	19.8
2 21	8 1.61	+38 45.4	1.436	2.280	16.4	20.3	2 21	8 2.16	+29 51.6	2.083	2.941	11.4	19.9
3 2	7 57.90	+37 32.2	1.526	2.295	19.2	20.5	3 2	7 56.13	+29 21.7	2.154	2.923	14.3	20.1
<b>412715</b>	2014 <i>OH</i> <sub>299</sub>		1 25.4 200°07	0°7/25.8	18		<b>203098</b>	2000 <i>RY</i> <sub>84</sub>		1 25.4 147°50	0°3/25.3	18	
12 23	8 54.89	+15 8.2	2.089	2.901	12.9	22.2	12 23	8 56.41	+17 24.7	1.891	2.711	13.8	21.4
1 2	8 48.95	+15 33.5	2.002	2.897	9.7	22.0	1 2	8 50.15	+18 2.4	1.820	2.721	10.2	21.2
1 12	8 40.85	+16 8.3	1.940	2.893	5.9	21.7	1 12	8 41.57	+18 48.7	1.774	2.730	6.0	21.0
1 22	8 31.25	+16 49.4	1.907	2.888	1.8	21.4	1 22	8 31.45	+19 38.6	1.756	2.739	1.5	20.7
2 1	8 21.11	+17 32.3	1.904	2.882	2.8	21.5	2 1	8 20.88	+20 26.8	1.768	2.747	3.1	20.8
2 11	8 11.55	+18 12.9	1.931	2.876	6.9	21.7	2 11	8 11.10	+21 8.7	1.810	2.754	7.4	21.1
2 21	8 3.54	+18 48.1	1.985	2.869	10.7	22.0	2 21	8 3.13	+21 41.3	1.879	2.760	11.3	21.4
3 2	7 57.80	+19 15.8	2.063	2.861	13.9	22.2	3 2	7 57.69	+22 3.9	1.971	2.766	14.5	21.6
<b>76998</b>	2001 <i>BJ</i> <sub>82</sub>		1 25.4 233°94	3°8/23.4	18		<b>165890</b>	2001 <i>SW</i> <sub>198</sub>		1 25.4 206°44	0°6/25.0	17	
12 23	8 57.31	+27 20.4	1.815	2.649	13.7	19.8	12 23	8 51.03	+19 25.2	2.629	3.447	10.4	21.0
1 2	8 51.21	+28 5.9	1.736	2.642	10.2	19.6	1 2	8 45.76	+19 53.2	2.543	3.443	7.7	20.9
1 12	8 42.39	+28 51.8	1.680	2.634	6.5	19.3	1 12	8 38.80	+20 25.9	2.483	3.439	4.5	20.7
1 22	8 31.68	+29 31.3	1.652	2.626	3.9	19.1	1 22	8 30.72	+21 0.1	2.453	3.435	1.2	20.4
2 1	8 20.31	+29 58.1	1.653	2.618	5.5	19.2	2 1	8 22.27	+21 32.6	2.453	3.430	2.5	20.5
2 11	8 9.75	+30 8.5	1.682	2.609	9.3	19.4	2 11	8 14.27	+22 0.3	2.484	3.425	5.8	20.7
2 21	8 1.22	+30 2.3	1.736	2.600	13.0	19.6	2 21	8 7.48	+22 21.3	2.543	3.420	8.9	20.9
3 2	7 55.57	+29 41.8	1.812	2.591	16.3	19.8	3 2	8 2.46	+22 35.0	2.627	3.414	11.5	21.1
<b>66433</b>	1999 <i>NF</i> <sub>49</sub>		1 25.4 74°99	2°6/26.2	18		<b>338222</b>	2002 <i>TA</i> <sub>17</sub>		1 25.4 89°83	3°8/23.9	18	
12 23	9 5.76	+15 4.5	1.573	2.381	16.6	18.5	12 23						

EPHEMERIDES

1 25.4

1 25.4

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>477330</b>	2009 <i>TV</i> <sub>21</sub>		1 25.4	1°15'	24°2'	10.7 18	<b>339461</b>	2005 <i>EC</i> <sub>219</sub>		1 25.4	310°45'	0°8'	25.9 18
12 23	8 48.50	-23 17.7	0.936	1.648	31.7	20.9	12 23	8 50.52	+15 4.5	2.117	2.936	12.5	20.8
1 2	8 46.12	-25 33.2	0.885	1.646	29.9	20.7	1 2	8 45.71	+15 24.4	2.034	2.932	9.4	20.6
1 12	8 40.05	-26 54.8	0.842	1.645	27.9	20.5	1 12	8 38.93	+15 53.4	1.975	2.929	5.7	20.4
1 22	8 31.21	-27 8.2	0.809	1.645	26.1	20.4	1 22	8 30.81	+16 28.7	1.944	2.925	1.8	20.1
2 1	8 21.26	-26 3.5	0.789	1.645	24.7	20.3	2 1	8 22.23	+17 6.5	1.943	2.922	2.6	20.2
2 11	8 12.36	-23 42.7	0.782	1.647	24.2	20.3	2 11	8 14.21	+17 42.9	1.971	2.919	6.6	20.4
2 21	8 6.35	-20 19.8	0.791	1.650	24.8	20.3	2 21	8 7.63	+18 14.9	2.026	2.915	10.2	20.6
3 2	8 4.44	-16 17.3	0.814	1.653	26.3	20.4	3 2	8 3.15	+18 40.3	2.105	2.912	13.3	20.8
<b>60848</b>	2000 <i>HQ</i> <sub>64</sub>		1 25.4	309°34'	2°2'	24.5 18	<b>353793</b>	2012 <i>QK</i> <sub>25</sub>		1 25.4	72°95'	3°3'	23.6 18
12 23	8 54.56	+23 9.8	1.557	2.400	15.1	19.0	12 23	8 54.85	+28 41.6	2.258	3.086	11.5	20.9
1 2	8 49.54	+23 32.4	1.471	2.384	11.2	18.7	1 2	8 48.75	+29 5.0	2.191	3.094	8.6	20.7
1 12	8 41.60	+23 59.3	1.408	2.368	6.8	18.4	1 12	8 40.62	+29 26.0	2.149	3.101	5.5	20.6
1 22	8 31.54	+24 24.6	1.371	2.352	2.6	18.1	1 22	8 31.22	+29 40.0	2.136	3.109	3.3	20.4
2 1	8 20.68	+24 42.6	1.362	2.337	4.6	18.2	2 1	8 21.53	+29 43.6	2.153	3.117	4.5	20.5
2 11	8 10.60	+24 49.0	1.379	2.322	9.3	18.4	2 11	8 12.62	+29 35.0	2.199	3.124	7.5	20.7
2 21	8 2.66	+24 42.8	1.421	2.307	13.9	18.7	2 21	8 5.37	+29 14.8	2.271	3.132	10.5	20.9
3 2	7 57.81	+24 24.9	1.483	2.293	17.8	18.9	3 2	8 0.38	+28 44.8	2.367	3.139	13.1	21.1
<b>53131</b>	1999 <i>AM</i> <sub>31</sub>		1 25.4	48°05'	0°1'	25.5 18	<b>221274</b>	2005 <i>UH</i> <sub>335</sub>		1 25.4	180°68'	1°5'	24.6 18
12 23	8 52.34	+16 3.8	1.698	2.528	14.6	18.9	12 23	8 56.92	+23 17.2	2.473	3.289	11.1	21.1
1 2	8 47.43	+16 42.9	1.626	2.532	10.9	18.7	1 2	8 50.12	+23 33.1	2.391	3.290	8.1	20.9
1 12	8 40.09	+17 33.4	1.578	2.535	6.5	18.4	1 12	8 41.40	+23 50.2	2.336	3.291	4.8	20.7
1 22	8 31.10	+18 30.3	1.557	2.539	1.7	18.1	1 22	8 31.43	+24 4.9	2.311	3.291	1.8	20.5
2 1	8 21.60	+19 27.7	1.564	2.543	3.2	18.2	2 1	8 21.10	+24 14.2	2.317	3.291	3.1	20.6
2 11	8 12.87	+20 19.8	1.599	2.547	7.8	18.5	2 11	8 11.40	+24 15.8	2.354	3.289	6.5	20.8
2 21	8 5.99	+21 2.8	1.660	2.551	12.0	18.8	2 21	8 3.17	+24 9.3	2.419	3.287	9.6	21.0
3 2	8 1.72	+21 34.7	1.744	2.555	15.5	19.0	3 2	7 57.02	+23 55.4	2.509	3.285	12.3	21.2
<b>347904</b>	2002 <i>VO</i> <sub>138</sub>		1 25.4	95°29'	5°0'	23.4 17	<b>443102</b>	2013 <i>WS</i>		1 25.4	262°63'	15°1'	29.4 18
12 23	9 2.52	+28 48.6	1.426	2.266	16.4	21.4	12 23	8 57.67	- 7 45.0	1.273	2.024	22.8	20.9
1 2	8 55.27	+29 39.0	1.377	2.285	12.2	21.2	1 2	8 52.18	-10 2.6	1.200	2.018	20.2	20.7
1 12	8 44.79	+30 26.5	1.350	2.303	7.9	21.0	1 12	8 43.37	-11 52.7	1.145	2.012	17.6	20.5
1 22	8 32.29	+31 2.2	1.349	2.321	5.0	20.9	1 22	8 32.08	-13 5.1	1.109	2.006	15.6	20.4
2 1	8 19.48	+31 19.2	1.376	2.338	6.7	21.0	2 1	8 19.73	-13 32.6	1.095	1.999	15.2	20.3
2 11	8 8.16	+31 15.2	1.429	2.356	10.6	21.3	2 11	8 8.17	-13 15.5	1.103	1.993	16.5	20.4
2 21	7 59.64	+30 52.4	1.507	2.372	14.5	21.6	2 21	7 58.99	-12 21.3	1.130	1.987	19.0	20.5
3 2	7 54.66	+30 15.5	1.604	2.389	17.8	21.8	3 2	7 53.33	-11 1.6	1.175	1.980	21.9	20.7
<b>29948</b>	1999 <i>JS</i> <sub>84</sub>		1 25.4	327°24'	2°2'	23.7 18	<b>129553</b>	1996 <i>TZ</i> <sub>45</sub>		1 25.4	148°11'	6°8'	20.0 18
12 23	8 50.44	+21 39.1	2.187	3.019	11.7	17.6	12 23	8 57.26	+41 42.6	2.664	3.471	10.6	20.2
1 2	8 45.45	+22 55.8	2.107	3.015	8.6	17.4	1 2	8 50.63	+42 51.0	2.607	3.477	8.7	20.1
1 12	8 38.82	+24 19.0	2.054	3.011	5.1	17.2	1 12	8 41.81	+43 49.7	2.576	3.484	7.2	20.0
1 22	8 30.78	+25 42.7	2.029	3.008	2.3	17.0	1 22	8 31.54	+44 32.5	2.572	3.489	6.8	20.0
2 1	8 22.21	+27 0.5	2.034	3.005	4.0	17.1	2 1	8 20.89	+44 55.0	2.597	3.495	7.7	20.0
2 11	8 14.14	+28 6.9	2.070	3.001	7.5	17.3	2 11	8 11.00	+44 55.9	2.649	3.500	9.4	20.2
2 21	8 7.49	+28 59.1	2.132	2.998	10.8	17.5	2 21	8 2.84	+44 36.8	2.725	3.505	11.3	20.3
3 2	8 2.98	+29 36.1	2.217	2.995	13.7	17.7	3 2	7 57.07	+44 1.4	2.822	3.510	13.0	20.4
<b>253037</b>	2002 <i>SR</i> <sub>19</sub>		1 25.4	92°05'	4°7'	20.8 18	<b>357314</b>	2003 <i>FX</i> <sub>64</sub>		1 25.4	357°93'	1°4'	26.2 18
12 23	8 52.23	+38 32.5	3.440	4.250	8.4	20.7	12 23	8 51.93	+12 25.3	1.306	2.143	17.8	20.2
1 2	8 46.37	+39 27.8	3.395	4.273	6.6	20.6	1 2	8 47.76	+13 7.9	1.234	2.142	13.4	19.9
1 12	8 39.03	+40 16.4	3.376	4.296	5.2	20.5	1 12	8 40.60	+14 10.4	1.185	2.141	8.3	19.6
1 22	8 30.77	+40 54.3	3.387	4.319	4.8	20.5	1 22	8 31.31	+15 27.5	1.159	2.140	2.8	19.3
2 1	8 22.32	+41 18.5	3.428	4.341	5.5	20.6	2 1	8 21.28	+16 51.1	1.160	2.140	3.7	19.3
2 11	8 14.42	+41 28.1	3.497	4.363	6.9	20.7	2 11	8 12.14	+18 12.0	1.187	2.140	9.2	19.6
2 21	8 7.72	+41 23.7	3.592	4.385	8.5	20.9	2 21	8 5.28	+19 22.9	1.238	2.141	14.2	19.9
3 2	8 2.70	+41 7.0	3.710	4.406	10.0	21.0	3 2	8 1.64	+20 19.8	1.310	2.142	18.5	20.2
<b>146370</b>	2001 <i>PE</i> <sub>58</sub>		1 25.4	167°99'	1°3'	24.7 18	<b>266969</b>	2010 <i>VU</i> <sub>85</sub>		1 25.4	12°14'	0°4'	25.2 18
12 23	8 54.58	+20 36.0	2.050	2.875	12.7	20.6	12 23	8 53.07	+18 27.2	1.612	2.449	15.0	20.7
1 2	8 48.76	+21 13.6	1.974	2.878	9.3	20.4	1 2	8 48.10	+18 49.2	1.541	2.450	11.1	20.5
1 12	8 40.75	+21 56.6	1.924	2.881	5.5	20.2	1 12	8 40.55	+19 19.5	1.492	2.451	6.6	20.2
1 22	8 31.27	+22 40.2	1.901	2.883	1.7	19.9	1 22	8 31.26	+19 53.7	1.470	2.453	1.7	19.9
2 1	8 21.34	+23 19.5	1.909	2.885	3.4	20.0	2 1	8 21.44	+20 26.4	1.476	2.455	3.4	20.0
2 11	8 12.09	+23 50.6	1.947	2.886	7.3	20.3	2 11	8 12.48	+20 53.1	1.509	2.457	8.2	20.3
2 21	8 4.50	+24 11.5	2.011	2.887	10.9	20.5	2 21	8 5.51	+21 11.3	1.568	2.460	12.5	20.6
3 2	7 59.25	+24 21.9	2.098	2.888	14.0	20.7	3 2	8 1.31	+21 20.0	1.648	2.463	16.1	20.8
<b>194603</b>	2001 <i>XX</i> <sub>129</sub>		1 25.4	84°87'	0°6'	25.1 17	<b>449093</b>	2012 <i>TM</i> <sub>193</sub>		1 25.4	116°76'	3°6'	23.7 15
12 23	8 58.63	+18 16.2	1.480	2.312	16.3	20.9	12 23	9 1.79	+25 28.8	1.602	2.434	15.3	22.5
1 2	8 52.07	+18 52.0	1.430	2.337	12.0	20.6	1 2	8 54.46	+26 26.0	1.549	2.455	11.2	22.3
1 12	8 42.77	+19 36.5	1.403	2.361	7.0	20.4	1 12	8 44.24	+27 24.2	1.519	2.474	6.9	22.1
1 22	8 31.77	+20 23.4	1.403	2.385	1.8	20.1	1 22	8 32.20	+28 15.5	1.517	2.493	3.7	21.9
2 1	8 20.51	+21 6.2	1.431	2.409	3.6	20.3	2 1	8 19.80	+28 52.7	1.544	2.511	5.5	22.1
2 11	8 10.48	+21 40.3	1.487	2.432	8.5	20.7	2 11	8 8.64	+29 12.3	1.599	2.529	9.5	22.4
2 21	8 2.82	+22 3.2	1.568	2.455	12.8	21.0	2 21	7 59.92	+29 14.7	1.680	2.545	13.3	22.6
3 2	7 58.20	+22 15.0	1.671	2.478	16.3	21.3	3 2	7 54.38	+29 2.6	1.782	2.561	16.5	22.9
<b>33187</b>	Pizzolato		1 25.4	323°20'	5°6'	22.7 18	<b>266388</b>	2007 <i>ET</i> <sub>131</sub>		1 25.4	183°56'	2°4'	24.1 18
12 23	8 55.18	+30 58.0	1.625	2.470	14.5	19.0	12 2						

EPHEMERIDES

1 25.4

1 25.5

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>462696</b>	2009 <i>VF</i> <sub>69</sub>		1 25.4 200°73	4°6/27.9	18		<b>373424</b>	1999 <i>LP</i> <sub>3</sub>		1 25.4 235°04	5°8/28.9	17	
12 23	8 52.47	+ 5 8.1	2.255	3.033	13.2	20.8	12 23	8 51.86	+ 0 13.2	2.411	3.163	13.2	21.8
1 2	8 46.97	+ 4 40.4	2.167	3.031	10.5	20.7	1 2	8 46.54	- 0 10.8	2.310	3.149	10.9	21.6
1 12	8 39.62	+ 4 26.2	2.104	3.028	7.6	20.5	1 12	8 39.40	- 0 18.7	2.231	3.135	8.4	21.4
1 22	8 31.01	+ 4 25.7	2.068	3.025	5.2	20.3	1 22	8 30.98	- 0 9.7	2.180	3.121	6.3	21.3
2 1	8 21.96	+ 4 37.9	2.060	3.023	4.9	20.3	2 1	8 22.03	+ 0 15.9	2.157	3.105	5.9	21.2
2 11	8 13.44	+ 5 0.4	2.083	3.019	7.1	20.4	2 11	8 13.45	+ 0 55.4	2.163	3.090	7.5	21.3
2 21	8 6.25	+ 5 29.7	2.132	3.016	10.0	20.6	2 21	8 6.06	+ 1 44.8	2.197	3.073	10.1	21.4
3 2	8 1.03	+ 6 2.1	2.206	3.012	12.8	20.8	3 2	8 0.50	+ 2 39.5	2.256	3.056	12.8	21.5
<b>80231</b>	1999 <i>VF</i> <sub>187</sub>		1 25.4 89°58	2°4/26.6	18		<b>245043</b>	2004 <i>FD</i> <sub>20</sub>		1 25.4 299°32	0°5/25.7	17	
12 23	8 56.00	+11 44.9	1.357	2.184	17.8	19.9	12 23	8 51.07	+16 33.2	2.159	2.980	12.3	21.3
1 2	8 50.49	+11 56.7	1.294	2.194	13.5	19.6	1 2	8 46.27	+16 43.7	2.055	2.955	9.2	21.0
1 12	8 42.05	+12 25.4	1.253	2.205	8.5	19.4	1 12	8 39.38	+17 1.9	1.976	2.931	5.6	20.8
1 22	8 31.67	+13 7.6	1.236	2.215	3.6	19.1	1 22	8 30.99	+17 25.2	1.924	2.906	1.6	20.4
2 1	8 20.76	+13 57.5	1.246	2.225	3.9	19.2	2 1	8 21.97	+17 50.3	1.902	2.882	2.7	20.5
2 11	8 10.92	+14 48.5	1.283	2.235	8.9	19.5	2 11	8 13.35	+18 13.8	1.910	2.857	6.8	20.7
2 21	8 3.43	+15 35.2	1.345	2.245	13.5	19.8	2 21	8 6.10	+18 33.1	1.944	2.833	10.6	20.9
3 2	7 59.10	+16 14.0	1.428	2.255	17.5	20.1	3 2	8 0.98	+18 46.6	2.002	2.808	14.0	21.0
<b>345149</b>	2005 <i>SY</i> <sub>115</sub>		1 25.4 42°38	3°7/24.0	18		<b>301878</b>	1996 <i>VU</i> <sub>39</sub>		1 25.4 141°10	1°6/24.5	18	
12 23	8 57.91	+25 8.3	1.230	2.083	17.6	20.1	12 23	8 57.22	+21 13.1	1.956	2.780	13.2	22.2
1 2	8 52.35	+25 47.4	1.173	2.090	13.0	19.8	1 2	8 50.73	+21 55.9	1.888	2.792	9.7	22.0
1 12	8 43.33	+26 28.9	1.137	2.097	8.0	19.5	1 12	8 41.92	+22 43.5	1.846	2.803	5.7	21.8
1 22	8 32.01	+27 4.4	1.126	2.105	3.9	19.3	1 22	8 31.62	+23 30.5	1.833	2.814	1.9	21.6
2 1	8 20.15	+27 26.0	1.141	2.113	6.0	19.5	2 1	8 20.91	+24 11.4	1.849	2.824	3.6	21.7
2 11	8 9.68	+27 29.9	1.181	2.121	10.8	19.8	2 11	8 11.02	+24 42.4	1.896	2.833	7.6	22.0
2 21	8 2.07	+27 16.5	1.243	2.130	15.5	20.1	2 21	8 2.95	+25 1.8	1.969	2.842	11.3	22.2
3 2	7 58.15	+26 49.0	1.325	2.139	19.3	20.3	3 2	7 57.41	+25 10.0	2.065	2.850	14.3	22.5
<b>497124</b>	2004 <i>LL</i> <sub>23</sub>		1 25.4 269°45	3°6/26.3	17		<b>242192</b>	2003 <i>NU</i> <sub>12</sub>		1 25.4 250°56	2°1/26.5	17	
12 23	9 2.35	+12 12.8	2.072	2.862	13.8	20.6	12 23	8 55.20	+12 0.6	1.888	2.696	14.3	21.0
1 2	8 54.61	+11 4.6	1.961	2.838	10.8	20.3	1 2	8 49.58	+12 12.2	1.786	2.677	10.9	20.8
1 12	8 44.37	+10 0.8	1.875	2.814	7.3	20.0	1 12	8 41.49	+12 36.9	1.709	2.657	7.0	20.5
1 22	8 32.30	+ 9 2.2	1.820	2.790	4.1	19.8	1 22	8 31.57	+13 12.4	1.658	2.636	3.0	20.2
2 1	8 19.46	+ 8 10.1	1.796	2.765	4.5	19.8	2 1	8 20.85	+13 55.0	1.637	2.615	3.4	20.2
2 11	8 7.11	+ 7 24.9	1.803	2.740	8.0	19.9	2 11	8 10.58	+14 40.1	1.646	2.593	7.7	20.4
2 21	7 56.42	+ 6 46.7	1.840	2.715	11.8	20.1	2 21	8 1.91	+15 23.2	1.681	2.570	11.9	20.6
3 2	7 48.23	+ 6 14.7	1.901	2.689	15.3	20.3	3 2	7 55.74	+16 1.1	1.739	2.547	15.7	20.8
<b>106424</b>	2000 <i>VN</i> <sub>42</sub>		1 25.4 36°04	5°1/23.3	18		<b>128945</b>	2004 <i>TB</i> <sub>129</sub>		1 25.4 154°32	1°9/24.2	18	
12 23	8 57.12	+28 15.8	1.306	2.158	16.8	19.3	12 23	8 52.94	+22 1.2	2.069	2.899	12.4	19.7
1 2	8 51.67	+29 8.5	1.251	2.166	12.6	19.1	1 2	8 47.60	+22 51.9	1.995	2.902	9.1	19.5
1 12	8 42.88	+30 0.1	1.219	2.175	8.1	18.9	1 12	8 40.10	+23 47.4	1.946	2.904	5.4	19.3
1 22	8 31.89	+30 41.2	1.211	2.184	5.2	18.7	1 22	8 31.16	+24 42.4	1.926	2.906	2.1	19.1
2 1	8 20.40	+31 4.0	1.229	2.193	7.0	18.9	2 1	8 21.75	+25 31.2	1.935	2.908	3.8	19.2
2 11	8 10.27	+31 5.1	1.272	2.203	11.2	19.1	2 11	8 12.99	+26 9.8	1.974	2.910	7.5	19.4
2 21	8 2.92	+30 46.0	1.338	2.214	15.3	19.4	2 21	8 5.84	+26 36.1	2.039	2.911	11.0	19.7
3 2	7 59.14	+30 10.8	1.423	2.225	18.9	19.7	3 2	8 0.99	+26 50.1	2.127	2.913	13.9	19.9
<b>130914</b>	2000 <i>WY</i>		1 25.4 326°53	4°7/22.9	18		<b>182370</b>	2001 <i>QK</i> <sub>156</sub>		1 25.4 109°65	3°1/27.4	18	
12 23	8 54.99	+26 29.7	1.443	2.293	15.7	19.8	12 23	8 53.42	+ 7 56.0	2.040	2.834	13.9	20.8
1 2	8 50.08	+27 43.4	1.374	2.288	11.7	19.5	1 2	8 47.70	+ 8 10.3	1.973	2.852	10.7	20.6
1 12	8 42.02	+29 0.6	1.327	2.284	7.5	19.2	1 12	8 40.03	+ 8 39.4	1.931	2.870	7.1	20.4
1 22	8 31.71	+30 11.7	1.306	2.280	4.8	19.1	1 22	8 31.11	+ 9 20.9	1.916	2.887	3.9	20.3
2 1	8 20.62	+31 7.4	1.312	2.276	6.8	19.2	2 1	8 21.89	+10 11.1	1.930	2.904	3.6	20.3
2 11	8 10.49	+31 41.7	1.344	2.273	11.0	19.4	2 11	8 13.38	+11 5.4	1.974	2.920	6.7	20.5
2 21	8 2.77	+31 53.6	1.399	2.269	15.1	19.6	2 21	8 6.42	+11 59.3	2.046	2.936	10.1	20.7
3 2	7 58.43	+31 45.6	1.474	2.266	18.7	19.9	3 2	8 1.62	+12 49.1	2.142	2.951	13.1	21.0
<b>336974</b>	2011 <i>JX</i> <sub>28</sub>		1 25.4 161°67	3°6/22.7	18		<b>308895</b>	2006 <i>ST</i> <sub>176</sub>		1 25.4 292°86	0°1/25.4	18	
12 23	8 52.58	+28 1.8	2.394	3.223	10.9	20.5	12 23	8 53.65	+17 25.1	1.653	2.485	14.9	20.8
1 2	8 47.17	+29 6.6	2.322	3.225	8.1	20.3	1 2	8 48.58	+17 46.9	1.572	2.478	11.1	20.5
1 12	8 39.78	+30 11.5	2.276	3.227	5.3	20.2	1 12	8 40.91	+18 18.2	1.514	2.472	6.6	20.3
1 22	8 31.06	+31 10.7	2.260	3.229	3.6	20.1	1 22	8 31.41	+18 54.9	1.483	2.465	1.7	19.9
2 1	8 21.89	+31 58.9	2.274	3.231	4.9	20.1	2 1	8 21.26	+19 31.7	1.480	2.459	3.3	20.0
2 11	8 13.31	+32 32.8	2.317	3.233	7.7	20.3	2 11	8 11.85	+20 3.8	1.505	2.453	8.2	20.3
2 21	8 6.18	+32 51.5	2.386	3.234	10.5	20.5	2 21	8 4.37	+20 28.0	1.555	2.447	12.6	20.5
3 2	8 1.17	+32 56.0	2.479	3.235	13.0	20.7	3 2	7 59.65	+20 42.9	1.627	2.441	16.3	20.8
<b>199903</b>	2007 <i>GO</i> <sub>14</sub>		1 25.4 194°58	2°1/27.2	17		<b>279095</b>	2008 <i>WL</i> <sub>139</sub>		1 25.4 34°85	3°2/27.1	18	
12 23	8 50.97	+ 9 2.2	2.842	3.626	10.6	21.6	12 23	8 50.97	+10 3.4	1.840	2.651	14.5	19.9
1 2	8 45.58	+ 9 25.6	2.748	3.623	8.1	21.5	1 2	8 46.11	+ 9 51.1	1.773	2.662	11.1	19.7
1 12	8 38.68	+ 9 59.6	2.681	3.620	5.4	21.3	1 12	8 39.18	+ 9 52.0	1.730	2.674	7.3	19.5
1 22	8 30.76	+10 42.7	2.643	3.615	2.7	21.1	1 22	8 30.91	+10 4.6	1.713	2.686	3.9	19.3
2 1	8 22.46	+11 31.9	2.636	3.611	2.7	21.1	2 1	8 22.31	+10 26.4	1.724	2.699	3.8	19.3
2 11	8 14.54	+12 23.9	2.661	3.605	5.3	21.2	2 11	8 14.47	+10 53.8	1.764	2.712	7.1	19.5
2 21	8 7.64	+13 15.5	2.715	3.599	8.1	21.4	2 21	8 8.28	+11 22.8	1.829	2.726	10.7	19.8
3 2	8 2.32	+14 3.8	2.795	3.592	10.7	21.6	3 2	8 4.37	+11 50.3	1.918	2.740	13.9	20.0
<b>291824</b>	2006 <i>KH</i> <sub>133</sub>		1 25.4 216°15	3°7/23.4	18		<b>327315</b>	2005 <i>UA</i> <sub>28</sub>		1 25.5 24°98	3°7/23.6	18	
12 23	8 56.14	+25 26.5	1.657	2.496	14.5	20.7							

EPHEMERIDES

1 25.5

1 25.5

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>207086</b>	2004 <i>XQ</i> <sub>171</sub>		1 25.5	48 <sup>o</sup> 11	3 <sup>o</sup> 5/23.9	18	<b>241791</b>	2001 <i>PB</i> <sub>51</sub>		1 25.5	61 <sup>o</sup> 47	7 <sup>o</sup> 3/29.2	18
12 23	8 55.78	+23 40.3	1.297	2.148	17.0	19.9	12 23	8 54.54	+1 35.9	1.297	2.095	20.1	19.9
1 2	8 50.59	+24 40.2	1.243	2.160	12.5	19.7	1 2	8 49.31	+1 15.0	1.246	2.116	16.2	19.7
1 12	8 42.21	+25 44.9	1.213	2.173	7.5	19.4	1 12	8 41.29	+1 21.7	1.213	2.137	11.9	19.5
1 22	8 31.75	+26 45.4	1.207	2.185	3.6	19.2	1 22	8 31.51	+1 55.9	1.203	2.159	8.3	19.3
2 1	8 20.78	+27 33.0	1.227	2.198	5.7	19.4	2 1	8 21.36	+2 53.9	1.218	2.180	7.4	19.4
2 11	8 11.10	+28 2.6	1.273	2.212	10.4	19.7	2 11	8 12.37	+4 7.9	1.259	2.202	10.0	19.6
2 21	8 4.04	+28 13.1	1.343	2.226	14.8	20.0	2 21	8 5.70	+5 28.7	1.324	2.224	13.7	19.8
3 2	8 0.40	+28 6.9	1.432	2.240	18.4	20.3	3 2	8 2.07	+6 48.1	1.410	2.245	17.2	20.1
<b>383715</b>	2007 <i>UL</i> <sub>43</sub>		1 25.5	49 <sup>o</sup> 74	0 <sup>o</sup> 5/25.1	18	<b>188474</b>	2004 <i>NT</i> <sub>3</sub>		1 25.5	140 <sup>o</sup> 49	4 <sup>o</sup> 4/22.1	18
12 23	8 51.66	+18 43.6	1.956	2.785	13.0	20.7	12 23	8 56.24	+31 14.7	2.512	3.333	10.7	21.7
1 2	8 46.54	+19 14.1	1.898	2.803	9.5	20.6	1 2	8 49.77	+32 25.8	2.451	3.347	8.1	21.5
1 12	8 39.39	+19 51.1	1.864	2.822	5.6	20.4	1 12	8 41.30	+33 33.9	2.417	3.360	5.6	21.4
1 22	8 30.97	+20 30.2	1.858	2.841	1.4	20.1	1 22	8 31.50	+34 33.0	2.412	3.372	4.4	21.3
2 1	8 22.28	+21 6.9	1.882	2.860	2.9	20.3	2 1	8 21.32	+35 17.9	2.438	3.383	5.6	21.4
2 11	8 14.38	+21 37.4	1.934	2.879	6.9	20.5	2 11	8 11.81	+35 46.1	2.494	3.394	8.0	21.6
2 21	8 8.14	+21 59.7	2.013	2.899	10.4	20.8	2 21	8 3.85	+35 57.6	2.576	3.404	10.5	21.8
3 2	8 4.15	+22 13.0	2.115	2.918	13.4	21.0	3 2	7 58.07	+35 54.3	2.680	3.414	12.6	22.0
<b>405655</b>	2005 <i>UB</i> <sub>29</sub>		1 25.5	94 <sup>o</sup> 23	5 <sup>o</sup> 0/22.5	18	<b>254096</b>	2004 <i>KC</i>		1 25.5	274 <sup>o</sup> 78	4 <sup>o</sup> 4/27.3	18
12 23	8 58.81	+31 45.0	2.024	2.851	12.7	21.2	12 23	8 54.01	+8 14.0	1.858	2.657	14.8	20.5
1 2	8 51.87	+32 46.2	1.977	2.875	9.6	21.0	1 2	8 48.61	+7 39.6	1.764	2.643	11.7	20.3
1 12	8 42.55	+33 42.4	1.955	2.899	6.6	20.9	1 12	8 40.86	+7 17.9	1.693	2.629	8.2	20.0
1 22	8 31.79	+34 26.7	1.961	2.923	5.0	20.8	1 22	8 31.44	+7 9.6	1.648	2.615	5.0	19.8
2 1	8 20.78	+34 54.0	1.997	2.946	6.3	20.9	2 1	8 21.36	+7 13.6	1.632	2.601	4.9	19.8
2 11	8 10.81	+35 2.1	2.061	2.968	9.0	21.1	2 11	8 11.83	+7 27.5	1.644	2.587	8.1	19.9
2 21	8 2.87	+34 52.7	2.150	2.990	11.8	21.4	2 21	8 3.91	+7 47.8	1.682	2.573	11.8	20.1
3 2	7 57.59	+34 28.7	2.262	3.012	14.3	21.6	3 2	7 58.44	+8 10.9	1.744	2.559	15.3	20.3
<b>492914</b>	2014 <i>RX</i> <sub>8</sub>		1 25.5	149 <sup>o</sup> 27	0 <sup>o</sup> 1/25.5	18	<b>518767</b>	2009 <i>UQ</i> <sub>160</sub>		1 25.5	123 <sup>o</sup> 55	2 <sup>o</sup> 3/24.2	18
12 23	8 54.93	+16 0.8	2.053	2.868	13.0	22.1	12 23	8 55.08	+24 23.1	2.019	2.849	12.6	21.6
1 2	8 48.96	+16 41.2	1.980	2.878	9.6	21.9	1 2	8 49.17	+24 50.4	1.947	2.853	9.3	21.4
1 12	8 40.88	+17 30.9	1.932	2.887	5.7	21.7	1 12	8 41.04	+25 19.2	1.900	2.857	5.6	21.2
1 22	8 31.39	+18 25.4	1.913	2.895	1.5	21.4	1 22	8 31.44	+25 44.7	1.882	2.861	2.5	21.0
2 1	8 21.47	+19 19.8	1.924	2.902	2.8	21.5	2 1	8 21.45	+26 2.5	1.892	2.864	4.0	21.1
2 11	8 12.23	+20 9.3	1.965	2.909	6.9	21.8	2 11	8 12.23	+26 9.9	1.932	2.868	7.6	21.4
2 21	8 4.61	+20 50.7	2.033	2.915	10.5	22.0	2 21	8 4.76	+26 6.4	1.998	2.871	11.1	21.6
3 2	7 59.27	+21 22.6	2.126	2.921	13.6	22.3	3 2	7 59.72	+25 52.8	2.087	2.875	14.1	21.8
<b>283280</b>	2011 <i>HC</i> <sub>39</sub>		1 25.5	194 <sup>o</sup> 73	0 <sup>o</sup> 5/25.1	18	<b>146267</b>	2001 <i>CO</i> <sub>26</sub>		1 25.5	66 <sup>o</sup> 52	7 <sup>o</sup> 0/22.9	18
12 23	8 50.75	+17 38.7	2.328	3.148	11.5	20.4	12 23	9 2.40	+31 21.5	1.187	2.038	18.2	18.3
1 2	8 45.79	+18 27.5	2.246	3.147	8.5	20.2	1 2	8 55.78	+32 30.2	1.145	2.056	13.8	18.1
1 12	8 38.97	+19 24.2	2.190	3.146	5.0	20.0	1 12	8 45.37	+33 32.9	1.124	2.075	9.4	17.9
1 22	8 30.90	+20 24.4	2.163	3.145	1.3	19.7	1 22	8 32.58	+34 18.0	1.128	2.094	7.0	17.8
2 1	8 22.38	+21 23.5	2.166	3.144	2.7	19.9	2 1	8 19.46	+34 36.6	1.157	2.113	8.7	17.9
2 11	8 14.35	+22 17.0	2.200	3.142	6.4	20.1	2 11	8 8.16	+34 27.1	1.210	2.132	12.6	18.2
2 21	8 7.65	+23 1.9	2.261	3.140	9.7	20.3	2 21	8 0.17	+33 53.6	1.285	2.151	16.5	18.5
3 2	8 2.92	+23 36.7	2.347	3.139	12.6	20.5	3 2	7 56.20	+33 2.8	1.379	2.170	19.9	18.8
<b>425487</b>	2010 <i>FM</i> <sub>54</sub>		1 25.5	328 <sup>o</sup> 95	4 <sup>o</sup> 3/22.5	18	<b>436930</b>	2012 <i>TE</i> <sub>116</sub>		1 25.5	355 <sup>o</sup> 18	4 <sup>o</sup> 3/27.9	18
12 23	8 52.17	+28 36.1	2.056	2.893	12.2	20.6	12 23	8 49.62	+6 7.6	2.141	2.932	13.4	20.7
1 2	8 47.24	+29 46.1	1.982	2.889	9.1	20.4	1 2	8 44.99	+5 45.6	2.058	2.930	10.6	20.5
1 12	8 40.01	+30 56.5	1.934	2.885	6.0	20.2	1 12	8 38.50	+5 37.5	1.998	2.929	7.6	20.3
1 22	8 31.19	+32 0.3	1.913	2.881	4.3	20.1	1 22	8 30.78	+5 43.1	1.965	2.928	4.9	20.1
2 1	8 21.82	+32 51.2	1.922	2.878	5.8	20.2	2 1	8 22.65	+6 1.0	1.961	2.927	4.6	20.1
2 11	8 13.10	+33 25.1	1.958	2.874	8.9	20.4	2 11	8 15.06	+6 28.4	1.985	2.927	7.0	20.2
2 21	8 6.06	+33 41.0	2.020	2.871	12.0	20.5	2 21	8 8.82	+7 1.5	2.036	2.926	10.1	20.4
3 2	8 1.46	+33 40.5	2.103	2.868	14.7	20.7	3 2	8 4.56	+7 36.5	2.110	2.927	13.0	20.6
<b>39948</b>	1998 <i>FP</i> <sub>113</sub>		1 25.5	178 <sup>o</sup> 96	1 <sup>o</sup> 3/24.8	18	<b>182720</b>	2001 <i>WW</i> <sub>54</sub>		1 25.5	85 <sup>o</sup> 98	1 <sup>o</sup> 0/24.9	18
12 23	8 57.98	+21 52.1	1.937	2.761	13.3	18.6	12 23	8 54.54	+20 9.4	1.807	2.638	13.9	20.7
1 2	8 51.39	+22 10.0	1.860	2.763	9.8	18.4	1 2	8 48.92	+20 37.3	1.739	2.646	10.2	20.5
1 12	8 42.39	+22 31.2	1.807	2.764	5.8	18.2	1 12	8 40.95	+21 11.1	1.696	2.654	6.0	20.2
1 22	8 31.80	+22 51.3	1.783	2.764	1.8	17.9	1 22	8 31.43	+21 45.8	1.681	2.663	1.7	20.0
2 1	8 20.73	+23 6.1	1.789	2.764	3.5	18.0	2 1	8 21.51	+22 16.7	1.694	2.671	3.4	20.1
2 11	8 10.46	+23 12.7	1.824	2.764	7.7	18.3	2 11	8 12.42	+22 39.9	1.736	2.679	7.7	20.4
2 21	8 2.04	+23 10.2	1.886	2.763	11.5	18.5	2 21	8 5.21	+22 53.5	1.804	2.688	11.6	20.6
3 2	7 56.22	+22 59.1	1.970	2.761	14.7	18.7	3 2	8 0.55	+22 57.5	1.894	2.696	14.8	20.9
<b>190821</b>	2001 <i>SJ</i> <sub>16</sub>		1 25.5	77 <sup>o</sup> 93	0 <sup>o</sup> 5/25.2	17	<b>39221</b>	2000 <i>YK</i> <sub>8</sub>		1 25.5	107 <sup>o</sup> 53	0 <sup>o</sup> 2/25.4	18
12 23	8 59.04	+18 11.7	1.396	2.231	17.0	21.4	12 23	8 54.10	+18 23.1	2.049	2.871	12.8	19.9
1 2	8 52.51	+18 43.7	1.348	2.256	12.4	21.2	1 2	8 48.31	+18 40.1	1.980	2.882	9.4	19.7
1 12	8 43.11	+19 24.6	1.323	2.282	7.3	20.9	1 12	8 40.46	+19 3.1	1.936	2.892	5.6	19.5
1 22	8 31.96	+20 8.3	1.324	2.307	1.9	20.7	1 22	8 31.29	+19 28.7	1.919	2.902	1.4	19.2
2 1	8 20.56	+20 48.2	1.353	2.331	3.7	20.8	2 1	8 21.78	+19 52.9	1.933	2.911	2.8	19.3
2 11	8 10.48	+21 19.3	1.409	2.356	8.8	21.2	2 11	8 13.01	+20 12.6	1.976	2.921	6.8	19.6
2 21	8 2.89	+21 39.7	1.490	2.380	13.1	21.5	2 21	8 5.87	+20 26.0	2.046	2.931	10.4	19.9
3 2	7 58.47	+21 49.2	1.593	2.404	16.7	21.8	3 2	8 1.00	+20 32.4	2.140	2.940	13.4	20.1
<b>42363</b>	2002 <i>CL</i> <sub>103</sub>		1 25.5	221 <sup>o</sup> 39	1 <sup>o</sup> 8/24.5								

EPHEMERIDES

1 25.5

1 25.5

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>464958</b>	2005 <i>WW</i> <sub>36</sub>		1 25.5	58°77'	3°5/23.6	18	<b>361166</b>	2006 <i>KN</i> <sub>64</sub>		1 25.5	239°92'	0°9/25.9	18
12 23	8 56.95	+24 47.3	1.605	2.444	14.9	20.5	12 23	8 55.59	+15 33.9	1.813	2.632	14.3	21.7
1 2	8 50.75	+25 55.0	1.566	2.476	10.8	20.3	1 2	8 49.90	+15 45.4	1.723	2.622	10.8	21.5
1 12	8 41.98	+27 4.0	1.552	2.509	6.6	20.2	1 12	8 41.70	+16 6.9	1.656	2.610	6.6	21.2
1 22	8 31.67	+28 6.0	1.565	2.541	3.5	20.0	1 22	8 31.73	+16 35.1	1.617	2.598	2.1	20.9
2 1	8 21.17	+28 54.4	1.606	2.573	5.3	20.2	2 1	8 21.06	+17 5.8	1.607	2.586	3.1	20.9
2 11	8 11.89	+29 25.6	1.675	2.605	9.0	20.5	2 11	8 11.00	+17 34.9	1.626	2.574	7.7	21.2
2 21	8 4.87	+29 39.3	1.769	2.637	12.6	20.8	2 21	8 2.71	+17 59.2	1.671	2.561	12.0	21.4
3 2	8 0.71	+29 37.8	1.884	2.669	15.5	21.1	3 2	7 57.03	+18 16.7	1.739	2.547	15.7	21.6
<b>389895</b>	2012 <i>TB</i> <sub>14</sub>		1 25.5	147°52'	1°3/24.9	17	<b>176275</b>	2001 <i>RB</i> <sub>130</sub>		1 25.5	201°04'	1°8/24.5	18
12 23	9 0.85	+20 39.4	1.736	2.559	14.7	22.2	12 23	8 55.20	+22 17.4	2.029	2.856	12.7	20.8
1 2	8 53.65	+21 10.8	1.669	2.571	10.8	21.9	1 2	8 49.36	+22 52.5	1.949	2.853	9.4	20.5
1 12	8 43.79	+21 47.6	1.626	2.583	6.4	21.7	1 12	8 41.24	+23 31.6	1.894	2.851	5.6	20.3
1 22	8 32.20	+22 24.1	1.611	2.593	1.9	21.4	1 22	8 31.58	+24 9.8	1.867	2.848	2.1	20.1
2 1	8 20.17	+22 54.9	1.626	2.602	3.7	21.6	2 1	8 21.40	+24 42.1	1.870	2.844	3.7	20.2
2 11	8 9.12	+23 16.0	1.671	2.611	8.2	21.9	2 11	8 11.89	+25 5.0	1.903	2.840	7.6	20.4
2 21	8 0.22	+23 26.2	1.741	2.618	12.3	22.1	2 21	8 4.06	+25 16.9	1.962	2.836	11.2	20.6
3 2	7 54.21	+23 26.0	1.834	2.625	15.7	22.4	3 2	7 58.65	+25 17.9	2.044	2.832	14.4	20.8
<b>456949</b>	2008 <i>AJ</i> <sub>55</sub>		1 25.5	62°69'	0°3/25.6	18	<b>495303</b>	2013 <i>WH</i> <sub>59</sub>		1 25.5	64°56'	5°0/21.9	18
12 23	8 58.66	+18 51.2	1.500	2.332	16.1	21.3	12 23	8 53.67	+31 7.8	2.091	2.925	12.1	20.6
1 2	8 52.11	+18 39.3	1.444	2.350	11.9	21.1	1 2	8 48.24	+32 23.3	2.035	2.937	9.1	20.4
1 12	8 42.85	+18 33.6	1.411	2.368	7.1	20.8	1 12	8 40.55	+33 35.8	2.004	2.949	6.4	20.2
1 22	8 31.93	+18 30.6	1.404	2.386	1.9	20.6	1 22	8 31.38	+34 38.3	2.001	2.961	5.0	20.2
2 1	8 20.75	+18 27.0	1.425	2.405	3.4	20.7	2 1	8 21.81	+35 24.8	2.027	2.974	6.3	20.3
2 11	8 10.79	+18 20.4	1.475	2.423	8.3	21.0	2 11	8 13.02	+35 52.3	2.080	2.986	9.0	20.5
2 21	8 3.17	+18 9.8	1.549	2.442	12.6	21.3	2 21	8 6.01	+36 0.8	2.159	2.998	11.8	20.7
3 2	7 58.54	+17 55.1	1.645	2.460	16.1	21.6	3 2	8 1.45	+35 52.7	2.260	3.011	14.2	20.9
<b>140985</b>	2001 <i>WZ</i> <sub>11</sub>		1 25.5	348°72'	1°8/26.6	18	<b>258700</b>	2002 <i>GE</i> <sub>37</sub>		1 25.5	246°16'	3°8/23.4	18
12 23	8 49.07	+12 28.3	2.033	2.850	13.1	20.0	12 23	8 57.67	+26 43.3	1.868	2.700	13.4	20.9
1 2	8 44.74	+12 39.7	1.951	2.846	9.9	19.8	1 2	8 51.63	+27 38.1	1.779	2.685	10.1	20.6
1 12	8 38.45	+13 2.4	1.892	2.842	6.3	19.5	1 12	8 42.84	+28 35.0	1.715	2.669	6.4	20.4
1 22	8 30.81	+13 34.2	1.861	2.839	2.6	19.3	1 22	8 32.06	+29 27.0	1.678	2.652	3.9	20.2
2 1	8 22.73	+14 11.7	1.858	2.836	2.9	19.3	2 1	8 20.46	+30 7.0	1.671	2.635	5.5	20.3
2 11	8 15.21	+14 50.8	1.884	2.834	6.6	19.5	2 11	8 9.49	+30 30.4	1.692	2.618	9.3	20.5
2 21	8 9.12	+15 28.0	1.937	2.832	10.3	19.8	2 21	8 0.45	+30 36.3	1.739	2.600	13.1	20.6
3 2	8 5.13	+16 0.3	2.014	2.831	13.5	20.0	3 2	7 54.26	+30 26.4	1.807	2.581	16.5	20.8
<b>61267</b>	2000 <i>OC</i> <sub>30</sub>		1 25.5	91°52'	3°9/27.3	18	<b>94796</b>	2001 <i>XU</i> <sub>154</sub>		1 25.5	96°02'	1°9/24.5	18
12 23	8 55.53	+ 8 45.4	1.534	2.345	16.9	19.1	12 23	8 57.03	+20 46.0	1.513	2.350	15.7	19.3
1 2	8 49.85	+ 8 36.5	1.470	2.357	13.1	18.9	1 2	8 51.15	+21 39.3	1.454	2.363	11.5	19.1
1 12	8 41.59	+ 8 44.6	1.427	2.370	8.7	18.6	1 12	8 42.46	+22 39.8	1.418	2.377	6.8	18.8
1 22	8 31.64	+ 9 8.3	1.410	2.382	4.8	18.4	1 22	8 31.90	+23 40.1	1.409	2.390	2.3	18.6
2 1	8 21.26	+ 9 43.9	1.420	2.394	4.6	18.5	2 1	8 20.88	+24 32.9	1.428	2.403	4.4	18.8
2 11	8 11.83	+10 26.3	1.458	2.406	8.3	18.7	2 11	8 10.93	+25 12.7	1.475	2.416	9.0	19.1
2 21	8 4.46	+11 10.1	1.521	2.418	12.5	19.0	2 21	8 3.26	+25 37.5	1.546	2.428	13.2	19.3
3 2	7 59.90	+11 51.1	1.606	2.429	16.1	19.2	3 2	7 58.65	+25 47.9	1.639	2.440	16.8	19.6
<b>489594</b>	2007 <i>TA</i> <sub>150</sub>		1 25.5	82°33'	3°9/27.4	18	<b>71617</b>	2000 <i>EM</i> <sub>28</sub>		1 25.5	45°76'	5°7/21.9	18
12 23	8 55.53	+ 8 37.5	1.565	2.374	16.7	20.9	12 23	8 54.75	+32 36.1	1.914	2.750	13.0	18.0
1 2	8 49.75	+ 8 27.0	1.504	2.391	12.9	20.7	1 2	8 49.25	+33 44.6	1.855	2.758	9.9	17.8
1 12	8 41.47	+ 8 33.3	1.466	2.407	8.6	20.5	1 12	8 41.24	+34 48.7	1.822	2.766	7.1	17.6
1 22	8 31.60	+ 8 54.8	1.452	2.424	4.8	20.3	1 22	8 31.58	+35 40.8	1.815	2.774	5.7	17.6
2 1	8 21.37	+ 9 28.0	1.467	2.440	4.6	20.4	2 1	8 21.48	+36 14.8	1.837	2.782	7.0	17.7
2 11	8 12.11	+10 8.1	1.509	2.456	8.2	20.6	2 11	8 12.28	+36 27.7	1.885	2.791	9.8	17.8
2 21	8 4.89	+10 49.8	1.576	2.473	12.1	20.9	2 21	8 5.08	+36 20.7	1.958	2.799	12.7	18.0
3 2	8 0.40	+11 29.0	1.666	2.488	15.6	21.1	3 2	8 0.59	+35 56.7	2.052	2.808	15.3	18.2
<b>235927</b>	2005 <i>EL</i> <sub>100</sub>		1 25.5	240°08'	3°6/23.3	17	<b>396155</b>	2013 <i>EY</i> <sub>14</sub>		1 25.5	235°62'	1°0/26.4	17
12 23	8 55.05	+29 17.6	2.337	3.164	11.3	20.8	12 23	8 46.67	+13 27.8	3.326	4.128	8.8	21.6
1 2	8 49.06	+29 49.9	2.256	3.157	8.4	20.6	1 2	8 42.32	+13 46.6	3.234	4.123	6.6	21.4
1 12	8 40.98	+30 20.1	2.200	3.151	5.5	20.5	1 12	8 36.75	+14 12.1	3.169	4.117	4.1	21.2
1 22	8 31.49	+30 43.3	2.173	3.144	3.6	20.3	1 22	8 30.37	+14 42.4	3.133	4.112	1.6	21.1
2 1	8 21.55	+30 55.4	2.176	3.137	4.8	20.4	2 1	8 23.72	+15 15.6	3.128	4.107	1.9	21.1
2 11	8 12.27	+30 54.1	2.208	3.129	7.7	20.5	2 11	8 17.37	+15 49.0	3.155	4.101	4.5	21.3
2 21	8 4.55	+30 39.6	2.267	3.122	10.7	20.7	2 21	8 11.87	+16 20.7	3.210	4.095	7.0	21.4
3 2	7 59.09	+30 13.6	2.349	3.115	13.4	20.9	3 2	8 7.66	+16 49.0	3.292	4.090	9.2	21.6
<b>252276</b>	2001 <i>QD</i> <sub>234</sub>		1 25.5	81°86'	1°1/26.1	18	<b>33091</b>	1997 <i>XO</i> <sub>12</sub>		1 25.5	75°20'	3°1/23.9	18
12 23	8 54.77	+14 11.8	1.792	2.610	14.5	21.2	12 23	8 56.35	+23 0.3	1.441	2.285	16.0	19.0
1 2	8 48.93	+14 34.0	1.734	2.632	10.8	21.0	1 2	8 50.86	+24 2.0	1.382	2.295	11.8	18.7
1 12	8 40.87	+15 7.0	1.700	2.653	6.6	20.8	1 12	8 42.39	+25 9.4	1.345	2.304	7.1	18.5
1 22	8 31.44	+15 47.0	1.694	2.675	2.2	20.5	1 22	8 31.91	+26 13.9	1.335	2.314	3.2	18.3
2 1	8 21.72	+16 29.4	1.717	2.696	2.9	20.6	2 1	8 20.89	+27 7.4	1.352	2.324	5.3	18.4
2 11	8 12.90	+17 9.4	1.768	2.717	7.1	20.9	2 11	8 10.97	+27 44.3	1.396	2.333	9.8	18.7
2 21	8 5.91	+17 43.9	1.847	2.737	11.0	21.2	2 21	8 3.45	+28 3.2	1.464	2.343	14.0	19.0
3 2	8 1.39	+18 10.9	1.948	2.758	14.2	21.5	3 2	7 59.13	+28 5.5	1.552	2.353	17.6	19.2
<b>378259</b>	2007 <i>DO</i> <sub>69</sub>		1 25.5	207°02'	2°7/23.8	17	<b>143485</b>	2003 <i>CV</i> <sub>14</sub>		1 25.5	291°25'	1°4/26.2	18
12 23	8 56.16	+26 46.7	2.484	3.304	10.9	21							



EPHEMERIDES

1 25.5

1 25.5

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>247638</b>	2002 <i>VP</i> <sub>44</sub>		1 25.5 110°90	5°4/29.1	18		<b>50135</b>	2000 <i>AU</i> <sub>127</sub>		1 25.5 91°42	0°6/25.8	18	
12 23	8 54.79	+ 1 1.0	2.208	2.964	14.1	21.9	12 23	8 57.89	+15 12.0	1.425	2.254	17.0	19.1
1 2	8 48.55	+ 0 50.9	2.144	2.989	11.4	21.7	1 2	8 51.77	+15 44.5	1.370	2.274	12.6	18.9
1 12	8 40.51	+ 0 58.6	2.104	3.014	8.5	21.6	1 12	8 42.81	+16 29.7	1.337	2.293	7.6	18.7
1 22	8 31.36	+ 1 23.6	2.091	3.038	6.1	21.5	1 22	8 32.05	+17 22.2	1.330	2.312	2.2	18.4
2 1	8 21.97	+ 2 3.7	2.107	3.061	5.5	21.5	2 1	8 20.90	+18 15.2	1.351	2.331	3.4	18.5
2 11	8 13.29	+ 2 54.9	2.152	3.084	7.3	21.6	2 11	8 10.91	+19 2.6	1.400	2.349	8.5	18.9
2 21	8 6.07	+ 3 52.3	2.226	3.105	9.9	21.8	2 21	8 3.27	+19 40.6	1.474	2.367	13.0	19.2
3 2	8 0.88	+ 4 51.0	2.324	3.126	12.4	22.0	3 2	7 58.73	+20 7.6	1.569	2.384	16.7	19.5
<b>391411</b>	2007 <i>DS</i> <sub>23</sub>		1 25.5 218°34	0°2/25.6	18		<b>370753</b>	2004 <i>RB</i> <sub>214</sub>		1 25.5 144°38	7°1/30.9	18	
12 23	8 57.25	+16 50.8	1.699	2.523	14.9	22.1	12 23	8 52.12	- 6 47.1	2.702	3.405	13.0	21.8
1 2	8 51.28	+17 12.9	1.614	2.516	11.2	21.8	1 2	8 46.46	- 7 20.9	2.624	3.417	11.1	21.7
1 12	8 42.60	+17 44.9	1.553	2.508	6.7	21.6	1 12	8 39.27	- 7 36.6	2.568	3.429	9.2	21.5
1 22	8 32.00	+18 22.7	1.518	2.500	1.8	21.2	1 22	8 31.09	- 7 32.8	2.539	3.440	7.7	21.5
2 1	8 20.68	+19 0.9	1.513	2.491	3.3	21.3	2 1	8 22.61	- 7 9.7	2.537	3.450	7.1	21.4
2 11	8 10.06	+19 34.6	1.536	2.482	8.2	21.6	2 11	8 14.60	- 6 29.7	2.563	3.460	7.9	21.5
2 21	8 1.40	+20 0.6	1.585	2.472	12.6	21.8	2 21	8 7.73	- 5 37.1	2.617	3.470	9.5	21.6
3 2	7 55.57	+20 17.7	1.656	2.462	16.4	22.0	3 2	8 2.51	- 4 36.5	2.696	3.478	11.4	21.8
<b>243166</b>	2007 <i>TL</i> <sub>108</sub>		1 25.5 80°03	3°0/27.3	18		<b>215547</b>	2002 <i>XE</i> <sub>56</sub>		1 25.5 90°73	1°9/24.2	18	
12 23	8 51.36	+ 9 10.7	2.229	3.026	12.8	20.4	12 23	8 55.82	+19 53.9	1.829	2.657	13.9	20.2
1 2	8 46.14	+ 9 1.3	2.157	3.037	9.8	20.2	1 2	8 49.84	+21 15.1	1.775	2.681	10.1	20.0
1 12	8 39.15	+ 9 3.5	2.108	3.047	6.6	20.0	1 12	8 41.52	+22 43.4	1.747	2.704	5.9	19.8
1 22	8 31.02	+ 9 16.1	2.087	3.058	3.7	19.9	1 22	8 31.70	+24 11.3	1.747	2.727	2.2	19.6
2 1	8 22.58	+ 9 37.1	2.096	3.069	3.5	19.9	2 1	8 21.52	+25 31.1	1.777	2.750	4.0	19.8
2 11	8 14.76	+10 3.4	2.134	3.080	6.3	20.1	2 11	8 12.21	+26 37.2	1.837	2.773	8.0	20.1
2 21	8 8.31	+10 31.8	2.200	3.090	9.5	20.3	2 21	8 4.79	+27 27.0	1.923	2.794	11.6	20.4
3 2	8 3.81	+10 59.4	2.290	3.101	12.3	20.5	3 2	7 59.94	+28 0.5	2.032	2.816	14.6	20.6
<b>167792</b>	2005 <i>AK</i> <sub>43</sub>		1 25.5 321°16	0°5/25.7	18		<b>5339</b>	1992 <i>CD</i>		1 25.5 352°03	0°6/25.1	18	
12 23	8 52.60	+16 12.7	1.388	2.230	16.7	20.0	12 23	8 51.31	+19 47.9	2.124	2.952	12.2	17.1
1 2	8 48.32	+16 30.1	1.307	2.218	12.5	19.8	1 2	8 46.37	+20 6.2	2.045	2.950	9.0	16.9
1 12	8 41.06	+17 0.3	1.248	2.206	7.6	19.4	1 12	8 39.43	+20 29.6	1.991	2.948	5.3	16.7
1 22	8 31.63	+17 39.1	1.213	2.195	2.2	19.1	1 22	8 31.16	+20 54.6	1.965	2.947	1.4	16.4
2 1	8 21.36	+18 20.7	1.205	2.185	3.6	19.1	2 1	8 22.48	+21 17.5	1.968	2.946	2.9	16.5
2 11	8 11.88	+18 58.9	1.223	2.175	9.1	19.4	2 11	8 14.41	+21 35.1	2.001	2.945	6.7	16.8
2 21	8 4.59	+19 29.5	1.264	2.165	14.1	19.7	2 21	8 7.83	+21 45.8	2.060	2.945	10.3	17.0
3 2	8 0.47	+19 50.0	1.326	2.156	18.4	19.9	3 2	8 3.41	+21 48.8	2.143	2.944	13.3	17.2
<b>128439</b>	Chriswaters		1 25.5 131°12	0°4/25.7	18		<b>424890</b>	2008 <i>WC</i> <sub>25</sub>		1 25.5 49°00	3°4/23.5	18	
12 23	8 59.05	+17 15.0	1.733	2.553	14.8	20.8	12 23	8 54.16	+25 34.8	1.748	2.588	13.8	20.6
1 2	8 52.26	+17 22.0	1.666	2.566	11.0	20.5	1 2	8 48.69	+26 35.0	1.702	2.612	10.1	20.4
1 12	8 42.97	+17 36.6	1.623	2.578	6.6	20.3	1 12	8 40.84	+27 36.1	1.680	2.636	6.2	20.2
1 22	8 32.05	+17 55.1	1.608	2.590	1.8	20.0	1 22	8 31.51	+28 30.9	1.686	2.661	3.5	20.1
2 1	8 20.75	+18 13.5	1.622	2.601	3.1	20.1	2 1	8 21.93	+29 13.5	1.720	2.686	5.1	20.2
2 11	8 10.41	+18 28.3	1.665	2.611	7.7	20.4	2 11	8 13.35	+29 40.4	1.782	2.712	8.6	20.5
2 21	8 2.11	+18 37.6	1.735	2.621	11.8	20.7	2 21	8 6.79	+29 51.2	1.869	2.737	12.0	20.8
3 2	7 56.57	+18 40.7	1.827	2.630	15.2	20.9	3 2	8 2.85	+29 47.6	1.978	2.763	14.9	21.0
<b>415729</b>	1999 <i>VL</i> <sub>46</sub>		1 25.5 40°53	9°4/30.8	16		<b>296975</b>	2010 <i>EN</i> <sub>87</sub>		1 25.5 340°47	1°0/24.9	18	
12 23	8 57.00	- 3 5.1	1.406	2.173	20.3	20.3	12 23	8 51.05	+20 9.0	1.878	2.713	13.2	20.7
1 2	8 50.57	- 4 4.8	1.378	2.219	16.7	20.2	1 2	8 46.47	+20 34.2	1.798	2.707	9.8	20.5
1 12	8 41.77	- 4 34.6	1.370	2.267	13.1	20.1	1 12	8 39.63	+21 5.5	1.742	2.700	5.8	20.2
1 22	8 31.67	- 4 33.2	1.384	2.314	10.3	20.1	1 22	8 31.24	+21 38.7	1.712	2.695	1.6	19.9
2 1	8 21.61	- 4 3.2	1.423	2.362	9.4	20.2	2 1	8 22.33	+22 9.2	1.712	2.689	3.3	20.0
2 11	8 12.89	- 3 11.1	1.488	2.409	10.7	20.3	2 11	8 14.07	+22 32.8	1.739	2.684	7.5	20.3
2 21	8 6.41	- 2 5.6	1.576	2.457	13.1	20.6	2 21	8 7.49	+22 47.6	1.793	2.680	11.4	20.5
3 2	8 2.70	- 0 55.0	1.687	2.504	15.7	20.9	3 2	8 3.30	+22 52.9	1.869	2.676	14.8	20.7
<b>397891</b>	2008 <i>UM</i> <sub>203</sub>		1 25.5 93°59	3°1/24.2	18		<b>144529</b>	2004 <i>EH</i> <sub>81</sub>		1 25.5 211°65	4°3/29.3	18	
12 23	9 1.03	+24 58.8	1.509	2.346	15.8	21.1	12 23	8 48.70	+ 1 11.4	2.491	3.252	12.6	19.9
1 2	8 54.02	+25 35.1	1.457	2.365	11.6	20.9	1 2	8 44.18	+ 1 40.0	2.400	3.251	10.1	19.7
1 12	8 44.09	+26 12.5	1.428	2.385	7.1	20.7	1 12	8 38.04	+ 2 26.6	2.333	3.249	7.5	19.5
1 22	8 32.34	+26 43.8	1.426	2.404	3.3	20.5	1 22	8 30.80	+ 3 30.0	2.294	3.248	5.1	19.4
2 1	8 20.30	+27 3.1	1.451	2.423	5.1	20.7	2 1	8 23.16	+ 4 47.1	2.284	3.246	4.5	19.3
2 11	8 9.56	+27 7.4	1.505	2.441	9.3	20.9	2 11	8 15.93	+ 6 13.3	2.304	3.244	6.3	19.5
2 21	8 1.34	+26 57.4	1.583	2.459	13.4	21.2	2 21	8 9.82	+ 7 42.9	2.353	3.242	9.0	19.6
3 2	7 56.34	+26 35.6	1.683	2.476	16.7	21.5	3 2	8 5.40	+ 9 10.9	2.429	3.240	11.6	19.8
<b>155954</b>	2001 <i>QR</i> <sub>95</sub>		1 25.5 86°32	0°3/25.8	18		<b>488512</b>	2000 <i>US</i> <sub>95</sub>		1 25.5 113°41	4°5/28.5	18	
12 23	8 47.87	+16 13.7	3.318	4.126	8.7	20.8	12 23	8 53.90	+ 3 30.2	2.412	3.175	12.9	21.5
1 2	8 43.10	+16 34.1	3.253	4.146	6.4	20.6	1 2	8 47.81	+ 3 14.4	2.345	3.198	10.2	21.3
1 12	8 37.15	+16 59.2	3.214	4.166	3.8	20.5	1 12	8 40.06	+ 3 13.0	2.302	3.220	7.4	21.2
1 22	8 30.49	+17 27.0	3.205	4.187	1.1	20.3	1 22	8 31.30	+ 3 25.5	2.288	3.241	5.1	21.1
2 1	8 23.67	+17 55.3	3.228	4.207	1.7	20.4	2 1	8 22.31	+ 3 50.4	2.303	3.262	4.7	21.1
2 11	8 17.26	+18 21.9	3.282	4.226	4.4	20.6	2 11	8 13.94	+ 4 24.4	2.348	3.282	6.6	21.2
2 21	8 11.77	+18 45.1	3.365	4.246	6.8	20.8	2 21	8 6.91	+ 5 3.9	2.421	3.301	9.1	21.4
3 2	8 7.61	+19 3.8	3.474	4.266	8.9	21.0	3 2	8 1.73	+ 5 45.1	2.520	3.320	11.6	21.6
<b>242123</b>	2002 <i>WL</i> <sub>17</sub>		1 25.5 58°57	7°4/30.3	17		<b>335964</b>	2007 <i>TM</i> <sub>157</sub>		1 25.5 151°36	0°1/25.5	16	
12 23	8 53.71	- 1 52.0	1.518	2.290	18.8	20.5	12 23	8 51.95</					

EPHEMERIDES

1 25.5

1 25.5

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>6114</b>	Dalla-Degregori		1 25.5	201°47'	1°0'	25.9	<b>462697</b>	2009 VU <sub>71</sub>		1 25.5	3°99'	4°2'	27.4
12 23	8 57.04	+14 54.4	1.691	2.511	15.2	18.1	12 23	8 52.06	+9 1.6	1.677	2.489	15.6	20.1
1 2	8 51.08	+15 10.8	1.609	2.508	11.4	17.8	1 2	8 47.28	+8 31.8	1.601	2.489	12.2	19.8
1 12	8 42.47	+15 38.7	1.551	2.504	7.0	17.6	1 12	8 40.14	+8 16.2	1.548	2.489	8.3	19.6
1 22	8 32.02	+16 14.3	1.519	2.500	2.3	17.3	1 22	8 31.42	+8 14.7	1.520	2.490	4.9	19.4
2 1	8 20.91	+16 52.8	1.517	2.496	3.2	17.3	2 1	8 22.19	+8 25.5	1.519	2.491	4.7	19.4
2 11	8 10.54	+17 29.5	1.543	2.491	8.0	17.6	2 11	8 13.70	+8 45.4	1.545	2.493	8.1	19.6
2 21	8 2.10	+18 0.6	1.595	2.485	12.4	17.8	2 21	8 6.99	+9 10.3	1.597	2.495	11.9	19.8
3 2	7 56.46	+18 24.0	1.669	2.479	16.2	18.1	3 2	8 2.82	+9 36.2	1.671	2.498	15.4	20.0
<b>33029</b>	1997 QV		1 25.5	69°29'	5°0'	28.4	<b>495438</b>	2014 SX <sub>290</sub>		1 25.5	77°48'	3°7'	23.7
12 23	8 54.16	+4 12.9	1.380	2.184	18.8	19.1	12 23	8 57.84	+27 3.6	1.719	2.555	14.2	21.0
1 2	8 49.02	+4 33.1	1.324	2.204	14.7	18.9	1 2	8 51.50	+27 47.9	1.665	2.573	10.5	20.8
1 12	8 41.20	+5 18.8	1.289	2.225	10.3	18.6	1 12	8 42.57	+28 31.4	1.636	2.591	6.6	20.6
1 22	8 31.65	+6 27.1	1.278	2.245	6.2	18.5	1 22	8 32.03	+29 7.4	1.634	2.609	3.8	20.5
2 1	8 21.70	+7 52.0	1.293	2.265	5.4	18.5	2 1	8 21.18	+29 30.2	1.661	2.627	5.3	20.6
2 11	8 12.80	+9 24.3	1.336	2.285	8.8	18.7	2 11	8 11.44	+29 37.1	1.715	2.645	8.9	20.9
2 21	8 6.09	+10 55.3	1.403	2.305	12.9	19.0	2 21	8 3.87	+29 28.9	1.795	2.662	12.5	21.1
3 2	8 2.31	+12 18.3	1.493	2.325	16.6	19.3	3 2	7 59.15	+29 7.7	1.896	2.680	15.5	21.4
<b>191181</b>	2002 NZ <sub>52</sub>		1 25.5	118°05'	0°6'	25.1	<b>456581</b>	2007 DG <sub>33</sub>		1 25.5	340°98'	6°3'	22.8
12 23	8 52.96	+19 23.3	2.557	3.372	10.7	20.7	12 23	8 59.99	+34 53.4	1.784	2.614	14.0	20.8
1 2	8 47.16	+19 53.2	2.491	3.389	7.9	20.5	1 2	8 53.36	+35 29.9	1.715	2.612	10.9	20.6
1 12	8 39.71	+20 27.4	2.451	3.406	4.6	20.3	1 12	8 43.83	+35 58.6	1.670	2.611	7.9	20.5
1 22	8 31.22	+21 2.6	2.440	3.422	1.2	20.1	1 22	8 32.39	+36 11.9	1.651	2.609	6.3	20.4
2 1	8 22.48	+21 35.2	2.461	3.438	2.5	20.2	2 1	8 20.48	+36 4.3	1.660	2.607	7.5	20.4
2 11	8 14.33	+22 2.4	2.513	3.454	5.8	20.5	2 11	8 9.68	+35 34.7	1.697	2.606	10.4	20.6
2 21	8 7.49	+22 22.7	2.593	3.469	8.8	20.7	2 21	8 1.24	+34 45.8	1.757	2.605	13.7	20.8
3 2	8 2.50	+22 35.4	2.697	3.483	11.3	20.9	3 2	7 55.92	+33 42.5	1.839	2.604	16.6	21.0
<b>417772</b>	2007 DV <sub>113</sub>		1 25.5	92°69'	3°3'	23.9	<b>287521</b>	2003 CU <sub>8</sub>		1 25.5	299°28'	2°4'	24.2
12 23	8 56.77	+27 13.5	1.892	2.725	13.2	20.9	12 23	8 53.48	+25 51.5	2.319	3.147	11.3	19.8
1 2	8 50.65	+27 42.3	1.822	2.728	9.8	20.7	1 2	8 47.91	+26 10.2	2.236	3.140	8.4	19.6
1 12	8 42.07	+28 10.1	1.777	2.731	6.2	20.5	1 12	8 40.34	+26 28.8	2.179	3.134	5.1	19.4
1 22	8 31.88	+28 31.4	1.759	2.735	3.4	20.3	1 22	8 31.46	+26 43.5	2.151	3.128	2.5	19.2
2 1	8 21.28	+28 41.5	1.771	2.738	4.9	20.4	2 1	8 22.16	+26 50.7	2.152	3.122	3.8	19.3
2 11	8 11.56	+28 37.9	1.810	2.741	8.4	20.7	2 11	8 13.48	+26 48.2	2.183	3.116	7.0	19.5
2 21	8 3.80	+28 21.1	1.876	2.744	12.0	20.9	2 21	8 6.29	+26 35.7	2.241	3.110	10.2	19.7
3 2	7 58.70	+27 53.0	1.964	2.748	15.0	21.1	3 2	8 1.23	+26 14.2	2.322	3.105	13.0	19.9
<b>20320</b>	1998 GH <sub>8</sub>		1 25.5	149°27'	3°4'	22.9	<b>257432</b>	2010 MX <sub>112</sub>		1 25.5	119°99'	0°3'	25.3
12 23	8 54.61	+26 55.2	2.379	3.205	11.1	18.2	12 23	8 55.53	+16 55.0	1.909	2.729	13.7	20.4
1 2	8 48.72	+28 5.3	2.311	3.213	8.2	18.0	1 2	8 49.58	+17 41.3	1.844	2.744	10.1	20.2
1 12	8 40.81	+29 16.1	2.270	3.221	5.3	17.9	1 12	8 41.38	+18 36.5	1.803	2.759	5.9	20.0
1 22	8 31.55	+30 21.7	2.257	3.228	3.4	17.7	1 22	8 31.73	+19 35.7	1.791	2.773	1.5	19.7
2 1	8 21.86	+31 16.4	2.276	3.235	4.8	17.8	2 1	8 21.70	+20 33.1	1.809	2.787	3.0	19.8
2 11	8 12.78	+31 56.8	2.325	3.242	7.6	18.0	2 11	8 12.44	+21 23.7	1.857	2.801	7.2	20.1
2 21	8 5.19	+32 21.7	2.400	3.248	10.5	18.2	2 21	8 4.95	+22 4.4	1.931	2.814	11.0	20.4
3 2	7 59.76	+32 32.2	2.498	3.253	12.9	18.4	3 2	7 59.89	+22 34.2	2.029	2.826	14.1	20.6
<b>184082</b>	2004 GY <sub>34</sub>		1 25.5	327°78'	10°5'	30.1	<b>293231</b>	2007 BS <sub>61</sub>		1 25.5	45°84'	1°6'	24.7
12 23	8 51.58	-4 45.3	1.626	2.382	18.4	20.3	12 23	8 54.02	+20 30.2	1.513	2.355	15.5	20.2
1 2	8 47.11	-6 0.5	1.545	2.374	15.9	20.1	1 2	8 48.93	+21 13.1	1.456	2.368	11.4	20.0
1 12	8 40.16	-6 51.7	1.482	2.366	13.2	19.9	1 12	8 41.18	+22 3.0	1.422	2.382	6.7	19.8
1 22	8 31.44	-7 14.1	1.442	2.360	11.1	19.8	1 22	8 31.69	+22 53.4	1.415	2.396	2.1	19.5
2 1	8 22.02	-7 5.5	1.427	2.353	10.5	19.7	2 1	8 21.80	+23 37.8	1.435	2.411	4.1	19.7
2 11	8 13.21	-6 28.4	1.435	2.347	11.8	19.8	2 11	8 12.94	+24 11.2	1.482	2.426	8.7	20.0
2 21	8 6.14	-5 28.9	1.467	2.341	14.3	19.9	2 21	8 6.24	+24 31.6	1.554	2.441	12.8	20.3
3 2	8 1.70	-4 15.5	1.520	2.336	17.2	20.1	3 2	8 2.44	+24 39.0	1.647	2.457	16.3	20.5
<b>218714</b>	2005 UA <sub>53</sub>		1 25.5	160°68'	1°2'	26.3	<b>42107</b>	2001 AF <sub>38</sub>		1 25.5	76°47'	8°5'	21.9
12 23	8 53.55	+13 20.4	2.503	3.303	11.4	21.6	12 23	9 6.14	+38 25.5	1.563	2.389	15.9	17.9
1 2	8 47.67	+13 41.3	2.423	3.311	8.6	21.4	1 2	8 57.97	+39 42.3	1.531	2.419	12.6	17.8
1 12	8 40.08	+14 10.9	2.369	3.317	5.3	21.2	1 12	8 46.49	+40 45.4	1.522	2.449	9.7	17.7
1 22	8 31.36	+14 46.7	2.344	3.324	2.0	21.0	1 22	8 33.06	+41 24.5	1.539	2.479	8.5	17.7
2 1	8 22.29	+15 25.4	2.351	3.329	2.4	21.0	2 1	8 19.52	+41 33.8	1.582	2.509	9.7	17.8
2 11	8 13.75	+16 3.7	2.389	3.334	5.7	21.3	2 11	8 7.74	+41 13.4	1.652	2.537	12.2	18.0
2 21	8 6.48	+16 38.7	2.455	3.338	8.9	21.5	2 21	7 59.00	+40 28.9	1.744	2.566	14.9	18.3
3 2	8 1.06	+17 8.6	2.546	3.342	11.6	21.7	3 2	7 53.90	+39 27.4	1.856	2.594	17.3	18.5
<b>431464</b>	2007 RU <sub>288</sub>		1 25.5	175°63'	2°6'	27.2	<b>160956</b>	2002 AU <sub>129</sub>		1 25.5	30°18'	13°4'	22.5
12 23	8 50.44	+9 33.0	2.572	3.364	11.4	21.1	12 23	9 16.55	+52 11.4	1.483	2.274	18.3	19.0
1 2	8 45.37	+9 30.5	2.487	3.365	8.8	20.9	1 2	9 6.42	+52 53.1	1.443	2.286	16.0	18.9
1 12	8 38.71	+9 38.1	2.427	3.366	5.8	20.7	1 12	8 51.67	+53 6.5	1.422	2.298	14.2	18.8
1 22	8 31.00	+9 54.8	2.395	3.367	3.2	20.5	1 22	8 34.37	+52 39.8	1.423	2.311	13.4	18.8
2 1	8 22.95	+10 18.4	2.394	3.367	3.1	20.5	2 1	8 17.37	+51 28.3	1.448	2.325	14.0	18.8
2 11	8 15.35	+10 46.3	2.422	3.367	5.7	20.7	2 11	8 3.30	+49 37.2	1.496	2.340	15.7	19.0
2 21	8 8.91	+11 15.6	2.479	3.367	8.6	20.9	2 21	7 53.63	+47 18.2	1.566	2.355	17.8	19.2
3 2	8 4.17	+11 43.9	2.561	3.367	11.3	21.1	3 2	7 48.73	+44 43.9	1.655	2.371	19.9	19.4
<b>5390</b>	Huichiming		1 25.5	65°75'	13°8'	16.0	<b>21813</b>	Danwinegar		1 25.5	272°08'	1°6'	24.7
12 23	9 1.71	+36 9.6	1.000	1.861	20.1	16.0	12 23	8 56.10	+21 30.3	1.700	2.534	14.5	18.6
1 2	8 57.20	+40 21.9	0.964	1.870	16.4	15.8	1 2	8 50.64	+21 59.0	1.609	2.517		

EPHEMERIDES

1 25.5

1 25.5

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>469027</b>	2015 <i>AZ</i> <sub>244</sub>		1 25.5 143°42	1.3/24.4	17		<b>359405</b>	2010 <i>JK</i> <sub>79</sub>		1 25.5 322°16	3.6/27.2	18	
12 23	8 50.86	+19 49.9	2.585	3.405	10.5	21.1	12 23	8 52.00	+9 35.5	1.339	2.167	17.9	20.9
1 2	8 45.80	+20 54.8	2.509	3.410	7.7	20.9	1 2	8 47.95	+9 38.9	1.259	2.158	13.9	20.7
1 12	8 39.04	+22 5.5	2.459	3.416	4.5	20.7	1 12	8 40.94	+10 2.2	1.200	2.148	9.3	20.4
1 22	8 31.13	+23 17.5	2.440	3.421	1.5	20.5	1 22	8 31.77	+10 43.9	1.164	2.140	4.7	20.1
2 1	8 22.83	+24 25.7	2.452	3.426	2.9	20.6	2 1	8 21.76	+11 39.3	1.154	2.131	4.5	20.1
2 11	8 14.99	+25 25.9	2.495	3.430	6.1	20.8	2 11	8 12.51	+12 41.3	1.170	2.124	9.2	20.3
2 21	8 8.36	+26 15.5	2.566	3.435	9.1	21.0	2 21	8 5.41	+13 42.9	1.210	2.116	14.2	20.5
3 2	8 3.52	+26 53.6	2.662	3.439	11.7	21.2	3 2	8 1.46	+14 38.3	1.270	2.110	18.5	20.8
<b>431228</b>	2006 <i>ST</i> <sub>326</sub>		1 25.5 214°48	4.2/22.4	17		<b>86503</b>	2000 <i>DQ</i> <sub>39</sub>		1 25.5 179°60	1.6/24.6	18	
12 23	8 53.42	+31 44.9	2.612	3.437	10.3	21.4	12 23	8 54.93	+23 38.6	2.270	3.094	11.6	19.6
1 2	8 47.79	+32 33.8	2.536	3.434	7.8	21.3	1 2	8 48.96	+23 51.8	2.191	3.094	8.6	19.4
1 12	8 40.26	+33 19.7	2.486	3.430	5.4	21.1	1 12	8 40.98	+24 6.2	2.139	3.095	5.1	19.2
1 22	8 31.46	+33 57.6	2.465	3.427	4.2	21.0	1 22	8 31.69	+24 18.3	2.114	3.095	1.9	19.0
2 1	8 22.26	+34 23.2	2.474	3.423	5.2	21.1	2 1	8 22.03	+24 24.7	2.121	3.095	3.3	19.1
2 11	8 13.61	+34 34.3	2.512	3.419	7.6	21.2	2 11	8 13.04	+24 23.3	2.156	3.094	6.8	19.3
2 21	8 6.37	+34 30.8	2.577	3.415	10.1	21.4	2 21	8 5.58	+24 13.6	2.220	3.094	10.1	19.5
3 2	8 1.16	+34 14.3	2.664	3.411	12.4	21.5	3 2	8 0.29	+23 56.2	2.307	3.094	12.9	19.7
<b>325049</b>	2008 <i>CN</i> <sub>152</sub>		1 25.5 202°86	0.3/25.7	17		<b>460392</b>	2014 <i>SD</i> <sub>84</sub>		1 25.5 224°27	0.5/25.8	18	
12 23	8 54.81	+16 44.9	2.588	3.394	10.9	22.1	12 23	8 55.57	+16 35.3	1.817	2.638	14.2	21.6
1 2	8 48.67	+17 0.5	2.496	3.388	8.1	21.9	1 2	8 49.91	+16 49.5	1.732	2.633	10.6	21.4
1 12	8 40.74	+17 22.0	2.429	3.382	4.9	21.7	1 12	8 41.79	+17 12.7	1.672	2.627	6.4	21.1
1 22	8 31.60	+17 47.0	2.393	3.374	1.4	21.4	1 22	8 31.97	+17 41.2	1.639	2.621	1.8	20.8
2 1	8 22.02	+18 12.3	2.388	3.366	2.3	21.5	2 1	8 21.53	+18 10.9	1.635	2.615	3.0	20.9
2 11	8 12.90	+18 35.3	2.414	3.358	5.8	21.7	2 11	8 11.77	+18 37.6	1.661	2.608	7.6	21.1
2 21	8 5.03	+18 53.9	2.469	3.348	9.0	21.9	2 21	8 3.79	+18 58.4	1.712	2.601	11.8	21.4
3 2	7 59.01	+19 6.9	2.549	3.337	11.8	22.1	3 2	7 58.40	+19 12.0	1.786	2.594	15.3	21.6
<b>412862</b>	2014 <i>PV</i> <sub>69</sub>		1 25.5 169°74	0.3/25.7	18		<b>58505</b>	1996 <i>VU</i> <sub>15</sub>		1 25.5 233°81	6.7/20.7	18	
12 23	8 56.64	+16 42.8	2.043	2.857	13.1	22.3	12 23	8 58.00	+36 40.5	2.167	2.990	12.2	20.1
1 2	8 50.35	+17 3.4	1.965	2.861	9.8	22.1	1 2	8 51.82	+38 0.8	2.092	2.980	9.7	19.9
1 12	8 41.86	+17 31.9	1.911	2.865	5.9	21.9	1 12	8 43.00	+39 15.4	2.042	2.970	7.5	19.8
1 22	8 31.91	+18 4.6	1.886	2.868	1.6	21.6	1 22	8 32.31	+40 15.9	2.019	2.960	6.8	19.7
2 1	8 21.50	+18 37.4	1.892	2.871	2.8	21.7	2 1	8 20.90	+40 55.8	2.025	2.950	8.0	19.7
2 11	8 11.77	+19 6.5	1.927	2.872	6.9	21.9	2 11	8 10.19	+41 11.7	2.059	2.938	10.4	19.9
2 21	8 3.69	+19 29.5	1.990	2.873	10.7	22.2	2 21	8 1.37	+41 4.7	2.116	2.927	13.0	20.0
3 2	7 57.96	+19 45.3	2.077	2.874	13.9	22.4	3 2	7 55.32	+40 38.2	2.194	2.915	15.4	20.2
<b>413854</b>	2006 <i>TL</i> <sub>38</sub>		1 25.5 136°25	0.3/25.7	18		<b>144687</b>	2004 <i>FE</i> <sub>145</sub>		1 25.5 317°28	3.5/23.1	18	
12 23	8 55.77	+16 31.1	2.165	2.977	12.6	23.1	12 23	8 53.23	+22 46.0	1.682	2.522	14.2	19.4
1 2	8 49.51	+16 53.8	2.095	2.990	9.3	22.9	1 2	8 48.54	+24 23.2	1.607	2.519	10.5	19.2
1 12	8 41.26	+17 23.8	2.050	3.003	5.6	22.7	1 12	8 41.16	+26 8.8	1.558	2.516	6.4	19.0
1 22	8 31.73	+17 57.7	2.034	3.016	1.5	22.4	1 22	8 31.84	+27 53.9	1.536	2.513	3.5	18.8
2 1	8 21.86	+18 31.5	2.049	3.028	2.6	22.5	2 1	8 21.75	+29 28.7	1.543	2.510	5.6	18.9
2 11	8 12.69	+19 1.8	2.094	3.039	6.5	22.8	2 11	8 12.33	+30 45.5	1.578	2.507	9.6	19.1
2 21	8 5.09	+19 26.2	2.167	3.049	10.0	23.0	2 21	8 4.85	+31 41.0	1.638	2.504	13.5	19.3
3 2	7 59.68	+19 43.6	2.264	3.059	12.9	23.3	3 2	8 0.22	+32 15.3	1.719	2.501	16.9	19.6
<b>416607</b>	2004 <i>QJ</i> <sub>28</sub>		1 25.5 55°17	5.1/28.4	18		<b>88434</b>	2001 <i>QP</i> <sub>70</sub>		1 25.5 221°03	3.5/27.4	18	
12 23	8 52.02	+4 48.6	1.768	2.561	15.7	20.9	12 23	8 55.49	+8 16.7	1.789	2.587	15.3	20.4
1 2	8 47.04	+4 32.1	1.702	2.574	12.5	20.8	1 2	8 49.91	+8 23.9	1.698	2.579	12.0	20.1
1 12	8 39.91	+4 33.7	1.659	2.588	8.9	20.6	1 12	8 41.86	+8 47.7	1.630	2.570	8.1	19.9
1 22	8 31.39	+4 53.2	1.640	2.602	5.9	20.4	1 22	8 32.02	+9 26.8	1.589	2.561	4.3	19.6
2 1	8 22.51	+5 28.0	1.650	2.616	5.3	20.4	2 1	8 21.47	+10 17.6	1.576	2.550	4.1	19.6
2 11	8 14.40	+6 13.6	1.687	2.630	7.9	20.6	2 11	8 11.48	+11 14.8	1.592	2.539	7.9	19.8
2 21	8 7.98	+7 4.5	1.750	2.645	11.2	20.8	2 21	8 3.20	+12 12.8	1.635	2.528	12.0	20.0
3 2	8 3.92	+7 55.6	1.836	2.659	14.3	21.1	3 2	7 57.48	+13 7.2	1.701	2.516	15.7	20.2
<b>426285</b>	2012 <i>TW</i> <sub>31</sub>		1 25.5 161°69	3.7/22.9	17		<b>416916</b>	2005 <i>SH</i> <sub>15</sub>		1 25.5 43°51	3.3/27.2	18	
12 23	8 54.03	+30 19.7	2.588	3.412	10.4	21.4	12 23	8 53.06	+9 53.1	1.462	2.283	17.0	20.9
1 2	8 48.18	+30 59.2	2.516	3.415	7.8	21.2	1 2	8 48.11	+9 54.0	1.409	2.304	13.0	20.7
1 12	8 40.46	+31 36.2	2.470	3.417	5.2	21.1	1 12	8 40.66	+10 12.0	1.378	2.325	8.5	20.5
1 22	8 31.53	+32 5.8	2.453	3.419	3.7	21.0	1 22	8 31.64	+10 44.3	1.372	2.347	4.2	20.3
2 1	8 22.26	+32 24.4	2.466	3.421	4.8	21.0	2 1	8 22.32	+11 26.6	1.393	2.369	4.1	20.4
2 11	8 13.60	+32 29.9	2.509	3.423	7.3	21.2	2 11	8 14.03	+12 12.9	1.440	2.392	8.1	20.7
2 21	8 6.37	+32 22.3	2.578	3.425	9.9	21.4	2 21	8 7.81	+12 58.0	1.513	2.415	12.2	20.9
3 2	8 1.16	+32 3.2	2.671	3.426	12.2	21.5	3 2	8 4.34	+13 38.0	1.608	2.438	15.7	21.2
<b>233595</b>	2007 <i>RM</i> <sub>134</sub>		1 25.5 129°14	1.1/26.3	18		<b>408129</b>	2013 <i>CH</i> <sub>61</sub>		1 25.5 295°44	0.2/25.5	18	
12 23	8 50.54	+12 58.3	2.361	3.169	11.8	20.2	12 23	8 57.59	+19 24.8	1.470	2.306	16.2	20.7
1 2	8 45.62	+13 32.4	2.283	3.175	8.8	20.0	1 2	8 51.90	+19 22.0	1.391	2.299	12.1	20.5
1 12	8 38.96	+14 16.8	2.230	3.180	5.5	19.8	1 12	8 43.20	+19 25.6	1.335	2.293	7.3	20.2
1 22	8 31.15	+15 8.4	2.206	3.186	2.0	19.6	1 22	8 32.40	+19 31.7	1.304	2.286	1.9	19.8
2 1	8 22.96	+16 3.2	2.212	3.191	2.4	19.6	2 1	8 20.88	+19 35.9	1.301	2.280	3.6	19.9
2 11	8 15.29	+16 57.0	2.248	3.196	5.9	19.8	2 11	8 10.28	+19 35.0	1.325	2.274	8.9	20.2
2 21	8 8.89	+17 46.4	2.313	3.201	9.2	20.1	2 21	8 1.97	+19 27.5	1.374	2.268	13.7	20.5
3 2	8 4.35	+18 29.0	2.402	3.205	12.0	20.3	3 2	7 56.85	+19 13.4	1.444	2.262	17.8	20.7
<b>489419</b>	2006 <i>VA</i> <sub>96</sub>		1 25.5 123°84	6.8/21.2	18		<b>419030</b>	2009 <i>QX</i> <sub>54</sub>		1 25.5 85°59	3.8/27.8	18	
12 23	9 0.47	+36 32.3	2.061	2.882	12.8	22.0	1						

EPHEMERIDES

1 25.5

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>270751</b>	2002 <i>RS</i> <sub>58</sub>		1 25.5 134°52	1°6/26.4	18		<b>412699</b>	2014 <i>OE</i> <sub>277</sub>		1 25.6 148°80	1°4/24.8	18	
12 23	8 56.76	+12 11.5	1.546	2.364	16.4	20.9	12 23	8 57.39	+21 10.3	2.083	2.903	12.7	22.3
1 2	8 50.98	+12 45.5	1.478	2.374	12.4	20.7	1 2	8 50.90	+21 45.8	2.013	2.914	9.3	22.1
1 12	8 42.50	+13 35.6	1.432	2.383	7.7	20.4	1 12	8 42.21	+22 25.7	1.968	2.924	5.5	21.8
1 22	8 32.19	+14 37.1	1.412	2.392	2.8	20.1	1 22	8 32.10	+23 5.0	1.951	2.933	1.8	21.6
2 1	8 21.32	+15 43.8	1.421	2.400	3.4	20.2	2 1	8 21.59	+23 39.2	1.966	2.941	3.3	21.7
2 11	8 11.34	+16 48.6	1.458	2.408	8.2	20.5	2 11	8 11.83	+24 4.5	2.010	2.949	7.2	22.0
2 21	8 3.46	+17 46.2	1.521	2.415	12.7	20.8	2 21	8 3.77	+24 19.8	2.082	2.955	10.7	22.2
3 2	7 58.47	+18 33.5	1.606	2.421	16.4	21.0	3 2	7 58.09	+24 25.0	2.177	2.962	13.7	22.4
<b>18988</b>	2000 <i>RB</i> <sub>24</sub>		1 25.5 309°06	7°0/29.5	18		<b>468241</b>	2015 <i>BX</i> <sub>242</sub>		1 25.6 327°48	2°7/27.2	17	
12 23	8 50.10	- 0 5.4	1.787	2.561	16.3	18.1	12 23	8 50.80	+ 9 46.5	2.099	2.903	13.2	21.5
1 2	8 45.90	- 0 26.3	1.697	2.550	13.5	17.9	1 2	8 46.05	+ 9 52.4	2.016	2.901	10.2	21.3
1 12	8 39.46	- 0 25.1	1.627	2.539	10.4	17.6	1 12	8 39.36	+10 11.1	1.957	2.900	6.7	21.1
1 22	8 31.40	- 0 0.2	1.582	2.528	7.8	17.5	1 22	8 31.35	+10 40.9	1.925	2.899	3.4	20.9
2 1	8 22.69	+ 0 47.1	1.564	2.518	7.1	17.4	2 1	8 22.91	+11 19.0	1.922	2.898	3.3	20.9
2 11	8 14.49	+ 1 52.6	1.572	2.508	9.0	17.5	2 11	8 15.00	+12 1.3	1.949	2.897	6.6	21.1
2 21	8 7.85	+ 3 9.5	1.605	2.498	12.2	17.6	2 21	8 8.49	+12 43.8	2.002	2.896	10.1	21.3
3 2	8 3.56	+ 4 30.6	1.662	2.488	15.5	17.8	3 2	8 4.04	+13 23.3	2.079	2.895	13.2	21.5
<b>431566</b>	2007 <i>UZ</i> <sub>102</sub>		1 25.5 22°79	3°3/23.7	18		<b>257168</b>	2008 <i>HA</i> <sub>69</sub>		1 25.6 59°96	2°6/24.3	18	R
12 23	8 52.28	+26 7.0	1.804	2.646	13.4	20.5	12 23	8 57.23	+23 27.8	1.546	2.386	15.3	20.2
1 2	8 47.46	+26 50.2	1.743	2.654	9.9	20.3	1 2	8 51.21	+24 8.7	1.499	2.409	11.2	20.0
1 12	8 40.28	+27 34.3	1.707	2.663	6.1	20.1	1 12	8 42.51	+24 52.4	1.474	2.432	6.7	19.8
1 22	8 31.57	+28 13.0	1.697	2.673	3.4	19.9	1 22	8 32.18	+25 32.3	1.477	2.456	2.8	19.6
2 1	8 22.48	+28 41.2	1.715	2.683	4.9	20.0	2 1	8 21.59	+26 2.2	1.507	2.480	4.6	19.8
2 11	8 14.25	+28 55.4	1.761	2.694	8.5	20.3	2 11	8 12.19	+26 18.8	1.565	2.504	8.8	20.1
2 21	8 7.90	+28 55.3	1.832	2.705	12.0	20.5	2 21	8 5.08	+26 21.6	1.647	2.528	12.7	20.3
3 2	8 4.11	+28 42.3	1.924	2.717	14.9	20.7	3 2	8 0.90	+26 12.2	1.751	2.551	15.9	20.6
<b>122558</b>	2000 <i>RA</i>		1 25.5 70°76	2°6/26.8	18		<b>387556</b>	2001 <i>QW</i> <sub>99</sub>		1 25.6 86°11	8°6/30.7	18	
12 23	8 56.25	+11 50.7	1.782	2.591	14.9	19.5	12 23	8 53.84	- 7 27.6	2.410	3.114	14.4	20.4
1 2	8 50.03	+11 35.9	1.726	2.616	11.3	19.3	1 2	8 47.94	- 8 42.6	2.342	3.130	12.5	20.3
1 12	8 41.63	+11 32.8	1.694	2.640	7.3	19.1	1 12	8 40.32	- 9 38.5	2.296	3.147	10.5	20.2
1 22	8 31.90	+11 39.5	1.689	2.665	3.4	18.9	1 22	8 31.61	-10 12.4	2.275	3.163	9.1	20.1
2 1	8 21.96	+11 53.3	1.713	2.689	3.5	19.0	2 1	8 22.57	-10 23.2	2.280	3.179	8.6	20.1
2 11	8 12.96	+12 10.8	1.765	2.713	7.2	19.2	2 11	8 14.10	-10 12.6	2.313	3.195	9.4	20.2
2 21	8 5.83	+12 29.0	1.844	2.737	10.9	19.5	2 21	8 6.94	- 9 44.5	2.371	3.210	10.9	20.3
3 2	8 1.16	+12 45.3	1.946	2.760	14.0	19.7	3 2	8 1.63	- 9 4.0	2.453	3.226	12.7	20.4
<b>421593</b>	2014 <i>OV</i> <sub>215</sub>		1 25.5 173°91	2°3/24.5	18		<b>6274</b>	Taizaburo		1 25.6 238°65	1°4/24.9	18	
12 23	8 59.46	+24 7.1	1.805	2.633	14.0	21.8	12 23	8 57.42	+19 20.9	1.492	2.328	16.0	17.3
1 2	8 52.79	+24 30.6	1.731	2.636	10.4	21.6	1 2	8 51.94	+20 7.5	1.410	2.319	11.9	17.0
1 12	8 43.49	+24 56.0	1.681	2.637	6.3	21.3	1 12	8 43.37	+21 4.7	1.351	2.309	7.1	16.7
1 22	8 32.45	+25 17.7	1.659	2.639	2.6	21.1	1 22	8 32.53	+22 6.0	1.317	2.299	2.1	16.4
2 1	8 20.90	+25 30.9	1.666	2.639	4.2	21.2	2 1	8 20.79	+23 3.4	1.312	2.289	4.2	16.5
2 11	8 10.24	+25 32.6	1.703	2.640	8.3	21.4	2 11	8 9.81	+23 50.2	1.334	2.278	9.4	16.7
2 21	8 1.63	+25 22.8	1.765	2.640	12.3	21.7	2 21	8 1.05	+24 22.9	1.380	2.267	14.2	17.0
3 2	7 55.84	+25 2.7	1.849	2.639	15.6	21.9	3 2	7 55.52	+24 40.8	1.448	2.255	18.3	17.2
<b>316721</b>	1998 <i>BB</i> <sub>20</sub>		1 25.5 60°72	0°4/25.7	18		<b>93700</b>	2000 <i>VT</i> <sub>26</sub>		1 25.6 11°52	2°5/26.7	18	
12 23	8 54.57	+17 6.3	1.726	2.553	14.6	21.1	12 23	8 51.34	+12 28.5	1.486	2.317	16.3	19.1
1 2	8 49.10	+17 16.2	1.658	2.562	10.8	20.9	1 2	8 47.06	+12 21.2	1.418	2.319	12.4	18.8
1 12	8 41.25	+17 34.3	1.615	2.571	6.5	20.7	1 12	8 40.20	+12 27.8	1.371	2.323	7.9	18.6
1 22	8 31.84	+17 57.1	1.598	2.580	1.8	20.4	1 22	8 31.62	+12 46.1	1.350	2.328	3.5	18.3
2 1	8 22.02	+18 20.4	1.609	2.589	3.0	20.5	2 1	8 22.53	+13 12.5	1.355	2.333	3.7	18.3
2 11	8 13.06	+18 40.4	1.649	2.598	7.5	20.8	2 11	8 14.31	+13 42.4	1.386	2.339	8.1	18.6
2 21	8 5.99	+18 54.8	1.715	2.607	11.6	21.1	2 21	8 8.08	+14 11.4	1.442	2.346	12.5	18.9
3 2	8 1.51	+19 2.3	1.803	2.616	15.0	21.3	3 2	8 4.62	+14 36.1	1.520	2.354	16.3	19.1
<b>366371</b>	2000 <i>SS</i> <sub>28</sub>		1 25.5 120°80	1°1/26.2	18		<b>194639</b>	2001 <i>XX</i> <sub>166</sub>		1 25.6 5°61	1°5/26.2	18	
12 23	8 55.62	+14 42.7	2.366	3.169	11.9	21.7	12 23	8 50.82	+14 22.1	1.089	1.943	19.3	19.9
1 2	8 49.21	+14 46.4	2.298	3.188	8.9	21.5	1 2	8 47.48	+14 35.2	1.027	1.943	14.5	19.6
1 12	8 41.02	+14 57.3	2.257	3.206	5.5	21.3	1 12	8 40.82	+15 5.7	0.984	1.943	9.0	19.3
1 22	8 31.74	+15 13.1	2.245	3.224	2.0	21.1	1 22	8 31.84	+15 49.3	0.964	1.945	3.0	19.0
2 1	8 22.23	+15 31.2	2.263	3.242	2.4	21.2	2 1	8 22.14	+16 38.9	0.968	1.949	4.0	19.0
2 11	8 13.39	+15 48.9	2.313	3.258	5.9	21.5	2 11	8 13.56	+17 26.8	0.996	1.953	9.9	19.4
2 21	8 5.98	+16 4.1	2.391	3.275	9.1	21.7	2 21	8 7.60	+18 7.1	1.046	1.959	15.3	19.7
3 2	8 0.57	+16 15.6	2.494	3.290	11.8	21.9	3 2	8 5.18	+18 36.3	1.115	1.966	19.8	20.0
<b>410000</b>	2006 <i>WJ</i> <sub>25</sub>		1 25.5 112°61	0°8/26.0	18		<b>161904</b>	2007 <i>DU</i> <sub>54</sub>		1 25.6 188°06	1°4/26.4	18	
12 23	8 54.63	+14 38.6	1.946	2.761	13.6	21.3	12 23	8 52.94	+13 5.4	2.161	2.969	12.7	21.3
1 2	8 48.89	+15 8.4	1.879	2.776	10.2	21.1	1 2	8 47.60	+13 21.4	2.078	2.969	9.6	21.1
1 12	8 41.02	+15 48.5	1.837	2.790	6.2	20.9	1 12	8 40.28	+13 47.6	2.019	2.968	6.0	20.9
1 22	8 31.77	+16 34.9	1.823	2.804	1.9	20.7	1 22	8 31.62	+14 21.7	1.988	2.967	2.3	20.6
2 1	8 22.16	+17 22.9	1.838	2.817	2.7	20.8	2 1	8 22.51	+15 0.0	1.987	2.966	2.7	20.6
2 11	8 13.29	+18 8.0	1.883	2.831	6.9	21.0	2 11	8 13.96	+15 38.6	2.017	2.964	6.4	20.9
2 21	8 6.10	+18 46.7	1.955	2.843	10.6	21.3	2 21	8 6.83	+16 14.4	2.073	2.962	10.0	21.1
3 2	8 1.23	+19 17.4	2.051	2.856	13.7	21.5	3 2	8 1.78	+16 44.8	2.154	2.960	13.1	21.3
<b>345707</b>	2006 <i>VW</i> <sub>51</sub>		1 25.6 129°74	0°7/25.1	18		<b>337699</b>	2001 <i>TY</i> <sub>257</sub>		1 25.6 107°73	9°0/17.4	18	
12 23	8 51.42	+19 56.8	2.739	3.555	10.1	22.0	12 23						

EPHEMERIDES

1 25.6

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>264751</b>	2002 CA <sub>310</sub>		1 25.6 339°20	0°8/25.9	18		<b>55716</b>	4249 T-3		1 25.6 183°43	0°5/25.3	18	
12 23	8 52.23	+16 14.7	1.587	2.422	15.3	20.7	12 23	8 54.57	+17 57.8	1.997	2.818	13.1	19.7
1 2	8 47.75	+16 18.8	1.507	2.414	11.5	20.4	1 2	8 49.01	+18 34.1	1.917	2.819	9.7	19.5
1 12	8 40.67	+16 33.0	1.450	2.406	7.0	20.1	1 12	8 41.23	+19 18.3	1.863	2.819	5.8	19.3
1 22	8 31.78	+16 53.9	1.418	2.400	2.2	19.8	1 22	8 31.93	+20 6.2	1.836	2.819	1.5	19.0
2 1	8 22.25	+17 17.6	1.414	2.393	3.2	19.9	2 1	8 22.11	+20 52.6	1.840	2.818	3.0	19.1
2 11	8 13.47	+17 39.7	1.436	2.388	8.1	20.1	2 11	8 12.93	+21 33.0	1.873	2.817	7.2	19.3
2 21	8 6.60	+17 57.0	1.484	2.383	12.6	20.4	2 21	8 5.37	+22 4.7	1.932	2.815	11.0	19.6
3 2	8 2.50	+18 7.8	1.553	2.379	16.4	20.6	3 2	8 0.16	+22 26.6	2.015	2.813	14.2	19.8
<b>518545</b>	2006 WB <sub>208</sub>		1 25.6 77°68	1°6/26.4	18		<b>146649</b>	2001 UD <sub>89</sub>		1 25.6 146°22	2°6/23.7	18	
12 23	8 55.12	+13 43.4	1.719	2.538	15.0	21.8	12 23	8 55.41	+23 53.7	2.234	3.058	11.8	20.5
1 2	8 49.43	+13 50.3	1.657	2.554	11.2	21.6	1 2	8 49.45	+25 1.0	2.165	3.068	8.7	20.3
1 12	8 41.42	+14 8.4	1.618	2.570	7.0	21.4	1 12	8 41.41	+26 11.5	2.123	3.077	5.3	20.1
1 22	8 31.93	+14 34.7	1.606	2.585	2.6	21.2	1 22	8 31.96	+27 19.0	2.110	3.086	2.7	20.0
2 1	8 22.09	+15 5.2	1.622	2.601	3.1	21.2	2 1	8 22.07	+28 17.9	2.127	3.094	4.2	20.1
2 11	8 13.14	+15 35.7	1.668	2.617	7.4	21.5	2 11	8 12.82	+29 3.9	2.175	3.102	7.5	20.3
2 21	8 6.08	+16 2.8	1.739	2.633	11.3	21.8	2 21	8 5.12	+29 35.5	2.249	3.109	10.6	20.5
3 2	8 1.57	+16 24.4	1.833	2.648	14.7	22.1	3 2	7 59.66	+29 53.0	2.347	3.115	13.3	20.7
<b>466382</b>	2013 SO <sub>21</sub>		1 25.6 77°63	0°3/25.4	18		<b>124287</b>	2001 QK <sub>45</sub>		1 25.6 78°15	1°6/24.9	17	
12 23	8 52.50	+18 1.0	2.025	2.850	12.8	21.8	12 23	9 0.63	+21 22.8	1.373	2.211	17.0	19.9
1 2	8 47.38	+18 31.0	1.952	2.855	9.5	21.6	1 2	8 53.96	+21 48.6	1.323	2.233	12.5	19.7
1 12	8 40.19	+19 8.4	1.903	2.860	5.6	21.3	1 12	8 44.27	+22 19.6	1.296	2.254	7.4	19.5
1 22	8 31.61	+19 49.1	1.882	2.865	1.5	21.1	1 22	8 32.71	+22 49.4	1.294	2.276	2.3	19.2
2 1	8 22.62	+20 28.5	1.891	2.869	2.8	21.2	2 1	8 20.87	+23 11.8	1.320	2.297	4.2	19.4
2 11	8 14.28	+21 2.8	1.929	2.874	6.9	21.4	2 11	8 10.40	+23 23.3	1.374	2.318	9.2	19.7
2 21	8 7.52	+21 29.4	1.993	2.879	10.5	21.7	2 21	8 2.54	+23 23.1	1.451	2.339	13.6	20.0
3 2	8 2.99	+21 47.1	2.081	2.884	13.6	21.9	3 2	7 57.98	+23 12.6	1.550	2.360	17.2	20.3
<b>328275</b>	2008 GJ <sub>54</sub>		1 25.6 97°61	1°8/24.6	18		<b>127132</b>	2002 GE <sub>106</sub>		1 25.6 230°73	2°6/27.4	18	
12 23	8 54.89	+21 49.4	1.826	2.658	13.7	21.4	12 23	8 50.99	+ 8 28.9	2.187	2.983	13.0	20.3
1 2	8 49.39	+22 27.6	1.756	2.663	10.1	21.2	1 2	8 46.21	+ 8 57.9	2.097	2.977	10.0	20.1
1 12	8 41.48	+23 10.8	1.710	2.668	6.0	21.0	1 12	8 39.51	+ 9 41.8	2.031	2.972	6.7	19.9
1 22	8 31.98	+23 53.3	1.692	2.673	2.2	20.7	1 22	8 31.47	+10 38.4	1.992	2.966	3.4	19.7
2 1	8 22.01	+24 29.7	1.703	2.678	3.8	20.9	2 1	8 22.93	+11 43.7	1.984	2.960	3.2	19.7
2 11	8 12.83	+24 56.0	1.743	2.683	7.9	21.1	2 11	8 14.83	+12 52.7	2.005	2.953	6.4	19.9
2 21	8 5.50	+25 10.5	1.808	2.688	11.8	21.3	2 21	8 8.06	+14 0.5	2.054	2.947	9.9	20.1
3 2	8 0.75	+25 13.5	1.896	2.693	15.0	21.6	3 2	8 3.28	+15 3.0	2.128	2.940	13.1	20.2
<b>5940</b>	Feliksobolev		1 25.6 143°14	4°6/22.4	18		<b>363835</b>	2005 QF <sub>1</sub>		1 25.6 128°26	2°9/27.7	18	
12 23	8 55.57	+32 50.4	2.468	3.291	10.8	17.1	12 23	8 53.04	+ 7 15.1	2.137	2.926	13.5	21.2
1 2	8 49.48	+33 40.8	2.401	3.296	8.3	17.0	1 2	8 47.60	+ 7 46.5	2.063	2.939	10.4	21.0
1 12	8 41.36	+34 26.9	2.361	3.302	5.9	16.8	1 12	8 40.26	+ 8 33.5	2.013	2.951	7.0	20.8
1 22	8 31.92	+35 3.2	2.349	3.308	4.6	16.8	1 22	8 31.65	+ 9 33.4	1.992	2.963	3.7	20.6
2 1	8 22.12	+35 25.4	2.368	3.313	5.7	16.8	2 1	8 22.67	+10 42.1	2.000	2.975	3.4	20.6
2 11	8 13.01	+35 31.5	2.414	3.318	8.0	17.0	2 11	8 14.30	+11 54.1	2.039	2.986	6.4	20.8
2 21	8 5.48	+35 21.9	2.487	3.322	10.6	17.2	2 21	8 7.36	+13 4.3	2.106	2.996	9.8	21.0
3 2	8 0.14	+34 58.9	2.583	3.327	12.8	17.3	3 2	8 2.48	+14 8.8	2.197	3.006	12.8	21.3
<b>57802</b>	2001 VO <sub>108</sub>		1 25.6 322°69	2°3/24.2	18		<b>19075</b>	4288 T-3		1 25.6 211°47	0°2/25.7	18	
12 23	8 52.16	+24 30.5	2.144	2.976	11.9	19.3	12 23	8 52.70	+16 8.9	2.120	2.937	12.6	18.8
1 2	8 47.19	+25 0.7	2.061	2.968	8.8	19.1	1 2	8 47.54	+16 42.9	2.036	2.934	9.4	18.6
1 12	8 40.12	+25 32.9	2.004	2.960	5.4	18.9	1 12	8 40.32	+17 26.1	1.976	2.931	5.6	18.4
1 22	8 31.62	+26 2.5	1.974	2.953	2.5	18.7	1 22	8 31.70	+18 14.6	1.945	2.927	1.6	18.1
2 1	8 22.63	+26 25.2	1.974	2.945	3.9	18.8	2 1	8 22.56	+19 4.0	1.945	2.924	2.7	18.2
2 11	8 14.24	+26 38.0	2.002	2.938	7.4	19.0	2 11	8 13.97	+19 49.8	1.973	2.919	6.7	18.4
2 21	8 7.39	+26 39.7	2.057	2.931	10.8	19.2	2 21	8 6.84	+20 28.7	2.029	2.915	10.4	18.6
3 2	8 2.76	+26 30.8	2.135	2.925	13.8	19.4	3 2	8 1.86	+20 58.9	2.109	2.911	13.5	18.8
<b>357018</b>	1999 VK <sub>163</sub>		1 25.6 119°54	3°1/23.9	18		<b>461067</b>	2014 YC <sub>26</sub>		1 25.6 45°82	4°5/27.5	18	
12 23	8 58.52	+25 22.8	1.810	2.641	13.8	20.3	12 23	8 54.83	+ 8 38.2	1.704	2.509	15.7	20.5
1 2	8 52.05	+26 8.1	1.748	2.654	10.2	20.1	1 2	8 49.25	+ 7 55.4	1.637	2.520	12.3	20.3
1 12	8 43.04	+26 54.7	1.711	2.666	6.3	19.9	1 12	8 41.34	+ 7 26.4	1.593	2.531	8.5	20.1
1 22	8 32.39	+27 35.9	1.702	2.678	3.2	19.7	1 22	8 31.95	+ 7 11.5	1.575	2.543	5.2	19.9
2 1	8 21.33	+28 6.1	1.722	2.690	4.8	19.8	2 1	8 22.19	+ 7 9.6	1.585	2.555	5.0	20.0
2 11	8 11.24	+28 22.0	1.770	2.702	8.5	20.1	2 11	8 13.28	+ 7 17.8	1.622	2.567	8.0	20.2
2 21	8 3.20	+28 23.3	1.844	2.712	12.1	20.3	2 21	8 6.22	+ 7 32.7	1.686	2.579	11.6	20.4
3 2	7 57.92	+28 11.7	1.940	2.723	15.2	20.6	3 2	8 1.67	+ 7 50.4	1.771	2.592	14.9	20.6
<b>459887</b>	2014 KG <sub>51</sub>		1 25.6 193°11	6°1/28.3	18		<b>451712</b>	2013 CB <sub>127</sub>		1 25.6 91°76	4°4/23.6	18	
12 23	8 56.90	+ 3 39.7	1.818	2.595	16.0	22.2	12 23	8 59.81	+27 38.6	1.527	2.366	15.5	20.5
1 2	8 50.83	+ 2 59.5	1.733	2.593	12.9	22.0	1 2	8 53.42	+28 29.5	1.470	2.379	11.5	20.3
1 12	8 42.37	+ 2 36.4	1.671	2.592	9.6	21.8	1 12	8 44.03	+29 19.6	1.437	2.391	7.4	20.1
1 22	8 32.24	+ 2 31.6	1.635	2.589	6.7	21.6	1 22	8 32.69	+30 0.8	1.430	2.403	4.5	20.0
2 1	8 21.52	+ 2 44.6	1.627	2.586	6.3	21.6	2 1	8 20.91	+30 26.2	1.451	2.415	6.1	20.1
2 11	8 11.43	+ 3 12.3	1.647	2.582	8.8	21.7	2 11	8 10.34	+30 32.5	1.498	2.427	10.0	20.4
2 21	8 3.07	+ 3 50.1	1.694	2.578	12.1	21.9	2 21	8 2.25	+30 20.8	1.570	2.439	13.9	20.6
3 2	7 57.22	+ 4 32.6	1.763	2.573	15.4	22.1	3 2	7 57.40	+29 54.3	1.663	2.450	17.1	20.9
<b>236854</b>	2007 RZ <sub>142</sub>		1 25.6 50°31	5°6/29.9	18		<b>519072</b>	2010 LC <sub>11</sub>		1 25.6 181°32	3°7/22.9	17	
12 23	8 49.19	- 0 26.7	2.151	2.912	14.3	20.1	12 23	8 53.47	+28 40.2	2.381	3.209	11.0	21.5
1 2	8												

EPHEMERIDES

1 25.6

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>357953</b>	2005 YG <sub>187</sub>		1 25.6 238°54	1°0/25.0	18		<b>282498</b>	2004 PA <sub>54</sub>		1 25.6 143°05	0°4/25.8	18	
12 23	8 55.43	+18 2.0	1.584	2.417	15.4	21.4	12 23	8 58.63	+16 31.8	1.913	2.726	13.9	21.8
1 2	8 50.28	+18 55.5	1.503	2.410	11.4	21.1	1 2	8 51.94	+16 51.5	1.843	2.739	10.3	21.6
1 12	8 42.31	+20 0.8	1.446	2.404	6.8	20.8	1 12	8 42.94	+17 19.4	1.797	2.751	6.2	21.4
1 22	8 32.30	+21 11.6	1.415	2.397	1.9	20.5	1 22	8 32.44	+17 51.6	1.780	2.762	1.8	21.1
2 1	8 21.50	+22 20.2	1.412	2.390	3.8	20.6	2 1	8 21.54	+18 23.8	1.793	2.772	2.8	21.2
2 11	8 11.41	+23 19.7	1.438	2.383	8.8	20.9	2 11	8 11.45	+18 52.0	1.837	2.782	7.2	21.5
2 21	8 3.35	+24 5.7	1.488	2.375	13.4	21.1	2 21	8 3.19	+19 14.0	1.907	2.791	11.0	21.7
3 2	7 58.24	+24 36.9	1.561	2.367	17.2	21.3	3 2	7 57.44	+19 28.5	2.001	2.799	14.3	21.9
<b>500557</b>	2012 UZ <sub>50</sub>		1 25.6 157°81	0°7/25.0	17		<b>253995</b>	2004 EO <sub>77</sub>		1 25.6 342°70	1°8/26.8	18	
12 23	8 51.33	+20 7.2	2.843	3.658	9.8	22.3	12 23	8 49.65	+11 46.1	2.040	2.853	13.2	20.2
1 2	8 46.02	+20 34.4	2.764	3.663	7.2	22.2	1 2	8 45.35	+12 5.9	1.956	2.849	10.0	20.0
1 12	8 39.19	+21 5.4	2.713	3.668	4.2	22.0	1 12	8 39.06	+12 38.3	1.896	2.845	6.4	19.7
1 22	8 31.37	+21 37.0	2.691	3.673	1.2	21.7	1 22	8 31.42	+13 20.6	1.864	2.842	2.7	19.5
2 1	8 23.25	+22 6.3	2.700	3.677	2.4	21.8	2 1	8 23.29	+14 9.0	1.860	2.839	2.9	19.5
2 11	8 15.59	+22 30.7	2.740	3.680	5.4	22.1	2 11	8 15.70	+14 59.0	1.886	2.836	6.6	19.7
2 21	8 9.06	+22 48.7	2.809	3.684	8.2	22.2	2 21	8 9.52	+15 46.4	1.938	2.833	10.3	20.0
3 2	8 4.16	+22 59.6	2.902	3.687	10.6	22.4	3 2	8 5.44	+16 28.2	2.014	2.831	13.5	20.2
<b>252534</b>	2001 VF <sub>30</sub>		1 25.6 70°34	3°7/23.6	18		<b>496260</b>	2012 PK <sub>16</sub>		1 25.6 142°01	0°7/26.0	18	
12 23	8 57.89	+26 1.4	1.708	2.543	14.3	20.3	12 23	8 53.45	+16 7.5	2.483	3.291	11.2	21.5
1 2	8 51.56	+27 1.8	1.663	2.570	10.5	20.1	1 2	8 47.71	+16 8.2	2.405	3.298	8.4	21.3
1 12	8 42.71	+28 2.4	1.643	2.598	6.5	19.9	1 12	8 40.25	+16 14.9	2.353	3.304	5.1	21.1
1 22	8 32.32	+28 55.8	1.650	2.625	3.7	19.8	1 22	8 31.70	+16 25.4	2.329	3.310	1.7	20.8
2 1	8 21.68	+29 35.5	1.686	2.652	5.3	20.0	2 1	8 22.84	+16 37.4	2.337	3.316	2.3	20.9
2 11	8 12.16	+29 58.5	1.750	2.679	8.9	20.3	2 11	8 14.55	+16 48.4	2.376	3.322	5.7	21.1
2 21	8 4.81	+30 4.9	1.839	2.705	12.3	20.5	2 21	8 7.55	+16 56.9	2.442	3.327	8.9	21.3
3 2	8 0.26	+29 56.9	1.950	2.731	15.2	20.8	3 2	8 2.42	+17 1.7	2.534	3.332	11.6	21.5
<b>218920</b>	2007 TB <sub>240</sub>		1 25.6 54°03	1°4/24.7	18		<b>329566</b>	2002 VR <sub>41</sub>		1 25.6 76°50	1°1/26.1	18	
12 23	8 52.16	+21 21.7	2.139	2.967	12.1	20.3	12 23	8 57.07	+14 33.8	1.685	2.503	15.3	21.4
1 2	8 47.08	+21 55.6	2.068	2.973	8.9	20.1	1 2	8 50.82	+14 52.5	1.633	2.531	11.3	21.2
1 12	8 40.00	+22 33.7	2.022	2.979	5.2	19.9	1 12	8 42.23	+15 22.1	1.606	2.559	6.9	21.0
1 22	8 31.61	+23 11.9	2.004	2.985	1.8	19.7	1 22	8 32.23	+15 58.2	1.605	2.586	2.3	20.7
2 1	8 22.85	+23 45.5	2.016	2.991	3.2	19.8	2 1	8 21.99	+16 36.3	1.634	2.613	3.0	20.9
2 11	8 14.74	+24 11.4	2.057	2.998	6.9	20.1	2 11	8 12.79	+17 11.7	1.691	2.640	7.4	21.2
2 21	8 8.14	+24 27.7	2.125	3.004	10.3	20.3	2 21	8 5.59	+17 41.4	1.774	2.666	11.3	21.5
3 2	8 3.70	+24 34.2	2.216	3.011	13.2	20.5	3 2	8 1.00	+18 3.7	1.881	2.692	14.5	21.7
<b>355815</b>	2008 TZ <sub>45</sub>		1 25.6 30°64	1°5/26.3	16		<b>132417</b>	2002 GH <sub>132</sub>		1 25.6 181°29	0°9/25.1	18	
12 23	8 52.68	+13 32.0	1.070	1.921	19.8	21.0	12 23	8 57.11	+19 49.7	2.020	2.840	13.0	21.2
1 2	8 48.71	+13 55.1	1.021	1.935	14.8	20.7	1 2	8 50.88	+20 19.3	1.941	2.842	9.6	20.9
1 12	8 41.46	+14 36.9	0.990	1.949	9.1	20.4	1 12	8 42.37	+20 54.7	1.886	2.842	5.7	20.7
1 22	8 32.06	+15 31.7	0.983	1.964	3.1	20.1	1 22	8 32.31	+21 31.5	1.860	2.842	1.6	20.4
2 1	8 22.16	+16 31.6	1.000	1.981	3.9	20.2	2 1	8 21.74	+22 4.8	1.865	2.842	3.2	20.5
2 11	8 13.59	+17 28.2	1.042	1.998	9.7	20.6	2 11	8 11.85	+22 31.0	1.899	2.840	7.3	20.8
2 21	8 7.71	+18 15.4	1.106	2.017	14.8	21.0	2 21	8 3.66	+22 48.0	1.960	2.839	11.0	21.0
3 2	8 5.31	+18 50.1	1.189	2.036	19.1	21.3	3 2	7 57.88	+22 55.7	2.044	2.836	14.2	21.2
<b>349097</b>	2007 ET <sub>154</sub>		1 25.6 284°23	0°6/25.8	18		<b>276335</b>	2002 TP <sub>298</sub>		1 25.6 95°91	1°4/24.9	18	
12 23	8 56.23	+16 37.0	1.404	2.240	16.8	21.1	12 23	8 57.93	+21 33.3	1.794	2.621	14.1	21.2
1 2	8 51.19	+16 45.3	1.319	2.227	12.7	20.8	1 2	8 51.52	+21 57.5	1.734	2.639	10.3	21.0
1 12	8 43.02	+17 4.9	1.256	2.213	7.8	20.5	1 12	8 42.70	+22 25.6	1.699	2.656	6.1	20.7
1 22	8 32.55	+17 31.9	1.218	2.200	2.3	20.1	1 22	8 32.37	+22 52.7	1.691	2.673	2.0	20.5
2 1	8 21.14	+18 1.2	1.207	2.187	3.6	20.2	2 1	8 21.73	+23 14.0	1.713	2.689	3.6	20.7
2 11	8 10.49	+18 27.3	1.222	2.173	9.2	20.4	2 11	8 12.07	+23 26.5	1.764	2.706	7.7	20.9
2 21	8 2.10	+18 46.8	1.261	2.160	14.4	20.7	2 21	8 4.39	+23 29.3	1.841	2.722	11.5	21.2
3 2	7 56.99	+18 57.9	1.321	2.147	18.7	20.9	3 2	7 59.37	+23 22.9	1.940	2.737	14.7	21.4
<b>9855</b>	1991 CU		1 25.6 119°31	1°5/26.5	18		<b>384182</b>	2009 BK <sub>75</sub>		1 25.6 327°88	2°1/24.0	18	
12 23	8 53.30	+11 51.3	1.880	2.692	14.2	17.2	12 23	8 51.01	+22 5.4	2.142	2.974	11.9	21.0
1 2	8 48.10	+12 30.6	1.808	2.700	10.7	17.0	1 2	8 46.40	+23 7.0	2.063	2.970	8.8	20.8
1 12	8 40.71	+13 24.0	1.759	2.709	6.7	16.8	1 12	8 39.72	+24 14.1	2.009	2.967	5.3	20.6
1 22	8 31.84	+14 27.4	1.737	2.717	2.5	16.5	1 22	8 31.62	+25 21.2	1.984	2.963	2.3	20.4
2 1	8 22.51	+15 35.6	1.745	2.724	2.9	16.6	2 1	8 22.99	+26 22.6	1.988	2.960	3.9	20.5
2 11	8 13.85	+16 42.5	1.783	2.732	7.0	16.9	2 11	8 14.90	+27 13.3	2.022	2.957	7.4	20.7
2 21	8 6.84	+17 43.4	1.847	2.739	10.9	17.1	2 21	8 8.26	+27 51.0	2.082	2.954	10.8	20.9
3 2	8 2.17	+18 35.1	1.935	2.746	14.2	17.3	3 2	8 3.80	+28 15.0	2.165	2.951	13.7	21.1
<b>462305</b>	2008 GW <sub>69</sub>		1 25.6 214°20	0°8/26.1	16		<b>63485</b>	2001 OO <sub>49</sub>		1 25.6 135°32	2°8/27.7	18	R
12 23	8 53.02	+14 4.6	2.260	3.069	12.2	22.0	12 23	8 50.45	+ 7 32.7	2.567	3.352	11.6	19.9
1 2	8 47.71	+14 37.5	2.170	3.063	9.2	21.8	1 2	8 45.47	+ 7 45.3	2.488	3.360	9.0	19.7
1 12	8 40.43	+15 20.7	2.105	3.056	5.6	21.6	1 12	8 38.93	+ 8 9.9	2.433	3.368	6.1	19.5
1 22	8 31.78	+16 10.9	2.068	3.049	1.8	21.3	1 22	8 31.37	+ 8 45.2	2.407	3.376	3.5	19.4
2 1	8 22.61	+17 4.1	2.062	3.041	2.5	21.4	2 1	8 23.49	+ 9 28.5	2.411	3.383	3.2	19.4
2 11	8 13.90	+17 55.7	2.086	3.032	6.3	21.6	2 11	8 16.08	+10 16.2	2.445	3.390	5.6	19.5
2 21	8 6.53	+18 42.3	2.138	3.024	9.9	21.8	2 21	8 9.81	+11 4.9	2.508	3.397	8.5	19.7
3 2	8 1.18	+19 21.3	2.214	3.014	13.0	22.0	3 2	8 5.23	+11 51.4	2.596	3.403	11.1	19.9
<b>18878</b>	1999 XD <sub>118</sub>		1 25.6 156°56	3°3/23.9	18		<b>255948</b>	2006 TG <sub>22</sub>		1 25.6 145°64	2°2/24.3	18	
12 23	9 0.57	+24 45.8	1.626	2.459	15.1	17.9	12 23	8 56.58	+23 6.1	2.074	2.898	12.6	21.1
1 2													

EPHEMERIDES

1 25.6

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>375822</b>	2009 <i>UN</i> <sub>47</sub>		1 25.6 151°41'	3°2'	27.7	18	<b>397201</b>	2006 <i>BR</i> <sub>223</sub>		1 25.6 59°27'	1°6'	26.4	18
12 23	8 53.34	+ 7 30.2	2.442	3.223	12.2	22.7	12 23	8 55.05	+12 6.9	1.291	2.123	18.2	20.7
1 2	8 47.63	+ 7 25.4	2.362	3.232	9.5	22.5	1 2	8 50.04	+12 44.9	1.237	2.141	13.7	20.5
1 12	8 40.23	+ 7 32.5	2.307	3.240	6.5	22.4	1 12	8 42.11	+13 41.2	1.205	2.159	8.5	20.3
1 22	8 31.72	+ 7 50.5	2.281	3.248	3.9	22.2	1 22	8 32.28	+14 50.2	1.197	2.177	3.1	20.0
2 1	8 22.87	+ 8 17.4	2.285	3.255	3.6	22.2	2 1	8 21.99	+16 4.0	1.216	2.196	3.6	20.1
2 11	8 14.55	+ 8 50.2	2.319	3.261	6.1	22.4	2 11	8 12.86	+17 14.2	1.261	2.214	8.8	20.4
2 21	8 7.50	+ 9 25.6	2.381	3.267	9.0	22.6	2 21	8 6.11	+18 15.0	1.331	2.233	13.5	20.7
3 2	8 2.28	+10 0.5	2.468	3.272	11.7	22.7	3 2	8 2.51	+19 3.1	1.422	2.252	17.4	21.0
<b>325312</b>	2008 <i>HB</i> <sub>67</sub>		1 25.6 11°06'	5°0'	27.7	18	<b>430822</b>	2005 <i>GS</i> <sub>96</sub>		1 25.6 222°40'	0°3'	25.4	17
12 23	8 51.65	+ 7 58.4	1.394	2.215	17.7	19.6	12 23	8 51.70	+18 14.9	2.537	3.353	10.8	22.1
1 2	8 47.45	+ 7 28.0	1.326	2.217	13.9	19.3	1 2	8 46.55	+18 40.6	2.449	3.347	8.0	21.9
1 12	8 40.57	+ 7 15.8	1.279	2.220	9.7	19.1	1 12	8 39.67	+19 12.2	2.386	3.341	4.8	21.7
1 22	8 31.87	+ 7 21.9	1.255	2.225	5.8	18.9	1 22	8 31.60	+19 46.4	2.353	3.335	1.3	21.5
2 1	8 22.61	+ 7 44.1	1.257	2.230	5.5	18.9	2 1	8 23.12	+20 19.9	2.350	3.328	2.4	21.5
2 11	8 14.24	+ 8 17.6	1.285	2.236	9.0	19.1	2 11	8 15.08	+20 49.5	2.378	3.322	5.9	21.8
2 21	8 7.94	+ 8 56.7	1.337	2.242	13.2	19.4	2 21	8 8.26	+21 13.1	2.434	3.315	9.1	21.9
3 2	8 4.51	+ 9 36.1	1.410	2.250	17.0	19.6	3 2	8 3.25	+21 29.6	2.514	3.307	11.8	22.1
<b>296768</b>	2009 <i>UM</i> <sub>80</sub>		1 25.6 49°42'	1°9'	26.6	18	<b>144630</b>	2004 <i>FU</i> <sub>77</sub>		1 25.6 317°10'	6°3'	22.4	18
12 23	8 53.02	+12 56.1	1.834	2.651	14.3	20.9	12 23	8 56.97	+32 6.4	1.578	2.421	14.9	19.3
1 2	8 47.94	+13 0.0	1.760	2.655	10.8	20.7	1 2	8 51.72	+33 7.8	1.505	2.411	11.5	19.1
1 12	8 40.64	+13 15.3	1.709	2.659	6.8	20.5	1 12	8 43.31	+34 6.0	1.454	2.401	8.1	18.9
1 22	8 31.86	+13 39.6	1.685	2.664	2.8	20.3	1 22	8 32.66	+34 51.7	1.429	2.392	6.3	18.8
2 1	8 22.63	+14 9.6	1.690	2.669	3.1	20.3	2 1	8 21.23	+35 16.9	1.431	2.383	7.9	18.8
2 11	8 14.11	+14 40.9	1.723	2.673	7.1	20.5	2 11	8 10.75	+35 17.8	1.458	2.374	11.4	19.0
2 21	8 7.27	+15 10.3	1.783	2.678	11.0	20.8	2 21	8 2.66	+34 55.6	1.509	2.365	15.0	19.2
3 2	8 2.82	+15 35.1	1.865	2.683	14.4	21.0	3 2	7 57.91	+34 14.5	1.579	2.357	18.3	19.4
<b>122889</b>	2000 <i>SU</i> <sub>149</sub>		1 25.6 92°50'	1°0'	26.2	18	<b>492402</b>	2014 <i>JL</i> <sub>65</sub>		1 25.6 179°08'	3°1'	23.8	18
12 23	8 54.75	+14 35.0	2.008	2.821	13.4	20.3	12 23	8 58.72	+24 20.9	1.876	2.704	13.6	22.1
1 2	8 48.91	+14 53.0	1.946	2.841	9.9	20.2	1 2	8 52.36	+25 24.9	1.802	2.706	10.0	21.9
1 12	8 41.06	+15 20.2	1.909	2.861	6.1	20.0	1 12	8 43.41	+26 32.7	1.753	2.707	6.2	21.7
1 22	8 31.94	+15 53.5	1.900	2.880	2.0	19.7	1 22	8 32.66	+27 37.2	1.732	2.708	3.2	21.5
2 1	8 22.54	+16 28.8	1.921	2.900	2.6	19.8	2 1	8 21.27	+28 31.2	1.740	2.708	4.9	21.6
2 11	8 13.92	+17 2.3	1.971	2.919	6.6	20.1	2 11	8 10.64	+29 9.9	1.778	2.707	8.7	21.8
2 21	8 6.93	+17 31.3	2.048	2.937	10.1	20.3	2 21	8 1.92	+29 31.9	1.842	2.705	12.4	22.0
3 2	8 2.17	+17 53.9	2.150	2.955	13.1	20.6	3 2	7 55.95	+29 38.4	1.928	2.703	15.6	22.2
<b>496197</b>	2011 <i>HK</i> <sub>59</sub>		1 25.6 146°65'	0°9'	24.9	18	<b>14794</b>	Konetskiy		1 25.6 76°88'	4°7'	28.6	18
12 23	8 51.92	+19 25.4	2.564	3.381	10.7	21.6	12 23	8 51.13	+ 3 58.2	2.168	2.946	13.7	18.1
1 2	8 46.65	+20 12.6	2.488	3.388	7.8	21.4	1 2	8 46.19	+ 3 46.2	2.095	2.957	10.9	17.9
1 12	8 39.68	+21 5.3	2.439	3.395	4.6	21.2	1 12	8 39.45	+ 3 50.0	2.046	2.969	7.9	17.8
1 22	8 31.58	+21 59.3	2.420	3.401	1.4	21.0	1 22	8 31.54	+ 4 9.2	2.023	2.980	5.3	17.6
2 1	8 23.13	+22 50.5	2.431	3.407	2.7	21.1	2 1	8 23.31	+ 4 41.9	2.029	2.992	4.8	17.6
2 11	8 15.17	+23 35.2	2.474	3.413	6.0	21.3	2 11	8 15.66	+ 5 24.3	2.064	3.003	6.9	17.8
2 21	8 8.44	+24 11.2	2.544	3.419	9.0	21.5	2 21	8 9.38	+ 6 12.1	2.125	3.015	9.8	18.0
3 2	8 3.53	+24 37.5	2.640	3.424	11.6	21.7	3 2	8 5.04	+ 7 0.9	2.211	3.026	12.5	18.2
<b>144792</b>	2004 <i>HD</i> <sub>46</sub>		1 25.6 195°20'	8°0'	1.1	17	<b>26015</b>	2076 <i>P-L</i>		1 25.6 79°15'	4°9'	28.0	18
12 23	8 50.29	-12 44.0	3.197	3.851	12.0	20.7	12 23	8 57.89	+ 6 19.5	1.414	2.218	18.4	18.1
1 2	8 45.18	-13 35.1	3.106	3.848	10.7	20.6	1 2	8 51.77	+ 6 10.2	1.362	2.243	14.4	17.9
1 12	8 38.71	-14 9.0	3.036	3.845	9.4	20.5	1 12	8 42.97	+ 6 21.8	1.332	2.268	9.9	17.7
1 22	8 31.32	-14 23.6	2.991	3.842	8.4	20.4	1 22	8 32.50	+ 6 52.8	1.325	2.293	5.9	17.6
2 1	8 23.58	-14 18.1	2.971	3.838	8.0	20.3	2 1	8 21.73	+ 7 38.7	1.346	2.318	5.4	17.6
2 11	8 16.15	-13 53.6	2.979	3.834	8.4	20.4	2 11	8 12.11	+ 8 33.3	1.394	2.342	8.8	17.9
2 21	8 9.61	-13 13.1	3.012	3.829	9.4	20.4	2 21	8 4.76	+ 9 30.0	1.467	2.365	12.7	18.2
3 2	8 4.45	-12 20.7	3.069	3.825	10.7	20.5	3 2	8 0.36	+10 23.3	1.563	2.389	16.3	18.4
<b>413497</b>	2005 <i>QZ</i> <sub>5</sub>		1 25.6 83°19'	0°7'	25.3	18	<b>172388</b>	2003 <i>AG</i> <sub>45</sub>		1 25.6 295°98'	3°4'	23.1	18
12 23	8 57.02	+20 1.0	1.799	2.626	14.1	21.1	12 23	8 51.99	+26 43.4	2.230	3.063	11.5	19.5
1 2	8 50.83	+20 14.3	1.738	2.642	10.4	20.9	1 2	8 47.18	+27 44.1	2.146	3.052	8.6	19.3
1 12	8 42.29	+20 32.6	1.702	2.659	6.1	20.7	1 12	8 40.24	+28 46.7	2.087	3.041	5.5	19.1
1 22	8 32.28	+20 51.7	1.693	2.675	1.7	20.4	1 22	8 31.81	+29 45.4	2.057	3.030	3.5	18.9
2 1	8 21.97	+21 7.6	1.713	2.691	3.2	20.5	2 1	8 22.80	+30 34.5	2.057	3.019	4.9	19.0
2 11	8 12.61	+21 17.3	1.762	2.707	7.4	20.8	2 11	8 14.30	+31 10.0	2.085	3.008	8.0	19.1
2 21	8 5.18	+21 19.5	1.838	2.723	11.3	21.1	2 21	8 7.26	+31 30.2	2.139	2.997	11.1	19.3
3 2	8 0.33	+21 14.4	1.936	2.739	14.5	21.3	3 2	8 2.44	+31 35.8	2.215	2.986	13.9	19.5
<b>376134</b>	2011 <i>AP</i> <sub>65</sub>		1 25.6 250°01'	0°9'	24.9	17	<b>288605</b>	2004 <i>LE</i> <sub>6</sub>		1 25.6 165°88'	3°4'	23.6	18
12 23	8 52.96	+18 44.2	2.157	2.980	12.2	21.6	12 23	9 0.07	+26 25.1	2.039	2.862	12.8	21.7
1 2	8 47.86	+19 32.6	2.065	2.967	9.1	21.3	1 2	8 53.15	+27 23.2	1.968	2.869	9.5	21.5
1 12	8 40.64	+20 29.1	1.998	2.954	5.4	21.1	1 12	8 43.77	+28 22.2	1.923	2.875	6.0	21.3
1 22	8 31.89	+21 29.3	1.959	2.941	1.5	20.8	1 22	8 32.75	+29 15.4	1.907	2.880	3.5	21.1
2 1	8 22.52	+22 27.7	1.950	2.927	3.1	20.9	2 1	8 21.20	+29 56.7	1.921	2.884	5.0	21.2
2 11	8 13.60	+23 19.4	1.972	2.913	7.1	21.1	2 11	8 10.44	+30 22.5	1.964	2.887	8.4	21.4
2 21	8 6.10	+24 1.3	2.020	2.899	10.7	21.3	2 21	8 1.54	+30 32.2	2.034	2.890	11.7	21.7
3 2	8 0.78	+24 31.9	2.093	2.885	13.9	21.5	3 2	7 55.26	+30 27.6	2.127	2.891	14.6	21.9
<b>264674</b>	2001 <i>XB</i> <sub>224</sub>		1 25.6 100°00'	1°6'	26.4	18	<b>511702</b>	2015 <i>CG</i> <sub>24</sub>		1 25.6 7°54'	2°6'	27.5	17
12 23	8 54.65	+13 53.5	1.878	2.693	14.1	20.6	12 23	8 49.37</					

EPHEMERIDES

1 25.6

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>293622</b>	2007 <i>MB</i>		1 25.6 234°98	1°2/25.1	18		<b>376603</b>	2013 <i>PU</i> <sub>33</sub>		1 25.6 166°68	0°4/25.8	18	
12 23	8 59.22	+21 20.9	1.669	2.498	14.9	20.8	12 23	8 54.43	+16 49.8	2.342	3.153	11.8	21.7
1 2	8 52.98	+21 33.2	1.585	2.490	11.1	20.6	1 2	8 48.60	+17 2.3	2.262	3.157	8.7	21.5
1 12	8 43.90	+21 50.1	1.525	2.482	6.7	20.3	1 12	8 40.90	+17 21.3	2.207	3.160	5.3	21.3
1 22	8 32.82	+22 6.8	1.491	2.473	2.0	20.0	1 22	8 31.97	+17 43.8	2.182	3.163	1.5	21.0
2 1	8 21.03	+22 18.5	1.486	2.464	3.7	20.1	2 1	8 22.66	+18 6.8	2.187	3.166	2.4	21.1
2 11	8 10.04	+22 21.8	1.510	2.454	8.6	20.3	2 11	8 13.93	+18 27.3	2.222	3.168	6.1	21.3
2 21	8 1.14	+22 15.5	1.559	2.444	13.0	20.6	2 21	8 6.59	+18 43.4	2.286	3.170	9.5	21.5
3 2	7 55.21	+22 0.5	1.630	2.434	16.8	20.8	3 2	8 1.24	+18 54.0	2.374	3.171	12.3	21.7
<b>8844</b>	1990 <i>QR</i> <sub>2</sub>		1 25.6 184°72	1°1/24.9	18		<b>209378</b>	2004 <i>EC</i> <sub>30</sub>		1 25.6 177°45	0°2/25.8	17	
12 23	8 54.98	+21 15.0	2.115	2.939	12.4	17.7	12 23	8 51.01	+16 35.9	2.796	3.605	10.1	21.2
1 2	8 49.24	+21 36.0	2.036	2.939	9.1	17.5	1 2	8 45.87	+16 58.5	2.712	3.606	7.5	21.0
1 12	8 41.38	+22 0.9	1.982	2.939	5.4	17.3	1 12	8 39.19	+17 27.1	2.654	3.607	4.5	20.8
1 22	8 32.09	+22 25.8	1.957	2.939	1.7	17.0	1 22	8 31.50	+17 59.1	2.626	3.608	1.3	20.6
2 1	8 22.36	+22 46.6	1.962	2.938	3.1	17.1	2 1	8 23.49	+18 31.6	2.629	3.608	2.1	20.6
2 11	8 13.29	+23 0.5	1.996	2.937	7.0	17.4	2 11	8 15.90	+19 1.7	2.663	3.608	5.3	20.8
2 21	8 5.80	+23 6.0	2.057	2.936	10.5	17.6	2 21	8 9.40	+19 27.5	2.726	3.608	8.2	21.0
3 2	8 0.59	+23 3.1	2.141	2.935	13.6	17.8	3 2	8 4.53	+19 47.6	2.813	3.607	10.7	21.2
<b>199217</b>	2006 <i>AO</i> <sub>30</sub>		1 25.6 330°65	2°3/24.6	18		<b>149696</b>	2004 <i>HP</i> <sub>25</sub>		1 25.6 198°66	2°6/23.6	18	
12 23	8 54.87	+21 38.3	1.287	2.138	17.1	20.0	12 23	8 52.27	+26 28.7	2.736	3.559	9.9	20.5
1 2	8 50.42	+22 16.8	1.214	2.130	12.7	19.7	1 2	8 46.94	+27 11.3	2.655	3.557	7.3	20.3
1 12	8 42.67	+23 3.6	1.162	2.123	7.6	19.4	1 12	8 39.89	+27 54.4	2.602	3.555	4.6	20.1
1 22	8 32.54	+23 51.3	1.135	2.116	2.8	19.1	1 22	8 31.70	+28 33.8	2.578	3.552	2.6	20.0
2 1	8 21.53	+24 31.9	1.133	2.110	4.9	19.2	2 1	8 23.13	+29 5.6	2.585	3.549	3.8	20.1
2 11	8 11.50	+24 59.1	1.158	2.104	10.3	19.5	2 11	8 15.04	+29 27.2	2.622	3.546	6.5	20.2
2 21	8 3.97	+25 10.7	1.205	2.099	15.3	19.8	2 21	8 8.17	+29 37.7	2.686	3.543	9.2	20.4
3 2	7 59.95	+25 7.3	1.271	2.094	19.5	20.0	3 2	8 3.10	+29 37.4	2.774	3.540	11.5	20.6
<b>408835</b>	2001 <i>RA</i> <sub>52</sub>		1 25.6 66°29	1°2/26.1	18		<b>29384</b>	1996 <i>HO</i> <sub>23</sub>		1 25.6 350°14	4°0/27.4	18	
12 23	8 59.17	+16 46.6	1.640	2.462	15.5	20.3	12 23	8 53.59	+ 9 7.1	1.360	2.183	18.0	18.0
1 2	8 52.44	+16 25.3	1.584	2.484	11.5	20.1	1 2	8 49.10	+ 9 0.1	1.286	2.181	14.0	17.7
1 12	8 43.24	+16 11.3	1.552	2.505	7.0	19.9	1 12	8 41.71	+ 9 12.1	1.233	2.179	9.4	17.5
1 22	8 32.56	+16 2.2	1.546	2.527	2.3	19.6	1 22	8 32.27	+ 9 42.0	1.204	2.178	5.0	17.2
2 1	8 21.66	+15 55.6	1.570	2.549	3.1	19.7	2 1	8 22.12	+10 25.8	1.201	2.177	4.8	17.2
2 11	8 11.88	+15 49.1	1.622	2.571	7.6	20.0	2 11	8 12.81	+11 17.3	1.223	2.176	9.1	17.4
2 21	8 4.23	+15 41.4	1.700	2.593	11.6	20.3	2 21	8 5.68	+12 10.1	1.270	2.175	13.7	17.7
3 2	7 59.34	+15 31.6	1.801	2.614	15.0	20.6	3 2	8 1.63	+12 58.6	1.338	2.175	17.9	17.9
<b>511786</b>	2015 <i>EN</i> <sub>34</sub>		1 25.6 289°87	1°2/26.4	17		<b>286543</b>	2002 <i>CC</i> <sub>144</sub>		1 25.6 334°66	1°8/26.3	18	
12 23	8 50.63	+13 35.5	2.217	3.030	12.3	21.7	12 23	8 53.86	+14 24.7	1.320	2.158	17.5	20.2
1 2	8 46.03	+13 52.8	2.123	3.017	9.3	21.5	1 2	8 49.47	+14 20.7	1.243	2.150	13.3	19.9
1 12	8 39.49	+14 20.3	2.053	3.004	5.8	21.2	1 12	8 42.02	+14 30.2	1.187	2.143	8.4	19.6
1 22	8 31.61	+14 55.5	2.012	2.991	2.2	20.9	1 22	8 32.38	+14 50.5	1.156	2.136	3.1	19.3
2 1	8 23.19	+15 35.0	2.000	2.979	2.6	21.0	2 1	8 21.94	+15 17.2	1.151	2.130	3.8	19.3
2 11	8 15.22	+16 14.9	2.017	2.966	6.3	21.2	2 11	8 12.36	+15 45.0	1.171	2.125	9.2	19.6
2 21	8 8.54	+16 51.9	2.062	2.953	9.9	21.4	2 21	8 5.08	+16 9.6	1.215	2.120	14.2	19.9
3 2	8 3.87	+17 23.4	2.130	2.941	13.1	21.5	3 2	8 1.04	+16 28.0	1.278	2.116	18.5	20.1
<b>408291</b>	2013 <i>GF</i> <sub>13</sub>		1 25.6 244°25	8°2/30.1	18		<b>493728</b>	2015 <i>TN</i> <sub>170</sub>		1 25.6 80°49	0°7/25.3	18	
12 23	8 53.53	- 3 30.0	1.926	2.670	16.3	21.8	12 23	8 57.28	+17 39.2	1.426	2.261	16.6	21.2
1 2	8 48.45	- 4 3.1	1.828	2.657	13.8	21.6	1 2	8 51.57	+18 25.8	1.370	2.278	12.3	21.0
1 12	8 41.09	- 4 13.9	1.752	2.643	11.1	21.4	1 12	8 43.00	+19 23.1	1.338	2.296	7.2	20.8
1 22	8 32.08	- 3 59.8	1.700	2.628	8.9	21.3	1 22	8 32.58	+20 24.4	1.331	2.313	1.9	20.5
2 1	8 22.34	- 3 20.5	1.674	2.613	8.2	21.2	2 1	8 21.72	+21 22.1	1.352	2.331	3.7	20.6
2 11	8 13.03	- 2 19.5	1.676	2.597	9.7	21.2	2 11	8 11.98	+22 10.0	1.401	2.348	8.8	21.0
2 21	8 5.19	- 1 2.9	1.703	2.581	12.4	21.4	2 21	8 4.57	+22 45.1	1.474	2.365	13.2	21.3
3 2	7 59.65	+ 0 21.9	1.753	2.564	15.4	21.5	3 2	8 0.26	+23 6.7	1.568	2.382	16.9	21.6
<b>454786</b>	2015 <i>AJ</i> <sub>1</sub>		1 25.6 88°68	1°8/26.7	18		<b>128751</b>	2004 <i>RL</i> <sub>182</sub>		1 25.6 116°62	1°8/26.7	18	
12 23	8 52.86	+11 37.5	1.846	2.659	14.4	21.1	12 23	8 54.02	+12 12.5	2.217	3.019	12.6	20.7
1 2	8 47.82	+12 3.4	1.775	2.668	10.9	20.9	1 2	8 48.28	+12 19.5	2.147	3.034	9.5	20.5
1 12	8 40.58	+12 43.0	1.727	2.676	6.9	20.6	1 12	8 40.69	+12 36.5	2.102	3.048	6.1	20.3
1 22	8 31.89	+13 33.1	1.706	2.685	2.8	20.4	1 22	8 31.92	+13 1.2	2.085	3.062	2.6	20.1
2 1	8 22.76	+14 28.8	1.714	2.693	3.0	20.4	2 1	8 22.84	+13 30.7	2.098	3.076	2.8	20.1
2 11	8 14.33	+15 24.9	1.751	2.701	7.0	20.7	2 11	8 14.41	+14 1.6	2.141	3.089	6.1	20.4
2 21	8 7.56	+16 16.8	1.815	2.710	10.9	20.9	2 21	8 7.42	+14 30.9	2.212	3.101	9.5	20.6
3 2	8 3.13	+17 1.4	1.902	2.718	14.2	21.2	3 2	8 2.46	+14 56.4	2.308	3.113	12.4	20.8
<b>502518</b>	2015 <i>BC</i> <sub>432</sub>		1 25.6 275°65	5°9/22.7	17		<b>383894</b>	2008 <i>ST</i> <sub>30</sub>		1 25.6 172°56	7°1/30.7	16	
12 23	9 1.70	+37 21.8	2.292	3.105	11.9	21.7	12 23	8 51.17	- 4 53.2	2.436	3.160	13.8	21.7
1 2	8 54.32	+37 44.8	2.208	3.093	9.4	21.5	1 2	8 46.15	- 5 21.4	2.351	3.162	11.7	21.6
1 12	8 44.45	+37 58.7	2.149	3.080	7.1	21.3	1 12	8 39.44	- 5 30.5	2.287	3.164	9.5	21.4
1 22	8 32.93	+37 57.6	2.118	3.067	5.9	21.2	1 22	8 31.60	- 5 19.1	2.249	3.165	7.7	21.3
2 1	8 20.96	+37 37.3	2.116	3.054	6.8	21.3	2 1	8 23.36	- 4 47.7	2.238	3.166	7.1	21.3
2 11	8 9.86	+36 57.1	2.143	3.041	9.2	21.4	2 11	8 15.56	- 3 59.2	2.255	3.167	8.1	21.3
2 21	8 0.71	+35 59.4	2.196	3.028	11.9	21.5	2 21	8 8.95	- 2 58.0	2.300	3.167	10.1	21.5
3 2	7 54.25	+34 48.6	2.272	3.015	14.4	21.7	3 2	8 4.11	- 1 49.7	2.368	3.167	12.3	21.6
<b>54057</b>	2000 <i>GF</i> <sub>134</sub>		1 25.6 284°72	4°0/27.7	18		<b>400003</b>	2006 <i>HG</i> <sub>32</sub>		1 25.6 171°79	2°8/23.9	18	
12 23	8 52.96	+ 7 12.3	1.466	2.278	17.4	18.5	12 2						



EPHEMERIDES

1 25.6

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>10918</b>	Kodaly		1 25.6 354°97	0°3/25.4	18		<b>283912</b>	2004 FW <sub>111</sub>		1 25.6 328°61	0°4/25.8	18	
12 23	8 50.45	+17 50.5	1.835	2.668	13.6	18.1	12 23	8 53.20	+18 25.1	1.919	2.746	13.3	19.7
1 2	8 46.20	+18 19.3	1.758	2.665	10.1	17.9	1 2	8 48.19	+18 14.5	1.830	2.733	10.0	19.4
1 12	8 39.71	+18 56.6	1.705	2.662	6.0	17.7	1 12	8 40.91	+18 9.0	1.765	2.721	6.0	19.2
1 22	8 31.70	+19 38.3	1.678	2.660	1.6	17.4	1 22	8 32.06	+18 6.4	1.727	2.709	1.7	18.9
2 1	8 23.18	+20 19.7	1.680	2.659	3.0	17.5	2 1	8 22.65	+18 4.0	1.718	2.698	2.8	18.9
2 11	8 15.31	+20 56.0	1.710	2.658	7.3	17.7	2 11	8 13.86	+17 59.4	1.738	2.687	7.2	19.2
2 21	8 9.08	+21 24.2	1.766	2.658	11.3	18.0	2 21	8 6.71	+17 51.4	1.784	2.677	11.2	19.4
3 2	8 5.23	+21 42.9	1.844	2.658	14.7	18.2	3 2	8 1.94	+17 39.2	1.853	2.667	14.6	19.6
<b>491839</b>	2013 AB <sub>46</sub>		1 25.6 11°27	1°8/24.8	18		<b>210191</b>	2007 OT <sub>6</sub>		1 25.6 74°83	9°2/18.5	18	
12 23	8 53.61	+19 28.2	1.231	2.084	17.6	21.0	12 23	9 4.64	+47 56.5	2.410	3.197	12.2	19.7
1 2	8 49.46	+20 21.5	1.167	2.085	13.0	20.7	1 2	8 56.69	+49 43.0	2.392	3.233	10.5	19.6
1 12	8 42.06	+21 26.6	1.125	2.086	7.7	20.4	1 12	8 45.93	+51 12.6	2.400	3.270	9.4	19.6
1 22	8 32.40	+22 35.4	1.107	2.089	2.4	20.1	1 22	8 33.37	+52 17.5	2.434	3.306	9.2	19.6
2 1	8 21.99	+23 38.8	1.115	2.092	4.7	20.2	2 1	8 20.45	+52 53.0	2.494	3.341	10.0	19.8
2 11	8 12.65	+24 28.9	1.148	2.096	10.1	20.6	2 11	8 8.71	+52 59.2	2.580	3.376	11.3	19.9
2 21	8 5.84	+25 2.2	1.204	2.100	15.1	20.8	2 21	7 59.34	+52 40.1	2.687	3.410	12.8	20.1
3 2	8 2.49	+25 18.3	1.279	2.106	19.2	21.1	3 2	7 53.06	+52 1.3	2.813	3.444	14.1	20.2
<b>209055</b>	2003 QE <sub>34</sub>		1 25.6 158°86	1°2/24.9	18		<b>92731</b>	2000 QM <sub>100</sub>		1 25.6 319°59	5°3/23.2	18	
12 23	8 59.24	+21 25.4	2.064	2.882	12.9	21.5	12 23	8 58.27	+29 1.5	1.436	2.282	15.9	18.4
1 2	8 52.37	+21 46.6	1.990	2.890	9.5	21.3	1 2	8 52.81	+29 56.8	1.367	2.278	12.1	18.2
1 12	8 43.24	+22 11.2	1.942	2.897	5.6	21.1	1 12	8 44.04	+30 51.6	1.320	2.274	8.0	17.9
1 22	8 32.63	+22 35.0	1.922	2.904	1.8	20.9	1 22	8 32.95	+31 36.4	1.299	2.269	5.4	17.8
2 1	8 21.62	+22 53.9	1.933	2.909	3.2	21.0	2 1	8 21.10	+32 3.1	1.304	2.266	7.1	17.9
2 11	8 11.38	+23 4.9	1.974	2.914	7.2	21.2	2 11	8 10.32	+32 7.5	1.335	2.262	11.1	18.1
2 21	8 2.90	+23 7.2	2.043	2.918	10.8	21.5	2 21	8 2.10	+31 50.5	1.389	2.259	15.3	18.3
3 2	7 56.86	+23 1.0	2.135	2.922	13.9	21.7	3 2	7 57.38	+31 15.9	1.462	2.255	18.8	18.6
<b>284712</b>	2008 TE <sub>124</sub>		1 25.6 187°64	1°0/25.1	18		<b>323583</b>	2004 TJ <sub>213</sub>		1 25.6 160°73	0°6/26.0	18	
12 23	8 59.64	+20 21.8	1.807	2.629	14.2	21.9	12 23	8 53.51	+15 25.8	2.573	3.378	11.0	22.3
1 2	8 53.04	+20 45.3	1.727	2.629	10.6	21.7	1 2	8 47.79	+15 46.6	2.493	3.385	8.2	22.1
1 12	8 43.83	+21 14.4	1.672	2.628	6.3	21.4	1 12	8 40.38	+16 14.4	2.440	3.391	5.0	21.9
1 22	8 32.83	+21 44.3	1.645	2.626	1.8	21.1	1 22	8 31.87	+16 46.7	2.415	3.396	1.6	21.7
2 1	8 21.23	+22 10.0	1.647	2.624	3.5	21.2	2 1	8 23.02	+17 20.1	2.422	3.401	2.2	21.7
2 11	8 10.43	+22 27.5	1.679	2.621	8.0	21.5	2 11	8 14.68	+17 51.7	2.460	3.406	5.6	22.0
2 21	8 1.57	+22 35.4	1.737	2.617	12.1	21.7	2 21	8 7.57	+18 19.1	2.527	3.409	8.7	22.2
3 2	7 55.48	+22 33.9	1.818	2.613	15.6	21.9	3 2	8 2.26	+18 41.0	2.619	3.413	11.4	22.4
<b>417540</b>	2006 TE <sub>126</sub>		1 25.6 50°14	5°9/23.1	18		<b>41757</b>	2000 VM <sub>33</sub>		1 25.6 66°77	1°2/26.2	18	
12 23	8 59.41	+31 24.2	1.464	2.308	15.8	20.9	12 23	8 56.78	+14 43.2	1.423	2.253	17.0	19.0
1 2	8 53.26	+32 16.5	1.417	2.324	12.0	20.7	1 2	8 51.11	+14 58.4	1.369	2.272	12.6	18.8
1 12	8 44.02	+33 3.6	1.392	2.342	8.2	20.5	1 12	8 42.69	+15 26.4	1.336	2.291	7.7	18.6
1 22	8 32.85	+33 36.5	1.393	2.359	5.9	20.5	1 22	8 32.51	+16 2.6	1.329	2.310	2.5	18.3
2 1	8 21.35	+33 48.8	1.421	2.377	7.4	20.6	2 1	8 21.98	+16 41.5	1.349	2.329	3.3	18.4
2 11	8 11.24	+33 38.8	1.475	2.396	10.8	20.8	2 11	8 12.56	+17 17.8	1.397	2.348	8.3	18.8
2 21	8 3.76	+33 9.0	1.552	2.414	14.4	21.1	2 21	8 5.43	+17 47.7	1.469	2.367	12.7	19.1
3 2	7 59.62	+32 24.0	1.649	2.433	17.4	21.3	3 2	8 1.29	+18 9.4	1.563	2.386	16.4	19.3
<b>230814</b>	2004 JK <sub>14</sub>		1 25.6 281°18	1°2/26.2	18		<b>489648</b>	2007 US <sub>13</sub>		1 25.6 209°93	4°4/23.3	18	
12 23	8 54.43	+13 31.8	1.404	2.236	17.0	20.6	12 23	8 59.11	+28 5.1	1.776	2.608	14.0	22.0
1 2	8 49.87	+14 4.0	1.321	2.225	12.9	20.3	1 2	8 52.91	+29 1.6	1.700	2.604	10.5	21.8
1 12	8 42.30	+14 53.5	1.259	2.214	8.0	20.0	1 12	8 43.89	+29 58.3	1.648	2.600	6.8	21.6
1 22	8 32.50	+15 55.9	1.223	2.204	2.7	19.6	1 22	8 32.89	+30 47.6	1.624	2.595	4.4	21.4
2 1	8 21.76	+17 4.5	1.213	2.193	3.6	19.7	2 1	8 21.21	+31 22.3	1.628	2.590	6.0	21.5
2 11	8 11.72	+18 11.3	1.230	2.182	9.1	20.0	2 11	8 10.35	+31 38.5	1.660	2.584	9.6	21.7
2 21	8 3.83	+19 10.0	1.271	2.171	14.2	20.2	2 21	8 1.59	+31 36.2	1.718	2.578	13.3	21.9
3 2	7 59.12	+19 56.9	1.333	2.161	18.5	20.4	3 2	7 55.81	+31 17.7	1.796	2.571	16.5	22.1
<b>114090</b>	2002 VM <sub>38</sub>		1 25.6 96°53	3°6/24.2	17		<b>56175</b>	1999 FY <sub>24</sub>		1 25.6 232°86	6°4/21.7	18	
12 23	9 2.38	+25 31.7	1.431	2.269	16.5	20.6	12 23	8 59.59	+35 54.3	2.103	2.925	12.5	19.2
1 2	8 55.39	+26 14.2	1.379	2.288	12.2	20.4	1 2	8 53.08	+36 54.8	2.027	2.917	9.8	19.0
1 12	8 45.28	+26 57.8	1.350	2.306	7.5	20.2	1 12	8 43.91	+37 49.0	1.975	2.908	7.4	18.8
1 22	8 33.20	+27 34.2	1.347	2.324	3.8	20.0	1 22	8 32.89	+38 29.3	1.951	2.899	6.4	18.8
2 1	8 20.75	+27 56.7	1.372	2.342	5.5	20.2	2 1	8 21.24	+38 49.5	1.955	2.889	7.6	18.8
2 11	8 9.68	+28 2.2	1.424	2.359	9.8	20.5	2 11	8 10.37	+38 47.2	1.987	2.879	10.1	18.9
2 21	8 1.27	+27 51.6	1.500	2.376	14.0	20.8	2 21	8 1.48	+38 23.8	2.043	2.869	12.9	19.1
3 2	7 56.25	+27 27.9	1.597	2.392	17.4	21.0	3 2	7 55.41	+37 43.0	2.121	2.858	15.5	19.3
<b>410030</b>	2006 XX <sub>30</sub>		1 25.6 79°26	1°0/26.1	18		<b>363092</b>	2000 SB <sub>110</sub>		1 25.6 88°38	4°3/28.5	18	
12 23	8 55.45	+15 4.4	1.724	2.546	14.8	21.4	12 23	8 54.70	+ 4 22.3	2.123	2.897	14.1	21.6
1 2	8 49.79	+15 17.1	1.662	2.561	11.1	21.2	1 2	8 48.71	+ 4 24.0	2.065	2.927	11.1	21.5
1 12	8 41.77	+15 40.0	1.623	2.576	6.7	21.0	1 12	8 40.91	+ 4 41.9	2.032	2.957	7.8	21.3
1 22	8 32.25	+16 9.5	1.610	2.591	2.2	20.8	1 22	8 32.00	+ 5 14.6	2.026	2.986	5.0	21.2
2 1	8 22.37	+16 41.5	1.627	2.606	3.0	20.8	2 1	8 22.89	+ 5 59.1	2.049	3.015	4.5	21.2
2 11	8 13.37	+17 11.5	1.672	2.621	7.4	21.1	2 11	8 14.53	+ 6 50.9	2.102	3.043	6.7	21.4
2 21	8 6.26	+17 36.6	1.743	2.636	11.4	21.4	2 21	8 7.68	+ 7 45.5	2.183	3.070	9.6	21.7
3 2	8 1.72	+17 55.0	1.837	2.651	14.7	21.7	3 2	8 2.88	+ 8 38.7	2.288	3.097	12.3	21.9
<b>198659</b>	2005 BH <sub>18</sub>		1 25.6 210°02	2°8/24.1	18		<b>430276</b>	2013 WD <sub>54</sub>		1 25.6 0°93	5°9/22.8	18	
12 23	8 56.01	+26 43.7	2.234	3.060	11.7	20.3	12 23	8 54.66	+32 46.7	1.690	2.533	14.1	20.6

EPHEMERIDES

1 25.6

1 25.6

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>459443</b>	2012 <i>UR</i> <sub>85</sub>		1 25.6 161°98	4°2/29.3	17		<b>208712</b>	2002 <i>JR</i> <sub>77</sub>		1 25.6 261°74	4°8/23.2	18	
12 23	8 50.14	+ 0 51.0	3.313	4.054	10.1	22.7	12 23	8 58.15	+28 19.8	1.614	2.453	14.8	20.3
1 2	8 44.96	+ 0 38.1	3.227	4.061	8.3	22.6	1 2	8 52.49	+29 17.0	1.538	2.446	11.2	20.1
1 12	8 38.57	+ 0 37.1	3.165	4.067	6.3	22.4	1 12	8 43.79	+30 14.6	1.486	2.439	7.3	19.8
1 22	8 31.38	+ 0 47.9	3.132	4.073	4.7	22.3	1 22	8 32.94	+31 4.2	1.460	2.431	4.8	19.7
2 1	8 23.94	+ 1 9.7	3.129	4.078	4.3	22.3	2 1	8 21.31	+31 38.2	1.462	2.424	6.5	19.7
2 11	8 16.84	+ 1 40.3	3.157	4.083	5.5	22.4	2 11	8 10.56	+31 52.0	1.491	2.416	10.3	19.9
2 21	8 10.62	+ 2 17.1	3.213	4.087	7.3	22.5	2 21	8 2.08	+31 45.8	1.544	2.409	14.3	20.2
3 2	8 5.69	+ 2 57.2	3.296	4.090	9.3	22.7	3 2	7 56.80	+31 22.3	1.617	2.401	17.7	20.4
<b>363098</b>	2000 <i>SO</i> <sub>317</sub>		1 25.6 207°37	2°8/27.2	17		<b>291095</b>	2005 <i>YZ</i> <sub>134</sub>		1 25.6 173°79	0°6/25.4	18	
12 23	8 55.10	+ 9 47.4	2.524	3.309	11.8	21.4	12 23	9 0.01	+19 50.1	1.754	2.576	14.6	21.1
1 2	8 49.03	+ 9 31.7	2.429	3.303	9.1	21.2	1 2	8 53.33	+20 0.7	1.678	2.579	10.8	20.9
1 12	8 41.19	+ 9 25.4	2.358	3.295	6.1	21.0	1 12	8 44.03	+20 16.8	1.625	2.581	6.5	20.6
1 22	8 32.12	+ 9 27.7	2.317	3.288	3.4	20.8	1 22	8 32.96	+20 34.0	1.601	2.583	1.8	20.3
2 1	8 22.62	+ 9 37.3	2.307	3.279	3.3	20.8	2 1	8 21.34	+20 48.1	1.606	2.584	3.3	20.4
2 11	8 13.55	+ 9 51.8	2.327	3.270	6.1	21.0	2 11	8 10.59	+20 55.7	1.639	2.584	7.9	20.7
2 21	8 5.70	+10 8.9	2.377	3.260	9.1	21.2	2 21	8 1.86	+20 55.7	1.700	2.584	12.1	20.9
3 2	7 59.70	+10 26.3	2.451	3.250	11.9	21.3	3 2	7 55.95	+20 48.0	1.783	2.583	15.6	21.2
<b>91298</b>	1999 <i>FQ</i> <sub>31</sub>		1 25.6 276°59	6°5/21.8	18		<b>472428</b>	2015 <i>BU</i> <sub>278</sub>		1 25.6 236°29	1°4/26.7	18	
12 23	8 59.17	+34 47.0	1.948	2.775	13.1	20.1	12 23	8 50.56	+12 3.0	2.307	3.113	12.1	21.1
1 2	8 53.11	+35 49.2	1.859	2.754	10.3	19.9	1 2	8 45.88	+12 31.6	2.221	3.111	9.1	20.9
1 12	8 44.13	+36 46.8	1.794	2.732	7.7	19.7	1 12	8 39.40	+13 11.5	2.160	3.108	5.8	20.7
1 22	8 33.01	+37 31.4	1.757	2.710	6.5	19.6	1 22	8 31.68	+14 0.0	2.127	3.105	2.3	20.5
2 1	8 21.01	+37 55.8	1.747	2.687	7.8	19.6	2 1	8 23.53	+14 53.3	2.124	3.103	2.5	20.5
2 11	8 9.70	+37 56.4	1.765	2.664	10.8	19.7	2 11	8 15.83	+15 47.2	2.151	3.100	6.0	20.7
2 21	8 0.42	+37 33.9	1.807	2.641	14.0	19.9	2 21	8 9.40	+16 37.8	2.206	3.097	9.4	20.9
3 2	7 54.16	+36 52.5	1.869	2.618	16.9	20.0	3 2	8 4.85	+17 22.3	2.285	3.094	12.4	21.1
<b>15728</b>	Karlmay		1 25.6 220°83	0°8/25.9	18		<b>204248</b>	2004 <i>EG</i> <sub>1</sub>		1 25.6 207°70	16°8/15.5	16	
12 23	8 57.10	+15 57.7	1.649	2.472	15.3	18.8	12 23	9 13.72	+51 6.5	1.258	2.067	20.0	19.9
1 2	8 51.38	+16 7.5	1.567	2.468	11.5	18.5	1 2	9 6.89	+53 50.6	1.216	2.065	18.0	19.7
1 12	8 42.97	+16 27.5	1.509	2.463	7.0	18.3	1 12	8 53.83	+56 10.2	1.194	2.062	16.9	19.7
1 22	8 32.67	+16 54.1	1.476	2.458	2.2	18.0	1 22	8 35.89	+57 45.0	1.193	2.059	17.1	19.7
2 1	8 21.68	+17 22.9	1.473	2.452	3.2	18.0	2 1	8 16.19	+58 20.8	1.212	2.056	18.5	19.7
2 11	8 11.44	+17 49.4	1.497	2.447	8.1	18.3	2 11	7 58.83	+57 57.1	1.250	2.052	20.7	19.9
2 21	8 3.17	+18 10.5	1.548	2.440	12.6	18.5	2 21	7 46.77	+56 45.0	1.303	2.048	23.0	20.0
3 2	7 57.73	+18 24.4	1.620	2.434	16.4	18.8	3 2	7 41.20	+54 59.4	1.369	2.043	25.1	20.2
<b>51826</b>	Kalpanachawla		1 25.6 48°97	4°6/23.0	18		<b>178283</b>	4261 <i>T</i> <sub>-3</sub>		1 25.6 91°83	1°9/26.8	18	
12 23	8 55.65	+31 8.1	2.064	2.896	12.3	18.7	12 23	8 55.21	+11 24.1	1.821	2.630	14.7	20.5
1 2	8 49.89	+31 51.6	2.001	2.902	9.3	18.5	1 2	8 49.48	+11 49.5	1.760	2.651	11.1	20.3
1 12	8 41.84	+32 31.4	1.962	2.909	6.3	18.4	1 12	8 41.57	+12 28.5	1.723	2.671	7.0	20.1
1 22	8 32.31	+33 1.6	1.951	2.916	4.6	18.3	1 22	8 32.26	+13 17.4	1.714	2.692	2.9	19.9
2 1	8 22.41	+33 17.3	1.969	2.923	5.8	18.4	2 1	8 22.62	+14 11.5	1.733	2.712	3.1	20.0
2 11	8 13.34	+33 16.4	2.014	2.931	8.6	18.5	2 11	8 13.81	+15 5.4	1.782	2.731	7.0	20.3
2 21	8 6.09	+32 59.7	2.085	2.938	11.6	18.7	2 21	8 6.77	+15 54.9	1.858	2.751	10.8	20.5
3 2	8 1.34	+32 29.7	2.179	2.946	14.2	18.9	3 2	8 2.13	+16 37.0	1.957	2.769	14.0	20.8
<b>51249</b>	2000 <i>JA</i> <sub>47</sub>		1 25.6 19°66	4°5/28.1	18		<b>408857</b>	2001 <i>SB</i> <sub>221</sub>		1 25.6 96°31	2°8/27.3	18	
12 23	8 51.40	+ 6 11.6	2.018	2.809	14.1	18.4	12 23	8 54.00	+ 9 31.5	1.882	2.685	14.5	21.4
1 2	8 46.62	+ 5 48.7	1.939	2.811	11.2	18.2	1 2	8 48.58	+ 9 43.3	1.815	2.699	11.1	21.2
1 12	8 39.86	+ 5 40.4	1.883	2.813	7.9	18.0	1 12	8 41.04	+10 9.5	1.771	2.714	7.3	21.0
1 22	8 31.79	+ 5 46.6	1.854	2.816	5.1	17.8	1 22	8 32.13	+10 47.7	1.754	2.728	3.6	20.8
2 1	8 23.29	+ 6 5.7	1.852	2.819	4.7	17.8	2 1	8 22.84	+11 34.1	1.766	2.742	3.5	20.9
2 11	8 15.38	+ 6 34.5	1.879	2.822	7.2	18.0	2 11	8 14.29	+12 23.8	1.807	2.756	7.0	21.1
2 21	8 8.93	+ 7 9.1	1.933	2.826	10.4	18.2	2 21	8 7.39	+13 12.3	1.875	2.769	10.6	21.3
3 2	8 4.57	+ 7 45.3	2.010	2.829	13.4	18.4	3 2	8 2.80	+13 56.1	1.966	2.782	13.8	21.6
<b>460170</b>	2014 <i>QX</i> <sub>29</sub>		1 25.6 169°42	2°6/27.3	18		<b>445589</b>	2011 <i>SJ</i> <sub>31</sub>		1 25.6 52°84	0°1/25.7	18	
12 23	8 54.96	+ 9 10.5	2.138	2.930	13.4	22.3	12 23	8 57.00	+17 29.5	1.294	2.135	17.6	21.2
1 2	8 49.17	+ 9 26.3	2.056	2.934	10.3	22.1	1 2	8 51.56	+17 46.3	1.241	2.151	13.1	21.0
1 12	8 41.36	+ 9 55.5	1.998	2.938	6.8	21.9	1 12	8 43.10	+18 13.7	1.209	2.167	7.8	20.7
1 22	8 32.20	+10 36.2	1.968	2.942	3.4	21.6	1 22	8 32.71	+18 46.3	1.202	2.184	2.1	20.4
2 1	8 22.58	+11 24.7	1.969	2.944	3.3	21.6	2 1	8 21.90	+19 17.9	1.221	2.201	3.6	20.6
2 11	8 13.52	+12 16.7	1.999	2.946	6.6	21.8	2 11	8 12.34	+19 43.6	1.267	2.219	9.0	20.9
2 21	8 5.92	+13 8.0	2.058	2.947	10.1	22.1	2 21	8 5.29	+20 0.5	1.337	2.236	13.7	21.3
3 2	8 0.45	+13 55.0	2.141	2.947	13.2	22.3	3 2	8 1.48	+20 7.9	1.427	2.254	17.5	21.6
<b>417131</b>	2005 <i>VE</i> <sub>24</sub>		1 25.6 323°94	3°1/23.9	18		<b>243173</b>	2007 <i>TG</i> <sub>136</sub>		1 25.6 61°25	1°5/24.9	18	
12 23	8 54.43	+24 48.6	1.741	2.580	13.9	21.7	12 23	8 55.27	+23 15.5	2.120	2.946	12.3	19.9
1 2	8 49.41	+25 36.6	1.665	2.575	10.3	21.4	1 2	8 49.38	+23 24.3	2.052	2.956	9.0	19.7
1 12	8 41.79	+26 27.9	1.613	2.570	6.4	21.2	1 12	8 41.45	+23 34.7	2.010	2.966	5.4	19.5
1 22	8 32.36	+27 15.9	1.588	2.566	3.3	21.0	1 22	8 32.23	+23 42.9	1.995	2.976	1.9	19.3
2 1	8 22.30	+27 54.2	1.592	2.561	4.9	21.1	2 1	8 22.70	+23 45.7	2.011	2.986	3.2	19.4
2 11	8 13.00	+28 18.3	1.623	2.557	8.9	21.3	2 11	8 13.96	+23 41.1	2.056	2.996	6.9	19.7
2 21	8 5.62	+28 27.0	1.678	2.553	12.8	21.5	2 21	8 6.85	+23 28.9	2.128	3.007	10.3	19.9
3 2	8 1.01	+28 21.2	1.755	2.550	16.1	21.7	3 2	8 2.00	+23 9.5	2.223	3.017	13.1	20.1
<b>167159</b>	2003 <i>SH</i> <sub>235</sub>		1 25.6 124°79	3°3/27.5	18		<b>377049</b>	2002 <i>TQ</i> <sub>121</sub>		1 25.6 67°59	2°5/24.3	18	
12 23	8 55.96	+ 8 38.3	1.854	2.651	14.9	21.4	12 23						

EPHEMERIDES

1 25.6

1 25.7

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>285656</b>	2000 <i>SD</i> <sub>48</sub>		1 25.6 153°61	4.8/29.2	17		<b>197533</b>	2004 <i>EZ</i> <sub>59</sub>		1 25.7 220°75	0.2/25.6	18	
12 23	8 52.87	+ 1 12.6	2.618	3.368	12.3	22.5	12 23	8 59.62	+18 16.3	1.825	2.643	14.3	21.1
1 2	8 47.26	+ 1 6.6	2.536	3.377	10.0	22.3	1 2	8 53.16	+18 29.8	1.735	2.634	10.7	20.9
1 12	8 40.08	+ 1 15.6	2.479	3.387	7.5	22.2	1 12	8 44.05	+18 50.6	1.668	2.623	6.5	20.6
1 22	8 31.86	+ 1 39.6	2.449	3.395	5.4	22.0	1 22	8 33.05	+19 14.6	1.630	2.612	1.8	20.3
2 1	8 23.32	+ 2 16.8	2.449	3.403	4.9	22.0	2 1	8 21.32	+19 37.6	1.621	2.600	3.1	20.3
2 11	8 15.25	+ 3 4.1	2.479	3.411	6.4	22.1	2 11	8 10.23	+19 55.5	1.642	2.587	7.9	20.6
2 21	8 8.32	+ 3 57.5	2.538	3.417	8.8	22.3	2 21	8 1.01	+20 6.2	1.689	2.574	12.2	20.8
3 2	8 3.09	+ 4 53.0	2.622	3.423	11.2	22.5	3 2	7 54.51	+20 9.1	1.759	2.559	15.9	21.0
<b>65365</b>	2002 <i>PD</i> <sub>24</sub>		1 25.6 166°79	0.6/26.1	18		<b>493113</b>	2014 <i>TG</i> <sub>8</sub>		1 25.7 81°16	0.6/25.3	18	
12 23	8 52.52	+15 33.7	2.362	3.174	11.7	20.7	12 23	8 54.82	+18 31.3	1.775	2.603	14.2	21.4
1 2	8 47.25	+15 51.8	2.281	3.176	8.7	20.5	1 2	8 49.43	+19 5.5	1.709	2.614	10.5	21.2
1 12	8 40.18	+16 17.6	2.226	3.178	5.3	20.3	1 12	8 41.67	+19 47.5	1.667	2.624	6.2	21.0
1 22	8 31.90	+16 48.2	2.199	3.180	1.7	20.0	1 22	8 32.36	+20 32.4	1.653	2.635	1.7	20.7
2 1	8 23.25	+17 20.5	2.202	3.181	2.3	20.1	2 1	8 22.62	+21 14.7	1.667	2.646	3.2	20.8
2 11	8 15.11	+17 51.1	2.236	3.183	6.0	20.3	2 11	8 13.70	+21 50.0	1.710	2.656	7.6	21.1
2 21	8 8.29	+18 17.5	2.297	3.184	9.3	20.5	2 21	8 6.62	+22 15.8	1.779	2.667	11.5	21.4
3 2	8 3.38	+18 38.0	2.383	3.184	12.1	20.7	3 2	8 2.09	+22 31.1	1.871	2.677	14.8	21.6
<b>458131</b>	2010 <i>FY</i> <sub>5</sub>		1 25.6 234°91	11.5/1.6	18		<b>376615</b>	2013 <i>PE</i> <sub>43</sub>		1 25.7 141°97	4.9/29.2	18	
12 23	8 54.04	-13 16.0	2.007	2.687	17.6	22.1	12 23	8 51.72	+ 1 39.0	2.284	3.047	13.5	21.3
1 2	8 48.86	-14 7.7	1.911	2.674	15.8	21.9	1 2	8 46.66	+ 1 41.7	2.204	3.054	10.9	21.1
1 12	8 41.42	-14 32.5	1.833	2.660	13.8	21.7	1 12	8 39.85	+ 2 1.8	2.146	3.061	8.1	21.0
1 22	8 32.31	-14 25.6	1.776	2.645	12.2	21.6	1 22	8 31.86	+ 2 38.8	2.116	3.068	5.6	20.8
2 1	8 22.46	-13 44.6	1.743	2.630	11.5	21.5	2 1	8 23.49	+ 3 30.5	2.114	3.074	5.0	20.8
2 11	8 13.00	-12 31.9	1.736	2.615	12.1	21.5	2 11	8 15.62	+ 4 32.6	2.142	3.080	6.9	20.9
2 21	8 4.98	-10 54.0	1.753	2.598	13.8	21.6	2 21	8 9.04	+ 5 40.1	2.198	3.085	9.6	21.1
3 2	7 59.24	- 8 59.6	1.792	2.581	16.0	21.7	3 2	8 4.34	+ 6 48.1	2.279	3.091	12.3	21.3
<b>325967</b>	2010 <i>VT</i> <sub>126</sub>		1 25.6 84°40	0.8/26.1	18		<b>75108</b>	1999 <i>VJ</i> <sub>55</sub>		1 25.7 333°82	2.2/24.7	18	
12 23	8 54.56	+14 46.4	1.786	2.606	14.5	21.2	12 23	8 54.42	+22 5.2	1.382	2.230	16.3	18.9
1 2	8 49.13	+15 11.4	1.721	2.620	10.8	20.9	1 2	8 49.97	+22 38.0	1.307	2.222	12.1	18.6
1 12	8 41.44	+15 47.3	1.680	2.634	6.6	20.7	1 12	8 42.43	+23 17.4	1.253	2.213	7.3	18.3
1 22	8 32.26	+16 30.1	1.666	2.647	2.1	20.5	1 22	8 32.66	+23 57.0	1.224	2.206	2.7	18.0
2 1	8 22.68	+17 14.9	1.681	2.661	2.9	20.5	2 1	8 22.08	+24 29.7	1.222	2.198	4.7	18.1
2 11	8 13.92	+17 56.9	1.725	2.674	7.2	20.8	2 11	8 12.41	+24 50.1	1.246	2.192	9.8	18.4
2 21	8 6.95	+18 32.6	1.795	2.688	11.1	21.1	2 21	8 5.06	+24 56.3	1.293	2.186	14.5	18.7
3 2	8 2.45	+19 0.2	1.888	2.701	14.4	21.4	3 2	8 0.99	+24 48.8	1.360	2.181	18.6	18.9
<b>415822</b>	2001 <i>QG</i> <sub>170</sub>		1 25.6 148°42	1.8/26.6	18		<b>437964</b>	2002 <i>XD</i> <sub>72</sub>		1 25.7 90°06	13.1/29.0	17	
12 23	8 58.53	+13 42.5	2.365	3.159	12.2	21.1	12 23	9 2.89	- 2 42.2	1.187	1.960	23.0	20.7
1 2	8 51.51	+13 22.0	2.287	3.170	9.2	20.9	1 2	8 56.22	- 5 1.8	1.128	1.970	19.6	20.5
1 12	8 42.63	+13 8.4	2.235	3.181	5.8	20.7	1 12	8 46.12	- 6 54.9	1.088	1.980	16.2	20.3
1 22	8 32.56	+13 0.4	2.213	3.190	2.5	20.5	1 22	8 33.65	- 8 12.5	1.069	1.990	13.7	20.2
2 1	8 22.18	+12 56.4	2.222	3.199	2.8	20.6	2 1	8 20.46	- 8 49.1	1.074	2.000	13.2	20.2
2 11	8 12.46	+12 54.6	2.263	3.207	6.1	20.8	2 11	8 8.48	- 8 46.3	1.102	2.010	14.9	20.4
2 21	8 4.21	+12 53.5	2.332	3.215	9.3	21.0	2 21	7 59.21	- 8 12.3	1.150	2.019	17.8	20.6
3 2	7 58.02	+12 51.8	2.427	3.222	12.1	21.2	3 2	7 53.62	- 7 17.9	1.217	2.029	20.9	20.8
<b>177733</b>	2005 <i>JT</i> <sub>176</sub>		1 25.6 183°58	1.7/26.9	18		<b>341528</b>	2007 <i>TR</i> <sub>441</sub>		1 25.7 140°63	3.6/28.1	18	
12 23	8 53.85	+10 44.3	2.194	2.992	12.9	21.2	12 23	8 51.36	+ 6 9.5	2.469	3.248	12.2	21.4
1 2	8 48.40	+11 22.8	2.108	2.993	9.8	21.0	1 2	8 46.29	+ 6 1.2	2.387	3.254	9.6	21.2
1 12	8 40.96	+12 14.8	2.047	2.993	6.2	20.8	1 12	8 39.58	+ 6 5.5	2.330	3.259	6.7	21.0
1 22	8 32.15	+13 17.1	2.015	2.992	2.6	20.6	1 22	8 31.79	+ 6 21.8	2.301	3.264	4.3	20.9
2 1	8 22.84	+14 25.0	2.013	2.991	2.7	20.6	2 1	8 23.66	+ 6 48.3	2.301	3.268	3.9	20.8
2 11	8 14.03	+15 33.4	2.042	2.989	6.4	20.8	2 11	8 16.01	+ 7 22.0	2.331	3.273	6.1	21.0
2 21	8 6.59	+16 37.7	2.099	2.987	10.0	21.0	2 21	8 9.56	+ 7 59.5	2.389	3.277	8.9	21.2
3 2	8 1.22	+17 34.6	2.181	2.984	13.1	21.2	3 2	8 4.85	+ 8 37.5	2.472	3.281	11.5	21.4
<b>417112</b>	2005 <i>UT</i> <sub>439</sub>		1 25.6 114°33	3.6/24.1	18		<b>414916</b>	2011 <i>AU</i> <sub>11</sub>		1 25.7 43°49	1.0/25.0	18	
12 23	9 0.36	+28 49.5	1.947	2.773	13.2	20.9	12 23	8 53.16	+18 41.3	1.816	2.646	13.8	21.1
1 2	8 53.38	+29 8.5	1.881	2.782	9.9	20.7	1 2	8 48.29	+19 31.3	1.742	2.648	10.2	20.9
1 12	8 43.93	+29 24.5	1.839	2.791	6.3	20.5	1 12	8 41.07	+20 30.2	1.693	2.650	6.0	20.6
1 22	8 32.93	+29 32.0	1.826	2.799	3.7	20.4	1 22	8 32.24	+21 32.4	1.670	2.652	1.7	20.4
2 1	8 21.60	+29 27.0	1.842	2.807	5.0	20.5	2 1	8 22.86	+22 31.8	1.678	2.655	3.4	20.5
2 11	8 11.25	+29 8.1	1.887	2.816	8.3	20.7	2 11	8 14.18	+23 22.7	1.713	2.657	7.7	20.7
2 21	8 2.93	+28 36.6	1.959	2.823	11.7	20.9	2 21	8 7.22	+24 2.1	1.775	2.660	11.6	21.0
3 2	7 57.32	+27 55.2	2.053	2.831	14.6	21.1	3 2	8 2.76	+24 28.8	1.859	2.662	15.0	21.2
<b>83011</b>	2001 <i>QF</i> <sub>165</sub>		1 25.7 115°28	2.4/23.9	18		<b>162950</b>	2001 <i>QK</i> <sub>47</sub>		1 25.7 70°79	2.6/24.3	18	
12 23	8 52.49	+23 46.2	2.325	3.153	11.3	19.5	12 23	8 56.93	+26 39.8	2.154	2.980	12.1	19.6
1 2	8 47.36	+24 42.1	2.253	3.158	8.3	19.3	1 2	8 50.57	+26 54.7	2.093	2.996	8.9	19.4
1 12	8 40.31	+25 41.0	2.207	3.163	5.0	19.1	1 12	8 42.15	+27 8.3	2.058	3.012	5.5	19.2
1 22	8 31.97	+26 37.8	2.190	3.168	2.5	19.0	1 22	8 32.47	+27 16.4	2.051	3.028	2.8	19.1
2 1	8 23.22	+27 27.4	2.204	3.173	3.8	19.1	2 1	8 22.56	+27 15.7	2.075	3.044	4.0	19.2
2 11	8 15.03	+28 6.2	2.247	3.178	7.0	19.3	2 11	8 13.52	+27 4.7	2.127	3.060	7.2	19.4
2 21	8 8.26	+28 32.4	2.317	3.183	10.1	19.5	2 21	8 6.20	+26 44.0	2.207	3.076	10.4	19.6
3 2	8 3.53	+28 46.2	2.410	3.187	12.7	19.7	3 2	8 1.18	+26 14.9	2.310	3.092	13.1	19.8
<b>437135</b>	2012 <i>UP</i> <sub>166</sub>		1 25.7 167°83	1.8/26.4	18		<b>169163</b>	2001 <i>QZ</i> <sub>205</sub>		1 25.7 183°56	1.4/26.7	17	
12 23	9 0.57	+14 14.2	1.640	2.453	15.								

EPHEMERIDES

1 25.7

1 25.7

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>248021</b>	2004 <i>FP</i> <sub>51</sub>		1 25.7 296°70	3°0/27.8	18		<b>521139</b>	2015 <i>FX</i> <sub>340</sub>		1 25.7 144°19	8°8/19.8	18	
12 23	8 49.46	+ 7 10.7	2.205	2.999	13.0	20.8	12 23	9 3.14	+27 26.8	1.167	2.017	18.6	20.7
1 2	8 45.27	+ 7 38.7	2.105	2.983	10.2	20.5	1 2	8 57.56	+30 56.1	1.112	2.024	14.1	20.5
1 12	8 39.18	+ 8 22.9	2.029	2.967	6.9	20.3	1 12	8 47.64	+34 34.4	1.082	2.030	10.1	20.3
1 22	8 31.73	+ 9 21.6	1.980	2.951	3.8	20.1	1 22	8 34.27	+37 58.8	1.079	2.036	8.9	20.2
2 1	8 23.71	+10 31.1	1.960	2.935	3.4	20.0	2 1	8 19.37	+40 46.8	1.104	2.041	11.6	20.4
2 11	8 16.04	+11 46.5	1.971	2.920	6.5	20.2	2 11	8 5.52	+42 46.0	1.154	2.046	15.8	20.6
2 21	8 9.61	+13 2.2	2.009	2.904	10.0	20.4	2 21	7 54.96	+43 56.7	1.225	2.050	19.8	20.9
3 2	8 5.10	+14 13.5	2.071	2.889	13.2	20.6	3 2	7 49.08	+44 26.9	1.312	2.053	23.1	21.1
<b>417574</b>	2006 <i>UA</i> <sub>254</sub>		1 25.7 164°62	1°3/26.3	18		<b>7904</b>	Morrow		1 25.7 151°05	0°9/26.2	18	
12 23	8 54.89	+14 11.6	1.856	2.672	14.2	21.9	12 23	8 56.08	+15 12.9	1.990	2.803	13.5	18.2
1 2	8 49.46	+14 23.6	1.778	2.674	10.7	21.7	1 2	8 50.16	+15 26.4	1.914	2.809	10.1	18.0
1 12	8 41.72	+14 46.3	1.724	2.675	6.6	21.4	1 12	8 42.07	+15 48.8	1.863	2.815	6.2	17.8
1 22	8 32.43	+15 16.7	1.697	2.677	2.4	21.2	1 22	8 32.53	+16 17.1	1.840	2.821	2.0	17.5
2 1	8 22.63	+15 50.9	1.699	2.678	2.9	21.2	2 1	8 22.56	+16 47.6	1.847	2.826	2.7	17.6
2 11	8 13.51	+16 24.5	1.729	2.679	7.2	21.5	2 11	8 13.27	+17 16.3	1.883	2.831	6.8	17.8
2 21	8 6.09	+16 54.3	1.787	2.680	11.2	21.7	2 21	8 5.63	+17 40.6	1.947	2.835	10.6	18.1
3 2	8 1.11	+17 18.0	1.868	2.680	14.6	21.9	3 2	8 0.32	+17 58.8	2.034	2.839	13.8	18.3
<b>186259</b>	2001 <i>YV</i> <sub>12</sub>		1 25.7 112°86	1°1/25.0	18		<b>32541</b>	2001 <i>QF</i> <sub>2</sub>		1 25.7 76°49	2°7/24.7	18	
12 23	8 55.74	+20 12.3	2.001	2.824	13.0	20.9	12 23	9 1.57	+24 32.2	1.387	2.227	16.8	17.8
1 2	8 49.89	+20 47.1	1.935	2.837	9.5	20.7	1 2	8 54.94	+24 51.3	1.331	2.241	12.4	17.6
1 12	8 41.87	+21 27.3	1.893	2.850	5.6	20.5	1 12	8 45.17	+25 11.8	1.298	2.255	7.5	17.4
1 22	8 32.46	+22 8.1	1.881	2.862	1.7	20.3	1 22	8 33.39	+25 27.1	1.290	2.269	3.1	17.1
2 1	8 22.66	+22 44.8	1.897	2.874	3.2	20.4	2 1	8 21.22	+25 31.7	1.309	2.283	4.9	17.3
2 11	8 13.63	+23 13.6	1.944	2.886	7.1	20.7	2 11	8 10.41	+25 23.0	1.355	2.297	9.6	17.6
2 21	8 6.29	+23 32.6	2.017	2.897	10.7	20.9	2 21	8 2.25	+25 1.9	1.426	2.311	13.9	17.9
3 2	8 1.30	+23 41.8	2.114	2.908	13.7	21.1	3 2	7 57.47	+24 30.9	1.517	2.325	17.6	18.2
<b>318959</b>	2005 <i>UT</i> <sub>244</sub>		1 25.7 86°13	3°9/23.6	18		<b>151204</b>	2001 <i>YV</i> <sub>29</sub>		1 25.7 303°85	1°2/26.2	18	
12 23	8 56.87	+27 51.1	1.871	2.705	13.3	20.6	12 23	8 54.01	+15 14.1	1.762	2.585	14.5	20.0
1 2	8 51.02	+28 35.0	1.805	2.711	9.9	20.4	1 2	8 49.02	+15 15.2	1.677	2.577	10.9	19.8
1 12	8 42.68	+29 18.0	1.764	2.717	6.4	20.2	1 12	8 41.60	+15 26.1	1.615	2.568	6.8	19.5
1 22	8 32.70	+29 53.9	1.750	2.722	3.9	20.1	1 22	8 32.46	+15 44.2	1.579	2.560	2.4	19.2
2 1	8 22.26	+30 17.1	1.764	2.728	5.3	20.1	2 1	8 22.69	+16 5.8	1.572	2.551	3.0	19.2
2 11	8 12.70	+30 24.7	1.807	2.734	8.7	20.4	2 11	8 13.57	+16 27.3	1.593	2.543	7.5	19.5
2 21	8 5.09	+30 16.9	1.875	2.739	12.1	20.6	2 21	8 6.19	+16 45.5	1.639	2.535	11.8	19.7
3 2	8 0.15	+29 55.7	1.965	2.745	15.1	20.8	3 2	8 1.36	+16 58.5	1.709	2.528	15.4	19.9
<b>133485</b>	2003 <i>SU</i> <sub>262</sub>		1 25.7 192°43	1°6/24.7	18		<b>462317</b>	2008 <i>HO</i> <sub>16</sub>		1 25.7 233°82	2°8/23.8	17	
12 23	8 57.73	+21 37.0	2.033	2.854	12.9	21.2	12 23	8 54.90	+23 49.4	2.060	2.889	12.5	21.8
1 2	8 51.52	+22 15.6	1.951	2.853	9.5	21.0	1 2	8 49.54	+24 51.3	1.975	2.880	9.2	21.6
1 12	8 42.96	+22 58.9	1.895	2.851	5.7	20.7	1 12	8 41.87	+25 58.0	1.916	2.872	5.7	21.4
1 22	8 32.79	+23 42.0	1.867	2.848	2.0	20.5	1 22	8 32.54	+27 3.0	1.886	2.863	2.9	21.2
2 1	8 22.05	+24 19.6	1.869	2.844	3.6	20.6	2 1	8 22.55	+28 0.1	1.885	2.854	4.4	21.2
2 11	8 11.96	+24 47.6	1.902	2.840	7.5	20.8	2 11	8 13.11	+28 44.3	1.914	2.845	8.1	21.4
2 21	8 3.57	+25 4.4	1.961	2.835	11.2	21.0	2 21	8 5.27	+29 13.6	1.969	2.835	11.6	21.6
3 2	7 57.63	+25 10.1	2.043	2.829	14.4	21.2	3 2	7 59.83	+29 28.1	2.046	2.825	14.7	21.8
<b>153873</b>	2001 <i>XY</i> <sub>91</sub>		1 25.7 320°03	10°4/18.4	18		<b>247881</b>	2003 <i>UG</i> <sub>169</sub>		1 25.7 48°19	5°9/22.6	18	
12 23	8 57.57	+40 51.0	1.615	2.449	15.1	19.9	12 23	8 57.52	+32 29.6	1.720	2.558	14.1	19.8
1 2	8 52.77	+42 50.8	1.550	2.436	12.6	19.7	1 2	8 51.58	+33 33.4	1.678	2.581	10.7	19.7
1 12	8 44.39	+44 41.5	1.508	2.424	10.8	19.6	1 12	8 43.00	+34 31.2	1.660	2.605	7.5	19.5
1 22	8 33.29	+46 10.1	1.491	2.412	10.5	19.5	1 22	8 32.78	+35 15.1	1.669	2.629	5.9	19.5
2 1	8 21.10	+47 6.2	1.499	2.400	12.0	19.6	2 1	8 22.30	+35 39.3	1.705	2.653	7.2	19.6
2 11	8 9.84	+47 25.2	1.529	2.389	14.6	19.7	2 11	8 13.00	+35 41.8	1.767	2.678	10.0	19.8
2 21	8 1.25	+47 9.8	1.581	2.378	17.3	19.9	2 21	8 5.94	+35 24.7	1.854	2.703	13.0	20.1
3 2	7 56.47	+46 26.3	1.649	2.368	19.9	20.1	3 2	8 1.78	+34 51.9	1.962	2.728	15.6	20.3
<b>469841</b>	2005 <i>TZ</i> <sub>39</sub>		1 25.7 14°15	7°3/30.0	18		<b>268661</b>	2006 <i>ES</i> <sub>22</sub>		1 25.7 139°78	1°1/25.0	18	
12 23	8 50.76	- 0 52.4	1.701	2.474	17.1	20.4	12 23	8 54.25	+20 40.1	2.191	3.014	12.0	21.3
1 2	8 46.54	- 1 12.6	1.625	2.476	14.1	20.2	1 2	8 48.71	+21 9.1	2.116	3.019	8.9	21.1
1 12	8 40.05	- 1 9.0	1.569	2.477	10.9	20.0	1 12	8 41.17	+21 42.6	2.067	3.023	5.3	20.9
1 22	8 32.00	- 0 40.2	1.536	2.480	8.2	19.9	1 22	8 32.30	+22 16.6	2.046	3.028	1.6	20.7
2 1	8 23.41	+ 0 12.0	1.530	2.482	7.4	19.8	2 1	8 23.03	+22 46.9	2.056	3.032	3.0	20.8
2 11	8 15.47	+ 1 22.4	1.550	2.485	9.1	19.9	2 11	8 14.39	+23 10.3	2.095	3.037	6.7	21.0
2 21	8 9.18	+ 2 43.6	1.595	2.489	12.2	20.1	2 21	8 7.26	+23 25.1	2.161	3.041	10.1	21.2
3 2	8 5.29	+ 4 8.1	1.663	2.493	15.3	20.3	3 2	8 2.28	+23 30.9	2.251	3.044	13.0	21.4
<b>302888</b>	2003 <i>NY</i> <sub>12</sub>		1 25.7 185°82	0°2/25.8	18		<b>402868</b>	2007 <i>RV</i> <sub>181</sub>		1 25.7 66°69	3°2/24.3	18	
12 23	8 58.09	+17 29.2	1.966	2.781	13.5	21.5	12 23	8 58.86	+24 51.8	1.468	2.309	15.9	21.5
1 2	8 51.75	+17 41.2	1.884	2.782	10.1	21.2	1 2	8 52.88	+25 28.7	1.411	2.321	11.8	21.3
1 12	8 43.07	+18 0.3	1.827	2.781	6.1	21.0	1 12	8 43.93	+26 7.5	1.377	2.334	7.2	21.1
1 22	8 32.82	+18 23.0	1.798	2.780	1.7	20.7	1 22	8 33.07	+26 41.0	1.369	2.347	3.4	20.9
2 1	8 22.03	+18 45.4	1.799	2.778	2.8	20.8	2 1	8 21.79	+27 2.9	1.389	2.361	5.1	21.0
2 11	8 11.93	+19 4.1	1.830	2.776	7.1	21.1	2 11	8 11.69	+27 9.8	1.435	2.374	9.5	21.3
2 21	8 3.55	+19 17.1	1.888	2.773	11.1	21.3	2 21	8 4.03	+27 1.8	1.506	2.387	13.6	21.6
3 2	7 57.63	+19 23.3	1.970	2.769	14.4	21.5	3 2	7 59.55	+26 41.1	1.598	2.400	17.1	21.8
<b>378331</b>	2007 <i>GX</i> <sub>64</sub>		1 25.7 218°17	3°2/23.5	17		<b>280672</b>	2005 <i>EK</i> <sub>159</sub>		1 25.7 145°53	3°7/23.3	18	
12 23	8 55.81	+27 43.6	2.478	3.300	10.8								

EPHEMERIDES

1 25.7

1 25.7

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>307592</b>	2003 <i>NX</i> <sub>1</sub>		1 25.7 163°01	10°0/31.5	18		<b>188197</b>	2002 <i>RA</i> <sub>54</sub>		1 25.7 106°30	0°5/25.9	17	
12 23	8 57.16	-10 26.1	2.233	2.917	15.9	21.2	12 23	8 58.48	+14 47.4	1.473	2.298	16.7	21.0
1 2	8 50.80	-11 35.4	2.154	2.924	14.0	21.1	1 2	8 52.50	+15 30.7	1.413	2.315	12.5	20.8
1 12	8 42.42	-12 22.4	2.096	2.931	12.0	21.0	1 12	8 43.71	+16 27.7	1.376	2.331	7.5	20.6
1 22	8 32.67	-12 43.4	2.062	2.936	10.5	20.9	1 22	8 33.07	+17 32.6	1.365	2.347	2.2	20.3
2 1	8 22.43	-12 36.9	2.053	2.941	10.0	20.8	2 1	8 21.94	+18 38.0	1.383	2.363	3.3	20.4
2 11	8 12.72	-12 4.9	2.071	2.945	10.6	20.9	2 11	8 11.85	+19 37.0	1.429	2.378	8.4	20.7
2 21	8 4.44	-11 12.3	2.115	2.949	12.2	21.0	2 21	8 4.01	+20 25.2	1.500	2.392	12.9	21.0
3 2	7 58.26	-10 5.7	2.181	2.951	14.1	21.1	3 2	7 59.20	+21 1.0	1.592	2.406	16.6	21.3
<b>168118</b>	2006 <i>FS</i> <sub>23</sub>		1 25.7 120°90	1°0/25.1	18		<b>317432</b>	2002 <i>QB</i> <sub>29</sub>		1 25.7 102°01	0°4/25.5	18	
12 23	8 58.42	+19 39.5	1.851	2.673	14.0	20.9	12 23	8 53.62	+18 44.8	2.270	3.088	11.8	21.3
1 2	8 52.00	+20 17.1	1.788	2.689	10.3	20.7	1 2	8 48.13	+19 7.2	2.200	3.100	8.7	21.2
1 12	8 43.20	+21 0.8	1.749	2.705	6.1	20.4	1 12	8 40.77	+19 35.0	2.156	3.112	5.2	21.0
1 22	8 32.88	+21 45.5	1.739	2.721	1.8	20.2	1 22	8 32.23	+20 4.8	2.141	3.123	1.4	20.7
2 1	8 22.17	+22 25.8	1.759	2.736	3.3	20.3	2 1	8 23.36	+20 32.9	2.156	3.135	2.5	20.8
2 11	8 12.34	+22 57.4	1.808	2.750	7.5	20.6	2 11	8 15.13	+20 56.3	2.201	3.146	6.2	21.1
2 21	8 4.41	+23 18.6	1.884	2.764	11.3	20.9	2 21	8 8.33	+21 13.1	2.274	3.157	9.5	21.3
3 2	7 59.05	+23 29.2	1.982	2.777	14.5	21.1	3 2	8 3.56	+21 22.7	2.370	3.168	12.3	21.5
<b>458774</b>	2011 <i>SJ</i> <sub>87</sub>		1 25.7 144°26	3°8/23.8	18		<b>134094</b>	2004 <i>XR</i> <sub>119</sub>		1 25.7 96°79	0°3/25.9	18	
12 23	9 1.14	+27 30.3	1.777	2.606	14.1	21.5	12 23	8 53.74	+16 48.2	2.116	2.933	12.6	20.6
1 2	8 54.28	+28 12.8	1.711	2.615	10.5	21.3	1 2	8 48.33	+17 5.8	2.044	2.943	9.3	20.4
1 12	8 44.69	+28 54.6	1.670	2.623	6.7	21.1	1 12	8 40.95	+17 30.7	1.998	2.953	5.6	20.2
1 22	8 33.31	+29 28.7	1.657	2.630	3.9	21.0	1 22	8 32.28	+17 59.7	1.980	2.962	1.6	19.9
2 1	8 21.46	+29 49.2	1.672	2.637	5.4	21.1	2 1	8 23.26	+18 29.0	1.992	2.972	2.5	20.0
2 11	8 10.60	+29 53.2	1.716	2.644	9.1	21.3	2 11	8 14.90	+18 55.2	2.034	2.981	6.4	20.3
2 21	8 1.92	+29 41.4	1.786	2.650	12.7	21.5	2 21	8 8.05	+19 16.1	2.102	2.990	10.0	20.5
3 2	7 56.18	+29 16.4	1.877	2.655	15.8	21.7	3 2	8 3.34	+19 30.3	2.195	2.999	13.0	20.8
<b>413934</b>	2006 <i>XD</i> <sub>39</sub>		1 25.7 60°45	1°7/24.7	18		<b>196523</b>	2003 <i>OJ</i> <sub>15</sub>		1 25.7 195°81	3°8/28.7	17	
12 23	8 54.97	+20 11.5	1.609	2.445	15.0	21.1	12 23	8 51.78	+ 3 29.6	2.873	3.632	11.1	22.1
1 2	8 49.77	+21 6.3	1.552	2.461	11.0	20.9	1 2	8 46.50	+ 3 33.5	2.778	3.628	8.9	21.9
1 12	8 42.00	+22 8.5	1.519	2.477	6.5	20.7	1 12	8 39.73	+ 3 50.4	2.707	3.624	6.5	21.8
1 22	8 32.57	+23 11.4	1.512	2.494	2.2	20.4	1 22	8 31.95	+ 4 19.7	2.664	3.619	4.4	21.6
2 1	8 22.72	+24 7.8	1.534	2.510	4.0	20.6	2 1	8 23.80	+ 4 59.8	2.652	3.614	3.9	21.6
2 11	8 13.81	+24 52.5	1.584	2.527	8.3	20.9	2 11	8 15.99	+ 5 47.7	2.671	3.608	5.7	21.7
2 21	8 6.95	+25 23.1	1.659	2.544	12.3	21.2	2 21	8 9.17	+ 6 39.8	2.719	3.601	8.2	21.8
3 2	8 2.85	+25 39.6	1.756	2.560	15.7	21.4	3 2	8 3.87	+ 7 32.7	2.793	3.594	10.6	22.0
<b>495424</b>	2014 <i>SP</i> <sub>168</sub>		1 25.7 212°42	6°9/28.8	17		<b>130747</b>	2000 <i>SV</i> <sub>260</sub>		1 25.7 16°09	4°0/27.7	18	
12 23	8 56.56	+ 0 59.7	1.970	2.730	15.5	21.9	12 23	8 52.09	+ 8 19.1	1.277	2.104	18.7	19.4
1 2	8 50.64	+ 0 9.3	1.879	2.724	12.8	21.7	1 2	8 48.17	+ 8 24.9	1.211	2.107	14.5	19.2
1 12	8 42.48	- 0 24.1	1.812	2.718	9.9	21.5	1 12	8 41.33	+ 8 52.9	1.164	2.111	9.8	18.9
1 22	8 32.73	- 0 38.2	1.770	2.711	7.5	21.3	1 22	8 32.47	+ 9 41.0	1.141	2.115	5.2	18.6
2 1	8 22.36	- 0 32.7	1.755	2.704	7.0	21.3	2 1	8 22.94	+10 43.8	1.143	2.120	4.7	18.6
2 11	8 12.51	- 0 9.9	1.769	2.696	8.9	21.4	2 11	8 14.34	+11 53.4	1.171	2.126	9.1	18.9
2 21	8 4.20	+ 0 25.9	1.810	2.687	11.9	21.6	2 21	8 7.97	+13 2.0	1.222	2.132	13.8	19.2
3 2	7 58.19	+ 1 9.5	1.873	2.678	14.8	21.7	3 2	8 4.71	+14 3.5	1.294	2.139	17.9	19.4
<b>202343</b>	2005 <i>EB</i> <sub>132</sub>		1 25.7 8°42	2°3/24.1	18		<b>447735</b>	2007 <i>FN</i> <sub>24</sub>		1 25.7 300°95	1°6/26.4	18	
12 23	8 52.26	+22 7.6	1.989	2.823	12.7	19.8	12 23	8 55.03	+13 46.0	1.329	2.163	17.7	21.3
1 2	8 47.56	+23 11.2	1.915	2.823	9.3	19.6	1 2	8 50.52	+13 58.3	1.249	2.154	13.4	21.0
1 12	8 40.65	+24 20.5	1.866	2.823	5.6	19.4	1 12	8 42.88	+14 26.5	1.189	2.144	8.4	20.7
1 22	8 32.22	+25 29.7	1.845	2.824	2.5	19.2	1 22	8 32.94	+15 7.1	1.155	2.135	3.1	20.4
2 1	8 23.26	+26 32.1	1.853	2.825	4.1	19.3	2 1	8 22.08	+15 54.5	1.146	2.126	3.7	20.4
2 11	8 14.91	+27 22.9	1.890	2.826	7.8	19.5	2 11	8 12.01	+16 41.9	1.163	2.117	9.3	20.7
2 21	8 8.15	+27 59.5	1.953	2.827	11.3	19.7	2 21	8 4.21	+17 23.8	1.205	2.109	14.4	20.9
3 2	8 3.72	+28 21.6	2.039	2.828	14.3	19.9	3 2	7 59.71	+17 56.8	1.266	2.100	18.9	21.2
<b>349616</b>	2008 <i>UH</i> <sub>82</sub>		1 25.7 147°95	0°6/25.4	18		<b>502276</b>	2015 <i>BY</i> <sub>132</sub>		1 25.7 248°24	0°7/25.2	17	
12 23	8 58.42	+17 55.2	1.760	2.581	14.6	21.6	12 23	8 51.75	+18 0.7	2.214	3.035	12.0	21.6
1 2	8 52.20	+18 37.0	1.690	2.591	10.8	21.4	1 2	8 46.98	+18 51.2	2.130	3.032	8.9	21.4
1 12	8 43.45	+19 27.8	1.644	2.599	6.4	21.1	1 12	8 40.23	+19 49.9	2.072	3.028	5.3	21.1
1 22	8 32.99	+20 22.0	1.625	2.607	1.7	20.9	1 22	8 32.13	+20 52.4	2.043	3.025	1.5	20.8
2 1	8 22.01	+21 13.7	1.637	2.615	3.3	21.0	2 1	8 23.51	+21 53.5	2.044	3.021	2.8	20.9
2 11	8 11.84	+21 57.5	1.677	2.622	7.8	21.3	2 11	8 15.39	+22 48.4	2.074	3.018	6.6	21.2
2 21	8 3.62	+22 30.7	1.744	2.628	11.9	21.5	2 21	8 8.63	+23 33.9	2.132	3.014	10.1	21.4
3 2	7 58.10	+22 52.4	1.834	2.633	15.3	21.8	3 2	8 3.92	+24 8.4	2.214	3.010	13.1	21.6
<b>82732</b>	2001 <i>PS</i> <sub>59</sub>		1 25.7 26°16	2°8/27.9	18		<b>492468</b>	2014 <i>ND</i> <sub>30</sub>		1 25.7 259°80	0°4/25.9	17	
12 23	8 49.74	+ 5 39.4	1.924	2.719	14.5	18.4	12 23	8 55.36	+11 24.0	1.641	2.456	15.8	21.7
1 2	8 45.60	+ 6 47.5	1.847	2.726	11.3	18.2	1 2	8 50.50	+12 58.9	1.544	2.440	12.0	21.4
1 12	8 39.43	+ 8 16.8	1.795	2.734	7.5	18.0	1 12	8 42.82	+14 57.9	1.471	2.424	7.4	21.1
1 22	8 31.89	+10 3.0	1.770	2.742	3.9	17.8	1 22	8 32.95	+17 14.4	1.425	2.407	2.2	20.7
2 1	8 23.87	+11 59.4	1.774	2.751	3.3	17.8	2 1	8 21.99	+19 38.1	1.410	2.389	3.3	20.8
2 11	8 16.41	+13 57.8	1.809	2.761	6.7	18.0	2 11	8 11.39	+21 56.9	1.425	2.372	8.7	21.0
2 21	8 10.42	+15 50.4	1.872	2.770	10.4	18.2	2 21	8 2.55	+24 1.0	1.468	2.354	13.5	21.3
3 2	8 6.58	+17 31.5	1.961	2.781	13.7	18.5	3 2	7 56.55	+25 44.8	1.533	2.336	17.7	21.5
<b>124676</b>	2001 <i>SY</i> <sub>107</sub>		1 25.7 115°90	2°7/24.5	18		<b>202024</b>	2004 <i>RZ</i> <sub>53</sub>		1 25.7 173°78	1°4/26.4	18	
12 23	9 2.83	+24 47.3	1.740	2.565									

EPHEMERIDES

1 25.7

1 25.7

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>359136</b>	2009 <i>BD</i> <sub>86</sub>		1 25.7 259°91	0°5/25.5	18		<b>194175</b>	2001 <i>TB</i> <sub>51</sub>		1 25.7 142°72	2°2/27.0	18	
12 23	8 56.62	+18 34.8	1.717	2.544	14.6	21.8	12 23	8 58.36	+10 49.4	1.990	2.786	14.1	21.7
1 2	8 51.21	+18 58.6	1.626	2.530	11.0	21.6	1 2	8 51.82	+11 3.8	1.918	2.801	10.7	21.5
1 12	8 43.09	+19 31.0	1.559	2.516	6.6	21.3	1 12	8 43.10	+11 30.9	1.871	2.815	6.9	21.3
1 22	8 32.99	+20 7.5	1.519	2.501	1.8	20.9	1 22	8 32.96	+12 8.0	1.851	2.828	3.1	21.1
2 1	8 22.09	+20 42.8	1.507	2.486	3.3	21.0	2 1	8 22.43	+12 51.1	1.862	2.840	3.1	21.1
2 11	8 11.78	+21 12.0	1.523	2.470	8.2	21.3	2 11	8 12.62	+13 35.9	1.904	2.851	6.8	21.4
2 21	8 3.34	+21 32.2	1.566	2.454	12.7	21.5	2 21	8 4.48	+14 18.4	1.973	2.861	10.5	21.6
3 2	7 57.68	+21 42.4	1.630	2.438	16.5	21.7	3 2	7 58.69	+14 55.9	2.066	2.870	13.7	21.9
<b>74410</b>	1999 <i>AX</i> <sub>4</sub>		1 25.7 210°15	2°0/24.3	18		<b>421184</b>	2013 <i>RR</i> <sub>68</sub>		1 25.7 228°98	6°4/21.7	18	
12 23	8 59.49	+11 7.2	1.162	1.992	20.0	18.0	12 23	8 58.93	+35 44.3	2.078	2.902	12.6	20.7
1 2	8 54.57	+14 10.8	1.084	1.990	14.9	17.7	1 2	8 52.73	+36 48.7	2.006	2.897	9.9	20.6
1 12	8 45.79	+17 54.2	1.029	1.988	8.8	17.4	1 12	8 43.89	+37 47.0	1.958	2.892	7.5	20.4
1 22	8 33.89	+22 1.2	1.003	1.985	2.6	17.0	1 22	8 33.23	+38 31.6	1.938	2.886	6.4	20.3
2 1	8 20.42	+26 6.5	1.008	1.982	5.9	17.2	2 1	8 21.96	+38 56.1	1.946	2.880	7.6	20.4
2 11	8 7.57	+29 45.3	1.042	1.979	12.4	17.5	2 11	8 11.48	+38 58.1	1.981	2.874	10.1	20.5
2 21	7 57.38	+32 42.7	1.102	1.976	18.0	17.8	2 21	8 2.96	+38 38.8	2.041	2.868	12.9	20.7
3 2	7 51.31	+34 55.7	1.181	1.972	22.6	18.1	3 2	7 57.23	+38 1.8	2.122	2.861	15.4	20.9
<b>194048</b>	2001 <i>SK</i> <sub>102</sub>		1 25.7 93°02	0°6/25.9	15		<b>126188</b>	2002 <i>AK</i> <sub>21</sub>		1 25.7 13°91	3°0/23.4	18	
12 23	8 59.49	+15 50.9	1.508	2.332	16.5	21.9	12 23	8 48.79	+11 29.7	0.956	1.816	20.9	16.6
1 2	8 53.11	+16 9.4	1.452	2.353	12.2	21.7	1 2	8 46.70	+15 3.6	0.899	1.821	15.4	16.3
1 12	8 44.01	+16 38.8	1.419	2.373	7.4	21.5	1 12	8 41.00	+19 17.4	0.864	1.828	8.9	16.0
1 22	8 33.19	+17 14.3	1.412	2.393	2.2	21.2	1 22	8 32.56	+23 49.1	0.856	1.837	3.2	15.7
2 1	8 22.00	+17 50.6	1.433	2.413	3.2	21.3	2 1	8 23.01	+28 8.8	0.875	1.848	6.9	16.0
2 11	8 11.93	+18 22.6	1.482	2.432	8.1	21.7	2 11	8 14.49	+31 50.2	0.921	1.861	13.2	16.3
2 21	8 4.12	+18 47.4	1.557	2.451	12.5	22.0	2 21	8 8.82	+34 40.6	0.989	1.875	18.6	16.7
3 2	7 59.28	+19 3.8	1.654	2.469	16.1	22.2	3 2	8 7.17	+36 39.3	1.076	1.891	22.8	17.0
<b>236888</b>	2007 <i>SQ</i> <sub>5</sub>		1 25.7 62°81	7°0/21.6	18		<b>175945</b>	2000 <i>GC</i> <sub>13</sub>		1 25.7 314°93	8°8/21.5	18	
12 23	8 59.43	+39 19.1	2.184	3.001	12.3	20.1	12 23	9 0.74	+38 8.9	1.547	2.381	15.6	19.4
1 2	8 52.88	+40 10.8	2.123	3.005	9.9	20.0	1 2	8 54.99	+39 15.4	1.475	2.369	12.6	19.2
1 12	8 43.82	+40 52.6	2.087	3.009	7.8	19.8	1 12	8 45.66	+40 12.5	1.425	2.356	9.9	19.0
1 22	8 33.13	+41 17.9	2.077	3.013	7.0	19.8	1 22	8 33.78	+40 49.3	1.400	2.344	8.8	18.9
2 1	8 22.06	+41 21.6	2.096	3.018	7.9	19.9	2 1	8 21.03	+40 57.1	1.401	2.333	10.2	18.9
2 11	8 11.94	+41 2.8	2.141	3.022	10.0	20.0	2 11	8 9.42	+40 33.4	1.426	2.322	13.1	19.1
2 21	8 3.84	+40 23.9	2.211	3.026	12.4	20.2	2 21	8 0.58	+39 41.6	1.474	2.311	16.4	19.2
3 2	7 58.48	+39 29.1	2.302	3.030	14.6	20.3	3 2	7 55.50	+38 28.6	1.540	2.301	19.4	19.4
<b>18655</b>	1998 <i>FS</i> <sub>26</sub>		1 25.7 189°19	3°7/28.3	18		<b>426399</b>	2013 <i>PL</i> <sub>41</sub>		1 25.7 57°04	0°7/26.1	18	
12 23	8 51.94	+ 5 14.8	2.150	2.932	13.6	18.5	12 23	8 54.07	+15 48.3	1.828	2.651	14.1	21.7
1 2	8 47.08	+ 5 34.6	2.063	2.932	10.8	18.3	1 2	8 48.79	+16 2.3	1.767	2.667	10.5	21.5
1 12	8 40.29	+ 6 11.4	2.000	2.931	7.5	18.1	1 12	8 41.32	+16 25.4	1.730	2.684	6.3	21.3
1 22	8 32.18	+ 7 3.7	1.964	2.930	4.5	17.9	1 22	8 32.48	+16 54.1	1.719	2.701	2.0	21.1
2 1	8 23.59	+ 8 8.0	1.958	2.929	4.0	17.9	2 1	8 23.30	+17 24.2	1.738	2.718	2.7	21.2
2 11	8 15.47	+ 9 19.4	1.981	2.927	6.7	18.0	2 11	8 14.95	+17 52.0	1.785	2.735	6.9	21.5
2 21	8 8.70	+10 32.4	2.032	2.925	10.0	18.2	2 21	8 8.33	+18 14.6	1.859	2.752	10.7	21.7
3 2	8 3.93	+11 42.2	2.108	2.923	13.0	18.4	3 2	8 4.10	+18 30.5	1.955	2.769	13.9	22.0
<b>371996</b>	2008 <i>HH</i> <sub>12</sub>		1 25.7 222°02	2°3/24.1	17		<b>368023</b>	2012 <i>FM</i> <sub>80</sub>		1 25.7 305°92	3°7/23.8	18	
12 23	8 55.35	+23 16.0	2.273	3.096	11.7	21.5	12 23	8 55.60	+26 0.9	1.681	2.521	14.3	20.1
1 2	8 49.72	+24 10.5	2.184	3.086	8.6	21.3	1 2	8 50.57	+26 47.8	1.601	2.510	10.7	19.9
1 12	8 41.95	+25 9.2	2.122	3.077	5.3	21.1	1 12	8 42.76	+27 37.3	1.544	2.500	6.7	19.6
1 22	8 32.66	+26 6.8	2.089	3.067	2.4	20.9	1 22	8 32.96	+28 22.2	1.514	2.490	3.8	19.4
2 1	8 22.77	+26 57.9	2.086	3.056	3.9	21.0	2 1	8 22.41	+28 55.8	1.512	2.480	5.4	19.5
2 11	8 13.36	+27 38.1	2.113	3.045	7.3	21.2	2 11	8 12.61	+29 13.6	1.537	2.470	9.4	19.7
2 21	8 5.39	+28 5.5	2.167	3.033	10.7	21.4	2 21	8 4.84	+29 14.5	1.586	2.461	13.4	19.9
3 2	7 59.61	+28 20.0	2.245	3.021	13.6	21.5	3 2	7 59.99	+29 0.2	1.657	2.452	16.9	20.1
<b>506506</b>	2004 <i>BZ</i> <sub>163</sub>		1 25.7 244°35	0°3/25.5	17		<b>205268</b>	2000 <i>SG</i> <sub>55</sub>		1 25.7 140°99	0°5/25.9	18	
12 23	8 49.28	+19 33.8	3.620	4.429	8.0	21.4	12 23	8 58.08	+15 52.9	1.912	2.725	13.9	21.6
1 2	8 44.47	+19 43.4	3.522	4.417	5.9	21.2	1 2	8 51.74	+16 17.5	1.842	2.737	10.4	21.4
1 12	8 38.46	+19 55.7	3.451	4.405	3.5	21.0	1 12	8 43.12	+16 51.2	1.796	2.748	6.3	21.2
1 22	8 31.65	+20 8.9	3.410	4.392	1.0	20.8	1 22	8 32.99	+17 30.1	1.778	2.759	1.9	20.9
2 1	8 24.56	+20 21.3	3.402	4.380	1.7	20.9	2 1	8 22.44	+18 9.5	1.790	2.769	2.8	21.0
2 11	8 17.75	+20 31.0	3.425	4.367	4.3	21.1	2 11	8 12.65	+18 45.3	1.832	2.779	7.1	21.3
2 21	8 11.76	+20 37.1	3.477	4.354	6.7	21.2	2 21	8 4.63	+19 14.4	1.901	2.788	10.9	21.5
3 2	8 7.01	+20 38.9	3.555	4.341	8.8	21.3	3 2	7 59.08	+19 35.5	1.994	2.795	14.2	21.7
<b>497719</b>	2006 <i>SR</i> <sub>145</sub>		1 25.7 197°37	7°1/ 1.4	17		<b>57205</b>	2001 <i>QM</i> <sub>55</sub>		1 25.7 79°48	4°7/23.9	18	
12 23	8 49.51	-10 23.5	3.111	3.785	12.0	22.7	12 23	9 2.05	+28 3.3	1.381	2.223	16.7	19.1
1 2	8 44.78	-10 41.8	3.016	3.781	10.5	22.6	1 2	8 55.50	+28 48.3	1.328	2.237	12.5	18.9
1 12	8 38.71	-10 42.2	2.942	3.778	8.9	22.4	1 12	8 45.66	+29 31.6	1.298	2.252	8.0	18.7
1 22	8 31.74	-10 23.2	2.894	3.774	7.6	22.3	1 22	8 33.71	+30 4.7	1.293	2.266	4.8	18.5
2 1	8 24.42	- 9 45.0	2.872	3.770	7.1	22.3	2 1	8 21.33	+30 20.3	1.315	2.281	6.4	18.7
2 11	8 17.42	- 8 49.8	2.879	3.765	7.6	22.3	2 11	8 10.36	+30 15.9	1.363	2.295	10.5	18.9
2 21	8 11.31	- 7 41.6	2.913	3.760	8.8	22.4	2 21	8 2.14	+29 53.3	1.435	2.309	14.6	19.2
3 2	8 6.57	- 6 24.8	2.972	3.754	10.5	22.5	3 2	7 57.44	+29 16.5	1.528	2.323	18.0	19.5
<b>95980</b>	Haroldhill		1 25.7 110°47	5°1/29.6	18		<b>410062</b>	2007 <i>BH</i> <sub>65</sub>		1 25.7 72°58	2°1/27.1	18	
12 23	8 52.76	+ 0 31.3	2.282	3.037	13.8	19.9	1						

EPHEMERIDES

1 25.7

1 25.7

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>285360</b>	1999 TX <sub>33</sub>		1 25.7 105°02	3°5/27.5	18		<b>227915</b>	2007 FQ		1 25.7 298°72	1°8/24.8	18	
12 23	8 58.93	+ 8 48.9	1.490	2.297	17.5	21.1	12 23	8 55.07	+22 14.8	1.866	2.698	13.4	20.9
1 2	8 52.74	+ 8 54.6	1.430	2.316	13.5	20.9	1 2	8 49.80	+22 45.6	1.788	2.695	10.0	20.7
1 12	8 43.85	+ 9 18.5	1.392	2.335	8.9	20.7	1 12	8 42.12	+23 20.7	1.734	2.691	6.0	20.4
1 22	8 33.21	+ 9 58.0	1.380	2.353	4.6	20.5	1 22	8 32.80	+23 55.3	1.707	2.688	2.2	20.2
2 1	8 22.16	+10 48.2	1.395	2.371	4.3	20.5	2 1	8 22.91	+24 24.1	1.710	2.685	3.7	20.3
2 11	8 12.13	+11 42.8	1.439	2.388	8.3	20.8	2 11	8 13.72	+24 43.4	1.740	2.682	7.8	20.5
2 21	8 4.29	+12 36.2	1.508	2.405	12.5	21.0	2 21	8 6.30	+24 51.5	1.797	2.679	11.7	20.7
3 2	7 59.37	+13 23.9	1.599	2.421	16.2	21.3	3 2	8 1.42	+24 48.8	1.876	2.676	15.0	20.9
<b>118799</b>	2000 SQ <sub>35</sub>		1 25.7 10°55	6°4/29.8	18		<b>118068</b>	5011 T-2		1 25.7 75°86	7°8/30.3	18	
12 23	8 50.24	+ 0 35.2	1.657	2.440	17.0	19.3	12 23	8 54.73	- 2 0.3	1.718	2.477	17.4	19.9
1 2	8 46.29	+ 0 34.9	1.580	2.441	13.9	19.1	1 2	8 49.33	- 2 33.7	1.658	2.498	14.4	19.7
1 12	8 40.04	+ 0 59.1	1.524	2.442	10.5	18.9	1 12	8 41.70	- 2 43.1	1.618	2.518	11.3	19.5
1 22	8 32.19	+ 1 48.1	1.492	2.445	7.4	18.7	1 22	8 32.64	- 2 27.3	1.603	2.539	8.7	19.4
2 1	8 23.79	+ 2 58.7	1.486	2.447	6.5	18.7	2 1	8 23.24	- 1 47.9	1.614	2.559	7.8	19.4
2 11	8 16.03	+ 4 24.5	1.507	2.451	8.6	18.8	2 11	8 14.65	- 0 49.9	1.652	2.579	9.3	19.6
2 21	8 9.94	+ 5 57.5	1.554	2.454	12.0	19.0	2 21	8 7.85	+ 0 19.7	1.715	2.600	12.0	19.8
3 2	8 6.30	+ 7 29.7	1.624	2.458	15.4	19.3	3 2	8 3.47	+ 1 33.6	1.801	2.619	14.8	20.0
<b>64566</b>	2001 WD <sub>36</sub>		1 25.7 330°49	0°8/25.3	18		<b>11986</b>	1995 VP		1 25.7 289°35	2°7/27.1	18	
12 23	8 54.51	+17 3.9	1.405	2.244	16.6	18.9	12 23	8 53.47	+11 12.5	1.963	2.769	13.9	17.7
1 2	8 50.02	+18 0.7	1.331	2.241	12.4	18.6	1 2	8 48.43	+11 2.2	1.876	2.764	10.7	17.4
1 12	8 42.55	+19 11.9	1.280	2.238	7.4	18.3	1 12	8 41.23	+11 3.3	1.813	2.758	7.0	17.2
1 22	8 32.94	+20 30.5	1.254	2.236	2.0	18.0	1 22	8 32.54	+11 14.6	1.778	2.752	3.5	17.0
2 1	8 22.51	+21 47.7	1.255	2.234	3.9	18.1	2 1	8 23.32	+11 33.8	1.770	2.747	3.4	17.0
2 11	8 12.90	+22 55.5	1.283	2.232	9.2	18.4	2 11	8 14.67	+11 57.5	1.792	2.741	7.0	17.2
2 21	8 5.49	+23 48.6	1.336	2.230	14.0	18.7	2 21	8 7.54	+12 22.4	1.841	2.736	10.7	17.4
3 2	8 1.24	+24 25.3	1.409	2.228	18.1	18.9	3 2	8 2.65	+12 45.6	1.912	2.730	14.1	17.6
<b>209039</b>	2003 OH <sub>10</sub>		1 25.7 147°75	0°1/25.7	18		<b>165465</b>	2001 AS <sub>20</sub>		1 25.7 8°60	3°8/27.4	18	
12 23	8 58.23	+17 31.5	1.997	2.811	13.4	21.5	12 23	8 51.74	+ 9 54.2	1.208	2.044	19.0	19.1
1 2	8 51.80	+17 53.8	1.925	2.822	9.9	21.3	1 2	8 48.10	+ 9 46.8	1.142	2.045	14.7	18.9
1 12	8 43.14	+18 23.4	1.878	2.832	5.9	21.1	1 12	8 41.43	+ 9 59.5	1.097	2.047	9.8	18.6
1 22	8 33.02	+18 56.2	1.859	2.841	1.6	20.8	1 22	8 32.66	+10 30.7	1.074	2.050	5.0	18.3
2 1	8 22.47	+19 28.0	1.870	2.849	2.8	20.9	2 1	8 23.20	+11 15.8	1.076	2.054	4.7	18.3
2 11	8 12.66	+19 55.1	1.912	2.857	6.9	21.2	2 11	8 14.71	+12 7.8	1.103	2.059	9.3	18.6
2 21	8 4.58	+20 15.2	1.980	2.864	10.7	21.4	2 21	8 8.56	+12 59.7	1.153	2.065	14.2	18.9
3 2	7 58.89	+20 27.6	2.073	2.870	13.9	21.7	3 2	8 5.63	+13 46.1	1.223	2.072	18.4	19.2
<b>293104</b>	2006 XY <sub>17</sub>		1 25.7 305°99	2°8/24.2	18		<b>231983</b>	2001 QC <sub>296</sub>		1 25.7 94°75	4°6/28.3	18	
12 23	8 53.87	+23 4.1	1.646	2.487	14.5	20.7	12 23	8 56.32	+ 5 32.8	1.535	2.333	17.5	20.3
1 2	8 49.42	+23 56.1	1.557	2.468	10.8	20.4	1 2	8 50.79	+ 5 41.1	1.473	2.350	13.7	20.1
1 12	8 42.18	+24 54.9	1.491	2.450	6.6	20.1	1 12	8 42.71	+ 6 10.9	1.432	2.367	9.5	19.9
1 22	8 32.85	+25 53.9	1.452	2.431	3.0	19.8	1 22	8 32.95	+ 7 0.0	1.416	2.384	5.6	19.7
2 1	8 22.62	+26 45.5	1.440	2.413	4.9	19.9	2 1	8 22.75	+ 8 3.8	1.428	2.400	5.0	19.7
2 11	8 12.98	+27 23.6	1.456	2.395	9.3	20.1	2 11	8 13.47	+ 9 15.4	1.468	2.416	8.3	19.9
2 21	8 5.26	+27 45.7	1.496	2.377	13.7	20.3	2 21	8 6.20	+10 27.6	1.533	2.432	12.2	20.2
3 2	8 0.46	+27 51.7	1.557	2.360	17.4	20.5	3 2	8 1.68	+11 34.7	1.621	2.447	15.8	20.5
<b>275505</b>	1995 SF <sub>73</sub>		1 25.7 62°84	3°0/27.4	18		<b>287582</b>	2003 FQ <sub>69</sub>		1 25.7 247°20	1°6/24.7	17	
12 23	8 52.72	+ 9 25.4	1.878	2.683	14.5	21.8	12 23	8 54.86	+21 14.3	2.238	3.059	11.9	21.3
1 2	8 47.84	+ 9 30.1	1.803	2.689	11.2	21.6	1 2	8 49.44	+21 58.9	2.142	3.043	8.8	21.1
1 12	8 40.83	+ 9 49.3	1.752	2.695	7.4	21.4	1 12	8 41.87	+22 49.2	2.071	3.027	5.3	20.8
1 22	8 32.39	+10 21.0	1.727	2.701	3.8	21.2	1 22	8 32.75	+23 40.6	2.030	3.010	1.9	20.6
2 1	8 23.50	+11 1.8	1.731	2.707	3.6	21.2	2 1	8 22.98	+24 28.0	2.019	2.993	3.4	20.6
2 11	8 15.27	+11 47.2	1.763	2.713	7.0	21.4	2 11	8 13.62	+25 7.0	2.037	2.975	7.1	20.8
2 21	8 8.63	+12 32.8	1.822	2.719	10.7	21.7	2 21	8 5.67	+25 35.2	2.084	2.957	10.7	21.0
3 2	8 4.26	+13 14.7	1.904	2.725	14.0	21.9	3 2	7 59.90	+25 51.9	2.153	2.939	13.8	21.2
<b>447249</b>	2005 UF <sub>236</sub>		1 25.7 323°41	2°5/24.5	18		<b>419864</b>	2011 AV <sub>20</sub>		1 25.7 324°18	0°8/25.4	18	
12 23	8 56.31	+21 12.7	1.358	2.203	16.7	21.4	12 23	8 54.42	+20 13.1	1.620	2.457	14.9	20.8
1 2	8 51.51	+22 9.9	1.287	2.201	12.4	21.1	1 2	8 49.68	+20 22.6	1.535	2.444	11.1	20.6
1 12	8 43.51	+23 16.5	1.238	2.198	7.5	20.8	1 12	8 42.24	+20 38.1	1.474	2.432	6.7	20.3
1 22	8 33.21	+24 24.5	1.215	2.195	2.9	20.5	1 22	8 32.88	+20 55.6	1.438	2.420	1.9	19.9
2 1	8 22.09	+25 24.7	1.218	2.193	5.0	20.7	2 1	8 22.80	+21 10.4	1.430	2.409	3.5	20.0
2 11	8 11.89	+26 10.1	1.248	2.191	10.0	20.9	2 11	8 13.43	+21 18.7	1.449	2.398	8.3	20.3
2 21	8 4.10	+26 37.8	1.301	2.189	14.8	21.2	2 21	8 6.01	+21 18.8	1.494	2.388	12.8	20.5
3 2	7 59.69	+26 48.1	1.374	2.187	18.8	21.5	3 2	8 1.42	+21 10.3	1.559	2.378	16.7	20.7
<b>478407</b>	2012 CQ		1 25.7 48°80	14°3/24.4	17		<b>363831</b>	2005 PY <sub>16</sub>		1 25.7 73°44	2°8/27.1	16	
12 23	9 23.85	+47 18.3	0.997	1.820	23.0	20.2	12 23	9 13.13	+ 8 37.6	1.232	2.027	21.1	22.2
1 2	9 13.50	+47 53.9	0.953	1.829	19.5	20.0	1 2	9 2.84	+ 9 26.9	1.207	2.089	15.8	22.1
1 12	8 56.98	+47 58.5	0.925	1.838	16.2	19.8	1 12	8 49.53	+10 36.1	1.204	2.148	9.9	21.9
1 22	8 36.80	+47 14.1	0.918	1.847	14.4	19.8	1 22	8 34.70	+11 57.4	1.228	2.205	4.2	21.7
2 1	8 16.79	+45 33.5	0.934	1.857	15.0	19.8	2 1	8 20.17	+13 21.5	1.282	2.260	4.0	21.9
2 11	8 0.57	+43 5.5	0.972	1.867	17.7	20.0	2 11	8 7.67	+14 39.7	1.365	2.313	8.9	22.3
2 21	7 50.01	+40 9.2	1.030	1.877	21.1	20.3	2 21	7 58.30	+15 46.6	1.475	2.364	13.3	22.7
3 2	7 45.39	+37 3.0	1.107	1.888	24.3	20.5	3 2	7 52.55	+16 40.3	1.606	2.413	16.8	23.0
<b>264740</b>	2002 CV <sub>181</sub>		1 25.7 37°78	0°2/25.6	18		<b>26578</b>	Cellinekim		1 25.7 73°21	4°6/28.8	18	
12 23	8 54.53	+18 16.0	1.734	2.564	14.4	20.6	12 23	8 51.39	+ 3 58.2	2.122	2.900	13.9	18.6
1 2	8 4												

EPHEMERIDES

1 25.7

1 25.8

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>406094</b>	2006 <i>UK</i> <sub>263</sub>		1 25.7 91°36	8°0/21.3	18		<b>195848</b>	2002 <i>QL</i> <sub>77</sub>		1 25.7 127°37	1°2/25.0	18	
12 23	9 2.74	+38 22.4	1.809	2.632	14.2	20.6	12 23	8 53.41	+20 32.6	2.185	3.009	12.0	20.8
1 2	8 55.72	+39 44.6	1.765	2.651	11.3	20.5	1 2	8 48.23	+21 6.7	2.109	3.012	8.9	20.6
1 12	8 45.71	+40 56.0	1.745	2.670	8.9	20.3	1 12	8 41.05	+21 46.0	2.058	3.014	5.3	20.4
1 22	8 33.78	+41 47.3	1.752	2.688	8.0	20.3	1 22	8 32.53	+22 26.0	2.036	3.017	1.7	20.2
2 1	8 21.46	+42 12.0	1.786	2.707	9.1	20.4	2 1	8 23.58	+23 2.5	2.043	3.019	3.0	20.3
2 11	8 10.38	+42 8.8	1.845	2.725	11.5	20.6	2 11	8 15.22	+23 31.9	2.080	3.022	6.7	20.5
2 21	8 1.81	+41 41.2	1.928	2.742	14.0	20.8	2 21	8 8.33	+23 52.1	2.144	3.024	10.1	20.7
3 2	7 56.48	+40 54.7	2.031	2.759	16.3	21.0	3 2	8 3.56	+24 2.7	2.231	3.026	13.1	20.9
<b>72961</b>	2002 <i>CJ</i> <sub>112</sub>		1 25.7 269°65	2°1/24.7	18		<b>322245</b>	2011 <i>CX</i> <sub>77</sub>		1 25.7 300°02	2°7/26.9	17	
12 23	8 56.84	+21 46.4	1.644	2.479	14.8	19.6	12 23	8 54.42	+12 24.8	1.839	2.651	14.4	20.5
1 2	8 51.59	+22 26.4	1.556	2.464	11.1	19.3	1 2	8 49.50	+12 4.8	1.734	2.625	11.2	20.2
1 12	8 43.48	+23 13.4	1.492	2.450	6.7	19.0	1 12	8 42.12	+11 55.0	1.652	2.599	7.3	19.9
1 22	8 33.26	+24 1.2	1.454	2.435	2.5	18.7	1 22	8 32.91	+11 54.7	1.597	2.573	3.5	19.6
2 1	8 22.16	+24 43.0	1.444	2.419	4.3	18.8	2 1	8 22.85	+12 1.9	1.570	2.547	3.6	19.6
2 11	8 11.70	+25 13.4	1.462	2.404	9.0	19.0	2 11	8 13.20	+12 13.9	1.572	2.521	7.7	19.7
2 21	8 3.24	+25 30.0	1.505	2.389	13.5	19.3	2 21	8 5.13	+12 27.6	1.599	2.496	12.0	19.9
3 2	7 57.75	+25 32.9	1.570	2.373	17.3	19.5	3 2	7 59.53	+12 40.5	1.649	2.470	15.8	20.1
<b>156753</b>	2002 <i>YW</i>		1 25.7 69°27	0°9/25.3	18		<b>239328</b>	2007 <i>RZ</i> <sub>49</sub>		1 25.8 125°89	5°6/29.4	18	
12 23	8 57.32	+17 38.8	1.301	2.141	17.6	19.2	12 23	8 55.39	+1 14.8	1.906	2.672	15.7	20.7
1 2	8 52.04	+18 30.7	1.246	2.156	13.0	19.0	1 2	8 49.74	+1 14.9	1.834	2.686	12.7	20.5
1 12	8 43.68	+19 34.8	1.212	2.171	7.7	18.8	1 12	8 41.97	+1 35.8	1.785	2.700	9.4	20.3
1 22	8 33.26	+20 43.5	1.204	2.186	2.1	18.4	1 22	8 32.79	+2 17.0	1.762	2.714	6.5	20.2
2 1	8 22.31	+21 48.2	1.223	2.202	4.0	18.6	2 1	8 23.20	+3 15.5	1.767	2.727	5.8	20.2
2 11	8 12.53	+22 41.7	1.268	2.217	9.3	19.0	2 11	8 14.29	+4 26.0	1.800	2.739	7.8	20.3
2 21	8 5.24	+23 20.4	1.338	2.232	14.0	19.3	2 21	8 7.00	+5 42.1	1.861	2.751	10.9	20.5
3 2	8 1.24	+23 43.7	1.427	2.247	17.9	19.6	3 2	8 1.99	+6 57.6	1.946	2.762	13.9	20.7
<b>5176</b>	Yoichi		1 25.7 85°73	2°0/24.5	18 R		<b>498914</b>	2009 <i>AS</i> <sub>39</sub>		1 25.8 269°22	0°1/25.8	17	
12 23	8 58.04	+21 49.8	1.961	2.784	13.2	16.8	12 23	8 51.14	+15 18.0	2.466	3.277	11.2	21.1
1 2	8 51.59	+22 47.6	1.913	2.815	9.7	16.6	1 2	8 46.51	+16 9.6	2.365	3.261	8.4	20.9
1 12	8 42.97	+23 49.2	1.890	2.845	5.7	16.4	1 12	8 40.06	+17 11.4	2.290	3.244	5.1	20.7
1 22	8 33.00	+24 48.3	1.896	2.875	2.3	16.2	1 22	8 32.29	+18 19.8	2.245	3.226	1.4	20.4
2 1	8 22.79	+25 39.3	1.932	2.905	3.8	16.4	2 1	8 23.95	+19 30.1	2.230	3.209	2.3	20.4
2 11	8 13.48	+26 18.2	1.998	2.933	7.4	16.7	2 11	8 15.92	+20 37.5	2.246	3.191	6.0	20.6
2 21	8 6.01	+26 43.8	2.090	2.962	10.8	16.9	2 21	8 9.03	+21 37.9	2.290	3.173	9.5	20.8
3 2	8 0.97	+26 56.7	2.206	2.989	13.6	17.2	3 2	8 3.95	+22 29.0	2.359	3.155	12.4	21.0
<b>95354</b>	2002 <i>CV</i> <sub>140</sub>		1 25.7 157°16	0°6/25.3	18		<b>313220</b>	2001 <i>SC</i> <sub>284</sub>		1 25.8 134°94	0°5/26.2	17	
12 23	8 53.59	+16 58.4	2.157	2.974	12.4	20.1	12 23	8 48.22	+15 29.4	3.570	4.371	8.3	21.9
1 2	8 48.41	+18 1.3	2.079	2.978	9.2	19.9	1 2	8 43.69	+15 46.0	3.489	4.379	6.1	21.8
1 12	8 41.18	+19 13.8	2.027	2.982	5.4	19.6	1 12	8 38.04	+16 7.5	3.436	4.386	3.7	21.6
1 22	8 32.56	+20 30.7	2.003	2.985	1.5	19.4	1 22	8 31.67	+16 32.2	3.413	4.394	1.2	21.5
2 1	8 23.43	+21 46.1	2.011	2.988	2.8	19.5	2 1	8 25.08	+16 58.1	3.422	4.401	1.6	21.5
2 11	8 14.83	+22 54.4	2.048	2.991	6.7	19.7	2 11	8 18.82	+17 23.2	3.461	4.408	4.1	21.7
2 21	8 7.67	+23 52.0	2.114	2.994	10.3	20.0	2 21	8 13.37	+17 45.8	3.530	4.414	6.4	21.9
3 2	8 2.64	+24 37.2	2.203	2.996	13.3	20.2	3 2	8 9.12	+18 4.7	3.626	4.421	8.5	22.0
<b>4393</b>	Dawe		1 25.7 285°92	0°1/25.7	18		<b>395796</b>	2012 <i>WT</i> <sub>21</sub>		1 25.8 179°64	3°1/26.9	18	
12 23	8 51.25	+17 19.2	2.380	3.197	11.4	17.8	12 23	8 58.45	+12 0.0	1.439	2.259	17.4	21.1
1 2	8 46.56	+17 42.8	2.287	3.186	8.5	17.6	1 2	8 52.76	+11 39.1	1.364	2.259	13.4	20.8
1 12	8 40.04	+18 13.4	2.220	3.174	5.1	17.4	1 12	8 44.13	+11 32.0	1.311	2.259	8.7	20.6
1 22	8 32.24	+18 48.1	2.181	3.163	1.4	17.1	1 22	8 33.46	+11 37.2	1.283	2.259	4.2	20.3
2 1	8 23.95	+19 23.2	2.172	3.151	2.4	17.1	2 1	8 22.10	+11 51.9	1.282	2.259	4.2	20.3
2 11	8 16.08	+19 55.2	2.193	3.140	6.1	17.4	2 11	8 11.63	+12 11.9	1.308	2.259	8.8	20.5
2 21	8 9.46	+20 21.7	2.241	3.128	9.5	17.6	2 21	8 3.38	+12 33.2	1.359	2.259	13.4	20.8
3 2	8 4.72	+20 41.1	2.314	3.117	12.4	17.7	3 2	7 58.23	+12 52.4	1.431	2.258	17.5	21.1
<b>221948</b>	1993 <i>FO</i> <sub>59</sub>		1 25.7 359°38	1°8/26.8	18		<b>270646</b>	2002 <i>PD</i> <sub>122</sub>		1 25.8 235°18	3°7/27.3	18	
12 23	8 52.71	+12 14.5	1.890	2.703	14.1	20.2	12 23	8 57.99	+9 27.2	1.616	2.421	16.4	21.1
1 2	8 47.93	+12 30.2	1.810	2.703	10.7	20.0	1 2	8 52.35	+9 17.6	1.525	2.410	12.8	20.9
1 12	8 40.97	+12 58.6	1.754	2.703	6.8	19.8	1 12	8 43.92	+9 23.7	1.456	2.398	8.7	20.6
1 22	8 32.51	+13 36.8	1.725	2.703	2.8	19.5	1 22	8 33.44	+9 44.7	1.413	2.385	4.6	20.3
2 1	8 23.54	+14 21.1	1.724	2.703	3.0	19.5	2 1	8 22.09	+10 17.7	1.397	2.372	4.4	20.3
2 11	8 15.17	+15 6.5	1.752	2.703	7.0	19.8	2 11	8 11.33	+10 57.9	1.410	2.359	8.5	20.5
2 21	8 8.39	+15 49.1	1.807	2.703	10.8	20.0	2 21	8 2.47	+11 40.3	1.448	2.345	13.0	20.7
3 2	8 3.90	+16 25.8	1.885	2.703	14.2	20.2	3 2	7 56.47	+12 20.4	1.509	2.330	17.0	20.9
<b>162423</b>	2000 <i>EK</i> <sub>88</sub>		1 25.7 275°90	2°9/27.2	18		<b>29757</b>	1999 <i>CH</i> <sub>8</sub>		1 25.8 266°22	2°8/23.9	18 R	
12 23	8 53.28	+10 35.0	2.171	2.971	13.0	19.8	12 23	8 54.51	+22 35.8	1.909	2.741	13.2	17.8
1 2	8 48.10	+10 17.3	2.083	2.966	10.0	19.6	1 2	8 49.60	+23 49.8	1.821	2.728	9.8	17.5
1 12	8 40.96	+10 9.9	2.020	2.961	6.7	19.4	1 12	8 42.19	+25 11.4	1.758	2.715	6.0	17.3
1 22	8 32.50	+10 12.1	1.984	2.956	3.6	19.2	1 22	8 32.95	+26 33.4	1.723	2.701	2.9	17.0
2 1	8 23.56	+10 22.2	1.977	2.951	3.4	19.2	2 1	8 22.92	+27 48.3	1.718	2.688	4.6	17.1
2 11	8 15.15	+10 37.5	1.999	2.946	6.5	19.3	2 11	8 13.37	+28 49.7	1.741	2.674	8.6	17.3
2 21	8 8.11	+10 55.3	2.049	2.941	10.0	19.5	2 21	8 5.48	+29 34.4	1.791	2.660	12.4	17.5
3 2	8 3.10	+11 12.9	2.123	2.936	13.0	19.7	3 2	8 0.14	+30 2.1	1.862	2.646	15.7	17.7
<b>249009</b>	2007 <i>QB</i> <sub>2</sub>		1 25.7 128°29	5°1/21.8	18		<b>135058</b>	2001 <i>OT</i> <sub>87</sub>		1 25.8 23°78	5°9/28.1	18	
12 23	8 58.47	+37 28.1	2.927	3.734	9.8	20.6	12 23	8 54.82	+5 40.5	1.79			



EPHEMERIDES

1 25.8

1 25.8

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>129587</b>	1997 <i>TH</i> <sub>21</sub>		1 25.8 36°15'	2.8	24.7	18	<b>107270</b>	2001 <i>BN</i> <sub>70</sub>		1 25.8 109°73'	1.3	26.4	18
12 23	8 57.38	+23 2.9	1.177	2.031	18.1	20.1	12 23	9 1.28	+14 11.1	1.511	2.328	16.8	19.5
1 2	8 52.40	+23 38.0	1.126	2.043	13.4	19.9	1 2	8 54.52	+14 25.6	1.452	2.349	12.6	19.3
1 12	8 44.02	+24 18.3	1.095	2.056	8.1	19.6	1 12	8 44.99	+14 52.4	1.417	2.369	7.7	19.1
1 22	8 33.42	+24 55.5	1.088	2.069	3.2	19.4	1 22	8 33.70	+15 27.5	1.408	2.388	2.7	18.8
2 1	8 22.33	+25 22.2	1.107	2.083	5.2	19.5	2 1	8 22.02	+16 5.6	1.427	2.407	3.3	18.9
2 11	8 12.62	+25 33.8	1.151	2.098	10.3	19.9	2 11	8 11.45	+16 41.4	1.475	2.425	8.1	19.2
2 21	8 5.70	+25 29.9	1.218	2.113	15.0	20.2	2 21	8 3.16	+17 11.5	1.549	2.442	12.5	19.5
3 2	8 2.36	+25 12.3	1.304	2.129	19.0	20.5	3 2	7 57.88	+17 34.0	1.645	2.459	16.2	19.8
<b>412664</b>	2014 <i>OH</i> <sub>196</sub>		1 25.8 194°00'	0.2	25.9	18	<b>334995</b>	2004 <i>FR</i> <sub>135</sub>		1 25.8 17°52'	7.0	30.8	18
12 23	8 57.48	+17 1.1	2.058	2.870	13.1	21.7	12 23	8 49.43	- 3 17.7	2.127	2.873	14.9	20.5
1 2	8 51.37	+17 18.1	1.973	2.868	9.8	21.5	1 2	8 45.29	- 3 31.3	2.046	2.876	12.5	20.3
1 12	8 43.02	+17 42.7	1.913	2.866	5.9	21.3	1 12	8 39.33	- 3 23.5	1.986	2.878	9.9	20.1
1 22	8 33.13	+18 11.5	1.881	2.862	1.7	21.0	1 22	8 32.13	- 2 53.4	1.951	2.881	7.7	20.0
2 1	8 22.70	+18 40.4	1.879	2.859	2.7	21.0	2 1	8 24.51	- 2 2.2	1.942	2.884	7.0	20.0
2 11	8 12.88	+19 5.9	1.908	2.854	6.9	21.3	2 11	8 17.38	- 0 54.2	1.961	2.888	8.2	20.0
2 21	8 4.65	+19 25.4	1.964	2.849	10.7	21.5	2 21	8 11.55	+ 0 24.7	2.007	2.891	10.5	20.2
3 2	7 58.75	+19 38.0	2.044	2.843	14.0	21.7	3 2	8 7.64	+ 1 48.0	2.076	2.895	13.1	20.4
<b>216208</b>	2006 <i>UC</i> <sub>58</sub>		1 25.8 129°85'	1.6	24.8	18	<b>194219</b>	2001 <i>TD</i> <sub>137</sub>		1 25.8 117°63'	0.9	25.3	18
12 23	8 57.01	+21 11.5	2.033	2.855	12.9	21.5	12 23	8 58.58	+17 29.5	1.670	2.493	15.2	20.2
1 2	8 50.97	+21 55.1	1.966	2.868	9.5	21.3	1 2	8 52.49	+18 28.8	1.608	2.510	11.2	20.0
1 12	8 42.72	+22 43.5	1.924	2.880	5.6	21.1	1 12	8 43.80	+19 38.4	1.570	2.526	6.6	19.8
1 22	8 33.04	+23 31.5	1.911	2.892	2.0	20.8	1 22	8 33.39	+20 51.7	1.560	2.542	1.8	19.5
2 1	8 22.94	+24 13.8	1.928	2.903	3.4	21.0	2 1	8 22.49	+22 1.1	1.579	2.557	3.4	19.7
2 11	8 13.58	+24 46.6	1.974	2.914	7.2	21.2	2 11	8 12.50	+23 0.4	1.627	2.571	8.0	20.0
2 21	8 5.92	+25 8.1	2.048	2.924	10.8	21.5	2 21	8 4.54	+23 46.4	1.702	2.585	12.2	20.2
3 2	8 0.62	+25 18.5	2.145	2.933	13.7	21.7	3 2	7 59.36	+24 18.3	1.798	2.598	15.6	20.5
<b>461965</b>	2006 <i>UQ</i> <sub>111</sub>		1 25.8 14°89'	0.8	25.9	18	<b>152903</b>	2000 <i>DP</i> <sub>46</sub>		1 25.8 267°89'	0.5	25.9	18
12 23	8 52.52	+18 14.3	1.004	1.868	19.8	20.0	12 23	8 57.14	+16 20.0	1.475	2.305	16.4	20.6
1 2	8 49.01	+17 51.4	0.955	1.877	14.7	19.7	1 2	8 51.98	+16 34.1	1.391	2.295	12.4	20.4
1 12	8 42.06	+17 38.5	0.926	1.888	8.9	19.4	1 12	8 43.82	+16 59.6	1.329	2.285	7.6	20.1
1 22	8 32.90	+17 32.2	0.919	1.901	2.7	19.1	1 22	8 33.47	+17 32.8	1.293	2.275	2.3	19.7
2 1	8 23.27	+17 28.4	0.936	1.917	3.9	19.2	2 1	8 22.25	+18 8.1	1.284	2.264	3.4	19.7
2 11	8 15.09	+17 23.5	0.975	1.934	9.8	19.6	2 11	8 11.76	+18 40.1	1.302	2.253	8.8	20.0
2 21	8 9.72	+17 15.2	1.037	1.953	15.0	20.0	2 21	8 3.41	+19 5.0	1.345	2.243	13.7	20.3
3 2	8 7.90	+17 2.2	1.117	1.974	19.3	20.3	3 2	7 58.18	+19 21.0	1.409	2.232	17.9	20.5
<b>345095</b>	2005 <i>MB</i> <sub>40</sub>		1 25.8 185°00'	3.2	27.2	18	<b>66608</b>	1999 <i>RW</i> <sub>196</sub>		1 25.8 129°62'	2.1	26.8	18
12 23	8 59.46	+10 21.5	1.746	2.546	15.6	21.8	12 23	9 1.12	+12 36.9	1.678	2.485	15.9	19.8
1 2	8 53.10	+10 9.9	1.664	2.547	12.1	21.6	1 2	8 54.22	+12 37.9	1.613	2.502	12.0	19.6
1 12	8 44.19	+10 11.7	1.605	2.547	8.0	21.3	1 12	8 44.76	+12 51.2	1.570	2.518	7.6	19.3
1 22	8 33.50	+10 25.6	1.572	2.546	4.1	21.1	1 22	8 33.64	+13 14.0	1.555	2.533	3.2	19.1
2 1	8 22.18	+10 48.9	1.569	2.544	4.0	21.1	2 1	8 22.11	+13 42.3	1.569	2.547	3.4	19.1
2 11	8 11.57	+11 17.5	1.595	2.542	7.9	21.3	2 11	8 11.53	+14 11.9	1.612	2.561	7.7	19.4
2 21	8 2.82	+11 47.6	1.647	2.539	12.0	21.5	2 21	8 3.00	+14 39.2	1.682	2.573	11.8	19.7
3 2	7 56.75	+12 15.8	1.722	2.535	15.6	21.8	3 2	7 57.25	+15 1.8	1.775	2.585	15.3	20.0
<b>156378</b>	2001 <i>YS</i> <sub>47</sub>		1 25.8 23°71'	0.1	25.8	18	<b>49999</b>	2000 <i>AW</i> <sub>14</sub>		1 25.8 109°36'	1.1	25.3	18
12 23	8 53.44	+17 44.8	1.286	2.134	17.3	20.0	12 23	9 1.49	+19 13.2	1.572	2.398	15.9	19.7
1 2	8 49.15	+17 56.4	1.232	2.146	12.9	19.8	1 2	8 54.66	+19 53.3	1.517	2.419	11.7	19.5
1 12	8 41.95	+18 18.3	1.200	2.159	7.7	19.5	1 12	8 45.07	+20 40.9	1.484	2.440	6.9	19.3
1 22	8 32.87	+18 45.6	1.191	2.173	2.1	19.2	1 22	8 33.73	+21 29.8	1.479	2.461	2.0	19.0
2 1	8 23.34	+19 12.7	1.209	2.189	3.5	19.3	2 1	8 22.00	+22 13.5	1.503	2.480	3.6	19.2
2 11	8 14.96	+19 34.6	1.252	2.205	8.8	19.7	2 11	8 11.39	+22 47.1	1.555	2.499	8.3	19.5
2 21	8 8.93	+19 48.6	1.319	2.223	13.4	20.0	2 21	8 3.05	+23 8.7	1.633	2.518	12.5	19.8
3 2	8 5.99	+19 53.5	1.406	2.241	17.3	20.3	3 2	7 57.72	+23 18.6	1.734	2.535	16.0	20.1
<b>145218</b>	2005 <i>JH</i> <sub>49</sub>		1 25.8 87°52'	2.3	27.2	18	<b>60965</b>	2000 <i>JA</i> <sub>77</sub>		1 25.8 97°77'	0.5	25.5	18
12 23	8 57.63	+10 5.6	1.964	2.759	14.3	20.2	12 23	8 58.05	+18 19.1	1.463	2.296	16.4	19.3
1 2	8 51.16	+10 27.9	1.912	2.794	10.8	20.0	1 2	8 52.45	+18 45.9	1.396	2.303	12.2	19.1
1 12	8 42.69	+11 3.4	1.884	2.827	6.9	19.8	1 12	8 43.94	+19 22.2	1.352	2.310	7.3	18.8
1 22	8 33.01	+11 48.8	1.884	2.860	3.2	19.7	1 22	8 33.46	+20 2.4	1.334	2.316	2.0	18.5
2 1	8 23.13	+12 39.7	1.915	2.892	3.1	19.7	2 1	8 22.40	+20 40.4	1.344	2.323	3.5	18.6
2 11	8 14.11	+13 31.2	1.975	2.923	6.5	20.0	2 11	8 12.32	+21 11.0	1.381	2.330	8.7	18.9
2 21	8 6.80	+14 19.5	2.063	2.954	10.0	20.3	2 21	8 4.50	+21 31.3	1.443	2.336	13.3	19.2
3 2	8 1.77	+15 1.7	2.176	2.984	13.0	20.5	3 2	7 59.78	+21 40.8	1.526	2.342	17.1	19.5
<b>293119</b>	2006 <i>XB</i> <sub>36</sub>		1 25.8 2°02'	27.3	16.9	18	<b>81749</b>	2000 <i>JX</i> <sub>53</sub>		1 25.8 161°20'	3.5	28.4	18
12 23	8 45.49	-26 58.8	1.083	1.754	30.3	18.6	12 23	8 53.41	+ 5 1.4	2.387	3.159	12.7	20.2
1 2	8 44.11	-31 4.2	1.045	1.749	29.4	18.5	1 2	8 48.03	+ 5 22.8	2.304	3.166	10.0	20.1
1 12	8 39.45	-34 21.3	1.019	1.747	28.7	18.4	1 12	8 40.89	+ 5 59.5	2.244	3.172	7.0	19.9
1 22	8 32.31	-36 36.7	1.002	1.748	28.1	18.4	1 22	8 32.57	+ 6 50.0	2.213	3.177	4.3	19.7
2 1	8 24.10	-37 41.1	0.995	1.752	27.6	18.3	2 1	8 23.84	+ 7 51.2	2.212	3.182	3.7	19.7
2 11	8 16.71	-37 33.7	0.998	1.760	27.4	18.3	2 11	8 15.59	+ 8 58.4	2.242	3.186	6.1	19.8
2 21	8 11.83	-36 21.5	1.011	1.771	27.4	18.4	2 21	8 8.58	+10 7.0	2.300	3.189	9.2	20.0
3 2	8 10.64	-34 16.9	1.033	1.785	27.5	18.5	3 2	8 3.41	+11 12.8	2.384	3.192	11.9	20.2
<b>416997</b>	2005 <i>TV</i> <sub>162</sub>		1 25.8 128°84'	1.6	24.9	18	<b>367552</b>	2009 <i>ST</i> <sub>2</sub>		1 25.8 103°21'	2.0	24.8	18
12 23	8 56.55	+21 57.7	2.002	2.827									

EPHEMERIDES

1 25.8

1 25.8

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>165665</b>	2001 <i>MJ</i> <sub>31</sub>		1 25.8 140°40	3°8/28.5	18		<b>489513</b>	2007 <i>PC</i> <sub>35</sub>		1 25.8 114°81	2°0/24.9	18	
12 23	8 51.77	+ 4 56.2	2.603	3.373	11.8	20.5	12 23	9 3.58	+24 2.6	1.935	2.752	13.6	21.4
1 2	8 46.66	+ 4 47.0	2.522	3.381	9.4	20.4	1 2	8 55.73	+24 18.8	1.877	2.776	10.0	21.2
1 12	8 39.99	+ 4 50.5	2.466	3.388	6.7	20.2	1 12	8 45.51	+24 35.5	1.844	2.798	6.0	21.0
1 22	8 32.30	+ 5 6.2	2.437	3.395	4.4	20.1	1 22	8 33.85	+24 48.1	1.840	2.820	2.4	20.8
2 1	8 24.29	+ 5 32.5	2.438	3.402	4.0	20.1	2 1	8 21.95	+24 52.6	1.866	2.840	3.7	21.0
2 11	8 16.74	+ 6 6.5	2.469	3.408	6.0	20.2	2 11	8 11.12	+24 47.1	1.923	2.860	7.5	21.2
2 21	8 10.31	+ 6 45.1	2.528	3.415	8.5	20.4	2 21	8 2.32	+24 32.1	2.007	2.880	11.1	21.5
3 2	8 5.54	+ 7 24.7	2.612	3.420	11.0	20.5	3 2	7 56.21	+24 9.1	2.114	2.898	14.1	21.7
<b>109639</b>	2001 <i>RA</i>		1 25.8 12°00	12°5/31.3	18		<b>284850</b>	2009 <i>BM</i> <sub>105</sub>		1 25.8 168°93	2°1/27.5	18	
12 23	8 54.16	- 9 41.5	1.697	2.416	19.1	18.8	12 23	8 50.49	+ 9 30.0	2.597	3.389	11.3	21.2
1 2	8 49.26	-11 27.9	1.626	2.417	16.9	18.7	1 2	8 45.80	+ 9 51.0	2.512	3.391	8.7	21.0
1 12	8 41.94	-12 48.6	1.573	2.419	14.8	18.5	1 12	8 39.53	+10 23.4	2.452	3.392	5.7	20.9
1 22	8 32.92	-13 37.4	1.541	2.421	13.1	18.4	1 22	8 32.21	+11 5.0	2.420	3.393	2.9	20.7
2 1	8 23.25	-13 50.8	1.533	2.424	12.5	18.4	2 1	8 24.52	+11 53.1	2.418	3.394	2.7	20.7
2 11	8 14.22	-13 30.4	1.547	2.427	13.3	18.4	2 11	8 17.24	+12 44.0	2.447	3.395	5.4	20.8
2 21	8 6.92	-12 41.9	1.584	2.431	15.0	18.6	2 21	8 11.06	+13 34.1	2.504	3.396	8.4	21.0
3 2	8 2.16	-11 33.9	1.642	2.435	17.1	18.7	3 2	8 6.52	+14 20.6	2.587	3.396	11.1	21.2
<b>105168</b>	2000 <i>OU</i> <sub>14</sub>		1 25.8 188°07	0°5/25.4	17		<b>71845</b>	2000 <i>UN</i> <sub>93</sub>		1 25.8 319°09	7°0/28.5	18	
12 23	8 51.51	+17 24.3	2.798	3.608	10.1	20.3	12 23	8 54.65	+ 4 15.8	1.450	2.250	18.2	18.8
1 2	8 46.52	+18 17.8	2.712	3.607	7.4	20.1	1 2	8 50.03	+ 3 22.8	1.368	2.242	14.8	18.6
1 12	8 39.96	+19 18.2	2.652	3.606	4.4	19.9	1 12	8 42.61	+ 2 49.1	1.307	2.234	11.1	18.3
1 22	8 32.32	+20 21.8	2.623	3.605	1.2	19.7	1 22	8 33.16	+ 2 37.2	1.269	2.226	7.8	18.1
2 1	8 24.27	+21 24.6	2.626	3.603	2.3	19.7	2 1	8 22.92	+ 2 47.2	1.257	2.219	7.3	18.1
2 11	8 16.58	+22 22.5	2.659	3.601	5.5	19.9	2 11	8 13.35	+ 3 15.9	1.270	2.212	10.1	18.2
2 21	8 9.95	+23 12.7	2.722	3.599	8.4	20.1	2 21	8 5.78	+ 3 57.4	1.307	2.205	14.0	18.4
3 2	8 4.94	+23 53.8	2.810	3.596	10.9	20.3	3 2	8 1.13	+ 4 45.0	1.364	2.199	17.7	18.6
<b>508589</b>	2017 <i>OD</i> <sub>53</sub>		1 25.8 162°46	1°4/24.9	17		<b>22146</b>	Samaan		1 25.8 169°06	2°2/27.3	18	
12 23	8 55.43	+23 8.4	2.515	3.333	10.8	21.7	12 23	8 53.00	+10 7.1	2.180	2.978	13.0	19.5
1 2	8 49.48	+23 22.3	2.436	3.336	8.0	21.5	1 2	8 47.92	+10 26.0	2.097	2.980	9.9	19.3
1 12	8 41.73	+23 37.6	2.384	3.339	4.8	21.3	1 12	8 40.92	+10 57.6	2.039	2.982	6.5	19.1
1 22	8 32.80	+23 51.2	2.361	3.341	1.8	21.1	1 22	8 32.62	+11 39.7	2.009	2.984	3.1	18.9
2 1	8 23.53	+23 59.9	2.369	3.344	2.9	21.2	2 1	8 23.86	+12 28.8	2.008	2.985	3.0	18.9
2 11	8 14.84	+24 1.8	2.407	3.346	6.1	21.4	2 11	8 15.62	+13 20.6	2.037	2.986	6.3	19.1
2 21	8 7.51	+23 56.1	2.473	3.348	9.2	21.6	2 21	8 8.75	+14 10.9	2.094	2.987	9.7	19.3
3 2	8 2.13	+23 43.4	2.564	3.349	11.8	21.8	3 2	8 3.88	+14 56.5	2.175	2.987	12.8	19.5
<b>109195</b>	2001 <i>QE</i> <sub>75</sub>		1 25.8 116°89	11°5/18.8	18		<b>84176</b>	2002 <i>RD</i> <sub>105</sub>		1 25.8 114°01	1°9/24.8	18	
12 23	9 8.95	+50 28.7	1.941	2.727	14.8	19.1	12 23	8 58.03	+22 28.3	1.862	2.688	13.7	19.6
1 2	9 0.97	+51 56.8	1.896	2.733	13.0	19.0	1 2	8 51.90	+23 0.7	1.796	2.700	10.1	19.4
1 12	8 49.21	+53 5.3	1.873	2.739	11.8	19.0	1 12	8 43.38	+23 36.7	1.756	2.712	6.0	19.2
1 22	8 34.94	+53 43.9	1.874	2.745	11.6	19.0	1 22	8 33.30	+24 11.0	1.743	2.723	2.3	18.9
2 1	8 20.09	+53 46.3	1.900	2.751	12.4	19.0	2 1	8 22.82	+24 38.5	1.759	2.734	3.7	19.1
2 11	8 6.84	+53 12.5	1.948	2.757	14.0	19.1	2 11	8 13.18	+24 55.8	1.804	2.744	7.7	19.3
2 21	7 56.76	+52 8.4	2.018	2.762	15.8	19.3	2 21	8 5.44	+25 1.9	1.876	2.755	11.5	19.6
3 2	7 50.68	+50 42.4	2.105	2.768	17.6	19.4	3 2	8 0.27	+24 57.3	1.971	2.765	14.6	19.8
<b>467033</b>	2016 <i>CO</i> <sub>209</sub>		1 25.8 35°28	1°7/24.9	18		<b>463255</b>	2012 <i>FT</i> <sub>75</sub>		1 25.8 281°68	7°8/20.9	18	
12 23	8 55.94	+21 37.3	1.758	2.591	14.1	21.4	12 23	8 59.40	+37 1.4	1.811	2.640	13.9	21.3
1 2	8 50.58	+22 7.6	1.685	2.591	10.4	21.2	1 2	8 53.71	+38 23.3	1.735	2.627	11.1	21.1
1 12	8 42.71	+22 43.0	1.635	2.592	6.3	20.9	1 12	8 44.91	+39 38.9	1.683	2.613	8.8	20.9
1 22	8 33.12	+23 18.2	1.612	2.593	2.2	20.7	1 22	8 33.83	+40 38.4	1.658	2.600	7.9	20.8
2 1	8 22.99	+23 48.0	1.618	2.594	3.7	20.8	2 1	8 21.86	+41 13.4	1.659	2.586	9.2	20.9
2 11	8 13.63	+24 8.3	1.652	2.596	8.0	21.0	2 11	8 10.70	+41 20.2	1.686	2.573	11.9	21.0
2 21	8 6.17	+24 17.5	1.712	2.597	12.0	21.3	2 21	8 1.81	+41 0.2	1.736	2.559	14.9	21.2
3 2	8 1.36	+24 15.8	1.794	2.598	15.4	21.5	3 2	7 56.17	+40 18.3	1.805	2.545	17.7	21.3
<b>81155</b>	2000 <i>EL</i> <sub>152</sub>		1 25.8 189°01	0°2/25.7	18		<b>322654</b>	1999 <i>LS</i> <sub>14</sub>		1 25.8 252°22	1°3/26.7	17	
12 23	8 56.63	+18 20.1	2.607	3.412	10.9	20.0	12 23	8 53.82	+12 32.2	2.276	3.078	12.4	21.7
1 2	8 50.34	+18 38.2	2.518	3.411	8.1	19.8	1 2	8 48.66	+12 59.2	2.171	3.059	9.4	21.4
1 12	8 42.26	+19 1.3	2.457	3.409	4.8	19.6	1 12	8 41.48	+13 37.8	2.091	3.039	6.0	21.2
1 22	8 32.97	+19 26.3	2.425	3.406	1.3	19.4	1 22	8 32.82	+14 25.5	2.040	3.019	2.3	20.9
2 1	8 23.26	+19 50.3	2.424	3.403	2.3	19.4	2 1	8 23.50	+15 18.5	2.019	2.998	2.6	20.9
2 11	8 14.03	+20 10.4	2.456	3.399	5.8	19.7	2 11	8 14.51	+16 12.2	2.028	2.977	6.4	21.1
2 21	8 6.06	+20 25.0	2.516	3.393	8.9	19.9	2 21	8 6.77	+17 2.8	2.066	2.955	10.1	21.3
3 2	7 59.96	+20 33.3	2.601	3.387	11.7	20.0	3 2	8 1.04	+17 47.2	2.128	2.932	13.3	21.4
<b>37444</b>	2793 <i>P-L</i>		1 25.8 179°27	1°4/26.6	18		<b>178249</b>	2007 <i>RX</i> <sub>236</sub>		1 25.8 71°89	7°6/31.3	18	
12 23	8 57.19	+13 5.9	2.103	2.904	13.2	20.2	12 23	8 52.29	- 5 25.1	2.267	2.991	14.7	20.0
1 2	8 51.09	+13 25.0	2.019	2.907	10.0	20.0	1 2	8 47.17	- 6 4.5	2.204	3.013	12.5	19.9
1 12	8 42.86	+13 54.8	1.960	2.908	6.3	19.8	1 12	8 40.35	- 6 23.5	2.161	3.034	10.2	19.7
1 22	8 33.16	+14 32.4	1.930	2.909	2.4	19.5	1 22	8 32.44	- 6 20.6	2.144	3.055	8.3	19.7
2 1	8 22.95	+15 14.0	1.930	2.908	2.7	19.5	2 1	8 24.26	- 5 56.3	2.153	3.076	7.6	19.7
2 11	8 13.31	+15 55.3	1.960	2.907	6.6	19.8	2 11	8 16.67	- 5 13.9	2.189	3.098	8.5	19.7
2 21	8 5.20	+16 33.0	2.018	2.906	10.3	20.0	2 21	8 10.40	- 4 18.4	2.252	3.119	10.3	19.9
3 2	7 59.32	+17 4.7	2.101	2.903	13.5	20.2	3 2	8 5.99	- 3 15.3	2.339	3.139	12.4	20.1
<b>441837</b>	2009 <i>UZ</i> <sub>125</sub>		1 25.8 97°42	1°2/25.3	17		<b>523527</b>	2017 <i>OH</i> <sub>61</sub>		1 25.8 212°89	2°7/24.0	17	
12 23	9 2.94	+20 41.5	1.374	2.208	17.3	21.7	12 23						

EPHEMERIDES

1 25.8

1 25.8

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>197584</b>	2004 <i>HJ</i> <sub>9</sub>		1 25.8 257°52	2°5/24.7	18		<b>323485</b>	2004 <i>PO</i> <sub>8</sub>		1 25.8 192°71	1°3/25.0	16	R
12 23	8 59.18	+22 43.0	1.450	2.289	16.2	20.7	12 23	8 58.40	+23 5.4	2.532	3.343	11.0	21.2
1 2	8 53.64	+23 17.8	1.371	2.281	12.1	20.4	1 2	8 51.72	+23 15.5	2.445	3.341	8.1	21.0
1 12	8 44.90	+23 58.5	1.315	2.273	7.4	20.1	1 12	8 43.13	+23 26.9	2.385	3.339	4.9	20.8
1 22	8 33.84	+24 38.1	1.285	2.265	2.9	19.8	1 22	8 33.27	+23 36.2	2.355	3.335	1.7	20.6
2 1	8 21.90	+25 9.3	1.282	2.257	4.8	19.9	2 1	8 23.01	+23 40.4	2.357	3.332	2.9	20.7
2 11	8 10.85	+25 27.1	1.306	2.249	9.7	20.2	2 11	8 13.32	+23 37.7	2.389	3.327	6.2	20.9
2 21	8 2.15	+25 29.9	1.354	2.240	14.5	20.4	2 21	8 5.02	+23 27.5	2.450	3.322	9.4	21.1
3 2	7 56.81	+25 19.1	1.422	2.232	18.5	20.7	3 2	7 58.75	+23 10.4	2.536	3.316	12.1	21.3
<b>387836</b>	2004 <i>HZ</i> <sub>53</sub>		1 25.8 201°43	8°6/19.1	18		<b>96273</b>	1995 <i>UD</i> <sub>15</sub>		1 25.8 197°86	0°8/25.4	18	
12 23	9 2.91	+35 26.2	1.755	2.582	14.4	20.4	12 23	8 57.60	+19 32.4	2.021	2.839	13.1	20.5
1 2	8 56.65	+37 57.7	1.688	2.579	11.5	20.2	1 2	8 51.58	+19 58.5	1.937	2.837	9.7	20.2
1 12	8 46.91	+40 26.7	1.648	2.575	9.2	20.1	1 12	8 43.26	+20 30.7	1.879	2.834	5.8	20.0
1 22	8 34.47	+42 39.1	1.636	2.570	8.7	20.0	1 22	8 33.34	+21 4.7	1.848	2.830	1.7	19.7
2 1	8 20.76	+44 22.5	1.652	2.565	10.4	20.1	2 1	8 22.86	+21 36.0	1.848	2.826	3.0	19.8
2 11	8 7.68	+45 30.5	1.695	2.559	13.2	20.3	2 11	8 13.00	+22 0.7	1.877	2.821	7.2	20.0
2 21	7 56.96	+46 3.8	1.761	2.552	16.1	20.4	2 21	8 4.79	+22 16.9	1.934	2.815	11.0	20.3
3 2	7 49.81	+46 7.8	1.844	2.545	18.6	20.6	3 2	7 58.98	+22 23.9	2.013	2.809	14.3	20.5
<b>371772</b>	2007 <i>HE</i> <sub>20</sub>		1 25.8 345°39	3°5/27.4	18		<b>316720</b>	1998 <i>BE</i> <sub>7</sub>		1 25.8 27°98	5°3/22.9	17	R
12 23	8 50.88	+10 15.7	1.462	2.288	16.8	20.3	12 23	8 59.50	+22 59.3	1.043	1.901	19.6	17.2
1 2	8 47.22	+10 3.8	1.382	2.278	13.0	20.1	1 2	8 53.70	+25 33.0	1.038	1.957	14.1	17.0
1 12	8 40.91	+10 8.4	1.323	2.270	8.7	19.8	1 12	8 44.56	+28 4.6	1.055	2.014	8.6	16.9
1 22	8 32.70	+10 28.3	1.288	2.262	4.6	19.5	1 22	8 33.60	+30 17.9	1.098	2.072	5.4	16.9
2 1	8 23.77	+11 0.4	1.279	2.256	4.3	19.5	2 1	8 22.76	+32 0.9	1.167	2.130	7.5	17.2
2 11	8 15.54	+11 39.7	1.296	2.250	8.5	19.7	2 11	8 13.84	+33 9.4	1.261	2.189	11.5	17.6
2 21	8 9.22	+12 20.8	1.338	2.246	13.0	19.9	2 21	8 7.98	+33 46.1	1.377	2.248	15.3	18.0
3 2	8 5.71	+12 58.9	1.400	2.242	17.0	20.2	3 2	8 5.63	+33 56.9	1.512	2.307	18.2	18.4
<b>404405</b>	2013 <i>GR</i> <sub>59</sub>		1 25.8 94°85	5°1/23.3	18		<b>318720</b>	2005 <i>QH</i> <sub>183</sub>		1 25.8 83°97	1°9/27.1	18	
12 23	9 1.20	+30 10.1	1.679	2.511	14.6	21.1	12 23	8 54.25	+ 9 53.3	1.871	2.675	14.6	20.7
1 2	8 54.57	+31 3.8	1.624	2.527	11.0	21.0	1 2	8 48.99	+10 40.9	1.808	2.695	11.0	20.5
1 12	8 45.10	+31 54.2	1.593	2.542	7.4	20.8	1 12	8 41.61	+11 44.1	1.769	2.715	7.0	20.3
1 22	8 33.80	+32 33.2	1.589	2.557	5.1	20.7	1 22	8 32.86	+12 58.7	1.758	2.735	3.0	20.1
2 1	8 22.11	+32 54.6	1.614	2.571	6.5	20.8	2 1	8 23.72	+14 18.7	1.776	2.755	2.9	20.1
2 11	8 11.56	+32 55.7	1.665	2.586	9.8	21.0	2 11	8 15.33	+15 37.6	1.824	2.775	6.8	20.4
2 21	8 3.35	+32 38.3	1.741	2.600	13.3	21.3	2 21	8 8.57	+16 50.2	1.900	2.794	10.5	20.7
3 2	7 58.21	+32 5.9	1.839	2.613	16.2	21.5	3 2	8 4.12	+17 52.8	1.999	2.813	13.7	20.9
<b>413898</b>	2006 <i>WM</i> <sub>5</sub>		1 25.8 48°57	8°5/30.2	18		<b>13961</b>	1991 <i>PV</i>		1 25.8 162°66	1°1/26.4	18	
12 23	8 53.58	- 2 27.2	1.733	2.492	17.3	21.2	12 23	8 59.09	+14 24.3	1.862	2.671	14.4	19.8
1 2	8 48.73	- 3 18.4	1.659	2.496	14.6	21.0	1 2	8 52.71	+14 42.4	1.786	2.678	10.9	19.6
1 12	8 41.58	- 3 46.8	1.604	2.500	11.7	20.8	1 12	8 43.94	+15 11.0	1.733	2.684	6.7	19.3
1 22	8 32.85	- 3 49.7	1.573	2.504	9.3	20.7	1 22	8 33.53	+15 46.8	1.709	2.689	2.3	19.1
2 1	8 23.58	- 3 26.9	1.568	2.508	8.5	20.7	2 1	8 22.61	+16 25.4	1.714	2.693	2.8	19.1
2 11	8 14.96	- 2 42.2	1.589	2.512	10.0	20.8	2 11	8 12.41	+17 2.2	1.749	2.697	7.2	19.4
2 21	8 8.02	- 1 41.7	1.634	2.517	12.6	20.9	2 21	8 4.00	+17 33.9	1.811	2.700	11.3	19.6
3 2	8 3.51	- 0 32.8	1.702	2.521	15.5	21.1	3 2	7 58.14	+17 58.6	1.897	2.702	14.7	19.9
<b>6183</b>	Viscome		1 25.8 63°90	8°8/28.5	18		<b>402251</b>	2005 <i>MP</i> <sub>27</sub>		1 25.8 147°92	0°3/25.9	18	
12 23	9 6.69	+ 3 14.3	1.308	2.091	20.7	16.9	12 23	8 55.33	+15 44.2	2.109	2.921	12.8	21.8
1 2	8 58.43	+ 1 24.9	1.265	2.125	16.8	16.7	1 2	8 49.71	+16 19.5	2.034	2.929	9.6	21.6
1 12	8 47.25	- 0 2.0	1.244	2.159	12.7	16.6	1 12	8 42.04	+17 4.0	1.983	2.936	5.8	21.4
1 22	8 34.35	- 1 1.8	1.248	2.193	9.5	16.5	1 22	8 32.99	+17 53.7	1.962	2.943	1.7	21.1
2 1	8 21.35	- 1 33.2	1.278	2.227	9.0	16.6	2 1	8 23.49	+18 43.9	1.970	2.950	2.5	21.2
2 11	8 9.87	- 1 39.1	1.334	2.260	11.2	16.8	2 11	8 14.61	+19 30.3	2.009	2.956	6.5	21.5
2 21	8 1.08	- 1 25.8	1.414	2.293	14.4	17.1	2 21	8 7.24	+20 9.6	2.075	2.961	10.2	21.7
3 2	7 55.60	- 1 0.7	1.515	2.326	17.5	17.4	3 2	8 2.04	+20 40.2	2.165	2.966	13.2	21.9
<b>193692</b>	2001 <i>FA</i> <sub>13</sub>		1 25.8 182°05	0°4/26.0	18		<b>99111</b>	2001 <i>FN</i> <sub>61</sub>		1 25.8 267°72	6°6/22.3	18	
12 23	8 53.12	+16 1.4	2.238	3.052	12.1	20.1	12 23	9 1.16	+33 59.6	1.780	2.609	14.1	19.6
1 2	8 48.02	+16 25.9	2.156	3.052	9.0	19.9	1 2	8 55.00	+35 0.8	1.695	2.592	11.0	19.4
1 12	8 41.00	+16 58.5	2.099	3.052	5.5	19.7	1 12	8 45.70	+35 57.6	1.635	2.575	8.1	19.2
1 22	8 32.68	+17 36.2	2.071	3.052	1.6	19.4	1 22	8 34.11	+36 41.0	1.601	2.557	6.6	19.1
2 1	8 23.91	+18 15.0	2.072	3.052	2.4	19.5	2 1	8 21.60	+37 3.1	1.595	2.539	8.0	19.1
2 11	8 15.67	+18 51.1	2.104	3.052	6.2	19.7	2 11	8 9.87	+37 0.3	1.615	2.521	11.1	19.2
2 21	8 8.80	+19 21.9	2.163	3.051	9.7	19.9	2 21	8 0.38	+36 33.7	1.660	2.503	14.6	19.4
3 2	8 3.94	+19 45.6	2.246	3.050	12.7	20.1	3 2	7 54.15	+35 47.9	1.725	2.484	17.7	19.6
<b>282541</b>	2004 <i>ST</i> <sub>13</sub>		1 25.8 81°91	1°0/26.3	18		<b>505036</b>	2011 <i>QE</i> <sub>92</sub>		1 25.8 272°23	3°8/23.8	17	
12 23	8 57.05	+13 37.9	1.467	2.292	16.8	20.9	12 23	8 59.62	+31 26.6	2.503	3.318	10.9	21.4
1 2	8 51.56	+14 14.4	1.409	2.309	12.6	20.7	1 2	8 52.86	+31 40.9	2.405	3.298	8.4	21.2
1 12	8 43.35	+15 5.6	1.373	2.326	7.7	20.5	1 12	8 43.94	+31 50.8	2.333	3.278	5.6	21.0
1 22	8 33.35	+16 6.2	1.362	2.343	2.5	20.2	1 22	8 33.53	+31 51.8	2.290	3.257	3.8	20.8
2 1	8 22.89	+17 9.5	1.380	2.360	3.2	20.3	2 1	8 22.59	+31 40.3	2.278	3.237	4.8	20.9
2 11	8 13.44	+18 8.7	1.426	2.377	8.2	20.6	2 11	8 12.23	+31 14.7	2.296	3.216	7.6	21.0
2 21	8 6.16	+18 58.9	1.497	2.394	12.6	20.9	2 21	8 3.41	+30 36.1	2.342	3.194	10.5	21.1
3 2	8 1.81	+19 37.7	1.589	2.410	16.3	21.2	3 2	7 56.83	+29 46.9	2.412	3.173	13.2	21.3
<b>237306</b>	2008 <i>YH</i> <sub>89</sub>		1 25.8 251°97	0°8/25.2	17		<b>253249</b>	2003 <i>AG</i> <sub>40</sub>		1 25.8 23°31	2°8/27.0	18	
12 23	8 52.61	+19 40.8	2.448	3.267	11.1	20.8	12 23	8 52.31					

EPHEMERIDES

1 25.8

1 25.8

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>171378</b>	2006 <i>OV</i> <sub>8</sub>		1 25.8 231°65	0°2/25.9	18		<b>53864</b>	2000 <i>FM</i> <sub>28</sub>		1 25.8 258°07	3°0/24.5	18	
12 23	8 56.44	+16 36.8	1.934	2.751	13.6	20.7	12 23	8 0.05	+24 29.3	1.558	2.394	15.4	19.8
1 2	8 50.89	+17 4.2	1.842	2.740	10.2	20.5	1 2	8 54.22	+25 2.5	1.474	2.382	11.6	19.5
1 12	8 42.95	+17 41.2	1.776	2.729	6.2	20.2	1 12	8 45.26	+25 39.3	1.413	2.369	7.2	19.2
1 22	8 33.30	+18 23.9	1.736	2.718	1.8	19.9	1 22	8 34.01	+26 12.6	1.378	2.356	3.3	19.0
2 1	8 22.94	+19 7.4	1.727	2.706	2.8	19.9	2 1	8 21.86	+26 35.8	1.370	2.343	5.0	19.1
2 11	8 13.12	+19 47.0	1.747	2.694	7.3	20.2	2 11	8 10.50	+26 44.3	1.390	2.330	9.7	19.3
2 21	8 4.91	+20 19.4	1.794	2.681	11.4	20.4	2 21	8 1.40	+26 37.3	1.435	2.316	14.2	19.5
3 2	7 59.15	+20 42.9	1.864	2.668	14.9	20.6	3 2	7 55.54	+26 16.7	1.501	2.302	18.1	19.7
<b>393394</b>	2000 <i>SU</i> <sub>13</sub>		1 25.8 103°67	1°6/24.9	17		<b>116936</b>	2004 <i>GA</i> <sub>38</sub>		1 25.8 116°96	5°9/29.9	18	
12 23	9 0.68	+20 55.7	1.764	2.587	14.5	21.9	12 23	8 54.15	- 0 26.1	2.222	2.971	14.2	19.6
1 2	8 53.84	+21 39.7	1.710	2.612	10.6	21.7	1 2	8 48.62	- 0 42.4	2.151	2.988	11.7	19.5
1 12	8 44.53	+22 28.7	1.680	2.636	6.3	21.5	1 12	8 41.29	- 0 40.4	2.102	3.004	8.9	19.3
1 22	8 33.67	+23 16.6	1.679	2.660	2.1	21.3	1 22	8 32.79	- 0 19.7	2.080	3.020	6.6	19.2
2 1	8 22.49	+23 57.6	1.707	2.683	3.7	21.5	2 1	8 23.97	+ 0 18.1	2.086	3.036	6.0	19.2
2 11	8 12.33	+24 27.6	1.765	2.705	7.8	21.8	2 11	8 15.73	+ 1 9.0	2.121	3.050	7.5	19.3
2 21	8 4.23	+24 45.4	1.848	2.726	11.6	22.0	2 21	8 8.86	+ 2 8.2	2.183	3.065	9.9	19.5
3 2	7 58.85	+24 51.5	1.955	2.747	14.8	22.3	3 2	8 3.93	+ 3 10.4	2.270	3.078	12.5	19.7
<b>248714</b>	2006 <i>PC</i> <sub>5</sub>		1 25.8 58°07	5°0/23.7	17		<b>302086</b>	2000 <i>YJ</i> <sub>20</sub>		1 25.8 298°46	1°5/26.5	18	
12 23	9 2.12	+28 40.0	1.410	2.251	16.5	19.8	12 23	8 54.71	+14 17.0	1.503	2.332	16.3	20.9
1 2	8 55.35	+29 37.7	1.374	2.282	12.2	19.6	1 2	8 50.25	+14 25.0	1.411	2.313	12.4	20.6
1 12	8 45.54	+30 32.1	1.362	2.314	7.9	19.5	1 12	8 42.90	+14 46.5	1.341	2.295	7.8	20.3
1 22	8 33.93	+31 14.2	1.375	2.346	5.1	19.4	1 22	8 33.38	+15 18.6	1.296	2.276	2.9	19.9
2 1	8 22.17	+31 37.6	1.415	2.378	6.6	19.5	2 1	8 22.89	+15 56.8	1.278	2.258	3.4	19.9
2 11	8 11.92	+31 40.0	1.482	2.409	10.2	19.8	2 11	8 12.97	+16 35.4	1.287	2.240	8.6	20.2
2 21	8 4.37	+31 23.7	1.573	2.441	13.9	20.1	2 21	8 5.01	+17 9.8	1.321	2.222	13.6	20.4
3 2	8 0.14	+30 52.8	1.684	2.472	16.9	20.4	3 2	8 0.05	+17 37.0	1.375	2.205	17.9	20.6
<b>190322</b>	1998 <i>HZ</i> <sub>83</sub>		1 25.8 213°62	0°6/25.4	18		<b>140368</b>	2001 <i>TC</i> <sub>29</sub>		1 25.8 86°49	0°9/25.3	18	
12 23	8 54.31	+18 53.9	2.439	3.253	11.3	20.8	12 23	8 57.77	+20 3.4	1.844	2.668	13.9	20.5
1 2	8 48.86	+19 28.5	2.348	3.246	8.3	20.6	1 2	8 51.63	+20 27.5	1.786	2.688	10.2	20.3
1 12	8 41.52	+20 9.2	2.284	3.239	5.0	20.4	1 12	8 43.20	+20 56.8	1.752	2.708	6.1	20.1
1 22	8 32.86	+20 52.4	2.249	3.231	1.4	20.1	1 22	8 33.33	+21 26.7	1.745	2.727	1.8	19.8
2 1	8 23.71	+21 33.8	2.245	3.223	2.6	20.2	2 1	8 23.15	+21 52.7	1.769	2.746	3.1	19.9
2 11	8 14.99	+22 10.0	2.271	3.214	6.2	20.4	2 11	8 13.88	+22 11.4	1.821	2.766	7.3	20.2
2 21	8 7.55	+22 38.5	2.326	3.205	9.5	20.6	2 21	8 6.48	+22 21.4	1.900	2.784	11.0	20.5
3 2	8 2.04	+22 58.3	2.405	3.195	12.4	20.8	3 2	8 1.59	+22 22.6	2.001	2.803	14.1	20.7
<b>109166</b>	2001 <i>QH</i> <sub>63</sub>		1 25.8 196°77	3°3/23.7	18		<b>268092</b>	2004 <i>RU</i> <sub>233</sub>		1 25.8 130°85	1°9/27.0	18	
12 23	8 56.64	+29 24.9	2.543	3.363	10.7	19.6	12 23	8 53.57	+11 38.5	2.119	2.923	13.1	21.4
1 2	8 50.50	+29 51.6	2.464	3.362	8.0	19.5	1 2	8 48.39	+11 52.9	2.041	2.929	10.0	21.2
1 12	8 42.43	+30 15.9	2.411	3.360	5.2	19.3	1 12	8 41.26	+12 18.7	1.988	2.934	6.4	21.0
1 22	8 33.10	+30 33.5	2.388	3.358	3.4	19.1	1 22	8 32.82	+12 53.7	1.963	2.940	2.8	20.8
2 1	8 23.38	+30 40.8	2.394	3.355	4.4	19.2	2 1	8 23.96	+13 34.3	1.967	2.946	2.8	20.8
2 11	8 14.26	+30 36.0	2.431	3.353	7.1	19.4	2 11	8 15.67	+14 16.4	2.001	2.951	6.3	21.0
2 21	8 6.59	+30 19.3	2.494	3.350	9.8	19.6	2 21	8 8.82	+14 56.5	2.063	2.956	9.9	21.3
3 2	8 0.99	+29 52.2	2.582	3.347	12.3	19.7	3 2	8 4.04	+15 31.8	2.148	2.961	12.9	21.5
<b>166727</b>	2002 <i>TQ</i> <sub>246</sub>		1 25.8 6°22	15°5/ 5.6	18		<b>207775</b>	2007 <i>TZ</i> <sub>70</sub>		1 25.8 62°45	6°0/21.5	18	
12 23	8 48.73	-19 20.4	1.712	2.374	20.8	18.7	12 23	8 55.85	+34 20.3	2.133	2.962	12.1	20.0
1 2	8 45.35	-21 1.2	1.647	2.376	19.2	18.5	1 2	8 50.37	+35 40.8	2.080	2.975	9.4	19.9
1 12	8 39.67	-22 8.9	1.596	2.378	17.6	18.4	1 12	8 42.55	+36 55.9	2.052	2.988	7.0	19.8
1 22	8 32.38	-22 37.1	1.563	2.381	16.3	18.3	1 22	8 33.19	+37 58.3	2.051	3.001	6.0	19.7
2 1	8 24.49	-22 22.2	1.549	2.386	15.5	18.3	2 1	8 23.38	+38 41.9	2.079	3.014	7.2	19.8
2 11	8 17.21	-21 26.2	1.555	2.392	15.6	18.3	2 11	8 14.36	+39 4.1	2.135	3.027	9.5	20.0
2 21	8 11.58	-19 55.9	1.580	2.399	16.4	18.4	2 21	8 7.13	+39 5.7	2.215	3.040	12.0	20.2
3 2	8 8.39	-18 1.1	1.625	2.407	17.7	18.5	3 2	8 2.41	+38 49.6	2.316	3.054	14.3	20.4
<b>277532</b>	2005 <i>XX</i> <sub>117</sub>		1 25.8 95°28	2°6/24.3	18		<b>344764</b>	2003 <i>WQ</i> <sub>69</sub>		1 25.8 43°75	5°2/28.7	18	
12 23	8 56.14	+24 19.0	1.940	2.770	13.1	21.4	12 23	8 52.48	+ 4 23.1	1.944	2.728	14.8	20.5
1 2	8 50.54	+25 2.5	1.874	2.779	9.6	21.2	1 2	8 47.67	+ 3 56.7	1.872	2.737	11.9	20.3
1 12	8 42.62	+25 48.4	1.832	2.788	5.9	21.0	1 12	8 40.85	+ 3 46.7	1.822	2.746	8.6	20.1
1 22	8 33.17	+26 30.9	1.818	2.796	2.8	20.8	1 22	8 32.71	+ 3 53.5	1.798	2.755	5.9	19.9
2 1	8 23.29	+27 4.8	1.834	2.805	4.2	20.9	2 1	8 24.16	+ 4 15.3	1.801	2.764	5.3	19.9
2 11	8 14.18	+27 26.5	1.878	2.813	7.9	21.2	2 11	8 16.25	+ 4 48.9	1.833	2.774	7.5	20.1
2 21	8 6.85	+27 35.0	1.948	2.821	11.4	21.4	2 21	8 9.84	+ 5 29.5	1.891	2.784	10.6	20.3
3 2	8 1.99	+27 31.2	2.041	2.829	14.4	21.6	3 2	8 5.58	+ 6 12.5	1.972	2.794	13.6	20.5
<b>84859</b>	2003 <i>AY</i> <sub>64</sub>		1 25.8 93°00	7°1/22.7	18		<b>337413</b>	2001 <i>QE</i> <sub>263</sub>		1 25.8 97°21	2°6/26.9	18	
12 23	9 4.95	+33 12.0	1.441	2.277	16.5	19.1	12 23	8 59.79	+12 33.3	1.518	2.333	16.8	20.0
1 2	8 57.81	+34 24.1	1.394	2.295	12.6	18.9	1 2	8 53.49	+12 20.3	1.456	2.349	12.8	19.8
1 12	8 47.24	+35 29.1	1.371	2.314	9.0	18.7	1 12	8 44.49	+12 20.2	1.416	2.364	8.2	19.6
1 22	8 34.47	+36 16.4	1.373	2.332	7.1	18.6	1 22	8 33.73	+12 30.8	1.402	2.379	3.7	19.4
2 1	8 21.29	+36 38.1	1.402	2.350	8.5	18.8	2 1	8 22.56	+12 48.8	1.416	2.394	3.7	19.4
2 11	8 9.62	+36 32.3	1.456	2.367	11.8	19.0	2 11	8 12.41	+13 9.9	1.458	2.408	8.1	19.7
2 21	8 0.86	+36 2.6	1.534	2.384	15.2	19.3	2 21	8 4.45	+13 30.6	1.525	2.422	12.4	20.0
3 2	7 55.77	+35 15.1	1.632	2.401	18.2	19.5	3 2	7 59.41	+13 48.1	1.615	2.436	16.1	20.2
<b>302983</b>	2003 <i>US</i> <sub>376</sub>		1 25.8 41°96	0°4/25.9	18		<b>284834</b>	2009 <i>BJ</i> <sub>42</sub>		1 25.8 315°31	0°8/25.3	18	
12 23	8 56.20	+16 35.8	1.285	2.126	17.8								

EPHEMERIDES

1 25.8

1 25.8

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>219851</b>	2002 <i>CP</i> <sub>210</sub>		1 25.8 15°80	2°2/24.8	18		<b>285596</b>	2000 <i>QM</i> <sub>131</sub>		1 25.8 104°05	3°3/28.3	18	
12 23	8 55.50	+23 8.4	1.645	2.483	14.6	20.0	12 23	8 53.98	+5 42.5	2.117	2.898	13.9	21.0
1 2	8 50.43	+23 35.8	1.576	2.485	10.8	19.7	1 2	8 48.62	+6 13.0	2.048	2.917	10.8	20.9
1 12	8 42.74	+24 6.7	1.530	2.488	6.5	19.5	1 12	8 41.37	+7 0.2	2.004	2.936	7.4	20.7
1 22	8 33.27	+24 35.8	1.511	2.491	2.6	19.3	1 22	8 32.90	+8 1.6	1.987	2.955	4.2	20.5
2 1	8 23.28	+24 57.5	1.520	2.495	4.2	19.4	2 1	8 24.08	+9 12.9	2.000	2.973	3.7	20.5
2 11	8 14.16	+25 8.3	1.556	2.499	8.5	19.6	2 11	8 15.89	+10 28.5	2.043	2.990	6.4	20.7
2 21	8 7.07	+25 7.0	1.617	2.503	12.5	19.9	2 21	8 9.13	+11 43.1	2.114	3.007	9.7	20.9
3 2	8 2.76	+24 54.6	1.700	2.508	16.0	20.1	3 2	8 4.42	+12 52.3	2.211	3.024	12.6	21.2
<b>356281</b>	2010 <i>CO</i> <sub>107</sub>		1 25.8 125°55	2°4/27.1	18		<b>12523</b>	1998 <i>HH</i> <sub>100</sub>		1 25.8 109°89	2°4/24.5	18	
12 23	8 56.96	+10 34.4	1.634	2.444	16.1	21.2	12 23	8 59.16	+22 40.8	1.855	2.680	13.8	17.5
1 2	8 51.37	+10 55.5	1.564	2.454	12.3	21.0	1 2	8 52.78	+23 35.2	1.797	2.700	10.1	17.3
1 12	8 43.25	+11 32.8	1.517	2.464	7.9	20.7	1 12	8 43.99	+24 33.4	1.764	2.719	6.1	17.1
1 22	8 33.42	+12 23.1	1.496	2.473	3.5	20.5	1 22	8 33.65	+25 29.0	1.759	2.738	2.6	16.9
2 1	8 23.05	+13 21.0	1.504	2.482	3.4	20.5	2 1	8 22.92	+26 15.8	1.784	2.756	4.1	17.0
2 11	8 13.49	+14 20.4	1.540	2.491	7.7	20.8	2 11	8 13.08	+26 49.7	1.838	2.773	7.9	17.3
2 21	8 5.86	+15 16.0	1.602	2.499	11.9	21.0	2 21	8 5.18	+27 9.5	1.918	2.790	11.5	17.6
3 2	8 0.92	+16 4.0	1.687	2.507	15.6	21.3	3 2	7 59.89	+27 16.1	2.021	2.807	14.6	17.8
<b>269065</b>	2007 <i>GB</i> <sub>41</sub>		1 25.8 48°60	1°7/26.7	18		<b>451429</b>	2011 <i>RL</i> <sub>16</sub>		1 25.8 57°56	0°5/25.7	15	
12 23	8 53.80	+13 16.4	1.818	2.634	14.4	20.5	12 23	9 3.15	+20 32.2	1.284	2.121	18.0	20.9
1 2	8 48.84	+13 23.4	1.746	2.641	10.9	20.3	1 2	8 56.19	+20 22.0	1.239	2.147	13.3	20.7
1 12	8 41.64	+13 41.9	1.697	2.647	6.9	20.1	1 12	8 46.12	+20 17.1	1.216	2.173	7.9	20.5
1 22	8 32.95	+14 9.2	1.675	2.654	2.7	19.8	1 22	8 34.22	+20 12.9	1.217	2.200	2.2	20.2
2 1	8 23.81	+14 41.6	1.682	2.661	2.9	19.9	2 1	8 22.15	+20 5.5	1.247	2.226	3.6	20.4
2 11	8 15.38	+15 14.7	1.717	2.668	7.0	20.1	2 11	8 11.61	+19 52.8	1.302	2.253	8.9	20.7
2 21	8 8.63	+15 45.0	1.779	2.676	10.9	20.4	2 21	8 3.83	+19 34.4	1.383	2.279	13.5	21.1
3 2	8 4.26	+16 10.2	1.863	2.683	14.3	20.6	3 2	7 59.42	+19 11.3	1.484	2.306	17.2	21.4
<b>337239</b>	2000 <i>JZ</i> <sub>13</sub>		1 25.8 225°06	4°7/21.8	17		<b>116349</b>	2003 <i>YM</i> <sub>89</sub>		1 25.8 85°48	0°6/25.6	18	
12 23	8 55.94	+34 16.1	2.863	3.679	9.7	21.7	12 23	9 0.50	+19 14.6	1.741	2.562	14.7	19.6
1 2	8 50.07	+35 16.6	2.780	3.668	7.6	21.6	1 2	8 53.66	+19 33.7	1.689	2.590	10.8	19.4
1 12	8 42.27	+36 13.5	2.723	3.657	5.6	21.4	1 12	8 44.43	+19 58.7	1.662	2.617	6.4	19.2
1 22	8 33.13	+37 1.4	2.695	3.645	4.7	21.4	1 22	8 33.75	+20 24.8	1.662	2.644	1.8	18.9
2 1	8 23.48	+37 35.8	2.698	3.633	5.7	21.4	2 1	8 22.84	+20 47.6	1.692	2.671	3.1	19.1
2 11	8 14.26	+37 54.3	2.729	3.620	7.7	21.5	2 11	8 13.00	+21 3.7	1.751	2.697	7.4	19.4
2 21	8 6.33	+37 56.5	2.788	3.607	10.0	21.7	2 21	8 5.21	+21 11.9	1.837	2.722	11.3	19.7
3 2	8 0.35	+37 44.3	2.869	3.594	12.1	21.8	3 2	8 0.09	+21 12.1	1.945	2.748	14.5	20.0
<b>274714</b>	2008 <i>UZ</i> <sub>125</sub>		1 25.8 168°23	4°5/22.6	17		<b>448222</b>	2008 <i>UO</i> <sub>354</sub>		1 25.8 45°59	0°2/25.8	15	
12 23	8 56.57	+32 0.2	2.436	3.258	11.0	21.2	12 23	8 56.47	+16 53.9	1.224	2.068	18.3	21.3
1 2	8 50.64	+32 54.1	2.365	3.260	8.4	21.0	1 2	8 51.64	+17 24.7	1.170	2.082	13.6	21.0
1 12	8 42.63	+33 44.8	2.320	3.262	5.9	20.9	1 12	8 43.66	+18 8.4	1.138	2.096	8.1	20.8
1 22	8 33.23	+34 26.4	2.304	3.264	4.5	20.8	1 22	8 33.61	+18 58.5	1.129	2.112	2.3	20.4
2 1	8 23.39	+34 54.3	2.318	3.266	5.6	20.8	2 1	8 23.04	+19 47.6	1.147	2.127	3.7	20.6
2 11	8 14.19	+35 6.0	2.361	3.267	8.0	21.0	2 11	8 13.68	+20 29.1	1.190	2.143	9.2	20.9
2 21	8 6.52	+35 1.8	2.429	3.268	10.7	21.2	2 21	8 6.87	+20 59.1	1.257	2.160	14.1	21.3
3 2	8 1.06	+34 43.5	2.521	3.269	13.0	21.3	3 2	8 3.40	+21 16.7	1.344	2.176	18.1	21.6
<b>145362</b>	2005 <i>MV</i> <sub>29</sub>		1 25.8 303°56	3°4/27.3	18		<b>231532</b>	2008 <i>SK</i> <sub>126</sub>		1 25.8 10°68	0°6/25.5	18	
12 23	8 54.79	+10 29.0	1.672	2.484	15.7	20.4	12 23	8 54.03	+19 22.6	1.873	2.702	13.5	20.9
1 2	8 49.89	+10 9.4	1.586	2.475	12.2	20.2	1 2	8 49.07	+19 38.9	1.798	2.703	10.0	20.7
1 12	8 42.47	+10 3.2	1.522	2.466	8.2	19.9	1 12	8 41.84	+20 1.4	1.747	2.704	6.0	20.4
1 22	8 33.25	+10 9.7	1.484	2.458	4.3	19.7	1 22	8 33.08	+20 26.2	1.724	2.706	1.7	20.2
2 1	8 23.34	+10 26.7	1.474	2.450	4.1	19.7	2 1	8 23.84	+20 49.0	1.729	2.708	2.9	20.3
2 11	8 14.05	+10 50.6	1.491	2.441	8.0	19.9	2 11	8 15.30	+21 6.4	1.762	2.710	7.2	20.5
2 21	8 6.54	+11 17.3	1.534	2.434	12.2	20.1	2 21	8 8.46	+21 16.4	1.822	2.712	11.1	20.8
3 2	8 1.65	+11 43.1	1.599	2.426	15.9	20.3	3 2	8 4.01	+21 18.4	1.904	2.715	14.4	21.0
<b>302065</b>	2000 <i>WM</i> <sub>26</sub>		1 25.8 52°30	3°1/27.2	18		<b>522285</b>	2016 <i>BW</i> <sub>96</sub>		1 25.8 289°53	4°4/28.0	17	
12 23	8 57.00	+11 16.6	1.309	2.135	18.4	20.6	12 23	8 53.44	+7 7.4	1.757	2.557	15.5	21.7
1 2	8 51.69	+11 8.7	1.256	2.154	14.0	20.4	1 2	8 48.88	+6 55.0	1.663	2.542	12.3	21.5
1 12	8 43.51	+11 17.6	1.224	2.173	9.1	20.1	1 12	8 41.90	+6 59.2	1.591	2.526	8.6	21.2
1 22	8 33.50	+11 40.7	1.216	2.193	4.3	19.9	1 22	8 33.15	+7 19.8	1.544	2.511	5.2	21.0
2 1	8 23.10	+12 13.4	1.235	2.213	4.1	20.0	2 1	8 23.65	+7 54.8	1.524	2.496	4.8	20.9
2 11	8 13.87	+12 49.9	1.280	2.234	8.6	20.3	2 11	8 14.62	+8 39.8	1.533	2.481	8.0	21.1
2 21	8 7.00	+13 25.4	1.350	2.254	13.1	20.6	2 21	8 7.19	+9 29.7	1.567	2.466	12.0	21.3
3 2	8 3.20	+13 55.9	1.440	2.275	16.9	20.9	3 2	8 2.24	+10 19.4	1.624	2.451	15.7	21.5
<b>14549</b>	1997 <i>TM</i> <sub>27</sub>		1 25.8 147°88	1°1/25.1	18		<b>301054</b>	2008 <i>UT</i> <sub>13</sub>		1 25.8 204°63	3°8/27.7	18	
12 23	8 57.35	+20 41.8	2.311	3.126	11.8	18.7	12 23	8 57.62	+8 13.0	1.748	2.544	15.7	21.6
1 2	8 51.07	+21 12.3	2.239	3.136	8.7	18.5	1 2	8 51.90	+8 4.9	1.662	2.541	12.3	21.4
1 12	8 42.82	+21 47.0	2.192	3.147	5.2	18.3	1 12	8 43.66	+8 12.7	1.599	2.536	8.4	21.1
1 22	8 33.29	+22 21.7	2.175	3.156	1.6	18.1	1 22	8 33.64	+8 35.5	1.561	2.531	4.8	20.9
2 1	8 23.39	+22 52.3	2.189	3.165	2.9	18.2	2 1	8 22.92	+9 10.5	1.553	2.526	4.4	20.9
2 11	8 14.13	+23 15.8	2.233	3.173	6.4	18.4	2 11	8 12.82	+9 53.1	1.572	2.520	7.9	21.0
2 21	8 6.35	+23 30.7	2.305	3.181	9.7	18.7	2 21	8 4.48	+10 38.4	1.618	2.513	12.0	21.3
3 2	8 0.69	+23 36.9	2.402	3.188	12.5	18.9	3 2	7 58.74	+11 21.9	1.688	2.506	15.6	21.5
<b>203849</b>	2002 <i>VL</i> <sub>96</sub>		1 25.8 82°75	0°7/25.4	18		<b>166978</b>	2003 <i>OJ</i> <sub>13</sub>		1 25.8 176°24	0°3/25.6	18	
12 23	8 52.49	+18 26.0	2.210	3.032	12.0	20.2	12 23						

EPHEMERIDES

1 25.8

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>404722</b>	2014 <i>JT</i> <sub>14</sub>		1 25.8 118°49	4.1°/23.5	18		<b>443866</b>	2001 <i>SB</i> <sub>293</sub>		1 25.8 80°52	3.4°/24.5	15	
12 23	9 1.16	+26 33.2	1.760	2.589	14.3	21.5	12 23	9 4.15	+25 8.5	1.433	2.268	16.6	22.3
1 2	8 54.50	+27 44.2	1.704	2.607	10.6	21.3	1 2	8 56.86	+25 49.3	1.390	2.296	12.2	22.2
1 12	8 45.14	+28 56.0	1.673	2.625	6.7	21.1	1 12	8 46.55	+26 30.8	1.369	2.324	7.5	22.0
1 22	8 34.02	+30 0.3	1.669	2.641	4.1	21.0	1 22	8 34.41	+27 5.4	1.374	2.352	3.6	21.8
2 1	8 22.43	+30 50.1	1.695	2.658	5.6	21.1	2 1	8 22.05	+27 26.5	1.408	2.379	5.2	22.0
2 11	8 11.83	+31 21.1	1.749	2.673	9.2	21.4	2 11	8 11.14	+27 31.5	1.469	2.406	9.4	22.3
2 21	8 3.38	+31 33.4	1.828	2.688	12.7	21.6	2 21	8 2.88	+27 21.4	1.554	2.432	13.5	22.6
3 2	7 57.83	+31 29.2	1.930	2.702	15.6	21.8	3 2	7 57.93	+26 59.0	1.661	2.457	16.8	22.8
<b>375009</b>	2007 <i>GN</i> <sub>15</sub>		1 25.8 171°33	3.7°/23.7	18		<b>507708</b>	2013 <i>TP</i> <sub>128</sub>		1 25.8 236°05	3.7°/23.7	17	
12 23	8 58.30	+28 52.1	2.163	2.987	12.1	21.8	12 23	8 59.77	+29 32.1	2.320	3.138	11.6	22.0
1 2	8 52.07	+29 29.4	2.089	2.989	9.1	21.6	1 2	8 53.20	+30 5.2	2.228	3.124	8.8	21.8
1 12	8 43.58	+30 5.0	2.041	2.991	5.9	21.4	1 12	8 44.33	+30 36.4	2.163	3.110	5.8	21.6
1 22	8 33.57	+30 33.3	2.021	2.992	3.8	21.3	1 22	8 33.85	+31 0.2	2.126	3.095	3.8	21.4
2 1	8 23.12	+30 49.6	2.031	2.993	5.0	21.3	2 1	8 22.77	+31 11.9	2.119	3.079	4.9	21.5
2 11	8 13.39	+30 51.6	2.070	2.994	8.0	21.5	2 11	8 12.26	+31 9.2	2.142	3.063	7.9	21.6
2 21	8 5.37	+30 39.3	2.136	2.994	11.1	21.7	2 21	8 3.35	+30 52.1	2.193	3.047	11.1	21.8
3 2	7 59.78	+30 14.9	2.224	2.994	13.9	21.9	3 2	7 56.81	+30 22.6	2.266	3.029	13.9	22.0
<b>63811</b>	2001 <i>RU</i> <sub>45</sub>		1 25.8 29°13	3.7°/24.2	18		<b>456378</b>	2006 <i>UA</i> <sub>62</sub>		1 25.8 89°62	7.1°/29.9	18	
12 23	8 57.01	+23 54.2	1.204	2.058	17.8	18.4	12 23	8 56.32	- 0 38.2	1.841	2.599	16.5	21.9
1 2	8 52.37	+24 49.5	1.147	2.064	13.2	18.1	1 2	8 50.53	- 1 13.7	1.780	2.621	13.6	21.7
1 12	8 44.28	+25 50.3	1.111	2.071	8.1	17.9	1 12	8 42.61	- 1 27.9	1.740	2.642	10.5	21.6
1 22	8 33.84	+26 47.3	1.099	2.078	3.9	17.7	1 22	8 33.32	- 1 19.7	1.724	2.663	7.9	21.5
2 1	8 22.72	+27 31.2	1.113	2.086	5.9	17.8	2 1	8 23.70	- 0 50.6	1.736	2.684	7.1	21.5
2 11	8 12.84	+27 56.2	1.152	2.094	10.8	18.1	2 11	8 14.85	- 0 4.8	1.776	2.705	8.7	21.6
2 21	8 5.70	+28 1.5	1.213	2.103	15.5	18.4	2 21	8 7.70	+ 0 51.8	1.842	2.725	11.4	21.8
3 2	8 2.18	+27 49.4	1.294	2.113	19.4	18.7	3 2	8 2.88	+ 1 53.0	1.931	2.744	14.1	22.0
<b>203305</b>	2001 <i>SO</i> <sub>273</sub>		1 25.8 150°58	0.7°/26.4	17		<b>433158</b>	2012 <i>TN</i> <sub>249</sub>		1 25.9 63°88	2.7°/24.2	18	
12 23	8 52.01	+14 51.5	2.411	3.220	11.5	21.2	12 23	8 55.50	+27 3.8	2.353	3.178	11.3	21.2
1 2	8 47.13	+15 12.5	2.329	3.222	8.6	21.0	1 2	8 49.78	+27 25.4	2.280	3.182	8.4	21.0
1 12	8 40.50	+15 41.7	2.273	3.224	5.3	20.8	1 12	8 42.12	+27 46.1	2.233	3.186	5.3	20.8
1 22	8 32.71	+16 16.4	2.245	3.226	1.8	20.5	1 22	8 33.19	+28 1.7	2.215	3.190	2.9	20.6
2 1	8 24.52	+16 53.3	2.248	3.227	2.2	20.6	2 1	8 23.91	+28 8.7	2.226	3.194	4.0	20.7
2 11	8 16.82	+17 29.0	2.280	3.229	5.7	20.8	2 11	8 15.29	+28 5.2	2.267	3.199	6.9	20.9
2 21	8 10.35	+18 0.7	2.341	3.230	9.0	21.0	2 21	8 8.17	+27 51.2	2.335	3.203	10.0	21.1
3 2	8 5.71	+18 26.6	2.426	3.231	11.8	21.2	3 2	8 3.15	+27 27.8	2.427	3.207	12.6	21.3
<b>152783</b>	1999 <i>RZ</i> <sub>223</sub>		1 25.8 199°21	4.0°/28.5	18		<b>495646</b>	2016 <i>AJ</i> <sub>6</sub>		1 25.9 36°53	3.8°/23.8	17	
12 23	8 53.26	+ 5 10.9	2.378	3.152	12.7	20.3	12 23	8 55.72	+23 48.8	1.396	2.243	16.2	21.0
1 2	8 48.06	+ 5 2.8	2.288	3.149	10.1	20.1	1 2	8 51.08	+25 3.2	1.337	2.251	12.0	20.7
1 12	8 41.09	+ 5 8.6	2.221	3.146	7.3	20.0	1 12	8 43.40	+26 23.4	1.301	2.259	7.4	20.5
1 22	8 32.89	+ 5 27.8	2.182	3.142	4.7	19.8	1 22	8 33.62	+27 40.1	1.290	2.267	3.9	20.3
2 1	8 24.24	+ 5 58.7	2.173	3.139	4.3	19.7	2 1	8 23.20	+28 43.8	1.306	2.276	5.8	20.4
2 11	8 16.01	+ 6 38.1	2.193	3.134	6.5	19.9	2 11	8 13.80	+29 28.4	1.349	2.285	10.2	20.7
2 21	8 9.01	+ 7 22.3	2.241	3.130	9.4	20.1	2 21	8 6.77	+29 52.2	1.415	2.295	14.4	21.0
3 2	8 3.83	+ 8 7.3	2.314	3.124	12.2	20.2	3 2	8 2.95	+29 56.7	1.501	2.305	17.9	21.2
<b>292080</b>	2006 <i>RA</i> <sub>33</sub>		1 25.8 163°10	0.2°/25.9	18		<b>327319</b>	2005 <i>UW</i> <sub>42</sub>		1 25.9 68°33	6.8°/30.0	18	
12 23	8 57.00	+16 54.3	2.010	2.825	13.3	21.7	12 23	8 53.47	- 0 13.6	1.800	2.566	16.5	20.9
1 2	8 51.11	+17 13.0	1.933	2.829	9.9	21.5	1 2	8 48.55	- 0 35.6	1.734	2.582	13.5	20.7
1 12	8 43.02	+17 39.6	1.880	2.833	6.0	21.3	1 12	8 41.49	- 0 35.6	1.689	2.597	10.3	20.6
1 22	8 33.44	+18 10.5	1.855	2.837	1.7	21.0	1 22	8 33.03	- 0 13.0	1.668	2.612	7.6	20.4
2 1	8 23.38	+18 41.5	1.860	2.840	2.6	21.1	2 1	8 24.17	+ 0 30.3	1.674	2.627	6.8	20.4
2 11	8 13.98	+19 8.9	1.895	2.842	6.8	21.4	2 11	8 16.02	+ 1 29.4	1.708	2.642	8.5	20.6
2 21	8 6.21	+19 30.3	1.957	2.844	10.6	21.6	2 21	8 9.51	+ 2 37.7	1.767	2.658	11.4	20.8
3 2	8 0.76	+19 44.4	2.043	2.846	13.8	21.8	3 2	8 5.29	+ 3 48.8	1.850	2.673	14.3	21.0
<b>424853</b>	2008 <i>UQ</i> <sub>335</sub>		1 25.8 18°75	3.3°/23.9	18		<b>424639</b>	2008 <i>LW</i> <sub>9</sub>		1 25.9 130°54	4.4°/29.0	18	
12 23	8 54.47	+25 49.6	1.809	2.647	13.5	21.2	12 23	8 52.86	+ 3 16.6	2.088	2.862	14.3	21.6
1 2	8 49.57	+26 34.5	1.742	2.650	10.0	21.0	1 2	8 47.95	+ 3 34.8	2.009	2.869	11.4	21.4
1 12	8 42.21	+27 21.0	1.699	2.654	6.3	20.8	1 12	8 41.09	+ 4 11.6	1.953	2.876	8.2	21.2
1 22	8 33.23	+28 2.8	1.683	2.658	3.4	20.6	1 22	8 32.92	+ 5 5.7	1.923	2.883	5.3	21.1
2 1	8 23.74	+28 34.2	1.695	2.663	4.9	20.7	2 1	8 24.31	+ 6 13.8	1.922	2.890	4.5	21.0
2 11	8 15.05	+28 51.5	1.735	2.668	8.5	20.9	2 11	8 16.24	+ 7 30.3	1.951	2.896	6.9	21.2
2 21	8 8.22	+28 54.0	1.800	2.674	12.1	21.1	2 21	8 9.56	+ 8 49.5	2.008	2.902	10.0	21.4
3 2	8 3.99	+28 43.0	1.886	2.680	15.2	21.4	3 2	8 4.92	+10 5.9	2.089	2.908	13.0	21.6
<b>357210</b>	2002 <i>GQ</i> <sub>113</sub>		1 25.8 275°86	4.9°/28.5	17		<b>282792</b>	2006 <i>OM</i> <sub>4</sub>		1 25.9 195°69	3.7°/22.9	17	
12 23	8 53.90	+ 4 43.3	1.692	2.484	16.4	21.3	12 23	8 57.11	+33 12.0	3.231	4.040	8.9	21.7
1 2	8 49.41	+ 4 49.5	1.591	2.464	13.1	21.0	1 2	8 50.62	+33 43.7	3.149	4.037	6.8	21.5
1 12	8 42.36	+ 5 17.2	1.512	2.443	9.4	20.8	1 12	8 42.49	+34 11.4	3.095	4.033	4.8	21.4
1 22	8 33.36	+ 6 6.4	1.457	2.422	5.9	20.5	1 22	8 33.29	+34 31.1	3.071	4.028	3.7	21.3
2 1	8 23.42	+ 7 14.2	1.431	2.401	5.2	20.4	2 1	8 23.76	+34 39.8	3.077	4.023	4.5	21.4
2 11	8 13.85	+ 8 34.4	1.431	2.380	8.4	20.5	2 11	8 14.71	+34 36.1	3.115	4.018	6.4	21.5
2 21	8 5.91	+ 9 59.7	1.458	2.358	12.7	20.7	2 21	8 6.85	+34 20.3	3.180	4.012	8.6	21.6
3 2	8 0.56	+11 22.8	1.508	2.337	16.6	20.9	3 2	8 0.72	+33 53.9	3.270	4.005	10.5	21.8
<b>93459</b>	2000 <i>SK</i> <sub>360</sub>		1 25.8 50°69	0.1°/25.8	18		<b>303345</b>	2004 <i>TD</i> <sub>221</sub>		1 25.9 176°42	3.7°/23.7	18	
12 23	8 53.47	+15 11.3	1.651	2.4									

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>246758</b>	2009 <i>BF</i> <sub>179</sub>		1 25.9 338°47	4.1/23.0	18		<b>372718</b>	2009 <i>XD</i> <sub>19</sub>		1 25.9 50°62	0.4/25.6	18	
12 23	8 53.97	+28 46.0	2.157	2.988	11.9	20.3	12 23	8 53.55	+17 23.0	1.803	2.631	14.0	20.5
1 2	8 49.00	+29 47.1	2.083	2.986	8.9	20.1	1 2	8 48.73	+18 3.8	1.741	2.645	10.4	20.3
1 12	8 41.84	+30 48.0	2.034	2.984	5.9	19.9	1 12	8 41.66	+18 53.7	1.702	2.659	6.2	20.1
1 22	8 33.16	+31 42.5	2.014	2.982	4.1	19.8	1 22	8 33.12	+19 47.6	1.691	2.673	1.7	19.8
2 1	8 23.95	+32 24.8	2.023	2.980	5.4	19.8	2 1	8 24.17	+20 39.9	1.709	2.688	2.9	19.9
2 11	8 15.34	+32 51.3	2.060	2.978	8.3	20.0	2 11	8 16.00	+21 25.6	1.755	2.703	7.2	20.2
2 21	8 8.32	+33 1.4	2.122	2.977	11.4	20.2	2 21	8 9.55	+22 1.8	1.828	2.718	11.0	20.5
3 2	8 3.60	+32 56.2	2.207	2.975	14.0	20.4	3 2	8 5.50	+22 26.9	1.923	2.734	14.3	20.7
<b>40003</b>	1998 <i>HW</i> <sub>92</sub>		1 25.9 322°10	0°6/25.5	18		<b>427679</b>	2004 <i>CV</i> <sub>71</sub>		1 25.9 353°43	0°9/26.6	18	
12 23	8 52.21	+19 10.9	2.120	2.945	12.3	19.2	12 23	8 50.18	+11 26.4	1.871	2.687	14.1	20.2
1 2	8 47.62	+19 32.2	2.032	2.935	9.1	19.0	1 2	8 46.34	+12 35.2	1.788	2.683	10.6	20.0
1 12	8 40.98	+19 59.6	1.970	2.926	5.5	18.7	1 12	8 40.33	+14 1.2	1.729	2.681	6.6	19.7
1 22	8 32.92	+20 29.6	1.935	2.917	1.6	18.5	1 22	8 32.78	+15 39.7	1.698	2.678	2.3	19.4
2 1	8 24.34	+20 58.3	1.930	2.908	2.7	18.5	2 1	8 24.63	+17 23.4	1.696	2.677	2.7	19.5
2 11	8 16.26	+21 22.2	1.953	2.900	6.7	18.8	2 11	8 16.97	+19 4.4	1.724	2.675	7.0	19.7
2 21	8 9.61	+21 38.9	2.004	2.892	10.3	19.0	2 21	8 10.81	+20 36.3	1.779	2.675	11.0	20.0
3 2	8 5.09	+21 47.5	2.077	2.884	13.5	19.2	3 2	8 6.90	+21 54.7	1.858	2.675	14.5	20.2
<b>116285</b>	2003 <i>YG</i> <sub>52</sub>		1 25.9 121°04	2°4/24.9	17		<b>1963</b>	Bezovec		1 25.9 13°35	7°0/20.5	18	A
12 23	9 3.34	+23 0.5	1.505	2.335	16.2	19.9	12 23	8 51.54	+20 59.7	1.048	1.915	18.9	13.4
1 2	8 56.38	+23 33.7	1.445	2.350	12.0	19.7	1 2	8 49.02	+24 48.2	0.994	1.919	13.9	13.1
1 12	8 46.40	+24 10.7	1.408	2.364	7.2	19.4	1 12	8 42.77	+28 57.8	0.965	1.925	9.0	12.9
1 22	8 34.45	+24 44.5	1.398	2.378	2.8	19.2	1 22	8 33.62	+33 4.1	0.963	1.933	7.0	12.8
2 1	8 22.02	+25 8.7	1.416	2.391	4.5	19.3	2 1	8 23.22	+36 41.0	0.989	1.942	10.2	13.0
2 11	8 10.78	+25 19.7	1.462	2.403	9.1	19.6	2 11	8 13.78	+39 30.5	1.039	1.953	15.0	13.3
2 21	8 2.00	+25 17.2	1.534	2.415	13.4	19.9	2 21	8 7.21	+41 27.9	1.111	1.965	19.4	13.6
3 2	7 56.46	+25 2.9	1.627	2.426	16.9	20.2	3 2	8 4.78	+42 37.7	1.199	1.979	22.9	13.9
<b>37711</b>	1996 <i>RP</i> <sub>12</sub>		1 25.9 42°57	3°5/27.7	18		<b>413867</b>	2006 <i>UW</i> <sub>126</sub>		1 25.9 135°89	1°9/24.9	18	
12 23	8 54.15	+ 8 35.1	1.401	2.219	17.8	18.6	12 23	8 58.06	+22 39.0	1.859	2.686	13.7	22.2
1 2	8 49.69	+ 8 49.0	1.334	2.226	13.8	18.4	1 2	8 52.12	+23 9.9	1.788	2.692	10.1	22.0
1 12	8 42.48	+ 9 23.4	1.288	2.233	9.2	18.1	1 12	8 43.74	+23 44.4	1.741	2.697	6.1	21.7
1 22	8 33.38	+10 15.7	1.266	2.240	4.7	17.9	1 22	8 33.72	+24 17.2	1.722	2.703	2.3	21.5
2 1	8 23.66	+11 20.5	1.271	2.248	4.2	17.9	2 1	8 23.22	+24 43.3	1.733	2.708	3.8	21.6
2 11	8 14.81	+12 30.2	1.302	2.256	8.5	18.1	2 11	8 13.52	+24 59.3	1.772	2.713	7.8	21.9
2 21	8 8.06	+13 37.7	1.359	2.265	13.0	18.4	2 21	8 5.67	+25 3.8	1.837	2.717	11.6	22.1
3 2	8 4.22	+14 37.7	1.436	2.273	16.9	18.7	3 2	8 0.42	+24 57.7	1.925	2.721	14.8	22.3
<b>175748</b>	1998 <i>QO</i> <sub>88</sub>		1 25.9 76°28	2°3/26.8	18		<b>39949</b>	1998 <i>FG</i> <sub>115</sub>		1 25.9 7°09	3°7/27.4	18	
12 23	9 0.44	+13 35.3	1.644	2.455	15.9	19.8	12 23	8 55.68	+10 39.7	1.413	2.234	17.5	17.8
1 2	8 53.73	+13 11.9	1.588	2.479	12.0	19.6	1 2	8 50.88	+10 15.4	1.340	2.235	13.6	17.6
1 12	8 44.56	+12 59.0	1.555	2.503	7.6	19.4	1 12	8 43.24	+10 6.5	1.289	2.235	9.1	17.3
1 22	8 33.89	+12 54.6	1.549	2.526	3.3	19.2	1 22	8 33.63	+10 12.2	1.262	2.236	4.8	17.1
2 1	8 22.96	+12 56.5	1.572	2.550	3.4	19.2	2 1	8 23.36	+10 29.7	1.261	2.237	4.5	17.0
2 11	8 13.10	+13 1.5	1.623	2.573	7.5	19.5	2 11	8 13.95	+10 54.8	1.287	2.239	8.7	17.3
2 21	8 5.31	+13 7.2	1.701	2.595	11.5	19.8	2 21	8 6.67	+11 22.7	1.337	2.242	13.2	17.6
3 2	8 0.25	+13 11.6	1.801	2.618	14.9	20.1	3 2	8 2.36	+11 49.3	1.408	2.244	17.2	17.8
<b>408964</b>	2002 <i>NR</i> <sub>64</sub>		1 25.9 173°83	1°5/26.5	18		<b>56848</b>	2000 <i>QC</i> <sub>59</sub>		1 25.9 273°57	2°7/24.4	18	
12 23	9 0.02	+14 58.4	2.102	2.904	13.3	21.9	12 23	8 57.05	+24 16.4	1.949	2.777	13.1	19.8
1 2	8 53.23	+14 41.4	2.019	2.907	10.0	21.7	1 2	8 51.62	+24 55.5	1.852	2.756	9.8	19.6
1 12	8 44.26	+14 31.4	1.961	2.909	6.3	21.5	1 12	8 43.64	+25 38.3	1.780	2.735	6.1	19.3
1 22	8 33.84	+14 26.5	1.932	2.911	2.5	21.2	1 22	8 33.77	+26 19.2	1.735	2.713	2.9	19.1
2 1	8 22.97	+14 24.9	1.934	2.912	2.8	21.2	2 1	8 23.07	+26 52.4	1.720	2.691	4.4	19.1
2 11	8 12.77	+14 24.3	1.966	2.913	6.6	21.5	2 11	8 12.86	+27 13.5	1.733	2.669	8.3	19.3
2 21	8 4.18	+14 23.0	2.026	2.913	10.3	21.7	2 21	8 4.33	+27 20.8	1.773	2.647	12.3	19.5
3 2	7 57.91	+14 20.0	2.110	2.912	13.5	21.9	3 2	7 58.39	+27 15.0	1.834	2.624	15.7	19.7
<b>42112</b>	2001 <i>AF</i> <sub>48</sub>		1 25.9 123°09	12°4/ 8.6	18		<b>388126</b>	2005 <i>UQ</i> <sub>510</sub>		1 25.9 223°77	2°5/27.7	17	
12 23	8 52.88	-26 14.9	2.548	3.101	16.6	18.8	12 23	8 50.58	+ 9 3.9	2.884	3.669	10.5	21.6
1 2	8 47.78	-26 57.5	2.477	3.113	15.5	18.7	1 2	8 45.85	+ 8 59.4	2.792	3.664	8.1	21.4
1 12	8 40.92	-27 11.4	2.420	3.124	14.3	18.6	1 12	8 39.68	+ 9 4.1	2.725	3.660	5.5	21.2
1 22	8 32.89	-26 53.2	2.381	3.135	13.3	18.5	1 22	8 32.56	+ 9 17.2	2.686	3.656	3.1	21.1
2 1	8 24.48	-26 1.4	2.362	3.146	12.6	18.5	2 1	8 25.09	+ 9 37.2	2.678	3.651	2.9	21.0
2 11	8 16.59	-24 38.3	2.366	3.156	12.4	18.5	2 11	8 17.97	+10 1.6	2.701	3.646	5.1	21.2
2 21	8 9.98	-22 49.4	2.393	3.167	12.9	18.6	2 21	8 11.82	+10 28.0	2.752	3.642	7.8	21.4
3 2	8 5.25	-20 42.4	2.443	3.176	13.7	18.6	3 2	8 7.16	+10 54.1	2.829	3.637	10.3	21.5
<b>247681</b>	2003 <i>AU</i> <sub>12</sub>		1 25.9 52°25	7°0/28.9	18		<b>19330</b>	1996 <i>XJ</i> <sub>31</sub>		1 25.9 355°89	1°8/24.7	18	
12 23	8 56.52	+ 3 10.7	1.590	2.375	17.5	19.2	12 23	8 53.22	+19 54.0	1.745	2.580	14.1	17.4
1 2	8 51.03	+ 2 9.7	1.526	2.389	14.2	19.0	1 2	8 48.79	+20 59.5	1.670	2.578	10.4	17.1
1 12	8 43.07	+ 1 28.0	1.484	2.402	10.7	18.8	1 12	8 41.89	+22 14.2	1.619	2.577	6.2	16.9
1 22	8 33.52	+ 1 7.6	1.466	2.416	7.8	18.7	1 22	8 33.25	+23 31.5	1.596	2.577	2.2	16.6
2 1	8 23.52	+ 1 8.3	1.475	2.431	7.2	18.7	2 1	8 23.97	+24 44.0	1.601	2.576	3.9	16.7
2 11	8 14.39	+ 1 27.0	1.510	2.445	9.4	18.9	2 11	8 15.33	+25 45.3	1.634	2.576	8.2	17.0
2 21	8 7.19	+ 1 58.4	1.570	2.460	12.6	19.1	2 21	8 8.46	+26 31.8	1.693	2.576	12.2	17.2
3 2	8 2.63	+ 2 36.5	1.652	2.475	15.7	19.3	3 2	8 4.18	+27 2.5	1.774	2.577	15.6	17.5
<b>144809</b>	2004 <i>HV</i> <sub>72</sub>		1 25.9 219°60	1°0/26.6	17		<b>203368</b>	2001 <i>WW</i> <sub>5</sub>		1 25.9 159°88	1°3/26.6	18	
12 23	8 51.61	+14 6.2	2.877	3.677	10.1	21.5	12						

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>52402</b>	1993 <i>TL</i>		1 25.9 120°77	2°0/24.6	18		<b>510535</b>	2012 <i>HS<sub>3</sub></i>		1 25.9 231°35	3°3/28.1	17	
12 23	8 59.25	+23 34.8	2.253	3.069	12.0	19.3	12 23	8 53.67	+6 42.2	2.544	3.319	12.0	22.9
1 2	8 52.51	+24 12.8	2.192	3.090	8.8	19.2	1 2	8 48.41	+6 45.4	2.440	3.305	9.4	22.7
1 12	8 43.74	+24 52.5	2.157	3.111	5.3	19.0	1 12	8 41.38	+7 1.3	2.361	3.291	6.6	22.5
1 22	8 33.70	+25 29.2	2.152	3.130	2.3	18.8	1 22	8 33.11	+7 29.0	2.310	3.275	4.0	22.3
2 1	8 23.37	+25 58.4	2.177	3.149	3.5	18.9	2 1	8 24.31	+8 6.7	2.289	3.260	3.6	22.2
2 11	8 13.80	+26 17.5	2.233	3.167	6.8	19.2	2 11	8 15.83	+8 51.0	2.299	3.243	6.0	22.3
2 21	8 5.86	+26 25.6	2.316	3.185	10.0	19.4	2 21	8 8.45	+9 38.2	2.338	3.226	9.1	22.5
3 2	8 0.14	+26 23.6	2.424	3.201	12.7	19.6	3 2	8 2.80	+10 25.0	2.402	3.208	11.9	22.7
<b>276859</b>	2004 <i>RG<sub>147</sub></i>		1 25.9 100°53	0°8/26.4	18		<b>234469</b>	2001 <i>SB<sub>245</sub></i>		1 25.9 147°36	2°3/24.2	18	
12 23	8 55.32	+14 41.3	2.126	2.936	12.9	21.7	12 23	8 54.37	+25 22.3	2.659	3.479	10.3	21.5
1 2	8 49.67	+15 5.2	2.062	2.954	9.6	21.6	1 2	8 48.82	+25 59.3	2.585	3.485	7.6	21.3
1 12	8 42.07	+15 38.2	2.022	2.973	5.9	21.4	1 12	8 41.54	+26 37.2	2.538	3.491	4.7	21.1
1 22	8 33.25	+16 16.9	2.010	2.991	2.0	21.1	1 22	8 33.13	+27 11.7	2.521	3.497	2.4	21.0
2 1	8 24.10	+16 57.2	2.029	3.008	2.4	21.2	2 1	8 24.37	+27 39.3	2.534	3.502	3.5	21.1
2 11	8 15.63	+17 35.3	2.077	3.026	6.2	21.5	2 11	8 16.14	+27 57.5	2.577	3.508	6.3	21.3
2 21	8 8.67	+18 8.3	2.153	3.042	9.7	21.7	2 21	8 9.18	+28 5.3	2.649	3.513	9.0	21.5
3 2	8 3.83	+18 34.5	2.254	3.059	12.6	21.9	3 2	8 4.06	+28 3.3	2.744	3.517	11.5	21.6
<b>324517</b>	2006 <i>VV<sub>72</sub></i>		1 25.9 327°66	2°7/24.5	18		<b>55008</b>	2001 <i>QW<sub>26</sub></i>		1 25.9 262°54	0°2/26.0	18	
12 23	8 55.12	+22 58.8	1.565	2.407	15.1	21.3	12 23	8 52.86	+16 41.7	2.395	3.207	11.5	19.7
1 2	8 50.52	+23 43.0	1.488	2.399	11.2	21.1	1 2	8 47.93	+17 2.2	2.299	3.195	8.6	19.5
1 12	8 43.09	+24 33.0	1.433	2.392	6.9	20.8	1 12	8 41.15	+17 30.0	2.229	3.181	5.2	19.3
1 22	8 33.64	+25 22.1	1.405	2.385	3.0	20.5	1 22	8 33.05	+18 2.2	2.187	3.168	1.6	19.0
2 1	8 23.43	+26 3.3	1.404	2.378	4.7	20.6	2 1	8 24.44	+18 35.5	2.175	3.155	2.3	19.0
2 11	8 13.98	+26 31.3	1.430	2.372	9.2	20.9	2 11	8 16.22	+19 6.4	2.194	3.141	6.0	19.3
2 21	8 6.59	+26 44.0	1.481	2.366	13.5	21.1	2 21	8 9.23	+19 32.3	2.240	3.127	9.5	19.5
3 2	8 2.17	+26 42.1	1.552	2.361	17.2	21.3	3 2	8 4.13	+19 51.8	2.311	3.114	12.4	19.6
<b>506094</b>	2016 <i>AF<sub>94</sub></i>		1 25.9 17°43	7°1/28.6	18		<b>11660</b>	1997 <i>FL<sub>2</sub></i>		1 25.9 48°48	0°4/26.1	18	
12 23	8 54.28	+4 49.0	1.329	2.138	19.1	20.6	12 23	8 55.99	+15 27.2	1.324	2.161	17.6	17.4
1 2	8 49.87	+3 48.1	1.264	2.143	15.4	20.4	1 2	8 51.12	+15 59.4	1.271	2.178	13.1	17.2
1 12	8 42.64	+3 7.8	1.219	2.148	11.4	20.2	1 12	8 43.34	+16 45.3	1.239	2.196	7.9	16.9
1 22	8 33.48	+2 50.4	1.197	2.155	8.0	20.0	1 22	8 33.68	+17 39.0	1.232	2.214	2.4	16.6
2 1	8 23.74	+2 55.8	1.199	2.162	7.4	20.0	2 1	8 23.56	+18 33.5	1.252	2.232	3.3	16.8
2 11	8 14.91	+3 20.0	1.227	2.171	10.1	20.2	2 11	8 14.56	+19 22.1	1.298	2.251	8.6	17.1
2 21	8 8.25	+3 56.8	1.277	2.180	13.9	20.4	2 21	8 7.90	+20 0.6	1.369	2.271	13.2	17.4
3 2	8 4.57	+4 39.5	1.349	2.190	17.5	20.7	3 2	8 4.32	+20 27.3	1.461	2.290	17.1	17.7
<b>522306</b>	2016 <i>BL<sub>100</sub></i>		1 25.9 252°62	4°5/28.0	17		<b>523776</b>	2014 <i>YB<sub>50</sub></i>		1 25.9 346°53	0°3/23.4	18	
12 23	8 55.80	+6 19.1	2.214	2.992	13.4	21.9	12 23	8 32.91	+29 8.5	36.938	37.757	0.8	22.0
1 2	8 50.22	+5 46.7	2.111	2.975	10.7	21.7	1 2	8 32.07	+29 14.0	36.859	37.757	0.6	21.9
1 12	8 42.58	+5 26.5	2.032	2.958	7.7	21.4	1 12	8 31.13	+29 19.3	36.808	37.756	0.4	21.9
1 22	8 33.46	+5 19.1	1.980	2.941	5.1	21.3	1 22	8 30.14	+29 24.2	36.787	37.755	0.3	21.9
2 1	8 23.70	+5 23.8	1.958	2.923	4.8	21.2	2 1	8 29.14	+29 28.6	36.796	37.755	0.3	21.9
2 11	8 14.32	+5 38.7	1.965	2.905	7.2	21.3	2 11	8 28.15	+29 32.5	36.835	37.754	0.6	21.9
2 21	8 6.24	+6 0.7	1.999	2.886	10.5	21.5	2 21	8 27.23	+29 35.6	36.903	37.753	0.8	22.0
3 2	8 0.20	+6 26.3	2.058	2.867	13.5	21.6	3 2	8 26.41	+29 37.9	36.998	37.753	1.0	22.0
<b>491100</b>	2011 <i>SN<sub>33</sub></i>		1 25.9 131°24	3°2/24.4	18		<b>201371</b>	2002 <i>TP<sub>321</sub></i>		1 25.9 101°16	0°3/25.7	18	
12 23	9 2.27	+25 52.3	1.714	2.542	14.6	21.4	12 23	8 54.25	+18 20.7	2.259	3.076	11.9	21.0
1 2	8 55.40	+26 25.0	1.650	2.553	10.9	21.2	1 2	8 48.89	+18 41.4	2.187	3.086	8.8	20.8
1 12	8 45.77	+26 58.1	1.609	2.563	6.8	21.0	1 12	8 41.64	+19 7.9	2.141	3.095	5.3	20.6
1 22	8 34.34	+27 25.2	1.596	2.573	3.4	20.8	1 22	8 33.18	+19 36.8	2.123	3.105	1.5	20.4
2 1	8 22.45	+27 40.7	1.612	2.582	4.8	20.9	2 1	8 24.36	+20 4.6	2.135	3.115	2.4	20.5
2 11	8 11.58	+27 41.7	1.656	2.591	8.8	21.2	2 11	8 16.15	+20 28.1	2.178	3.124	6.1	20.7
2 21	8 2.93	+27 28.8	1.726	2.599	12.6	21.4	2 21	8 9.36	+20 45.4	2.247	3.133	9.5	21.0
3 2	7 57.24	+27 4.3	1.819	2.607	15.8	21.6	3 2	8 4.58	+20 55.6	2.341	3.142	12.4	21.2
<b>49328</b>	1998 <i>VL<sub>35</sub></i>		1 25.9 85°10	4°4/27.9	18		<b>332849</b>	2010 <i>HS<sub>56</sub></i>		1 25.9 116°22	1°0/26.7	18	
12 23	8 58.06	+7 58.4	1.783	2.576	15.6	18.2	12 23	8 52.77	+12 4.4	2.325	3.127	12.1	20.9
1 2	8 51.92	+7 24.0	1.719	2.594	12.2	18.0	1 2	8 47.78	+12 56.7	2.250	3.137	9.1	20.8
1 12	8 43.52	+7 3.9	1.678	2.612	8.4	17.8	1 12	8 40.99	+14 0.9	2.200	3.148	5.7	20.6
1 22	8 33.68	+6 58.0	1.663	2.629	5.1	17.6	1 22	8 33.01	+15 13.2	2.179	3.158	2.1	20.3
2 1	8 23.50	+7 4.6	1.677	2.647	4.8	17.6	2 1	8 24.62	+16 28.5	2.189	3.168	2.3	20.4
2 11	8 14.16	+7 20.7	1.720	2.664	7.7	17.9	2 11	8 16.74	+17 41.7	2.230	3.178	5.8	20.6
2 21	8 6.63	+7 42.3	1.788	2.681	11.1	18.1	2 21	8 10.13	+18 48.7	2.299	3.188	9.2	20.8
3 2	8 1.57	+8 5.7	1.881	2.698	14.3	18.3	3 2	8 5.41	+19 46.6	2.394	3.197	12.0	21.0
<b>31033</b>	1996 <i>HY<sub>23</sub></i>		1 25.9 162°65	4°1/23.0	18		<b>98326</b>	2000 <i>SG<sub>274</sub></i>		1 25.9 147°48	2°6/24.5	18	
12 23	8 59.04	+30 10.8	2.391	3.209	11.3	20.1	12 23	8 59.62	+23 26.5	1.814	2.641	14.0	19.6
1 2	8 52.54	+31 9.2	2.321	3.216	8.5	20.0	1 2	8 53.39	+24 14.4	1.745	2.649	10.4	19.4
1 12	8 43.89	+32 5.5	2.277	3.222	5.8	19.8	1 12	8 44.59	+25 6.0	1.701	2.656	6.3	19.2
1 22	8 33.80	+32 53.8	2.263	3.227	4.2	19.7	1 22	8 34.06	+25 54.8	1.685	2.663	2.8	19.0
2 1	8 23.26	+33 28.8	2.279	3.232	5.3	19.8	2 1	8 22.99	+26 34.7	1.698	2.670	4.3	19.1
2 11	8 13.36	+33 47.9	2.325	3.236	7.9	19.9	2 11	8 12.75	+27 1.6	1.739	2.675	8.3	19.3
2 21	8 5.06	+33 51.1	2.397	3.239	10.7	20.1	2 21	8 4.47	+27 14.1	1.807	2.681	12.1	19.6
3 2	7 59.02	+33 40.1	2.493	3.242	13.1	20.3	3 2	7 58.91	+27 13.4	1.897	2.685	15.3	19.8
<b>32082</b>	Sominsky		1 25.9 193°36	0°2/26.1	18		<b>290031</b>	2005 <i>QE<sub>29</sub></i>		1 25.9 117°50	2°0/26.8	17	
12 23	8 52.72	+16 30.9	2.661	3.469	10.6	20.8	12 23	9 1.04	+12 48.5	1.621			



EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>266763</b>	2009 <i>SN</i> <sub>129</sub>		1 25.9 155°77	0°2/25.8	18		<b>1796</b>	Riga		1 25.9 280°90	7°6/	1.5	18
12 23	8 55.09	+17 37.2	2.042	2.861	13.0	21.4	12 23	8 49.20	- 9 8.3	2.653	3.348	13.4	15.4
1 2	8 49.77	+18 5.4	1.965	2.864	9.6	21.2	1 2	8 45.03	- 9 24.9	2.559	3.342	11.7	15.2
1 12	8 42.31	+18 41.4	1.912	2.866	5.8	21.0	1 12	8 39.33	- 9 21.2	2.487	3.337	9.8	15.1
1 22	8 33.41	+19 21.1	1.887	2.869	1.6	20.7	1 22	8 32.57	- 8 55.4	2.438	3.332	8.3	15.0
2 1	8 24.02	+20 0.1	1.892	2.871	2.7	20.8	2 1	8 25.41	- 8 8.1	2.416	3.326	7.6	14.9
2 11	8 15.24	+20 34.4	1.926	2.873	6.8	21.0	2 11	8 18.59	- 7 1.8	2.421	3.321	8.2	14.9
2 21	8 8.01	+21 1.3	1.988	2.875	10.5	21.3	2 21	8 12.78	- 5 41.5	2.453	3.316	9.7	15.0
3 2	8 3.03	+21 19.5	2.072	2.876	13.6	21.5	3 2	8 8.54	- 4 12.9	2.510	3.311	11.6	15.1
<b>230426</b>	2002 <i>PD</i> <sub>110</sub>		1 25.9 99°24	0°9/25.4	17		<b>173542</b>	2000 <i>WT</i> <sub>163</sub>		1 25.9 118°16	0°2/25.8	18	
12 23	9 0.56	+17 23.4	1.452	2.280	16.8	21.2	12 23	8 59.62	+17 28.7	1.819	2.635	14.4	20.9
1 2	8 54.35	+18 20.4	1.398	2.302	12.4	21.0	1 2	8 53.18	+17 54.5	1.756	2.653	10.7	20.7
1 12	8 45.25	+19 28.7	1.366	2.323	7.4	20.7	1 12	8 44.36	+18 28.3	1.716	2.670	6.4	20.5
1 22	8 34.25	+20 40.6	1.361	2.343	2.1	20.5	1 22	8 34.00	+19 5.4	1.705	2.687	1.8	20.2
2 1	8 22.79	+21 48.2	1.385	2.363	3.6	20.6	2 1	8 23.26	+19 41.2	1.723	2.703	2.9	20.3
2 11	8 12.44	+22 44.5	1.436	2.382	8.7	21.0	2 11	8 13.38	+20 11.3	1.771	2.718	7.3	20.6
2 21	8 4.43	+23 26.5	1.513	2.401	13.1	21.3	2 21	8 5.40	+20 33.4	1.846	2.732	11.2	20.9
3 2	7 59.53	+23 53.6	1.611	2.419	16.7	21.5	3 2	7 59.99	+20 46.9	1.943	2.746	14.4	21.2
<b>240540</b>	2004 <i>GN</i> <sub>77</sub>		1 25.9 345°36	1°0/25.1	18		<b>120928</b>	1998 <i>SP</i> <sub>109</sub>		1 25.9 82°51	4°5/27.8	18	R
12 23	8 50.61	+16 49.1	1.887	2.716	13.4	19.7	12 23	8 58.20	+ 8 17.8	1.409	2.219	18.2	19.4
1 2	8 46.76	+18 9.1	1.805	2.710	10.0	19.5	1 2	8 52.64	+ 7 57.2	1.345	2.231	14.2	19.2
1 12	8 40.68	+19 42.0	1.747	2.704	5.9	19.2	1 12	8 44.27	+ 7 55.0	1.303	2.243	9.7	19.0
1 22	8 32.99	+21 21.7	1.717	2.699	1.7	18.9	1 22	8 34.02	+ 8 10.2	1.285	2.255	5.5	18.8
2 1	8 24.64	+23 0.2	1.717	2.695	3.3	19.1	2 1	8 23.24	+ 8 39.8	1.293	2.267	5.0	18.8
2 11	8 16.78	+24 30.2	1.746	2.691	7.6	19.3	2 11	8 13.44	+ 9 18.3	1.329	2.279	8.8	19.0
2 21	8 10.43	+25 46.3	1.802	2.687	11.5	19.5	2 21	8 5.85	+10 0.2	1.389	2.290	13.1	19.3
3 2	8 6.40	+26 46.0	1.881	2.684	14.8	19.7	3 2	8 1.26	+10 40.5	1.470	2.302	16.8	19.5
<b>522203</b>	2016 <i>AJ</i> <sub>262</sub>		1 25.9 240°20	3°8/28.2	17		<b>370202</b>	2002 <i>EU</i> <sub>23</sub>		1 25.9 58°35	0°4/25.7	18	
12 23	8 53.26	+ 6 34.6	2.075	2.862	13.9	21.6	12 23	8 55.46	+18 32.2	1.813	2.640	14.0	21.0
1 2	8 48.41	+ 6 33.9	1.984	2.856	11.0	21.4	1 2	8 50.22	+18 51.9	1.744	2.647	10.4	20.8
1 12	8 41.52	+ 6 48.5	1.916	2.849	7.7	21.1	1 12	8 42.65	+19 18.6	1.699	2.655	6.2	20.6
1 22	8 33.20	+ 7 17.6	1.876	2.842	4.6	20.9	1 22	8 33.54	+19 48.4	1.681	2.663	1.7	20.3
2 1	8 24.33	+ 7 58.7	1.864	2.835	4.1	20.9	2 1	8 23.98	+20 16.7	1.692	2.672	2.9	20.4
2 11	8 15.91	+ 8 47.8	1.881	2.827	6.9	21.0	2 11	8 15.20	+20 39.7	1.732	2.680	7.3	20.7
2 21	8 8.86	+ 9 40.2	1.925	2.820	10.4	21.2	2 21	8 8.18	+20 55.1	1.797	2.688	11.2	20.9
3 2	8 3.91	+10 31.6	1.993	2.812	13.5	21.4	3 2	8 3.63	+21 2.2	1.885	2.697	14.5	21.1
<b>489697</b>	2007 <i>VK</i> <sub>120</sub>		1 25.9 183°02	1°0/26.5	18		<b>179840</b>	2002 <i>TT</i> <sub>222</sub>		1 25.9 54°21	3°6/24.2	18	
12 23	8 57.47	+14 10.1	2.033	2.839	13.5	22.6	12 23	8 58.56	+25 50.2	1.515	2.355	15.5	20.1
1 2	8 51.55	+14 32.5	1.949	2.840	10.2	22.4	1 2	8 52.95	+26 33.8	1.459	2.368	11.5	19.9
1 12	8 43.41	+15 5.2	1.890	2.840	6.3	22.1	1 12	8 44.45	+27 18.6	1.426	2.382	7.2	19.7
1 22	8 33.74	+15 45.2	1.859	2.840	2.2	21.9	1 22	8 34.07	+27 57.2	1.419	2.395	3.8	19.5
2 1	8 23.51	+16 28.2	1.859	2.838	2.6	21.9	2 1	8 23.24	+28 23.0	1.439	2.409	5.4	19.6
2 11	8 13.87	+17 9.7	1.888	2.837	6.8	22.2	2 11	8 13.52	+28 32.6	1.487	2.423	9.4	19.9
2 21	8 5.79	+17 46.4	1.945	2.834	10.6	22.4	2 21	8 6.13	+28 26.1	1.558	2.437	13.3	20.2
3 2	8 0.02	+18 16.1	2.026	2.831	13.9	22.6	3 2	8 1.81	+28 5.8	1.651	2.452	16.7	20.4
<b>195706</b>	2002 <i>PO</i> <sub>36</sub>		1 25.9 359°51	0°8/25.5	18	R	<b>218036</b>	2002 <i>AP</i> <sub>104</sub>		1 25.9 45°76	0°6/26.1	18	
12 23	8 56.43	+21 10.2	1.967	2.792	13.1	19.9	12 23	8 58.46	+17 52.2	1.498	2.329	16.2	19.6
1 2	8 50.82	+21 10.0	1.889	2.792	9.8	19.6	1 2	8 52.59	+17 41.1	1.445	2.349	12.0	19.4
1 12	8 42.96	+21 13.0	1.835	2.791	5.9	19.4	1 12	8 44.08	+17 37.5	1.414	2.370	7.3	19.2
1 22	8 33.60	+21 15.9	1.809	2.791	1.7	19.1	1 22	8 33.93	+17 38.2	1.409	2.391	2.2	18.9
2 1	8 23.78	+21 15.7	1.813	2.791	2.9	19.2	2 1	8 23.50	+17 39.7	1.432	2.412	3.1	19.0
2 11	8 14.68	+21 9.9	1.845	2.791	7.1	19.5	2 11	8 14.20	+17 39.2	1.482	2.434	7.9	19.3
2 21	8 7.26	+20 57.9	1.904	2.792	10.8	19.7	2 21	8 7.11	+17 35.0	1.558	2.456	12.1	19.6
3 2	8 2.24	+20 39.9	1.986	2.793	14.1	19.9	3 2	8 2.89	+17 26.5	1.656	2.479	15.7	19.9
<b>226794</b>	2004 <i>RL</i> <sub>183</sub>		1 25.9 82°57	6°2/30.3	18		<b>460161</b>	2014 <i>QS</i> <sub>21</sub>		1 25.9 108°65	2°0/25.2	18	
12 23	8 53.44	- 0 58.7	2.025	2.779	15.3	20.5	12 23	9 3.16	+24 40.9	1.790	2.613	14.3	21.6
1 2	8 48.35	- 1 4.1	1.959	2.799	12.5	20.3	1 2	8 55.88	+24 39.3	1.723	2.624	10.6	21.3
1 12	8 41.35	- 0 48.4	1.916	2.820	9.6	20.2	1 12	8 46.00	+24 37.3	1.681	2.635	6.5	21.1
1 22	8 33.12	- 0 12.0	1.898	2.840	7.0	20.1	1 22	8 34.48	+24 30.8	1.666	2.646	2.5	20.9
2 1	8 24.57	+ 0 42.8	1.908	2.860	6.2	20.1	2 1	8 22.62	+24 16.2	1.681	2.657	3.8	21.0
2 11	8 16.67	+ 1 51.0	1.946	2.880	7.7	20.2	2 11	8 11.80	+23 52.4	1.726	2.667	7.9	21.3
2 21	8 10.24	+ 3 6.4	2.011	2.899	10.3	20.4	2 21	8 3.12	+23 20.1	1.797	2.677	11.8	21.5
3 2	8 5.87	+ 4 23.0	2.101	2.918	13.0	20.6	3 2	7 57.27	+22 41.5	1.891	2.687	15.1	21.8
<b>254663</b>	2005 <i>KU</i> <sub>11</sub>		1 25.9 207°80	2°2/24.6	18		<b>463613</b>	2013 <i>SA</i> <sub>85</sub>		1 25.9 186°14	2°3/27.6	18	
12 23	8 57.08	+22 30.8	1.994	2.819	13.0	21.0	12 23	8 53.58	+ 9 11.8	2.570	3.355	11.6	22.2
1 2	8 51.46	+23 19.7	1.912	2.815	9.6	20.8	1 2	8 48.27	+ 9 29.3	2.480	3.355	8.9	22.0
1 12	8 43.45	+24 13.7	1.855	2.811	5.8	20.5	1 12	8 41.28	+ 9 58.3	2.416	3.354	5.9	21.8
1 22	8 33.78	+25 6.9	1.827	2.806	2.5	20.3	1 22	8 33.15	+10 36.9	2.380	3.352	3.0	21.6
2 1	8 23.48	+25 53.6	1.828	2.801	3.9	20.4	2 1	8 24.60	+11 22.4	2.375	3.350	2.8	21.6
2 11	8 13.77	+26 29.1	1.858	2.795	7.8	20.6	2 11	8 16.45	+12 11.1	2.401	3.348	5.6	21.8
2 21	8 5.73	+26 51.4	1.915	2.789	11.5	20.8	2 21	8 9.43	+12 59.5	2.455	3.345	8.6	22.0
3 2	8 0.15	+27 0.8	1.995	2.783	14.7	21.0	3 2	8 4.14	+13 44.7	2.536	3.341	11.4	22.1
<b>51325</b>	2000 <i>LV</i> <sub>16</sub>		1 25.9 26°68	1°7/27.1	18		<b>451026</b>	2008 <i>WE</i> <sub>33</sub>		1 25.9 48°44	2°2/24.8	17	
12 23	8 51.15	+10 52.5	2.069	2.876	13.2	18.3							

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>197216</b>	2003 <i>WR</i> <sub>26</sub>		1 25.9	20°29	19°2/23.3	16	<b>318880</b>	2005 <i>TG</i> <sub>114</sub>		1 25.9	225°17	1°6/25.0	18
12 23	9 25.51	+54 0.2	0.921	1.737	25.1	19.4	12 23	8 56.94	+21 57.5	2.018	2.842	12.9	21.2
1 2	9 16.59	+55 14.1	0.883	1.740	22.4	19.2	1 2	8 51.31	+22 26.9	1.934	2.836	9.6	20.9
1 12	8 59.97	+55 49.8	0.859	1.744	20.2	19.1	1 12	8 43.37	+23 0.7	1.875	2.830	5.8	20.7
1 22	8 38.49	+55 24.8	0.853	1.748	19.2	19.0	1 22	8 33.81	+23 34.2	1.844	2.824	2.1	20.4
2 1	8 17.00	+53 48.3	0.865	1.754	19.8	19.1	2 1	8 23.66	+24 2.5	1.842	2.818	3.4	20.5
2 11	8 0.14	+51 9.0	0.895	1.761	21.8	19.2	2 11	8 14.12	+24 22.0	1.870	2.811	7.4	20.7
2 21	7 50.06	+47 48.8	0.944	1.768	24.4	19.4	2 21	8 6.22	+24 31.1	1.924	2.804	11.1	21.0
3 2	7 46.79	+44 10.0	1.008	1.776	27.1	19.7	3 2	8 0.71	+24 30.0	2.001	2.797	14.4	21.2
<b>401109</b>	2011 <i>UE</i> <sub>245</sub>		1 25.9	38°22	0°1/25.9	17	<b>424382</b>	2007 <i>WC</i> <sub>35</sub>		1 25.9	147°21	3°9/23.1	17
12 23	8 56.56	+17 22.7	1.258	2.102	17.9	21.1	12 23	8 55.12	+30 10.1	2.528	3.351	10.6	21.2
1 2	8 51.73	+17 38.7	1.204	2.115	13.3	20.9	1 2	8 49.60	+31 0.9	2.457	3.355	8.0	21.0
1 12	8 43.83	+18 5.7	1.170	2.129	8.0	20.6	1 12	8 42.15	+31 49.8	2.413	3.359	5.4	20.9
1 22	8 33.92	+18 38.7	1.161	2.143	2.3	20.3	1 22	8 33.43	+32 31.5	2.397	3.362	3.9	20.8
2 1	8 23.51	+19 11.2	1.178	2.158	3.5	20.5	2 1	8 24.30	+33 1.7	2.411	3.365	4.9	20.9
2 11	8 14.30	+19 38.1	1.221	2.174	8.9	20.8	2 11	8 15.74	+33 17.9	2.454	3.368	7.4	21.0
2 21	8 7.56	+19 56.1	1.287	2.191	13.7	21.1	2 21	8 8.58	+33 19.8	2.524	3.371	10.0	21.2
3 2	8 4.06	+20 4.3	1.374	2.207	17.7	21.4	3 2	8 3.46	+33 8.7	2.617	3.374	12.4	21.4
<b>468225</b>	2015 <i>BJ</i> <sub>133</sub>		1 25.9	183°69	1°5/24.9	18	<b>459807</b>	2013 <i>RR</i> <sub>94</sub>		1 25.9	142°86	0°9/26.5	18
12 23	8 53.81	+21 17.0	2.185	3.010	12.0	21.7	12 23	8 55.30	+14 48.7	2.436	3.238	11.6	21.9
1 2	8 48.79	+21 58.9	2.107	3.010	8.9	21.5	1 2	8 49.55	+15 2.0	2.360	3.248	8.7	21.7
1 12	8 41.74	+22 45.7	2.054	3.010	5.3	21.3	1 12	8 42.04	+15 22.8	2.309	3.258	5.4	21.5
1 22	8 33.31	+23 33.0	2.029	3.010	1.9	21.1	1 22	8 33.39	+15 48.7	2.288	3.268	1.9	21.3
2 1	8 24.39	+24 15.8	2.035	3.010	3.2	21.2	2 1	8 24.38	+16 16.6	2.297	3.276	2.2	21.3
2 11	8 16.02	+24 50.3	2.069	3.010	6.9	21.4	2 11	8 15.93	+16 43.5	2.337	3.285	5.7	21.6
2 21	8 9.10	+25 14.3	2.131	3.009	10.3	21.6	2 21	8 8.78	+17 7.1	2.405	3.293	8.9	21.8
3 2	8 4.30	+25 27.5	2.216	3.009	13.2	21.8	3 2	8 3.50	+17 25.9	2.499	3.300	11.7	22.0
<b>245174</b>	2004 <i>TO</i> <sub>135</sub>		1 25.9	87°96	4°0/27.8	18	<b>345613</b>	2006 <i>SC</i> <sub>207</sub>		1 25.9	156°66	0°8/26.6	17
12 23	8 58.87	+ 8 23.3	1.557	2.359	17.1	20.1	12 23	8 52.53	+14 46.5	2.926	3.725	10.0	21.8
1 2	8 52.82	+ 8 11.7	1.499	2.380	13.2	19.9	1 2	8 47.28	+14 56.3	2.844	3.731	7.5	21.7
1 12	8 44.22	+ 8 17.2	1.462	2.401	8.9	19.7	1 12	8 40.59	+15 12.3	2.788	3.736	4.6	21.5
1 22	8 34.00	+ 8 38.2	1.451	2.422	5.0	19.5	1 22	8 32.96	+15 32.6	2.762	3.742	1.7	21.3
2 1	8 23.40	+ 9 11.1	1.468	2.442	4.5	19.6	2 1	8 25.03	+15 55.0	2.767	3.746	1.9	21.3
2 11	8 13.78	+ 9 51.0	1.512	2.461	8.0	19.8	2 11	8 17.52	+16 17.0	2.803	3.751	4.9	21.5
2 21	8 6.23	+10 32.6	1.583	2.481	12.0	20.1	2 21	8 11.04	+16 36.7	2.869	3.755	7.7	21.7
3 2	8 1.43	+11 11.7	1.676	2.500	15.5	20.4	3 2	8 6.09	+16 52.8	2.960	3.758	10.1	21.9
<b>8368</b>	Lamont		1 25.9	334°12	0°2/25.9	18	<b>263703</b>	2008 <i>HX</i> <sub>18</sub>		1 25.9	324°63	0°7/26.3	18
12 23	8 53.59	+16 41.5	1.255	2.101	17.7	17.4	12 23	8 54.46	+15 53.2	1.574	2.404	15.6	21.2
1 2	8 49.92	+17 1.9	1.177	2.090	13.4	17.1	1 2	8 49.96	+16 4.2	1.492	2.396	11.8	21.0
1 12	8 43.05	+17 36.0	1.121	2.079	8.2	16.8	1 12	8 42.78	+16 26.4	1.432	2.387	7.3	20.7
1 22	8 33.80	+18 19.2	1.088	2.070	2.4	16.4	1 22	8 33.69	+16 56.3	1.398	2.380	2.3	20.4
2 1	8 23.59	+19 4.6	1.080	2.061	3.6	16.5	2 1	8 23.86	+17 29.1	1.392	2.372	3.1	20.4
2 11	8 14.20	+19 45.4	1.098	2.053	9.5	16.8	2 11	8 14.71	+17 59.9	1.412	2.365	8.1	20.7
2 21	8 7.14	+20 16.7	1.138	2.045	14.8	17.1	2 21	8 7.47	+18 25.1	1.458	2.358	12.7	20.9
3 2	8 3.47	+20 36.3	1.198	2.039	19.3	17.3	3 2	8 3.02	+18 42.5	1.525	2.352	16.6	21.2
<b>422691</b>	2000 <i>GA</i>		1 25.9	307°69	2°4/24.5	17	<b>519285</b>	2011 <i>BZ</i> <sub>166</sub>		1 25.9	30°01	2°6/27.2	16
12 23	8 54.40	+24 4.3	1.976	2.808	12.8	21.2	12 23	8 53.80	+11 40.1	1.589	2.410	16.0	21.8
1 2	8 49.56	+24 38.9	1.888	2.795	9.5	20.9	1 2	8 49.20	+11 37.9	1.522	2.417	12.2	21.6
1 12	8 42.38	+25 16.7	1.825	2.781	5.9	20.7	1 12	8 42.15	+11 49.9	1.478	2.426	7.9	21.3
1 22	8 33.53	+25 52.6	1.790	2.768	2.7	20.5	1 22	8 33.46	+12 13.8	1.458	2.435	3.6	21.1
2 1	8 24.04	+26 21.5	1.783	2.755	4.1	20.5	2 1	8 24.28	+12 45.9	1.466	2.444	3.5	21.1
2 11	8 15.10	+26 39.5	1.804	2.742	7.9	20.7	2 11	8 15.92	+13 21.2	1.501	2.454	7.6	21.4
2 21	8 7.79	+26 45.1	1.852	2.730	11.6	20.9	2 21	8 9.42	+13 55.6	1.562	2.465	11.8	21.6
3 2	8 2.89	+26 38.7	1.921	2.718	14.8	21.1	3 2	8 5.54	+14 25.4	1.645	2.476	15.4	21.9
<b>120601</b>	1995 <i>UN</i> <sub>73</sub>		1 25.9	171°25	3°3/24.1	18	<b>166892</b>	2002 <i>YY</i> <sub>23</sub>		1 25.9	30°20	1°8/24.8	18
12 23	9 1.69	+25 5.5	1.865	2.689	13.8	21.1	12 23	8 52.72	+21 9.6	1.805	2.641	13.6	19.2
1 2	8 55.01	+26 3.7	1.792	2.693	10.3	20.9	1 2	8 48.25	+21 57.4	1.744	2.652	10.0	19.0
1 12	8 45.66	+27 4.7	1.744	2.697	6.4	20.7	1 12	8 41.50	+22 51.1	1.706	2.664	6.0	18.8
1 22	8 34.46	+28 1.2	1.725	2.700	3.4	20.5	1 22	8 33.26	+23 44.8	1.696	2.677	2.2	18.5
2 1	8 22.64	+28 46.4	1.735	2.703	4.9	20.6	2 1	8 24.60	+24 32.8	1.714	2.690	3.7	18.7
2 11	8 11.60	+29 15.9	1.774	2.704	8.7	20.8	2 11	8 16.70	+25 10.4	1.761	2.704	7.6	18.9
2 21	8 2.54	+29 28.8	1.840	2.704	12.4	21.0	2 21	8 10.53	+25 35.6	1.833	2.718	11.3	19.2
3 2	7 56.27	+29 26.8	1.928	2.704	15.5	21.2	3 2	8 6.78	+25 48.1	1.927	2.732	14.5	19.4
<b>343472</b>	2010 <i>ER</i> <sub>70</sub>		1 25.9	300°31	1°7/24.9	17	<b>19698</b>	1999 <i>SR</i> <sub>4</sub>		1 25.9	280°12	4°6/28.6	18
12 23	8 54.49	+22 46.7	2.170	2.996	12.0	21.4	12 23	8 52.47	+ 4 56.1	2.022	2.806	14.3	17.5
1 2	8 49.34	+23 9.8	2.086	2.990	8.9	21.2	1 2	8 47.92	+ 4 48.1	1.931	2.797	11.5	17.3
1 12	8 42.09	+23 35.9	2.028	2.983	5.4	20.9	1 12	8 41.31	+ 4 56.7	1.861	2.788	8.3	17.1
1 22	8 33.42	+24 0.9	1.997	2.977	2.0	20.7	1 22	8 33.23	+ 5 21.6	1.818	2.780	5.4	16.9
2 1	8 24.25	+24 20.9	1.996	2.971	3.3	20.8	2 1	8 24.58	+ 6 0.9	1.803	2.771	4.8	16.8
2 11	8 15.64	+24 32.8	2.024	2.965	6.9	21.0	2 11	8 16.37	+ 6 50.6	1.817	2.762	7.3	16.9
2 21	8 8.51	+24 35.3	2.079	2.959	10.4	21.2	2 21	8 9.54	+ 7 45.8	1.857	2.753	10.6	17.1
3 2	8 3.57	+24 28.7	2.157	2.953	13.4	21.4	3 2	8 4.81	+ 8 41.6	1.922	2.744	13.8	17.3
<b>169136</b>	2001 <i>QD</i> <sub>52</sub>		1 25.9	92°93	4°0/23.8	18	<b>432894</b>	2011 <i>OW</i> <sub>1</sub>		1 25.9	201°49	1°6/26.9	17
12 23	9 0.25	+31 44.2	2.397	3.214	11.3	20.3	12 23	8					

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>304968</b>	2007 <i>TE</i> <sub>132</sub>		1 25.9	45°82	2°2/26.9	18	<b>158940</b>	2004 <i>RN</i> <sub>79</sub>		1 25.9	97°53	0°7/25.5	18
12 23	8 55.66	+12 21.9	1.375	2.203	17.6	20.5	12 23	8 55.45	+19 1.3	2.005	2.827	13.0	20.5
1 2	8 50.86	+12 30.2	1.315	2.215	13.3	20.3	1 2	8 50.06	+19 29.6	1.935	2.836	9.6	20.3
1 12	8 43.26	+12 54.4	1.276	2.228	8.5	20.1	1 12	8 42.54	+20 4.4	1.889	2.845	5.8	20.1
1 22	8 33.80	+13 31.0	1.262	2.241	3.5	19.8	1 22	8 33.60	+20 41.3	1.872	2.853	1.7	19.8
2 1	8 23.82	+14 14.7	1.275	2.254	3.5	19.8	2 1	8 24.24	+21 15.9	1.883	2.862	2.8	20.0
2 11	8 14.85	+14 59.5	1.314	2.268	8.3	20.1	2 11	8 15.56	+21 44.3	1.925	2.870	6.9	20.2
2 21	8 8.08	+15 40.2	1.378	2.283	12.9	20.4	2 21	8 8.49	+22 4.5	1.993	2.879	10.5	20.5
3 2	8 4.29	+16 13.5	1.463	2.297	16.8	20.7	3 2	8 3.70	+22 15.8	2.084	2.887	13.6	20.7
<b>200946</b>	2002 <i>BF</i> <sub>10</sub>		1 25.9	14°24	3°6/24.8	18	<b>251059</b>	2006 <i>SP</i> <sub>4</sub>		1 25.9	70°19	5°9/23.1	18
12 23	8 57.45	+25 39.9	1.056	1.919	19.1	19.1	12 23	9 1.58	+31 43.7	1.620	2.455	15.0	19.4
1 2	8 53.08	+25 54.3	1.002	1.923	14.3	18.8	1 2	8 55.11	+32 45.3	1.574	2.476	11.4	19.3
1 12	8 44.96	+26 9.6	0.968	1.928	8.8	18.6	1 12	8 45.72	+33 41.7	1.551	2.497	7.9	19.1
1 22	8 34.32	+26 18.1	0.956	1.935	4.1	18.3	1 22	8 34.50	+34 24.3	1.555	2.518	5.9	19.0
2 1	8 23.06	+26 13.3	0.968	1.944	5.8	18.4	2 1	8 22.94	+34 46.7	1.586	2.539	7.2	19.2
2 11	8 13.31	+25 52.3	1.005	1.953	11.1	18.8	2 11	8 12.62	+34 46.6	1.644	2.560	10.3	19.4
2 21	8 6.60	+25 16.7	1.062	1.964	16.1	19.1	2 21	8 4.74	+34 26.3	1.726	2.581	13.6	19.6
3 2	8 3.77	+24 30.0	1.138	1.977	20.3	19.4	3 2	8 0.00	+33 50.1	1.829	2.601	16.4	19.9
<b>326989</b>	2004 <i>PG</i> <sub>78</sub>		1 25.9	194°95	0°6/25.6	16	<b>198991</b>	2005 <i>VQ</i> <sub>116</sub>		1 25.9	175°99	2°1/25.0	18
12 23	8 58.36	+20 29.4	2.411	3.221	11.5	22.0	12 23	9 0.79	+22 19.2	1.560	2.392	15.6	20.7
1 2	8 51.93	+20 33.7	2.324	3.219	8.5	21.8	1 2	8 54.71	+22 49.2	1.487	2.393	11.6	20.5
1 12	8 43.54	+20 41.2	2.263	3.216	5.1	21.5	1 12	8 45.66	+23 24.3	1.438	2.394	7.1	20.2
1 22	8 33.85	+20 48.8	2.231	3.212	1.5	21.3	1 22	8 34.55	+23 58.1	1.414	2.395	2.6	19.9
2 1	8 23.71	+20 53.6	2.230	3.208	2.5	21.3	2 1	8 22.77	+24 24.4	1.419	2.395	4.2	20.0
2 11	8 14.14	+20 53.7	2.260	3.204	6.2	21.6	2 11	8 11.90	+24 38.9	1.452	2.395	8.9	20.3
2 21	8 5.97	+20 48.1	2.319	3.199	9.5	21.8	2 21	8 3.27	+24 40.6	1.510	2.395	13.3	20.6
3 2	7 59.86	+20 36.8	2.403	3.193	12.4	22.0	3 2	7 57.76	+24 30.3	1.589	2.394	17.0	20.8
<b>165264</b>	2000 <i>SH</i> <sub>236</sub>		1 25.9	34°05	2°0/26.8	18	<b>39552</b>	1992 <i>EY</i> <sub>7</sub>		1 25.9	263°52	2°7/27.7	18
12 23	8 54.93	+12 58.2	1.198	2.038	18.9	19.7	12 23	8 52.58	+ 9 3.8	2.044	2.843	13.7	19.5
1 2	8 50.62	+13 9.6	1.143	2.050	14.3	19.5	1 2	8 47.98	+ 9 21.9	1.957	2.839	10.6	19.3
1 12	8 43.24	+13 38.3	1.108	2.063	9.0	19.2	1 12	8 41.34	+ 9 54.7	1.894	2.835	7.1	19.1
1 22	8 33.81	+14 20.1	1.097	2.077	3.5	18.9	1 22	8 33.29	+10 40.2	1.857	2.831	3.6	18.8
2 1	8 23.84	+15 8.6	1.111	2.091	3.7	19.0	2 1	8 24.69	+11 34.7	1.850	2.827	3.2	18.8
2 11	8 15.01	+15 56.8	1.151	2.107	9.0	19.3	2 11	8 16.57	+12 33.4	1.872	2.822	6.6	19.0
2 21	8 8.63	+16 39.0	1.213	2.123	13.9	19.6	2 21	8 9.84	+13 31.4	1.921	2.818	10.3	19.2
3 2	8 5.50	+17 11.9	1.297	2.140	18.0	20.0	3 2	8 5.21	+14 24.7	1.994	2.814	13.5	19.4
<b>39385</b>	4017 <i>P-L</i>		1 25.9	67°83	6°6/23.2	18	<b>181771</b>	1997 <i>GG</i> <sub>3</sub>		1 25.9	144°02	1°9/24.9	18
12 23	9 5.09	+35 24.6	1.720	2.545	14.7	18.5	12 23	9 5.11	+21 49.8	1.882	2.694	14.1	20.5
1 2	8 57.44	+36 10.6	1.680	2.573	11.4	18.4	1 2	8 57.31	+22 33.3	1.816	2.713	10.5	20.3
1 12	8 46.95	+36 47.0	1.664	2.601	8.3	18.3	1 12	8 46.93	+23 21.0	1.776	2.729	6.3	20.1
1 22	8 34.78	+37 6.0	1.674	2.629	6.6	18.2	1 22	8 34.86	+24 6.6	1.765	2.745	2.3	19.9
2 1	8 22.48	+37 2.8	1.713	2.656	7.6	18.3	2 1	8 22.35	+24 44.4	1.784	2.759	3.8	20.0
2 11	8 11.62	+36 37.2	1.778	2.684	10.3	18.6	2 11	8 10.76	+25 10.4	1.834	2.771	7.9	20.3
2 21	8 3.30	+35 52.9	1.868	2.711	13.2	18.8	2 21	8 1.23	+25 23.7	1.911	2.783	11.6	20.5
3 2	7 58.14	+34 55.2	1.979	2.738	15.7	19.0	3 2	7 54.47	+25 25.2	2.012	2.792	14.8	20.8
<b>103308</b>	2000 <i>AH</i> <sub>55</sub>		1 25.9	67°91	1°2/25.4	18	<b>47088</b>	1999 <i>AB</i> <sub>7</sub>		1 25.9	8°90	1°1/26.7	18
12 23	9 0.27	+18 2.7	1.231	2.071	18.4	19.2	12 23	8 51.60	+12 26.6	2.056	2.867	13.2	18.8
1 2	8 54.46	+18 56.5	1.186	2.096	13.6	19.0	1 2	8 47.25	+13 7.6	1.975	2.868	9.9	18.6
1 12	8 45.46	+20 1.6	1.163	2.121	8.0	18.7	1 12	8 40.90	+14 1.7	1.918	2.868	6.2	18.4
1 22	8 34.42	+21 9.7	1.164	2.146	2.3	18.4	1 22	8 33.17	+15 5.2	1.889	2.869	2.3	18.1
2 1	8 23.00	+22 11.8	1.192	2.171	4.0	18.6	2 1	8 24.93	+16 13.1	1.890	2.870	2.5	18.1
2 11	8 12.94	+23 1.1	1.247	2.196	9.4	19.0	2 11	8 17.20	+17 20.0	1.920	2.871	6.4	18.4
2 21	8 5.56	+23 34.6	1.326	2.221	14.1	19.3	2 21	8 10.87	+18 21.2	1.977	2.872	10.1	18.6
3 2	8 1.59	+23 52.7	1.425	2.245	17.9	19.7	3 2	8 6.61	+19 13.7	2.059	2.874	13.3	18.8
<b>259037</b>	2002 <i>TV</i> <sub>244</sub>		1 25.9	58°66	1°1/25.4	18	<b>307903</b>	2004 <i>CP</i> <sub>67</sub>		1 25.9	283°12	0°1/25.9	18
12 23	8 58.42	+19 53.7	1.486	2.321	16.1	20.5	12 23	8 54.75	+16 3.7	1.703	2.529	14.8	20.5
1 2	8 52.69	+20 21.4	1.435	2.343	11.9	20.3	1 2	8 50.05	+16 41.7	1.621	2.523	11.1	20.2
1 12	8 44.23	+20 55.9	1.407	2.364	7.0	20.0	1 12	8 42.81	+17 31.6	1.561	2.517	6.8	20.0
1 22	8 34.07	+21 31.5	1.405	2.386	2.1	19.8	1 22	8 33.76	+18 29.1	1.529	2.510	2.0	19.7
2 1	8 23.56	+22 2.3	1.430	2.409	3.6	19.9	2 1	8 23.99	+19 27.8	1.524	2.504	3.0	19.7
2 11	8 14.19	+22 24.1	1.483	2.431	8.3	20.3	2 11	8 14.82	+20 21.8	1.548	2.498	7.8	20.0
2 21	8 7.07	+22 35.4	1.561	2.453	12.5	20.6	2 21	8 7.43	+21 6.8	1.598	2.492	12.2	20.2
3 2	8 2.88	+22 36.2	1.661	2.476	16.0	20.8	3 2	8 2.68	+21 40.4	1.670	2.486	15.9	20.5
<b>459772</b>	2013 <i>QT</i> <sub>83</sub>		1 25.9	178°82	4°2/23.2	18	<b>398377</b>	2011 <i>SS</i> <sub>113</sub>		1 25.9	134°74	1°5/26.8	18
12 23	9 0.32	+32 3.8	2.574	3.387	10.8	21.9	12 23	8 59.30	+13 3.8	1.962	2.763	14.1	22.9
1 2	8 53.42	+32 44.2	2.499	3.389	8.2	21.7	1 2	8 52.85	+13 19.4	1.892	2.779	10.6	22.7
1 12	8 44.45	+33 20.8	2.450	3.391	5.7	21.6	1 12	8 44.19	+13 45.9	1.847	2.795	6.7	22.5
1 22	8 34.13	+33 48.2	2.430	3.391	4.2	21.5	1 22	8 34.08	+14 20.2	1.830	2.809	2.6	22.2
2 1	8 23.39	+34 2.4	2.441	3.391	5.2	21.5	2 1	8 23.58	+14 58.2	1.843	2.822	2.8	22.3
2 11	8 13.29	+34 1.4	2.482	3.391	7.6	21.7	2 11	8 13.82	+15 35.8	1.887	2.835	6.7	22.5
2 21	8 4.73	+33 45.9	2.550	3.389	10.2	21.8	2 21	8 5.76	+16 9.6	1.957	2.847	10.5	22.8
3 2	7 58.36	+33 18.0	2.642	3.387	12.5	22.0	3 2	8 0.07	+16 37.5	2.052	2.858	13.7	23.0
<b>321683</b>	2010 <i>EY</i> <sub>75</sub>		1 25.9	99°26	4°1/28.9	18	<b>484276</b>	2007 <i>JZ</i> <sub>25</sub>		1 25.9	238°58	1°0/25.4	18
12 23	8 51.44	+ 4 18.4	2.336	3.110	12.9	21.0	12 23						

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>429961</b>	2012 VS <sub>50</sub>		1 25.9 186°87	3°6/28.6	17		<b>402454</b>	2006 BS <sub>87</sub>		1 25.9 302°31	2°1/25.2	18	
12 23	8 51.14	+ 5 21.5	2.601	3.375	11.8	21.5	12 23	8 59.98	+22 58.3	1.432	2.271	16.4	21.6
1 2	8 46.48	+ 5 21.2	2.513	3.374	9.3	21.4	1 2	8 54.41	+23 12.8	1.356	2.265	12.3	21.4
1 12	8 40.24	+ 5 33.8	2.449	3.374	6.6	21.2	1 12	8 45.66	+23 31.1	1.302	2.260	7.5	21.1
1 22	8 32.95	+ 5 58.6	2.412	3.373	4.2	21.0	1 22	8 34.64	+23 47.4	1.273	2.254	2.7	20.8
2 1	8 25.28	+ 6 33.8	2.406	3.373	3.8	21.0	2 1	8 22.83	+23 56.0	1.272	2.248	4.4	20.9
2 11	8 18.00	+ 7 16.2	2.429	3.372	5.8	21.1	2 11	8 11.97	+23 53.1	1.297	2.243	9.4	21.1
2 21	8 11.79	+ 8 2.4	2.480	3.371	8.5	21.3	2 21	8 3.50	+23 38.3	1.346	2.238	14.1	21.4
3 2	8 7.21	+ 8 48.7	2.557	3.370	11.1	21.5	3 2	7 58.35	+23 13.1	1.416	2.233	18.2	21.6
<b>454278</b>	2014 HX <sub>36</sub>		1 25.9 95°19	0°4/26.1	18		<b>500298</b>	2012 QR <sub>21</sub>		1 25.9 148°74	1°3/25.2	18	
12 23	8 58.40	+14 51.7	1.459	2.285	16.8	21.5	12 23	8 56.18	+22 49.7	2.409	3.226	11.3	21.4
1 2	8 52.85	+15 33.2	1.398	2.299	12.6	21.3	1 2	8 50.34	+23 0.7	2.330	3.230	8.3	21.3
1 12	8 44.47	+16 28.7	1.359	2.314	7.6	21.0	1 12	8 42.62	+23 13.4	2.278	3.233	5.0	21.1
1 22	8 34.21	+17 32.4	1.347	2.328	2.3	20.7	1 22	8 33.67	+23 24.6	2.255	3.235	1.8	20.8
2 1	8 23.41	+18 36.8	1.362	2.343	3.2	20.8	2 1	8 24.36	+23 31.2	2.262	3.238	2.9	20.9
2 11	8 13.59	+19 35.3	1.406	2.357	8.3	21.2	2 11	8 15.64	+23 31.1	2.300	3.241	6.2	21.1
2 21	8 5.98	+20 23.1	1.474	2.370	12.8	21.5	2 21	8 8.33	+23 23.7	2.365	3.243	9.4	21.3
3 2	8 1.37	+20 58.4	1.564	2.383	16.6	21.7	3 2	8 3.02	+23 9.4	2.455	3.245	12.2	21.5
<b>163301</b>	2002 JE <sub>8</sub>		1 25.9 348°86	4°2/28.1	18		<b>129832</b>	1999 RC <sub>8</sub>		1 25.9 124°48	1°0/26.5	18	
12 23	8 49.84	+ 7 37.6	1.173	2.007	19.6	18.6	12 23	8 58.32	+14 9.8	1.937	2.744	14.0	21.4
1 2	8 47.17	+ 7 52.0	1.099	1.999	15.4	18.4	1 2	8 52.17	+14 30.9	1.870	2.761	10.5	21.2
1 12	8 41.44	+ 8 32.6	1.044	1.992	10.5	18.1	1 12	8 43.82	+15 2.4	1.826	2.776	6.5	21.0
1 22	8 33.43	+ 9 37.7	1.012	1.986	5.6	17.8	1 22	8 34.03	+15 40.7	1.811	2.791	2.3	20.8
2 1	8 24.50	+11 1.2	1.003	1.981	4.8	17.7	2 1	8 23.84	+16 21.4	1.826	2.806	2.6	20.8
2 11	8 16.35	+12 33.2	1.019	1.978	9.5	17.9	2 11	8 14.41	+17 0.2	1.870	2.819	6.8	21.1
2 21	8 10.45	+14 3.5	1.058	1.975	14.6	18.2	2 21	8 6.68	+17 34.0	1.942	2.832	10.5	21.4
3 2	8 7.84	+15 24.1	1.117	1.975	19.2	18.5	3 2	8 1.31	+18 0.7	2.038	2.845	13.7	21.6
<b>445867</b>	2012 TD <sub>120</sub>		1 25.9 275°90	1°1/25.5	18		<b>354938</b>	2006 EQ <sub>17</sub>		1 25.9 62°55	5°1/28.8	18	
12 23	9 0.41	+20 29.2	1.326	2.165	17.4	21.6	12 23	8 55.73	+ 4 37.5	1.369	2.173	18.9	20.8
1 2	8 54.90	+20 41.8	1.251	2.160	13.1	21.3	1 2	8 50.87	+ 4 46.5	1.312	2.191	14.9	20.6
1 12	8 46.03	+21 1.6	1.197	2.155	7.9	21.0	1 12	8 43.28	+ 5 20.2	1.276	2.210	10.5	20.4
1 22	8 34.73	+21 23.1	1.168	2.150	2.4	20.7	1 22	8 33.91	+ 6 16.5	1.263	2.229	6.3	20.2
2 1	8 22.56	+21 40.1	1.166	2.145	4.0	20.8	2 1	8 24.06	+ 7 30.0	1.276	2.248	5.4	20.2
2 11	8 11.37	+21 48.1	1.190	2.140	9.6	21.1	2 11	8 15.20	+ 8 52.2	1.316	2.268	8.7	20.5
2 21	8 2.69	+21 45.4	1.238	2.135	14.7	21.3	2 21	8 8.49	+10 14.8	1.381	2.287	12.8	20.8
3 2	7 57.54	+21 32.6	1.306	2.130	19.0	21.6	3 2	8 4.70	+11 31.1	1.468	2.306	16.5	21.0
<b>196256</b>	2003 EH <sub>1</sub>		1 25.9 22°44	26°6/ 2.0	14 C		<b>341791</b>	2007 WM <sub>61</sub>		1 25.9 23°13	4°2/28.4	18	
12 23	10 55.86	-65 57.0	1.585	1.638	35.5	19.7	12 23	8 52.19	+ 6 12.7	2.163	2.948	13.5	20.8
1 2	10 52.34	-73 3.8	1.663	1.712	33.8	19.9	1 2	8 47.51	+ 5 51.9	2.082	2.951	10.7	20.6
1 12	10 31.75	-79 1.8	1.748	1.788	32.3	20.0	1 12	8 40.99	+ 5 44.7	2.026	2.954	7.6	20.4
1 22	9 23.92	-83 32.3	1.834	1.864	30.8	20.2	1 22	8 33.23	+ 5 51.1	1.995	2.957	4.9	20.3
2 1	6 36.86	-85 18.5	1.918	1.941	29.6	20.3	2 1	8 25.05	+ 6 9.6	1.994	2.961	4.4	20.2
2 11	4 19.32	-83 44.0	1.997	2.017	28.5	20.5	2 11	8 17.39	+ 6 37.1	2.021	2.965	6.7	20.4
2 21	3 33.28	-81 11.2	2.069	2.094	27.5	20.6	2 21	8 11.06	+ 7 9.9	2.075	2.969	9.8	20.6
3 2	3 23.71	-78 46.8	2.134	2.169	26.6	20.7	3 2	8 6.67	+ 7 44.5	2.153	2.973	12.6	20.8
<b>453813</b>	2011 SW <sub>86</sub>		1 25.9 113°99	4°6/28.4	18		<b>187135</b>	2005 QX <sub>133</sub>		1 25.9 250°96	5°6/29.7	18	
12 23	8 56.90	+ 6 5.2	1.664	2.458	16.5	21.5	12 23	8 52.70	+ 1 4.2	1.897	2.668	15.6	20.6
1 2	8 51.42	+ 5 57.6	1.594	2.468	13.0	21.3	1 2	8 48.23	+ 1 12.4	1.810	2.664	12.7	20.4
1 12	8 43.50	+ 6 8.6	1.546	2.479	9.1	21.1	1 12	8 41.61	+ 1 42.7	1.744	2.661	9.5	20.2
1 22	8 33.94	+ 6 37.3	1.523	2.489	5.6	20.9	1 22	8 33.45	+ 2 34.9	1.703	2.657	6.6	20.0
2 1	8 23.87	+ 7 20.5	1.528	2.499	4.9	20.9	2 1	8 24.69	+ 3 46.1	1.691	2.653	5.7	19.9
2 11	8 14.58	+ 8 12.8	1.561	2.509	8.0	21.1	2 11	8 16.42	+ 5 10.6	1.706	2.649	7.8	20.0
2 21	8 7.12	+ 9 8.5	1.620	2.518	11.8	21.4	2 21	8 9.62	+ 6 41.2	1.748	2.645	11.1	20.2
3 2	8 2.25	+10 2.4	1.702	2.527	15.2	21.6	3 2	8 5.03	+ 8 11.1	1.815	2.641	14.4	20.4
<b>296107</b>	2009 BR <sub>44</sub>		1 25.9 229°14	1°8/24.9	18		<b>275940</b>	2001 UM <sub>105</sub>		1 25.9 169°03	3°5/29.0	17	
12 23	8 56.66	+24 40.4	2.443	3.262	11.1	20.6	12 23	8 51.46	+ 3 31.7	3.185	3.939	10.2	22.1
1 2	8 50.70	+24 46.8	2.361	3.260	8.2	20.4	1 2	8 46.44	+ 3 30.4	3.097	3.943	8.2	22.0
1 12	8 42.84	+24 53.4	2.304	3.258	5.0	20.2	1 12	8 40.12	+ 3 40.5	3.033	3.947	6.0	21.9
1 22	8 33.72	+24 56.9	2.276	3.255	2.1	20.0	1 22	8 32.96	+ 4 1.6	2.998	3.951	4.1	21.7
2 1	8 24.22	+24 54.4	2.279	3.253	3.1	20.1	2 1	8 25.50	+ 4 32.2	2.993	3.954	3.6	21.7
2 11	8 15.31	+24 44.2	2.312	3.251	6.4	20.3	2 11	8 18.37	+ 5 9.9	3.019	3.956	5.1	21.8
2 21	8 7.82	+24 26.1	2.373	3.248	9.5	20.5	2 21	8 12.13	+ 5 51.8	3.075	3.958	7.3	22.0
3 2	8 2.35	+24 1.0	2.459	3.246	12.2	20.6	3 2	8 7.22	+ 6 35.0	3.157	3.959	9.4	22.1
<b>142785</b>	2002 UG <sub>14</sub>		1 25.9 106°54	3°8/23.4	18		<b>313882</b>	2004 HX <sub>2</sub>		1 25.9 303°10	1°1/25.3	17	
12 23	9 0.94	+27 24.9	2.135	2.954	12.4	20.3	12 23	8 54.53	+18 37.7	1.596	2.431	15.2	20.9
1 2	8 54.03	+28 38.9	2.085	2.982	9.2	20.2	1 2	8 50.39	+19 21.1	1.494	2.402	11.4	20.6
1 12	8 44.88	+29 52.2	2.061	3.010	6.0	20.0	1 12	8 43.37	+20 16.6	1.415	2.373	7.0	20.2
1 22	8 34.31	+30 57.6	2.067	3.036	3.9	19.9	1 22	8 34.07	+21 19.1	1.362	2.343	2.1	19.9
2 1	8 23.40	+31 49.3	2.103	3.062	5.1	20.1	2 1	8 23.63	+22 21.4	1.336	2.314	3.8	19.9
2 11	8 13.34	+32 24.0	2.169	3.086	8.0	20.3	2 11	8 13.56	+23 16.3	1.338	2.286	9.0	20.1
2 21	8 5.08	+32 41.5	2.262	3.110	11.0	20.5	2 21	8 5.29	+23 58.9	1.364	2.257	13.9	20.3
3 2	7 59.28	+32 43.9	2.377	3.134	13.5	20.7	3 2	7 59.96	+24 27.1	1.412	2.229	18.2	20.5
<b>370585</b>	2003 UT <sub>376</sub>		1 25.9 116°78	0°5/26.2	18		<b>172211</b>	2002 QE <sub>84</sub>		1 25.9 329°51	1°9/25.2	18	
12 23	8 54.66	+16 10.6	2.178	2.991	12.5	21.6	12 23	8 55.96	+22 7.1	1.338	2.186	16.8	

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>264927</b>	2002 <i>UG</i> <sub>33</sub>		1 25.9	49°76	1°3/26.5	18	<b>109843</b>	2001 <i>RP</i> <sub>126</sub>		1 25.9	179°65	5°6/22.5	18
12 23	8 58.71	+15 6.8	1.371	2.201	17.5	20.2	12 23	9 2.19	+34 56.8	2.277	3.092	11.9	21.2
1 2	8 52.94	+15 6.4	1.325	2.227	13.1	20.0	1 2	8 55.18	+35 50.0	2.206	3.093	9.3	21.0
1 12	8 44.42	+15 17.9	1.300	2.254	8.0	19.8	1 12	8 45.73	+36 37.3	2.161	3.094	6.8	20.8
1 22	8 34.21	+15 37.3	1.301	2.282	2.8	19.6	1 22	8 34.65	+37 11.9	2.143	3.095	5.6	20.8
2 1	8 23.75	+16 0.0	1.329	2.309	3.2	19.7	2 1	8 23.06	+37 28.6	2.156	3.095	6.6	20.8
2 11	8 14.53	+16 21.6	1.384	2.337	8.1	20.0	2 11	8 12.24	+37 25.4	2.197	3.094	9.0	21.0
2 21	8 7.64	+16 38.9	1.464	2.366	12.5	20.3	2 21	8 3.26	+37 3.6	2.263	3.092	11.7	21.1
3 2	8 3.74	+16 50.1	1.565	2.394	16.1	20.6	3 2	7 56.87	+36 26.7	2.353	3.090	14.1	21.3
<b>415297</b>	2013 <i>GB</i> <sub>70</sub>		1 25.9	250°96	1°0/26.4	18	<b>465085</b>	2006 <i>UD</i> <sub>10</sub>		1 25.9	32°10	2°4/27.1	18
12 23	8 57.50	+15 14.9	1.810	2.625	14.5	21.2	12 23	8 54.16	+12 2.1	1.253	2.088	18.5	21.0
1 2	8 52.04	+15 22.1	1.717	2.612	11.0	20.9	1 2	8 49.91	+12 8.8	1.202	2.106	14.0	20.8
1 12	8 44.04	+15 39.4	1.647	2.599	6.9	20.7	1 12	8 42.79	+12 32.8	1.172	2.124	8.9	20.6
1 22	8 34.20	+16 3.9	1.605	2.585	2.4	20.4	1 22	8 33.82	+13 10.4	1.165	2.144	3.8	20.3
2 1	8 23.58	+16 31.7	1.591	2.571	2.9	20.4	2 1	8 24.42	+13 55.9	1.185	2.165	3.7	20.4
2 11	8 13.50	+16 58.5	1.606	2.557	7.5	20.6	2 11	8 16.14	+14 42.5	1.230	2.186	8.5	20.7
2 21	8 5.12	+17 21.3	1.648	2.542	11.9	20.8	2 21	8 10.17	+15 25.0	1.299	2.208	13.1	21.1
3 2	7 59.33	+17 37.9	1.713	2.527	15.6	21.0	3 2	8 7.24	+15 59.5	1.388	2.231	17.0	21.4
<b>322735</b>	2000 <i>SM</i> <sub>246</sub>		1 25.9	162°44	5°4/22.4	18	<b>132421</b>	2002 <i>GF</i> <sub>140</sub>		1 25.9	102°51	1°1/25.4	18
12 23	9 0.79	+34 49.2	2.375	3.190	11.5	21.2	12 23	9 0.04	+19 51.4	1.736	2.559	14.7	20.7
1 2	8 54.02	+35 45.7	2.309	3.196	8.9	21.0	1 2	8 53.68	+20 25.9	1.677	2.579	10.8	20.5
1 12	8 44.97	+36 36.6	2.268	3.201	6.6	20.9	1 12	8 44.83	+21 6.5	1.643	2.598	6.5	20.2
1 22	8 34.40	+37 15.4	2.255	3.206	5.4	20.8	1 22	8 34.38	+21 48.0	1.636	2.617	2.0	20.0
2 1	8 23.38	+37 37.2	2.272	3.210	6.4	20.9	2 1	8 23.55	+22 24.6	1.658	2.636	3.3	20.1
2 11	8 13.10	+37 39.9	2.318	3.213	8.7	21.1	2 11	8 13.67	+22 52.3	1.709	2.654	7.7	20.4
2 21	8 4.55	+37 24.7	2.390	3.216	11.2	21.2	2 21	8 5.80	+23 9.4	1.787	2.671	11.6	20.7
3 2	7 58.43	+36 54.4	2.484	3.219	13.5	21.4	3 2	8 0.62	+23 15.9	1.887	2.688	14.9	21.0
<b>396804</b>	2004 <i>PS</i> <sub>48</sub>		1 25.9	95°31	1°5/25.2	17	<b>173844</b>	2001 <i>TK</i> <sub>119</sub>		1 25.9	97°55	1°1/25.4	18
12 23	9 2.19	+20 38.7	1.611	2.436	15.5	21.6	12 23	8 57.48	+22 36.2	2.416	3.231	11.3	20.0
1 2	8 55.35	+21 14.9	1.559	2.462	11.4	21.4	1 2	8 51.20	+22 36.5	2.346	3.243	8.3	19.8
1 12	8 45.83	+21 56.6	1.531	2.486	6.8	21.2	1 12	8 43.10	+22 38.0	2.302	3.255	5.0	19.6
1 22	8 34.64	+22 37.8	1.529	2.511	2.2	21.0	1 22	8 33.86	+22 37.9	2.286	3.267	1.6	19.4
2 1	8 23.13	+23 12.4	1.557	2.534	3.7	21.1	2 1	8 24.34	+22 33.8	2.302	3.279	2.7	19.5
2 11	8 12.74	+23 36.4	1.614	2.557	8.1	21.4	2 11	8 15.50	+22 24.1	2.348	3.291	6.0	19.7
2 21	8 4.59	+23 48.6	1.696	2.580	12.2	21.7	2 21	8 8.12	+22 8.4	2.423	3.302	9.2	19.9
3 2	7 59.36	+23 49.7	1.801	2.601	15.5	22.0	3 2	8 2.74	+21 47.3	2.522	3.313	11.8	20.1
<b>140482</b>	2001 <i>TK</i> <sub>141</sub>		1 25.9	259°33	2°1/24.7	18	<b>30832</b>	Urbaincreve		1 25.9	349°70	0°2/25.9	18
12 23	8 56.03	+22 0.0	1.840	2.671	13.7	19.9	12 23	8 52.91	+15 41.3	1.212	2.060	18.2	17.4
1 2	8 50.94	+22 47.5	1.759	2.664	10.2	19.7	1 2	8 49.52	+16 28.9	1.141	2.054	13.7	17.1
1 12	8 43.36	+23 41.1	1.702	2.658	6.2	19.5	1 12	8 42.92	+17 34.0	1.090	2.050	8.3	16.8
1 22	8 34.00	+24 34.9	1.672	2.652	2.5	19.2	1 22	8 33.96	+18 50.3	1.064	2.046	2.4	16.5
2 1	8 23.96	+25 22.6	1.671	2.645	4.0	19.3	2 1	8 24.09	+20 8.6	1.063	2.043	3.8	16.5
2 11	8 14.53	+25 59.2	1.698	2.639	8.1	19.5	2 11	8 15.08	+21 19.5	1.087	2.041	9.7	16.9
2 21	8 6.86	+26 22.5	1.752	2.632	12.0	19.7	2 21	8 8.44	+22 16.5	1.134	2.040	14.9	17.2
3 2	8 1.77	+26 32.2	1.827	2.625	15.4	20.0	3 2	8 5.20	+22 56.6	1.200	2.040	19.4	17.4
<b>109778</b>	2001 <i>RM</i> <sub>83</sub>		1 25.9	162°35	0°4/26.2	18	<b>165823</b>	2001 <i>RJ</i> <sub>113</sub>		1 25.9	62°01	0°2/25.9	18
12 23	8 57.16	+16 12.9	2.442	3.245	11.6	21.5	12 23	8 54.12	+17 36.8	2.090	2.909	12.7	19.9
1 2	8 51.01	+16 28.9	2.362	3.252	8.7	21.3	1 2	8 48.95	+18 4.6	2.030	2.929	9.4	19.7
1 12	8 43.03	+16 51.6	2.308	3.259	5.3	21.1	1 12	8 41.84	+18 39.2	1.994	2.949	5.6	19.5
1 22	8 33.84	+17 18.1	2.283	3.264	1.7	20.9	1 22	8 33.51	+19 17.0	1.987	2.969	1.6	19.3
2 1	8 24.26	+17 45.3	2.290	3.270	2.2	20.9	2 1	8 24.88	+19 53.6	2.009	2.989	2.5	19.4
2 11	8 15.22	+18 10.2	2.327	3.274	5.8	21.2	2 11	8 16.94	+20 25.5	2.061	3.008	6.3	19.6
2 21	8 7.51	+18 30.6	2.394	3.277	9.1	21.4	2 21	8 10.52	+20 50.3	2.140	3.028	9.8	19.9
3 2	8 1.73	+18 45.4	2.485	3.280	11.9	21.6	3 2	8 6.20	+21 7.1	2.242	3.048	12.7	20.1
<b>7018</b>	1992 <i>DF</i>		1 25.9	62°83	0°2/25.9	18	<b>51034</b>	2000 <i>GB</i> <sub>124</sub>		1 25.9	344°68	12°8/16.6	18
12 23	8 57.13	+16 12.3	1.351	2.187	17.4	17.5	12 23	9 5.05	+48 52.1	1.686	2.491	15.9	18.1
1 2	8 52.15	+16 54.2	1.292	2.199	12.9	17.2	1 2	8 59.14	+51 3.8	1.639	2.489	14.1	18.0
1 12	8 44.20	+17 49.6	1.254	2.211	7.8	17.0	1 12	8 49.02	+52 57.5	1.614	2.487	13.0	17.9
1 22	8 34.24	+18 52.1	1.241	2.223	2.2	16.7	1 22	8 35.77	+54 19.8	1.613	2.486	13.0	17.9
2 1	8 23.69	+19 54.0	1.255	2.235	3.4	16.8	2 1	8 21.35	+55 1.3	1.635	2.485	14.2	17.9
2 11	8 14.17	+20 48.1	1.296	2.248	8.8	17.1	2 11	8 8.24	+55 0.2	1.678	2.484	16.0	18.1
2 21	8 6.97	+21 30.1	1.362	2.260	13.5	17.4	2 21	7 58.40	+54 21.9	1.740	2.483	18.0	18.2
3 2	8 2.92	+21 58.6	1.448	2.273	17.4	17.7	3 2	7 52.97	+53 15.1	1.817	2.483	19.9	18.4
<b>353987</b>	2000 <i>OQ</i> <sub>19</sub>		1 25.9	174°97	0°9/26.6	18	<b>239900</b>	2000 <i>SP</i> <sub>87</sub>		1 25.9	200°70	4°6/23.1	18
12 23	8 58.11	+13 25.3	2.220	3.017	12.8	22.1	12 23	9 1.00	+29 1.3	2.002	2.826	13.0	20.7
1 2	8 51.94	+14 0.2	2.136	3.022	9.6	21.9	1 2	8 54.62	+30 9.8	1.923	2.822	9.8	20.5
1 12	8 43.71	+14 45.8	2.077	3.025	6.0	21.7	1 12	8 45.59	+31 18.4	1.870	2.817	6.6	20.3
1 22	8 34.07	+15 38.7	2.047	3.027	2.1	21.4	1 22	8 34.67	+32 19.4	1.845	2.812	4.6	20.2
2 1	8 23.90	+16 34.4	2.049	3.028	2.4	21.4	2 1	8 23.03	+33 5.7	1.850	2.806	6.0	20.2
2 11	8 14.26	+17 28.2	2.081	3.029	6.3	21.7	2 11	8 12.05	+33 33.2	1.883	2.799	9.2	20.4
2 21	8 6.05	+18 16.6	2.143	3.028	9.9	21.9	2 21	8 2.92	+33 41.3	1.942	2.791	12.5	20.6
3 2	7 59.96	+18 57.1	2.229	3.026	13.0	22.1	3 2	7 56.51	+33 32.3	2.024	2.783	15.4	20.8
<b>131263</b>	2001 <i>FX</i> <sub>39</sub>		1 25.9	92°99	2°7/24.7	18	<b>235693</b>	2004 <i>SL</i> <sub>31</sub>		1 25.9	108°80	3°4/27.8	18
12 23	9 1.35	+24 37.1	1.701	2.529	14.7	18.6	12 23						

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>61328</b>	2000 <i>OD</i> <sub>58</sub>		1 25.9 114°06'	1.3°/25.2	18		<b>457048</b>	2008 <i>DY</i> <sub>10</sub>		1 25.9 316°38'	0.3°/25.8	18	
12 23	8 55.21	+22 31.6	2.445	3.264	11.1	19.5	12 23	8 54.90	+17 2.8	1.609	2.440	15.3	21.8
1 2	8 49.62	+22 47.3	2.370	3.270	8.2	19.3	1 2	8 50.34	+17 37.9	1.529	2.434	11.4	21.6
1 12	8 42.21	+23 5.0	2.321	3.276	4.9	19.1	1 12	8 43.13	+18 24.4	1.472	2.428	6.9	21.3
1 22	8 33.63	+23 21.6	2.301	3.281	1.7	18.9	1 22	8 34.01	+19 17.3	1.441	2.423	2.0	21.0
2 1	8 24.71	+23 33.8	2.311	3.287	2.8	19.0	2 1	8 24.16	+20 10.5	1.438	2.418	3.2	21.0
2 11	8 16.36	+23 39.4	2.352	3.293	6.1	19.2	2 11	8 14.97	+20 57.9	1.463	2.413	8.1	21.3
2 21	8 9.38	+23 37.6	2.420	3.298	9.2	19.4	2 21	8 7.68	+21 35.5	1.513	2.409	12.6	21.6
3 2	8 4.34	+23 28.6	2.512	3.304	11.9	19.6	3 2	8 3.15	+22 1.5	1.585	2.404	16.4	21.8
<b>412777</b>	2014 <i>PY</i> <sub>2</sub>		1 25.9 172°94'	0°8'/26.5	18		<b>508363</b>	2016 <i>EU</i> <sub>170</sub>		1 25.9 218°25'	6°3'/30.9	17	
12 23	8 57.50	+14 10.4	2.081	2.886	13.3	22.2	12 23	8 52.26	- 3 58.7	2.503	3.228	13.4	21.9
1 2	8 51.62	+14 42.6	2.000	2.890	10.0	22.0	1 2	8 47.48	- 4 0.6	2.405	3.221	11.3	21.7
1 12	8 43.59	+15 25.6	1.943	2.893	6.2	21.7	1 12	8 41.00	- 3 43.0	2.329	3.213	9.0	21.6
1 22	8 34.07	+16 15.6	1.915	2.895	2.1	21.5	1 22	8 33.34	- 3 5.1	2.279	3.205	7.0	21.4
2 1	8 24.01	+17 8.0	1.917	2.897	2.5	21.5	2 1	8 25.18	- 2 8.1	2.257	3.197	6.3	21.4
2 11	8 14.52	+17 58.1	1.950	2.898	6.6	21.8	2 11	8 17.37	- 0 55.7	2.265	3.188	7.4	21.4
2 21	8 6.56	+18 42.2	2.010	2.898	10.3	22.0	2 21	8 10.65	+ 0 27.0	2.300	3.179	9.6	21.6
3 2	8 0.83	+19 18.2	2.095	2.897	13.6	22.2	3 2	8 5.63	+ 1 54.1	2.361	3.169	12.0	21.7
<b>500138</b>	2012 <i>CC</i> <sub>55</sub>		1 25.9 261°51'	3°0'/23.9	18		<b>33615</b>	1999 <i>JB</i> <sub>64</sub>		1 25.9 247°29'	5°0'/22.9	18	
12 23	8 58.48	+14 19.1	1.168	2.007	19.3	20.0	12 23	8 59.70	+28 22.1	1.802	2.633	13.9	18.8
1 2	8 54.26	+17 7.7	1.088	1.999	14.4	19.7	1 2	8 54.07	+29 41.8	1.716	2.618	10.6	18.5
1 12	8 46.23	+20 30.7	1.031	1.991	8.6	19.4	1 12	8 45.51	+31 4.2	1.654	2.603	7.1	18.3
1 22	8 35.07	+24 12.8	1.002	1.983	3.3	19.0	1 22	8 34.74	+32 20.4	1.620	2.588	5.0	18.1
2 1	8 22.26	+27 51.2	1.002	1.974	6.4	19.2	2 1	8 22.99	+33 21.5	1.615	2.571	6.6	18.2
2 11	8 9.95	+31 3.7	1.029	1.966	12.6	19.5	2 11	8 11.80	+34 1.8	1.637	2.555	10.2	18.4
2 21	8 0.21	+33 37.3	1.082	1.957	18.2	19.8	2 21	8 2.55	+34 19.8	1.684	2.537	13.9	18.5
3 2	7 54.53	+35 29.4	1.153	1.949	22.7	20.0	3 2	7 56.29	+34 17.6	1.752	2.520	17.2	18.7
<b>226060</b>	2002 <i>GV</i> <sub>160</sub>		1 25.9 345°75'	0°5'/25.7	18		<b>124644</b>	2001 <i>SG</i> <sub>69</sub>		1 25.9 147°89'	1°9'/27.2	18	
12 23	8 53.28	+17 33.7	1.694	2.526	14.6	20.4	12 23	8 58.44	+10 56.0	1.906	2.705	14.5	20.1
1 2	8 48.99	+18 10.4	1.616	2.522	10.9	20.1	1 2	8 52.40	+11 24.0	1.832	2.716	11.1	19.9
1 12	8 42.23	+18 57.5	1.561	2.518	6.6	19.9	1 12	8 44.09	+12 6.0	1.782	2.726	7.1	19.7
1 22	8 33.72	+19 50.0	1.533	2.515	1.9	19.6	1 22	8 34.24	+12 58.8	1.759	2.736	3.1	19.4
2 1	8 24.56	+20 42.1	1.533	2.512	3.1	19.6	2 1	8 23.89	+13 57.5	1.766	2.745	2.9	19.4
2 11	8 16.05	+21 28.1	1.560	2.510	7.8	19.9	2 11	8 14.21	+14 56.6	1.803	2.753	6.9	19.7
2 21	8 9.31	+22 4.3	1.613	2.508	12.0	20.2	2 21	8 6.21	+15 51.5	1.868	2.760	10.8	19.9
3 2	8 5.16	+22 29.0	1.688	2.506	15.6	20.4	3 2	8 0.61	+16 39.0	1.957	2.766	14.1	20.2
<b>38578</b>	1999 <i>XS</i> <sub>11</sub>		1 25.9 94°02'	2°7'/24.2	18		<b>169285</b>	2001 <i>SY</i> <sub>251</sub>		1 25.9 80°03'	0°5'/26.3	18	
12 23	8 55.34	+27 38.9	2.622	3.443	10.4	18.7	12 23	8 53.19	+15 37.5	2.309	3.120	11.9	20.2
1 2	8 49.64	+28 2.0	2.552	3.451	7.7	18.6	1 2	8 48.17	+16 0.1	2.239	3.133	8.9	20.0
1 12	8 42.20	+28 23.8	2.508	3.458	4.9	18.4	1 12	8 41.37	+16 30.5	2.195	3.147	5.4	19.8
1 22	8 33.63	+28 40.5	2.493	3.466	2.8	18.3	1 22	8 33.43	+17 5.6	2.179	3.160	1.7	19.6
2 1	8 24.77	+28 49.0	2.508	3.474	3.8	18.4	2 1	8 25.16	+17 41.9	2.193	3.173	2.2	19.7
2 11	8 16.51	+28 47.5	2.553	3.482	6.4	18.5	2 11	8 17.46	+18 15.9	2.237	3.186	5.8	19.9
2 21	8 9.58	+28 35.9	2.626	3.489	9.1	18.7	2 21	8 11.08	+18 45.0	2.309	3.199	9.1	20.2
3 2	8 4.55	+28 15.3	2.723	3.497	11.5	18.9	3 2	8 6.61	+19 7.7	2.406	3.212	11.9	20.4
<b>323875</b>	2005 <i>SK</i> <sub>170</sub>		1 25.9 23°97'	7°3'/29.9	18		<b>437804</b>	2015 <i>DF</i> <sub>23</sub>		1 25.9 265°14'	0°9'/25.4	17	
12 23	8 52.80	+ 0 18.6	1.645	2.422	17.4	20.3	12 23	8 53.68	+20 4.6	2.355	3.174	11.4	21.5
1 2	8 48.51	- 0 12.1	1.572	2.426	14.3	20.1	1 2	8 48.70	+20 30.6	2.265	3.165	8.5	21.3
1 12	8 41.86	- 0 21.7	1.519	2.430	11.0	19.9	1 12	8 41.81	+21 1.7	2.201	3.156	5.1	21.0
1 22	8 33.60	- 0 5.3	1.489	2.435	8.2	19.8	1 22	8 33.60	+21 34.4	2.165	3.147	1.6	20.8
2 1	8 24.79	+ 0 33.4	1.486	2.441	7.3	19.7	2 1	8 24.88	+22 4.8	2.160	3.137	2.7	20.8
2 11	8 16.64	+ 1 30.4	1.509	2.446	9.2	19.8	2 11	8 16.60	+22 29.6	2.184	3.128	6.3	21.1
2 21	8 10.20	+ 2 38.6	1.557	2.453	12.3	20.0	2 21	8 9.63	+22 46.8	2.236	3.119	9.7	21.3
3 2	8 6.23	+ 3 50.8	1.627	2.459	15.5	20.3	3 2	8 4.61	+22 55.7	2.312	3.109	12.6	21.4
<b>27406</b>	2000 <i>EA</i> <sub>114</sub>		1 25.9 238°90'	4°4'/29.1	18		<b>105509</b>	2000 <i>RL</i> <sub>9</sub>		1 25.9 114°62'	4°7'/23.2	18	
12 23	8 51.57	+ 3 28.2	2.343	3.113	13.0	19.0	12 23	9 1.57	+28 9.1	1.802	2.630	14.0	19.7
1 2	8 47.04	+ 3 28.9	2.253	3.109	10.5	18.8	1 2	8 55.01	+29 26.6	1.747	2.649	10.5	19.5
1 12	8 40.75	+ 3 45.5	2.185	3.105	7.6	18.6	1 12	8 45.76	+30 43.6	1.718	2.667	6.9	19.3
1 22	8 33.26	+ 4 17.5	2.145	3.101	5.1	18.4	1 22	8 34.74	+31 51.5	1.716	2.684	4.7	19.2
2 1	8 25.30	+ 5 2.8	2.133	3.097	4.5	18.4	2 1	8 23.23	+32 42.9	1.743	2.701	6.1	19.3
2 11	8 17.74	+ 5 57.8	2.151	3.093	6.5	18.5	2 11	8 12.69	+33 14.1	1.799	2.717	9.4	19.6
2 21	8 11.36	+ 6 57.7	2.196	3.088	9.4	18.7	2 21	8 4.26	+33 25.2	1.880	2.733	12.7	19.8
3 2	8 6.77	+ 7 58.3	2.266	3.084	12.2	18.9	3 2	7 58.70	+33 18.9	1.982	2.748	15.5	20.0
<b>462887</b>	2010 <i>VD</i> <sub>220</sub>		1 25.9 98°93'	5°4'/29.0	18		<b>307426</b>	2002 <i>TC</i> <sub>273</sub>		1 25.9 111°00'	2°2'/27.1	18	
12 23	8 57.48	+ 3 23.7	1.972	2.741	15.2	21.8	12 23	8 57.48	+12 2.5	1.855	2.661	14.6	20.9
1 2	8 51.44	+ 2 54.6	1.907	2.762	12.1	21.6	1 2	8 51.68	+12 3.0	1.786	2.673	11.1	20.7
1 12	8 43.36	+ 2 42.4	1.866	2.783	8.9	21.5	1 12	8 43.63	+12 15.3	1.740	2.686	7.1	20.5
1 22	8 33.98	+ 2 47.5	1.851	2.804	6.2	21.4	1 22	8 34.11	+12 37.2	1.722	2.698	3.2	20.3
2 1	8 24.28	+ 3 8.2	1.864	2.824	5.6	21.4	2 1	8 24.18	+13 5.2	1.732	2.710	3.1	20.3
2 11	8 15.32	+ 3 40.8	1.906	2.844	7.6	21.5	2 11	8 14.99	+13 35.4	1.772	2.722	6.9	20.5
2 21	8 7.96	+ 4 20.9	1.976	2.863	10.5	21.7	2 21	8 7.52	+14 4.4	1.838	2.733	10.8	20.8
3 2	8 2.82	+ 5 3.8	2.069	2.881	13.3	22.0	3 2	8 2.45	+14 29.4	1.928	2.744	14.0	21.0
<b>32182</b>	2000 <i>NR</i> <sub>18</sub>		1 25.9 183°34'	1°2'/25.2	18		<b>414237</b>	2008 <i>FX</i> <sub>105</sub>		1 25.9 111°91'	3°4'/23.9	18	
12 23	8 56.60	+20 44.6	2.352	3.167	11.6	19.5							

EPHEMERIDES

1 25.9

1 25.9

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>133891</b>	Jaesubhong		1 25.9 126°15	3°7/24.2	18		<b>147635</b>	2004 <i>HW</i> <sub>63</sub>		1 25.9 12°09	10°4/19.5	18	
12 23	9 2.63	+26 51.7	1.738	2.566	14.5	20.2	12 23	8 58.77	+39 12.2	1.445	2.285	16.2	19.1
1 2	8 55.82	+27 36.4	1.677	2.579	10.8	20.0	1 2	8 54.17	+41 16.0	1.394	2.287	13.3	18.9
1 12	8 46.25	+28 20.9	1.640	2.592	6.8	19.8	1 12	8 45.87	+43 9.6	1.367	2.289	11.0	18.8
1 22	8 34.89	+28 58.3	1.630	2.604	3.9	19.6	1 22	8 34.91	+44 39.4	1.363	2.292	10.5	18.7
2 1	8 23.06	+29 22.3	1.649	2.616	5.2	19.7	2 1	8 23.03	+45 34.7	1.384	2.296	12.0	18.8
2 11	8 12.24	+29 30.0	1.696	2.627	8.9	19.9	2 11	8 12.33	+45 52.1	1.428	2.301	14.6	19.0
2 21	8 3.62	+29 21.8	1.769	2.637	12.6	20.2	2 21	8 4.49	+45 34.7	1.492	2.306	17.4	19.2
3 2	7 57.94	+29 0.3	1.865	2.647	15.7	20.4	3 2	8 0.51	+44 49.9	1.574	2.311	20.0	19.4
<b>63471</b>	2001 <i>OD</i> <sub>25</sub>		1 25.9 130°91	0°9/26.4	18		<b>110866</b>	2001 <i>UH</i> <sub>91</sub>		1 25.9 165°68	1°5/25.0	18	
12 23	8 59.24	+16 10.9	2.117	2.922	13.0	19.6	12 23	8 57.16	+21 22.0	2.161	2.980	12.3	21.0
1 2	8 52.74	+16 6.6	2.044	2.935	9.8	19.4	1 2	8 51.38	+22 0.2	2.084	2.984	9.1	20.8
1 12	8 44.16	+16 8.9	1.997	2.947	6.0	19.2	1 12	8 43.46	+22 43.0	2.033	2.987	5.5	20.6
1 22	8 34.26	+16 15.4	1.979	2.959	2.0	19.0	1 22	8 34.11	+23 25.7	2.010	2.990	2.0	20.3
2 1	8 24.00	+16 23.5	1.991	2.970	2.5	19.0	2 1	8 24.27	+24 3.5	2.018	2.993	3.2	20.4
2 11	8 14.45	+16 30.7	2.033	2.981	6.4	19.3	2 11	8 15.04	+24 32.7	2.055	2.995	6.9	20.7
2 21	8 6.51	+16 35.1	2.103	2.991	9.9	19.5	2 21	8 7.34	+24 51.6	2.120	2.997	10.4	20.9
3 2	8 0.81	+16 35.8	2.198	3.001	13.0	19.8	3 2	8 1.87	+25 0.0	2.208	2.998	13.4	21.1
<b>258090</b>	2001 <i>QB</i> <sub>87</sub>		1 25.9 63°89	3°8/27.5	18		<b>143513</b>	2003 <i>EH</i> <sub>7</sub>		1 25.9 231°18	0°9/26.6	18	
12 23	8 59.52	+10 28.4	1.641	2.446	16.2	19.6	12 23	8 52.85	+14 57.7	2.744	3.546	10.5	20.4
1 2	8 53.25	+9 48.7	1.583	2.467	12.5	19.4	1 2	8 47.79	+15 3.1	2.650	3.538	7.9	20.2
1 12	8 44.57	+9 21.9	1.547	2.488	8.4	19.2	1 12	8 41.15	+15 15.1	2.582	3.531	4.9	20.0
1 22	8 34.37	+9 7.6	1.538	2.509	4.6	19.0	1 22	8 33.42	+15 31.8	2.543	3.523	1.8	19.8
2 1	8 23.87	+9 4.2	1.557	2.530	4.4	19.1	2 1	8 25.29	+15 50.8	2.535	3.515	2.0	19.8
2 11	8 14.35	+9 8.9	1.604	2.552	7.8	19.3	2 11	8 17.54	+16 9.8	2.558	3.507	5.2	20.0
2 21	8 6.82	+9 18.4	1.677	2.573	11.5	19.6	2 21	8 10.85	+16 26.7	2.610	3.498	8.2	20.2
3 2	8 1.93	+9 29.5	1.773	2.594	14.8	19.8	3 2	8 5.79	+16 40.1	2.686	3.489	10.9	20.3
<b>317546</b>	2002 <i>UE</i> <sub>15</sub>		1 25.9 85°32	2°2/25.1	18		<b>162759</b>	2000 <i>WV</i> <sub>101</sub>		1 25.9 53°05	0°1/26.0	18	
12 23	9 5.33	+24 54.1	1.798	2.617	14.4	21.2	12 23	8 55.92	+15 9.5	1.369	2.204	17.2	19.5
1 2	8 57.35	+24 59.4	1.747	2.646	10.6	21.0	1 2	8 51.27	+15 58.8	1.309	2.216	12.9	19.3
1 12	8 46.90	+25 4.4	1.721	2.674	6.5	20.8	1 12	8 43.73	+17 3.1	1.272	2.228	7.8	19.0
1 22	8 35.01	+25 4.2	1.723	2.703	2.6	20.6	1 22	8 34.24	+18 16.0	1.259	2.241	2.3	18.7
2 1	8 22.98	+24 55.4	1.756	2.730	3.8	20.8	2 1	8 24.15	+19 29.2	1.273	2.254	3.3	18.8
2 11	8 12.18	+24 36.9	1.818	2.757	7.7	21.1	2 11	8 15.04	+20 34.9	1.315	2.267	8.6	19.2
2 21	8 3.59	+24 9.8	1.907	2.784	11.4	21.3	2 21	8 8.16	+21 28.1	1.381	2.280	13.3	19.5
3 2	7 57.80	+23 36.0	2.019	2.810	14.4	21.6	3 2	8 4.33	+22 6.8	1.468	2.294	17.1	19.7
<b>108802</b>	2001 <i>OB</i> <sub>72</sub>		1 25.9 163°60	0°6/26.4	18		<b>464562</b>	2016 <i>CT</i> <sub>48</sub>		1 25.9 58°92	1°6/25.2	18	
12 23	8 52.89	+15 14.6	2.551	3.357	11.1	19.9	12 23	8 56.99	+20 21.3	1.557	2.393	15.5	21.3
1 2	8 47.88	+15 35.3	2.468	3.360	8.3	19.7	1 2	8 51.79	+21 3.6	1.498	2.406	11.4	21.1
1 12	8 41.20	+16 3.5	2.412	3.362	5.1	19.5	1 12	8 43.92	+21 53.2	1.462	2.419	6.8	20.9
1 22	8 33.41	+16 36.5	2.383	3.364	1.7	19.2	1 22	8 34.27	+22 43.6	1.451	2.433	2.3	20.6
2 1	8 25.24	+17 11.3	2.386	3.366	2.1	19.3	2 1	8 24.13	+23 28.4	1.469	2.446	3.8	20.7
2 11	8 17.51	+17 44.6	2.419	3.368	5.5	19.5	2 11	8 14.93	+24 2.5	1.514	2.460	8.4	21.0
2 21	8 10.95	+18 14.0	2.481	3.369	8.6	19.7	2 21	8 7.84	+24 23.7	1.585	2.474	12.5	21.3
3 2	8 6.13	+18 37.8	2.567	3.370	11.3	19.9	3 2	8 3.59	+24 32.0	1.677	2.488	16.0	21.6
<b>305027</b>	2007 <i>TW</i> <sub>397</sub>		1 25.9 286°00	2°2/26.9	18		<b>353275</b>	2010 <i>FQ</i> <sub>55</sub>		1 25.9 268°79	2°1/24.9	18	
12 23	8 57.21	+13 33.5	1.583	2.402	16.0	20.6	12 23	8 58.90	+21 40.8	1.585	2.418	15.4	21.6
1 2	8 52.18	+13 20.8	1.491	2.387	12.3	20.3	1 2	8 53.65	+22 20.0	1.494	2.401	11.5	21.3
1 12	8 44.34	+13 19.7	1.422	2.372	8.0	20.0	1 12	8 45.37	+23 6.7	1.426	2.383	7.1	21.0
1 22	8 34.43	+13 28.3	1.378	2.356	3.4	19.7	1 22	8 34.79	+23 54.7	1.384	2.365	2.6	20.7
2 1	8 23.63	+13 43.9	1.362	2.341	3.5	19.7	2 1	8 23.19	+24 36.8	1.371	2.347	4.3	20.7
2 11	8 13.41	+14 2.5	1.373	2.325	8.3	19.9	2 11	8 12.17	+25 7.1	1.385	2.328	9.2	21.0
2 21	8 5.09	+14 20.5	1.409	2.310	13.0	20.1	2 21	8 3.20	+25 23.1	1.423	2.309	13.9	21.2
3 2	7 59.64	+14 35.2	1.468	2.295	17.1	20.3	3 2	7 57.33	+25 24.8	1.483	2.290	18.0	21.4
<b>369351</b>	2009 <i>SM</i> <sub>352</sub>		1 25.9 65°27	1°9/27.0	18		<b>357588</b>	2004 <i>VS</i> <sub>26</sub>		1 25.9 56°27	3°0/24.9	18	
12 23	8 54.65	+12 29.6	1.859	2.671	14.3	21.0	12 23	9 1.74	+24 10.9	1.282	2.126	17.6	20.7
1 2	8 49.63	+12 38.5	1.789	2.680	10.9	20.8	1 2	8 55.63	+24 41.4	1.236	2.147	13.0	20.5
1 12	8 42.43	+12 59.4	1.742	2.690	6.9	20.6	1 12	8 46.29	+25 14.3	1.211	2.169	7.9	20.3
1 22	8 33.79	+13 29.6	1.722	2.699	2.9	20.3	1 22	8 34.93	+25 42.2	1.211	2.191	3.4	20.1
2 1	8 24.71	+14 5.3	1.730	2.709	2.9	20.4	2 1	8 23.24	+25 58.5	1.238	2.213	5.0	20.2
2 11	8 16.31	+14 42.3	1.767	2.719	6.8	20.6	2 11	8 12.98	+25 59.9	1.291	2.235	9.7	20.5
2 21	8 9.56	+15 16.9	1.831	2.729	10.6	20.9	2 21	8 5.45	+25 47.2	1.368	2.257	14.1	20.9
3 2	8 5.11	+15 46.2	1.918	2.739	13.9	21.1	3 2	8 1.36	+25 22.7	1.465	2.280	17.8	21.1
<b>82516</b>	2001 <i>OH</i> <sub>52</sub>		1 25.9 36°63	6°9/22.8	18		<b>337398</b>	2001 <i>QW</i> <sub>184</sub>		1 25.9 183°26	0°5/26.4	17	
12 23	9 1.45	+37 31.5	1.857	2.681	13.8	18.6	12 23	8 54.90	+16 33.1	3.052	3.850	9.6	21.9
1 2	8 54.93	+38 10.4	1.804	2.693	10.9	18.4	1 2	8 49.10	+16 34.3	2.963	3.850	7.2	21.7
1 12	8 45.66	+38 39.1	1.775	2.706	8.3	18.3	1 12	8 41.84	+16 40.0	2.901	3.850	4.4	21.5
1 22	8 34.70	+38 50.5	1.771	2.719	6.9	18.2	1 22	8 33.62	+16 48.5	2.869	3.849	1.5	21.3
2 1	8 23.44	+38 39.9	1.796	2.733	7.9	18.3	2 1	8 25.08	+16 57.8	2.869	3.848	1.8	21.3
2 11	8 13.36	+38 6.8	1.847	2.747	10.3	18.5	2 11	8 16.93	+17 6.1	2.900	3.846	4.8	21.5
2 21	8 5.58	+37 14.7	1.922	2.761	13.0	18.7	2 21	8 9.81	+17 11.9	2.961	3.844	7.6	21.7
3 2	8 0.76	+36 8.5	2.019	2.776	15.5	18.9	3 2	8 4.21	+17 14.5	3.048	3.841	10.0	21.9
<b>323770</b>	2005 <i>QJ</i> <sub>25</sub>		1 25.9 123°50	1°1/25.3	18		<b>420989</b>	2013 <i>PD</i> <sub>36</sub>		1 25.9 267°29	0°4/26.2	18	
12 23	8 56.97	+20 8.5	1.984	2.805	13.2	21.5	12 23	8 57.83					

EPHEMERIDES

1 25.9

1 26.0

2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2019/20	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>289071</b>	2004 <i>TC</i> <sub>211</sub>		1 25.9 252° 97	1.7°/25.0	18		<b>100345</b>	1995 <i>ST</i> <sub>61</sub>		1 26.0 93° 10	2.4°/27.3	18	
12 23	8 55.89	+21 58.4	1.979	2.806	13.0	21.2	12 23	9 0.10	+10 24.5	1.480	2.290	17.4	20.0
1 2	8 50.66	+22 31.4	1.900	2.804	9.6	21.0	1 2	8 53.99	+10 49.9	1.425	2.314	13.3	19.8
1 12	8 43.14	+23 9.0	1.846	2.802	5.8	20.7	1 12	8 45.19	+11 32.7	1.392	2.338	8.5	19.5
1 22	8 34.05	+23 46.2	1.819	2.800	2.2	20.5	1 22	8 34.64	+12 28.7	1.384	2.361	3.7	19.3
2 1	8 24.41	+24 18.2	1.822	2.798	3.5	20.6	2 1	8 23.70	+13 31.5	1.405	2.384	3.5	19.4
2 11	8 15.40	+24 41.2	1.854	2.796	7.4	20.8	2 11	8 13.80	+14 34.4	1.454	2.406	8.0	19.7
2 21	8 8.03	+24 53.4	1.912	2.794	11.1	21.0	2 21	8 6.09	+15 31.7	1.529	2.428	12.3	20.0
3 2	8 3.04	+24 54.8	1.993	2.792	14.3	21.2	3 2	8 1.28	+16 20.0	1.626	2.449	15.9	20.3
<b>354167</b>	2002 <i>CZ</i> <sub>254</sub>		1 25.9 304° 43	4.1°/27.7	18		<b>383387</b>	2006 <i>TC</i> <sub>11</sub>		1 26.0 171° 31	3.7°/22.8	17	
12 23	8 54.68	+9 10.7	1.424	2.242	17.6	20.6	12 23	8 55.55	+32 0.8	3.098	3.912	9.1	22.0
1 2	8 50.57	+8 58.1	1.334	2.225	13.8	20.4	1 2	8 49.75	+32 48.3	3.024	3.915	6.9	21.9
1 12	8 43.52	+9 3.6	1.265	2.209	9.5	20.1	1 12	8 42.31	+33 33.0	2.978	3.918	4.9	21.7
1 22	8 34.27	+9 26.6	1.219	2.192	5.2	19.8	1 22	8 33.79	+34 10.4	2.961	3.920	3.7	21.7
2 1	8 24.01	+10 4.4	1.200	2.176	4.7	19.7	2 1	8 24.92	+34 37.1	2.976	3.922	4.6	21.7
2 11	8 14.31	+10 51.5	1.207	2.160	9.0	19.9	2 11	8 16.50	+34 51.0	3.020	3.924	6.6	21.9
2 21	8 6.57	+11 41.8	1.238	2.145	13.8	20.1	2 21	8 9.24	+34 52.1	3.091	3.925	8.7	22.0
3 2	8 1.86	+12 29.6	1.289	2.130	18.2	20.3	3 2	8 3.70	+34 41.4	3.187	3.926	10.7	22.2
<b>329246</b>	1995 <i>FN</i> <sub>14</sub>		1 25.9 45° 30	2.9°/24.4	18		<b>10288</b>	Saville		1 26.0 97° 66	4.8°/28.3	18	
12 23	8 57.03	+24 15.2	1.753	2.587	14.1	21.5	12 23	9 1.03	+6 19.2	1.678	2.464	16.7	18.5
1 2	8 51.77	+25 1.8	1.682	2.588	10.5	21.3	1 2	8 54.34	+5 53.9	1.620	2.489	13.1	18.3
1 12	8 43.93	+25 51.9	1.634	2.590	6.5	21.0	1 12	8 45.25	+5 45.9	1.584	2.514	9.2	18.1
1 22	8 34.30	+26 38.9	1.614	2.592	3.1	20.8	1 22	8 34.65	+5 54.6	1.575	2.538	5.7	18.0
2 1	8 24.08	+27 16.7	1.622	2.593	4.6	20.9	2 1	8 23.73	+6 17.5	1.593	2.562	5.1	18.0
2 11	8 14.62	+27 40.9	1.658	2.595	8.5	21.2	2 11	8 13.77	+6 50.3	1.641	2.585	8.0	18.2
2 21	8 7.09	+27 50.2	1.719	2.597	12.4	21.4	2 21	8 5.78	+7 28.1	1.715	2.607	11.6	18.5
3 2	8 2.27	+27 45.7	1.803	2.599	15.7	21.6	3 2	8 0.43	+8 6.3	1.812	2.629	14.8	18.7
<b>324520</b>	2006 <i>VS</i> <sub>87</sub>		1 25.9 40° 55	2.9°/24.7	18		<b>262848</b>	2007 <i>BT</i> <sub>17</sub>		1 26.0 19° 94	1.6°/26.9	18	
12 23	8 58.07	+24 11.0	1.430	2.273	16.2	20.5	12 23	8 53.30	+12 36.6	1.519	2.345	16.3	20.7
1 2	8 52.80	+24 44.8	1.375	2.286	12.0	20.3	1 2	8 49.14	+13 0.4	1.449	2.349	12.3	20.5
1 12	8 44.59	+25 21.6	1.343	2.300	7.3	20.1	1 12	8 42.41	+13 39.8	1.402	2.354	7.8	20.2
1 22	8 34.48	+25 54.2	1.336	2.314	3.3	19.9	1 22	8 33.89	+14 31.0	1.380	2.359	3.0	20.0
2 1	8 23.91	+26 16.5	1.356	2.329	4.8	20.0	2 1	8 24.78	+15 28.3	1.385	2.365	3.1	20.0
2 11	8 14.48	+26 24.8	1.402	2.345	9.2	20.3	2 11	8 16.44	+16 25.2	1.417	2.371	7.8	20.3
2 21	8 7.41	+26 18.8	1.473	2.361	13.4	20.6	2 21	8 10.02	+17 16.4	1.474	2.378	12.3	20.6
3 2	8 3.45	+26 0.3	1.564	2.377	16.9	20.9	3 2	8 6.31	+17 58.4	1.553	2.386	16.1	20.8
<b>16131</b>	Kaganovich		1 25.9 32° 24	1.0°/25.4	18		<b>427568</b>	2003 <i>BG</i> <sub>4</sub>		1 26.0 292° 00	1.4°/26.9	17	
12 23	8 55.18	+20 18.2	2.008	2.832	12.9	18.9	12 23	8 53.80	+14 6.1	2.370	3.175	11.8	21.1
1 2	8 50.05	+20 44.3	1.931	2.833	9.6	18.7	1 2	8 48.69	+13 59.5	2.285	3.173	9.0	20.9
1 12	8 42.73	+21 15.8	1.878	2.834	5.7	18.5	1 12	8 41.78	+14 0.5	2.224	3.171	5.7	20.7
1 22	8 33.94	+21 48.6	1.854	2.835	1.8	18.2	1 22	8 33.66	+14 7.5	2.191	3.169	2.3	20.5
2 1	8 24.64	+22 18.1	1.858	2.836	3.0	18.3	2 1	8 25.13	+14 18.2	2.189	3.167	2.4	20.5
2 11	8 15.98	+22 40.9	1.892	2.837	7.0	18.6	2 11	8 17.08	+14 30.3	2.216	3.166	5.8	20.7
2 21	8 8.89	+22 54.9	1.952	2.839	10.7	18.8	2 21	8 10.30	+14 41.5	2.271	3.164	9.1	20.9
3 2	8 4.10	+22 59.6	2.036	2.840	13.8	19.0	3 2	8 5.39	+14 50.4	2.351	3.162	12.0	21.1
<b>81182</b>	2000 <i>EW</i> <sub>183</sub>		1 25.9 155° 77	1.5°/27.2	18		<b>308751</b>	2006 <i>JA</i> <sub>51</sub>		1 26.0 205° 92	2.6°/24.6	18	
12 23	8 52.44	+11 3.6	2.330	3.129	12.2	19.3	12 23	8 59.16	+23 26.6	1.804	2.632	14.0	21.7
1 2	8 47.73	+11 41.7	2.247	3.132	9.3	19.2	1 2	8 53.38	+24 14.4	1.725	2.629	10.4	21.4
1 12	8 41.22	+12 32.1	2.189	3.134	5.9	18.9	1 12	8 44.95	+25 6.8	1.670	2.625	6.4	21.2
1 22	8 33.49	+13 31.8	2.159	3.136	2.5	18.7	1 22	8 34.65	+25 57.3	1.643	2.621	2.9	21.0
2 1	8 25.30	+14 36.8	2.159	3.138	2.4	18.7	2 1	8 23.64	+26 39.4	1.645	2.617	4.4	21.1
2 11	8 17.56	+15 42.1	2.190	3.140	5.8	18.9	2 11	8 13.32	+27 8.4	1.675	2.612	8.5	21.3
2 21	8 11.05	+16 43.5	2.249	3.142	9.2	19.2	2 21	8 4.90	+27 22.7	1.731	2.607	12.4	21.5
3 2	8 6.39	+17 38.0	2.333	3.143	12.1	19.4	3 2	7 59.22	+27 23.1	1.809	2.601	15.8	21.7
<b>97549</b>	2000 <i>DM</i> <sub>58</sub>		1 25.9 40° 22	1.9°/25.2	18		<b>335960</b>	2007 <i>TW</i> <sub>150</sub>		1 26.0 140° 14	3.4°/28.4	18	
12 23	8 57.53	+23 37.5	1.837	2.667	13.7	19.6	12 23	8 53.00	+6 15.6	2.620	3.393	11.7	21.1
1 2	8 51.85	+23 47.1	1.771	2.676	10.1	19.4	1 2	8 47.87	+6 11.4	2.539	3.402	9.2	20.9
1 12	8 43.80	+23 58.4	1.730	2.686	6.1	19.2	1 12	8 41.19	+6 19.3	2.483	3.410	6.5	20.7
1 22	8 34.23	+24 7.1	1.716	2.696	2.3	19.0	1 22	8 33.48	+6 38.3	2.455	3.418	4.0	20.6
2 1	8 24.27	+24 9.3	1.730	2.706	3.6	19.1	2 1	8 25.44	+7 6.7	2.457	3.425	3.6	20.6
2 11	8 15.18	+24 2.8	1.773	2.716	7.5	19.4	2 11	8 17.84	+7 41.5	2.489	3.432	5.7	20.7
2 21	8 7.96	+23 47.3	1.842	2.727	11.3	19.6	2 21	8 11.35	+8 19.5	2.550	3.439	8.4	20.9
3 2	8 3.28	+23 24.0	1.934	2.738	14.4	19.8	3 2	8 6.50	+8 57.7	2.636	3.446	10.9	21.1
<b>239232</b>	2006 <i>SH</i> <sub>119</sub>		1 25.9 157° 13	1.9°/24.5	18		<b>412036</b>	2013 <i>CO</i> <sub>153</sub>		1 26.0 246° 33	2.9°/24.5	17	
12 23	8 54.29	+24 26.1	2.813	3.630	9.8	20.9	12 23	8 59.83	+24 14.1	1.797	2.625	14.1	22.5
1 2	8 48.84	+25 0.6	2.737	3.635	7.3	20.7	1 2	8 54.03	+24 56.4	1.708	2.611	10.5	22.2
1 12	8 41.77	+25 36.4	2.687	3.640	4.5	20.5	1 12	8 45.45	+25 42.7	1.643	2.597	6.6	21.9
1 22	8 33.62	+26 9.8	2.667	3.645	2.1	20.4	1 22	8 34.83	+26 26.7	1.605	2.582	3.1	21.7
2 1	8 25.14	+26 37.5	2.678	3.649	3.1	20.5	2 1	8 23.35	+27 1.8	1.596	2.567	4.6	21.8
2 11	8 17.12	+26 56.9	2.720	3.653	5.8	20.6	2 11	8 12.47	+27 23.3	1.615	2.552	8.8	22.0
2 21	8 10.27	+27 7.0	2.790	3.657	8.5	20.8	2 21	8 3.47	+27 29.9	1.661	2.536	12.9	22.2
3 2	8 5.13	+27 8.1	2.884	3.660	10.9	21.0	3 2	7 57.32	+27 22.4	1.728	2.519	16.4	22.4
<b>172767</b>	2004 <i>DH</i> <sub>60</sub>		1 25.9 247° 50	0.4°/25.8	18		<b>390985</b>	2005 <i>SR</i> <sub>34</sub>		1 26.0 196° 38	2.9°/24.5	18	
12 23	8 54.18	+19 6.9	2.413	3.228	11.3	20.7	12 23	9 1.					